INSTALLATION MANUAL

ALX 73x
Print & Apply System

Using the Documentation

CAUTION!

Read the user manual before operating the device for the first time.

The user manual is an essential part of the device it belongs to.

The user manual is to be stored at the machine operating location and made accessible to the operator.
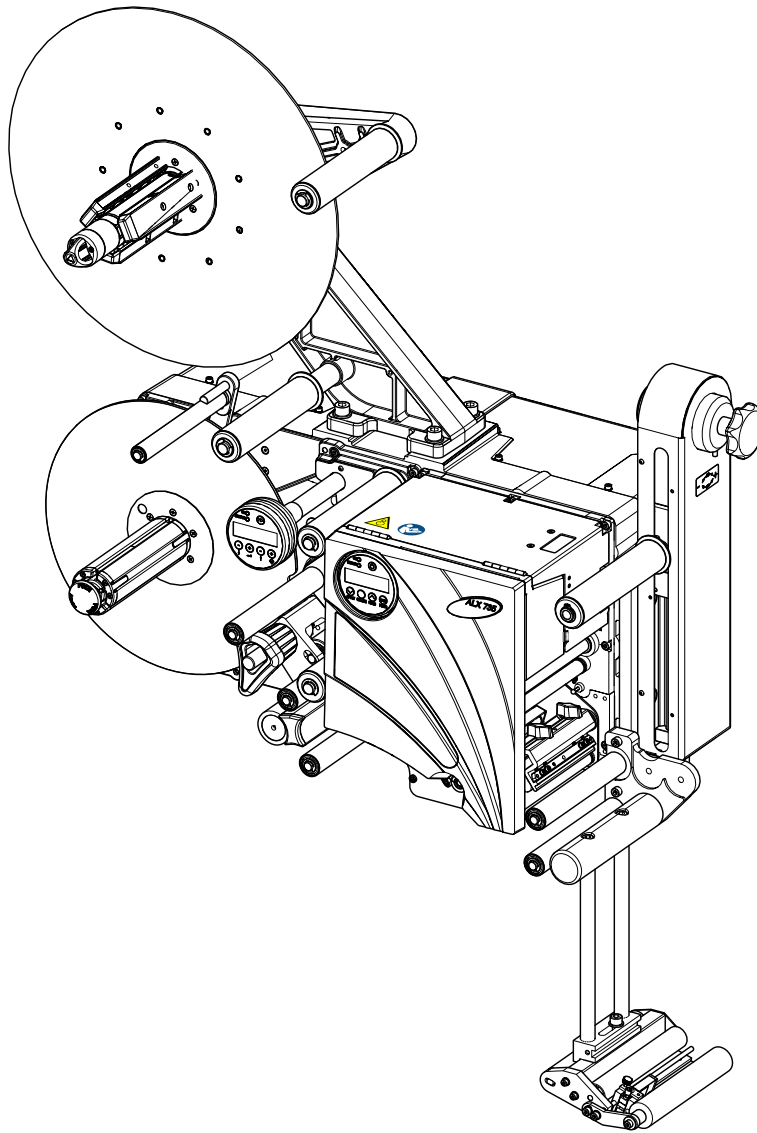
Copyright

Documentation structure

Datapool, documentation object

The overall documentation is a part of the datapool, which is provided for the printer user and the service personnel on CD or other electronic media.

Datapool

This datapool includes:

– this printer documentation,
– the printer drivers

Printer doc

Here the overall documentation (abbr.: documentation) is to be understood as the printer documentation.

The printer documentation contains all the information which is required for using the product. Using the product means preparing it for use, putting it into operation, setting it up, the operation, servicing and maintenance, fault searching and the service for optional extensions, settings and repairs.

Doc object

The documentation object includes

– various printer families (printer series), consisting of different printer models (devices),
– standard and optional additions for the printer (options) and
– the printer language Easy Plug.

Documentation concept

The wide range of products which must be documented and the demand for documentation distribution and use, both in electronic form (CD/Internet, PC) as well as in paper form, have resulted in the following documentation concept:

Structure

The documentation consists of

• topic sections (generally comparable to chapters),

• manuals (handbooks, instructions),

• link pages and the

• start page (start page of the CD documentation).

Subject section   Thematically-related subject contents are described in each topic section. A topic section is the smallest unit of information with its own

– page numbering,
– header bar,
– list of contents,
– index,
– device classification and
– its own revision status.

Subject sections form the basis of the manual. A topic section can be simultaneously assigned to several manuals. Subject sections are in one, in some cases two, languages.

11/14 Rev. 5.08-01

All devices

Using the Documentation

CAUTION!
Read the user manual before operating the device for the first time.
The user manual is an essential part of the device it belongs to.
The user manual is to be stored at the machine operating location and made accessible to the operator.
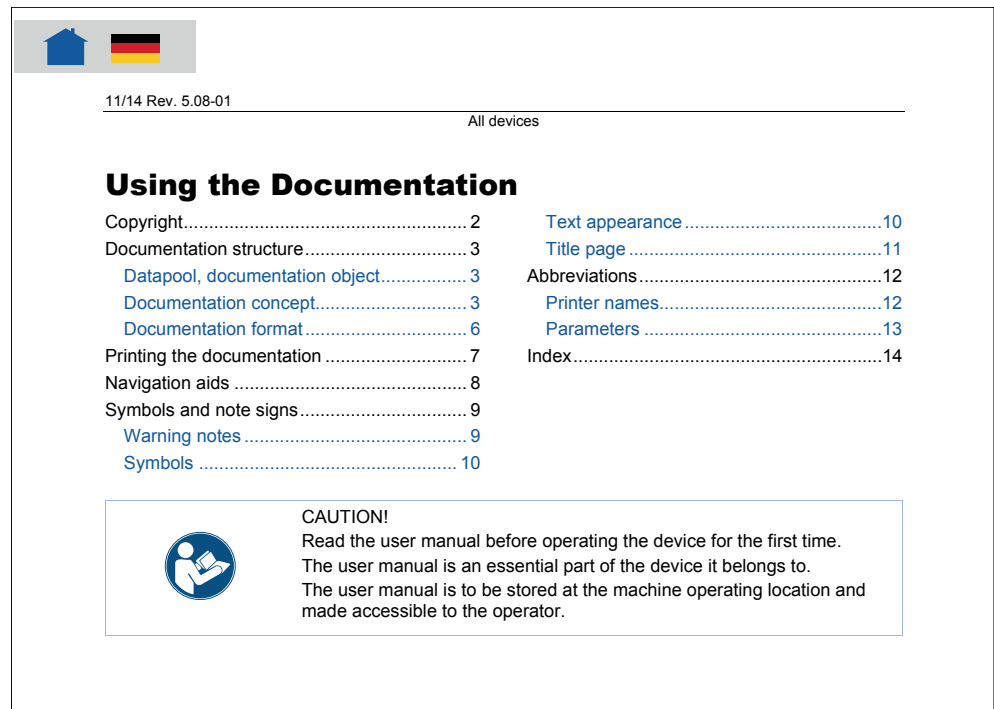
Fig. 1   Example: First page of topic section "Using the Documentation"

Manual   A manual is composed of different topic sections. The following features characterize a manual:

– Title page with a list of contents, device classification and revision status (see Fig. 1).

– The list of contents contains the designations of the topic sections and also serves as a link distributor to these topic sections.

– The contents of a manual refer to a certain device, a device family or an option (documentation object).

– A manual is assigned to a certain language and only contains topic sections in this language.

– A manual is assigned to a certain user group. There are *Service Manuals* (mainly for the Service), *User Manuals* (mainly for the user) and just *Manuals* (for Service and user).
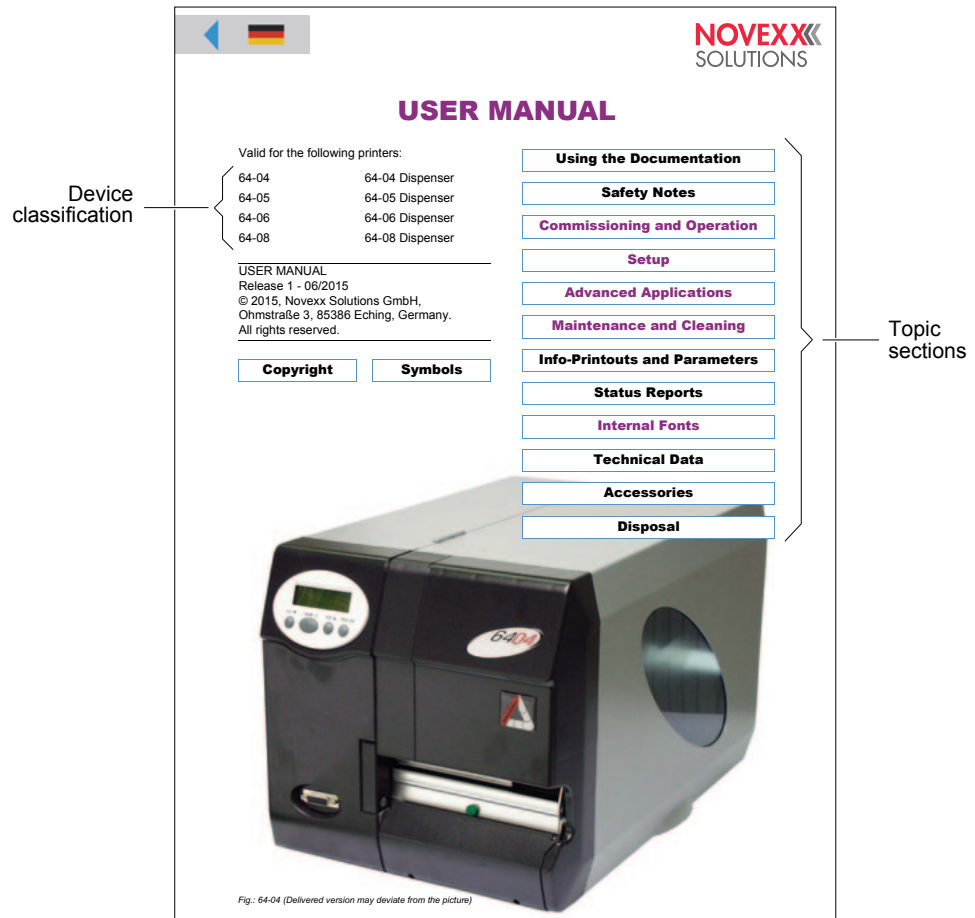
Fig. 1 Each Manual title page provides a list of topic section in its right half.

To a certain extent manuals are only virtual, as the same topic section can be simultaneously assigned to different manuals (the topic section physically only exists once).

Subject sections which are only assigned to a single manual are colour-coded on the title page of the manual (in the same colour as the title of the manual, see "Symbols and note signs").

Link page   A link page is only an organisational component of the datapool available on electronic media. The following features characterize a link page:

– Assignment to a single language

– Function as a link distributor to the individual manuals (access to the overall documentation of the corresponding language)

– Function as a link distributor to other components of the datapool provided on the electronic medium (e. g. printer drivers and print and design software in the corresponding language)

Start page   The start page is also only an organisational component and is displayed when the CD starts, or on the Internet on the link to the printer datapool. The following features characterize a start page:

– Assignment is irrespective of the language or multilingual

– Function for the language selection made by the user

– Function as a link distributor to the link page with the selected language.

This gives the following documentation hierarchy:

Hierarchy   1. Start page (selection of the language)

2. Link page (selection of the manual)

3. Manual title page (selection of the topic section)

4. Subject section contents page (selection of the subtheme)

In most cases, the subtheme selected in step 4 equates to the information being searched for. For instance, the selection of the status number in the list of contents of the topic section leads straight to the description of this status number.

Documentation format

All elements of the printer overall documentation are in Adobe PDF (Portable Document Format). This has the following practical advantages:

Printing   • The documents can be printed in the required quality irrespective of the printer type and the fonts which are used.

Memory   • Less memory is required for saving the document due to differentiated data compression (faster loading, faster printing).

Internet   • Internet compatibility due to the relatively small amount of data.

License   • Simple distribution without the need to purchase licenses (Adobe Reader licenses are provided free of charge by Adobe worldwide and in many languages).

Platform   • Can run on different platforms (Windows/Macintosh/Linux)

Links   • Links within and between Acrobat documents, as well as links to documents in other formats and executable files.

• Other Acrobat Reader functions such as page returns, bookmarks, thumbnails, document-overlapping search function with an automated index, etc.

❍ More detailed information about the Acrobat Reader is contained in the Acrobat online help.

Printing the documentation

In order to make the documentation readable without a PC, the documents can be printed in A4 as well as in Letter format. For printing, the Acrobat Reader uses the print capabilities of the platform it is run on. The layout of the printed documents equals the appearance on the monitor screen.

Mind the following hints before you start to print:

When printing several manuals, it is not necessary to print out all topic sections starting with the title page.

– Only print out the topic sections marked in black once. These topic sections are referenced from different Manuals. Physically, they consist of the same data.

– Always print out all subjects marked in purple. Reference is only made once in the respective manual to each purple topic section.

When printing all of only one manual, it is necessary to print out all topic sections in this manual starting from the title page.

Example
- In order to print a *user manual*, proceed as follows:

1. Print the title page.

2. Click the topic sections on the right half of the title page one after the other. Print each topic section completely.

- In order to print the *service manual* additionally, switch to the title page of the service manual and only click the topic sections written in purple. Print those topic sections. The remaining black topic sections are already printed with the user manual.

Text integration
It is also possible to integrate documentation text (and images) in other documents using the Windows clipboard. As a result, e. g. order information (spare part designations and part numbers) can be used simply and with no additional effort.

➠ Pay attention to copyright restrictions. Information on this subject can be found under "Copyright".

Navigation aids

Info search

The following options are available for quickly searching for information in the paper documentation:

– The title page of each manual with a list of contents of the topic section

– The detailed list of contents with page numbers on the first page of each topic section

– The own page numbering of each topic section

– The index at the end of each topic section.

Links

In the top left corner of each title page and on the first page of each topic section, you find small graphics, which ease the change back to higher levels of the documentation (see Tab. 1).

Symbol	Meaning
	Triangle: Link to the last opened page.
	Triangle: Link to the last opened page. *House*: Link to the menu page. *Flag*: Link to the german page of identical content. On the corresponding german page, a british flag symbolizes the cross-reference to the british page.
	Houses with flags: Links to the menu pages in different languages. Is used in bilingual topic sections (e.g. spare parts lists).

Tab. 1   Navigation aids can be found on the first pages of the PDF-documents.

Symbols and note signs

Warning notes

Warning notes warn of a possibly dangerous situation. Personal injury, material damage or data loss are possible, if care is not taken.

Depending on the dimension of possible damages, the warning notes look different:

- Warning note, which warns of a danger that can lead to injuries, if the dangerous situation is not avoided. Appearance: Exclamation mark in a triangle, signal word "WARNING", blue frame, blue shaded text field (see below).

> WARNING!
>
> Description of the *danger source*.
> Description of *possible personal injury*.
>
> ➜ *Measure* to avoid personal injury.
> ➜ Further measure to avoid personal injury.
> ➜ …

- Warning note, which warns of a danger that can lead to material damage or data loss, if the dangerous situation is not avoided. Appearance: Exclamation mark in a triangle, signal word "CAUTION", blue frame (see below)..
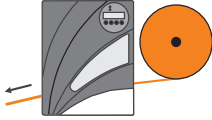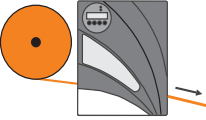
> CAUTION!
>
> Description of the *danger source*.
> Description of *possible material damage*.
>
> ➜ Measure to avoid material damage.
> ➜ ...

Symbols

⚠	Warning of the risk of injury due to moving or rapidly rotating parts! Long hair, loose jewellery, long sleeves, etc.are not admissible when operating the machine. Wear sufficient personal protection gear.
🔧	Tools required for the described service action.
ℹ	Marks additional information, which has not necessarily to be read to operate the machine, but which improves the understanding for the described function.
	Lefthand version (LH version): Symbol marking a text section which refers to the LH version of a device. (Only important for DPM, PEM and ALX 92x)
	Righthand version (RH version): Symbol marking a text section which refers to the RH version of a device. (Only important for DPM, PEM and ALX 92x)
C E	CE label: Documents the EC conformity of the device.
♲	Recycling: Notes about disposal. Pay attention to environmental protection!
▶▶	Arrow at the right bottom corner: paragraph is continued on the following page.

Text appearance

1. 2.	(Numbered) Action instructions, introductory text: follow the sequence!
→	Focus arrow: action instructions, sequence not stipulated.
⫸	Note arrow: special note. Pay attention!
•	Focus point: feature, extra paragraph.
○	Focus circle: Reference to another text position or info source.
✓	Exists. Completed. Yes. Applies.
Blue text with link symbol 🗋	Link to other positions in the documentation (click). Exception: In lists of contents, the black text is also linked.

Title page

Link	Black text in the blue frame: link to topic sections which occur several times in different manuals (click).
Link	Purple text in the blue frame: link to a topic section which only occurs once and belongs specifically to the manual (click).
Link	Blue text in the blue frame: A click on the text starts an executable program, e.g. the printer driver unpacking program starting from the "Manual printer driver" title page.

Abbreviations

Printer names

If there is not enough space to call all printers by their full names, the abbreviated spellings listed in Tab. 2 are used.

Spelling	Meaning	Example, note
64-04/05	64-04, 64-05	
64bit series	Printer/Print-Dispenser with 64bit electronics	64-xx, DPM, PEM, ALX 92x
64-xx	Tabletop printer with 64bit electronics	64-04, 64-05, 64-06, 64-08
ALX 92x	Print-Dispenser of the ALX 92x series	ALX 924, ALX 925, ALX 926

Tab. 2   Abbreviated spelling of printers.

Parameters

The notation of parameters is done as follows:
MENU > Parameter name

Example:
INTERF. PARAM. > Interface
(Parameter "Interface" in the menu "INTERF. PARAM.")

Index

Please note

General information

Validity of this manual and required compliance

Contents

The complete operating manual for the ALX 734, ALX 735 and ALX 736 print & apply systems consists of the following parts:

- Operating manual (for operating personnel)
- Installation manual (for service personnel)
- Service manual (for service personnel)
- Spare parts catalogue (for service personnel)

This service manual refers exclusively to the machine types listed above. It is to be referred to for correct installation, set-up and adjustment of the label dispenser as well as for undertaking of repairs. In the description of repair, only the replacement of high-wear components is covered. If other components need to be replaced, e.g. after being damaged due to the effects of an external force, please consult the servicing technician at our sales partner.

Removal and repair of the dispensing edge are not included. The labeller can be equipped with various dispensing edges to suit customer requirements. Removal and repair of the dispensing edge are described in a separate service manual.

Technical release

Technical release: 6/2019

Software versions:

- Dispenser: 2.76
- Printer: 6.60

Liability

NOVEXX Solutions assumes no liability for damages resulting from improper adjustments or repairs of the machine. It is assumed that only knowledgeable and appropriately qualified persons are to perform installation, adjustment, or repairs.

Copyright

All rights to this operating manual are assigned to NOVEXX Solutions. Transmission, reprinting or any other means of reproduction of this manual, whether whole or in part, are not allowed without prior written permission. Third parties, in particular competitors, are not to be allowed access to information derived from this manual.

Printed in Germany

Manufacturer

Novexx Solutions GmbH

Ohmstrasse 3

D-85386 Eching, Germany

Tel.: +49-8165-925-0

Fax: +49-8165-925-231

www.novexx.com

How information is represented

Explanation of symbols

To enhance readability and make information easier to find, different types of information are identified:

→ Instruction with no order of tasks assigned

1. Numbered instructions introduced by preceding text

2. The specified order must be followed!

⮕ Special note for action that must be performed.

☹ Explanation of an error cause in the reference of error messages.

- Enumeration of features
- Other feature

EXPERTS   The Experts symbol identifies activities that are reserved exclusively for qualified and specially trained personnel.

i   The information symbol identifies notes and recommendations as well as additional information.

Notes about hazards and risks

Important instructions that must absolutely be followed are specially highlighted:

⚠   WARNING!

A warning symbol refers to risks that can result in severe or fatal injuries! The note contains safety measures to protect affected persons.

→ Instructions must be followed without exception.

⚠   CAUTION!

A caution symbol refers to risks that can result in property damage or personal injury (minor injuries). The note contains instructions for preventing damage.

→ Instructions must be followed without exception.

Illustrations

Illustrations appear in the text where required. References to these illustrations are shown in [square brackets] containing the number of the illustrations. Uppercase letters after an illustration number, for example [12A], refer to the corresponding item within the illustration.

Normally the machine is shown as the right version. The left version is only shown if there is a need to make a distinction.

Key symbols

Keys in the *dispenser control panel* are represented as symbols.

If multiple keys must be pressed simultaneously, the symbols are joined in the text by "+": (↓) + (⟷)

Keys in the *printer control panel* are represented as text, for example "Press the Cut key".

Parameters

Parameters in the parameter menu are represented in the format MENU NAME > Parameter name in grey type.

Notes on installation and repair work

General information

Before performing any maintenance or repair work:

➔ Block access to the working area of the machine to unauthorised persons.

➔ Post a notification sign, which calls attention to the work.

Electro-static discharge:

➔ When the casing is open, protect the electronics from damage due to electrostatic discharge, e.g. wear an antistatic wrist strap.

Tools:

➔ Only use suitable tools.

➔ Ensure all tools are at hand before beginning the work.

➔ Do not attempt to improvise or to use improper tools, e.g. loosening an interior-toothed screw (Torx) with a hexagon socket driver.

Rubber and plastic parts:

➔ Do not allow hoses, seals, and other rubber or plastic parts to come into contact with grease, petrol, benzene, kerosene or mineral oil.

Environmental protection

➔ Avoid unnecessary waste, e.g. use cleaning cloths sparingly and reuse packing material.

➔ Only store operating materials, such as fresh or used cleaning agents, in suitable containers. Never allow them to enter the sewerage system or to seep into the ground.

➔ Do not put old batteries, removed parts, and used cleaning agents in household waste. Dispose of them in an eco-friendly manner.

Packaging materials:

Only recyclable materials are used for packaging the machine.

➔ Dispose of unwanted packaging material in an eco-friendly manner.

Eco-friendly disposal:

➔ Sort the waste as much as possible, e.g. separate metals from plastics.

➔ Avoid contaminating the waste if possible.

➔ Drop off the waste at the collection points provided for that purpose
or

➔ Have the waste collected by suitable recycling agencies.

➔ Use any on-site options.

➔ Observe all relevant rules, ordinances, and laws.

Rules for electromagnetic compatibility

Connect all metallic parts to each other via large surfaces, ensuring electric conductivity.

Only polished metal surfaces are electrically conductive. Painted or oxidised surfaces are unsuitable. Aluminium which appears to be polished still has an invisible oxidation layer on the surface.

Coated or plated surfaces, though electrically conductive, can reach very high resistance values at high frequencies (skin effect).

→ Clean contact surfaces, polish the metal, use fan disks (washers) or mounting plates.

→ Carry out EMC grounding, preferably as a neutral (star) point. A neutral (star) point prevents loops.

When laying the signal lines and power cable, space them apart.

→ Lay all control and signal lines at least 50 cm distant from power cables (e.g. motor line). Minimum distance in the switch cabinet: 20 cm.

→ Spatially lay out all the lines in the switch cabinet as close as possible to the reference potential.

Lead the signal lines into the unit or switch cabinet from one side only.

The more lines that are laid in front and in back between the switch cabinet and the machine, the larger the radiation surface of the radiated electromagnetic energy.

→ Lead the signal lines out of the machine (in one bundle and from one location, if possible) and into the switch cabinet.

Twist together unshielded lines from the same circuit.

This reduces interference effects of various kinds.

Wire inductive components to suitable interference suppressors.

Possible inductive components: Relay, solenoid valve

Possible interference suppressors: Diodes, varistors, RC combinations

→ House all components suspected of being sources of RF interference fields in a closed metal casing (Faraday screen).

Shield all signal and control lines.

→ Ground the shielding on both sides at its large surfaces.

→ For insufficient potential equalisation between the shielding lines: Lay an additional equalisation lead parallel to the shielding with a cross section at least 10 mm^2.

Avoid equalisation currents in the shielding of the signal lines

Equalisation currents can arise between subassemblies with different grounding conditions.

→ When the grounding conditions are different, only shield the side with the better grounding condition.

→ Only shield both sides when the grounding conditions are the same (e.g. inside a machine).

Power filter

→ Mount the power filter direct at the power supply.

→ Connect the filter casing to the EMC grounding via large metal surfaces.

Lay all lines as close as possible to metal parts, even reserve cables

Freely hanging lines act as transceiver antennas.

→ Ground all reserve cables and unused wires in the cables at least at one end.

Keep the cables as short as possible

Cable resistance and signal distortion increase with the length of the cable.

Safety instructions

Information and qualifications

Ensuring the necessary qualification

➔ Let the installation, setup and repair of the machine only be accomplished by appropriately qualified personnel.

➔ Let intallation and service work at the machine only be accomplished by qualified electricians.

➔ Areas of responsibilities for operating and servicing the machine must be clearly defined and consistently observed.

Qualification for system integrators and service technicians

Knowledge required to install the print dispenser and perform service work must be demonstrated through appropriate qualification. Only service personnel with technical training are able to assess the tasks to be performed and recognise potential dangers.

- Knowledge acquired through technical training in mechanics and electronics (for example in Germany the training to become a mechatronics engineer).
- Participation in a technical training course for the corresponding label dispenser offered by the manufacturer.
- The service personnel must be acquainted with the functionality of the label dispenser.
- The system integrator must be acquainted with the functionality of the of the system into which the label dispenser is being integrated.

Tasks	System integrator	Operator	Service technician
Install the machine	X		
Connect	X		
Make settings	X		
Switch on/off	X	X	X
Insert/change material/ribbon	X	X	X
Application-related settings	X	X	X
Rectify minor operating faults [a]	X	X	X
Clean the machine		X	X
Rectify major operating faults [b]			X
Settings to the electronics/ mechanics			X
Repairs			X
Manual:	Installation manual, Service manual	Operating Manual	Service manual, spare parts catalogue

[Tab. 1]   An example of the distribution of tasks among different qualified personnel.

a)   For example faults when detecting labels
b)   For example incorrect labelling

Pay attention to the information

⚠	**WARNING!** Reliable and efficient operation of the labeller is only guaranteed if all necessary information is observed! ➔ Carry out the installation, connection, programming, setting, and repairing of the machine exclusively in accordance with the specifications in this manual. ➔ Observe additional safety and warning notices attached to the labeller. ➔ Observe and adhere to all relevant ordinances and rules in their applicable form. Examples: • Work place regulation • Accident prevention regulations • Trade union regulations for occupational safety and health • Equipment safety law • Recycling and waste management law

Information must be made available

This service guide

➔ must be made available to all persons who are entrusted with installing, setting up, adjusting, or repairing the labeller.

➔ must be maintained in legible condition.

➔ must be made available to the new owner if the machine is sold.

➔ Safety and warning notices attached to the labeller must be kept clean and legible. Missing or damaged warning plates are to be replaced.

Machine operating safety

Installation, maintenance

⚠	**WARNING!** Improper usage of the machine can lead to accidents, material damage and loss of production! ➔ When installing the labeller, check for visible shipment damage. Immediately inform Novexx Solutions of any damage. ➔ When installing the machine on a support stand, make sure that it can not tip over. ➔ Only put the machine into operation if it is in flawless condition. ➔ Only perform alterations or conversions to the machine with the consent of Novexx Solutions's customer service. ➔ Only use original replacement parts.

⚠	**WARNING!** Danger of body part trapping and pinching at the dispensing edge due to products moving in the conveyor direction! ➔ Take appropriate measures to prevent personnel from reaching between a product and the dispensing edge; e.g. install a protective guard or shield.

Before starting up the machine:

➜ Carry out test runs using the task-specific settings under near production conditions.

➜ Only put the machine into operation after at least one successful test run has been completed.

Protection measures in applicator mode

⚠	**WARNING!**
	Danger of crushing between dispenser edge and applicator pressure plate due to applicator movement !
	➜ Prevent personnel from reaching between dispensing edge and applicator by installing higher-level protective guards [a].

a)   Movable, separating guards according to EN 953

After all servicing or repair work

⚠	**WARNING!**
	Risk of an accident due to moving or loose parts!
	➜ Re-install all covers and safety equipment.
	➜ Check for firm seating of all screw connections that were loosened during the work.
	➜ Remove all tools and other aids used during service and repair from the working area of the labeller.
	➜ Verify flawless functioning of all safety equipment.

⚠	**WARNING!**
	This unit operates at mains voltage! Coming into contact with electrically live components can cause potentially lethal electrical shocks and burns.
	➜ After assembling, check the printer according to the regulations relevant in your country.

Safe operation

Protect against injuries that can result from electrical current

⚠	**WARNING!**
	Contact with energised components can result in life-endangering currents through the body as well as burns. The label dispenser is connected with the mains supply!
	➜ Only allow work on the electronics system to be done by authorised electronics technicians.
	➜ Observe the following information unconditionally.

Power connection:	Power switch = separator.
	➜ If the power switch is not accessible due to the installation position of the machine, a suitable separator has to be provided by the system integrator.

Power connection:	The machine side power connector has a definite phase position. → Pay attention to the phase position when connecting the machine. Power switch = separator. → If the power switch is not accessible due to the installation position of the machine, a suitable separator has to be provided by the system integrator.
Before any repair work:	→ Detach the machine from power supply. → Check to ensure it is de-energised. → Secure the power supply against unintentional or unauthorised switch-on.
Casing:	→ Before opening the casingpull the power plug. The casing may only be opened by trained personnel and when the machine is de-energised. → Only put the machine into operation when the rear wall of the casing is correctly in place.
Casing:	→ Before opening the casing and before removing the PMA(printer) module or the LMA(dispenser) module, pull the power plug. The casing may only be opened by trained personnel and when the machine is de-energised. → Only put the machine into operation when the rear housing is correctly in place and when the PMA module and the LMA module are correctly installed.
If the machine must be switched on while the casing is open for repair or inspection:	→ Never touch energised components. This also applies to components with low voltages.
Ensure the flawless condition of the electrical system:	→ Regularly check the electrical equipment. → Only connect the machine to other machines if these meet the requirements for a SELV circuit, in accordance with EN 60950. → Re-tighten loose connections. → Immediately replace damaged lines. → After assembling, check the printer according to the regulations relevant in your country.

Protection against injuries that can result from mechanical actions

⚠	**WARNING!** Acute risk of injury and long-term bodily injury from working with heavy loads! → Lift or carry the machine with a minimum of 2 persons. If possible, use a crane or other lifting device. → Only use suitable and defect-free restraining devices during transportation and installation. → Never allow the machine to stand with loosened mounting brackets, not even for a short time. → If the machine is fastened to a movable support: Ensure it can not tip over.

⚠	**WARNING!** Risk of accident due to uncontrolled machine start-up! → Before doing any repair work, switch off the machine and pull the power plug. → Before doing any repair work, switch off the machine.

Installation/Deinstallation

Defining the operating position

Space requirement

For machine dimensions read topic section Technical Data ⃞ > „Entire unit" > „Dimensions".

On the machine side facing the operator must be left *at least 1 m* free space for loading and changing of supplies.

On the connector-side of the machine and at the sides must be left *at least 0.5 m* free space due to:

- Optimal air exchange at the ventilation openings [1A, B]
- Accessibility of the mains switch

Admissible operation positions

The ALX 73x may only be used for labelling from the following directions:

- Top labelling,
  see chapter Top labelling ⃞ on page 3
- Side labelling,
  see chapter Side labelling ⃞ on page 5

The machine should be fixed at a mounting point, which is recommended for the applied configuration (see (Tab. 1) and the following chapters).

Sign	Meaning
1	Recommended
2	O.k.
3	Not recommended
(X)	Mounting point on the rear side

[Tab. 1]   Meaning of the signs used in the pictures.

For recommended fixtures read chapter Mounting the machine on a support stand ⃞ on page 8.
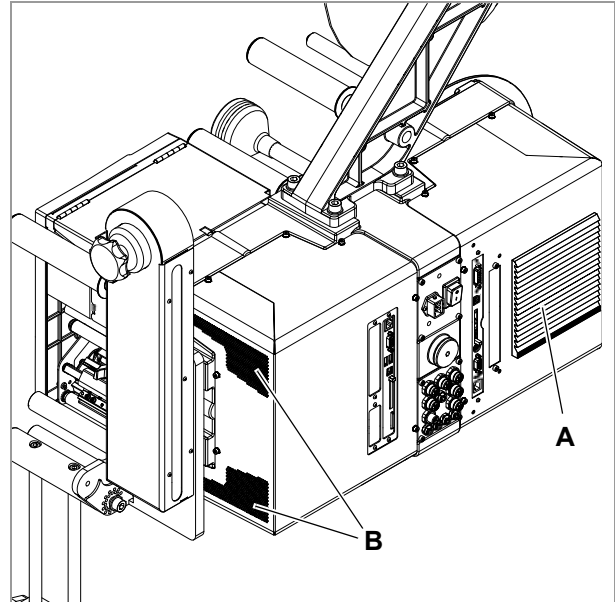
[1]   Ventilation openings (A, B) at ALX 73x.

Top labelling

Horizontal operating position
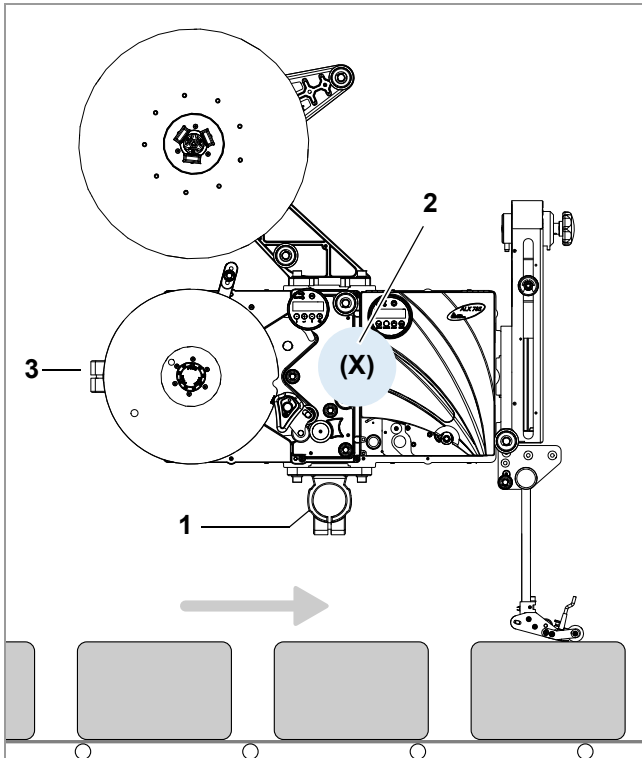
[4]   Horizontal position for top labelling with one unwinder on top.
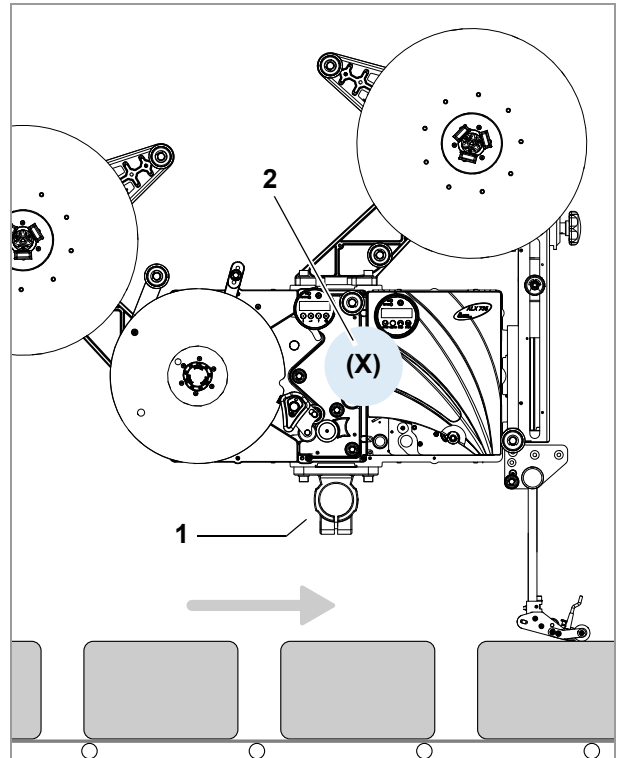
[2]   Horizontal position for top labelling with two unwinders.
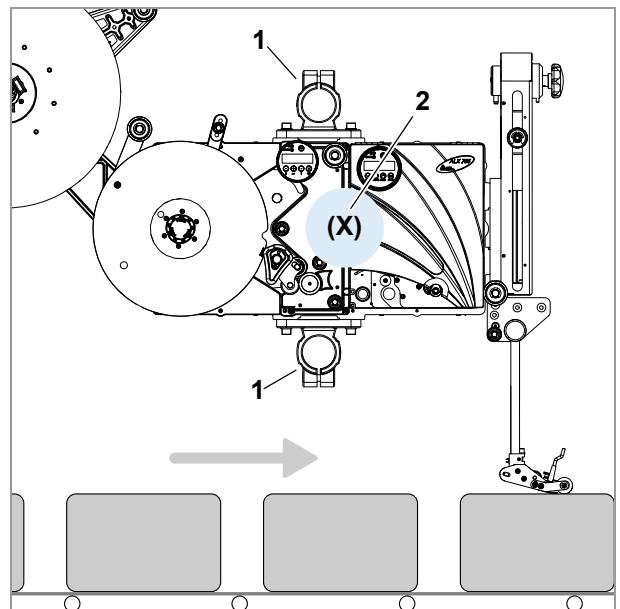
[3]   Horizontal position for top labelling with one unwinder left.

Vertical operating position
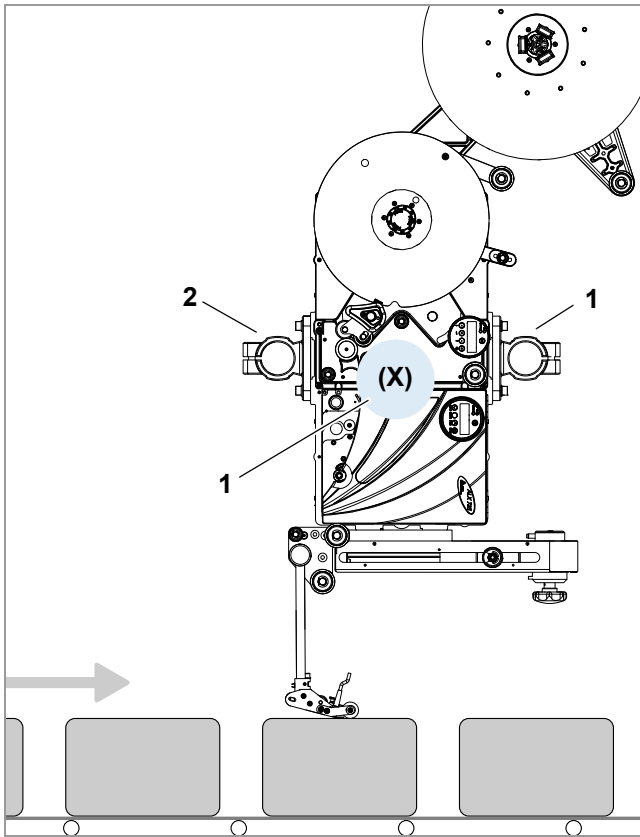
[6]   Vertical operating position for top labelling with one top mounted unwinder.
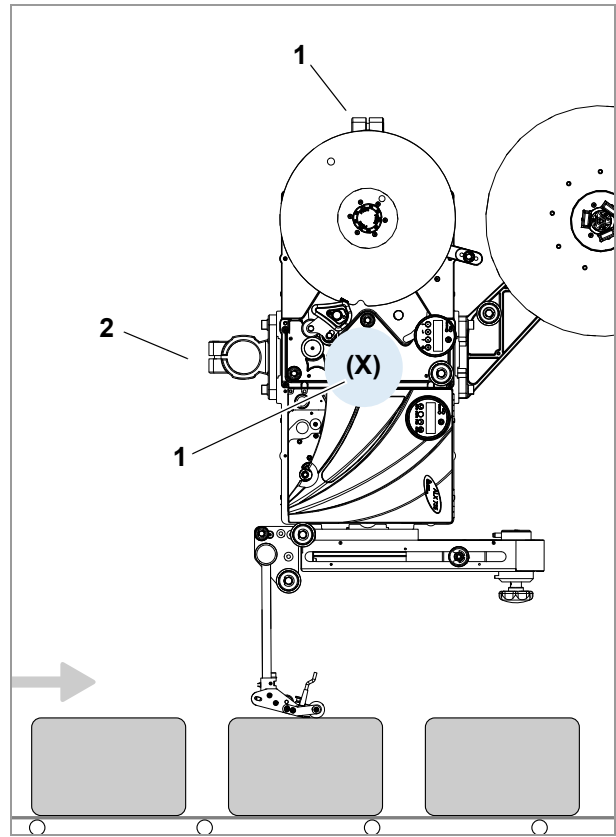
[5]   Vertical operating position for top labelling with one side mounted unwinder.

Side labelling

Horizontal operating position
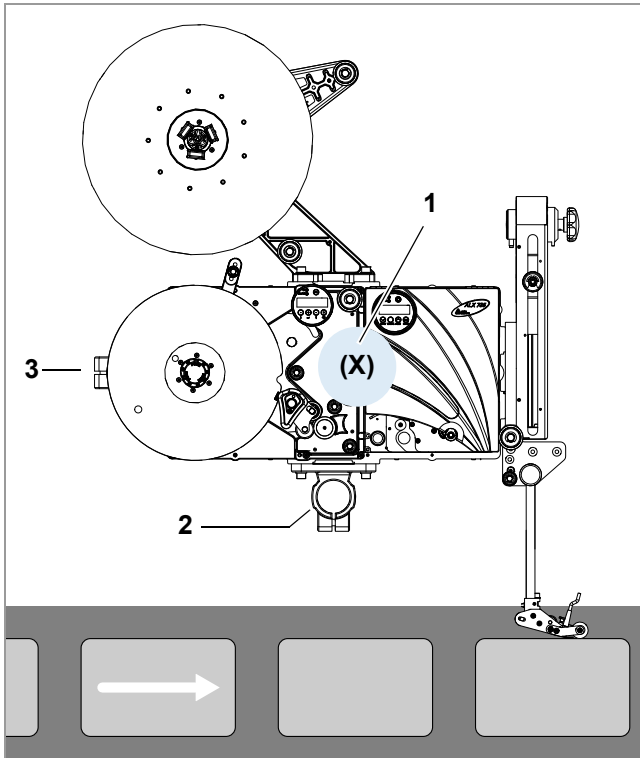
[9]   Horizontal operating position for side labelling with one top mounted unwinder.
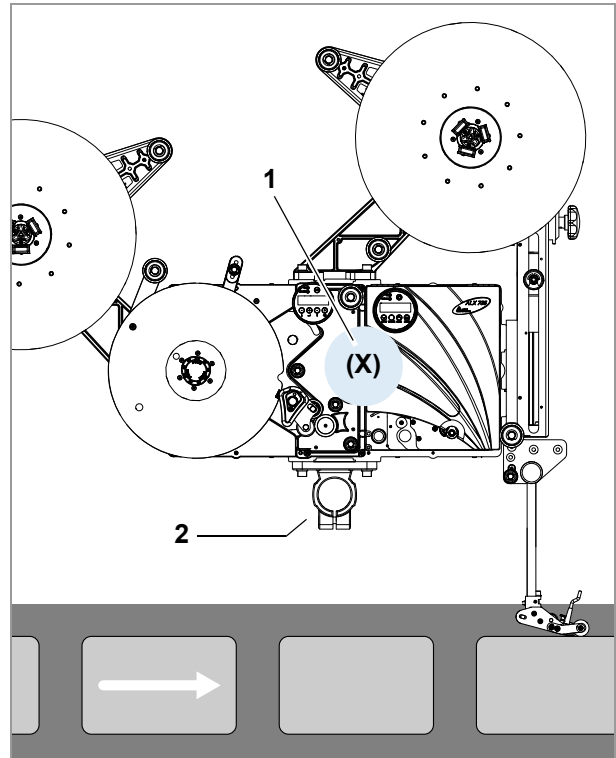
[7]   Horizontal operating position for side labelling with two unwinders.
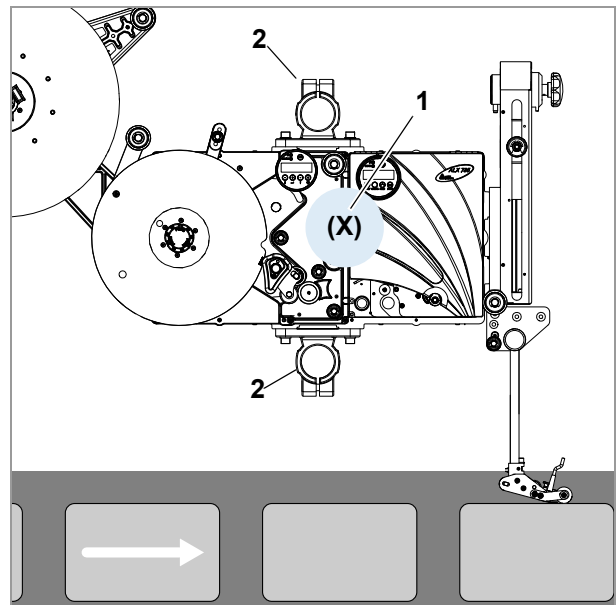
[8]   Horizontal operating position for side labelling with one side mounted unwinder.

Vertical operating position
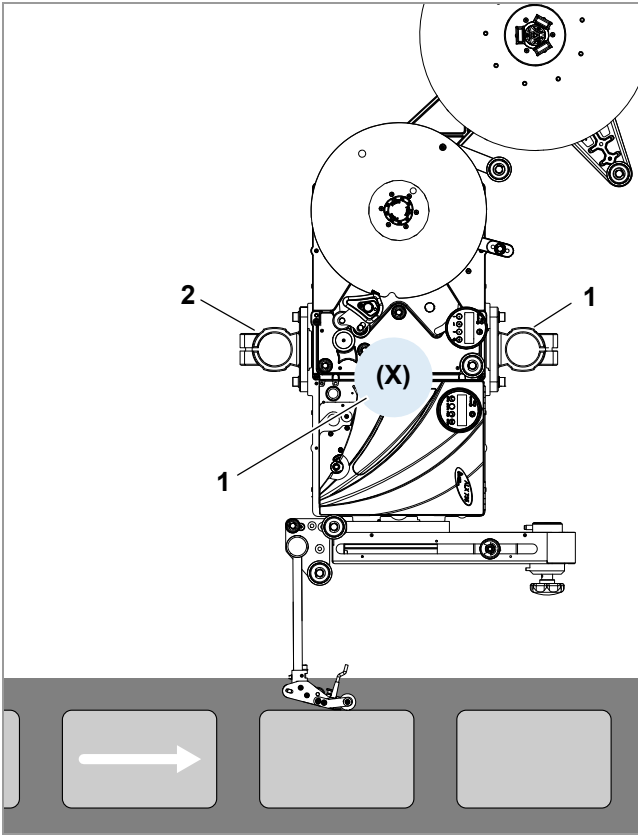
[11] Vertical operating position for side labelling with one top mounted unwinder.
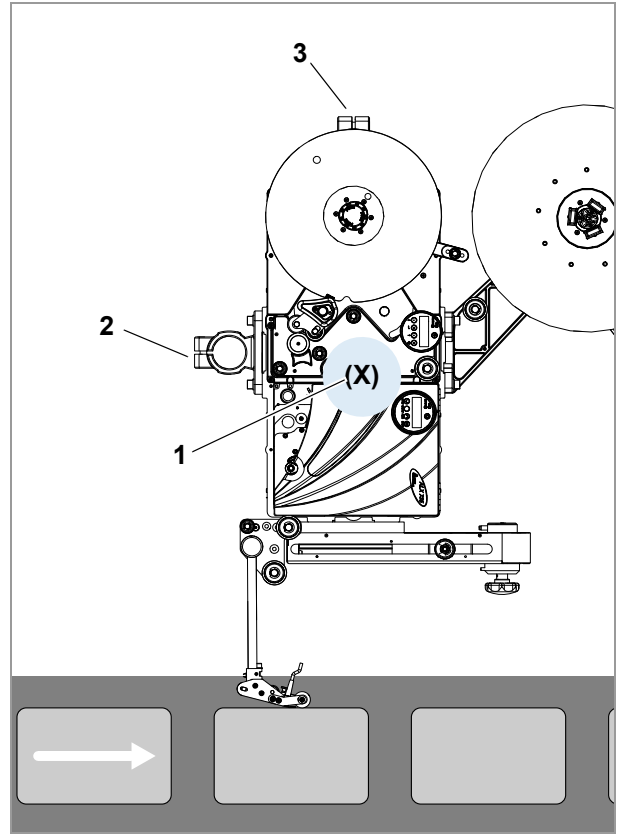
[10] Vertical operating position for side labelling with one side mounted unwinder.

Unpacking and assembling the machine

> ⚠ **WARNING!**
>
> Acute risk of injury and long-term bodily injury from working with heavy loads!
>
> → Lift or carry the machine with a minimum or 2 persons. If possible, use a crane or other lifting device.

Transportation

> ⚠ **CAUTION!**
>
> To avoid damaging the machine during transporting:
>
> → Only use the original packaging for machine transportation.
>
> → Keep the original packaging for later transportation.

Unpacking the machine

> ⚠ **CAUTION!**
>
> To avoid damaging the machine during unpacking:
>
> → Never hold the machine by the deflection rollers, dancer arm, rewinder or unwinder.

→ Lift the machine out of the packaging with at least 2 persons.

⇒ To do so, hold the machine by its casing.

⇒ As a lashing point for the crane, screw in an M10 [12A] eye bolt in a threaded hole at one of the flanges.

→ After unpacking, check the machine for visible shipment damage.
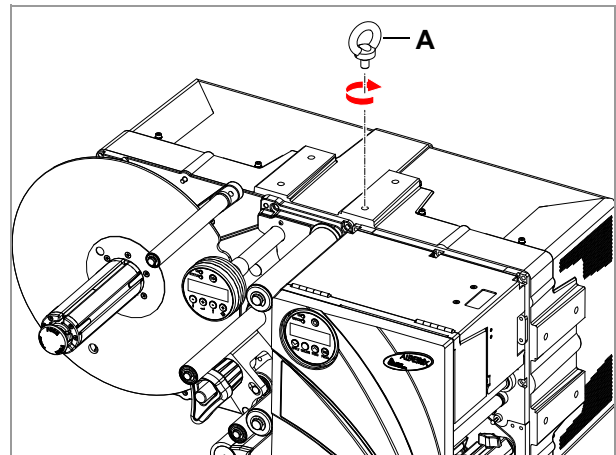
[12] Attaching an eye bolt.

Mounting the machine on a support stand

> ⚠ **WARNING!**
>
> Risk of injury from a tipping over support stand.
>
> ➔ When installing the machine on a support stand, make sure that it can not tip over.
>
> ➔ Fix the support stand onto the ground.

Mounting options

The ALX 73x can be mounted in two ways:

- At the machine rear side [13], see chapter Rear side mounting 🗎 on page 9.

- At one of the flanges at the machines outer side [14], see chapter Mounting at the machines outer side 🗎 on page 11.

⫸ Recommended mounting points for the different operation positions see chapter Admissible operation positions 🗎 on page 2.
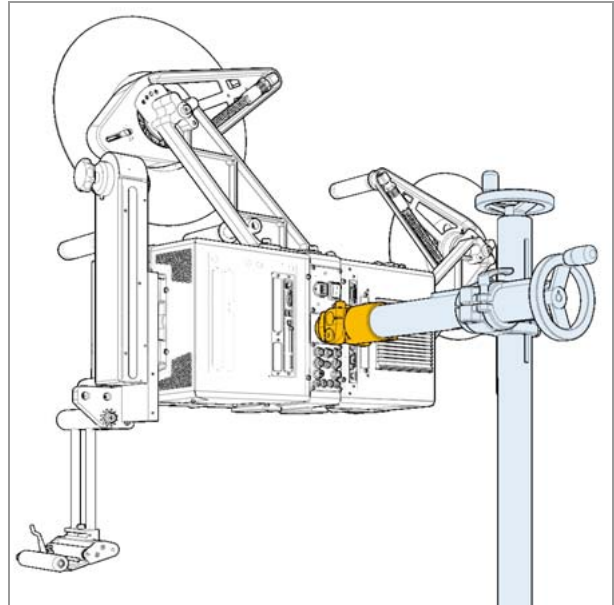
[13] Rear side mounting.
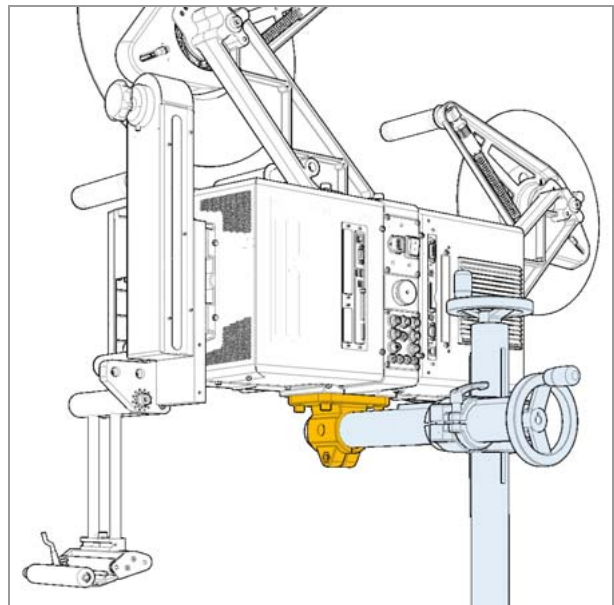
[14] Bottom mounting.

Rear side mounting

Prerequisites:

- *Support stand with a tube end providing the following measures:*
  - Outer-Ø: 60 mm
  - Wall thickness: minimum 5 mm

- *Adjustable head joint [19] (article number A9773)*

[19] Adjustable head joint in state of delivery.

Tools:

6/10/17 mm allen keys

Assembly:

1. Remove the cover plug [15A] from the lange on the machines rear side.

2. Locate the two cylinder pins [14B] in the holes in the machine side bracket [14C].

3. Screw the machine side bracket onto the flange on the rear side of the machine using the provided screw [1] [14D].

    ⟫ The two cylinder pins must locate into the holes in the flange.

    ⟫ Tightening torque: 350 Nm

4. Turn the adjustment screw [16B] and both clamp screws [16A] some rotations out.

5. Insert the support stand side bracket [17A] and push in the axle [17B] flush.

6. Tighten the 2 clamp screws [17C].

    ⟫ Tightening torque: 70 Nm

7. Loosen the clamp screw [17D].

8. Push the machine with the head joint onto the support stand tube [18A] and thighten the clamp screw [18B].

    ⟫ Tightening torque: 70 Nm

    Continued overleaf.
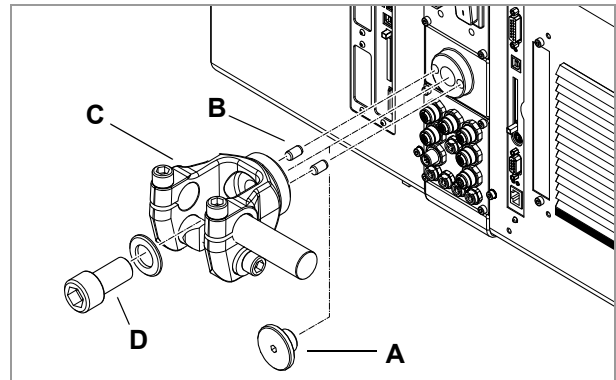
[15] Mounting the machine side bracket.
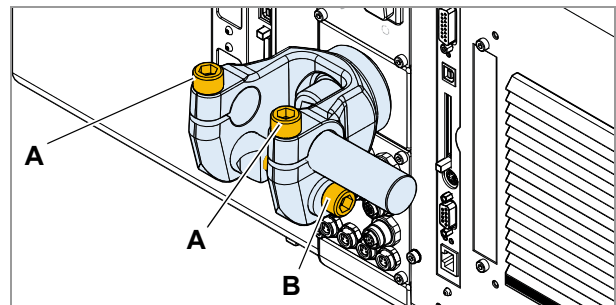
[16] Machine side bracket mounted.
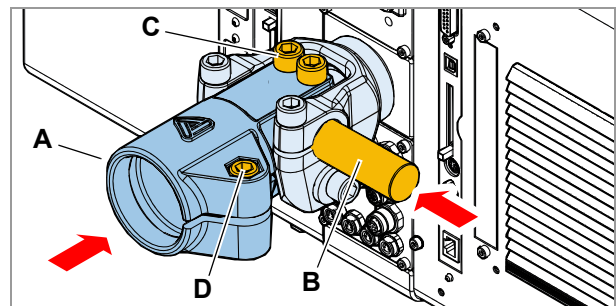
[17] Mounting the support stand side bracket.
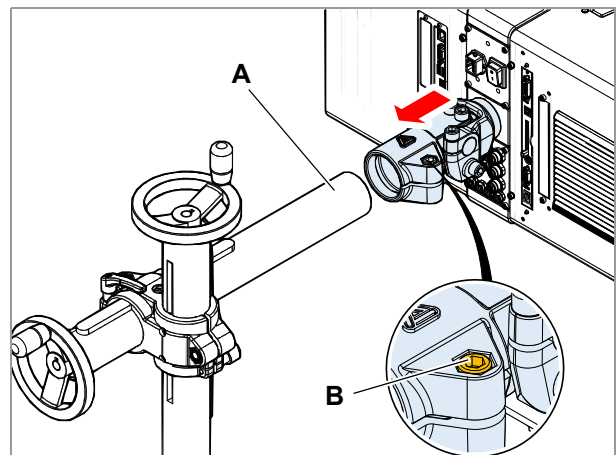
[18] Mounting to the support stand.

---

1) DIN EN ISO 4762 M20x40 (8.8)

9. Incline the machine to the required angle by turning the adjustment screw [20A].

    ⇒ Turn in = Inclination upwards

    ⇒ Turn out = Inclination downwards
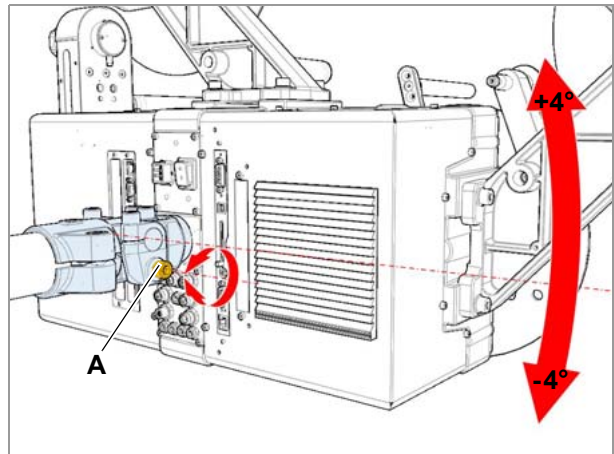
[20] Setting the declination.

10. Tighten the 2 clamp screws [21A].

    ⇒ Tightening torque: 70 Nm
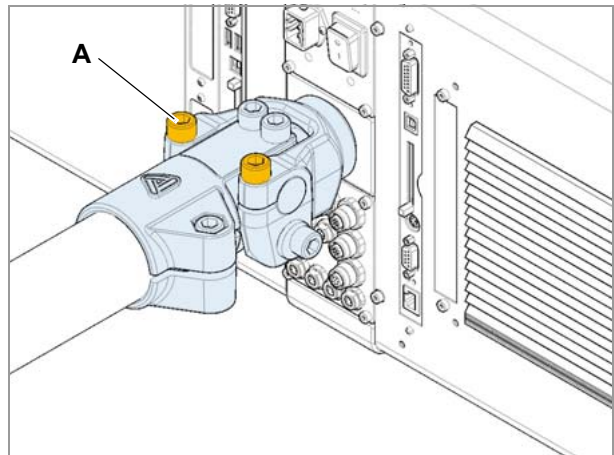
[21] Tightening the clamp screw (A).

Mounting at the machines outer side

Prerequisites:

- *Support stand with a tube end providing the following measures:*
  - Outer-Ø: 60 mm
  - Wall thickness: minimum 5 mm
- *Flange plate* [22A] (article number A7622, including bolts and washers)

Tools:

    8/10 mm allen keys

Assembly:

1. Screw the flange plate [22A] to an appropriate flange at the machine.

   ⬛➡ Note the recommended mounting points, see chapter Admissible operation positions 🗎 on page 2.

   ⬛➡ Use the 4 bolts shipped with the flange (DIN EN ISO 4762 M10x25 A2).

   ⬛➡ Tightening torque: 45 Nm

2. Lift the machine and push the clamping part of the flange plate onto the support stand tube [22B]. Tighten the clamp screw.

   ⬛➡ Lift the machine with a minimum of 2 persons or with a crane; let a 3rd person tighten the screw.

   ⬛➡ Tightening torque: 70 Nm
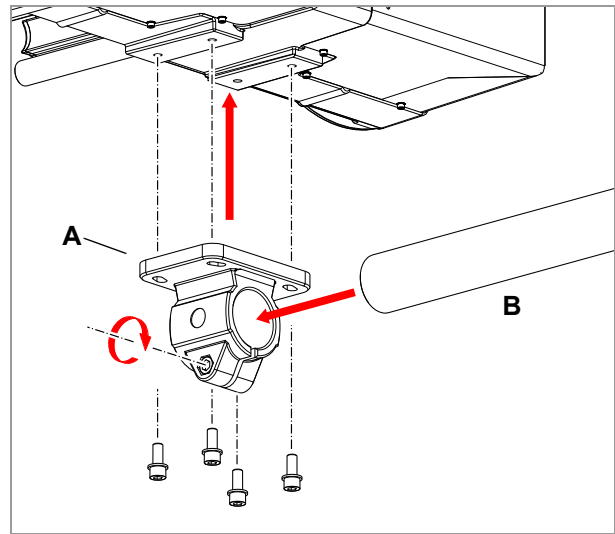
[22] Mounting the flange plate to an ALX 73x.

Mounting with adjustable head joint at the machines outer side

To attach the machine inclinable at its outer side, the flange plate can be combined with the adjustable head joint.

Prerequisites:

- *Support stand [23D] with a tube end providing the following measures:*
  - Tube outer-Ø: 60 mm
  - Wall thickness: minimum 5 mm
- *Flange plate* [23A] (article number A7622, including bolts and washers)
- *Adapter tube* [23B] (article number A9951)
- *Adjustable head joint [23C] (Artikelnummer A9773)*

Tools:

6/8/10/17 mm allen keys

Assembly:

1. Screw the flange plate [23A] to an appropriate flange at the machine.

   ⟾ Note the recommended mounting points, see chapter Admissible operation positions 🗋 on page 2.

   ⟾ Use the 4 bolts shipped with the flange (DIN EN ISO 4762 M10x25 A2).

   ⟾ Tightening torque: 45 Nm

2. Push the adapter tube [23B] into the clamping of the flange plate. Tighten the clamp screw.

   ⟾ Tightening torque: 70 Nm

3. Mount the adjustable head joint [23C] to the adapter tube. How to? - see chapter Rear side mounting 🗋 on page 9.

4. Lift the machine and push the clamping part of the flange plate onto the support stand tube [23D]. Tighten the clamp screw.

   ⟾ Lift the machine with a minimum of 2 persons or with a crane; let a 3rd person tighten the screw.

   ⟾ Tightening torque: 70 Nm
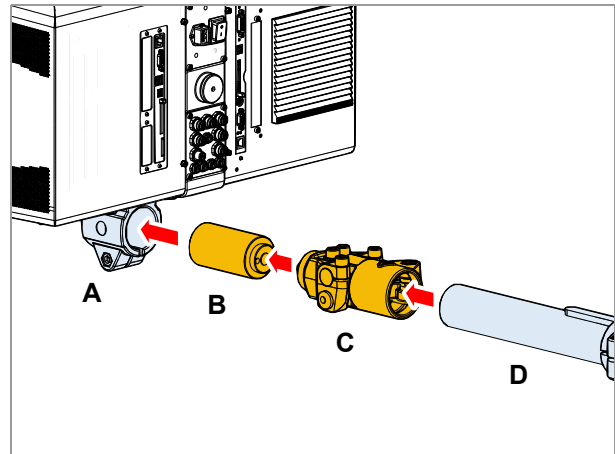
[23] Mounting with flange plate (A) and adjustable head joint (C).
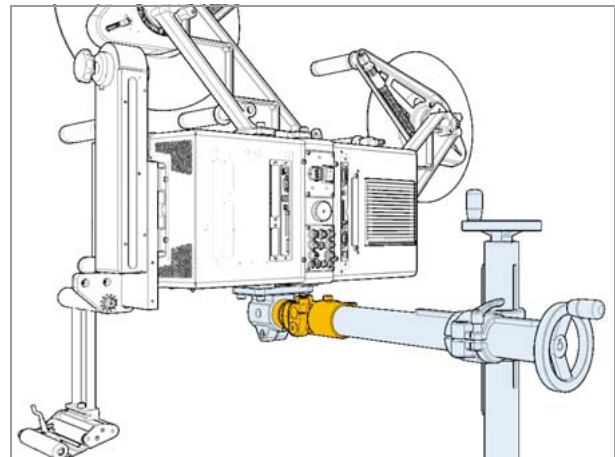
[24] Mounting with flange plate and adjustable head joint.

Mounting the unwinder

Tool:

   8 mm allen key

Prerequisites:

Depending on the planned application, the ALX 73x comes with one or two unwinder(s). For recommended respectively admissible combinations, see chapter Admissible operation positions 🗋 on page 2.

Rewinder position	Article number	
	Ø 300	Ø 400
Left side	A103259	A102784
Left top	A102651	A102649
Right top	A102650	A102648
Right side	A103260	A102783
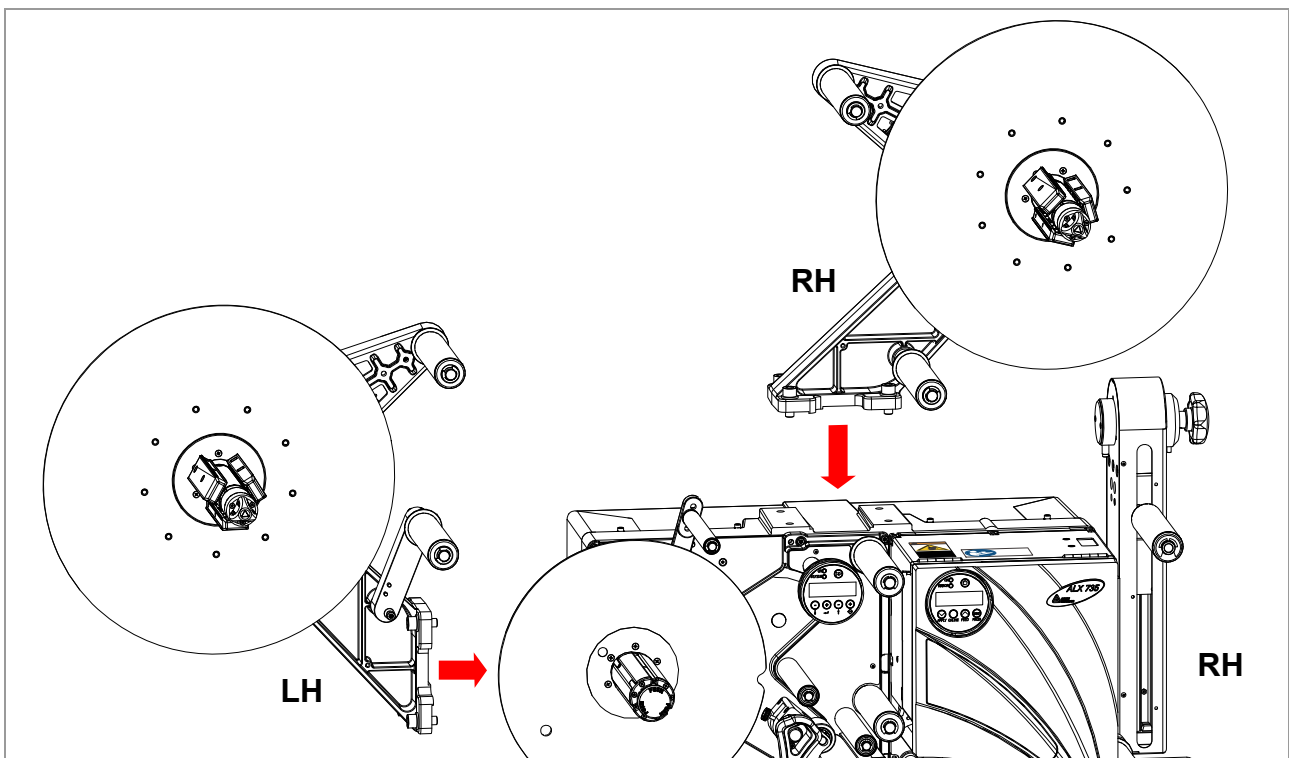
[25] Positions and markings of the unwinders at an ALX 73x RH.
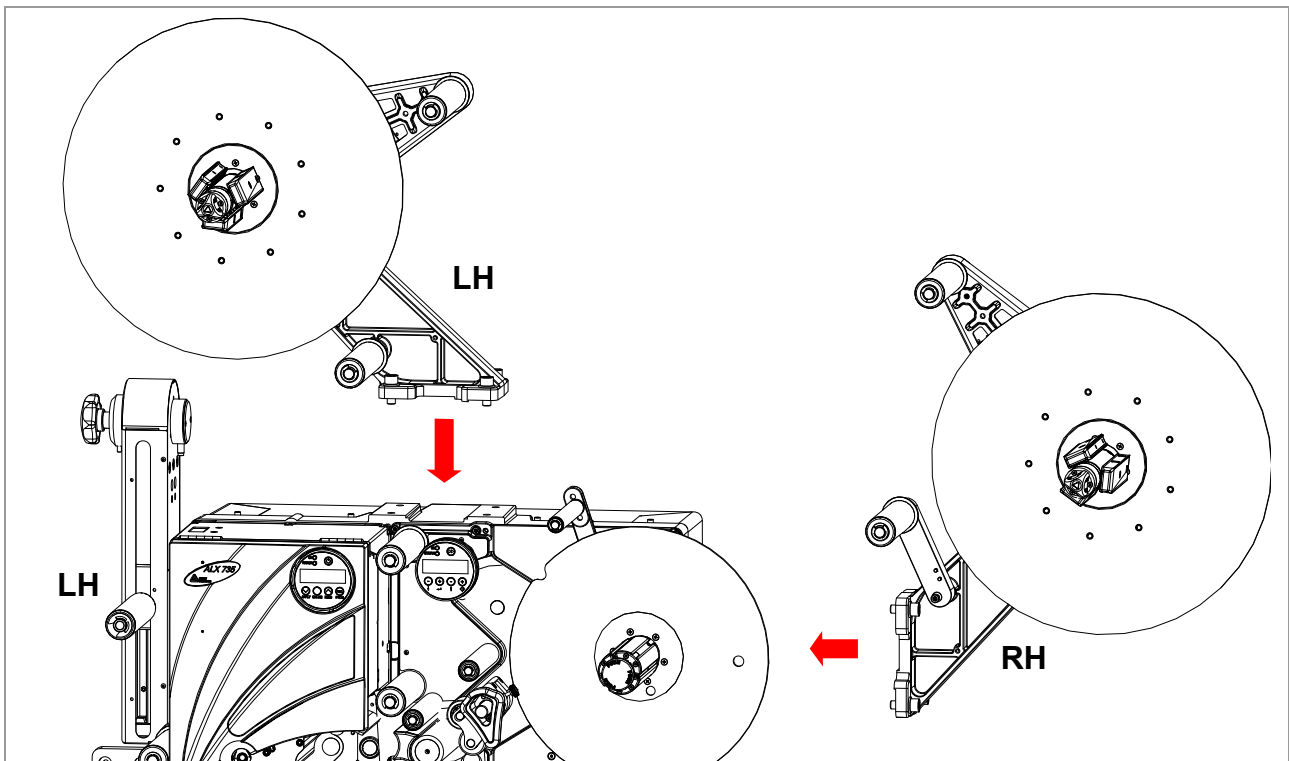
[26] Positions and markings of the unwinders at an ALX 73x LH.

This description shows how to mount an unwinder with 400 mm max. roll diameter to the top left side. Mounting the other unwinder versions has to be done correspondingly mirrored respectively to the side flanges.

For detailed information about how to identify the different unwinder versions, refer to chapter RH/LH Identification 🗋 on page 2.
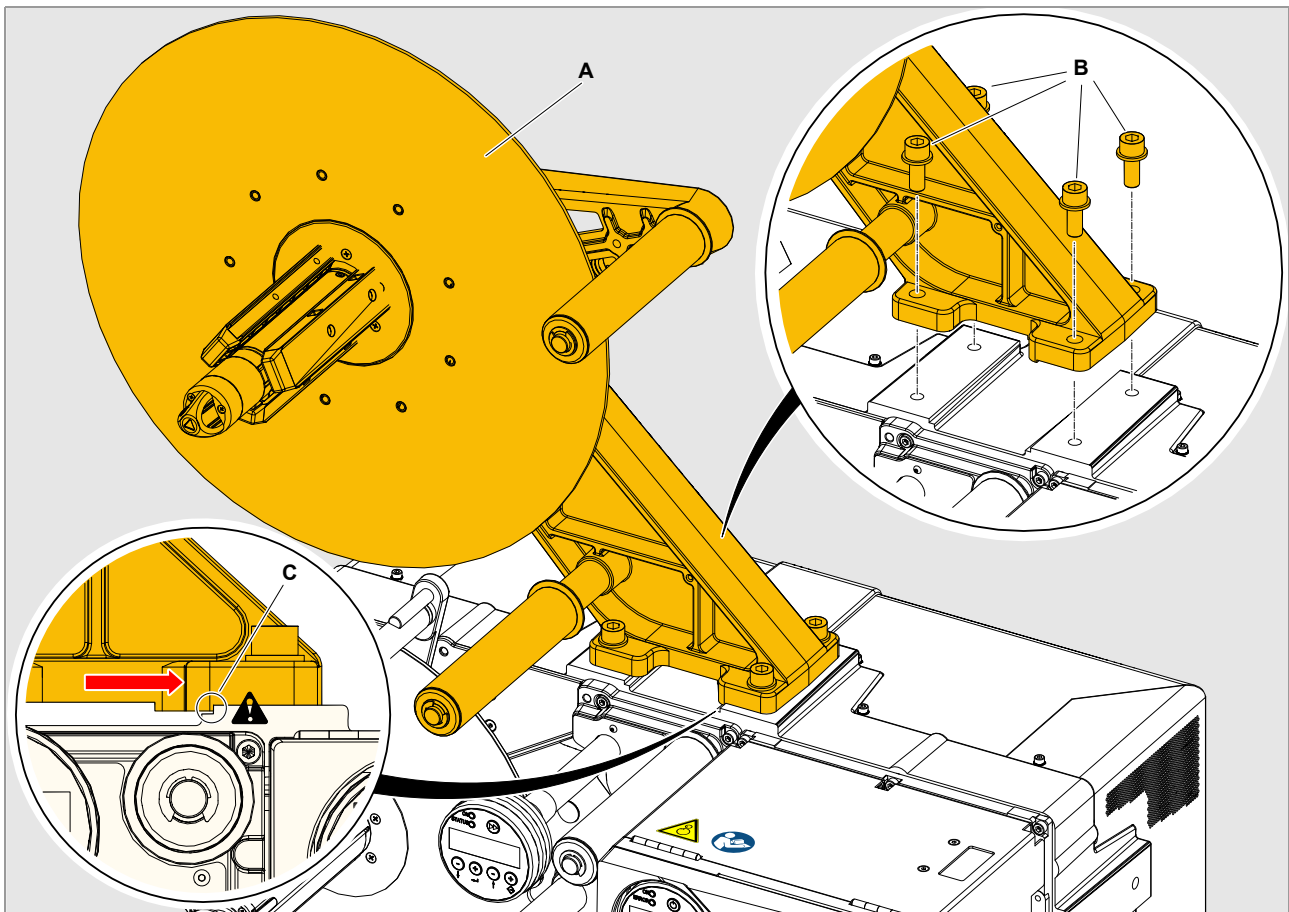
[27] Mounting the unwinder (A).

Assembly:

1. Fix the unwinder to the flange using the 4 screws [27B] and washers that came with the unwinder.

    ➠ Only tighten the screws slightly by hand.

⚠ CAUTION!

Possible unproper machine function caused by inaccurate alignment during assembly.

→ Adjust the zero line as described in the following.

2. Press the edge on the bottom of the unwinder foot against the edge at the flange [27C].

3. Lay a steel ruler [28C] alongside the surfaces [28B].

4. Align the unwinder foot laterally, until both surfaces [28B] are in the same plane.

5. Tighten the screws.

    ➠ Tightening torque: 45 Nm
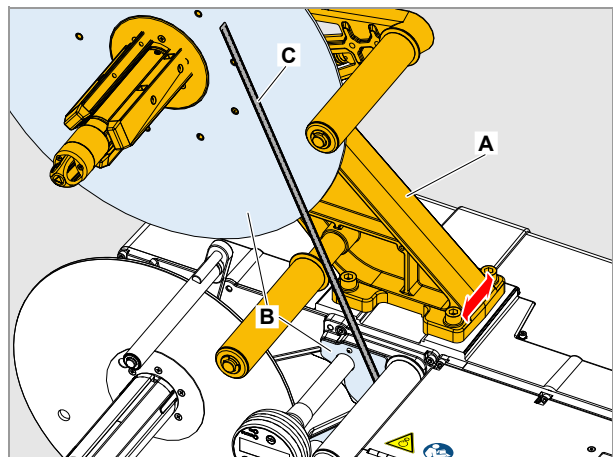
[28] Adjusting the unwinder´s zero line by aid of a steel ruler (C).

Mounting the holding plate

Tool

   8 mm hex socket screwdriver

Mounting

→ Attach the dispensing edge holding plate [29A] with 4 screws to the frontal housing flange.

⫸ The 2 studs [29B] in the holding plate must rest on the flange edge [29C].

⫸ Use the shipped screws (DIN EN ISO 4762 M10x20 A2).
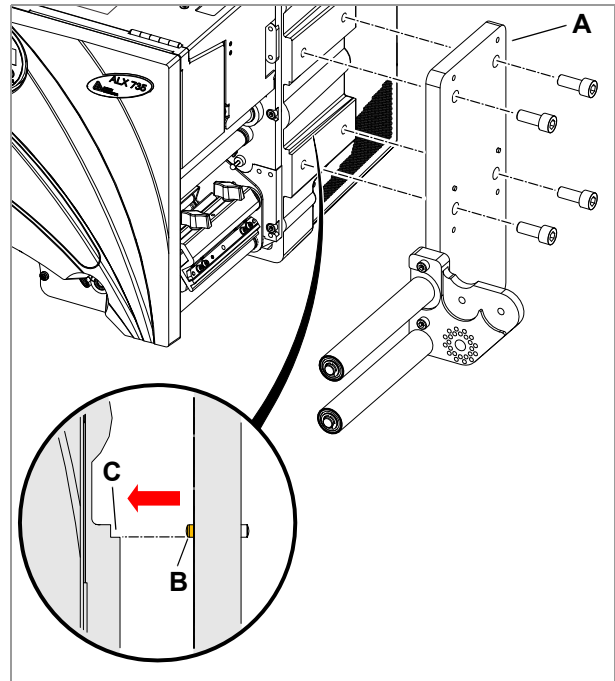
[29] Mounting the dispensing edge holding plate (A).

Configuring the dispensing edge holder

An ALX 73x with standard dispensing edge holder and fixed L-shape dispensing edge can print labels up to a length of *225 mm* without having to modify the length of the dispensing edge holder.

Longer labels (*up to 440 mm)* can be processed, if the length of the dispensing edge holder is checked and is, under certain circumstances, modified.

For this purpose can be applied optional length-adjustable dispensing edge holders, see Adjustable dispensing edge holders 🗋 on page 53.

By means of the diagram [31], the required dispensing edge holder length can be determined dependent on the label length. The coloured areas show the ranges of admissible dispensing edge holder lengths. The label length plots against the x-axis, the dispensing edge distance plots against the y-axis left and the dispensing edge holder rod lenths plot against the y-axis right.

⮞ Application conditions for the diagram:

- The dispensing edge holder is not swivelled ahead (that is, the position of the dispensing edge holder must match fig. [30])

- The linear dancer lever is equipped with a *single* deflection roller..

⮞ Application of the optional *double* deflection roller: see

Continued overleaf.
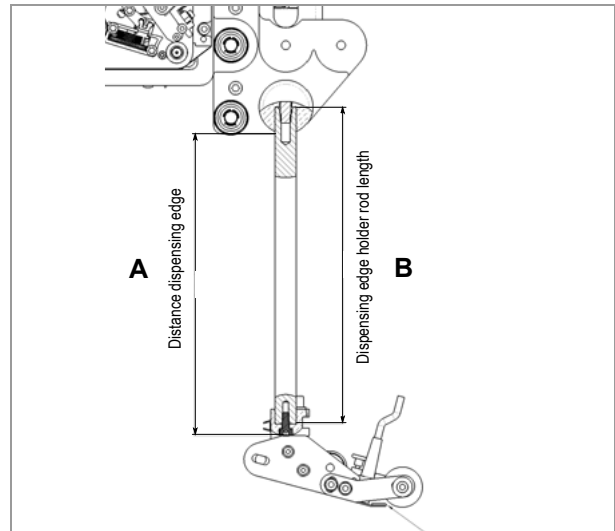
[30] Measures for the dispensing edge holder rods (B) and for the dispensing edge distance (A).
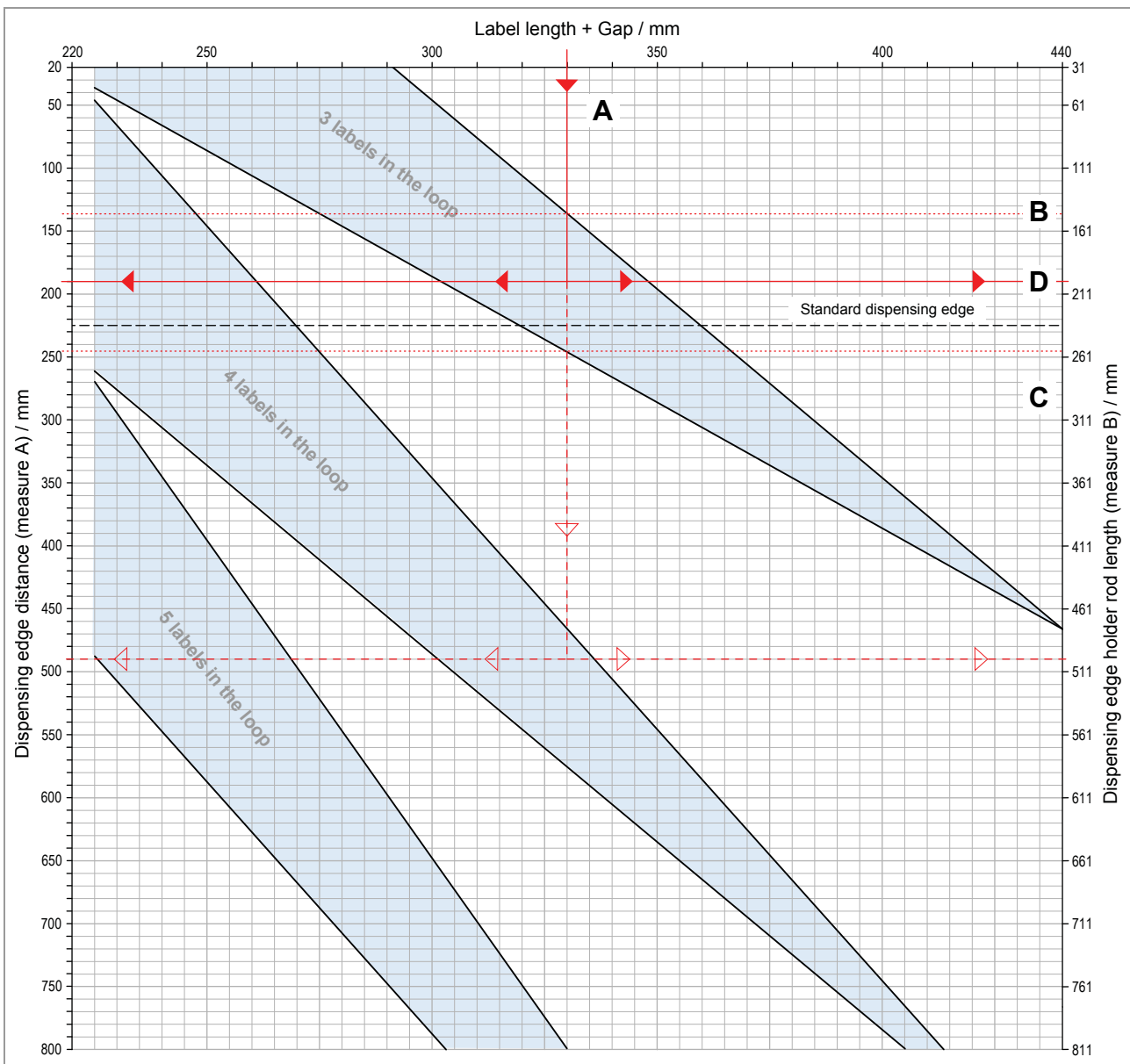
[31] Diagram for finding out the optimum length of the dispensing edge holder (linear dancer lever with single deflection roller).

Reading example:

Starting with a label length [1] of 330 mm [31A], the diagram shows a length range for the rods of 145 mm [31B] to 255 mm [31C] (dotted lines). If one chooses a point in the middle of the range, this results in approx. 200 mm [31D].

⏩ All points in the coloured areas, including the points on the border lines are admissible.

⏩ The related measure for the dispensing edge distance can be read on the left y-axis.

_____

1)　including the gap

⫸ An additional length area results, if the vertical line is elongated until it cuts the second coloured area. The examle shows here an admissible rod lengthof 475 to 511 mm (dashed lines).

⫸ The black dashed line marks the length of the standard dispensing edge holder. The diagram shows, that the example labels with 330 mm length can also be processed with this dispensing edge holder. *Not* processed with the standard holder can be labels with one of the following lengths:

- 270 - 320 mm
- > 360 mm

Mounting the dispensing edge holder

The dispensing edge holder is required for mounting L-shape dispensing edges.

Both, the dispensing edge holder [32A] and the mounting flange [32B] on the holding plate have two concentric rings of holes on the connecting surfaces. Two pins [32C] that fit into these holes are provided with the dispensing edge holder. To secure the dispensing edge holder so it cannot swivel, the pins are located in diametrically opposite holes. By replacing the pins in adjacent holes, the mounting angle of the dispensing edge holder can be adjusted in 15° increments.

If the dispensing edge holder is swivelled forwards, an additional deflection roller (accessory) has to be mounted (see chapter Mounting an additional deflection roller 🗋 on page 22).

Tool

    8 mm hex socket screwdriver

Assembly:

1. Locate the pins [33C] in diametrically opposite holes.

2. Fit the dispensing edge holder onto the pins at the required angle.

    ➠ Choose either inner or outer circle of holes, dependent on the required angle.

3. Fix the dispensing edge holder in place with screw [32D].
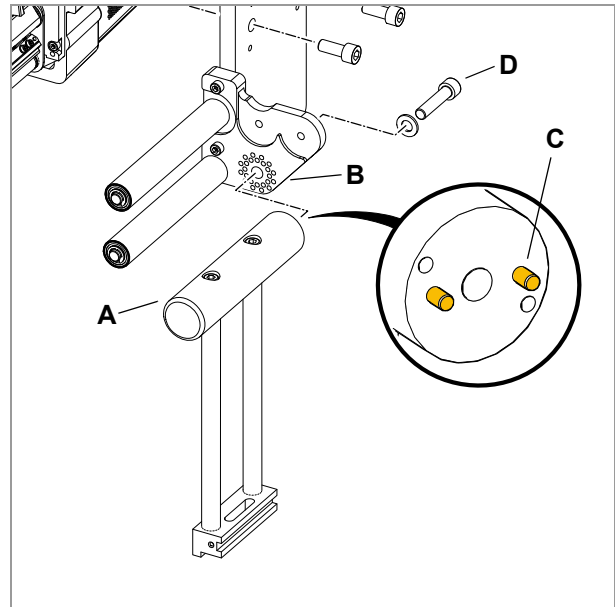
[32] Mounting the dispensing edge holder (A).

Mounting the dispensing edge

Mounting a L-shape dispensing edge

Prerequisite: Dispensing edge holder is mounted.

Tool

   Hex socket screwdriver, 8 mm

Mounting:

1. Fit the dispensing edge [33A] as pictured.

   ⟾ Position the dispensing edge so that the inner side plate touches the edge of the label web (material zero line).

2. Connect the label sensor.

   See chap. Label sensor 🗋 on page 26.

⟾ The following optional available dispensing edges are attached in the same way:

   • Swivelling dispensing edge
   • Spring-loaded dispensing edge
   • Pneumatic dispensing edge

Mounting a V-shape dispensing edge

Tool

   • Hex socket screwdriver, 2.5 mm
   • Socket spanner, SW 16

Mounting:

1. Fit the V-shape dispensing edge [33A] in the required tilt angle as pictured.

   ⟾ The maximum length adjustment range is reached with a tilt angle of 6.5° [34A].

2. Install the additional deflection roller, see Mounting an additional deflection roller 🗋 on page 22.

3. Connect the label sensor.

   See chap. Label sensor 🗋 on page 26.

Length adjustment:

1. Loosen the 4 set screws [35A] in the cross-beam.

2. Shift the dispensing edge to the appropriate length.

   ⟾ Adjustment range at 6.5° tilt angle: 173 - 421 mm. See measure x in [35B].

3. Re-tighten the set screws.
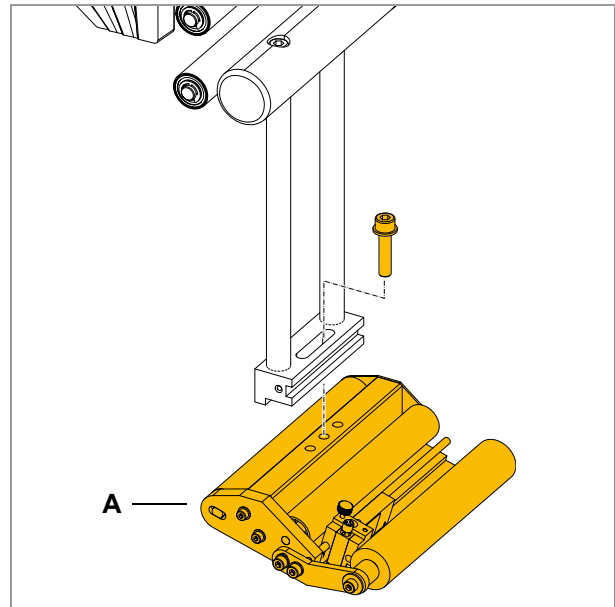
[33] Mounting a fixed L-shape dispensing edge (A).
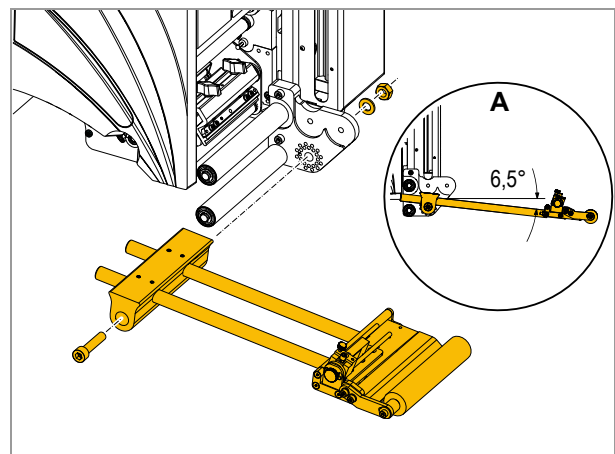
[34] Mounting a V-shape dispensing edge.
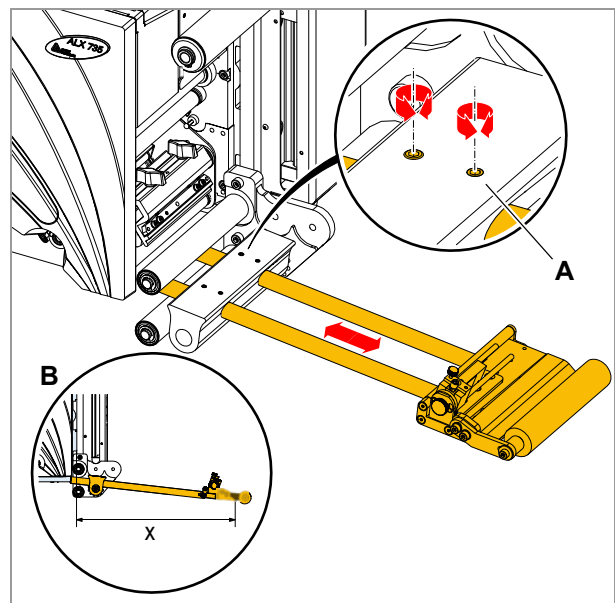
[35] Length adjustment of the V-shape dispensing edge.

Mounting the dancer arm unit

Tools

- Allen keys, 2/4 mm
- Spanner, SW 13

Mounting

1. Remove the deflection roller [36A]. To do so, unscrew the axle using the spanner.

2. Remove the housing [36B]. To do so, remove 4 screws [36C].

3. Attach the dancer arm unit to the holding plate (4 screws [36D]).

4. Reassemble housing and deflection roller.

5. Connect the sensor.

   See chap. Position sensor for linear dancer arm 🗋 on page 35.
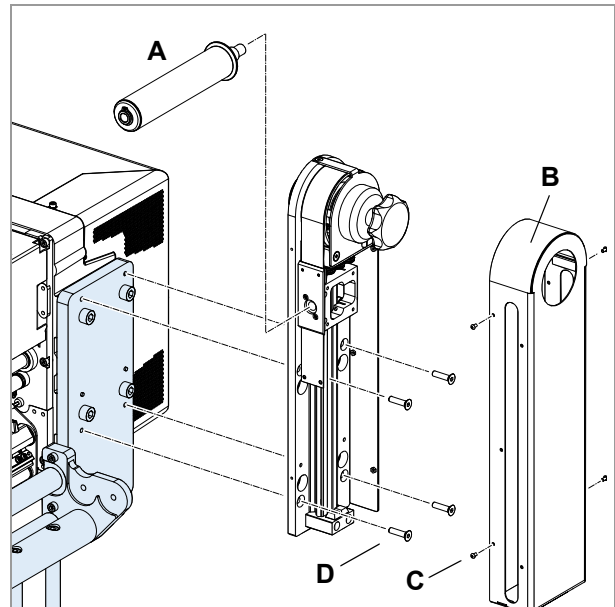
[36] Mounting the dancer arm unit.

Mounting an additional deflection roller

The following applications require an additional deflection roller:

- L-shape dispensing edge swivelled to the front [37]
- V-shape dispensing edge

Article numbers:

- A104230 (ALX 734/5)
- A104231 (ALX 736)

Tool

   Allen key, 8 mm

Mounting

➔ Fit the deflection roller [37A] as pictured.
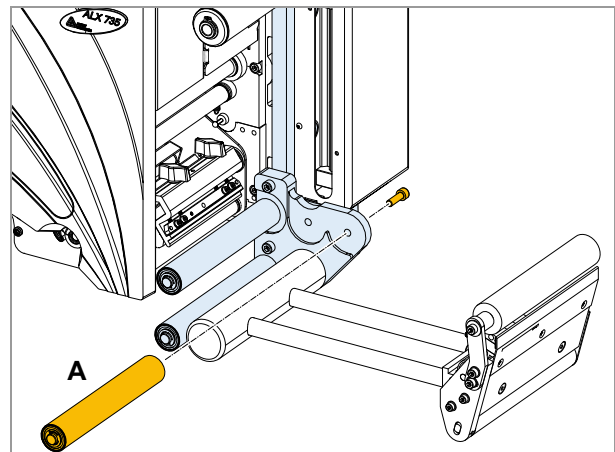
[37] Mounting an additional deflection roller (A).

Electrical connections

⚠	**WARNING!**
	The machine is connected with the mains supply! Contact with energised components can result in life-endangering currents through the body as well as burns.
	➔ The mains connection may only be performed by authorised specialists who are aware of the risks involved.
	➔ Ensure that the machine is switched off before connecting the power cable.
	➔ Only operate the machine using the system voltage indicated on the nameplate.
	➔ The length of the power cable must not exceed 3 m.
	The machine side power plug has a definite phase position.
	➔ Pay attention to the phase position when connecting the machine.
	Power switch = Separator
	➔ If the power switch can not be accessed, e.g. due to the mounting position of the machine, an *additional accessible* power switch must be installed.

Connecting to the mains power supply

Connecting to the machine

The ALX 73x comes with a loose machine connector [38].

Article number: A9546

Tool:

   Screwdriver size 2

Connecting:

1. Select a 3-wire power cable with a cross section matching the mains voltage/current in your country.

2. Strip the insulation off the power cable according to the regulations.

3. Thread the cable end through the connector housing [39].

4. Screw the wire ends into the clamps as illustrated [39].

    ⇒ Pay attention to the phase position [39L].

Mains connection

Connect the free cable end to the mains power supply.

⇒ Pay attention to the phase position [39L].

[38] Machine connector of the power cable.
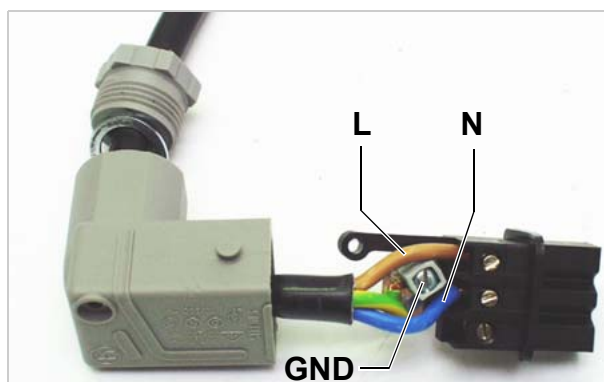
[39] Preparing the connector.

[40] Pin assignment of the connector.

Connecting to a data host

According to the factory settings, the ALX 73x is set for data transfer via USB interface. Print data can also be transferred via a serial interface or an Ethernet interface.

Alternativly, print data can be provided on a memory medium.

The interface type is selected with the following parameter: INTERFACE PARA >EASYPLUGINTERPR > Interface

You might have to set other parameters as well, depending on the interface chosen:

- Settings for the serial interface (Com1 or Com3 [1]): INTERFACE PARA > >COM1 PORT or INTERFACE PARA >COM3 PORT.

- Settings for the Ethernet interface: INTERFACE PARA >NETWORK PARAM.

Information about using the *Ethernet interface* can be found in topic section Advanced Applications 🗎, chapter „Data transmission with Ethernet".

For details about *data transmission* read the user manual, chapter „Startup and operation" > „Printing" > „Transferring a print job".

Ordering numbers for power cables or *data cables* can be found in the Service Manual, topic section „Spare Parts", chapter „Accessories".
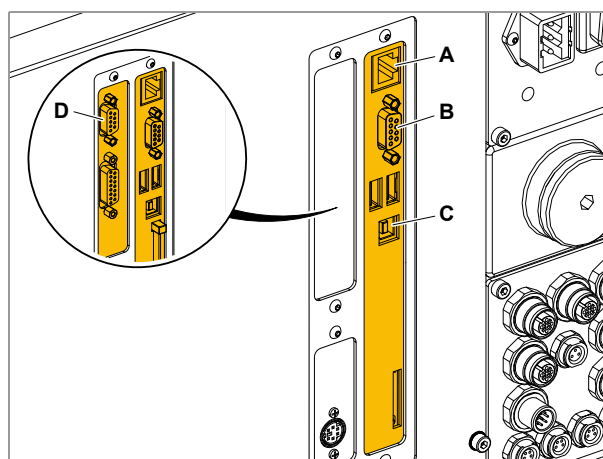
[41] Data interfaces at the ALX 73x.
- **A** Ethernet
- **B** RS 232
- **C** USB
- **D** RS 232/422/485 (optional)

---

1)   If the optional 2nd serial interface is installed.

Connecting the sensors

Label sensor

Permitted sensor type: NPN

The label sensor is included in the dispensing edge scope of delivery [42].

Article numbers:

- A101974: Sensor with bracket and cable (1.5 m)
- A101972: Sensor with bracket [43]
- A101971: Connection cable (1.5 m)

i   Older light sensor types see chapter Teaching older label sensor types ⎙ on page 66.
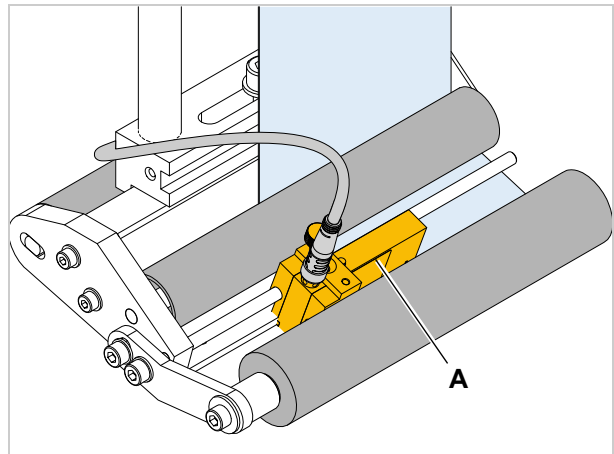
[42] Label sensor (A) at the L-shape dispensing edge

[43] Novexx label sensor (standard since 9/2011)

Connecting the sensor

➔ Plug the label sensor in to the connector shown [44A].

Pin assignment

Pin	Assignment
1	+24 V
2	LED
3	Ground
4	Sensor signal

[Tab. 2] Pin assignment label sensor connector.
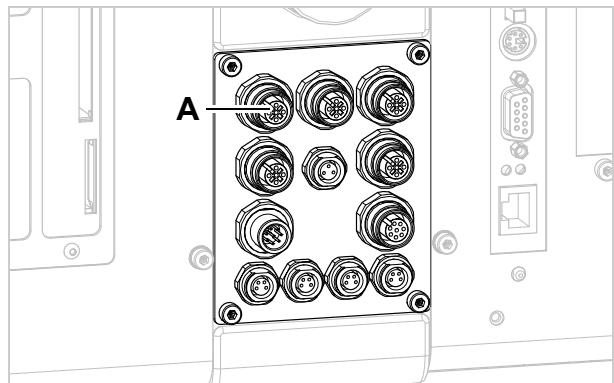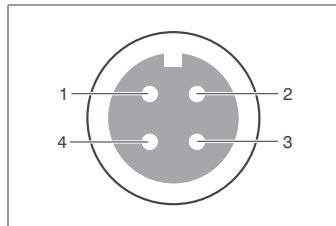
[44] Connection (A) label sensor.

Connection diagram
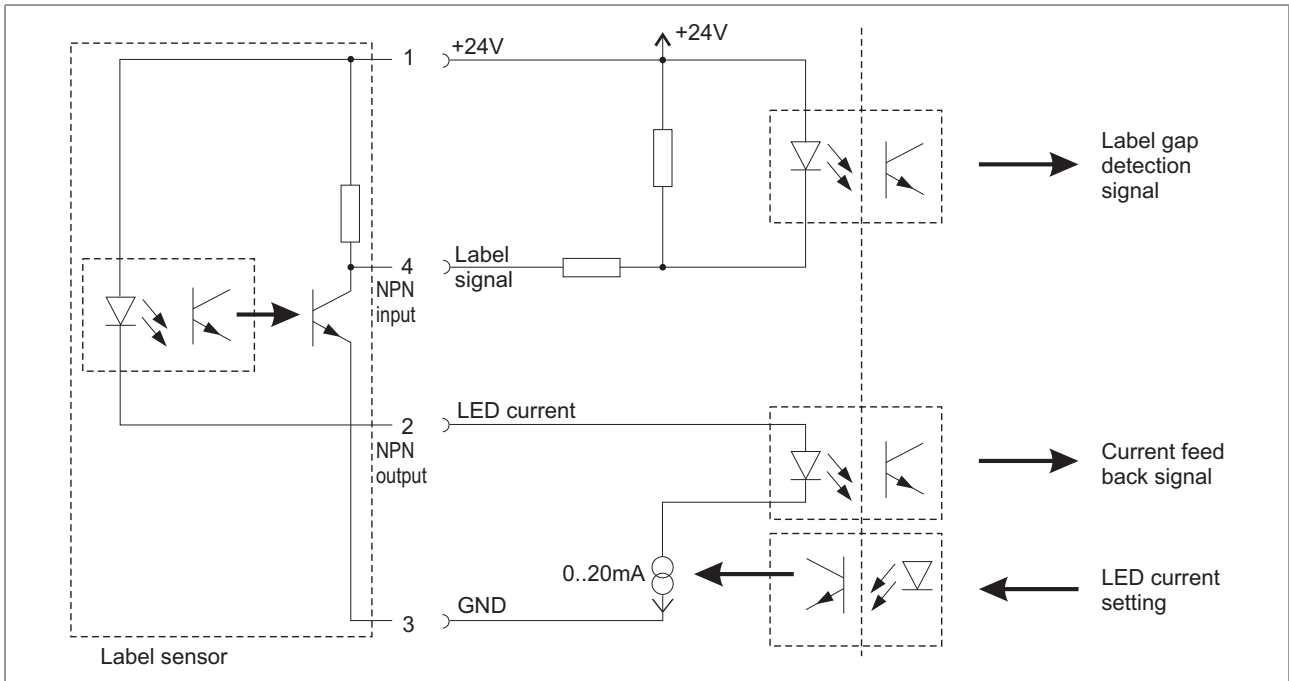
[45] Connection diagram for label sensor.

ℹ️ The LED current at pin 2 controls the sensitivity
of the sensor.

Teaching the label sensor

1. Press the button [46A] for 2 s, until the status LEDs [46B] light permanently.

    ⮞ *Notice*: Don´t press the button for longer than 5 s, otherwise you risk to switch between NO/NC[1].

    After releasing the button, a teaching „time window" opens for 2-8 s. During this period, the status LEDs are flashing fast [47].

2. While the LEDs are flashing, move as many labels as possible (at least 2) through the sensor fork.

    ⮞ This has to be done *manually*, *not* by pressing the ▶▶ button.

    If the labels were detected successfully, the status LEDs are flashing 2x [48].

    If the labels were not detected ideal, the status LEDs are flashing 4x.

3. Repeat the procedure, if the labels were not detected ideal.
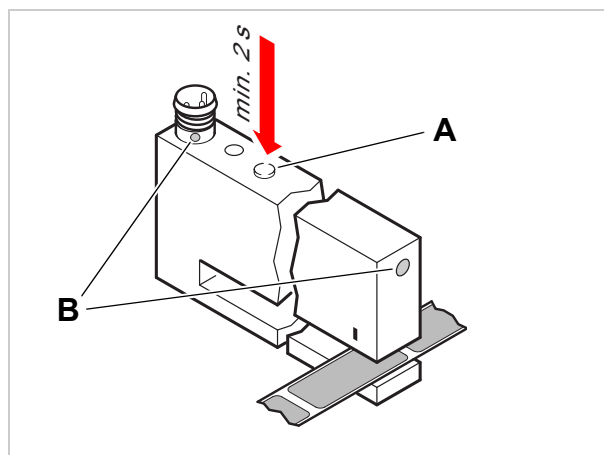
[46] Starting the autoteaching.
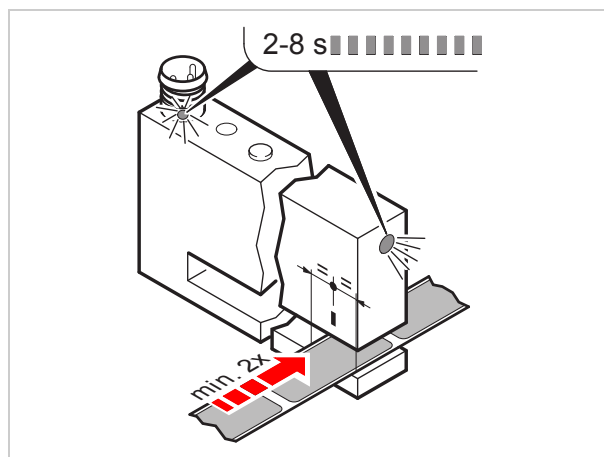
[47] Autoteaching is indicated by flashing LEDs.
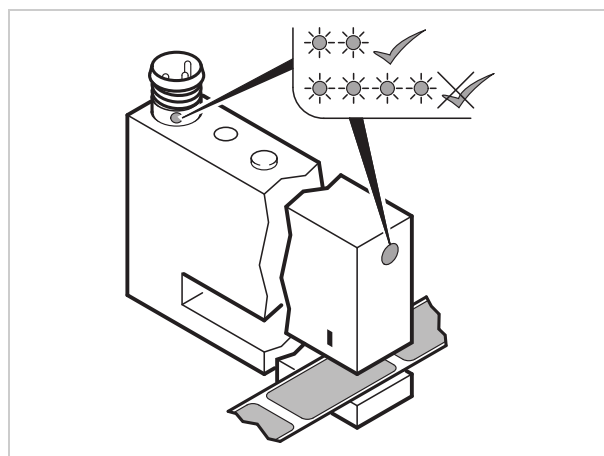
[48] Sensor is successfully set = flashing 2x.

---

1)   NO = Normally open; NC = Normally closed

Switching the sensor - NC/NO

This light sensor is equipped with a push-pull output stage, thus, the two states are called NO (normally open) and NC (normally closed).

Default setting: NC

Switching the sensor:

→ Press the button [49A] for at least 6 s, until the status LEDs [49B] flash 2x.

Finding out the current setting:

1. Move some label material through the sensor fork and watch the LEDs.

2. Compare the result with the table:

Mode	Label	LED	Output
Wenglor (NPN)	Yes	On	Low
	No	Off	High
Novexx (NO)	Yes	On	High
	No	Off	Low
Novexx (NC)	Yes	Off	Low
	No	On	High

[Tab. 3]   Overview: LED activity and output levels with or without Label.
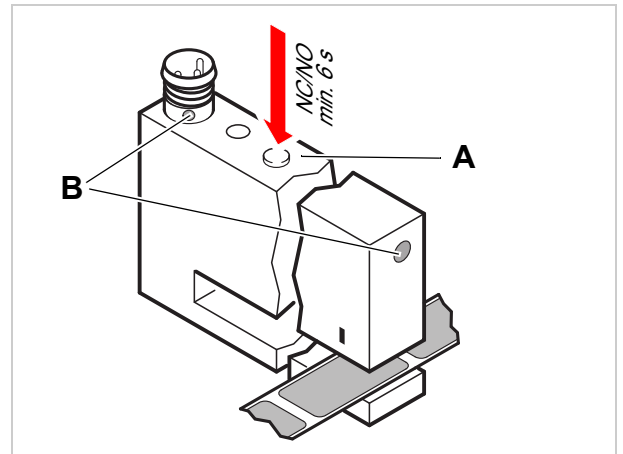
[49] Switching the Novexx sensor between NC and NO.

Capacitive label sensor

Capacitive label sensors are required to detect transparent or metallized labels, what is not possible with normal light sensors.

Permitted sensor types: PNP or NPN

Default setting: PNP

▥➡ Capacitive label sensor and standard photoelectric sensor may both be connected at the same time. Selection of the active sensor is done by calling (LMA) MACHINE SETUP > Label sens. type. The setting is stored within the product profile.

NOVEXX Solutions offers a capacitive label sensor from di-soric (www.di-soric.de🗋).

Article numbers:

- A100455 *capacitive sensor* di-soric
  KGUTI50 0.4-G3-T4 [50]

- *Sensor kit* (sensor + sensor holder + connection cable) [56]:
  A7775 for 160 mm wide dispensing edge holder
  A9995 for 230 mm wide dispensing edge holder

- *Sensor holder*
  A6059 for 160 mm wide dispensing edge holder
  A5574 for 230 mm wide dispensing edge holder

🛈 Older light sensor types see chapter Teaching older label sensor types 🗋 on page 66.

[50] Capacitive label sensor from di-soric
KGUTI50 0.4-G3-T4
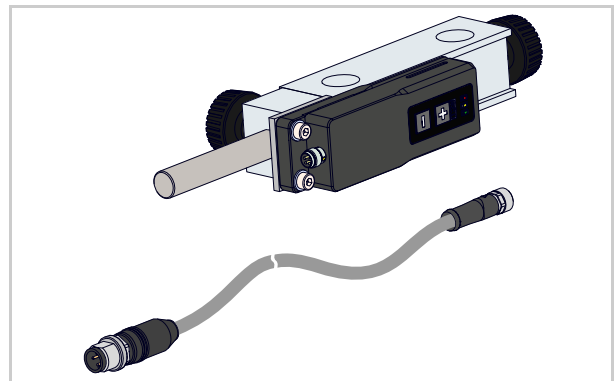
[51] Sensor kit.

Installing the sensor

Tools:

Hexagon socket drivers 4/6 mm

Installation:

1. Turn out the 2 screws [52A] from the upper cross beam.

2. Push the sensor holder [52B] onto the holding rods and fix it with the thumb screw [52C].

3. Reinstall the holding rods to the upper cross beam.
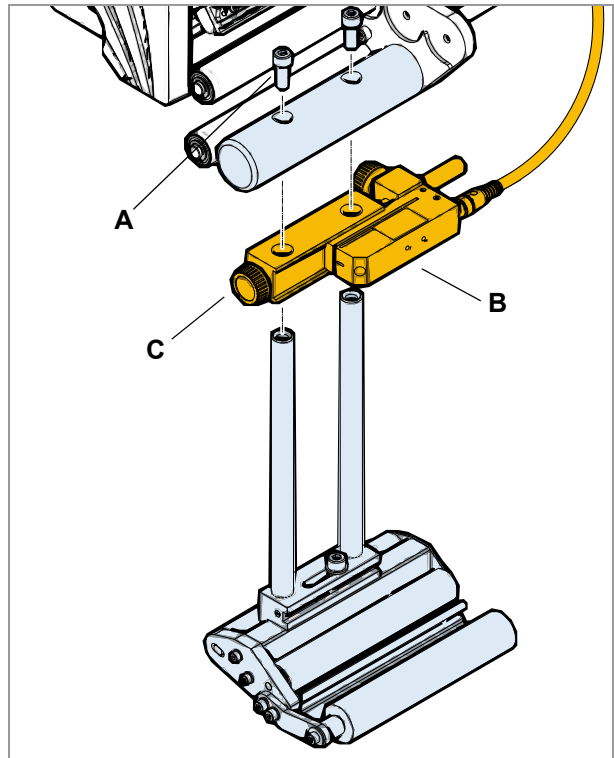
[52] Mounting the capacitive label sensor.

4. If not already done: Screw the sensor to the sensor-holder [53].

5. Connect the cable.
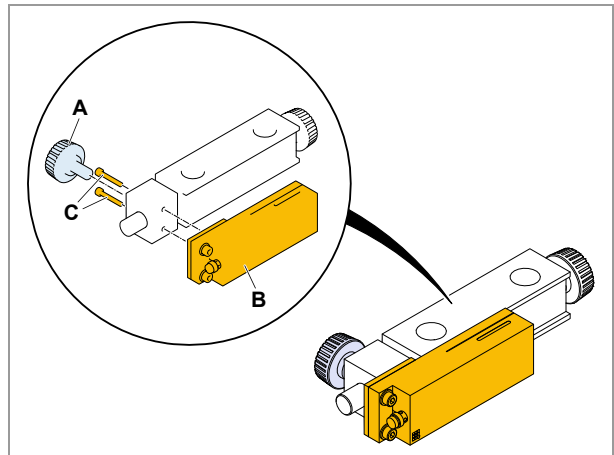
[53] Attaching sensor type 2 (B) to the sensor holder.

Positioning the sensor holder:

The sensor holder be varied in a wide range on the holding rods. The most favorable position can be found as follows:

Label web is in stop position (position just after dispensing a label).

1. Loosen the thumb screw [54B] at the sensor holder.
2. Push the sensor holder over a label gap and fix it there.
3. Tighten the thumb screw.

➠ In this position should be possibly few labels between dispensing edge and (capacitive) sensor.

➠ Fine adjustment of the stop position is done in the same way as with the standard label sensor.
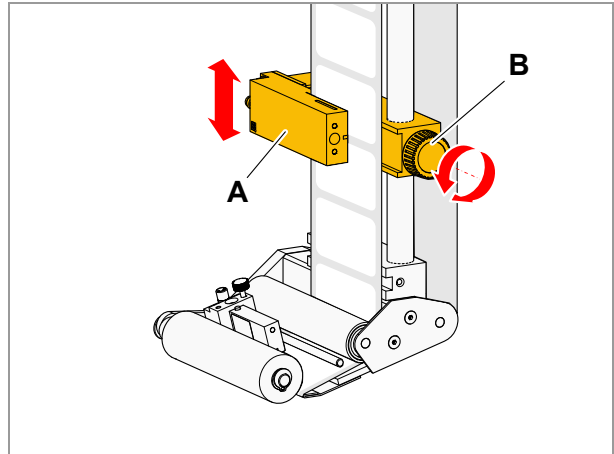
Connecting the sensor

➜ Plug the sensor in to the connector shown [55A].

Connection accessories	Article no.
Connector (cable-Ø 4-6 mm)	A8142
Connector (cable-Ø 6-8 mm)	A8143
Connecting cable (coupling-plug)	A7127

Pin assignment

Pin	Assignment
1	+24 V
2	+24 V or ground or no connection [a]
3	Ground
4	Sensor signal

a) Changing light/dark switching at the product sensor or the alternative label sensor 🗎 on page 37.

[54] Positioning the sensor holder.
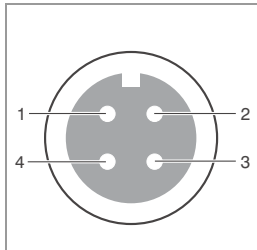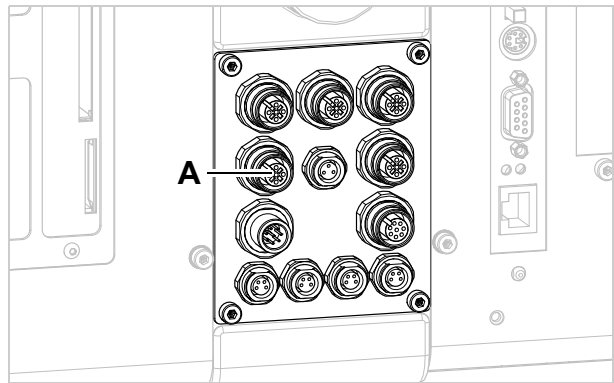
[55] Connection (A) for alternative label sensor.

Connection Diagram
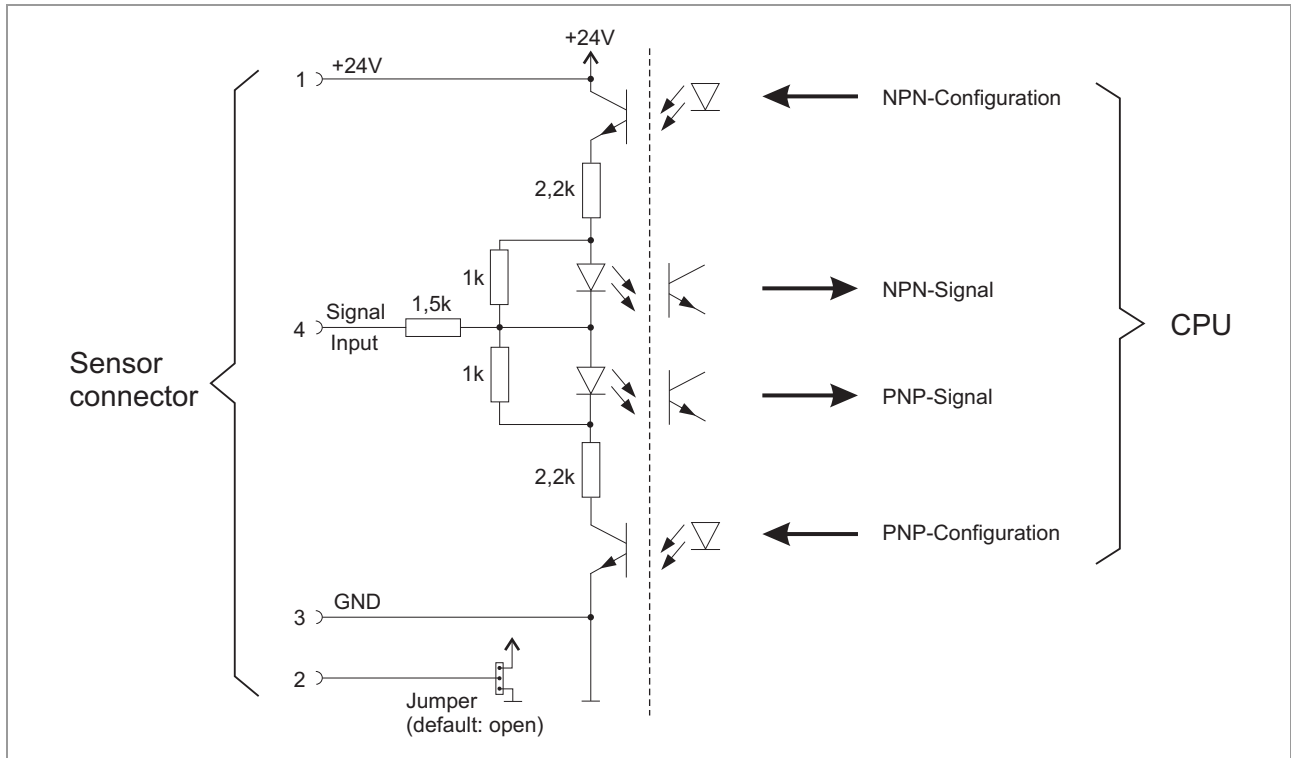
[56] Connection diagram alternative label sensor.

Teaching the sensor

Autoteach:

During the "Autoteach" process, feed at least three labels and label gaps through the fork opening of the sensor. The label web must be taut and rest lightly on the lower leg of the fork opening. Tip: move the sensor up and down on the holding rods with the holder released [57].

1. Press the „+" button [57B] for 2-4 seconds.

    ➠ The yellow LED [57C] lights up; it flashes quickly when the button is released.

2. Slide the sensor over the label web over some labels and gaps.

3. (Alternatively) Pull the label web through the sensor.

The „Autoteach" process ends automatically after a few seconds and the yellow LED stops flashing.

Display result:

*   Teach process successful: yellow LED flashes twice

*   Teach process not successful: yellow LED flashes 4x and red LED lights up
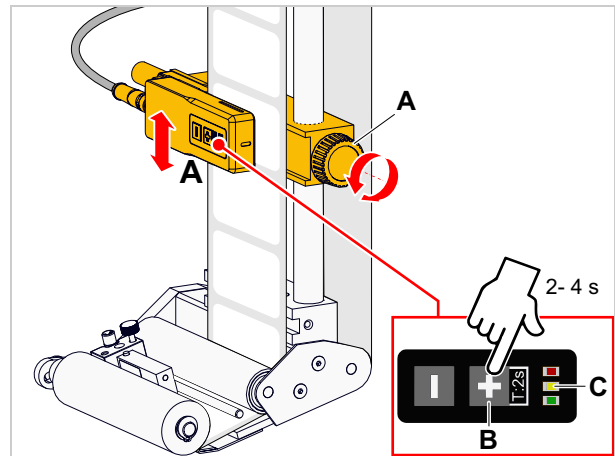
[57] Performing "Autoteach".

Static „single value teach" on label gap:

1. Position the sensor with the detection area over a label gap and fix it there.

    ➠ It is best to remove a label and slide the sensor over the resulting gap.

2. Press the „+" button for 4-6 seconds.

    ➠ The yellow LED remains off.

Display result:

- Teach process successful: yellow LED flashes twice

- Teach process not successful: yellow LED flashes 4x and red LED lights up

ℹ️ For more information, see the documentation supplied by the manufacturer.

Setting older sensor types: see chapter Teaching older label sensor types 🗎 on page 66.

Cleaning the sensor

Due to the small gap between the upper and lower part, adhesive residue from label webs can accumulate in the area of the fork opening.

Tools:

- Hex socket screwdriver 3 mm

- Torx screwdriver Tx20

Cleaning the sensor fork (intensively):

1. Disconnect the sensor.

2. Unscrew the sensor [58A] from the bracket. To do this, unscrew the two screws [58B].

3. Loosen the screw connection of the upper and lower part [59B]. To do this, unscrew the 4 screws [59A].

4. Remove adhesive residue with a soft cloth.

5. Screw the upper and lower sections back together.

    ➠ Tighten screws evenly to avoid mechanical stresses.

6. Screw the sensor back onto the bracket.

7. Reconnect the cable.

8. Perform reference value adjustment. To do this, press the „-" button for at least 6 seconds.

9. Teach the sensor to the label material.
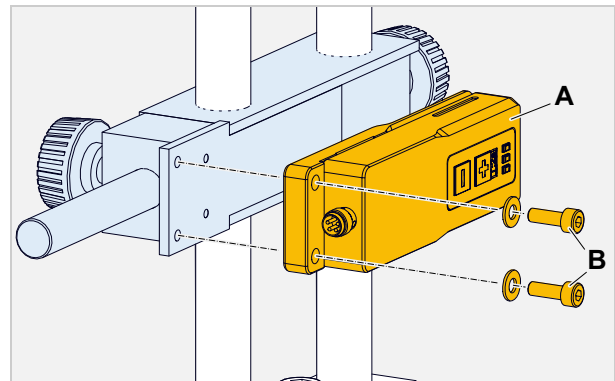
[58] Unscrew the sensor (A) from the bracket.
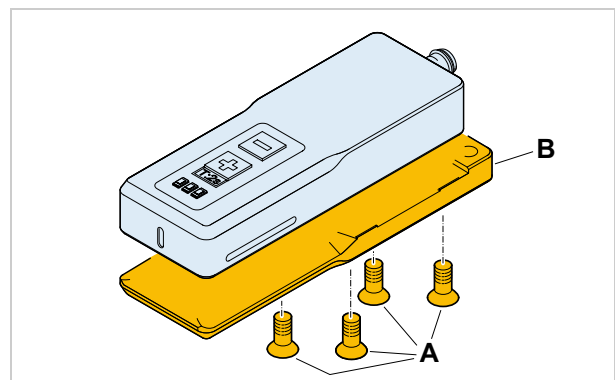
[59] Dismantling the upper and lower part of the sensor.

Position sensor for linear dancer arm

➔ Connect cable [60] to the linear dancer unit [61A] and to the machines rear side [62A].

[60] Connection cable for the dancer arm position sensor (Article no.: A102508).
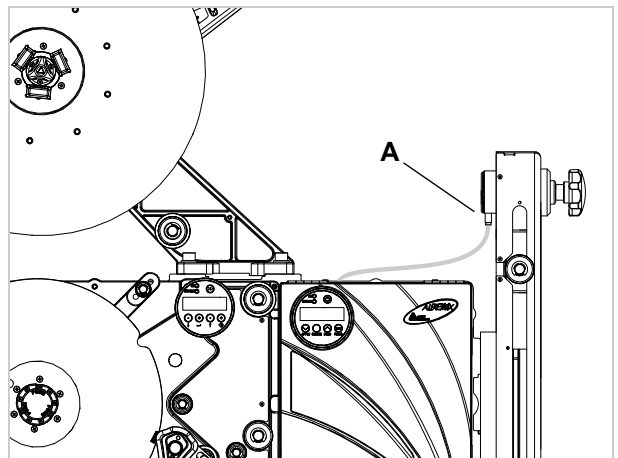
[61] Connect cable to the dancer arm unit.
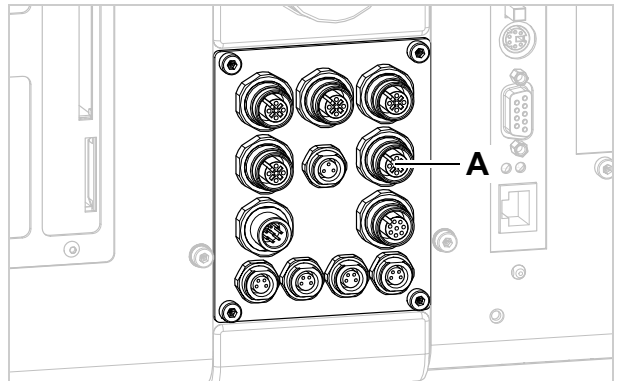
[62] Connection (A) for dancerarm position sensor.

Start (Product) sensor

The start sensor (= product sensor) starts the dispensing process and is therefore indispensable in most applications. These installation instructions refer to the standard sensor (N102106) offered by Novexx. Alternatively, a sensor with reflector is available (N102109). The bracket of the reflector is mounted in the same way as the sensor.

- Permitted sensor types: PNP or NPN
- Preset: PNP

Assembly

→ Push the start sensor with the holder [63A] onto the holding rod [63B] and tighten the clamping screw [63C].

Connecting

→ Connect the sensor cable to the cable tail of the sensor [63E] and to the illustrated connection [63D] on the machine.

For NPN Photoelectric sensor:

→ Set (LMA) MACHINE SETUP > Startsen. In.Type to "NPN".

Pin assignment

Pin	Assignment
1	+24 V
2	+24 V or ground or no connection [a]
3	Ground
4	Sensor signal
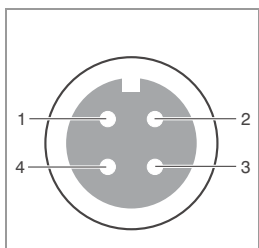
a) See Changing light/dark switching at the product sensor or the alternative label sensor ⬚ on page 37.
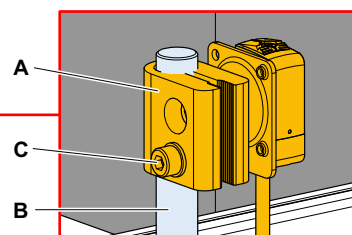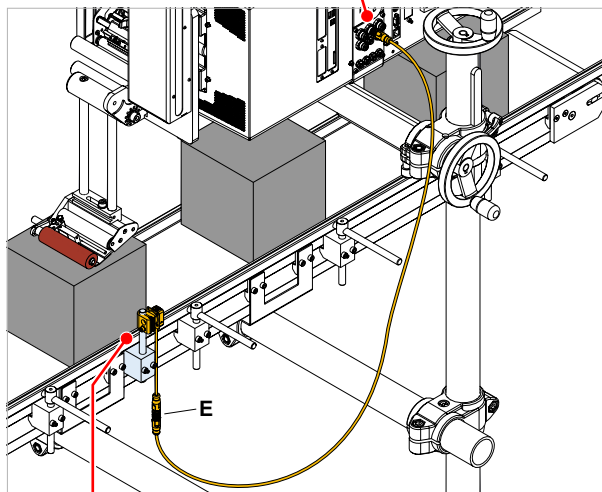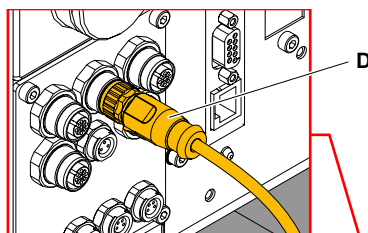
[63] Attaching the start sensor
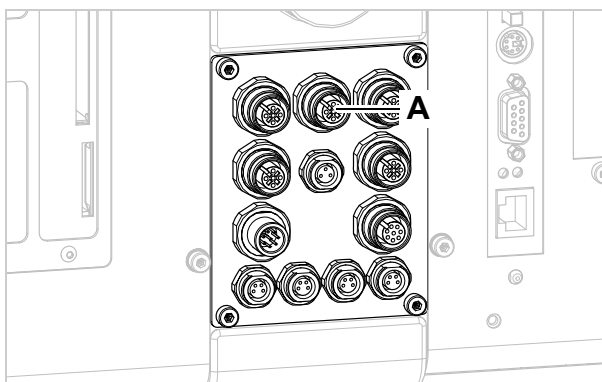
[64] Connection for the start sensor

Connection Diagram
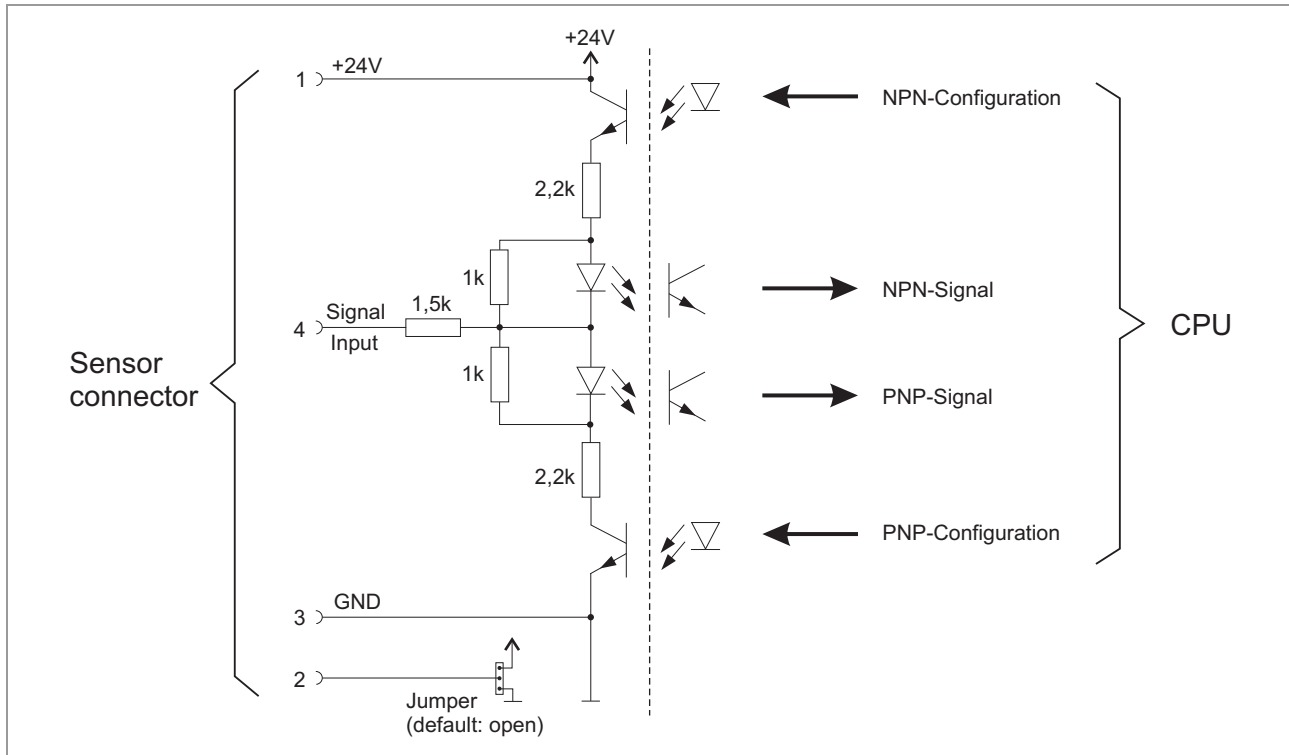
[65] Connection diagram product sensor.

Changing light/dark switching at the product sensor or the alternative label sensor

Basically, sensors can be assigned to three different groups regarding the function of pin 2:

a) Pin 2 has no function

b) Pin 2 = input, e.g. for light/dark switching

c) Pin 2 = output, e.g. for an inverse signal

With sensors of type b), the basic switching type can be changed by connecting pin 2 to +24 V or to ground [66]. For all other sensor types is the absolute rule: Leave jumper JP 901 respectively JP 902 open!

Example:

The alternative label sensor pictured in [50] has an inverse output on pin 2. Therefore, JP 901 must be left open.

CPU board „Gen. 1"

JP 901 JP 902	Function
• • •	Pin 2 of the sensor connector is not connected (default setting)
▯	Pin 2 of the sensor connector is connected to +24 V
▯	Pin 2 of the sensor connector is connected to ground

[Tab. 4]   Controlling pin2 at the sensor connector by placing JP901 resp. JP902

Refer to the illustration on the right to find the jumper position on the board.
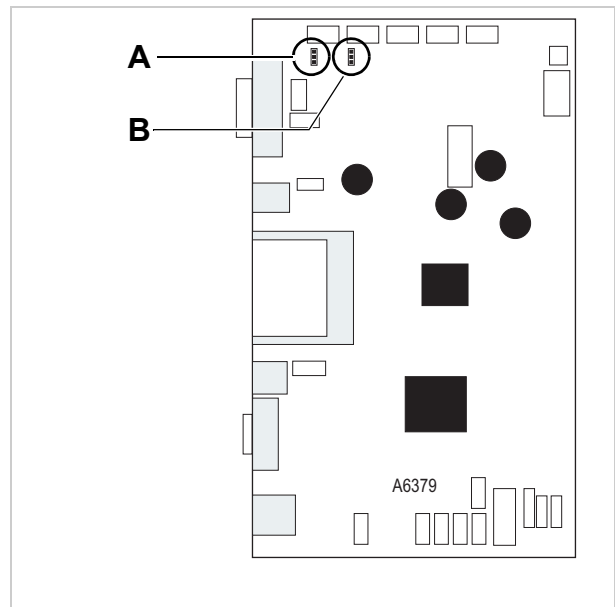
[66] CPU board „Gen. 1" in the LMA.
   A Position of the jumper JP901 (A) for the control of pin 2 of the alternative label sensor.
   B Position of the jumper JP902 (B) for the control of pin 2 of the product sensor.

CPU board „Gen. 2"

JP 2601 JP 2602	Pin 2 of the sensor connector is not connected (default setting)
• • •	Pin 2 of the sensor connector is connected to +24 V
▭ •	Pin 2 of the sensor connector is connected to ground
• ▭	Pin 2 of the sensor connector is not connected (default setting)

[Tab. 5]   Controlling pin2 at the sensor connector by placing JP2601 resp. JP2602.

Refer to the illustration on the right to find the jumper position on the board.
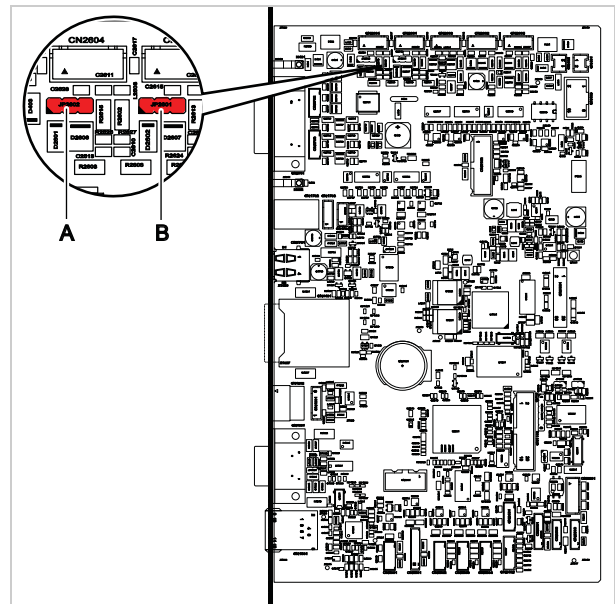
[67] CPU board „Gen. 2" in the LMA.
   A Position of the jumper JP2602 (A) for the control of pin 2 of the *alternative label sensor*.
   B Position of the jumper JP2601 (B) for the control of pin 2 of the *product sensor*.

External OD sensor

[70] External OD sensor.

The ALS 30x can be equipped with an optional sensor [68] to check the outer diameter (OD sensor) of the label roll. The OD sensor triggers a display message and a signal at the signal interface, if less than a certain residual diameter is left on the label roll.

Permitted sensor type: PNP

Article numbers: RH A9416, LH A9392 (for both unwinder types, 300 mm and 400 mm diameter)

Mounting

Tool:

    8 mm hex socket key

1. Remove screw [69A].

2. Fix light barrier holder [69B] with screw [69A] as pictured.

    ➠ The stud at the unwinder holder [69C] must engage with the drilling at the light barrier holder.
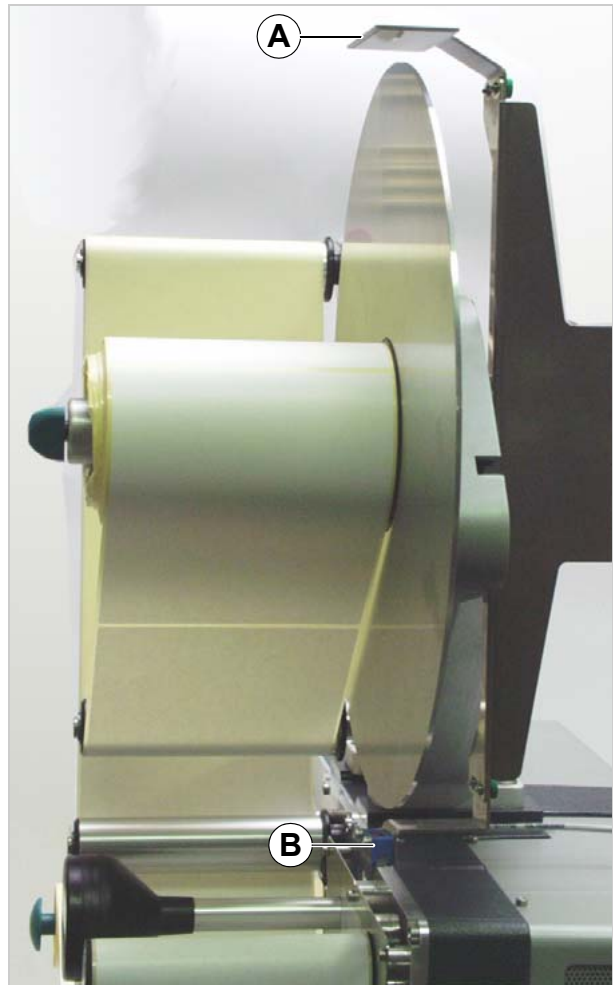
[68] Mounted external OD sensor - side view.
   A Reflector
   B Sensor
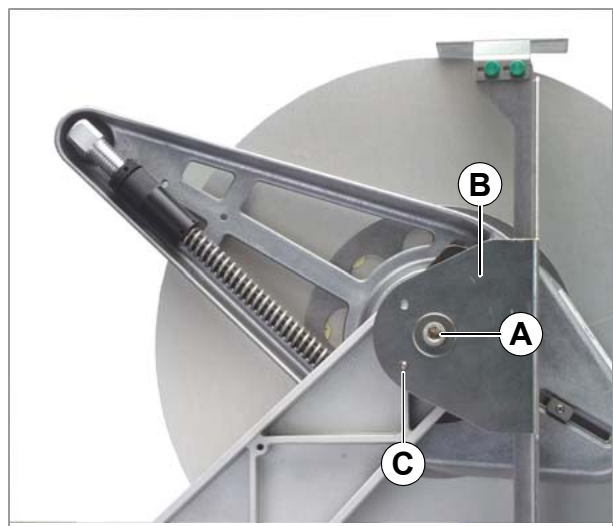
[69] Mounted external OD sensor - rear view (400 mm unwinder).

Connecting

→ Plug the roll diameter sensor in to the connector shown [71A].

Enabling

→ (LMA) Set MASCHINE SETUP > OD sensor warn. to „Error" or „Warning".

→ (LMA) Set MASCHINE SETUP > OD Sens.polarity to „Level low active".

Pin assignment

Pin	Assignment
1	+24 V
2	not used
3	Ground
4	Sensor signal
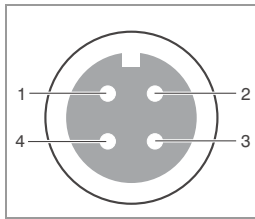
[Tab. 6]   Pin assignment for OD sensor connection.
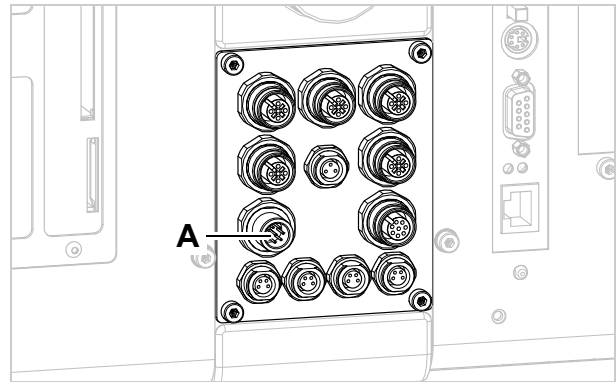
[71]   Connection for OD sensor.

Connection diagram
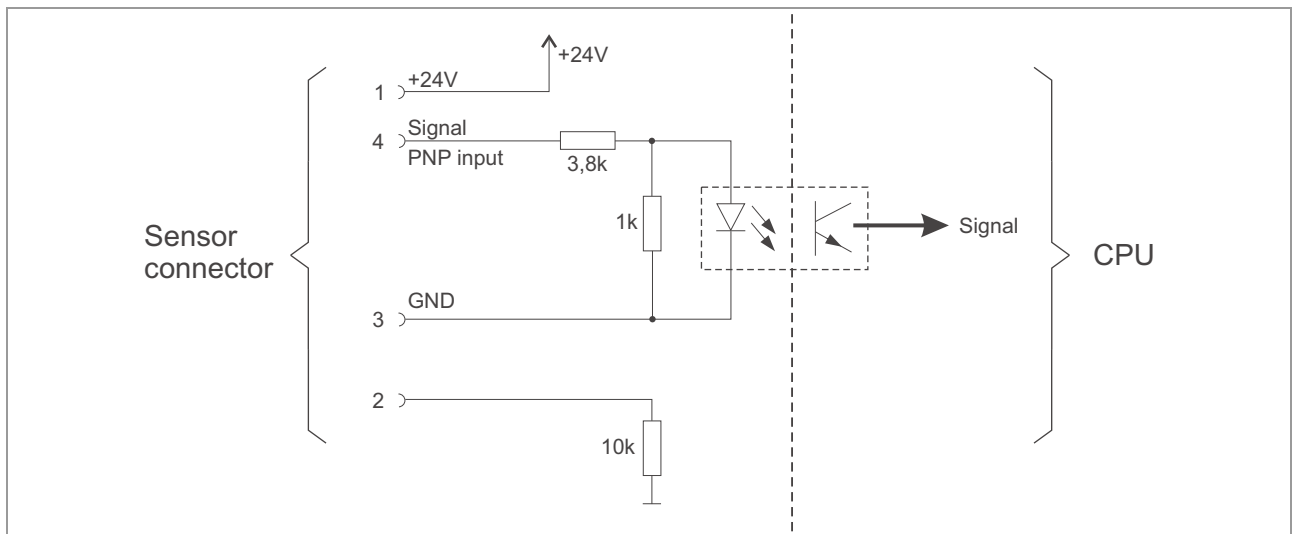
[72]   Connection diagram OD sensor.

Setting the roll diameter

Prerequisite:

- OD sensor is installed an activated.
- Label material roll with the required remaining diameter is prepared.

Setting:

1. Measure the diameter of the prepared roll.

2. Loosen the thumb screws [74A] at the reflector.

3. Shift the reflector to position A [73A] or B [73B] (long holes) according to the measured roll diameter (--> tab.). Retighten the thumb screws.

Roll Ø in mm	Roll Ø in Inch	Reflector position
38-122	1.5-4.8	A
51-135	2.0-5.3	B

4. Insert the prepared label roll.

5. Loosen the thumb screws [74B] at the sensor.

6. Rotate the sensor, until the light beam does not meet the reflector any more.

   The LED at the sensor is off.

7. Slowly rotate the sensor backwards, until the light beam meets the reflector.

   The LED at the sensor lights up.

8. Rotate the sensor further, until the light beam is covered by the label roll.

   The LED at the sensor goes out.

9. Tighten the thumb screws.

Function test

Prerequisite:

- Machine is in dispensing mode.
- (LMA) MASCHINE SETUP > OD sensor warn. = „Warning".

If the light beam of the sensor [73C] meets the reflector, the following warning appears after the next label has been dispensed:

ONLINE

OD sensor warn.

The message disappears immediately, if the light beam stops falling on the reflector.
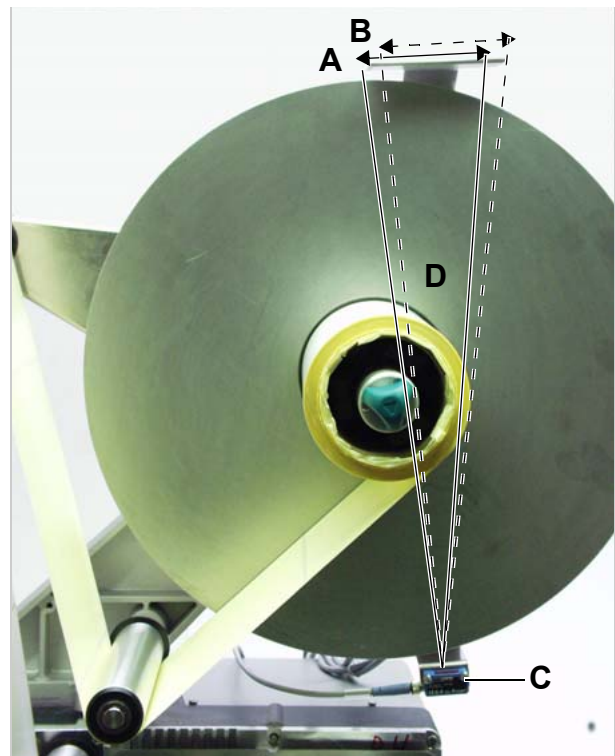
[73] Setting the OD sensor.
- **A** Reflector position A (solid line)
- **B** Reflector position B (dotted line)
- **C** Sensor
- **D** Sensor swivelling range
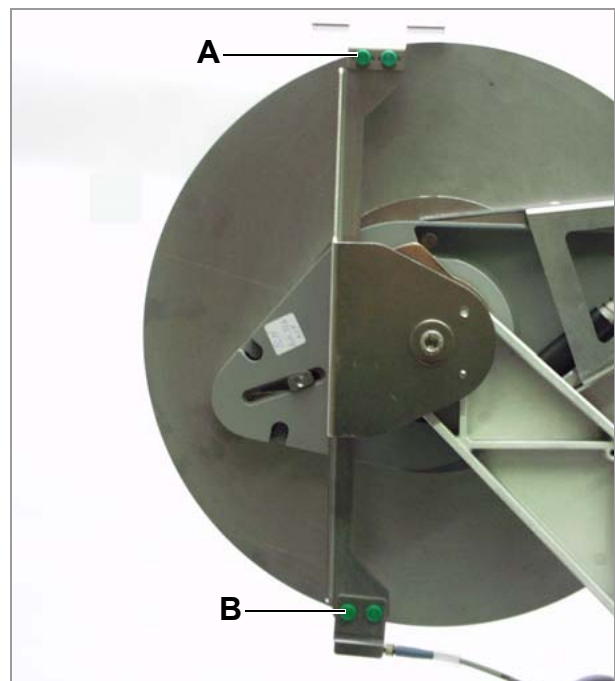
[74] Rear view on the OD sensor.

Internal OD sensors

The internal OD-sensors are integrated in the material unwinder. Precondition for activating the sensors is, that they are connected to the ALX 73x.

Two unwinders can be connected overall. Each un-winder requires a cable kit.

Prerequisite: Cable kit (article number A9767)

Connecting

1. Plug both cables with the female connectors to the unwinder [76A].
2. Plug both cables with the male connectors to the machine: Connections [77A+B] or [77C+D].

Activating

Warning, if the critical roll diameter is reached:

➜ Set the required minimum diameter in (LMA) MACHINE SETUP > Material warning.

If the set diameter is reached, the following warning appears:

> ONLINE
> Material low

Error message, if the material roll is completely un-reeled:

➜ Set (LMA) MACHINE SETUP > Materialend err to „On".

At material end, the following message appears:

> Status num: 5002
>   Material end

The machine stops.

[75] Cable kit for internal OD control (article number A9767).
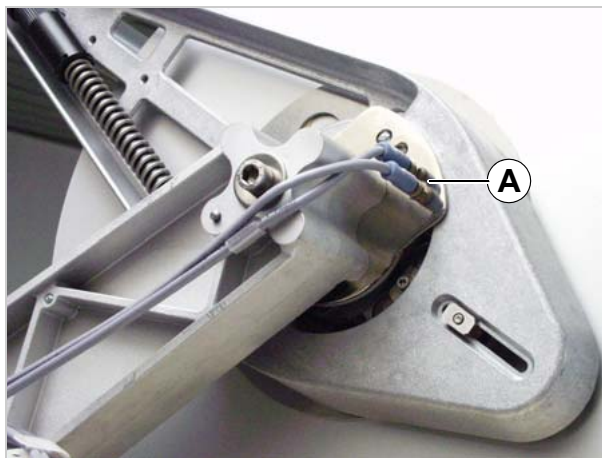
[76] Unwinder connections.
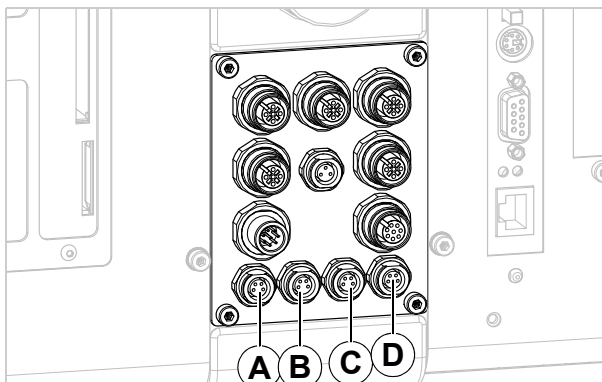
[77] Connections for OD sensors.

Rotary encoder

For the labeller to be used with automatic speed adjustment, a rotary encoder must be connected. The rotary encoder communicates the conveyor belt speed to the label dispenser.

Specifications for suitable rotary encoders

Characteristic	Value
Sensor types	Push-Pull or PNP (Recommended: Push-Pull)
Nominal voltage	24 V (DC)
Output current	20 mA for each connected labeller
Resolution	c. 0.4 mm/pulse
Rise time	1 µs
Decay time	1 µs
Frequency	max. 5 kHz (PNP) max. 20 kHz (Push-Pull)
Pulse/pause ratio	1/1 ±12.5%

About encoder resolution

The minimum resolution is 5 pulses per milimetre of product movement with a maximum of 32767 steps from detection of the start pulse to dispensing of the label = 0.2 mm resolution.

So between 5 and 20 pulses per milimetre of product movement are ideal.

Novexx rotary encoders

Article no.	Article	Image
N103708	Rotary encoder basic kit	
N103707	Mounting kit	

[Tab. 7]   Article numbers for Novexx rotary encoder and accessories.
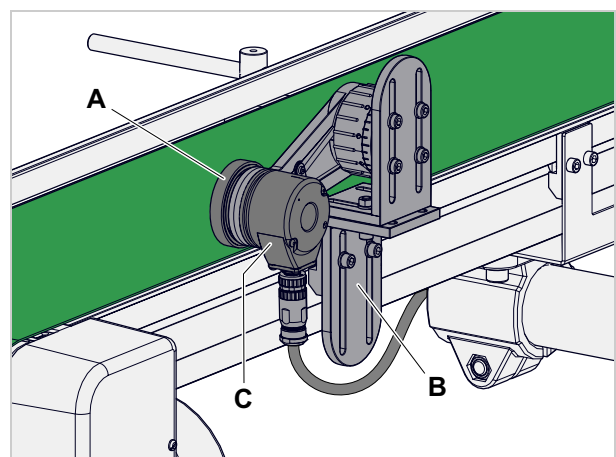
[78] Novexx encoder (C) with measuring wheel (A) and bracket (B) for mounting on a Novexx Solutions conveyor belt.

Article no.	Article	Image
N103709	Rotary encoder kit	
N103696	Rotary encoder	
N103697	Measuring wheel (200 mm circumference, for 10 mm axle)	
N101829	Connection cable (2 m)	

[Tab. 7]   Article numbers for Novexx rotary encoder and accessories.

Connecting the rotary encoder

⚠️ **CAUTION!**

To avoid damage to the electronics:

➔ Switch the machine off before connecting the rotary encoder.

➔ Plug the rotary encoder in to the connector shown [79A].

➠ No changeover is necessary for a Push-Pull rotary encoder.

Connecting a M12 connector:

Pin	Common wire colors	Function
1	Brown	+24 V
2	White	Impulse B
3	Blue	Ground
4	Black	Impluse A

For details on how to set up an encoder and operate with automatic speed adjustment (APSF), see chapter
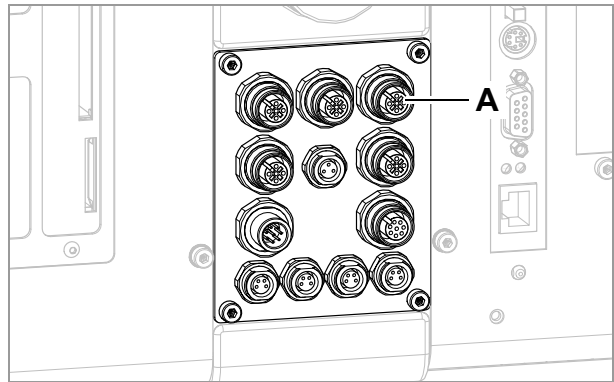
[79] Connection (A) for rotary encoder.
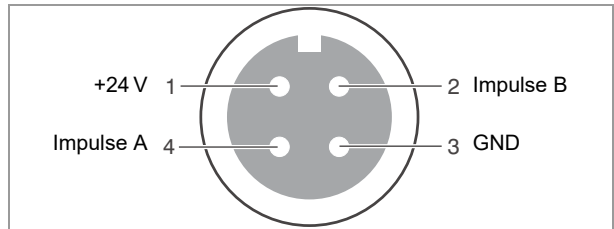
[80] Pin assignment rotary encoder connection

[81] Recommended M12 connector (article number: A8142 for cable-Ø 4-6 mm, A8143 for cable-Ø 6-8 mm)

Connection diagram
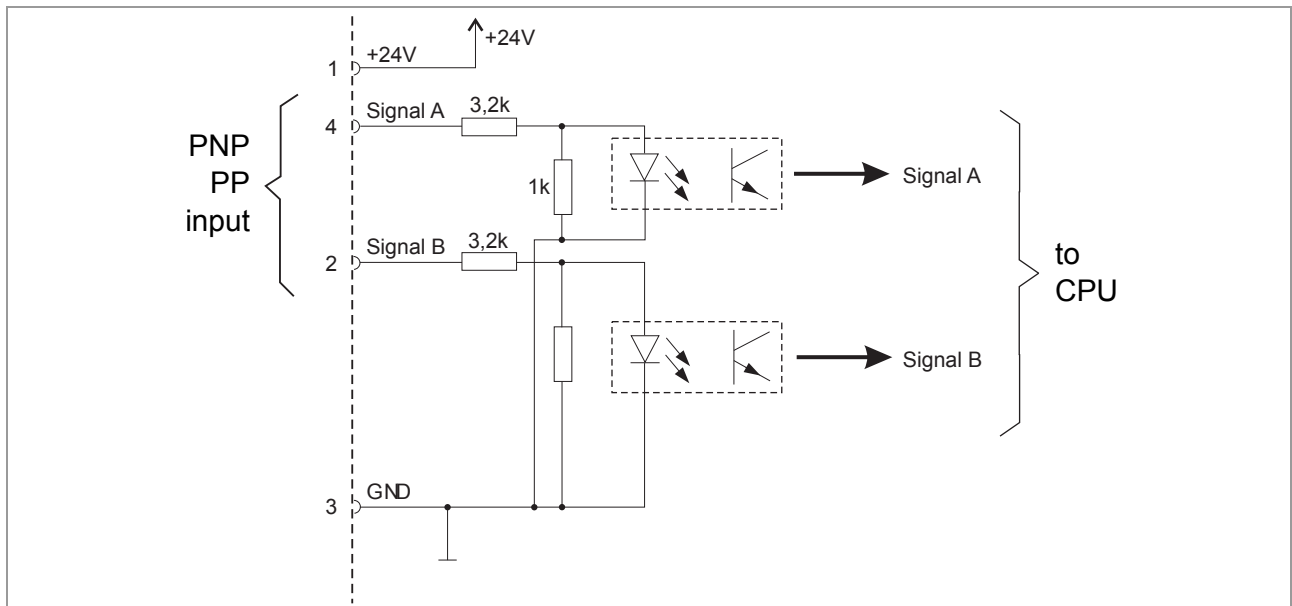
[82] Connection diagram rotary encoder.

Installing APSF

Principle of operation

APSF = Automatic Product Speed Following.
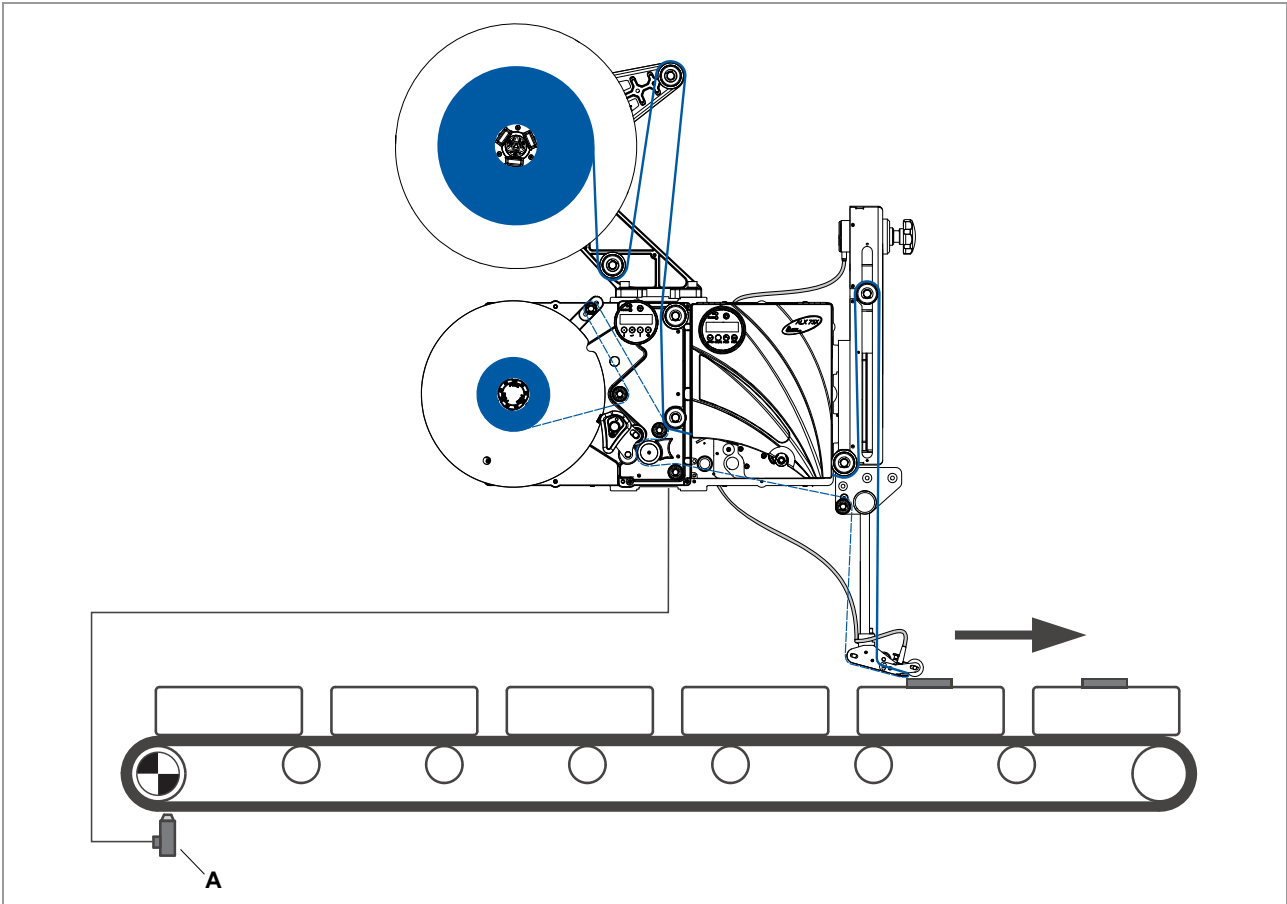
[83] Rotary encoder (A) on the conveyor line (schematic).

The automatic dispensing speed adjustment makes it possible to automatically adapt the dispensing speed to the speed of the conveyor belt.

The conveyor belt and the label feed operate in perfect synchronisation thanks to the automatic speed adjustment. If the conveyor belt stops while a label is being dispensed, the label feed will also stop. If the conveyor belt starts up, the label feed will be activated automatically.

The speed of the conveyor belt is picked up by a rotary encoder [83A] and transmitted to the control system of the labeller. The rotary encoder is not included in the scope of delivery of the labeller.

Connecting the rotary encoder: see chapter Rotary encoder 🗋 on page 43.

Mounting the rotary encoder

Rotary encoder with measuring wheel at the conveyor belt
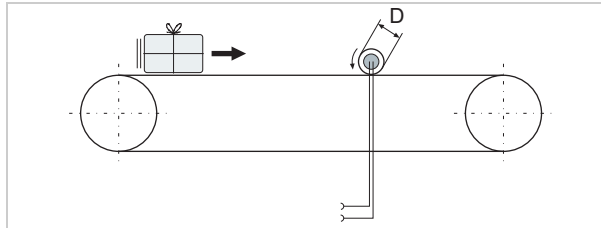
[84] Mounting the rotary encoder with measurement wheel at the conveyor belt. D = Diameter of the measurement wheel.

A measuring wheel translates the conveyor belt movement into rotation of the rotary encoder shaft.

Diameter of the measuring wheel [84D] and resolution (impulses per rotation) of the rotary encoder can be entered directly in the function menu.

Rotary encoder on the drive axle of the conveyor belt
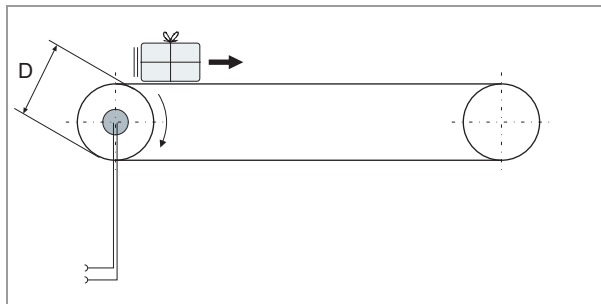
[85] Mounting the rotary encoder onto the driving axle of the conveyor belt. D = Diameter of the driving gear.

With this mounting option, the rotary encoder is mounted directly onto the drive axle of the conveyor. In this case, the driving gear of the conveyor belt takes the part of the measuring wheel. Accordingly, the diameter of the driving gear [85D] must be entered into parameter (LMA) MACHINE SETUP > Encoder Diameter.

Rotary encoder at the motor axle

The rotary encoder is mounted onto the motor axle. The rotation speed of the motor is normally transmitted via a reduction gear to the driving axle of the conveyor belt.

The reduction ratio of the gear (motor axle rotates faster than drive axle) must be considered, when entering the rotary encoder data. This can be done on two ways:

➡ Entering a reduced measuring wheel diameter D' regarding the following:

$$D' = \frac{D}{G} = \frac{D \cdot Z_1}{Z_2} \text{ , with Reduction gear ration } G = \frac{Z_2}{Z_1}$$

➡ Entering a increased resolution I' , regarding the follwing: $I' = I \cdot G = I \cdot \frac{Z_2}{Z_1}$

➡ Mind the setting range of the parameters „Diameter" and „Resolution"!
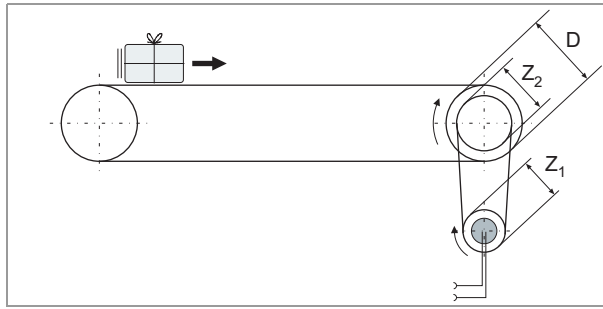
[86] Mounting the rotary encoder on the motor axle.

Entering the rotary encoder resolution

1. Call (LMA) MACHINE SETUP > Encoder Resol.

2. Enter the resolution of the rotary encoder to be used.

    Adjustment range: [0.0…9999] pulses/revolution

    ➠ Consider the gear ratio (see above)

Entering the diameter of the measuring wheel
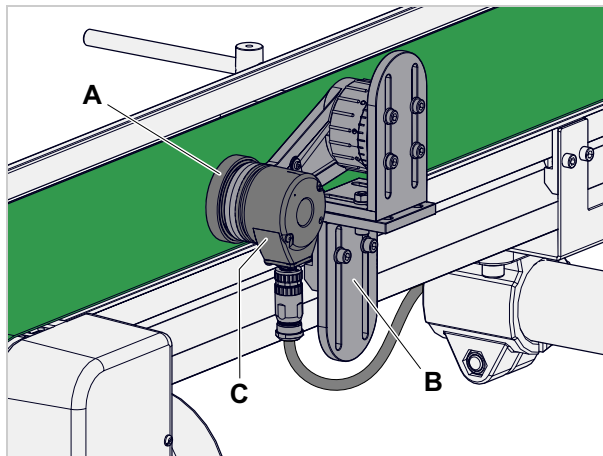
[87] Installed rotary encoder.

The measuring wheel [87A] translates the conveyer belt movement into rotation of the rotary encoder shaft [87C]. The diameter of the measuring wheel therefore influences the rotational speed of the rotary encoder.

1. Call (LMA) MACHINE SETUP > Encoder Type

2. Enter the diameter of the measuring wheel to be used.

    ➠ Adjustment range: [0.0…200.0] mm

Entering the rotary encoder type

Depending on the features of rotary encoder and label dispenser, there are different ways to count the impulses generated by the rotary encoder:

1. Call (LMA) MACHINE SETUP > Encoder Type.
2. Enter the type of measuring wheel which is mounted on the rotary encoder shaft (further details see below)

Single-phase operation   Only one phase of the encoder signal (signal A) is utilized.

Advantage:

Less expense (as with double-phase)

Disadvantages:

- Lower resolution (as with double-phase)
- If the conveyor is standing still, vibrations can produce „faulty" signals, which the labeller cannot distinguish from „real" signals.

Double-phase normal operation   Many rotary encoder produce a second signal (signal B), which is out of phase by 90°. Using this signal can overcome the restrictions of single-phase operation.

Advantages:

- Detection of the rotational direction, even when standing still
- Double resolution

Disadvantages:

- Higher expenses (the sensor must be able to produce signal B, the labeller must be able to utilize it)
- The rotational direction must be configured

Double-phase inverted operation   If the phase relationship (leading or trailing) between the sensor signals A and B doesn´t match the counting direction of the labeller, the labeller calculates nonsense speed values. The following measures correct this problem:

- Operating the rotary encoder in opposite direction (e. g. by mounting it on the opposite side of the conveyor), or
- Changing the cables, that is exchanging A and B, or
- Connecting the inverse signal /B instead of B, or
- Configuring the inversion of signal B at the labeller:

➜ Set (LMA) MACHINE SETUP > Encoder Type to „2 Phases invert."

Input of encoder data

Example: Entering the values for the recommended rotary encoder

Setting resolution:

➜ Set (LMA) MACHINE SETUP > Encoder Resol. to "500 Pulses/Turn".

Setting measuring wheel diameter:

➜ Set (LMA) MACHINE SETUP > Encoder Diameter to "63.7 mm".

Switching on speed adaption:

➜ Set (LMA) MACHINE SETUP > Speed Adaption to "On".

Calibrating the belt speed

Aftercalling (LMA) MACHINE SETUP > Encoder Diameter the following is displayed:

Encoder Diameter	
x.x	yy.y var

- x.x = diameter of measuring wheel

- yy.y = belt speed according to current measurement

- var = indicates *variable* belt speed

If the actual belt speed is known, the measured speed can be synchronised with it as follows:

➜ Increase or decrease the diameter of the measuring wheel until the belt speed displayed matches the actual speed.

Mounting of options

Remote operator panels

Important notes

Remote operator panels are necessary, if the machine is installed at an inaccessible place, where the standard operator panels can not be reached. Printer and dispenser each require a separate operator panel.

▰➡ The printer-side connector [2A] for the operator panel is an option. The connector has to be factory installed.

▰➡ The operator panels for printer and dispenser must not be confused. For this reason, the operator panels are marked with „Labeller" resp. „Printer" stickers.

▰➡ Remote and standard operator panels can be used alternately.

Connecting

> ⚠️ CAUTION!
>
> if the connection cable is longer than 2.5 m, EMC-caused disturbances can occur.
>
> ➡ Only use the factory-installed cable.
>
> ➡ Don´t extend the cable.

➡ Plug the printer operator panel [1A] to connector [2A].

➡ Plug the dispenser operator panel [1B] to connector [2B].

Wall mounting

Tool:

     Cross-head screwdriver sizes 3/5

Mounting:

1. Drill 2 holes according to the distances in the drawing [3A].
2. Open the operator panel housing (4 screws).
3. Mount the lower part of the housing to the mounting surface using 2 M4 screws.
4. Close the operator panel housing.
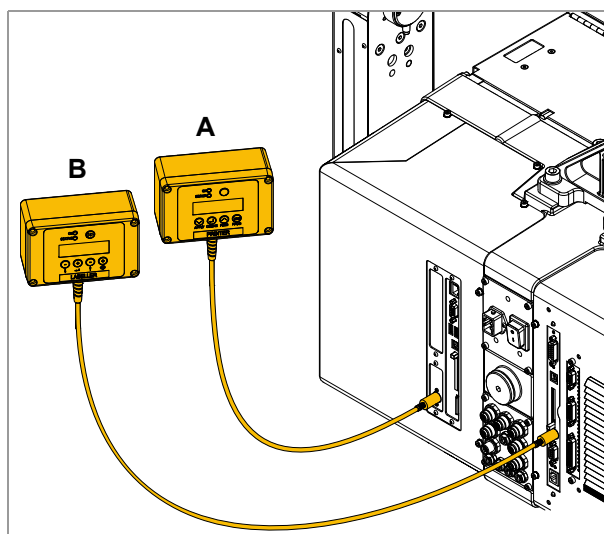
[1]   Remote operator panels for prnter (A) and dispenser (B).

[2]   Connections for printer (A) and dispenser (B) operator panel.
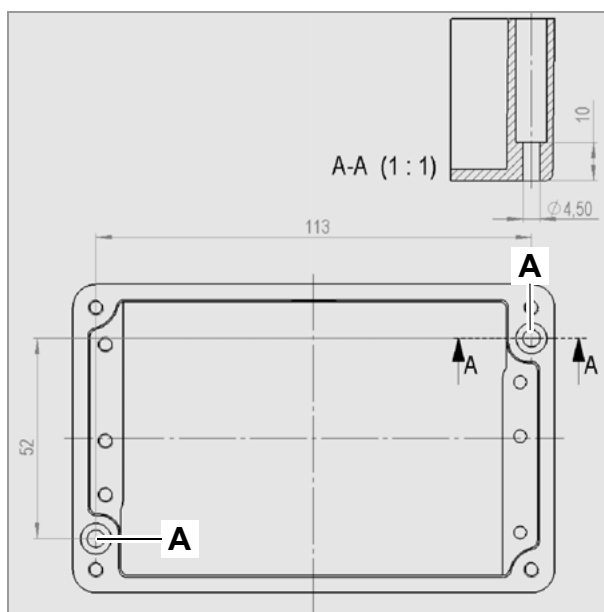
[3]   Hole distances for wall mounting or the remote operator panels.

Applicators

System requirements

The following applicators can be operated at the ALX 73x:

- LA-TO (tamp-on applicator) [4]
- LA-BO (blow-on applicator) [5]

⟫ Due to the danger of cuts and crush injuries, the LA-TO may only be operated with *superior protective equipment* installed (for details refer to the LA-TO service manual 🗋).

Both applicator types are controlled via one of the following interfaces:

- Standard signal interface at the LMA
- Optional applicator interface at the LMA, with firmware version 1.38 or higher

Mounting and operation

The following manuals describe how to install and operate the applicators:

- Operating Manual LA-TO 🗋
- LA-BO Technical Manual 🗋
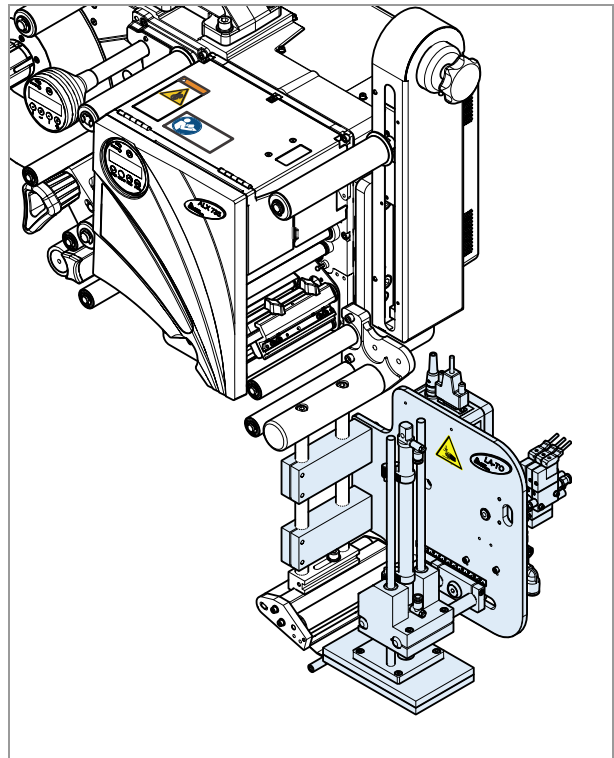
[4] ALX 73x with LA-TO (illustrated w/o cables, hoses and protective equipment).
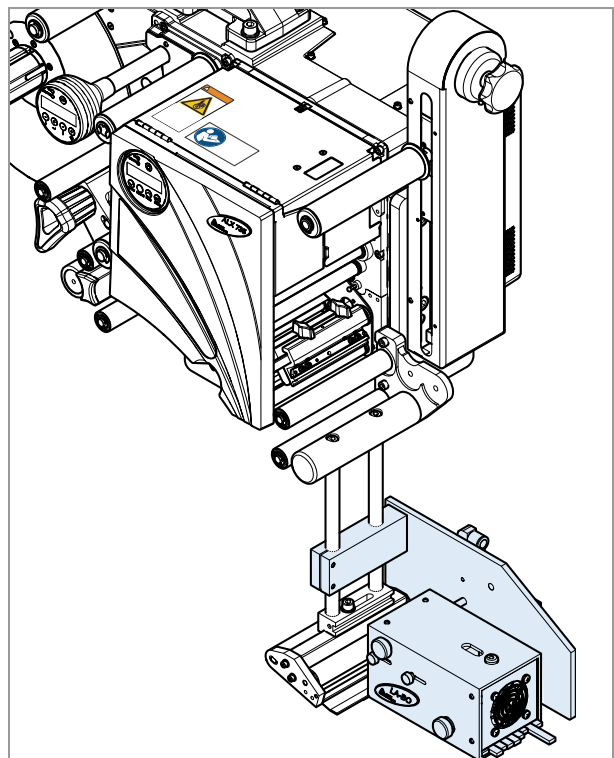
[5] ALX 73x with LA-BO (illustrated w/o cables and hoses)

Adjustable dispensing edge holders

Adjustable dispensing edge holder (simple version)

Also read the notes about the standard dispensing edge holder in chapter Mounting the dispensing edge holder 🗋 on page 20.

Setting range: A_{min} = 254 mm; A_{max} = 419 mm [7]

Tool

Hex socket screwdriver, 8 mm

Mounting:

1. Locate the pins [6A] in diametrically opposite holes.

2. Fit the dispensing edge holder onto the pins at the required angle.

   ➠ Choose either inner or outer circle of holes, dependent on the required angle.

3. Fix the dispensing edge holder in place with screw [6B].

Length adjustment:

1. Define the required length.

   ➠ Read the notes in chapter Configuring the dispensing edge holder 🗋 on page 17.

   ➠ With the optional available rods in different lengths, the adjustment range can be extended, see chapter Längentabelle für verstellbaren Spendekanten-Halter 🗋 auf Seite 65.

2. Loosen the clamp lever [6C].

3. Shift the lower part of the dispensing edge holder to the appropriate length.

4. Tighten the clamp lever.
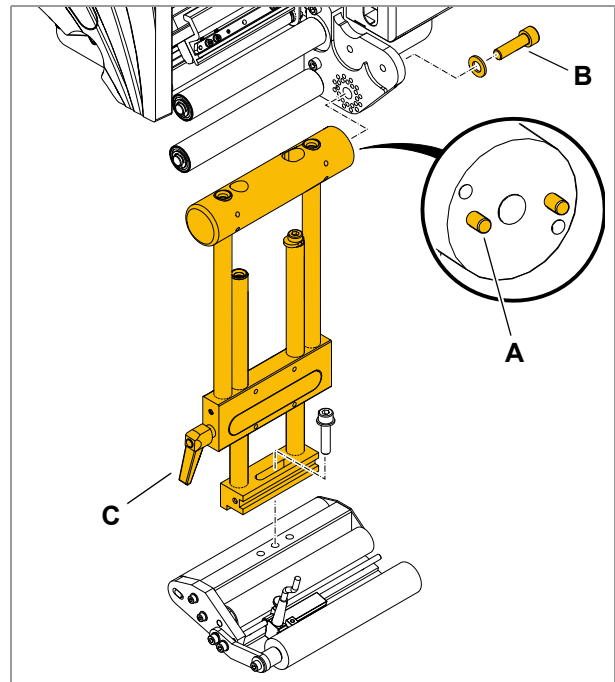
[6]   Mounting the adjustable dispensing edge holder.
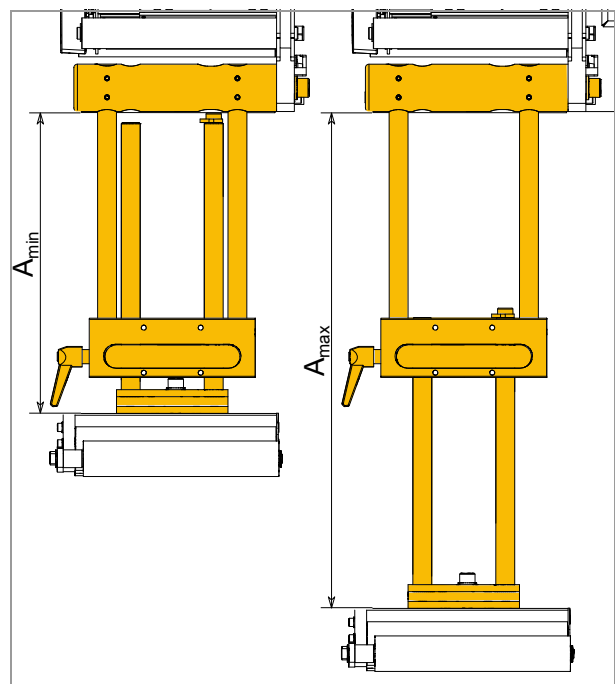
[7]   Setting range of the adjustable dispensing edge holder.

Fine adjustable dispensing edge holder

Also read the notes about the standard dispensing edge holder in chapter Mounting the dispensing edge holder 🗋 on page 20.

Setting range: A_{min} = 134 mm; A_{max} = 204 mm [9]

Tool

    Hex socket screwdriver, 8 mm

Mounting:

1. Locate the pins [8A] in diametrically opposite holes.
2. Fit the dispensing edge holder onto the pins at the required angle.

    ⮡ Choose either inner or outer circle of holes, dependent on the required angle.

3. Fix the dispensing edge holder in place with screw [8B].

Length adjustment:

1. Define the required length.

    ⮡ Read the notes in chapter Configuring the dispensing edge holder 🗋 on page 17.

2. Rotate the adjustment wheel [8C], until the appropriate length is reached.
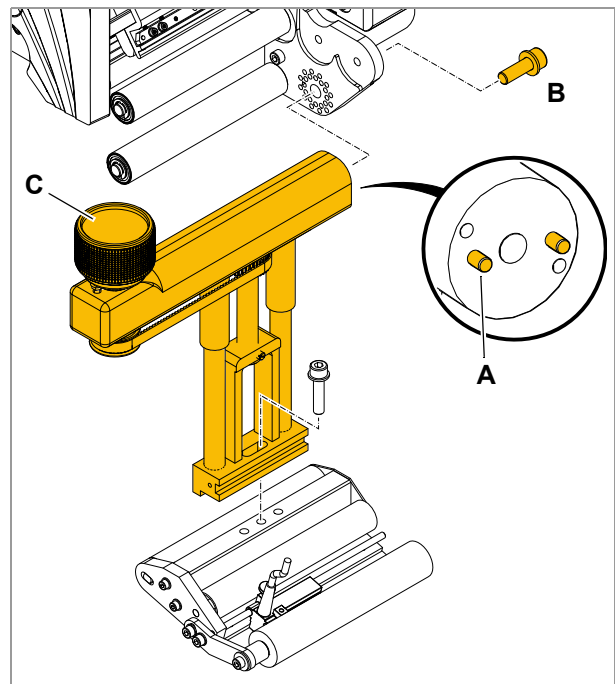
[8]   Mounting the fine adjustable dispensing edge holder.
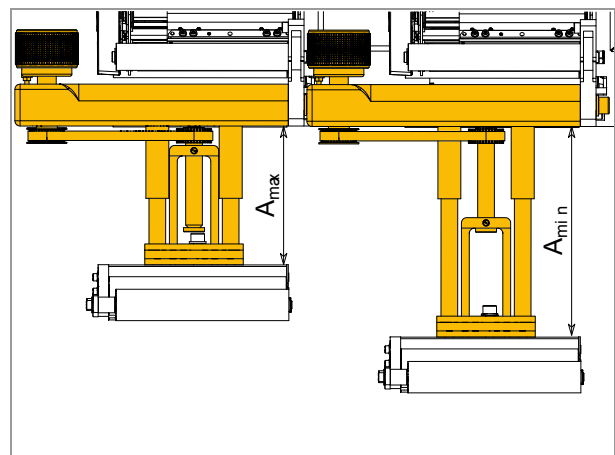
[9]   Setting range of the fine adjustable dispensing edge holder.

Dancer arm unit with double roller

Replacing the single by a double roller increases the label amount that can be buffered in the loop. This is an advantage, if very long labels are processed.

Tools

- Allen keys, 5/10 mm
- Open-ended spanner, SW 13
- Retaining ring pliers (external) for retaining rings according to DIN 471, 16 mm

Mounting:

1. Remove the single deflection roller. To do so, apply the open-ended spanner to the two surfaces [10A] and screw out the axle.

2. Remove the retaining rings [11A] and the rollers [11B] from the axles of the double roller holder.

3. Screw the double roller holder on.

   ⇒ Screw in screw [11C] instead of the single roller axle.

4. Attach the deflection roller [11D].

Parameter settings:

→ Set MACHINE SETUP > Loop setup = „2 deviator rolls".

⇒ Parameter is only visible in production mode.
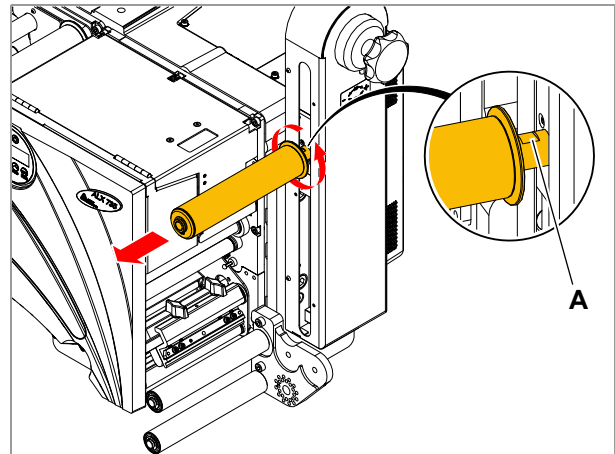
[10] Removing the single deflection roller.
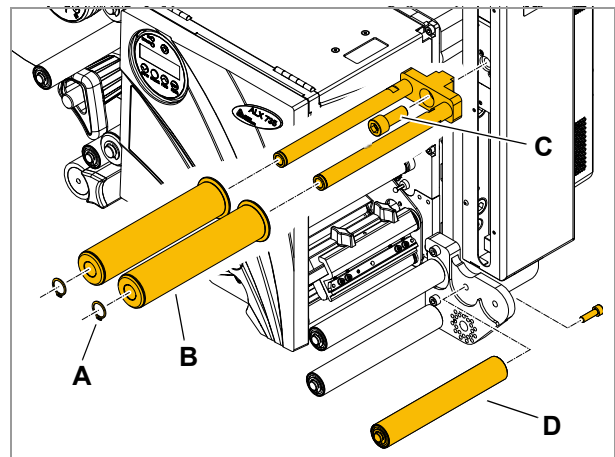
[11] Installing the double roller.

Splice table

With the splice table option, the end of the preceding material roll can be taped to the beginning of the new roll. Thus, the material doesn´t have to be fed through the whole machine for each new material roll, what reduces the downtimes for material change.

Tool:

8 mm allen key

Mounting on an ALX 73x with a lateral unwinder

Article numbers:

- A107825 Splice table
- 000165-21 Screw M10x16 (4 pieces required)
- 000091-22 Washer 10,5 (4 pieces required)

[12] Splice table on an ALX 73x with a lateral unwinder.

Mounting (RH machine):

➡ Screw the splice table [13A] to the flange on top of the machine using the 4 screws [13B] and washers

⟾ Tightening torque: 45 Nm
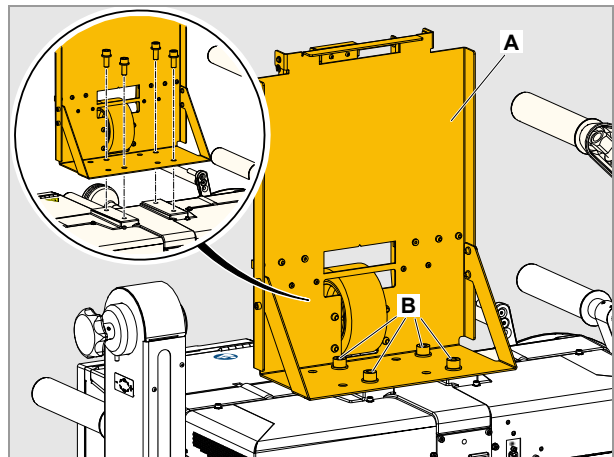
[13] Mounting the splice table (A).

Mounting on an ALX 73x with on top unwinder

Article number: A107827 Splice table with adapter plate
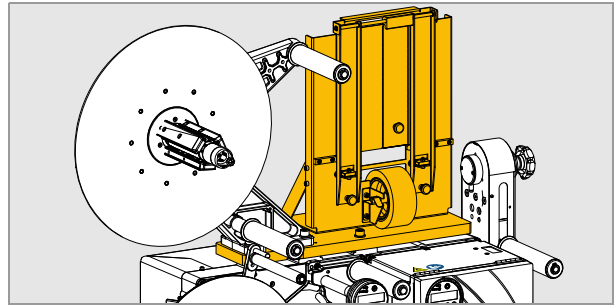
[14] Splice table with adapter plate ready mounted.

Mounting (RH machine):

1. Remove the on top unwinder [15].

   The 4 screws are no longer used.
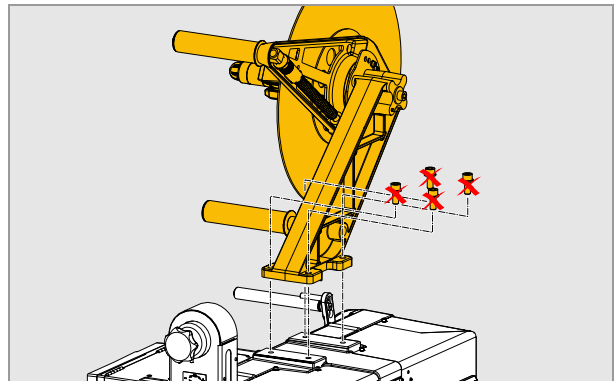
[15] Removing the on top unwinder.

2. Attach both, splice table [16A] and adapter plate [16B], as illustrated, using the 5 screws [16C+D] (M10x35) contained in the parts kit.

   The screws [16D] and [16E] fix the splicing table and the adapter plate onto the flange.

   ⚠ CAUTION!

   Possible unproper machine function caused by inaccurate alignment during assembly.

   ➜ Press the adapter plate to the right so that the pins contact the flange [16F].

3. Screw the unwinder to the adapter plate using the two pairs of screws with different lengths.

   ⤳ Tighten the screws only slightly by hand.

   – Screws [17A]: M10x50
   – Screws [17B]: M10x35

   The long screws fix the unwinder through the holes in the adapter plate to the right flange.

   ⚠ CAUTION!

   Possible unproper machine function caused by inaccurate alignment during assembly.

   ➜ Press the unwinder foot with the edge on its bottom side against the edge on the adapter plate [17C].

4. Press the edge on the bottom of the unwinder foot against the edge at the flange [17C].

[16] Mounting splice table (A) and adapter plate (B).
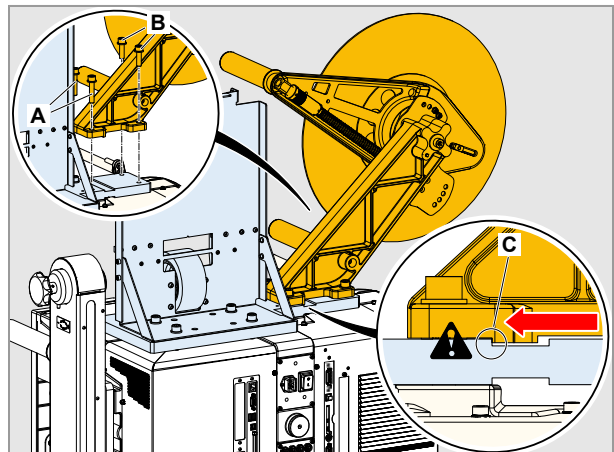
[17] Screwing the unwinder to the adapter plate.

5. Lay a steel ruler [18A] alongside the surfaces [18B].

6. Align the unwinder foot laterally, until both surfaces [18B] are in the same plane.

7. Tighten the screws.

    ➠ Tightening torque: 45 Nm
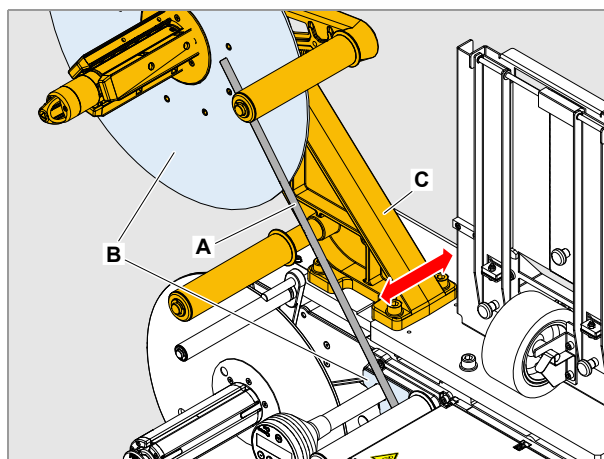
[18] Adjusting the unwinder´s zero line by aid of a steel ruler (A).

Mounting/connecting the signal beacon

NOVEXX Solutions offers a ready to use signal beacon for the ALX 73x. The LED lamps of the beacon show the colors red-yellow-green. The beacon can be connected to different signal interfaces, using the optional available cables.

Article numbers:

- *Signal beacon* (with mounting angle, without cable): N102104

- *Connection cable*:

Article number	Connection to interface
N100491	Standard [1] (Sub-D 15) [19A]
N100496	PLC out [1] (M12) [19C]
N100492	AI [2] (HD-sub 26) [19B]

1)   Required setting: SIGNAL INTERFACE > Interface mode = „PLC signals"
2)   Option

The beacon can signal the following machine states:

- Error (red)
- Warning (yellow)
- Ready (green)

Assembly

Tools:

- Hex key size 8
- Open-end spanner SW 17

1. Loosen clamping screw [20D] at the base of the signal tower.

2. Screw the fixing screw [20D] into one of the tapped holes on one of the mounting flanges of the machine and lock it with the nut.

3. Turn/swivel the signal beacon in the desired direction.

4. Retighten the clamping screw.
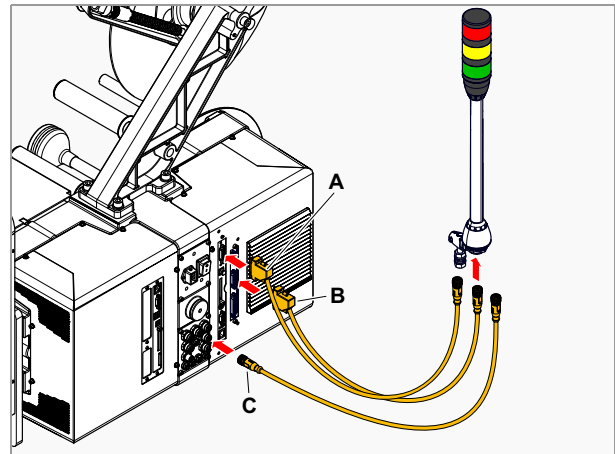
[19] Various connection options for the signal beacon.
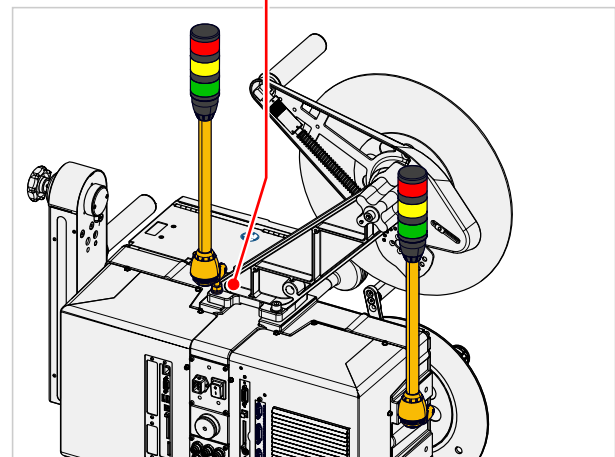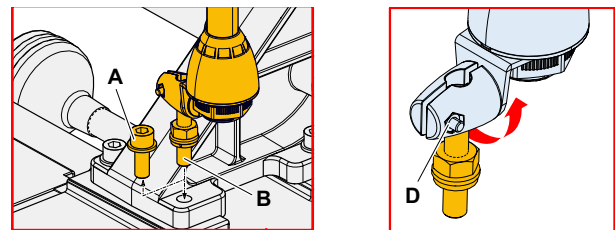
[20] Mounting the signal beacon.

Selecting consumables

Thermal transfer / direct thermal printing

The ALX 73x can print onto label material using the direct thermal mode or thermal transfer mode.

Direct thermal
Direct thermal printing is done *without ribbon*. The direct thermal process requires label material with a temperature-sensitive coating. The printout is produced by applying precise bursts of heat to the material under the printhead. This changes the colour of the coating.

Thermal transfer
Thermal transfer printing is done *with* (thermal transfer) *ribbon* on "normal" label material. The printout is produced by applying precise bursts of heat to the thermal transfer ribbon under the printhead. This transfers the colour particles to the label.

Label material

The ALX 73x was developed for printing on self-adhesive stock.

Pay attention to the following factors when selecting label material:

- The roughness of the material surface
- The printhead temperature required for the colour transfer
- Size of the material roll. The following dimensions need to be checked: Outside-/inside diameter of the material roll and the material width

Material roughness
If the material is very rough, the printhead will be worn down more quickly than when using a smooth material. This is an important aspect of thermal printing. With thermal transfer printing, this doesn't pose such a problem, because you can – and indeed should – select a ribbon that is wider than the material. This means that the printhead is protected over the entire width of the material.

Printhead temperature
High printhead temperatures can similarly cause problems. The material and the ribbon take longer to cool. As a result, the print quality may degrade – particularly at high print speeds. The printhead also wears down more quickly.

➧ The printing result is highly dependent on the right combination of label material and thermal transfer ribbon. The surface of the label material determines which thermal transfer ribbons produces the best adhesion. Unsuitable ribbons can lead to poor printing results.

Further information can be found in the User Manual ALX 92x, chapter „Product description" > „Technical Data" > „Label material".

Thermal transfer ribbon

The following is recommended for thermal transfer ribbons:

- The back of the ribbon should be coated so that it produces no static or friction (Backcoating). If this isn't the case, the printhead may be damaged by static discharge coming off the ribbon surface.

- The ribbons need to be designed for "corner edge" printheads.

- Ribbons should be able to handle print speeds of up to 400 mm/s (16 ips).

- Size of the ribbon roll: The following dimensions need to be checked: outside/inside diameter of the ribbon roll, ribbon width.

> ⚠ CAUTION! - Thermal transfer ribbons without these properties can degrade the performance of the printer and the print quality as well as damage the printhead!

The ribbon with odering no. 2240-600-xxx is a recommended ribbon type.

➠ The thermal transfer ribbon should only be slightly wider than the label material.

- If an *overly narrow ribbon* is used, the border of the label material interferes with the printhead – which wears it down more quickly.

- If an *overly wide ribbon* is used, creasing may occur in the ribbon. This can led to poor printing results.

Further information about suitable thermal transfer ribbon can be found in the User Manual of the machine, chapter „Product description" > „Technical Data" > „Thermal transfer ribbon".

Decommissioning, Dismantling, Disposal

Take the machine out of operation

Disconnecting the machine from the compressed air supply (only machines with installed applicator):

1. Switch off the compressed air supply of the applicator.

2. Disconnect the compressed air hose from the applicator.

For details read the applicator installation manual.

Disconnect the machine from the power supply:

1. Switch the machine off at the mains switch (switch position „0" or „switch illumination off" for machines with splash guard).

2. Pull out the mains plug from the mains socket or disconnect the power cord from the electrical cabinet.

3. Disconnect all cables at the machine.

Dismantling the machine

Machine with installed applicator:

➜ Remove the applicator.

For details read the applicator installation manual.

1. Dismantle the dancer arm unit.

   See chapter Mounting the dancer arm unit 🗎 on page 22.

2. Dismantle dispensing edge holder with dispensing edge.

   See chapter Mounting the holding plate 🗎 on page 16.

3. Dismantle the unwinder.

   See chapter Mounting the unwinder 🗎 on page 13.

4. Dismantle the machine off the support stand.

⚠	WARNING! Danger of injury by the machine falling to ground. ➜ Let the machine be hold by at least 2 per-sons, while a 3rd person loosens the clamping at the support stand. ➜ Wear safety footwear.
	Acute risk of injury and long-term bodily in-jury from working with heavy loads! ➜ Lift or carry the machine with a minimum of 2 persons. If possible, use a crane or other lifting device.

   See chapter Mounting the machine on a support stand 🗎 on page 8.

5. Strip the machine from the support stand tube and lay it down.

⚠	CAUTION! To avoid damaging the machine during transport: ➜ Never hold the machine by the deflection rollers, dancer arm or rewind or unwind unit.

Machine disposal

➠ It is advisable to remove reusable machine components as long as the machine is firmly mounted.

1. Remove machine parts which can be reused (e. g. applicator, applicator interface, dispensing edge holder, dispensing edge).

2. Dispose of the remaining machine parts separated by material groups in an environmentally acceptable manner.

➠ Observe the national regulations.

➠ We recommend to put a company in charge, which is spezialized in machine disposal.

➠ Wir empfehlen, eine auf Entsorgung von Maschinen spezialisierte Fachfirma zu beauftragen.

➠ Dispose of waste properly, i.e. sorted according to the material groups of the parts to be disposed of. The aim should always be to achieve a maximum possible reutilisation of the basic materials com-bined with the minimum possible environmental im-pact.

Appendix

Length chart for adjustable dispensing edge holder

Article no.		Upper rods					Meas. A
		A5097	A5099	A5096	A5098	A5095	
	Length/mm	236	320	382	510	593	
A5097	236	419	503	565	693	776	max.
		254	338	340	528	611	min.
A5099	320	503	587	649	777	860	max.
		254	338	400	528	611	min.
A5096	382	565	649	711	839	922	max.
		344	344	400	528	611	min.
A5098	510	693	777	839	967	1050	max.
		472	472	472	528	611	min.
A5095	593	776	860	922	1050	1133	max.
		562	562	562	562	611	min.

(Lower rods — row label)

[Tab. 1] Adjustment ranges of the adjustable dispensing edge holder with rods of different lengths.
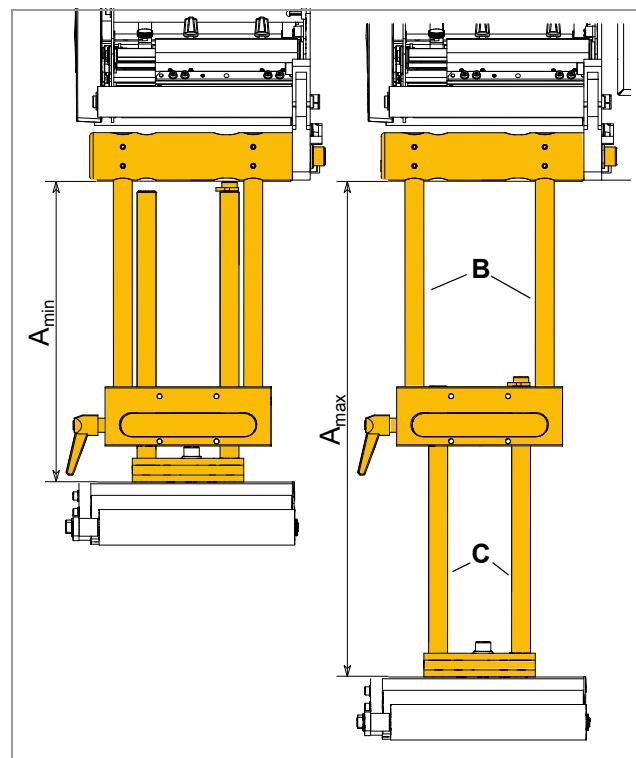
[1] Adjustment range of the dispensing edge holder from A_{min} to A_{max}.
B = upper rods, C = lower rods.

Diagram for determining the length of the dispensing edge holder (with double deflection roller)
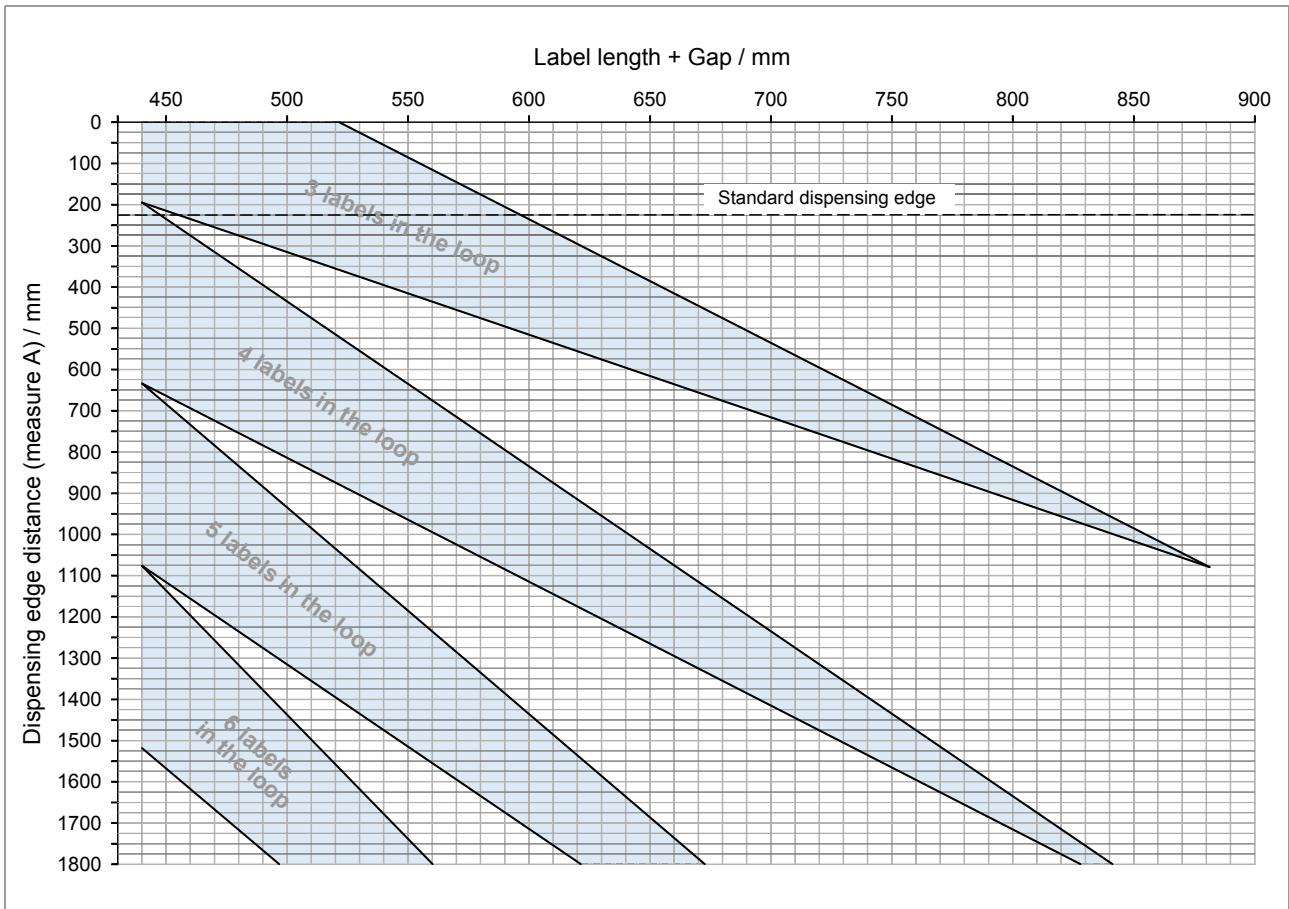
[2]   Diagram for finding out the optimum length of the dispensing edge holder (linear dancer lever with double deflection roller).

Teaching older label sensor types

Adjusting the Wenglor label sensor automatically

[3]   Wenglor label sensor OPT242-P800 (old standard until 9/2011)

Only applies to Wenglor photoelectric sensors (old standard, replaced by Novexx photoelectric sensors since 09/2011).

➠ Only works up to max. 120 mm label length (including the gap).

→ (LMA) Call up MACHINE SETUP > Auto Sensor Adj.

The label material is fed slowly until the next gap between labels (punch) is reached. The label sensor is automatically adjusted in the process.

Adjusting the Wenglor label sensor manually

Only applies to Wenglor photoelectric sensors (old standard, replaced by Novexx photoelectric sensors since 09/2011).

For dispensing label material with a low contrast, it can be necessary to adjust the label sensor manually:

1. (LMA) Call up MACHINE SETUP > Sensor Adjust.

Sensor Adjust	
Manual:	xx%

2. Place backing paper in the fork of the label sensor.
3. Press the (↓) key, until the LED [4A] on the label sensor lights up.
4. Press the (↑) key and keep it pressed just beyond the point where the LED goes out.
5. Note the displayed value (value 1).
6. Place label material in the fork of the label sensor.

   The LED will light back up.

7. Press the (↑) key and keep it pressed just beyond the point where the LED goes out.
8. Note the displayed value (value 2).
9. Calculate value 3:

   Value 3= (value 1 + (value 2 - value 1) / 2)

10. Set value 3 by means of the two arrow keys and acknowledge the adjustment by pressing the (↵) key.
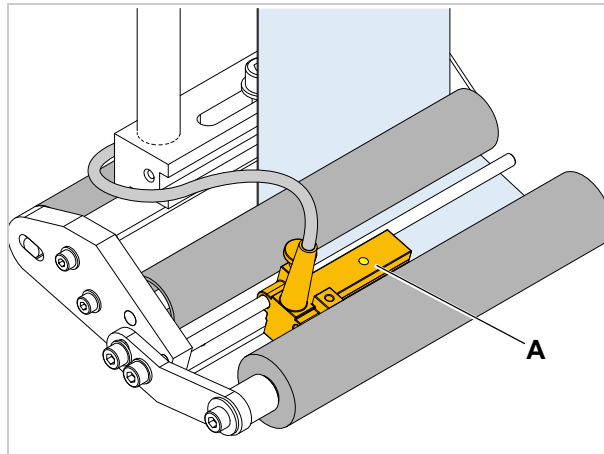
[4]   LED (A) at the label sensor.

Teaching the capaciti-ve sensor Di-Soric

These sensors were available as options until approx. 4/2024 and were then replaced by the Di-Soric sensor type KGUTI.

Article numbers:

- Type 1: A101452 (KSSTI 1000/80 FG3LK-AIBS, top of the picture)
- Type 2: N100455 (KSSTI 400 3GK-TSSL, bottom of the picture)
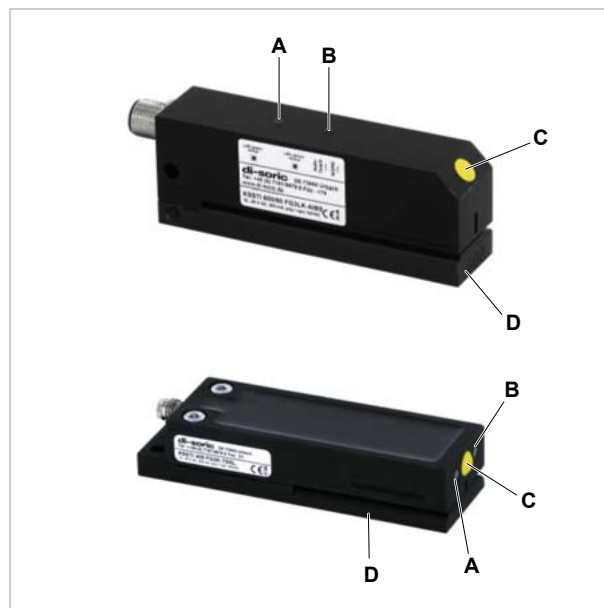
[5]   Set capacitive label sensor type 1 (top) and type 2 (bottom).
       A Service LED (green/red)
       B Mode LED (yellow)
       C Auto-teach button
       D Bottom fork arm

Teaching the Di-Soric sensor:

1. Insert label material into the sensor fork.

    The label material must lie on the bottom fork arm [5D].

2. Press the button [5C], until the mode LED [5B, yellow] lights up (approx. 2 s).

    The mode LED starts to flash quickly for approx. 2-4 s.

3. During the mode LED flashes, move at least two labels through the sensor fork.

    Service and mode LEDs are flashing…

– 2x: The auto-teach procedure has been concluded sucessfully. The service LED lights green.

– 4x: The label was not detected optimally, the best possible switching point will be set. The service LED lights red.

Teaching the capaciti-ve sensor Leuze GK14/24

The „Leuze sensor" is a capactive label sensor, which was offered by NOVEXX Solutions in the past. In the meantime, it was replaced by a sensor from Di-Soric.

Sensor setting:

1. Remove label material from the sensor fork.

2. Turn potentiometer [6B] to the right, until a light click is audible (= max. sensitivity). Turn the potentiometer ½ turn to the left.

3. Turn potentiometer [6D] until both LEDs [6C] shine equally bright (= base adjustment).

4. Move the label web through the sensor fork and watch the switching output LED.

   The LED [6C] must shine in label gaps.

5. If case of insufficient switching behaviour, change the sensitivity setting.

6. After increasing the sensitivity setting, the base adjustment must be repeated.
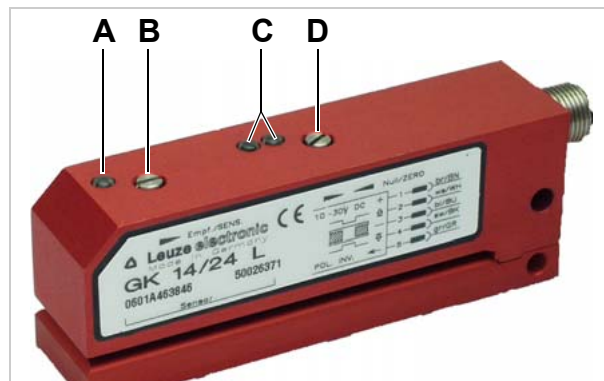
[6]   Capacitive label sensor LEUZE GK14/24
     A   LED: switching output
     B   Set-screw sensitivity
     C   LED: base adjustment
     D   Set screw base adjustment

See also www.leuze.de

Also refer to Capacitive label sensor on page 30.

Enhanced functions

Access via Web/FTP server

Web server

Applications

The web server makes it possible

- to set or read the values of parameters from the parameter menu via a web browser
- to control the operator panel of the labeller resp. the printer via a web browser.

➠ The web server is *not* multi-session compatible, i.e. only one user can be logged in at any time.

➠ The web server is a setup utility, not an operational one. The web server should not be heavily used during a high performance application of the dispenser, otherwise this could result in losses in machine performance.

Prerequisites

- LMA/PMA is connected to a network

  ➠ The two modules LMA and PMA have separate Web servers which can be addressed independently with the respective IP address („LMA/PMA" means „LMA and /or PMA").

- A valid IP address is assigned to the dispenser (by the network administrator or by a DHCP server)
- INTERFACE PARA >NETWORK PARAM. > WEB server is set to "On".

Starting the web server

1. Note down the IP address of the LMA/PMA.

   ➠ This is shown under INTERFACE PARA >NETWORK PARAM. > IP address

2. Start the internet browser.

3. Enter the following in the address bar:

   http://[IP address without initial zeroes]

   Example: IP address = 144.093.029.031

   Enter: http://144.93.29.31
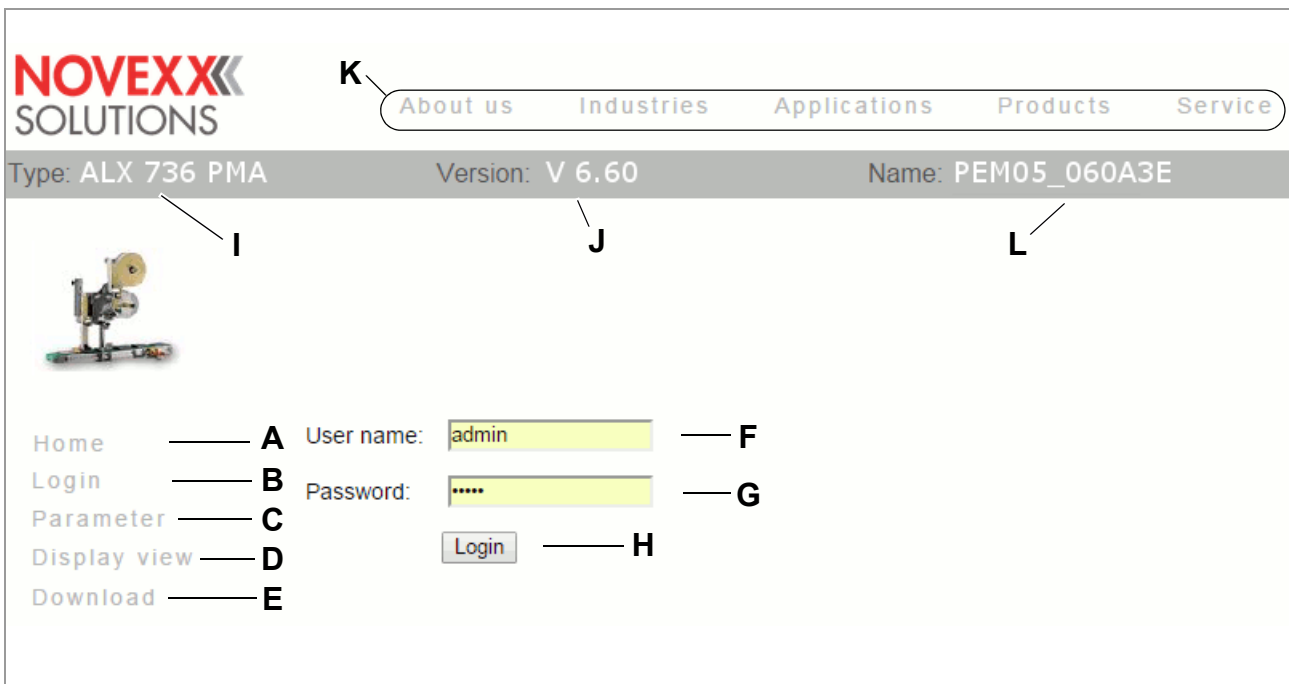
[1]   User interface of the web server (here: web server of PMA, after clicking on "Login")

A   Link to the web server home

B   Opens input fields for user name and password [1]

C   Calls the parameter menu

Enables settings in the labeller parameter menu to be changed.

D   Calls the operator panel display

Gives access to all the parameters of the real operator panel

E   Starts the FTP server in a new browser window

See chapter FTP server 🗎 on page 7.

F   Input field for user name

Preset: "admin"

G   Input field for password

Preset: "admin"

The password can be changed under INTERFACE PARA >NETWORK PARAM. > WEB server

H   Click on this button after entering user name and password

I   Displays the machine model

J   Displays the firmware version

K   Links to the Avery Dennison Machinery website

L   DHCP host name (see INTERFACE PARA >NETWORK PARAM. > DHCP Host Name)

Logging in to the web server

1.   Click on the "Login" link [1B]

2.   Enter user name and password [1F, G]

Preset in both cases: admin

3.   Click on the "Login" button [1H]

Changing a setting in the parameter menu
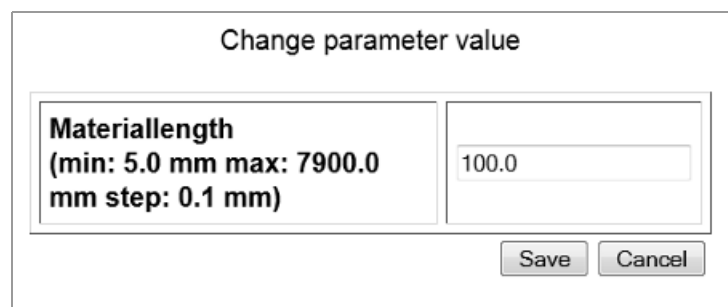
Click on the names of submenus and parameters to open them so that you can change the settings they contain.

Example

Making a change to PRINT PARAMETERS > Materiallength:

1. Click on "Parameter" link [1C].
2. Click on "PRINT PARAMETERS" link.
3. Click on "Materiallength" link.
4. A dialog box opens: [2].
5. Enter the required value in the entry field.
6. Click on the "Save" button.

The value is now transferred to the labeller.

Change parameter value

Materiallength
(min: 5.0 mm max: 7900.0 mm step: 0.1 mm)   100.0

     Save   Cancel

[2] Example: Dialog box for entering value for the parameter PRINT PARAMETERS > Materiallength

> ℹ️ Some parameters trigger a reset of the labeller, if they have been changed on the labeller via the operator panel. However, if any of these parameters is changed via the web server, the reset does not occur automatically. The
changes only come into effect after the next time the labeller is reset. In these cases, the "Reset" button [3A] appears after the setting has been changed.

[3]   Information (A): Changes made to the parameter setting do not come into effect until after a reset.

The virtual operator panel
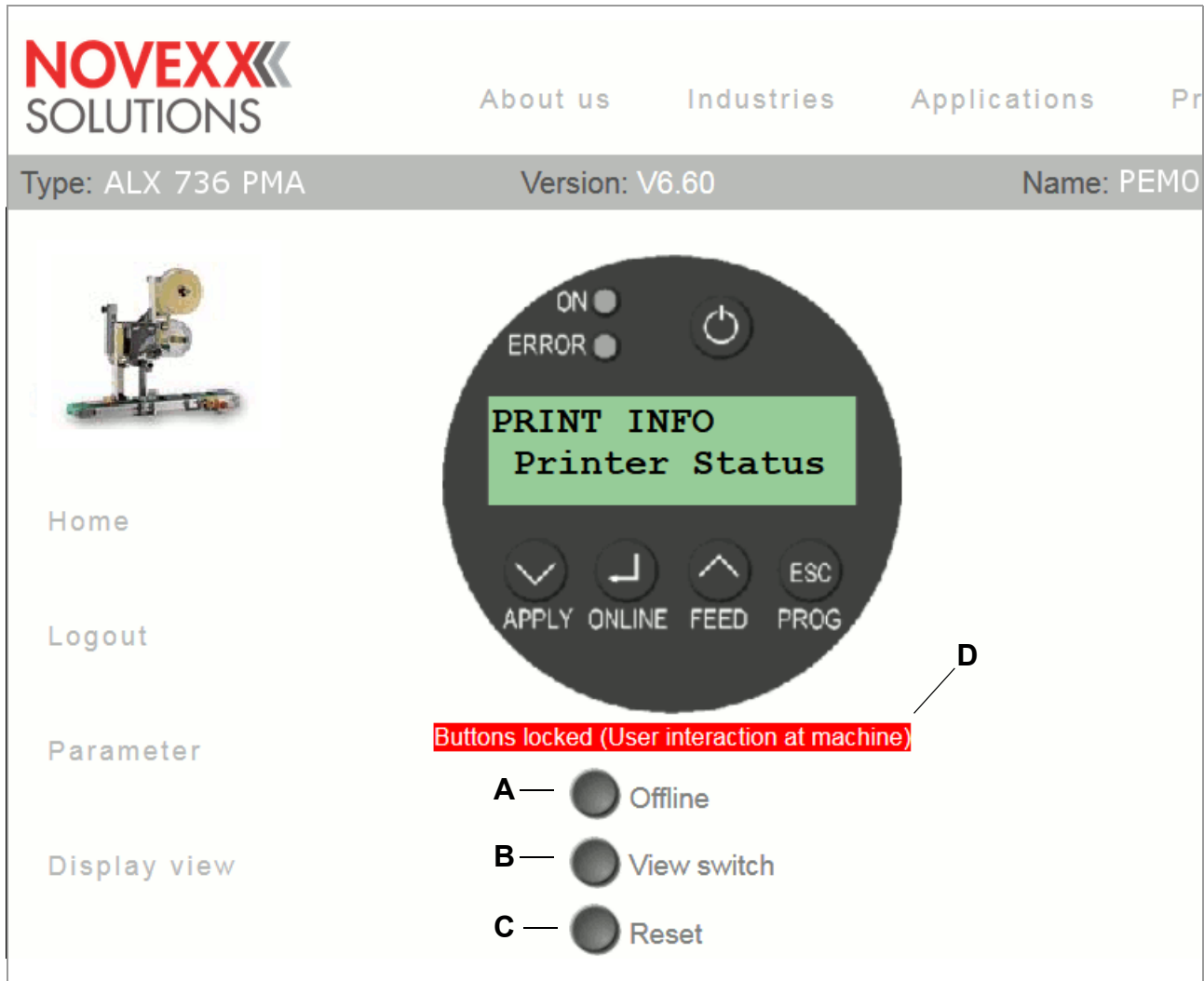
[4] The virtual operator panel

After the "Display view" link is clicked, an image of the operator panel (= virtual operator panel) appears on the screen [4]. All of the buttons on the real operator panel can also be operated by mouse-click on the virtual operator panel.

The buttons [4A-C] underneath the virtual operator panel are equivalent to key combinations on the real operator panel

A "Offline" button

Sets the machine offline during dispensing mode

Equals pressing the ONLINE button

B "View switch" button

Switches into standalone mode

Equivalent to pressing the buttons ONLINE + ESC

C "Reset" button

Triggers a reset

Equivalent to pressing the buttons APPLY + ONLINE + FEED

D Status line [4D]

In order to avoid putting an operating person at the machine at risk by sudden starting up of the machine, the virtual operator panel is locked as soon as a button at the machine operator panel is pressed. The status line indicates the current status:

Message	Meaning
No	A user is logged in at the virtual operator panel. The virtual operator panel is unlocked.
„Buttons locked (not logged in)"	*No* user is logged in at the virtual operator panel. The virtual operator panel is locked.
„Buttons locked (User interaction at machine)"	A user is logged in at the virtual operator panel. The virtual operator panel is blocked, because an operator at the machine operator panel has pressed a button Reactivate the virtual operator panel: ➜ Switch from „Offline" to „Online" at the machine operator panel.

FTP server

Applications

The file transfer protocol (FTP) server (RFC959) enables access to the internal RAM disk and to the memory card in the card slot of the LMA/PMA (as long as there is a memory card in the slot).

In this way, files (configuration or firmware files) can be saved to the memory card or the internal RAM disk, or existing files renamed or deleted.

➠ The FTP server is multi-session compatible.

➠ The FTP server should not be heavily used during a high performance application of the labeller.

Prerequisites

• LMA/PMA is connected to a network

➠ The two modules LMA and PMA have separate Web servers which can be addressed independently with the respective IP address („LMA/PMA" means „LMA and /or PMA").

• A valid IP address is assigned to the LMA/PMA (by the network administrator or by a DHCP server)

• INTERFACE PARA >NETWORK PARAM. > FTP server is set to "On".

• A FTP client [1] is installed on the host computer.

• The FTP connection is *not* blocked by a firewall

Establishing a FTP connection

1. Note down the IP address of the LMA/PMA.

➠ The IP address is shown under INTERFACE PARA >NETWORK PARAM. > IP address

2. Start the FTP client.

3. Enter the following in the address bar:

ftp://[IP address without initial zeroes]

---

1) e. g. WS-FTP, Windows Explorer, Internet Explorer, Midnight Commander

Example: IP address = 144.093.029.047

Enter: ftp://144.93.29.47

An input field for the user name and password appears.

4. Enter user name and password.

A user name can be chosen at will; preset password = "avery"

Change the password under INTERFACE PARA >NETWORK PARAM. > FTP Password
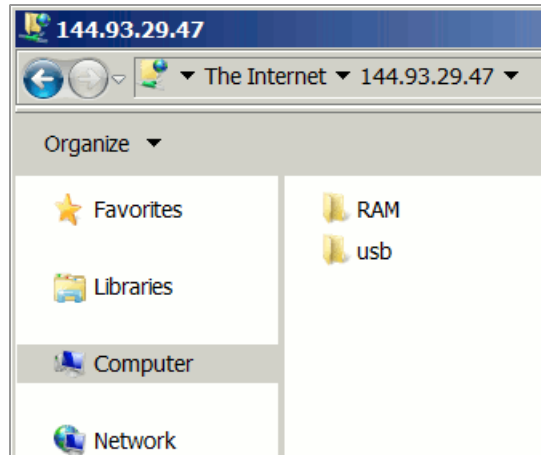
[5] User interface of the FTP server in the Windows Explorer.
RAM = internal machine memory; usb = connected USB stick.
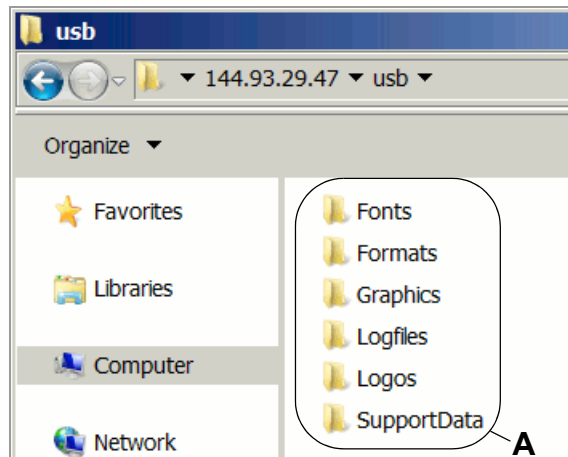
[6] Folders on the USB stick (A).
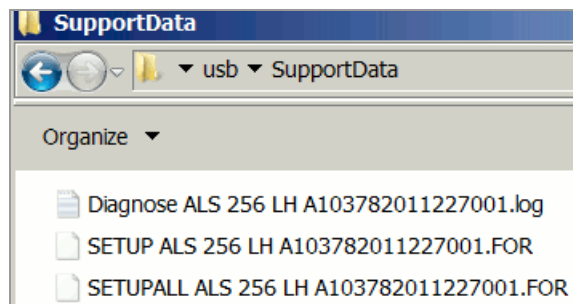
[7] Files in folder „SupportData".

If the login was successful, separate folders appear in the FTP client, one for the internal RAM disk and one for each connected memory medium [5]:

- RAM:

  The content of the RAM disk is without matter for the user.

- USB:

  If one of the functions for storing setup or diagnosis data on a memory medium was already processed, the following subfolders can be found here [1]:

Subfolder	Comment
Formats	• Location for setup files (see MASCHINEN SETUP > Param. speichern) • Location for firmware files to be uploaded in standalone mode
Logfiles	Location for diagnosis files (see SERVICE/DIAGNOS. > Diagnose speich.)
SupportData	Location for setup and diagnosis files (see SERVICE/ DIAGNOS. > Gen.SupportDaten) [7]
Fonts	Without function
Graphics	
Logos	

---

1) Depending on the applied memory medium appears SD, CF or USB.

Saving/loading a configuration

Applications

It sometimes happens that all of the parameter settings for a labeller must be restored or transferred to another labeller. In such cases, the user can import all of the function settings together as a set, saving time, money and stress. The following applications come to mind:

- After a service action, when the same settings as before the service are to be re-installed on a labeller.
- When the settings in the functions menu of one labeller are to be transferred onto another machine of the same model.
- When several labellers of the same model are to be set up with exactly the same settings.

In these cases, it is convenient to first export and save the settings so that they can later be imported. There are two ways of doing this:

- *Data interface*: Readout via the data interface with the help of appropriate interface commands. This method requires a sound knowledge of the Easy Plug command language and will not be described here.

  Detailed information about Easy-Plug:

  – (PMA) See Easy-Plug manual
  – (LMA) See chapter Interface commands on page 24 ff

- *Storage medium*: Saving the settings onto a storage medium (memory card or USB stick) as a text file ("setup file").

  See Printout of SETUPALL.FOR (LMA) on page 33

▥➡ The settings have to be saved for LMA and PMA separately. To be able to read out the two setup files, the following media are required: A USB stick for the LMA and a memory card (SD or CF) for the PMA.

- (LMA) Storing on a memory card is not supported with the current firmware (version 2.51)
- (PMA) Storing on a USB stick is not supported with the current firmware (version 6.41)

Saving onto a storage medium

1. Switch the labeller off.
2. Insert memory card into labeller's card slot.
3. Switch the labeller on.
4. (LMA) Call MACHINE SETUP > Store Parameters.

   (PMA) Call SPECIAL FUNCTION > Store Parameters.

   ▥➡ Those functions only appear in the menus if a storage medium is connected.

5. Press the (↵) button to acknowledge the displayed storage medium.

   (If more than one storage medium is connected) Select the desired medium and press the (↵) button.

6. Choose an option for saving: "With adjust para" or "Without adj. par"

   – "With adjust para": (Default): device-specific settings are *included* in what is saved. These include sensor settings, for example. The names of the relevant functions are marked with a "*" in the text file. This setting is recommended when the intention is to transfer the settings back onto the same machine.
   – "Without adj. par": parameters that contain device-specific settings are *excluded* from what is saved. This is recommended when settings from one machine are to be transferred to another machine of the same model.

7. Press the (↵) button.

   The default file name is now shown (saved in \FORMATS directory on the storage medium):

   – `SETUPALL xxxxxx yyyyyyyyyyyyyyyy.FOR`
     for MACHINE SETUP > Store Parameters = „With adjust para"
   – `SETUP xxxxxx yyyyyyyyyyyyyyyy.FOR`
     for MACHINE SETUP > Store Parameters = „Without adj. par"

   (with xxxxxx = machine type, e. g. „ALX 736 LMA RH"; yy = RH or LH; yyyyyyyyyyyyyyyy = CPU board serial number)

➠ File name and directory can be changed using buttons on the LMA / PMA operator panel. If a file with the name entered already exists, this will be overwritten without asking for confirmation.

Loading from a storage medium

Selecting a file

In the file selection dialog, only files with the following endings are shown:

- `*.FOR` (configuration file)
- `*.S3B` (firmware file).

The files must be located on the memory card, in the "\FORMATS" directory.

If there is more than one file in the "\FORMATS" directory, the first file alphabetically is displayed. The following system is used to select a file:

Key	Action
↓	Show next file
↑	Show previous file
⟷	Show first file
↵	Select currently displayed file

[Tab. 1]　Functions of buttons for file selection

If there are no suitable files in the "\FORMATS" directory or no memory card in the card slot, the following message appears:

> Standalone
> No files!

If a setup file was choosen that doesn´t match the the machine type, the following message appears:

> Wrong Setup file
> Execute? No

➜ Press the (↵) button to cancel.

Loading a
configuration

1. Press the (↵) + (⬦) keys simultaneously.

> Select file
> SETUP ALX 736 RH A637

2. Press the (↵) key.

> SETUP ALS 306 RH A637 [a]
> Executing .

a) Selected file name

The loading can take a couple of seconds. To visualize the progress, the point is moving during the loading.

> Store Parameters
> Restart system..

The configuration is loaded after the restart.

Automatic loading

➜ Save the configuration file as \AUTOSTRT.FOR (in the root directory of the storage medium).

If a USB stick is applied at a PMA:

➜ (PMA) Assign drive C: to the USB stick (INTERFACE PARA >DRIVEASSIGNMENT > Drive C = „USB stick")

Importing the settings:

1. Switch machine off.
2. Connect the storage medium.
3. Switch machine on.

   The import of the function settings starts automatically. Display after settings have successfully been applied:

> Switch off
> Remove card [a]

a) Appears also with USB stick

4. Switch machine off.
5. Remove storage medium.

Loading a configuration via the data interface
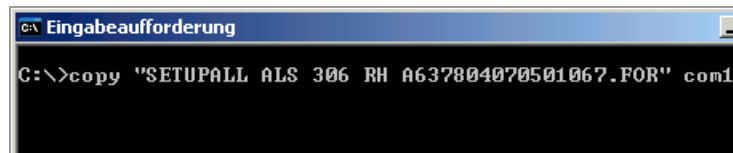
Prerequisites

- A configuration file has been read out (see chapter Saving onto a storage medium⬚ on page 10).
- The configuration file was saved on the host computer (The transfer can be carried out using the FTP server, for example, see chapter FTP server⬚ on page 7).
- Host computer and machine are connected via *the* interface which has been activated through the menu: INTERFACE PARA >EASYPLUGINTERPR > Interface (Com1, USB or Ethernet)
- Host computer operating system: Windows XP or Windows 7

Loading via serial interface

On the host computer:

1. Open a command prompt window.
2. Enter the command `copy setupall.for com1` [8]

   ➠ Replace "setupall.for" with the selected filename.
3. Press the Enter key.

```
Eingabeaufforderung                                        _

C:\>copy "SETUPALL ALS 306 RH A6378040070501067.FOR" com1
```

[8] Command prompt window showing the command to transfer the file "setupall.for"
     to the interface Com1.

Loading via USB or Ethernet interface

On the host computer:

1. Open a command prompt window.
2. Enter the command `copy setupall.for \\Computername\Share name`

   ➠ Replace "setupall.for" with the selected filename
   – Computername = Name of the computer. You can find this name in Windows XP under START > SETTINGS > CONTROL PANEL > SYSTEM > COMPUTERNAME (e.g. "DM-ECH-0990").
   – Share name = name found in Windows XP under START > SETTINGS > PRINTERS AND FAXES, by right-clicking on the device icon then clicking PROPERTIES > SHARING. The Share name stands for a printer that is connected to a certain port – a USB port for transfer via USB or the TCP/IP port for Ethernet transfer.

➠ The procedure described does not work with Windows 98, Windows ME or Windows NT 4.0.

➠ The Share name must satisfy MS-DOS conventions (max. 8 characters length, no special characters or spaces)

Tandem Operation

Overview
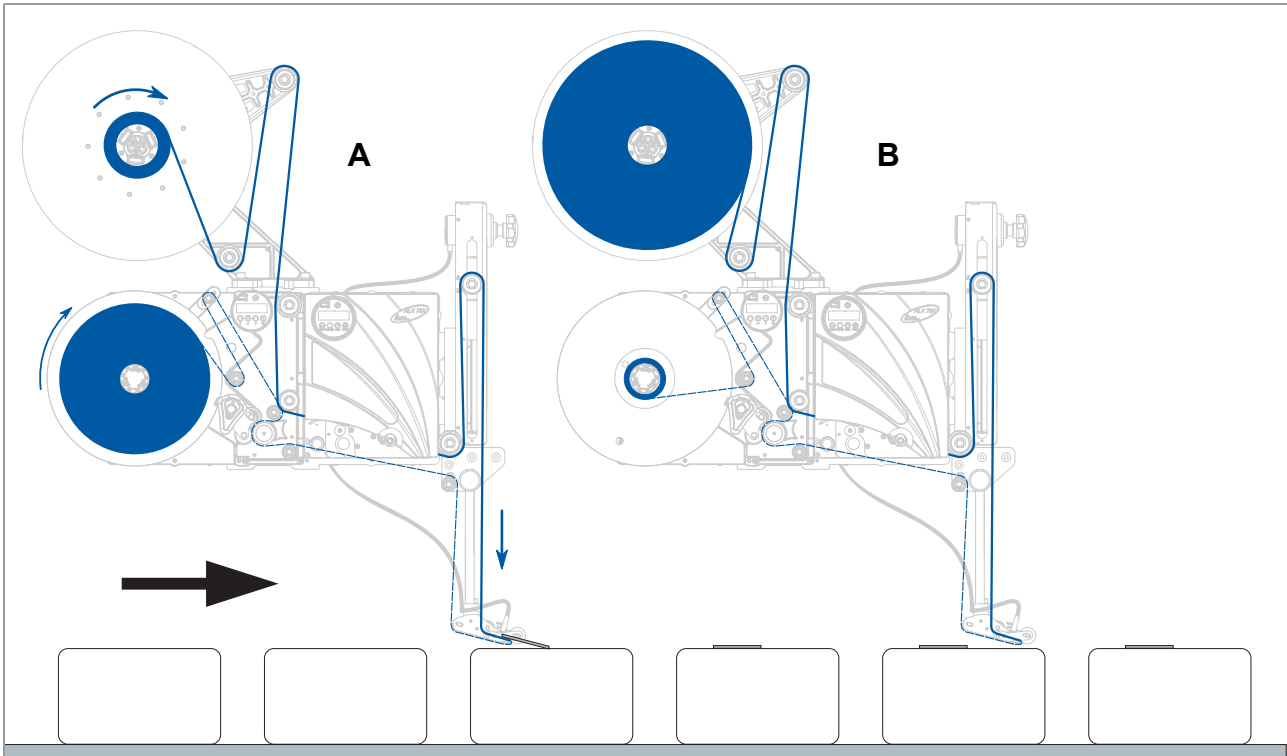
[9] Two labellers in tandem arrangement:
   A Master (in the illustration: currently active, but with a label roll that is running low)
   B Slave (in the illustration: in standby, with a full label roll)

In tandem operation, two labellers are arranged one behind the other. Only one of the labellers is in operation at a time. The other remains in standby.

If the active labeller reports the end of the label roll or a malfunction occurs, it shuts down. The other labeller takes over the task of labelling. During automatic switch-over from one machine to the other, the distance between the two machines and their arrangement are taken into consideration. As a rule, unlabelled products can be prevented.

At the idle machine, the operator has the option to reload with new label material or to eliminate minor malfunctions.

The first machine in the production line is designated as the master device, the second is designated as the slave device. Normally, the master device is activated first.

Operating modes   The master machine can be set to two operating modes:

- *Master mode*: The master machine starts labelling. If an error occurs at the master, the slave overtakes. As soon as the error at the master is removed, the slave stops and the master continues.

- *Flipflop master mode*: The master machine starts labelling. If an error occurs at the master, the slave overtakes and continues labelling, until an error or a warning occurs at the slave. Then it switches back to the master machine, at which the error should be removed now.

Synchronisation   There are two ways to synchronise master and slave:

- Via serial interface 🗋 on page 16
- Via Ethernet interface 🗋 on page 17

Prerequisites

- Two labellers, both RH or both LH, one mounted directly behind the other on the conveyor line
- Firmware version:
    – 6.41-PMA and 1.41-LMA or higher
    – With version 2.52 or higher, both machines must have the same version installed
- Potential equalisation between the two machines
- In case of operation with automatic speed adjustment: The rotary encoder must be connected to both machines using the Y-cable [1]. Both machines must be set for the use of the rotary encoder.
- Product sensor:
    – *One* common sensor is connected to both machines using the Y-cable [1], *or*
    – *Two* sensors, one for each machine
- Connection cables:
    – Tandem interface cable [1] for synchronisation over Com1 [10] (Article number A7978), *or*
    – Standard network cable for synchronisation over Ethernet interface [11]

⚠️ CAUTION!

Malfunction caused by a firmware limitation.

→ Don´t operate the machines with the following settings at the same time:

- Tandem mode „FlipFlop master"
  (MACHINE SETUP > Tandem Operation = „FlipFlop master")
- Applicator operation
- Setting
  SIGNAL INTERFACE >APPLIC. SIGNALS > Apply mode = „After start sig." or
  SIGNAL INTERFACE >AI BOARD SIGNAL > Apply mode = „After start sig."

---

1)   See Y-cable for product sensor / rotary encoder 🗋 on page 32

Connecting the machines

Via serial interface   Synchronisation over serial interface (Com1):

1. Connect the D-sub connector [10B] at either end of the tandem interface cable [10A] to the serial interface of each machine.

2. Connect the mini DIN 6 connector [10C] of the tandem interface cable to one of the two machines, at the connection shown.

    ➠ It is irrelevant, to which machine the „double end" of the cable is connected.
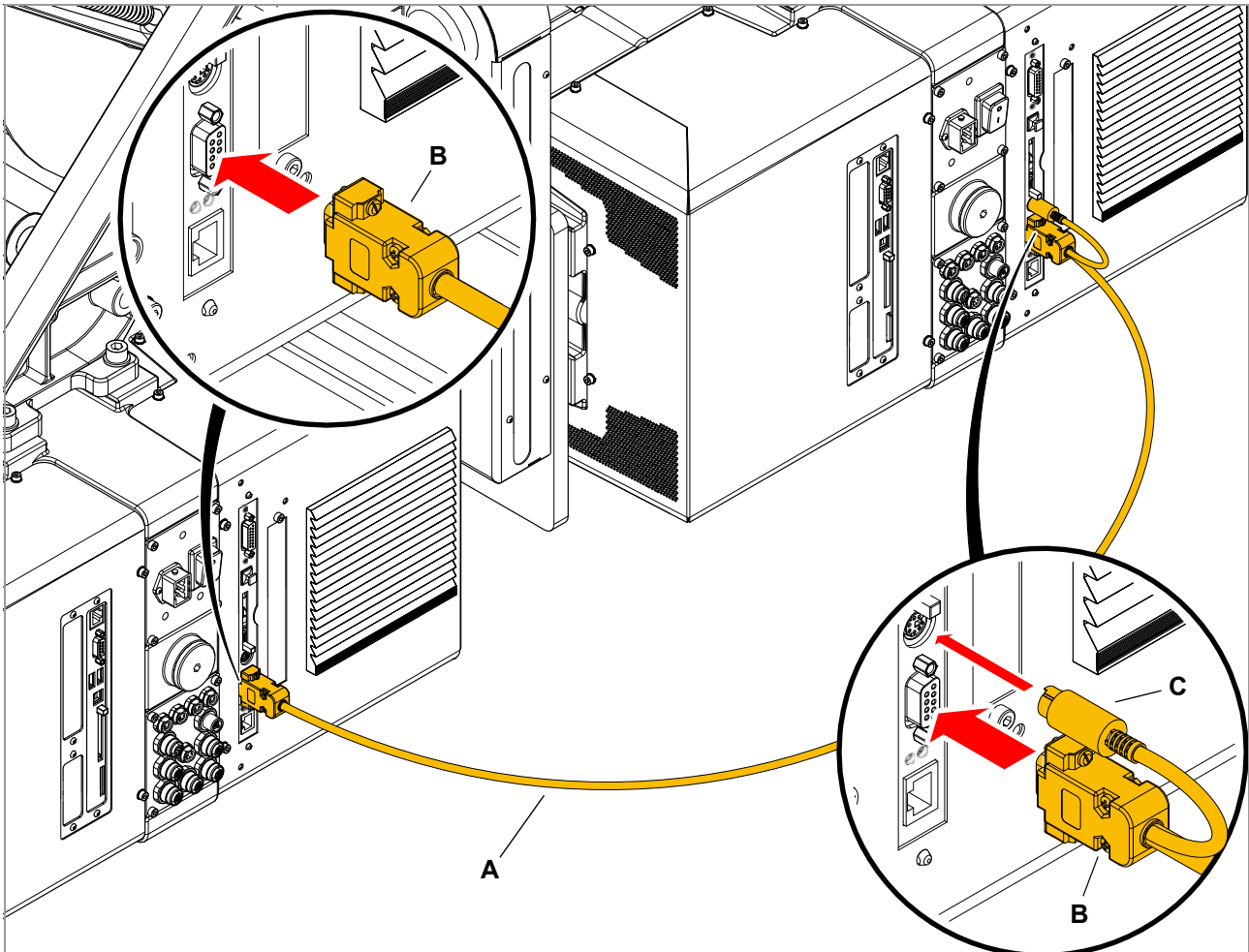
[10] Connecting tandem machines by means of the tandem interface cable (A7978).

Cable plan of the tandem interface cable: see Tandem interface cable ⬈ on page 31.

Via Ethernet interface Synchronisation over Ethernet interface (peer-to-peer, that is direct connection without network):

→ Connect the plugs [11B] of the (crossover) network cabel [11A] to the ethernet interface on both machines.

> **i** If both machines are connected to a network, standard (1:1) network cables are required for connection.
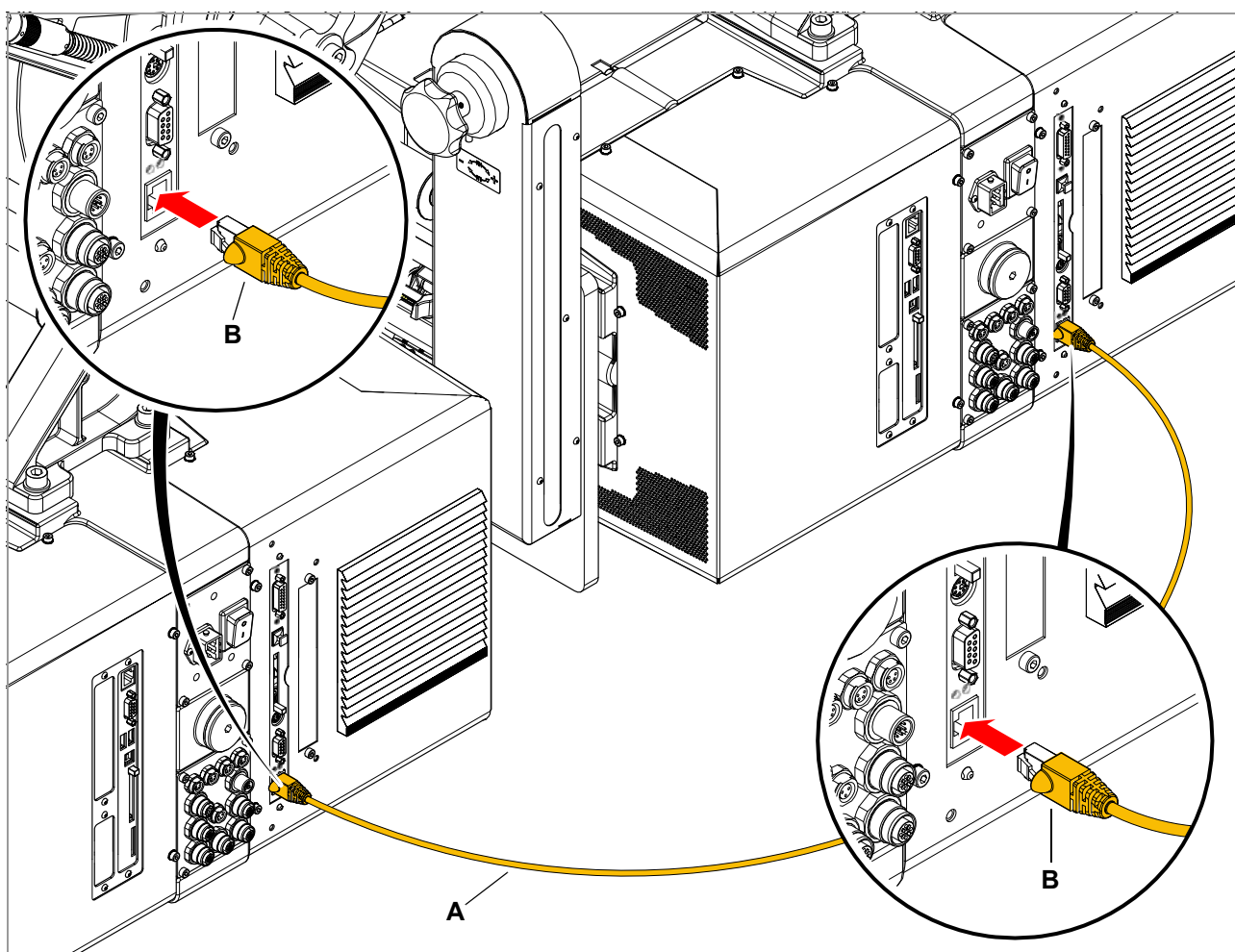
[11] Connecting tandem machines by means of a network cable (A).

Settings in the parameter menu of the LMA

Syncronisation via serial interface

With firmware version 2.52 or higher, the appropriate settings for both COM1 ports are done automatically, if COM1 is selected as communication port (MACHINE SETUP > Tandem synchron.. = „Serial Com1"). Additionally, the submenu for COM1 settings (INTERFACE PARA >COM1 PORT) is no longer visible.

Machine	Menu >Submenu	> Parameter	Setting
Master and Slave	INTERFACE PARA >EASYPLUGINTERPR >	Interface	*not* "Serial Com1" and *not* „Auto negotiation"
			ℹ During tandem operation, Com1 is used for communication between master and slave machine. Therefore, the interface function may not be set to „Auto negotiation" or to „Serial Com1".
	INTERFACE PARA >COM1 PORT >	Baud rate	115 200
		No. of data bits	the same setting on both machines
		Parity	
		Stop bits	
		Data synch.	"None"
	MACHINE SETUP >	Tandem synchron.	"Serial Com1"
Master	MACHINE SETUP >	Tandem Operation	"Master" or „FlipFlop master"
		Tandem Distance	Set the distance between the dispensing edges of the master and slave.
Slave	MACHINE SETUP >	Tandem Operation	"Slave"

[Tab. 2]   Required settings for master and slave for tandem synchronisation via Com1.

Syncronisation via Ethernet interface

> **i**   Table 3 contains example addresses for a direct connection (peer-to-peer) of the machines. For connection to a network, the addresses have to be provided by the network administrator. It is recommended to connect both machines to the same subnet which should have low network traffic.

Machine	Menu >Submenu	> Parameter	Setting
Master and Slave	INTERFACE PARA >EASYPLUGINTERPR >	Interface	„TCP/IP SOCKET"
	MACHINE SETUP >	Tandem synchron.	„UDP Tandem Port"
Master	MACHINE SETUP >	Tandem Operation	„Master" or „FlipFlop master"
		Tandem Distance	Set the distance between the dispensing edges of the master and slave.
		Slave IP address	192.168.001.201 [a]
	INTERFACE PARA >NETWORK PARAM. >	IP Addressassign	„Fixed IP address"
		IP address	192.168.001.200 [a]
Slave	MACHINE SETUP >	Tandem Operation	„Slave"
	INTERFACE PARA >NETWORK PARAM. >	IP address	192.168.001.201 [a]

[Tab. 3]   Required settings for master and slave for tandem synchronisation via Ethernet interface.

a)   Example address. Regarding the IP addresses it is recommended to avoid using „000" or „555". For older machines with a CPU board „Gen. 2", the addresses 127.xxx.xxx.xxx *must not* be used.

Optional settings

The following settings influence tandem operation, regardless of the way of synchronisation.

Machine	Menu >Submenu	> Parameter	Setting
Master and Slave	MASCHINEN SETUP >	Tandem startmode	„1 Start sensor" or „2 Start sensors" (increased dispensing accuracy with 2 sensors, especially with a large distance between master and slave)
Master	MASCHINEN SETUP >	Materialend err	*Master mode*: If „Materialend err" is activated ,switching to the slave is already done when the critical roll diameter is reached, rather than at material end (simplifies label threading)
Slave	MASCHINEN SETUP >	Materialend warn	*Flipflop master mode*: „Materialend warn" *must* be activated in order to have all products labelled when switching from slave to master, even those placed between the machines at that moment.

[Tab. 4]   Optional settings at master and slave.

Activating the machines to dispense

**Switching on
(Firmware --> 2.51)**

The master starts the labelling.

1. Switch slave on
2. Switch master on

➡ If the master is switched on before the slave, the following error message appears:

> Status num: 5147
>   Tandemsynch.init

- This message appears when communication between the master and slave is interrupted.
- If the slave is switched on first, the message does not appear.

**Switching on
(Firmware 2.52 -->)**

The master starts the labelling.

→ Switch both machines on.

➡ The switching-on order is arbitrary.

If no communication can be established between the machines after switching-on, the following warning shows up:

> ONLINE
> Tandem Synch.

If communication succeeds within 5 minutes after the first appearance of the warning, the warning will disappear.

If no communication was established within 5 minutes after appearance of the warning, the following error messages will appear:

Master:

> Statusnum: 5147
>   Tandemsynch.Init

Slave:

> Statusnum: 5148
>   Tandemsynch.Init

Display on master

Master mode:

> Online Master
> Labels   292

Flipflop master mode:

> Online FF-Master
> Labels   292

The machine is ready for operation and begins labelling once it receives a signal from the product sensor.

Display on slave

> Online Slave
> Dispenser locked

(Display alternates between this and standard display)

Fine adjusting the label position at the slave

The label position at the slave is generally given by the start offset setting of the master and by the distance between the two machines. A fine adjustment of the label position at the slave is possible during operation:

1. Change to operation mode „Online settings" [12].
2. Set the offset value using the two buttons [12A,B] on the right half of the operation panel.

   This modifies the label position on the product.

A   B
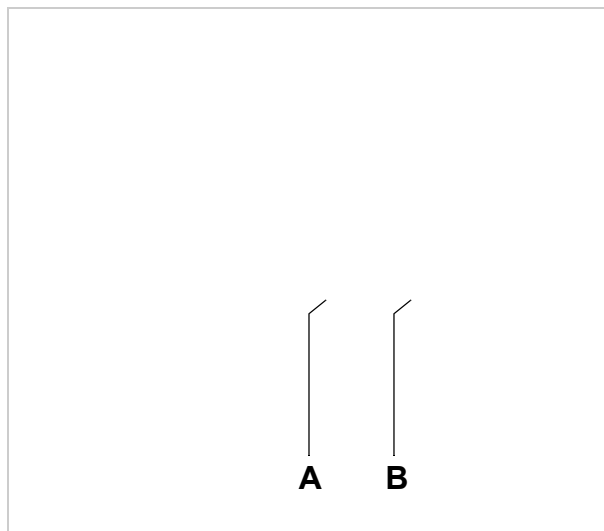
[12] Operation panel in the „Online settings" mode.

Material end

As soon as the labelling material on the master runs out or an error occurs, the slave is automatically activated. The master can be refitted while the slave takes over dispensing.

Master mode

In master mode, the master typically does a bigger part of the labelling work. The slave only takes over if the master has to be refitted.

Start situation: The master is labelling.

Display (left: master; right: slave):

Online Master		Online Slave
Etik.	xxx	Spender gesperrt

Critical roll-Ø is reached at the master, toggling to the slave [1].

Statusnum:	5071	Online Slave
Material end unw		Etik. xxx

1) Prerequisite: MASCHINEN SETUP > Mat. Ende Fehler is activated; otherwise the toggling occurs not before material end.

Roll change at the master:

1. Press the (↵) key to acknowledge the error.

Online Master		Online Slave	
Stopped :	xxx	Etik.	xxx

2. Replenish material
3. Press the (↑) key to activate the master.

Online Master		Online Slave
Etik.	xxx	Spender gesperrt

Flipflop master mode

In flipflop master mode, master and slave typically take over equal parts of the label-ling work.

Start situation: The master is labelling.

Display (left: master; right: slave):

Online FF-Master		Online Slave
Etik.	xxx	Spender gesperrt

Critical roll-Ø is reached at the master, toggling to the slave [1].

Statusnum:	5071	Online Slave	
Materialende Abw		Etik.	xxx

Roll change at the master:

1. Press the (↵) key to acknowledge the error.

Online FF-Master		Online Slave	
Gestoppt:	xxx	Etik.	xxx

2. Replenish material
3. Press the (↑) key to activate standby.

Online FF-Master	Online Slave	
Spender gesperrt	Etik.	xxx

Critical roll-Ø is reached at the slave, toggling to the master.

Online FF-Master		Online Slave
Etik.	xxx	Material low [a]

a) Toggling already occurs, if the OD control of the slave has activated a war-ning signal. If the external OD control is used, „OD sensor warn." appears instead of „Material low". For a short time, both machines work simulta-neously, because the slave labels those products, which where placed between the machines at the time of toggling.

Display shortly thereafter:

Online FF-Master		Online Slave
Etik.	xxx	Spender gesperrt

→ Roll change at the slave.

Stopping / continuing labelling

On the respective active machine:

➔ Press the (↵) key.

Display:

Online Master [a]
Stopped: xxx

a) Or „Online FF-Master" or „Onli-
    ne Slave".

The second machine takes over labellling

To continue labelling:

➔ Press the (↑) key.

Interface commands

Notes

The interface commands in this chapter apply to the *LMA*.

Interface commands for *PMA*: see Easy-Plug manual ⬚.

Command overview

Command	Function	Can take values
#!An	Activate interface Once the command #!A1 has been given, all commands received are interpreted as interface commands.	n = Machine ID (is set using INTERFACE PARA >EASYPLUGINTERPR > Dispenser ID no.
#!CLRE	Acknowledge status message (only possible, if the quit method is not „N")	
#!CLRW	Reset warning status.	
#!D	Dispense a label	
#!ERRF	Get status message	
#!Pn	Deactivate interface Once the command #!P1 has been given, the commands received are *no longer* interpreted as interface commands.	n = Machine ID (is set using INTERFACE PARA >EASYPLUGINTERPR > Dispenser ID no.
#!PG<Function ID>#G	Gives readout of a single menu parameter setting via the interface that is set up for use.	<Function ID> = identification number of menu function
#!PGn	Gives readout of menu parameter settings via the interface that is set up for use.	n = [-1 , -2, -4, -8, -16, -32, -xx]
#PB s/n/ <Function ID>=<Value> [, <Function ID>=<Value>] #G	Value assignment to one ore more functions in a product profile.	s = number of the product profile n = name of the product profile <Function ID> = identification number of menu function
#PC <Function ID>/<Value> #G	Adjusting a parameter in the parameter menu. Effective only after reset.	<Function ID> = identification number of menu function
#!PC <Function ID>/ <Value>	Immediate adjustment of a parameter in the parameter menu during operation. *Immediate* effect.	<Value> = Setting value of the function
#!SP	Stop LMA	
#!SR	Restart LMA	
#!WARF	Get warning status	
#!XMn#G	Save diagnose dump in Flash and/or send it to interface	n = [-99, -100]

[Tab. 5]   Overview of interface commands

Immediately executable commands

An immediately executable command (short „immediate command") is marked with an exclamation mark "!". Immediate commands are not temporarily stored in the queue, but are carried out immediately. All other commands are put on the waiting list until the immediate commands have been carried out, and are then processed in the order in which they have been received.

#!ERRF   Returns status messages

- Return format: „ERRxnnnn<LF>"
- nnnn = Status number belonging to the status message.

Examples or return strings:

- „ERR00000": Currently no active status message; no active message in the past.
- „ERR05002": Currently no active status message; in the past, the „Material end" message (5002) was active, which has already been acknowledged.
- „ERRU5145": Currently, the „Rewinder full" message (5145) is active. The message must be acknowledged by operation panel or by sending the #!CLRE command.

x =	Meaning
A	Self quitting
U	Requires user quit
N	Can not be quitted (requires reset)
F	Quit method is not defined
0	Status message was already quit

[Tab. 6]   Possible quit methods of the returned status messages.

#!PGn

n =	Effect
-1	Values for machine-specific settings (e.g. sensor adjustment values) are *commented out* [13F] (by adding a "*" to the front of each). When settings are then transmitted to another labeller, the machine-specific settings are *not* included in the information sent.
-2	Values for machine-specific settings (e.g. sensor adjustment values) are *not* commented out [13F]. Machine-specific settings are consequently transferred along with the rest of the settings when these are sent to another labeller.
-4	Additional output of comments. These comprise the name and value of the function in text form. Besides this, a number of machine data [13B] are output at the start.
-8	Additional output of comments that comprise the type of function (Tab. 8) and its range of permitted values [13E]. For information on the function types see below.
-16	Additional output of the service data as a comment.
-32	Outputs the content of the product profiles.
-xx	Combination of two or more values of the range [-1, -2, -4, -8, -16, -32] by addition. Example: (-16)+(-8)+ (-4)+(-2)=(-30).

[Tab. 7]   Effects of different handover values used in the #!PG command

The current set value for the function is returned as ASCII text and ends with a line feed <LF> (0x0a). It is possible to output the values of all the functions together. These can then be transferred to another device (see #PC command).

If an ID is not available, only <LF> is returned.

[13] Selection of function settings output after the #!PG-30 command is given
- **A** Command to activate the interface
- **B** Machine data, output in accordance with #!PG-4
- **C** #PC<Function ID>/<Value> for the "Dispense Speed" function
- **D** Plain text comment, output in accordance with #!PG-4
- **E** Function type and permitted value range, output in accordance with #!PG-8
- **F** Machine-specific setting; in this case not commented out, since #!PG-1 was used to insert a "*" at the start of the line

Parameter type	Displayed in form	Meaning	Example
Integer	<i: 0 - 2147483647 (1)>	0 = minimum value 2147483647 = max. value 1 = Increment	MACHINE SETUP > Dispense counter
Float	<f: 5.0 - 600.0 (0.1)>	5.0 = min. value 600.0 = max. value 0.1 = Increment	LABEL SETUP > Label pitch
String	<s: 32>	32 = max. string length	INTERFACE PARA >NETWORK PARAM. > DHCP host name
Discrete	<d>	0 = Disabled 1 = Enabled	LABEL SETUP > Stop count. mode

[Tab. 8]   Overview of parameter types

#!PC   Syntax: `#!PC<Function ID>/<Value>`

Immediate command for setting of function values. In comparison to the #PC command, only the functions listed afterwards can be set this way. The settings take effect immediately.

<Parameter ID>	<Value>	Function	Parameter in menu
2005	n = 0 - Maxint [a]	Label counter	MACHINE SETUP > Dispense counter
2065	n = 0 - 16	Loads product profile no. „n". A valid product profile must be stored under this number. After the command, a restart is executed.	LABEL SETUP > Load prod.profil
3213	n = 0 - 10000 ms	Signal delay after dispense end	SIGNAL INTERFACE >PLC SIGNALS > Disp.end delay
6000	f = 0.0 - MAX m/min	Dispensing speed	LABEL SETUP > Dispense speed
6001	f = 0.0 - MAX m/min	Slew speed	LABEL SETUP > Slew speed
6002	f = 5.0 - 500.0 mm	Material length	LABEL SETUP > Label pitch
6003	f = 0.0 - 999.9 mm	Label stop position	LABEL SETUP > Lab. stop offset
6004	f = 15.0 - 9999.9 mm	Start offset	LABEL SETUP > Start offset
6010	n = 0 - 100 %	Adjustment label sensor	MACHINE SETUP > <N.N.>
6016	n = 0 - Maxint [a]	Label amount	LABEL SETUP > Label stop quan.
6017	f = 0.0 - 1999.9 mm	Product length	LABEL SETUP > Product length

[Tab. 9]   Functions which are setable with the #!PC function.

a)   Maxint = 4294967296

#!SP   Syntax: `#!SP`

In dispensing mode, the following is displayed after sending the command:

> ONLINE
> Stopped : xxx

Continuing the dispensing: press the (↑) button or send #!SR.

#!WARF   Syntax: `#!WARF`

Returns the warning status

Return format: „WARF01234567<LF>"; If a warning is active, the appropriate bit is set in the return string. If no warning is active, a „_" is returned instead of a digit. An additional 8 character block is returned (separated by a TAB (0x09)), if at least one bit >= 8 is set.

Example:

The warnings 0 and 4 are active.

Return string: „WARF0___4___<LF>"

Bit	Displayed text	Meaning
0	Productstartwarn	• New start signal arrived before the dispensing operation was finished. • Several missing labels on the web, which can not be compensated.
1	PMA warning	The printer (PMA) has stopped or an error has occurred on the printer.
2	Material low	(Internal OD sensor) critical material roll diameter reached.
4	APSF speed warn.	The conveyor speed exceeded the max. speed of the dispenser.
5	OD sensor warn.	(External OD sensor) critical material roll diameter reached.
6	Toomany products	• Each product triggers more than one start signal. • Too many products are between product sensor and dispensing edge. The buffer for product start signals is about to overflow. • The resolution of the rotary encoder is set wrong.
7	Rew. stop warn	The material rewinder was switched off by the operator.
8	Int. mod. synch	Although communication between printer and dispenser has been interrupted, labels can currently still be dispensed from the buffer loop.
9	Module speed	The printer is printing too slowly. Start signals must therefore be left out.
10	Foil low	Critical foil roll diameter at the printer reached.
11	Loop empty	To few labels in the loop. Currently, no label can be taken out of the loop

[Tab. 10] Bit values in the return string of #!WARF.

For measures to get rid of the warning causes, read the user manual, topic section Operating faults ⃞ > „Reference status messages - dispenser" > „List of warnings".

#!XM

Syntax: `#!XMn#G`

Generates a diagnose dump and sends it to an interface or stores it in the Flash memory.

n =	Meaning
-99	Diagnose dump is sent to the debug interface (which normally is Com1) and is stored in the Flash.
-100	Diagnose dump is sent to the active data interface (INTERFACE PARA >EASYPLUGINTERPR > Interface) and is *not* stored in the Flash.

[Tab. 11] Handover values for #!XM.

Not immediately executable commands

Not immediate commands (short „commands") are temporarily stored in the queue, and are then processed in the order in which they have been received.

#PB   Value assignment to one ore more functions in a product profile.

Syntax: `#PB s/n/<Function ID>=<Value>[,<FunktionsID>=<Wert>]#G`

- s : Number of the product profile
- / : Separator
- n : Name of the product profile
- <Function ID>: Identification number of the function
- <Value>: Value of the function (permitted values depend on function type)
- #G declares end of command

Example:

Creating a product profile with the name „Product 2" on memory slot 2:

```
#!A1

#PB2/Product 2/2067=0,6000=10.0,6001=10.0,6002=35.4,
6003=19.0,6004=15.0,6034=0.0,6017=0.0,6035=0,6036=100.0,
6037=100.0,6007=1,6041=0,6015=0,2002=0,2069=1,2006=0,2058=0,
2071=0,2068=5,2043=0,6005=0,6006=0,6008=500,6009=64.0,6040=1,
6046=1.80,6018=0,6047=0,6020=3,6038=0,6019=500.0,2015=4,
6011=1,6012=1,6013=0,6014=0,6042=0,6043=0,2020=1,2051=1,
2053=0,2075=60,2074=80,2076=270,6022=0,6028=0,6044=0,6045=0,
6023=0,6024=50000,6025=50000,6029=15000,6030=2000,1101=0,
1102=0,1104=64,2072=0,2021=0,1201=8,1202=8,1203=2,1204=1,
1205=0,1206=0,1207=1,1501=1,1505=9100,1506=0,
1513=ALS_204_LH_080100,1507=0,1508=avery,1509=0,1510=5,
1511=admin,1512=supervisor,1532=operator,1529=0,
1530=-2105212662,1531=3600,1533=0.0,6033=0,3211=0,3213=0,
3214=0,6101=0,6112=0,6102=0,6113=1,6106=1,6107=0,6108=0,
6109=2000,6111=0,3112=1,3101=6,3102=0,3110=2,3116=1,3106=1,
3107=1,3108=0,3115=80,3109=2000,3111=0,3230=0,3231=0,
3232=0,5111=0,5112=0,5127=1,5124=0,5128=-1872945986,5404=0,
5400=0,5401=0,5402=0,5408=0,5403=0,5406=0,5407=0#G
```

#PC   Syntax: `#PC<Parameter ID>/<Value>#G`

- <Function ID>: Identification number of the function (999999 = Function ID for special purposes; must be set together with one of the handover values listed in the table below (Tab. 12))
- / : Separator
- <Value>: Value of the function (permitted values depend on function type)
- #G declares end of command

Adjusts a parameter in the parameter menu.

This parameter is especially suitable for saving and transferring complete machine setups. It can for example be used in the following cases:

- if settings must be transferred from one machine to another.
- if several machines are supposed to have the same settings.
- if the settings of a machine are supposed to be recovered, e.g. after the CPU board was replaced.

It is adviseable to read out the parameter settings of the concerned machine at first. It thus emerges which parameters are relevant for the respective machine. The reading out can be done one of the following ways:

- Via the immediate command #!PGn, see chapter #!PGn on page 25
- Saving a setup file on a memory card, see chapter Saving/loading a configuration on page 10

To activate the setting, the machine must be reset after sending the #PC command. The reset can be triggered at the operation panel of the device or by an Easy-Plug command (#PC999999/-1#G). This is also the last command in a setup file.

Example:

```
#!A
#PC6000/10.0#G
#PC999999/-1#G
```

Sets the dispensing speed to 10.0 m/min and restarts the machine:

- #!A sets interface to be ready to receive interface commands
- 6000 = Function ID of the function LABEL SETUP > Dispense speed
- 10.0 = Speed in m/min
- 999999/-1 resets the machine

Value	Function
-1	*Reset* the machine
1	*Store* the current parameter settings as customer default (equates to MACHINE SETUP > Custom defaults = „Apply current")
2	*Delete* the stored customer default values (equates to MACHINE SETUP > Custom defaults = „Delete")
3	*Restore* factory settings with „custom defaults" if available (equates to MACHINE SETUP > Factory settings = „Custom defaults"), if not use „factory defaults" (equates to MACHINE SETUP > Factory settings = „Factory defaults")

[Tab. 12] Handover values for the command #PC999999 for special purposes.

Also refer to chapter Printout of SETUPALL.FOR (LMA) on page 33.

Appendix

Cable plans

Tandem interface cable
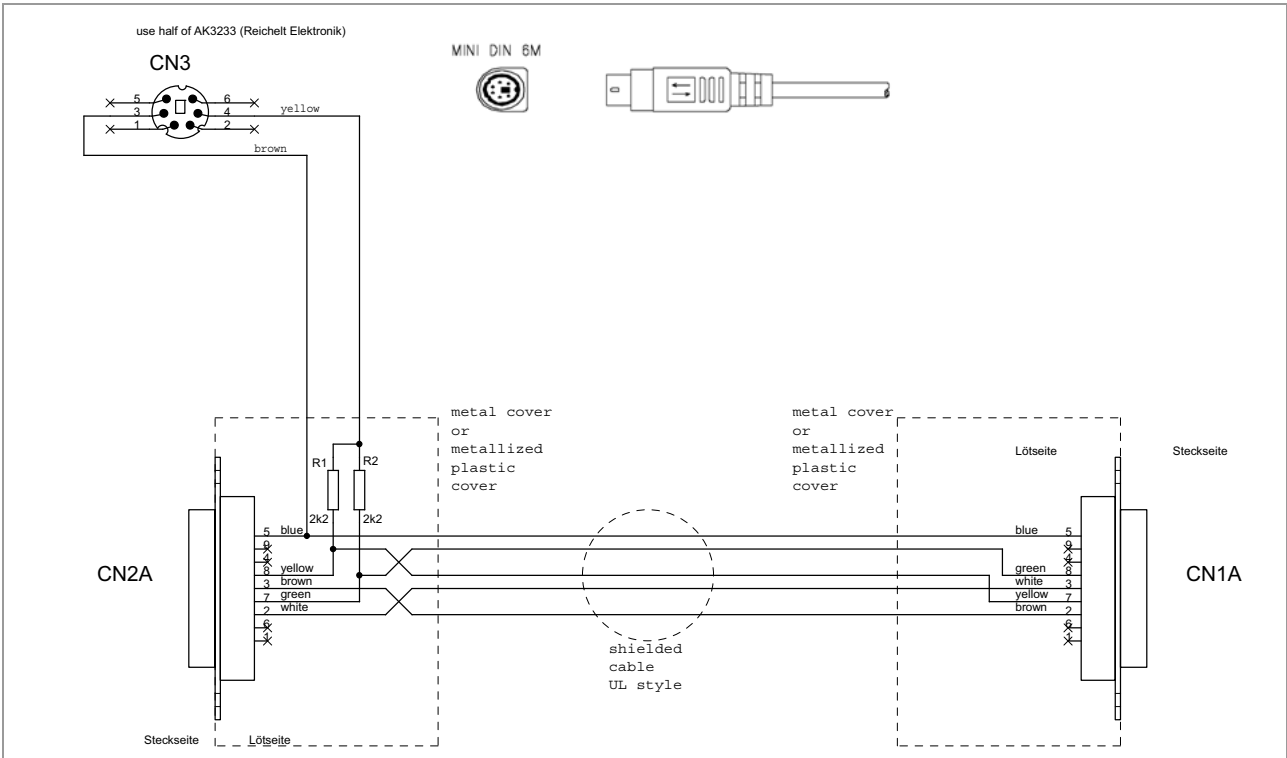
[14] Cable drawing of the tandem interface cable (A7978).

Y-cable for product sensor / rotary encoder
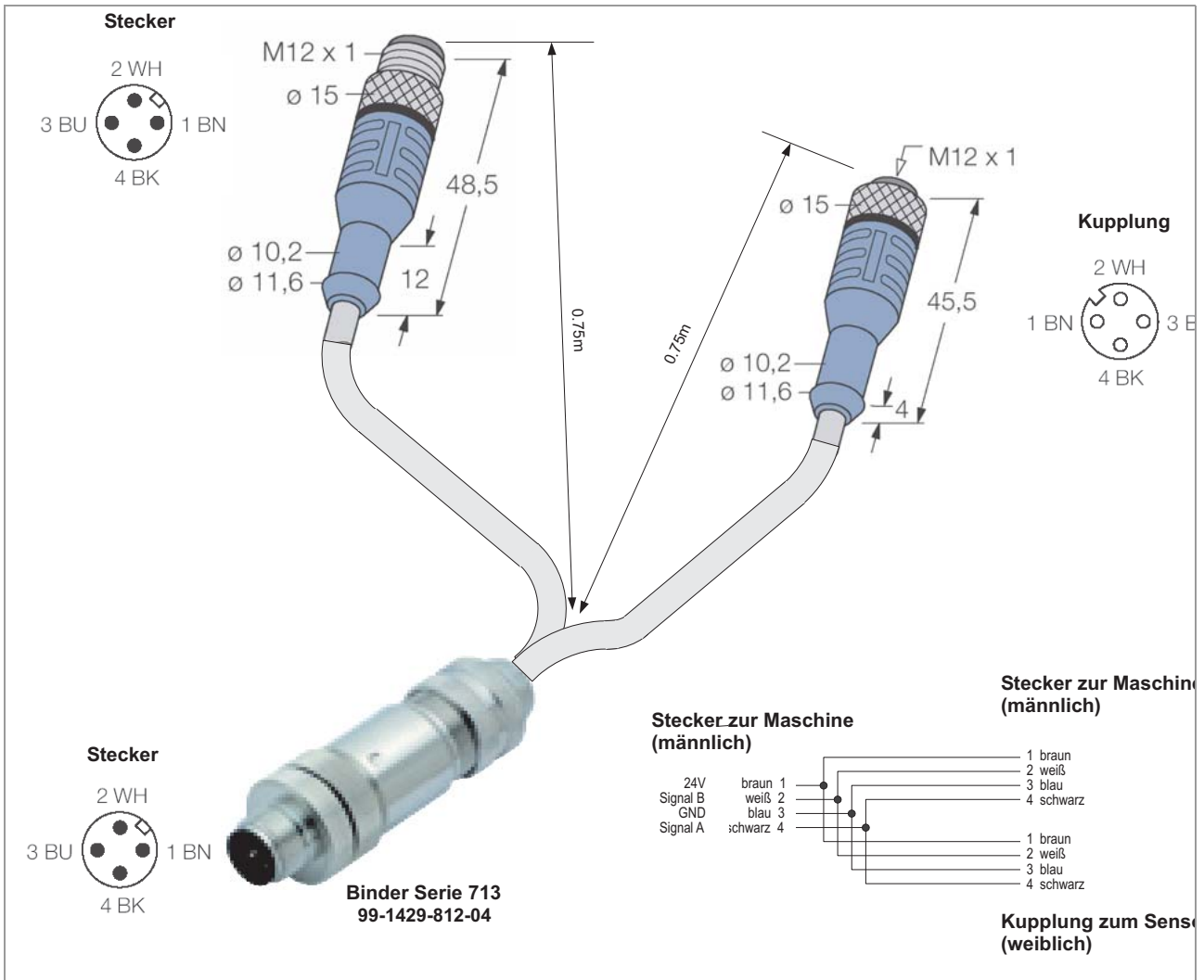
[15] Y-cable for connection of product sensor or rotary encoder (one cable each) to both machines (A7979).

Printout of SETUPALL.FOR (LMA)

```
#!A1
#G Machine Setup for ALX 734 LMA LH    Version: V2.51
#G Serial number      :   A10378201130400255
#G MAC Address        :   000A.44.08.00.FF
#G Creation date      :   01.01.2000 00:02


#G-----------------------------------------------------------
#G LABEL SETUP
#G-----------------------------------------------------------
#PC2067/0              #G  Gap detect. mode : Manual
#PC6000/50.0           #G  Dispense speed   : 50.0 m/min
#PC6001/40.0           #G  Slew speed       : 40.0 m/min
#PC6002/52.6           #G  Label pitch      : 52.6 mm
#PC6003/19.0           #G  Lab. stop offset : 19.0 mm
#PC6004/15.2           #G  Start offset     : 15.2 mm
#PC6034/0.0            #G  Start offset     :  0.0 mm
#PC6017/52.2           #G  Product length   : 52.2 mm
#PC6035/0              #G  Multi label mode : Disabled
#PC6036/202.9          #G  Label 2 offset   : 202.9 mm
#PC6037/202.9          #G  Label 3 offset   : 202.9 mm
#PC6007/0              #G  Miss. label tol. : 0
#PC6041/0              #G  Miss. label mode : Compensate
#PC6015/0              #G  Stop count. mode : Disabled
#PC6016/0              #G  Label stop quan. : 0
#G-----------------------------------------------------------
#G MACHINE SETUP
#G-----------------------------------------------------------
#PC5050/10             #G *Dispenser type   : ALX 734 LMA LH
#PC2002/0              #G  Speed unit       : Inch/s
#PC2069/1              #G  Cover open error : Immediately
#PC2065/1              #G  Param. data base : 1
#PC2005/0              #G *Dispense counter : 0
#PC2006/0              #G  w/wo  magazine   : with
#PC2058/0              #G  Feed mode        : Head up
#PC2071/0             #G  EasyPlug errors  : Tolerant handl.
#PC2068/5             #G  Foil stretching  : Feedback:  5 mm
#PC2043/0              #G  Start print mode : Pulse falling
#PC6010/29            #G *Sensor Adjust    : Manual   : 29 %
#PC6005/0              #G  Speed Adaption   : Off
```

```
#PC6006/0              #G  Encoder Type    : Single Phase
#PC6008/500            #G  Encoder Resol.  :  500 pulses/turn
#PC6009/64.0           #G  Encoder Diameter : 64.0mm  49.9var
#PC6040/0              #G  Rewinder Operat. : Disabled
#PC6046/1.80           #G  Rewinder gear    : Reduction 1:1.80
#PC6018/0              #G  Tandem Operation : Disabled
#PC6047/0              #G  Tandem startmode : 1 Start sensor
#PC6020/3              #G  Tandem Synch.    : UDP Tandem Port
#PC6038/0              #G  Slave IP address : 000.000.000.000
#PC6019/500.0          #G  Tandem Distance  : 500.0 mm
#PC2015/4              #G  Label sens. type : Optical
#PC6011/1              #G  Labelsen. InType : PNP
#PC6012/1              #G  Startsen. In.Type: PNP
#PC6013/0              #G  Start disp. mode : Pulse falling
#PC6014/0              #G  Start error stop : Off
#PC6042/0              #G  On inhibit enter : Do saved starts
#PC6043/0              #G  On inhibit leave : Do saved starts
#PC2020/1              #G  Turn-on mode     : Online
#PC2051/1              #G  Language         : English
#PC2053/0              #G  Access authoriz. : Deactivated
#PC2075/60             #G  Materialend err  : Mat.diam < 60mm
#PC2074/80             #G  Materialend warn : Mat.diam < 80mm
#PC2076/270            #G  Rewinder full    : Diameter > 270mm
#PC6022/0              #G  Ext. OD sensor   : Off
#PC6028/0              #G  OD Sens.polarity : Level low active
#PC6044/0              #G  Loop supply mode : Full label print
#PC6045/0              #G  Loop setup       : 1 deviator roll
#PC6023/0              #G  Unwinder motor   : Disabled
#PC6024/22500          #G  Feed accelerate  : 22500 mm/s2
#PC6025/40000          #G  Feed decelerat.  : 40000 mm/s2
#PC6029/15000          #G  Rew.empty accel. : 15000 mm/s2
#PC6030/2000           #G  Rew.full accel.  :  2000 mm/s2
#G----------------------------------------------------------
#G Easyplug Interpreter
#G----------------------------------------------------------
#PC1101/5              #G  Interface        : Automatic
#PC1102/0              #G  Spooler mode     : Mult. print jobs
#PC1103/1              #G  *Dispenser ID no. : 1
#PC1104/64             #G  Spooler size     :  64 KBytes
#PC2072/0              #G  Offline mode     : Interf. disabled
```

```
#PC2021/0                    #G  Interface delay :    0 ms
#G------------------------------------------------------------
#G COM1 Port Parameter
#G------------------------------------------------------------
#PC1201/8                    #G  Baud rate        : 115200 Baud
#PC1202/8                    #G  No. of data bits : 8
#PC1203/2                    #G  Parity           : None
#PC1204/1                    #G  Stop bits        : 1 Bit
#PC1205/0                    #G  Data synch.      : RTS/CTS
#PC1206/0                    #G  Serial port mode : RS232
#PC1207/1                    #G  Frame error      : Display
#G------------------------------------------------------------
#G Ethernet Parameter
#G------------------------------------------------------------
#PC1501/1                    #G  IP Addressassign : Fixed IP address
#PC1502/192.168.001.099   #G *IP address        : 192.168.001.099
#PC1503/255.255.255.000   #G *Net mask          : 255.255.255.000
#PC1504/000.000.000.000   #G *Gateway address   : 000.000.000.000
#PC1505/9100                 #G  Port address      : 9100
#PC1506/0                    #G  Ethernet speed    : Auto negotiation
#PC1513/ALX_734_LMA_LH_0800FF#G#G  DHCP host name   : ALX_734_L-
MA_LH_0800FF
#PC1507/1                    #G  FTP server       : Enabled
#PC1508/avery#G              #G  FTP Password     : avery
#PC1509/1                    #G  WEB server       : Enabled
#PC1510/5                    #G  WEB display refr : 5 s
#PC1511/admin#G              #G  WEB admin passw. : admin
#PC1512/supervisor#G         #G  WEB supervisor p.: supervisor
#PC1532/operator#G           #G  WEB operator p.  : operator
#PC1529/0                    #G  Time client      : Disabled
#PC1530/-2105212662          #G  Time server IP   : 130.133.001.010
#PC1531/3600                 #G  Sync. interval   : 3600 s
#PC1533/0.0                  #G  Time zone        : +0:00
#G------------------------------------------------------------
#G Signal  Interface Parameter Menu
#G------------------------------------------------------------
#PC6033/1                    #G  Interface mode   : Applic. signals
#G------------------------------------------------------------
#G PLC  Signals Parameter Menu
#G------------------------------------------------------------
```

```
#PC3211/0                    #G  End dispense mod : Mode0 inactive
#PC3213/0                    #G  Disp.end delay   :     0 ms
#PC3214/0                    #G  End pulse width  :     0 ms
#G------------------------------------------------------------
#G Applicator  Signals Parameter Menu
#G------------------------------------------------------------
#PC6101/0                    #G  Applicator type  : LTP - LTPV
#PC6112/0                    #G  Status outputs   : Deactivated
#PC6102/0                   #G  Apply mode       : After start sig.
#PC6113/1                    #G  Lab release time :     1 ms
#PC6106/1                    #G  Dwell time       :     1 ms
#PC6107/0                    #G  Blow on time     :     0 ms
#PC6108/0                    #G  Restart delay    :     0 ms
#PC6109/2000                 #G  Position timeout :  2000 ms
#PC6111/0                    #G  Apply comp. time :     0 ms
#G------------------------------------------------------------
#G AI Board Signals Parameter Menu
#G------------------------------------------------------------
#PC3112/1                    #G  Status signals   : Enabled
#PC3101/9                    #G  Applicator type  : LA-BO
#PC3102/0                   #G  Apply mode       : After start sig.
#PC3110/2                    #G  Start disp. mode : Pulse rising
#PC3116/1                    #G  Lab release time :     1 ms
#PC3106/500                  #G  Dwell time       :   500 ms
#PC3107/60                   #G  Blow on time     :    60 ms
#PC3108/0                    #G  Restart delay    :     0 ms
#PC3115/80                   #G  Stop lag time    :    80 ms
#PC3109/2000                 #G  Position timeout :  2000 ms
#PC3111/0                    #G  Apply comp. time :     0 ms
#G------------------------------------------------------------
#G Active signal inputs
#G------------------------------------------------------------
#PC3230/0                    #G  Start signal     : Default input
#PC3231/0                    #G  Inhibit signal   : Default input
#PC3232/0                   #G  OD sensor signal : Default  input
#G------------------------------------------------------------
#G Printer Service Menu
#G------------------------------------------------------------
#PC5111/0                    #G  Spec parameter 1 : 0
#PC5112/0                    #G  Spec parameter 2 : 0
```

```
#PC5133/54984793          #G *Loop dancer val. : 54984793

#G------------------------------------------------------------

#G DHCP Addresses

#G------------------------------------------------------------

#G readonly   ID=30001    #G   IP address       :

#G readonly   ID=30002    #G   Net mask         :

#G readonly   ID=30003    #G   Gateway address  :

#G------------------------------------------------------------

#G Module Firmware Versions

#G------------------------------------------------------------

#G readonly   ID=30004    #G   System version   : V2.51

#G readonly   ID=30067    #G   System revision  : 7764

#G readonly   ID=30070    #G   System date      : Apr 18 2013

#G readonly   ID=30076    #G   Model-ID         : ALX 734 LMA LH

#G readonly   ID=30081    #G   storage medias   : RAM,USB

#G readonly   ID=30058    #G   Applicator int.  : V 1 - T 38

#G------------------------------------------------------------

#G Operational Data

#G------------------------------------------------------------

#G readonly   ID=30014    #G   Serv. operations : 0

#G readonly   ID=30021    #G   Tot. mat. length : 212 m

#G readonly   ID=30027    #G   Dispencing cycl. : 1208

#G readonly   ID=30028    #G   Operation time   : 0 hours  2 min

#G readonly   ID=30082    #G   Total Operation  : 27 hours  50 min

#G------------------------------------------------------------

#G Power supply data

#G------------------------------------------------------------

#G readonly   ID=30029    #G   Type             : ALPS600

#G readonly   ID=30030    #G   Version          : H6.00 F1.10

#G readonly   ID=30031    #G   Serial number    : 10374002

#G readonly   ID=30072    #G   PS Temperature   :  23 ?C

#G readonly   ID=30032    #G   Standby+On time  : 297 hours  57 min

#G readonly   ID=30200    #G   PS Reg.    0x000 : 12 00 00 17 00
00 0F 00 00 02 97 55 80 91 97 53

#G readonly   ID=30201    #G   PS Reg.    0x010 : 00 00 00 00 00
02 97 57 00 00 00 00 00 00 00 CC

#G readonly   ID=30202    #G   PS Reg.    0x020 : 0F 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00

#G readonly   ID=30203    #G   PS Reg.    0x030 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
```

```
#G readonly   ID=30204   #G  PS Reg.   0x040 : 10 20 00 06 00
10 37 40 02 00 01 00 42 00 00 00
#G readonly   ID=30205   #G  PS Reg.   0x050 : 00 41 49 00 00
0A 00 00 00 00 FF 23 00 00 00 00
#G readonly   ID=30206   #G  PS Reg.   0x060 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 32 0F
#G readonly   ID=30207   #G  PS Reg.   0x070 : 00 00 00 00 00
02 97 55 00 00 00 00 00 02 97 53
#G readonly   ID=30208   #G  PS Reg.   0x080 : 41 4C 50 53 36
30 30 20 20 20 20 20 20 20 20 20
#G readonly   ID=30209   #G  PS Reg.   0x090 : 01 10 00 00 00
00 00 00 41 49 00 00 0A 00 00 00
#G readonly   ID=30210   #G  PS Reg.   0x0A0 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30211   #G  PS Reg.   0x0B0 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30212   #G  PS Reg.   0x0C0 : 10 00 00 03 01
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30213   #G  PS Reg.   0x0D0 : 00 41 49 00 00
0A 00 00 00 00 FF 23 00 00 00 00
#G readonly   ID=30214   #G  PS Reg.   0x0E0 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 32 00
#G readonly   ID=30215   #G  PS Reg.   0x0F0 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30216   #G  PS Reg.   0x100 : 00 00 00 00 2C
C3 00 00 00 00 00 00 00 00 B8 9C
#G readonly   ID=30217   #G  PS Reg.   0x110 : 01 00 00 0F 05
00 43 3B 00 82 05 00 00 00 00 00
#G readonly   ID=30218   #G  PS Reg.   0x120 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30219   #G  PS Reg.   0x130 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30220   #G  PS Reg.   0x140 : 23 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30221   #G  PS Reg.   0x150 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30222   #G  PS Reg.   0x160 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G readonly   ID=30223   #G  PS Reg.   0x170 : 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
#G------------------------------------------------------------
#G CPU board data
#G------------------------------------------------------------
#G readonly   ID=30034   #G  CPU identifier   : ARM926T Rev5
#G readonly   ID=30036   #G  PCB Revision    : REV01
```

```
#G readonly   ID=30037    #G  FPGA version     : 3821
#G readonly   ID=30039    #G  MAC Address      : 000A.44.08.00.FF
#G readonly   ID=30040    #G  Serial number    :
A10378201130400255
#G readonly   ID=30041    #G  Production date  : 04.02.2013
#G readonly   ID=30042    #G  PCB part number  : A103782-01
#G readonly   ID=30043    #G  Board part numb. : A103780-01
#G readonly   ID=30044    #G  Manufacturer     : Kurz IE
#G readonly   ID=30045    #G  Work place       : Prueffeld Rhd
#G readonly   ID=30046    #G  Company name     : Kurz IE
#G------------------------------------------------------------
#G Display board data
#G------------------------------------------------------------
#G readonly   ID=30059    #G  Display Version  : V3.10
#G readonly   ID=30068    #G  Display serialNr : A662603S10070419
#G------------------------------------------------------------
#G Internal Memory Configuration
#G------------------------------------------------------------
#G readonly   ID=30007    #G  RAM memory size  : 128 MB
#G readonly   ID=30008    #G  Flash mem size   : 8 MB    STM
#G readonly   ID=30013    #G  Default values   : Standard
#G------------------------------------------------------------
#G Printer Debug Menu
#G------------------------------------------------------------
#PC5127/1                 #G  Debug interface  : Serial Com1
#PC5124/0                 #G  Debug mask       : 0
#PC5128/-1872945986       #G  Debug IP address : 144.093.028.190
#PC5404/0                 #G  Fields           : Disabled
#PC5400/0                 #G  Label generation : Disabled
#PC5401/0                 #G  Print handling   : Disabled
#PC5402/0                 #G  Variables        : Disabled
#PC5408/0                 #G  OLV data         : Disabled
#PC5403/0                 #G  Pctrl communica. : Disabled
#PC5406/0                 #G  RFID-Reader      : Disabled
#PC5407/0                 #G  RFID-Task        : Disabled
#G------------------------------------------------------------
#G Product profiles
#G------------------------------------------------------------
#PB01N//CLEAR#G
#PB02N//CLEAR#G
```

```
#PB03N//CLEAR#G
#PB04N//CLEAR#G
#PB05N//CLEAR#G
#PB06N//CLEAR#G
#PB07N//CLEAR#G
#PB08N//CLEAR#G
#PB09N//CLEAR#G
#PB10N//CLEAR#G
#PB11N//CLEAR#G
#PB12N//CLEAR#G
#PB13N//CLEAR#G
#PB14N//CLEAR#G
#PB15N//CLEAR#G
#PB16//CLEAR#G
#G------------------------------------------------------------
#G Execute system restart  (  131 parameters )
#G------------------------------------------------------------
#PC999999/-1#G
```

Printout of SETUPALL.FOR (PMA)

```
#!A1
#G Machine Setup for ALX 736 PMA    Version: V6.41
#G Serial number      :  A662105104002622
#G MAC Address        :  000A.44.06.0A.3E
#G Creation date      :  14.05.2014 13:56


#G------------------------------------------------------------
#G Printer Parameter Menu
#G------------------------------------------------------------
#PC1001/1              #G  Infeed no.      : Nr. 1
#PC1002/8              #G  Inf. change spd. :  8 Inch/s
#PC1003/8.0            #G  Print speed     :  8 Inch/s
#PC1004/8.0            #G  Feed speed      :  8 Inch/s
#PC1005/1              #G  Materialtype    : Punched
#PC1006/50.0           #G  Materiallength  : 50.0 mm
#PC1007/50.0           #G  Materialwidth   : 50.0 mm
#PC1027/0              #G  Print direction : Foot first
#PC1008/0.0            #G  Punch offset    :  0.0 mm
#PC1009/1              #G  Bar code multip. : * 1
#PC1029/0              #G  Tradit. Imaging : No
```

```
#PC1010/0                    #G  UPC plain-copy   : In line
#PC1011/0                    #G  EAN Readline     : Standard
#PC1012/0                   #G  EAN sep. lines   : With readl. only
#PC1013/1                    #G  Rotated barcodes : Optimized
#PC1014/0                    #G  Dispense Mode    : Real 1:1 mode
#PC1015/3                    #G  Cut speed        :  3 Inch/s
#PC1016/160                  #G  Cut width        :  160 mm
#PC1017/0.0                  #G  Cut position     :  0.0 mm
#PC1018/0.0                  #G  Double cut       :  0.0 mm
#PC1019/1                   #G  Rewind direction : Printing outside
#PC1020/0.0                  #G  *X - Printadjust :  0.0 mm
#PC1021/0.0                  #G  *Y - Printadjust :  0.0 mm
#PC1022/0                    #G  Punchmode        : Automatic
#PC1023/128                  #G  Punchlevel       : 128
#PC1024/30                   #G  Matend           : 30
#G------------------------------------------------------------
#G Easyplug Interpreter
#G------------------------------------------------------------
#PC1101/7                    #G  Interface        : Automatic
#PC1102/0                   #G  Spooler mode     : Mult. print jobs
#PC1103/1                    #G  *Printer ID no.  : 1
#PC1104/64                   #G  Spooler size     :  64 KBytes
#PC2072/0                   #G  Offline mode     : Interf. disabled
#PC2021/0                    #G  Interface delay  :    0 ms
#G------------------------------------------------------------
#G COM1 Port Parameter
#G------------------------------------------------------------
#PC1201/8                    #G  Baud rate        : 115200 Baud
#PC1202/8                    #G  No. of data bits : 8
#PC1203/2                    #G  Parity           : None
#PC1204/1                    #G  Stop bits        : 1 Bit
#PC1205/0                    #G  Data synch.      : RTS/CTS
#PC1206/0                    #G  Serial port mode : RS232
#PC1207/1                    #G  Frame error      : Display
#G------------------------------------------------------------
#G COM2 Port Parameter
#G------------------------------------------------------------
#PC1302/8                    #G  Baud rate        : 115200 Baud
#PC1303/8                    #G  No. of data bits : 8
#PC1304/2                    #G  Parity           : None
```

```
#PC1305/2                    #G  Stop bits       : 2 Bit
#PC1306/0                    #G  Data synch.     : RTS/CTS
#PC1307/0                    #G  Serial port mode : RS232
#PC1308/1                    #G  Frame error     : Display
#G-----------------------------------------------------------
#G COM3 Port Parameter
#G-----------------------------------------------------------
#PC1351/2                    #G  Baud rate       : 9600 Baud
#PC1353/8                    #G  No. of data bits : 8
#PC1354/1                    #G  Parity          : None
#PC1355/2                    #G  Stop bits       : 2 Bit
#PC1356/0                    #G  Data synch.     : RTS/CTS
#PC1357/0                    #G  Serial port mode : RS232
#PC1358/1                    #G  Frame error     : Display
#G-----------------------------------------------------------
#G COM4 Port Parameter
#G-----------------------------------------------------------
#PC1361/2                    #G  Baud rate       : 9600 Baud
#PC1363/8                    #G  No. of data bits : 8
#PC1364/1                    #G  Parity          : None
#PC1365/2                    #G  Stop bits       : 2 Bit
#PC1366/0                    #G  Data synch.     : RTS/CTS
#PC1368/1                    #G  Frame error     : Display
#G-----------------------------------------------------------
#G COM5 Port Parameter
#G-----------------------------------------------------------
#PC1371/2                    #G  Baud rate       : 9600 Baud
#PC1373/8                    #G  No. of data bits : 8
#PC1374/1                    #G  Parity          : None
#PC1375/2                    #G  Stop bits       : 2 Bit
#PC1376/0                    #G  Data synch.     : RTS/CTS
#PC1378/1                    #G  Frame error     : Display
#G-----------------------------------------------------------
#G Centronics Port Parameter
#G-----------------------------------------------------------
#PC1401/1                    #G  PnP function    : On
#G-----------------------------------------------------------
#G Ethernet Parameter
#G-----------------------------------------------------------
#PC1501/1                 #G  IP Addressassign : Fixed IP address
```

```
#PC1502/000.000.000.000   #G *IP address      : 000.000.000.000
#PC1503/000.000.000.000   #G *Net mask         : 000.000.000.000
#PC1504/000.000.000.000   #G *Gateway address  : 000.000.000.000
#PC1505/9100              #G  Port address      : 9100
#PC1506/0                #G  Ethernet speed   : Auto negotiation
#PC1521/0                 #G  SNMP Agent        : Disabled
#PC1522/public#G          #G  SNMP password     : public
#PC1507/1                 #G  FTP server        : Enabled
#PC1508/avery#G           #G  FTP Password      : avery
#PC1509/1                 #G  WEB server        : Enabled
#PC1510/5                 #G  WEB display refr  :  5 s
#PC1511/admin#G           #G  WEB admin passw.  : admin
#PC1512/supervisor#G      #G  WEB supervisor p.: supervisor
#PC1532/operator#G        #G  WEB operator p.   : operator
#PC1529/0                 #G  Time client       : Disabled
#PC1530/-2105212662       #G  Time server IP   : 130.133.001.010
#PC1531/3600              #G  Sync. interval    : 3600 s
#PC1513/ALX736PMA_060A3E#G#G  DHCP host name    :
ALX736PMA_060A3E
#PC1514/avery#G           #G  WLAN SSID         : avery
#PC1515/0                 #G  WLAN WEP          : Disabled
#PC1516/1                 #G  WLAN default key : 1
#PC1523/123456789a#G      #G  WLAN 64Bit Key 1 : 123456789a
#PC1524/123456789a#G      #G  WLAN 64Bit Key 2 : 123456789a
#PC1525/123456789a#G      #G  WLAN 64Bit Key 3 : 123456789a
#PC1526/123456789a#G      #G  WLAN 64Bit Key 4 : 123456789a
#PC1517/123456789ABCD123456789ABCD#G#G  WLAN 128BitKey 1 :
123456789ABCD123456789ABCD
#PC1518/123456789ABCD123456789ABCD#G#G  WLAN 128BitKey 2 :
123456789ABCD123456789ABCD
#PC1519/123456789ABCD123456789ABCD#G#G  WLAN 128BitKey 3 :
123456789ABCD123456789ABCD
#PC1520/123456789ABCD123456789ABCD#G#G  WLAN 128BitKey 4 :
123456789ABCD123456789ABCD
#G-----------------------------------------------------------
#G Options Parameter
#G-----------------------------------------------------------
#PC3518/0                 #G  OLV Option        : Disabled
#PC5207/0                 #G  RFID Option       : Disabled
#PC1550/0                 #G  StandAlone Input : None
#G-----------------------------------------------------------
```

```
#G Drive Assignment
#G-----------------------------------------------------------
#PC1600/4                 #G  Drive C          : USB stick
#PC1601/0                 #G  Drive D          : None
#PC1602/3                 #G  Drive E          : SD card
#PC1603/1                 #G  Drive F          : CompactFlash
#G-----------------------------------------------------------
#G Printer System Menu
#G-----------------------------------------------------------
#PC2001/24.5              #G  Head disp dist.  : 24.5 mm
#PC2002/0                 #G  Speed unit       : Inch/s
#PC2069/1                 #G  Cover open error : Immediately
#PC2003/20.0              #G  Foil end warning : 20.0 mm
#PC2060/0                 #G  Foil warn stop   : Disabled
#PC2004/0                 #G  Display mode     : Job rest quant.
#PC2005/7127              #G *Dispense counter : 7127
#PC2006/0                 #G  w/wo  magazine   : with
#PC2007/0                 #G  Autom. dot check : Off
#PC2008/10                #G  Earliest dottest : after 10 label
#PC2009/0                 #G  Latest dotcheck  : after 0 label
#PC2010/0                 #G  Dottestarea from :    0 mm
#PC2011/160               #G  Dottestarea to   :  160 mm
#PC2012/0                 #G  Print Interpret. : Easyplug
#PC2013/9                 #G  Character sets   : IBM
#PC2014/0                 #G  Character filter : Chars >= 20Hex
#PC2015/0                 #G  Light sens. type : Punched
#PC2016/0                 #G  Head-sensor dist :    0 mm
#PC2017/50                #G  Sens. punch-LS   :  50 %
#PC2018/1                 #G  Ribbon autoecon. : Enabled
#PC2019/10.0              #G  Ribb. eco. limit : 10.0 mm
#PC2058/0                 #G  Feed mode        : Head up
#PC2020/1                 #G  Turn-on mode     : Online
#PC2022/1                 #G  Error reprint    : Enabled
#PC2071/0                 #G  EasyPlug errors  : Tolerant handl.
#PC2023/0                 #G  Single-job mode  : Disabled
#PC2024/1147              #G *Head resistance  : 1147 Ohm
#PC2026/20                #G  Temp. reduction  :  20 %
#PC2027/0                 #G  Voltage offset   :   0 %
#PC2028/1                 #G  Logo expansion   : Yes
#PC2029/1                 #G  Miss. label tol. : 1
```

```
#PC2067/0                  #G  Gap detect. mode : Manual
#PC2068/0                 #G  Foil stretching  : Feedback:  0 mm
#PC2030/1                  #G  Mat. end detect. : Transparent
#PC2031/0                  #G  Periph. device   : None
#PC2032/2                  #G  Infeed module    : 2 infeeds
#PC2033/1                  #G  Singlestartquant : 1
#PC2034/0                  #G  Dispensing mode  : fast
#PC2035/0                  #G  Application mode : Safe mode
#PC2036/0                  #G  Appl. waitpos.   :    0 mm
#PC2037/10                 #G  Applicator speed : 10 Inch/s
#PC2039/0                  #G  Start source     : Light barrier
#PC2040/0                  #G  Dispensing edge  : short
#PC2042/0                  #G  External signal  : Disabled
#PC2043/0                  #G  Start print mode : Pulse falling
#PC2044/0                  #G  Apply key        : Disabled
#PC2045/70                 #G  Print contrast   :  70 %
#PC2046/512                #G  Ram disk size    : 512 KBytes
#PC2047/24576              #G  Font downl. area : 24576 KBytes
#PC2048/3072               #G  Free store size  : 3072 KBytes
#PC2049/0                 #G  Print info mode  : Par.values right
#PC2050/0                  #G  Reprint function : Disabled
#PC2051/1                  #G  Language         : English
#PC2063/1                  #G  Keyboard         : English
#PC2052/0                  #G  Signal / buzzer  : Off
#PC2053/0                  #G  Access authoriz. : Deactivated
#PC1026/0                 #G  Material feed    : for- / backwards
#G----------------------------------------------------------
#G Peripheral Parameter Menu
#G----------------------------------------------------------
#PC2059/80                 #G  Max InitFeedback :   80 mm
#PC2041/0                 #G  Transport mode   : Dispenser motor
#PC1031/100                #G  Forw feed rat.   : 100 %
#PC1032/100                #G  Backw feed rat.  : 100 %
#PC6004/15.0               #G  Start offset     : 15.0 mm
#PC6014/0                  #G  Start error stop : Off
#PC6017/0.0                #G  Product length   :  0.0 mm
#PC6005/0                  #G  Speed Adaption   : Off
#PC6006/0                  #G  Encoder Type     : Single Phase
#PC6008/500               #G  Encoder Resol.   :  500 pulses/turn
#PC6009/64.0               #G  Encoder Diameter : 64.0mm   0.0var
```

```
#G------------------------------------------------------------

#G Dispenser Interface

#G------------------------------------------------------------

#PC3001/0                    #G   Interface type   : USI interface

#PC3003/0                    #G   Start print mode : Pulse falling

#PC3004/0                    #G   End print mode   : Mode 0

#PC3005/0                    #G   Reprint signal   : Disabled

#PC3006/1                    #G   Ribbon signal    : Enabled

#PC3007/0                    #G   Material signal  : Disabled

#PC2061/0                    #G   Mat. signal stop : Disabled

#PC3013/60.0                 #G   Diam. mat. end   : 60.0 mm

#PC3008/0                    #G   Feed input       : Standard

#PC3012/0                    #G   Pause input      : Standard

#PC3009/0                    #G   Start error stop : Off

#PC3010/1                    #G   Internal inputs  : Enabled

#PC3011/0                   #G  Apply mode      : After start sig.

#PC3014/0                   #G  USI profile     : Default

#G------------------------------------------------------------

#G Applicator Parameter Menu (AI Board)

#G------------------------------------------------------------

#PC3101/6                   #G   Applicator type  : Direct Dispense

#PC3102/0                   #G   Apply mode       : After start sig.

#PC3110/2                    #G   Start print mode : Pulse rising

#PC3114/0                    #G   Label verify     : Off

#PC3116/1                    #G   Lab release time :    1 ms

#PC3106/1                    #G   Dwell time       :    1 ms

#PC3107/1                    #G   Blow on time     :    1 ms

#PC3108/0                    #G   Restart delay    :    0 ms

#PC3115/80                   #G   Stop lag time    :   80 ms

#PC3109/2000                 #G   Position timeout :  2000 ms

#PC3111/0                    #G   Apply comp. time :    0 ms

#G------------------------------------------------------------

#G I/O Board Parameter Menu

#G------------------------------------------------------------

#PC3203/0                    #G   Start print mode : Pulse falling

#PC3204/0                    #G   Reprint signal   : Disabled

#PC3205/0                    #G   Feed input       : Disabled

#PC3206/0                    #G   Pause input      : Disabled

#PC3207/0                    #G   Error output     : Printer error

#PC3208/0                   #G  Error polarity   : Level low active
```

```
#PC3209/1                #G  Status output   : Low ribbon warn.
#PC3210/0                #G  Status polarity : Level low active
#PC3211/0                 #G  End print mode   : Mode0 inactive
#G------------------------------------------------------------
#G OLV Parameter Menu
#G------------------------------------------------------------
#PC3501/0                #G  Verify mode     : All barcodes
#PC3502/0                #G  Cancel. printing : Disabled
#PC3503/0                #G  Reprint quantity : 0
#PC3504/1                #G  OLV mode        : fast
#PC3505/0                #G  Ref Decode      : No test
#PC3506/-1               #G  Decodability    : -1
#PC3507/-1               #G  Modulation      : -1
#PC3508/-1               #G  Defects         : -1
#PC3509/-1               #G  Edge Contrast   : -1
#PC3510/-1               #G  Rmin/Rmax       : -1
#PC3511/-1               #G  Symbol Contrast : -1
#PC3512/-1               #G  PCS             : -1
#PC3513/-1               #G  R (white)       : -1
#PC3514/-1               #G  R (black)       : -1
#PC3515/-1               #G  Ratio           : -1
#PC3516/-1               #G  ANSI Symb. Grade : -1
#PC3517/10               #G  Dist. head-beam :   10 mm
#G------------------------------------------------------------
#G LTSI Applicator Parameter Menu
#G------------------------------------------------------------
#PC3152/0                #G  Apply mode      : After start sig.
#PC3153/190               #G  Stroke length   :  190 mm
#PC3154/0                #G  Appl. waitpos.  :    0 mm
#PC3155/350.0            #G  Applicator speed : 350 mm/s
#PC3158/0                #G  Restart delay   :    0 ms
#G------------------------------------------------------------
#G MLI Parameter Menu
#G------------------------------------------------------------
#PC4002/15               #G  Darkness        : 15
#PC4003/126              #G  Control Prefix  : 7EH
#PC4004/94               #G  Format Prefix   : 5EH
#PC4005/44               #G  Delimiter Char  : 2CH
#PC4006/0                #G  Label Top       : 0 Dots
#PC4007/0                #G  Left Position   : 0 Dots
```

```
#PC4009/0                 #G  Resolution      : 300 DPI
#PC4010/0                 #G  Error Indication : OFF
#PC4011/0                 #G  Error Checking  : YES
#PC4012/0                 #G  305 DPI Scaling : YES
#PC4013/0                 #G  Image Save Path : Internal RAM
#PC4014/1                 #G  Command ^PR     : Enable
#PC4015/1                 #G  Command ^MT     : Enable
#PC4017/0                 #G  Label Invert    : Disable
#PC4016/1                 #G  Command ^JM     : Enable
#PC4018/1                 #G  Command ^MD/~SD : Enable
#G-------------------------------------------------------------
#G RFID Parameter Menu
#G-------------------------------------------------------------
#PC5208/10                #G  Power level     : [10]
#PC5201/10                #G  Try Times       : 10
#PC2055/3                 #G  Max Tags to stop : 3
#PC2056/1                 #G  Nr CMD retries  : 1
#PC5204/0                 #G  Chip Protection : Disabled
#PC5206/6.0               #G  Chip Size       :  6.0 mm
#PC5205/20.0              #G  Chip Offset     : 20.0 mm
#G-------------------------------------------------------------
#G Printer Special Menue
#G-------------------------------------------------------------
#PC5001/15                #G *Printer type    : ALX 73x PMA LH
#PC5002/2                 #G *Printhead type  : KCE 6Inch
#PC5003/0                 #G  Disp. Head Offs. : No
#PC5006/1                 #G *Sensor type     : Combined sensor
#PC5004/0                 #G  Command sequence : '#G'
#PC5005/0                 #G  EasyPl. file log : Disabled
#PC5129/0                 #G  Flash Res. Area  :   0 KBytes
#G-------------------------------------------------------------
#G Printer Service Menu
#G-------------------------------------------------------------
#PC5110/0                 #G *Head step tune  : 0 step(s)
#PC5111/0                 #G  Spec parameter 1 : 0
#PC5112/0                 #G  Spec parameter 2 : 0
#PC5113/0                 #G  EasyPlug Monitor : Disabled
#PC5125/0                 #G  EP Monitor Mode  : Interpreter data
#PC5115/51                #G *Matend adjust   : 51
#PC5116/122               #G *Punch adjust    : 122
```

```
#PC5117/150                  #G *Reflex adjust    : 150
#PC5118/188                  #G *Fullsize adjust  : 188
#PC5130/255                  #G *Aux adjust       : 255
#PC5101/35                   #G  Matend tolerance :   35 mm
#PC5102/0.0                  #G  Feed adjust      : 0.0 %
#PC5103/0.0                  #G  Foil feed adjust : 0.0 %
#PC5104/0.7                  #G *Punch y calibr.  :  0.7 mm
#PC5132/0              #G  Rew.Sens.Connect : At stepperdriver
#PC5123/32832                #G *Rewinder adjust  : 32832
#G-----------------------------------------------------------
#G DHCP Addresses
#G-----------------------------------------------------------
#G readonly   ID=30001    #G  IP address       :
#G readonly   ID=30002    #G  Net mask         :
#G readonly   ID=30003    #G  Gateway address  :
#G-----------------------------------------------------------
#G Module Firmware Versions
#G-----------------------------------------------------------
#G readonly   ID=30004    #G  System version   : V6.41
#G readonly   ID=30067    #G  System revision  : 7065
#G readonly   ID=30070    #G  System date      : May 23 2012
#G readonly   ID=30061    #G  Bootloader       : V3.82
#G readonly   ID=30062    #G  uMon             : V3.3 17Jun2010
#G readonly   ID=30049    #G  Feed driver      : V 3 - T 3
#G readonly   ID=30050    #G  Foil driver      : V 3 - T 3
#G readonly   ID=30051    #G  Head driver      : V 3 - T 3
#G-----------------------------------------------------------
#G Operational Data
#G-----------------------------------------------------------
#G readonly   ID=30014    #G  Serv. operations : Not initialized
#G readonly   ID=30015    #G  Head number      : Not initialized
#G readonly   ID=30016    #G  Roll number      : Not initialized
#G readonly   ID=30018    #G  Head run length  : 359999 m
#G readonly   ID=30019    #G  Roll run length  : 361371 m
#G readonly   ID=30021    #G  Tot. mat. length : 361371 m
#G readonly   ID=30022    #G  Tot. foil length : 362252 m
#G readonly   ID=30024    #G  Total head moves : 34472
#G readonly   ID=30025    #G  Head strobes     : 41197306
#G readonly   ID=30071    #G  Head temperature :   25 ?C
#G readonly   ID=30026    #G  Foil diameter    : 72.7 mm
```

```
#G readonly   ID=30028    #G  Operation time   : 0 hours  2 min
#G------------------------------------------------------------
#G Power supply data
#G------------------------------------------------------------
#G readonly   ID=30029    #G  Type             : HME PSupply 450a
#G readonly   ID=30030    #G  Version          : H1.12 F1.39
#G readonly   ID=30031    #G  Serial number    : 10400031
#G readonly   ID=30072    #G  PS Temperature   :  35 ?C
#G readonly   ID=30032    #G  Standby+On time  : 298 hours  0 min
#G readonly   ID=30033    #G  On time          : 254 hours  30 min
#G------------------------------------------------------------
#G CPU board data
#G------------------------------------------------------------
#G readonly   ID=30034    #G  CPU identifier   : 2-4
#G readonly   ID=30036    #G  PCB Revision     : REV03
#G readonly   ID=30037    #G  FPGA version     : 1121
#G readonly   ID=30039    #G  MAC Address      : 000A.44.06.0A.3E
#G readonly   ID=30040    #G  Serial number    : A662105104002622
#G readonly   ID=30041    #G  Production date  : 01.10.2010
#G readonly   ID=30042    #G  PCB part number  : A6619-03
#G readonly   ID=30043    #G  Board part numb. : A6621-05
#G readonly   ID=30044    #G  Manufacturer     : Katek GmbH
#G readonly   ID=30045    #G  Work place       : FE5
#G readonly   ID=30046    #G  Company name     : Avery Dennison
#G------------------------------------------------------------
#G Display board data
#G------------------------------------------------------------
#G readonly   ID=30059    #G  Display Version  : V3.10
#G readonly   ID=30068    #G  Display serialNr : A662603S10080207
#G------------------------------------------------------------
#G Internal Memory Configuration
#G------------------------------------------------------------
#G readonly   ID=30007    #G  Ram memory size  : 64 MB
#G readonly   ID=30008    #G  Flash mem size   : 4 MB    AMD
#G readonly   ID=30064    #G  SD card          : 30420 MB / 30720 MB
#G readonly   ID=30010    #G  Space for Jobs   : 27.3 MB
#G readonly   ID=30011    #G  Max. Labellength : 4339 mm
#G readonly   ID=30013    #G  Default values   : Standard
#G------------------------------------------------------------
#G Statistics
```

```
#G------------------------------------------------------------
#G readonly   ID=30100    #G  Nr of Tags       :
#G readonly   ID=30101    #G  Nr. invalid tags :
#G readonly   ID=30110    #G  Scrap rate       : 100.0 %
#G readonly   ID=30102    #G  Total Nr. SELECT :
#G readonly   ID=30103    #G  Invalid SELECT   :
#G readonly   ID=30104    #G  Total Nr. READ   :
#G readonly   ID=30105    #G  Invalid READ     :
#G readonly   ID=30106    #G  Total Nr. WRITES :
#G readonly   ID=30107    #G  Invalid WRITE    :
#G readonly   ID=30108    #G  Rate READ        :
#G readonly   ID=30109    #G  Rate WRITE       :
#G------------------------------------------------------------
#G Printer Debug Menu
#G------------------------------------------------------------
#PC5127/1                 #G  Debug interface  : Serial Com1
#PC5124/0                 #G  Debug mask       : 0
#PC5128/-1872945986       #G  Debug IP address : 144.093.028.190
#PC5404/0                 #G  Fields           : Disabled
#PC5400/0                 #G  Label generation : Disabled
#PC5401/0                 #G  Print handling   : Disabled
#PC5402/0                 #G  Variables        : Disabled
#PC5408/0                 #G  OLV data         : Disabled
#PC5403/0                 #G  Pctrl communica. : Disabled
#PC5406/0                 #G  RFID-Reader      : Disabled
#PC5407/0                 #G  RFID-Task        : Disabled
#PC5405/0                 #G  Debug Shell      : Disabled
#PC5131/1                 #G  BitimageFileDump : Easyplug select
#G------------------------------------------------------------
#G Execute system restart  (  286 parameters )
#G------------------------------------------------------------
#PC999999/-1#G
```

Info Printouts & Parameters

SYSTEM PARAMETER

DP INTERFACE

ZPL PARAMETERS

SPECIAL FUNCTION

SERVICE FUNCTION

SERVICE DATA

General Information

Important setting instructions

Starting in offline mode, you get to the parameter menu by pressing the prog button. There you can set/alter the different parameters of the printer and activate/deactivate options.

Many Parameters provide a range within the setting can be changed with a standard step width. By this step width, the setting is changed, if the Cut-(Apply-) or Feed button is pressed once.

➩ The step width can be increased ten times, if the Online button is pressed simultaneously (Cut+Online or Feed+Online).

➩ Wait at least 10 seconds between switching the device off and on again, otherwise any modified parameter settings are not saved.

➩ With some parameters, false settings can result in the device being damaged (e. g. if the print head temperature is too high). Data and/or print orders are also deleted during formatting and with other settings.

➩ Pay attention to the corresponding notes in the following description to ensure that no damage occurs!

Area of application

The description counts for all devices listed in the headline of this document. All status printouts and parameters are described in the same order as they *may appear* in the parameter menu of the respective printer.

➩ Not all of the parameters appear in each of the listed printers!
At the beginning of each parameter description can be found information about the availability of the parameter:

64-xx	ALX 92x	DPM

➩ ALX 92x/DPM: Only with installed USI board.

Fig. 1: At the beginning of each parameter description, the availability of the parameter is specified: Between the two lines is a list of the concerned printer types; the remark below (arrow) quotes further conditions.

If a parameter appears in the menu of a certain printer type or not, depends on the following, which can be read from this bar:

- The *printer type:*
  Printers, which have the parameter available in the parameter menu, are listed between the lines. Example (see fig. 1): 64-xx, ALX 92x, ALX 73x (PMA), DPM.

- The configuration with *options* and/or certain *parameter settings*:
  Example (see fig. 1): The parameter only appears in the menu of an ALX 92x or DPM, if the device is equipped with an USI board. If the remark is not assigned to a special printer type, it is valid for all listed printers.

Firmware

This description applies to all printers which are equipped with the following firmware version:

6.75-SR2

❍ The paragraph „Overview Parameter Menues" in this topic section contains an overview of all available parameters of the respective printer.

Operating the parameter menu

The illustrations on the following pages clarifie the operating principle of the parameter menu. The return path shown on the left of the screen, called up using the Prog. button, also applies for parameters in the middle of the screen.

Setting values

The setting of a parameter always follows this scheme:

1. Select the parameter.

2. Press the Online button.

3. Set the parameter to the intended value by pressing the Cut or Feed button.

4. Confirm by pressing the Online button.

Example

Setting the parameter PRINT PARAMETERS > Material type to punched material.

1. Press prog button.

| OFFLINE   0 JOBS | Initial state: off-line mode

2. Press prog button.

| PRINT INFO |

3. Press cut button.

| PRINT PARAMETERS |

4. Press online button.

| PRINT PARAMETERS
| Print speed | First parameter in the PRINT PARAMETERS menu.

5. Press cut button repeatedly, until the following is displayed:

| Material type
| Endless |

6. Press feed button.

| Material type
| Punched | Setting the parameter to the intended value by pressing the Cut or Feed button.

7. Press online button.

| PRINT PARAMETERS
| Material type | Confirm with Online button.

8. Press prog button 2x.

| OFFLINE   0 JOBS | "Way back" by pressing the Prog button.

Parameter Menu 64-xx
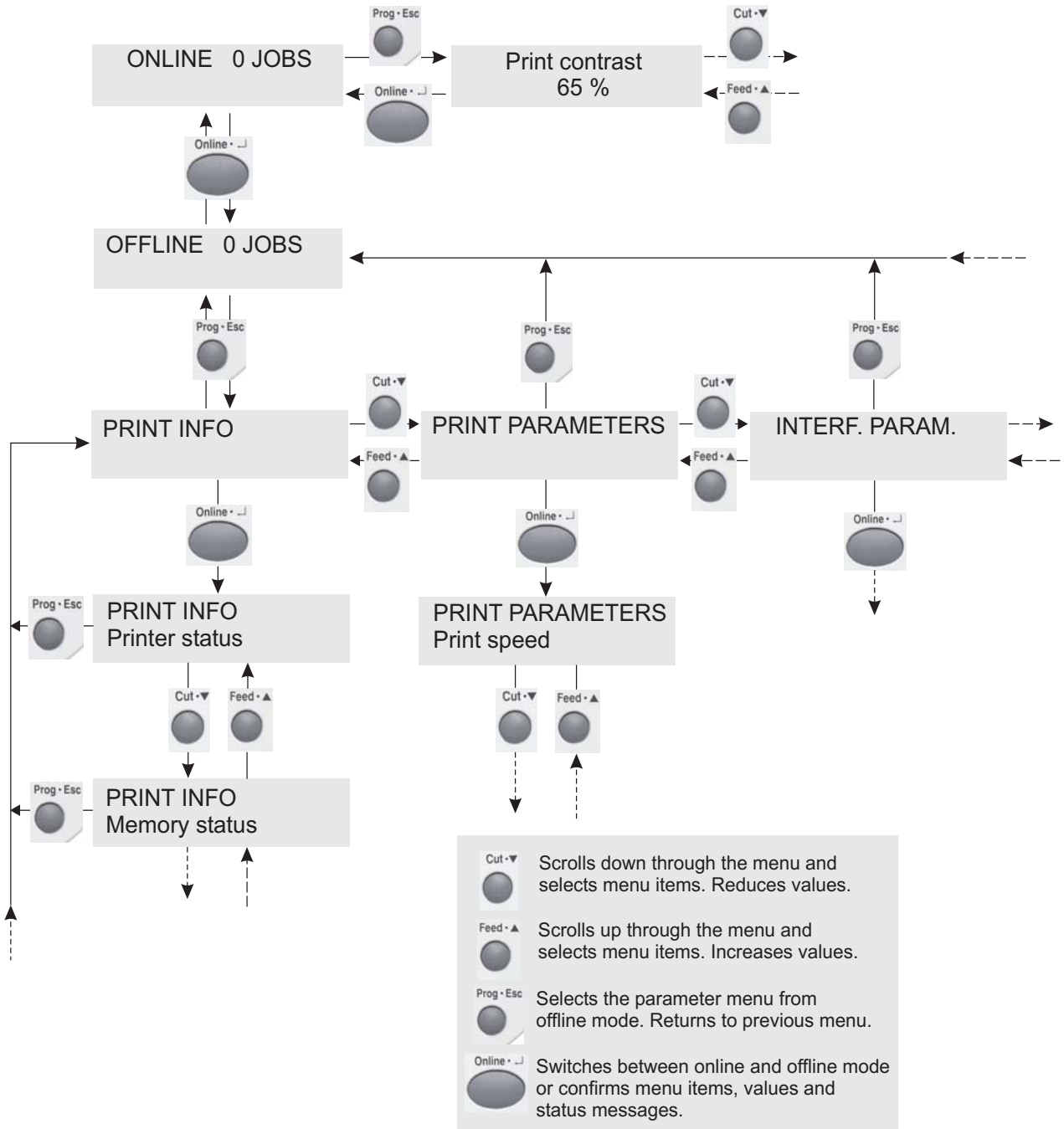
Fig. 1:　Guideline through the parameter menu. Start into it by pressing the Prog button in off-line mode.

Parameter Menu DPM / PEM / ALX

ONLINE   0 JOBS   —(ESC)—   Print contrast 65%

OFFLINE   0 JOBS

PRINT INFO   —   PRINT PARAMETERS   —   INTERFACE PARA

PRINT INFO
Printer Status

PRINT INFO
Memory Status

PRINT PARAMETERS
Print speed

	APPLY leads into deeper tiers of menu structure or selects menu items. Values are reduced.
APPLY	
FEED	FEED leads into higher tiers of menu structure or selects menu items. Values are enlarged.
PROG (ESC)	PROG leads into the parameters menu. PROG also causes one step back to the last menu level.
ONLINE	ONLINE changes between on-line and off-line mode or confirms menu items, values and displayed status messages.

Z00261E.cdr

Fig. 2:   Functional diagram of the DPM / PEM / ALX parameter menu. You get into the menu by pressing the Prog key in Offlline-Mode.

Overview Parameter Menus

Understanding the Parameter Overviews

The charts in the following show all of the parameters implemented in the printer firmware. Some parameters are only visible in the parameter menu under specific preconditions. These parameters are provided with a gray background and a digit at the right column edge. The digit refers to a footnote describing the precondition under which the parameter is visible.

64-xx Parameters

FW 6.75-SR2

PRINT INFO	
Printer status	
Memory status	
Font status	
Flashdata status	9
Service status	
Dottest endless	
Dottest punched	
Reference label	
RFID status	22

PRINT PARAMETERS	
Print speed	
Feed speed	
Material type	
Material length	
Material width	
Print direction	
Punch offset	
Bar code Multip.	
Tradit. imaging	13
UPC plain-copy	
EAN Readline	
EAN sep. lines	
Rotated Barcodes	
Dispensposition	14
Cut mode	6
Cut speed	6
Cut position	6
Double cut	6
Rest position	6
Cut width	6
Rewind direction	5
X – print offset	
Y – print offset	
Punch mode	
Punch level	12

INTERFACE PARA	
> EASYPLUGINTERPR	
Print interface	
Spooler mode	
Printer ID No.	
Spooler size	
Offline mode	
Interface delay	
> COM1 PORT	
Baud rate	
No. of data bits	
Parity	
Stop bits	
Data synch.	
Frame error	
> COM2 PORT	11
Baud rate	11
No. of data bits	11
Parity	11
Stop bits	11
Data synch.	11
Serial Port Mode	11
Frame error	11
> COM4 PORT	
Baud rate	
No. of data bits	

(Interf. Para. continued)	
Parity	
Stop bits	
Data synch.	
Frame error	
> CENTRONICS	
PnP function	
> NETWORK PARAM.	
IP Addressassign	
IP Address	
Net mask	
Gateway address	
Ethernet speed	
Port address	
MAC address	
FTP server	
FTP password	13
WEB server	
WEB display refr.	28
WEB admin passw.	13
WEB supervisor p.	13
WEB operator p.	13
Time client	
Time server IP	32
Sync. interval	32
Time zone	32
DHCP host name	

(Interf. Para. continued)	
WLAN SSID	31
WLAN WEP	31
WLAN default key	31
WLAN 64Bit key 1	31
WLAN 64Bit key 2	31
WLAN 64Bit key 3	31
WLAN 64Bit key 4	31
WLAN 128Bit key 1	31
WLAN 128Bit key 2	31
WLAN 128Bit key 3	31
WLAN 128Bit key 4	31
WLAN com quality	31
WLAN signal lev.	31
> OPTIONS	
OLV option	
RFID option	
StandAlone Input	
#VW/I Interface	
> DRIVEASSIGNMENT	
Drive C	
Drive D	
Drive E	40
Drive F	

SYSTEM PARAMETER	
Foil end warning	
Cover open error	
Foil warn stop	
Disp. Cnt. Reset	14
Autom. dot check	
Early dottest	15
Latest dottest	15
Dottestarea from	15
Dottestarea to	15
Print Interpret.	
Character sets	
Character filter	
Light sens. type	
Head-sensor dist	13
Ribbon autoecon.	
Ribb. eco. limit	2
Head down lead	13/2
Feed mode	
Turn-on mode	
Error reprint	
EasyPlug errors	
Single job mode	
Head resistance	13
Temp. reduction	
Voltage offset	
Expand Logo	3
Miss. label tol.	
Gap detect. mode	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER > Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

64-xx Parameters

FW 6.75-SR2

(System Param. continued)		DISPENSER PARA	14	I/O BOARD PARA	11	OLV PARAMETERS	26	DP INTERFACE	7	ZPL PARAMETERS	10
Foil stretching	21	Dispense mode	14	Start delay	11	Verify mode	26	Interface type	7	Version	10
Mat. end detect.		Dispenseposition	14	Reprint Signal	11	Cancel. printing	26	Start print mode	7	Darkness	10
Periph. device		Display mode	14	Feed input	11	Reprint quantity	26	End print mode	7	Control Prefix	10
Singlestartquant		Dispense counter	14	Pause input	11	OLV mode	26	Reprint signal	7	Format Prefix	10
Head disp dist	20	Dispensing mode	14	Error output	11	Ref Decode	26	Ribbon signal	7	Delimiter Char	10
External signal		Application mode	14	Error polarity	11	Decodability	26	Material signal	7	Label Top	10
Start print mode		Start source	14	Status output	11	Modulation	26	Feed input	7	Left Position	10
Apply key	13	Dispensing edge	14	Status polarity	11	Defects	26	Pause input	7	Manual Calibrate	10
Print contrast		Max InitFeedback	14	End print mode	11	Edge Contrast	26	Start error stop	7	Resolution	10
Ram disk size		Transport mode	14			Rmin/Rmax	26	Internal inputs	7	Error Indication	10
Font downl. area		Start offset	14			Symbol Contrast	26	Apply mode	7/19	Error Checking	10
Free store size		Start error stop	14			PCS	26	USI profile	7	305 DPI Scaling	10
Print Info Mode		Product length	14			R (white)	26	Warning signal	7	Image Save Path	10
Reprint function		Forw feed rat.	14/35			R (black)	26			Command ^PR	10
Language		Backw feed rat.	14/35			Ratio	26			Command ^MT	10
Keyboard						ANSI Symbolgrade	26			Label Invert	10
Signal / buzzer						Dist. head-beam	26			Command ^JM	10
Access authoriz.											
Realtime clock											
Ribbon pre Start	13										

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER > Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **23.** With connected remote display only **24.** With Applicator Interface only **25.** Only OLV option activated **26.** Depends on the applicator type **27.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **28.** Availability depends on device conf. **29.** Only with a CF card inserted **30.** Only with a WLAN CF card inserted **31.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **32.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **33.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **34.** Only if DISPENSER PARA > Transport mode = „Dual motors" **35.** Only if DISPENSER PARA > Speed Adaption = „On" **36.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **37.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **38.** Only PEM **39.** Only if CPU board index is -06 or lower

64-xx Parameters

FW 6.75-SR2

SPECIAL FUNCTION

Printertype	13
Printhead type	13
Disp. Head Offs.	1/13
Command Sequence	13
Delete job	
Delete spooler	
Factory settings	
Custom defaults	13
Store Parameters	
Store Diagnosis	
Gen.Support Data	
EasyPl. file log	30
Log files delete	30
Data blocks del.	9
RFID stat. del.	22

SERVICE FUNCTION

Service	13
Head exchange	13
Roller exchange	13
Cutter exchange	13/6
Serv. data reset	13
Head dot test	
Head step tune	13
EasyPlug monitor	13
EP Monitor Mode	13
Head adjust	
Sensor adjust	13
Sensor test	
Cutter test	
Matend tolerance	
Feedadjust label	
Feed adjust	
Foil feed adjust	13
Punch Y calibr.	13
PS registers	4/13
Scanner test	
Memory card test	
Send test	
Receive test	
Com2 comun. test	11
Com2 port test	11
Headvo. adj. 20 V	13/17
Headvo. adj. 28 V	13/17
Print test	

(Service Funct. continued)

Rewinder setup	5
Rewinder values	5

SERVICE DATA

> MODULE FW VERS.	
System version	
System revision	
System date	
Bootloader	
uMon	
Feed driver	
Foil driver	
Head driver	
Peripheraldriver	29
Rewinder	29
USI interface	29
Dispenser lift	29
Dispenser feed	29

> OPERATION DATA	
Serv. operations	
Headnumber	
Roll number	
Cutter number	6
Head run length	
Roll run length	
Cuts on knife	6
Tot. mat. length	
Tot. foil length	
Total cuts	6
Total head moves	
Head strobes	

(Service Data cont.)

Head temperature	
Foil diameter	
Dispensing cycl.	
Operation time	

> POWERSUPPLYDATA	
Type	
PS temperature	
Version	29
Serial number	29
Operation time	29
Total on time	29

> CPU BOARD DATA	
CPU identifier	
PCB revision	
FPGA version	
MAC address	
Serial number	
Production date	
PCB part number	
Board part numb.	
Manufacturer	13
Work place	13
Company name	13

(Service Data cont.)

> DISPLAY DATA	
Display version	
Display SerialNr	
Remote disp. vers.	24
Remote disip. #	24

> MEMORY DATA	
Ram memory size	
Flash mem size	
CompactFlash	30
SD card	30
USB	30
Space for Jobs	
Max. Labellength	
Default values	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER > Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

64-xx Operator Parameters

FW 6.75-SR2

PRINT PARAMETERS	
Print speed	
Feed speed	
Material type	
Material length	
Material width	
Print direction	
Cut speed	6
Cut position	6
Double cut	6
Rewind direction	5
X – print offset	
Y – print offset	

SYSTEM PARAMETER	
Light sens. type	
Ribbon autoecon.	
Ribbon eco. limit	
Print contrast	

DISPENSER PARA	14
Dispenseposition	14
Start offset	14

SPECIAL FUNCTION	
Delete job	
Delete spooler	
Store Parameters	
Store Diagnosis	

SERVICE FUNCTION	
Head dot test	
Matend tolerance	

SERVICE DATA	
> MODULE FW VERS.	
System version	
System revision	
System date	
Bootloader	
uMon	
Feed driver	
Foil driver	
Head driver	
Peripheraldriver	29
Rewinder	29
USI interface	29
Dispenser lift	29
Dispenser feed	29

> OPERATION DATA	
Serv. operations	
Headnumber	
Roll number	
Cutter number	6
Head run length	
Roll run length	
Cuts on knife	6
Tot. mat. length	
Tot. foil length	
Total cuts	6
Total head moves	
Head strobes	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. **=** „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

64-xx Operator Parameters

FW 6.75-SR2

(Service Data cont.)

Head temperature	
Foil diameter	
Dispensing cycl.	
Operation time	

> POWERSUPPLYDATA	
Type	
PS temperature	
Version	29
Serial number	29
Operation time	29
Total on time	29

> CPU BOARD DATA	
CPU identifier	
PCB revision	
FPGA version	
MAC address	
Serial number	
Production date	
PCB part number	
Board part numb.	
Manufacturer	13
Work place	13
Company name	13

(Service Data cont.)

> DISPLAY DATA	
Display version	
Display SerialNr	
Remote disp. vers.	24
Remote disip. #	24

> MEMORY DATA	
Ram memory size	
Flash mem size	
CompactFlash	30
SD card	30
USB	30
Space for Jobs	
Max. Labellength	
Default values	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

Parameters · DPM / PEM / ALX 92x · FW 6.75-SR2

PRINT INFO		PRINT PARAMETERS		INTERFACE PARA		(INTERFACE PARA cont.)		(INTERFACE PARA cont.)		SYSTEM PARAMETER	
Printer status		Print speed		> EASYPLUGINTERPR		Parity		WLAN WEP	31	Speed unit	
Memory status		Feed speed		Print interface		Data synch.		WLAN default key	31	Cover open error	
Font status		Material type		Spooler mode		Stop bits		WLAN 64Bit key 1	31	Foil end warning	
Flashdata status	9	Material length		Printer ID No.		Frame error		WLAN 64Bit key 2	31	Foil warn stop	
Service status		Material width		Spooler size				WLAN 64Bit key 3	31	Disp. Cnt. Reset	34
Dottest endless		Print direction		Offline mode		> CENTRONICS		WLAN 64Bit key 4	31	Autom. dot check	
Dottest punched		Punch offset		Interface delay		PnP function		WLAN 128Bit key 1	31	Early dottest	15
Reference label		Bar code Multip.						WLAN 128Bit key 2	31	Latest dottest	15
RFID status	22	Tradit. imaging	13	> COM1 PORT		> NETWORK PARAM.		WLAN 128Bit key 3	31	Dottestarea from	15
		UPC plain-copy		Baud rate		IP Addressassign		WLAN 128Bit key 4	31	Dottestarea to	15
		EAN Readline		No. of data bits		IP Address		WLAN com quality	31	Print Interpret.	
		EAN sep. lines		Parity		Net mask		WLAN signal lev.	31	Character sets	
		Rotated Barcodes		Stop bits		Gateway address				Character filter	
		Dispense Mode	33	Data synch.		Port address		> OPTIONEN		Light sens. type	
		Dispensposition	33	Frame error		Ethernet speed		OLV option		Head-sensor dist.	13
		X – print offset				MAC address		RFID option	18	Ribbon autoecon.	
		Y – print offset		> COM2 PORT	11	FTP server		StandAlone Input		Ribb. eco. limit	2
		Punch mode		Baud rate	11	FTP password	13	#VW/I Interface		Head down lead	13/2
		Punch level	12	No. of data bits	11	WEB server				Feed mode	
				Parity	11	WEB admin passw.	13	> DRIVEASSIGNMENT		Turn-on mode	
				Stop bits	11	WEB supervisor p.	13	Drive C		Error reprint	
				Data synch.	11	WEB operator p.	13	Drive D		EasyPlug errors	
				Serial Port Mode	11	Time client		Drive E	40	Single job mode	
				Frame error	11	Time server IP	32	Drive F		Head resistance	13
						Sync. interval	32			Temp. reduction	
				> COM4 PORT		Time zone	32			Voltage offset	
				Baud rate		DHCP host name				Expand Logo	3
				No. of data bits		WLAN SSID	31			Miss. label tol.	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER > Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

Parameters

DPM / PEM / ALX 92x

FW 6.75-SR2

(System Param. cont.)

Gap detect. mode	
Foil stretching	13
Head lift autom.	39
Mat. end detect.	
Periph. device	13*
Singlestartquant	
Dispensing Mode	33
Application mode	33
External signal	
Start print mode	
Apply key	13
Print contrast	
Ram disk size	
Font downl. area	
Free store size	
Print info mode	
Reprint function	
Language	
Keyboard	
Signal / buzzer	
Access authoriz.	
Realtime clock	
Material feed	
Ribbon pre Start	13
Speed Adaption	**
Encoder Type	36**
Encoder Resol.	36**
Encoder Diameter	36**

DISPENSER PARA	34
Head disp dist.	34
Dispense mode	34
Dispenseposition	34
Display mode	34
Dispense counter	34
Dispensing mode	34
Application mode	34
Max InitFeedback	34
Start offset	34
Start error stop	34
Product length	34
Speed Adaption	34
Encoder Type	34/36
Encoder Resol.	34/36
Encoder Diameter	34/36
Multi label mode	
Label 2 offset	34/37
Label 3 offset	34/38

APPLICATOR PARA	25
Applicator type	25
Application mode	25
Start print mode	25
Dwell time	25/27
Blow on time	25/28
Restart delay	25
Apply comp. time	25/27
Position timeout	25/33
Lab release time	25/27
Touch down sens.	25/27
TouchDownTimeout	25/27

OLV PARAMETERS	26
Verify mode	26
Cancel. printing	26
Reprint quantity	26
OLV mode	26
Ref Decode	26
Decodability	26
Modulation	26
Defects	26
Edge Contrast	26
Rmin/Rmax	26
Symbol Contrast	26
PCS	26
R (white)	26
R (black)	26
Ratio	26
ANSI Symbolgrade	26
Dist. head-beam	26

DP INTERFACE	7
Interface type	7
Start print mode	7
End print mode	7
Reprint signal	7
Ribbon signal	7
Material signal	7
Feed input	7
Pause input	7
Start error stop	7
Internal inputs	7
Apply mode	19
USI profile	26
Warning signal	7

ZPL PARAMETERS	10
Version	10
Darkness	10
Control Prefix	10
Format Prefix	10
Delimiter Char	10
Label Top	10
Left Position	10
Manual Calibrate	10
Resolution	10
Error Indication	10
Error Checking	10
305 DPI Scaling	10
Image Save Path	10
Command ^PR	10
Command ^MT	10
Label Invert	10
Command ^JM	10

*) Only visible with ALX 92x/DPM

**) Only visible with PEM

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **23.** With connected remote display only **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

DPM / PEM / ALX 92x   Parameters

FW 6.75-SR2

I/O BOARD PARA	11
Start print mode	11
Reprint Signal	11
Feed	11
Pause input	11
Error output	11
Error polarity	11
Status output	11
Status polarity	11
End print mode	11

SPECIAL FUNCTION	
Printer type	13
Printhead type	13
Command Sequence	13
Delete job	
Delete spooler	
Factory settings	
Custom defaults	13
Store Parameters	
Store Diagnosis	
Gen.Support Data	
EasyPl. file log	30
Log files delete	30
Data blocks del.	9
RFID stat. del.	22

SERVICE FUNCTION	
Service	13
Head exchange	13
Roller exchange	13
Serv. data reset	13
Head dot test	
Head step tune	13
EasyPlug monitor	13
EP Monitor Mode	13
Head adjust	
Sensor adjust	13
Sensor test	
Cutter test	
Matend tolerance	
Feedadjust label	
Feed adjust	
Foil feed adjust	13
Punch Y calibr.	13
PS register	13
Scanner test	
Memory card test	
Send test	
Receive test	
Com2 comun. test	13
Com2 port test	13
Rewinder setup	
Rewinder values	
Print test	

SERVICE DATA	
> MODULE FW VERS.	
System version	
System revision	
System date	
Bootloader	
uMon	
Feed driver	
Foil driver	
Head driver	
Rewinder	29
USI interface	29
Applicator int.	29
> OPERATION DATA	
Serv. operations	
Headnumber	
Roll number	
Head run length	
Roll run length	
Tot. mat. length	
Tot. foil length	
Total head moves	
Head strobes	
Head temperature	
Foil diameter	
Dispensing cycl.	
Operation time	

(Service Data cont.)

> POWERSUPPLYDATA	
Type	
Version	29
Serial number	29
PS temperature	
Operation time	29
Total on time	29
> CPU BOARD DATA	
CPU identifier	
PCB revision	
FPGA version	
MAC address	
Serial number	
Production date	
PCB part number	
Board part numb.	
Manufacturer	13
Work place	13
Company name	13
> DISPLAY DATA	
Display version	
Display serialnr	
Remote disp. vers.	24
Remote disip. #	24

(Service Data cont.)

> MEMORY DATA	
Ram memory size	
Flash mem size	
CompactFlash	30
SD card	30
USB	30
Space for Jobs	
Max. Labellength	
Default values	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only if DP INTERFACE > Interface type = USI Applicator **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

DPM/PEM/ALX Op. Parameters

FW 6.75-SR2

PRINT PARAMETERS
Print speed
Feed speed
Material type
Material length
Material width
Print direction
X – print offset
Y – print offset

SYSTEM PARAMETER
Light sens. type
Ribbon autoecon.
Ribbon eco. limit
Print contrast

DISPENSER PARA	34
Dispenseposition	34
Start offset	34

APPLICATOR PARA	25
Dwell time	25/27
Blow on time	25/27
Restart delay	25
Position timeout	25/27

SPECIAL FUNCTION
Delete job
Delete spooler
Store Parameters
Store Diagnosis

SERVICE FUNCTION
Head dot test
Matend tolerance

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. **=** „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

DPM/PEM/ALX Op. Parameters

FW 6.75-SR2

SERVICE DATA	
> MODULE FW VERS.	
System version	
System revision	
System date	
Bootloader	
uMon	
Feed driver	
Foil driver	
Head driver	
Rewinder	29
USI interface	29
Applicator int.	29

> OPERATION DATA	
Serv. operations	
Headnumber	
Roll number	
Head run length	
Roll run length	
Tot. mat. length	
Tot. foil length	
Total head moves	
Head strobes	
Head temperature	
Foil diameter	
Dispensing cycl.	
Operation time	

(Service Data cont.)

> POWERSUPPLYDATA	
Type	
Version	29
Serial number	29
PS temperature	
Operation time	29
Total on time	29

> CPU BOARD DATA	
CPU identifier	
Syst. controller	
PCB revision	
MAC address	
Serial number	
Production date	
PCB part number	
Board part numb.	
Manufacturer	13
Work place	13
Company name	13

> DISPLAY DATA	
Display version	
Display serialnr	
Remote disp. vers.	24
Remote disip. #	24

(Service Data cont.)

> MEMORY DATA	
Ram memory size	
Flash mem size	
CompactFlash	30
SD card	30
USB	30
Space for Jobs	
Max. Labellength	
Default values	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only if SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

ALX 73x (PMA) Parameters

FW 6.75-SR2

PRINT INFO	
Printer status	
Memory status	
Font status	
Flashdata status	9
Service status	
Dottest endless	
Dottest punched	
Reference label	

PRINT PARAMETERS	
Print speed	
Feed speed	
Material type	
Material length	
Material width	
Print direction	
Punch offset	
Bar code Multip.	
Tradit. imaging	13
UPC plain-copy	
EAN Readline	
EAN sep. lines	
Rotated Barcodes	
X – print offset	
Y – print offset	
Punch mode	
Punch level	12

INTERFACE PARA	
> EASYPLUGINTERPR	
Print interface	
Spooler mode	
Printer ID No.	
Spooler size	
Offline mode	
Interface delay	
> COM1 PORT	
Baud rate	
No. of data bits	
Parity	
Stop bits	
Data synch.	
Frame error	
> COM3 PORT	11
Baud rate	11
No. of data bits	11
Parity	11
Stop bits	11
Data synch.	11
Serial Port Mode	11
Frame error	11
> COM4 PORT	
Baud rate	
No. of data bits	

(INTERFACE PARA cont.)	
Parity	
Data synch.	
Stop bits	
Frame error	
> CENTRONICS	
PnP function	
> NETWORK PARAM.	
IP Addressassign	
IP Address	
Net mask	
Gateway address	
Port address	
Ethernet speed	
MAC address	
FTP server	
FTP password	13
WEB server	
WEB admin passw.	13
WEB supervisor p.	13
WEB operator p.	13
Time client	
Time server IP	32
Sync interval	32
DHCP host name	
WLAN SSID	31
WLAN WEP	31

(INTERFACE PARA cont.)	
WLAN default key	31
WLAN 64Bit key 1	31
WLAN 64Bit key 2	31
WLAN 64Bit key 3	31
WLAN 64Bit key 4	31
WLAN 128Bit key 1	31
WLAN 128Bit key 2	31
WLAN 128Bit key 3	31
WLAN 128Bit key 4	31
WLAN com quality	31
WLAN signal lev.	31
> OPTIONEN	
OLV option	
RFID option	18
StandAlone Input	
#VW/I Interface	
> DRIVEASSIGNMENT	
Drive C	
Drive D	
Drive E	40
Drive F	

SYSTEM PARAMETER	
Cover open error	
Foil end warning	
Foil warn stop	
Autom. dot check	
Early dottest	15
Latest dottest	15
Dottestarea from	15
Dottestarea to	15
Print Interpret.	
Character sets	
Character filter	
Light sens. type	
Head-sensor dist.	13
Ribbon autoecon.	
Ribbon eco. limit	
Feed mode	
Turn-on mode	
Error reprint	
EasyPlug errors	
Single job mode	
Head resistance	13
Temp. reduction	
Voltage offset	
Expand Logo	3
Miss. label tol.	
Gap detect. mode	
Foil stretching	13
Head lift autom.	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. **=** „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

ALX 73x (PMA) Parameters

FW 6.75-SR2

(System Param. cont.)

Mat. end detect.	
Periph. device	13/16
Print contrast	
Ram disk size	
Font downl. area	
Free store size	
Print info mode	
Language	
Keyboard	
Signal / buzzer	
Access authoriz.	
Realtime clock	
Ribbon pre Start	13

DP INTERFACE   7

Interface type	7
Start print mode	7
End print mode	7
Reprint signal	7
Ribbon signal	7
Material signal	7
Feed input	7
Pause input	7
Start error stop	7
Internal inputs	7
Apply mode	19
USI profile	26
Warning signal	7

ZPL PARAMETERS   10

Version	10
Darkness	10
Control Prefix	10
Format Prefix	10
Delimiter Char	10
Label Top	10
Left Position	10
Manual Calibrate	10
Resolution	10
Error Indication	10
Error Checking	10
305 DPI Scaling	10
Image Save Path	10
Command ^PR	10
Command ^MT	10
Label Invert	10
Command ^JM	10

I/O BOARD PARA   11

Start print mode	11
Reprint Signal	11
Feed	11
Pause input	11
Error output	11
Error polarity	11
Status output	11
Status polarity	11
End print mode	11

SPECIAL FUNCTION

Printer type	13
Printhead type	13
Sensor type	13
Command Sequence	13
Delete job	
Delete spooler	
Factory settings	
Custom defaults	13
Store Parameters	
Store Diagnosis	
Gen.Support Data	
EasyPl. file log	30
Log files delete	30
Data blocks del.	9

SERVICE FUNCTION

Service	13
Head exchange	13
Roller exchange	13
Serv. data reset	13
Head dot test	
Head step tune	13
EasyPlug monitor	13
EP Monitor Mode	13
Head adjust	
Sensor adjust	13
Sensor test	
Cutter test	
Matend tolerance	
Feedadjust label	
Feed adjust	
Foil feed adjust	13
Punch Y calibr.	13
PS register	13
Scanner test	
Memory card test	
Send test	
Receive test	
Print test	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER > Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tearoff edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

ALX 73x (PMA) Parameters

FW 6.75-SR2

SERVICE DATA	
> MODULE FW VERS.	
System version	
System revision	
System date	
Bootloader	
uMon	
Feed driver	
Foil driver	
Head driver	
Rewinder	29
USI interface	29
Applicator int.	29
> OPERATION DATA	
Serv. operations	
Headnumber	
Roll number	
Head run length	
Roll run length	
Tot. mat. length	
Tot. foil length	
Total head moves	
Head strobes	
Head temperature	
Foil diameter	
Operation time	

(Service Data cont.)

> POWERSUPPLYDATA	
Type	
Version	29
Serial number	29
PS temperature	
Operation time	29
Total on time	29
> CPU BOARD DATA	
CPU identifier	
PCB revision	
FPGA version	
MAC address	
Serial number	
Production date	
PCB part number	
Board part numb.	
Manufacturer	13
Work place	13
Company name	13
> DISPLAY DATA	
Display version	
Display serialnr	
Remote disp. vers.	24
Remote disip. #	24

(Service Data cont.)

> MEMORY DATA	
Ram memory size	
Flash mem size	
CompactFlash	30
Space for Jobs	
Max. Labellength	
Default values	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

ALX 73x (PMA) op. Parameters

FW 6.75-SR2

PRINT INFO	PRINT PARAMETERS	SYSTEM PARAMETER	APPLICATOR PARA 25	SPECIAL FUNCTION	SERVICE FUNCTION
Printer status	Print speed	Light sens. type	Dwell time 25/27	Delete job	Head dot test
Memory status	Feed speed	Ribbon autoecon.	Blow on time 25/27	Delete spooler	Print test
Font status	Material type	Ribbon eco. limit	Restart delay 25	Store Parameters	
Flashdata status 9	Material length	Print contrast	Position timeout 25/27	Store Diagnosis	
Service status	Material width				
Dottest endless	Print direction				
Dottest punched	X – print offset				
Reference label	Y – print offset				

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. **=** „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

ALX 73x (PMA) op. Parameters

FW 6.75-SR2

SERVICE DATA	
> MODULE FW VERS.	
System version	
System revision	
System date	
Bootloader	
uMon	
Feed driver	
Foil driver	
Head driver	
Rewinder	29
USI interface	29
Applicator int.	29
> OPERATION DATA	
Serv. operations	
Headnumber	
Roll number	
Head run length	
Roll run length	
Tot. mat. length	
Tot. foil length	
Total head moves	
Head strobes	
Head temperature	
Foil diameter	
Dispensing cycl.	
Operation time	

(Service Data cont.)	
> POWERSUPPLYDATA	
Type	
Version	29
Serial number	29
PS temperature	
Operation time	29
Total on time	29
> CPU BOARD DATA	
CPU identifier	
Syst. controller	
PCB revision	
MAC address	
Serial number	
Production date	
PCB part number	
Board part numb.	
Manufacturer	13
Work place	13
Company name	13
> DISPLAY DATA	
Display version	
Display serialnr	
Remote disp. vers.	24
Remote disip. #	24

(Service Data cont.)	
> MEMORY DATA	
Ram memory size	
Flash mem size	
CompactFlash	30
Space for Jobs	
Max. Labellength	
Default values	

1. Only 64-xx dispenser with 4" printhead **2.** Only if SYSTEM PARAMETER **>** Ribbon autoecon. = „On", „On Turbo" or „Thermal/headlift" **3.** Only with 8-Dot-Emulation **4.** Only with 64-08 **5.** Only with rewinder option **6.** Only with cutter **7.** Only with USI interface **8.** Only if SYSTEM PARAMETER > Gap detect. mode = Autom. feed back **9.** Only with at least one data block stored in the flash memory **10.** Only if SYSTEM PARAMETER > Print Interpret. = „ZPL Emulation" **11.** Only with I/O board **12.** Only if PRINT PARAMETERS > Punch mode = Manual **13.** Only in production mode **14.** Only with 64-xx dispenser **15.** Only if SYSTEM PARAMETER > Autom. dot check = Continuous **16.** For details read parameter description **17.** Only with 64-04/05/06 **18.** Only with installed RFID option **19.** Only if DP INTERFACE > Interface type = USI Applicator **20.** Only with SYSTEM PARAMETER > Dispensing edge = „User defined" **21.** Not with 64-xx dispenser **22.** Only with an activated RFID option **24.** With connected remote display only **25.** With Applicator Interface only **26.** Only OLV option activated **27.** Depends on the applicator type **28.** Only if INTERFACE PARA > NETWORK PARAM. > WEB server = „On" **29.** Availability depends on device conf. **30.** Only with a CF card inserted **31.** Only with a WLAN CF card inserted **32.** Only if INTERFACE PARA > NETWORK PARAM. > Time client = „On" **33.** Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge" **34.** Only if SYSTEM PARAMETER > Periph. device = „Dispenser" **35.** Only if DISPENSER PARA > Transport mode = „Dual motors" **36.** Only if DISPENSER PARA > Speed Adaption = „On" **37.** Only if DISPENSER PARA > Multi label mode = „x labels/start" **38.** Only if DISPENSER PARA > Multi label mode = „3 labels/start" **39.** Only PEM **39.** Only if CPU board index is -06 or lower

Alphabetical Parameter List

PRINT INFO

A material width of 100 mm is necessary to print the reports. The status print-out is approx. 200 mm long.

Printer status

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

A protocol can be printed to get an overview of customer-specific parameter settings, see [1].

⫸ Which parameters are listed, depends on the printer type.

[1]   Example of printout „Printer status".

Listed items:

- System version:
  - Shows the installed firmware version as well as the release date of this version.
  - Firmware version: R = firmware RISC processor, H = firmware H8 processor.

- Printer type:
  - Shows the printer type, which has been set using parameter SERVICE FUNCTIONS > printer type (e.g. 64-04)
  - "USA" displayed after the printer type indicates that the USA font is loaded.
  - "8DOT" displayed after the printer type indicates that the 8-Dot emulation is loaded.

- Printer Parameter Menu
  Shows the setting of the parameters in the PRINT PARAMETERS menu.

- Printer Interface Menu
  Shows the setting of the parameters in the INTERFACE PARA menu.

- Printer system menu
  Shows the setting of the parameters in the SYSTEM PARAMETER menu.

- Dispenser Interface
  Shows the setting of the parameters in the DP INTERFACE menu.

- Internal Options
  – Default values: Shows the values which are used in case of a factory reset (Standard or Default). See parameter SPECIAL FUNCTION > Default Values.
  – Realtime Clock: Shows the set time and date, if a realtime clock is installed. In case of a too low battery, the line "Battery empty" is added.
  – 2. com port: Shows if an additionall serial Interface is installed (not supported).

Memory status

64-xx   ALX 92x   DPM   PEM   ALX 73x (PMA)

A memory protocol can be printed to provide an overview of the distribution of the available memory capacity (one page).

▦➔ The entries differ depending on printer type and configuration.

MEMORY STATUS

Internal Memory Configuration

Ram memory size	: 64 MB
Flash mem size	: 4 MB AMD
CompactFlash	: 117 MB / 128 MB
Space for Jobs	: 51.2 MB
Max. Labellength	: 8167 mm
Default values	: Standard
Space for spooler	: 64 KB
Space for RAM disc	: 512 KB
Font downl. area	: 256 KB
Free store size	: 3072 KB

Logos on RAM disc

Graphics on RAM disc

Easyplug formats on Memory Card (C:)

Testjob.for   407 Bytes

Logos on Memory Card (C:)

Graphics on Memory Card (C:)

[2]   Example of a „Memory status" printout.

Listed items: - Internal Memory Configuration

○ See paragraph

- Logos on RAM disc
- Graphics on RAM disc
- Fonts on RAM disc

❍ See „Plugin card manual", topic section „Application", chapter CF/SD cards 🗋
.

Font status

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Print samples of all installed characters, bar codes and line samples (several pages).

Page „Font Library" shows a list of the internal fonts and line styles.

Internal Fonts   ➜ Use the Easy-Plug commands listet in the first column of the report (e.g. #YT100), to print using the appropriate font.

❍ Easy Plug commands: Refer to the Easy Plug Manual, topic section Description of Commands 🗋.

❍ For a list of all characters contained in the internal fonts, refer to the User Manual, topic section Internal Fonts 🗋.

[3]   Print sample „Font Status", section „Font Library".

Internal Line Styles   ➜ Use the line style number (fist column) with one of the Easy Plug commands #YL or #YR to print lines in the matching style.

❍ Easy Plug commands: Refer to the Easy Plug Manual, topic section Description of Commands ⧉.
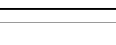
▥➡ Additionally, the following line styles are available:
– 13: Checked pattern with 3 dot edge length
– 14: Checked pattern with 1 mm edge length
– 15: Checked pattern with 5 mm edge length

▥➡ The line width has to be defined as a multiple of the edge length of the checked pattern!

Internal bar codes   The pages titled „Barcode Library" show print samples of the internal bar codes (see [4], [5]).

[4]   Print sample „Font Status", section „Barcode Library".

• *Onedimensional bar codes* are printed with the Easy-Plug command #YB, see manual Easy-Plug, topic section Description of Commands ⧉.

• *Two-dimensional bar codes* are printed by means of special Easy-Plug commands:

Easy-Plug command	Bar code
#IDM	Data Matrix Code
#MXC	Maxi Code
#PDF	PDF 417
#CBF	Codabar F
#CFN	Code 49
#SQR	QR Matrix Code

[1]   Internal, two-dimensional bar codes.

- *GS1 DataBar* (formerly RSS) and *Composite Component* (CC) bar codes are printed by means of the Easy-Plug command #RSS. The bar code is determined by the number in the first column of the subsequent table. This number is added to the command as a parameter.

[5]   Print sample „Font Status", section „Font Library": Listing of RSS-Codes and 2-dim. bar codes.

Flashdata status

64-xx　　　ALX 92x　　　　DPM　　　　PEM　　ALX 73x (PMA)

Prints a list of all fonts stored in the flash memory. This can be e. g. customized fonts or diagnose data.

❍ For details see topic section Internal Fonts 🗋, paragraph „Customized fonts".

❍ For detailed information about diagnosis data refer to the service manual, topic section „Fault location", „Reading out diagnosis data".

```
┌─────────────────────────────────────────┐
│ FLASH DATA BLOCKS                        │
│                                          │
│ Total flash for data blocks    : 1872 KByte │
│ Flash data block partition size : 16 KByte  │
│ Number of flash data blocks    : 2       │
│ Remaining flash for data blocks : 1104 KByte │
│                                          │
│ Block 0  Diagnostics information  128 KByte │
│                                          │
│                                          │
│ Block 1  MPCL Block   128 KByte          │
│                                          │
└─────────────────────────────────────────┘
```

[6]　　Example printout „Flashdata status".

Service Status

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Print the Service status report to read about operation time, no. of services, no. of exchanged parts and other matters of service interest (one page).

Use the parameter SERVICE FUNCTION > Serv. data reset, to set all the counters to zero, which are listed on the printout.

```
Service Status


Operational Data

Service operations      : 4294967295
Head number             : 0
Roll number             : 0
Knife number            : 0
Head run length         : 0 m
Roll run length         : 0 m
Cuts on knife           : 9
Total material length   : 358429 m
Total foil length       : 358150 m
Total cuts              : 2187
Total head moves        : 2414
Head strobes            : 1922179
Foil diameter           : 44.5 mm
Operation time          : 20 hours  16 min

Power supply data

Type:                   : CME PSupply

CPU board data

CPU identifier          : 34-16
System controller       : GT-64111
Board Revision          : REV04

Peripheraldriver

Feed driver             : V 3 - T 3
Foil driver             : V 3 - T 3
Head driver             : V 3 - T 3
Peripheraldriver        : V 3 - T 3
USI interface           : V 2 - T 1
```

[7]   Example of a „Service Status" printout.

❍ For information on the operational data on the service status printout refer to paragraph > OPERATION DATA ⬚ on page 150.

❍ For information on the power supply data on the service status printout refer to paragraph > POWERSUPPLYDATA ⬚ on page 153.

❍ For information on the CPU board data on the service status printout refer to paragraph > CPU BOARD DATA ⬚ on page 154.

❍ For information on the peripheral driver data on the service status printout refer to paragraph > MODULE FW VERS. ⬚ on page 148.

Dottest endless

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Dottest for application with endless label stock.

This function prints a pattern which enables trained personnel to check the adjustment as well as the function of the printhead.

Only in supervisor mode:

If no dot check has been proceeded (by calling the parameter SERVICE FUNCTION > Head dot test) since powering on the printer, a test is started before printing the status report. Depending on the result, one of the following messages is printed on the bottom margin of the label:

- "All print dots o.k."
- "x print dots defective"

▭➔ 64-08 printers don´t proceed this dot check automatically, because this would be very time consuming. The printout shows the message:

- "Head Dot Test not yet executed"

If a dot test has already been performed since powering on the printer, the above showed messages are also displayed at 64-08 printers after proceeding a "Dottest endless" or „Dottest punched".

❍ For information about the supervisor mode, see paragraph Access authoriz. 🗋 on page 93

Test pattern

The „Dottest endless" or „Dottest punched" prints a pattern consisting of 33 rows filled with vertical lines on the upper label area. All lines have a constant distance of 4 dot. With every new row, the line pattern is shifted one dot. The resulting line-pattern repeats every four rows.
The test pattern shows missing dots clearly as white vertical lines running through the pattern.

The lower label area is filled with testpatterns, which are kept close to those used by Kyocera. The patterns are useful for printout comparison.

The bars underneath the test pattern allow the adjustment of the different zero lines.

Dottest punched

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Dottest for application with punched material.

❍ See parameter Dottest endless 🗋 on page 37.

Reference label

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Prints a label with some examples of barcodes, fonts, logos... just try out!
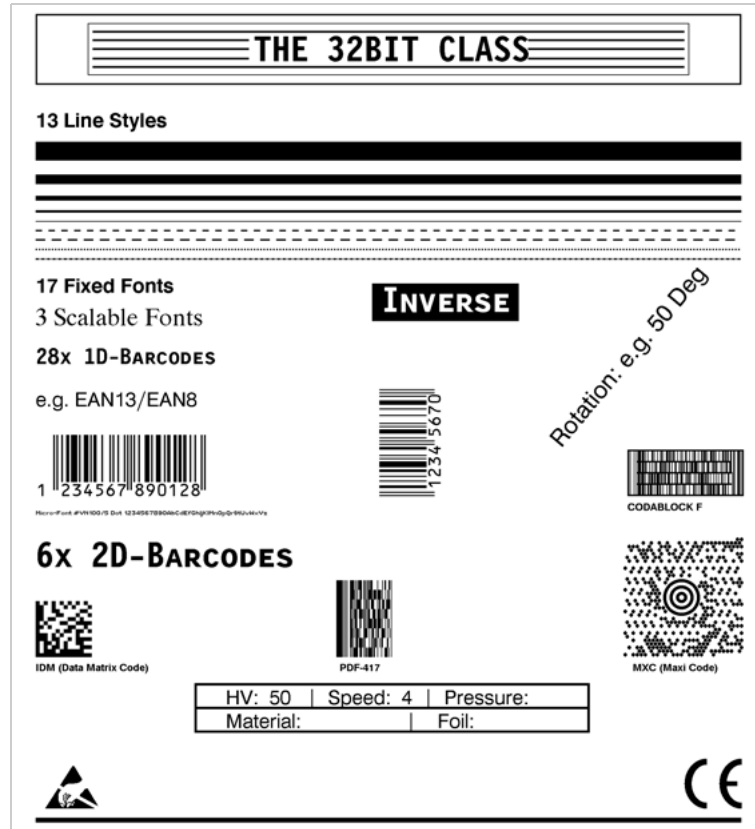
[8]   Example of a Reference label printout (INFO AUSDRUCKEN > Reference label).

RFID Status

▥➡ Only with activated RFID option.

64-xx	ALX 92x	DPM

Prints a status printout with RFID specific data:

RFID Status	
System version	: V4.00 Jun 23 2005 [R4.00 PE2.50 H4.00Q]
Printer type	: 64-05
Nr CMD retries	: 3
Nr invalid tags	: 3
Statistics	
Nr of Tags	: 7043
Nr. invalid tags	: 2788
Total Nr. SELECT	: 7803
Invalid SELECT	: 16%
Total Nr. READ	: 1189
Invalid READ	: 29%
Total Nr. WRITES	: 5483
Invalid WRITE	: 37%
Rate READ	: 45
Rate WRITE	: 46

[2] *Example of a RFID status printout (* INFO AUSDRUCKEN > RFID Status*).*

PRINT PARAMETERS

Print speed

| 64-xx | ALX 92x | DPM | PEM | ALX 73x (PMA) |

The print speed (material feed) can be adjusted according to the ribbon and material combination being used in order to optimise the contrast depth and the density of the print image.

x inch/s (mm/s)   Setting range: see table (tab. 3); Unit interval: 1 inch/s (5 mm/s)
Default setting: 8 inch/s

▥➡ DPM / PEM / ALX 92x / ALX 73x (PMA): Print speed can be set optionally in Inch/s or mm/s. The unit is selected with SYSTEM PARAMETER > Speed unit.

Printer	Print speed / feed speed	
	(mm/s)	**(Inch/s)**
64-04/05		2-16
6406		2-14
64-08		2-9
ALX 924/5, DPM 4/5", PEM 4/5", ALX 734/5 (PMA)	50-400	2-16
ALX 926, DPM 6", PEM 6", ALX 736 (PMA)	50-300	2-12

[3]   *The setting range of the print/feed speed depends on the printer type.*

Feed speed

| 64-xx | ALX 92x | DPM | PEM | ALX 73x (PMA) |

Setting:
The value for the feed speed should not be set too high for print applications with long calculating units (e. g. consecutive numbering). This can help to avoid alternating between abrupt braking to 0 (zero) and acceleration to print speed.

▥➡ When altering the print speed, the feed speed is equal to the print speed. If a different feed speed is required, this must be set again.

x inch/s (mm/s)   Setting range: see table (tab. 3); Unit interval: 1 inch/s (5 mm/s)
Default setting: 8 inch/s

▥➡ DPM / PEM / ALX 92x / ALX 73x (PMA): Print speed can be set optionally in Inch/s or mm/s. The unit is selected with SYSTEM PARAMETER > Speed unit.

Material type

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Definition of the materials used. A distinction is made between reel material and gapped material (hole gaps, self-adhesive material with register gaps). The detected gap position corresponds to the start of the label.

▥➡ The value is overwritten by the appropriate Easy Plug command when sending label formats.

Endless   If material is to be used without gaps.

Punched   If material is to be used with gaps (default setting).

Material length

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The material length (label length) is the distance between the gaps, measured from the front edge (beginning) of a label to the front edge of the next label.

▥➡ The value is overwritten by the appropriate Easy Plug command when sending label formats.

xxx mm   Setting range: 5 mm to "max. length entry"; Unit interval: 0.1 mm
Default setting: 100 mm

Maximum length entry: dependent on the print head width and memory configuration.

Material width

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Zero position of the left border. If the printer is working in line-printer mode, alterations can be made in millimetre units.

xxx mm   Setting range: "min. width" to "max. width"; Unit interval: 0.1 mm
Default setting: 100 mm

• Min. width: dependent on the printer type
• Max. width: dependent on print head width and memory configuration.

❍ For detailed material width information, refer to topic section „Specifications".

Print direction

64-xx   ALX 92x   DPM   PEM   ALX 73x (PMA)
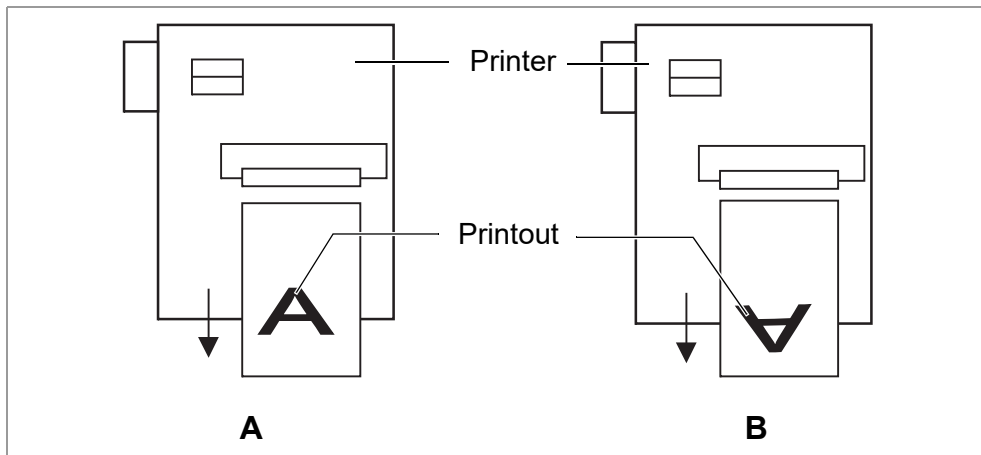
[9] Orientation of the printout „Foot first" (A) or „Head first" (B).

Foot first   (Default) Orientation of the printout according to [9A].

Head first   Orientation of the printout according to [9B]. Mind the following:

➠ Define the „true" label length (without gap length) in parameter PRINT PARAMETERS > Material length. If the label gap is wider than 5 mm, the parameter SYSTEM PARAMETER > Miss. label tol. must be set to a value more than zero.

➠ The distance between material base line and the first printable dot is 1 mm. To keep this distance while printing „head first", the material width must be calculated as follows::

$$b_{Mat} = b_{Bp} - 2mm \text{ , with}$$

b_{Mat}: Material width
b_{Bp}: Backing paper width

Punch offset

64-xx   ALX 92x   DPM   PEM   ALX 73x (PMA)

The zero position can be determined offset in millimetre units from the detected gap position.

➠ The value is overwritten by the appropriate Easy Plug command when sending label formats.

xxx mm   Setting range: -8 to +max. label length; Unit interval: 0,1 mm
Default setting: 0 mm

Maximum offset in feed direction: -8 mm

Minimum offset against feed direction: +max. label length
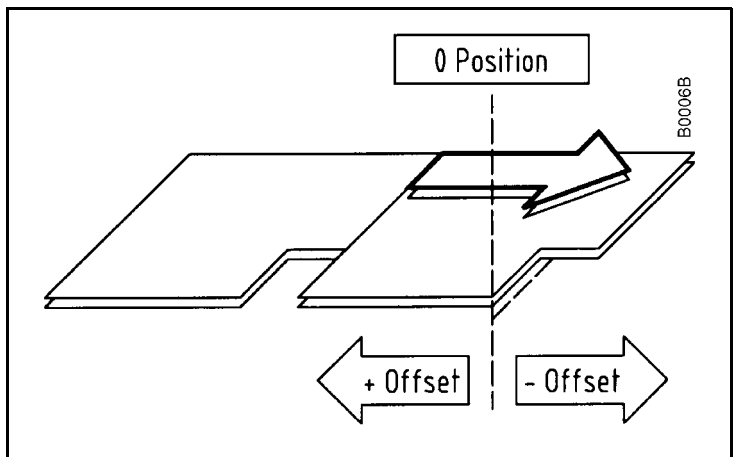
[10] Positive and negative offset in relation to the feed direction (arrow).

Bar code multip.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Bar code height scaling factor

Increases the bar code height defined in the label layout (Easy-Plug) by multi-plication by a factor of 1 to 10.

x Setting range: 1 to 10; Unit interval: 1; Default setting: 1

The printed bar code height calculates starting with the value defined in the label layout multiplied by the scaling factor x.

Tradit. Imaging

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ In production mode only.

Up to firmware version x.31, the barcode height was calculated with the formula:

$$Barcodehight_{Print} = (Barcodehight_{Layout} + 1) \cdot x$$

with x = PRINT PARAMETERS > Barcode Multi.

By doing so, the printed barcode height in millimeters was by 1 higher than the value defined in the layout (1 --> 2 mm, 2 --> 3 mm, etc.)[1].

From firmware version x.31 on, the printed barcode is exactly as high in mil-limeters, as the value in the layout is (1 --> 1 mm, 2 --> 2 mm, etc.)[1].

No New height calculation (1 --> 1 mm, 2 --> 2 mm, etc.) is applied (default set-ting).
The plain copy line is printed with OCR-B font.

Yes Setting for customers with print layouts based on the *old* height calculation scheme.

---

1) *Assumed that* PRINT PARAMETERS > Barcode Multi. = „1".

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

The plain copy line of the barcodes EAN8, EAN13, UPC-A and UPC-E is printed with the same fonts, which older printer types like TTK or TTX x50 have used.

UPC plain-copy

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The position of the first and last digit in the plain-copy line - underneath the bar code - can be adjusted as required.

Raised   First and last digit of the UPCA or first digit with the UPCE are raised (default setting).

In line   All digits in the decoded line are in line under the code.

EAN Readline

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

<> Signs   Readline enclosed in "<>" signs or terminated by a ">"-Sign (EAN 13).

Standard   Readline without "<>" or ">" signs (default).

EAN sep. lines

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

EAN separation lines. Parameter for controlling of EAN or UPC barcodes if they are printed without readline.

With readl. only   (Default) The separation bars at the beginning, middle, and the end of the barcode are only long, if the barcode is printed with a readline.

Always long   The separation bars at the beginning, middle, and the end of the barcode are always long, regardless if the barcode is printed with or without readline. The position of the barcode is the same as with the readline option switched on.

Dispense Mode

64-xx	ALX 92x	DPM

Governs the run of the print-dispense procedure.

➡ Only if SYSTEM PARAMETER > Periph. device = „Tear-off edge".
➡ The ribbon autoeconomy function can only be used in "Real 1:1 Mode"!

Dispense only   With this setting, the printer can be used as a mere dispenser without processing print jobs. Set the material length before you use this function.

See parameter PRINT PARAMETERS > Material length.

After calling "Dispense only", the printer restarts; afterwards, the following is displayed:

| Dispense only | | 0 = Number of dispensed labels. |
| Labels | 0 | |

The parameters menu can be activated as usual after having switched to the offline mode by pressing the Online button two times.

Normal 1:1 Mode

- The printer cannot print on the whole label surface. A stripe at the label beginning stays unprinted.
- The label is being dispensed while printing.
- The output volume is at its maximum level.

⇒ The width of the unprintable strip is calculated as follows:
Distance print line to dispensing edge + Dispense position (see [4])

Printer	Distance print line - dispensing edge
64-xx	39.8 mm (long dispensing edge) 24.2 mm (short dispensing edge)
AP 5.4	25.0 mm

[4]   *Distances between print line and dispensing edge for some printers.*

⇒ The position of the print image on the label depends on the length of the unprintable strip. If the dispensing position is changed, or printed on a different device or with a different dispensing edge, the position of the print image shifts in or against the print direction.

❍ Also refer to parameter PRINT PARAMETERS > Dispense position.
❍ A graphic can be found under PRINT PARAMETERS > Cut mode > Normal 1:1 mode.

Non-printable area with
a) Dispense position = 0
b) Dispense position < 0
c) Dispense position > 0

Z0137E.eps
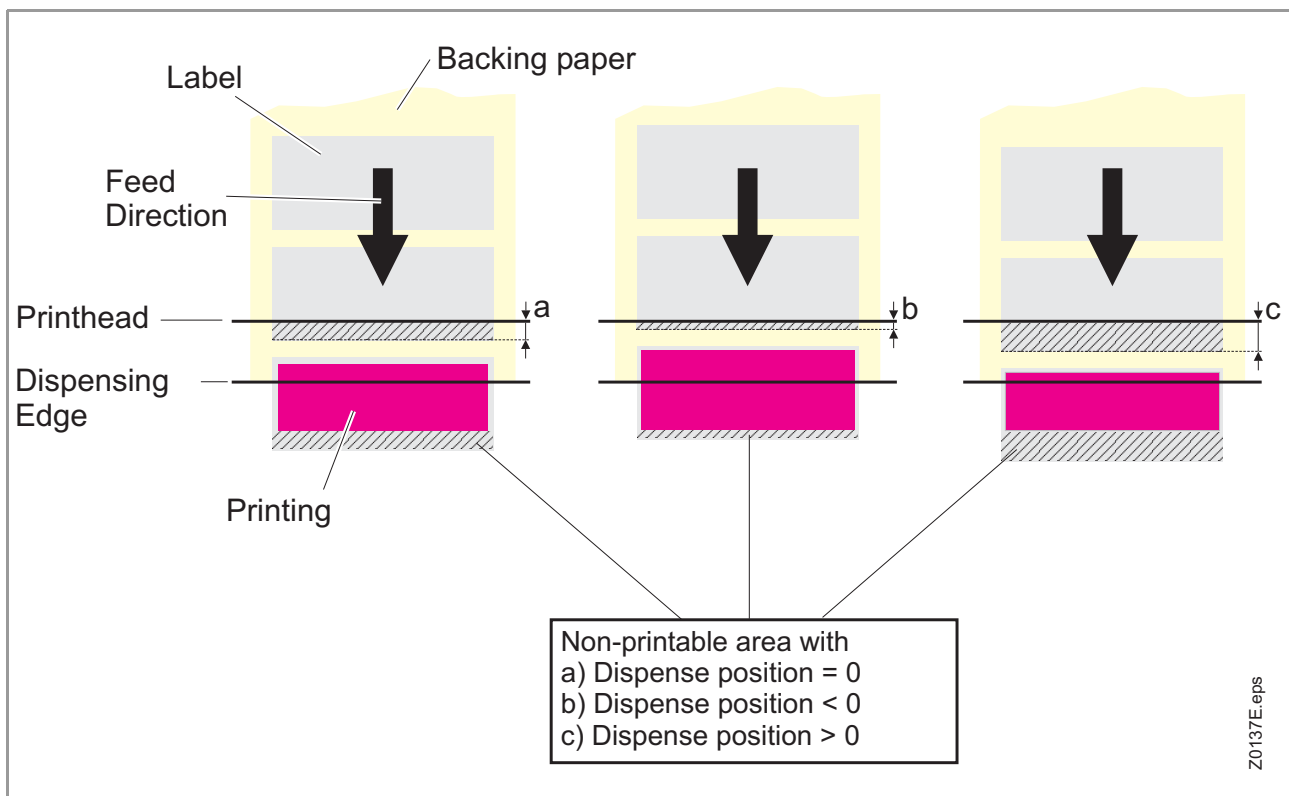
[11] *The size of the not imprintable area in Normal 1:1 depends of the setting of parameter* SYSTEM PARAMETER > Dispense Position.

Batch Mode
- The printer can print the whole label surface.
- Dispensing of the label takes place during printing. Printing of the next label is interrupted until the label is completely dispensed.
- The output volume is at its maximum level.

  ➠ The *Batch mode* is optimised for printing and dispensing at high speeds. Due to this, it is not possible to use all features awaliable in modes *Normal 1:1* or *Real 1:1*. Also consider, that printing data must be available on time and in sufficient quantity.
  ➠ The following Job/Parameter-combinations must not be used:
- Jobs with counter fields
- Jobs with variable fields
- SYSTEM PARAMETER > Dispensing mode **must be set to "fast".**
- The USI reprint function is not supported. DP INTERFACE > Reprint signal **must be set to "deactivated".**
- Foil save

❍ A graphic can be found under PRINT PARAMETERS > Cut mode > Batch mode.

Real 1:1 Mode
(Default setting)
- The printer can print the whole label surface.
- After dispensing a label, the beginning of the next label is drawn back under the print head.
- The output volume is lower than in *Batch Mode* or *Normal 1:1 Mode*.

❍ A graphic can be found under PRINT PARAMETERS > Cut mode > Real 1:1 mode.

Dispenseposition

64-xx	ALX 92x	DPM

➠ Only with SYSTEM PARAMETER > Periph. device = „Tear-off edge".
Dispense position

Adjusts the dispense position in or against the feed direction. Depending on the set dispense position, the dispensed label sticks to the backing paper with a more or less wide strip [12]. The required width of this strip depends on the further processing.
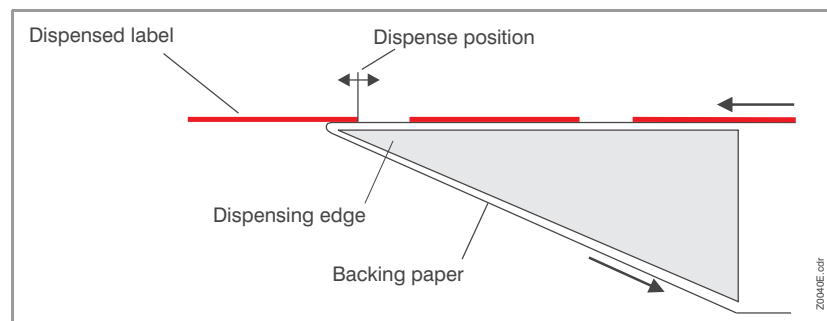
[12] Dispense position (= stopp position) of the dispensed label.

x.x mm
Setting range: -30.0 to +20.0 mm; Unit interval: 0.1 mm; Default setting: -6.0 mm

Cut mode

64-xx

⬛➡ Only with mounted and activated cutter (SYSTEM PARAMETER > Periph. device = „Cutter").
This is where the procedure for the label output and cut is defined.

Real 1:1 mode   The whole surface of the label is printable. The label is pushed forward to the cutter for cutting. After the cut, the beginning of the next label is drawn back under the print head. This reduces the output volume (in relation to a certain time).
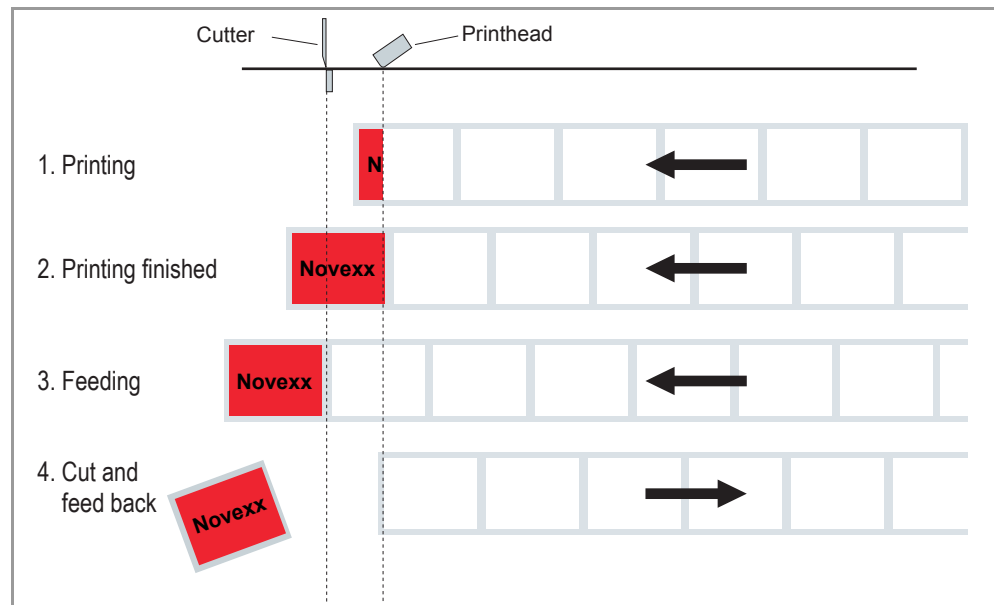
[13] *Printing process (schematic) in „Real 1:1 Mode".*

Batch mode

The whole surface of the label is printable. Cutting takes place during printing. This can result in brief interruptions within the print zone of the following label. The output volume is at its maximum level.

Requirements for the batch mode are:

- Ribbon economy is not active (parameter SYSTEM PARAMETER > Ribbon autoecon. = "Off")
- Material length >18 mm (>14 mm on the TTX 350)
- Number of cuts for a print job - at least 2 or more
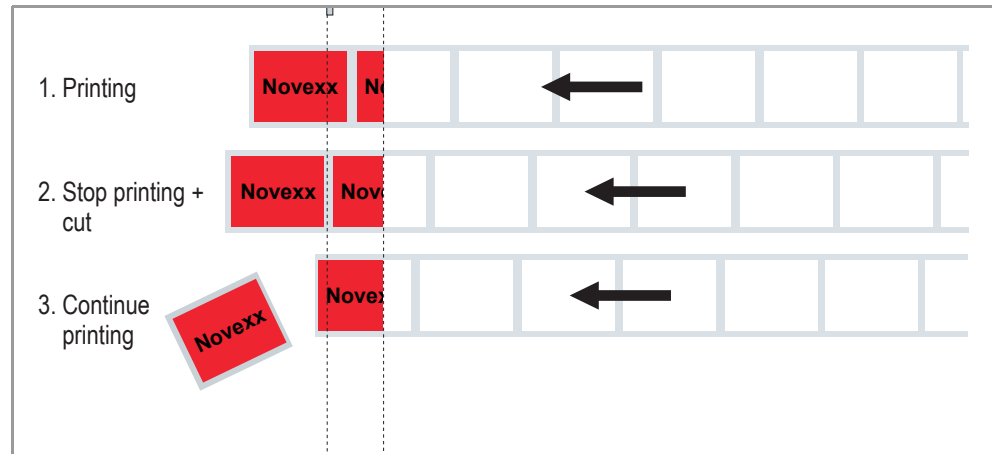
[14] Printing process in Batch mode (schematic).

Normal 1:1 mode

In N1:1 mode, cutting takes place during printing. The zero-line of the printing is shifted 18 mm in y-direction. This offset equals the distance cutter-printhead. Caused by this shifting, the first 18 mm of the label are not printable (= unprintable strip). These measurement corresponds to the distance between print head and cutter. The output volume is at its maximum level. (The offset of the zero-line is caused historically and serves the compatibility of older printer models).

⫸ The position of the print image on the label depends on the length of the unprintable strip. If the label is printed on another device with a different distance printhead-knife, the position of the print image shifts in or against the print direction.
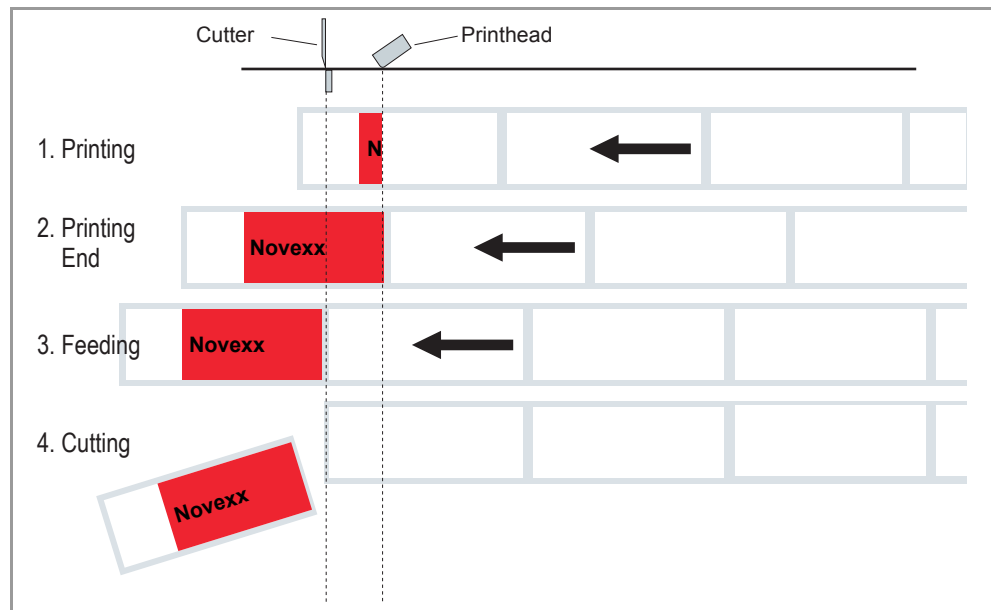
[15] Printing process in Normal 1:1 mode (schematic).

Cut speed

64-xx

▥➡ Only with mounted and activated cutter (SYSTEM PARAMETER > Periph. device =
„Cutter").
The cut speed is to be adjusted to the material thickness and strength.

x

Setting range: 2 to 5; Unit interval: 1

- 2: extremely slow; for thick and strong material
- 5: extremely fast; for thin material

Cut position

64-xx

⫸ Only with mounted and activated cutter (SYSTEM PARAMETER > Periph. device = „Cutter").
The cut position is identical to the detected gap position, i. e. with the start of the label. Fine settings to meet specific customer requirements can be programmed using the parameter PRINT PARAMETER > Cut position.

x inch/s

Setting range: -2.0 to +2.0 mm; Unit interval: 0.1mm

- Maximum offset in feed direction: -2.0 mm
- No offset: 0 mm
- Minimum offset against feed direction: -2.0 mm

Double cut

64-xx

⫸ Only with mounted and activated cutter (SYSTEM PARAMETER > Periph. device = „Cutter").

Joining grids or the gap area between the labels can be removed using a double cut, thereby improving the outline.

The first cut is offset by the distance set from the recognized gap position away in the feed direction, the second cut is made at the gap position.

A possible correction of the cut position ("Cut position" function) is calculated for both cuts and must be taken into consideration.

x inch/s

Setting range: 0.0 to 5.0 mm; Unit interval: 0.1mm

Normal simple cut: 0.0 mm

⫸ The smallest possible double cut distance of 1.0 mm must be adhered to!

Rest position

64-xx

▥➡ Only with mounted and activated cutter (SYSTEM PARAMETER > Periph. device = Cutter).

To avoid that the label material is wrapped around the print roller after a long idle time, the material rest position can be changed to „at cutter".

at head   The material rest position in idle times is at the print head

at cutter   The material rest position in idle times is at the cutter to avoid material being wrapped around the print roller

Cut width

64-xx

▥➡ Only with mounted and activated cutter (SYSTEM PARAMETER > Periph. device = „Cutter").

xxx   Setting range: 0 to MAX_CUT_WIDTH;
Default setting: MAX_CUT_WIDTH

The values for MAX_CUT_WIDTH depend on printer type and printhead:

Printer	MAX_CUT_WIDTH
64-04	106
64-05	128
64-06	160
64-08	213
AP 5.4 with 203 dpi	104
AP 5.4 with 300 dpi	105
AP 5.6 with 203 dpi	168
AP 5.6 with 300 dpi	167

▥➡ The values for MAX_CUT_WIDTH don´t equate to the real cut width (no linear relation between value and cut width). The proper setting value has to be determined by trying.

Rewind direction

64-xx

▥➡ Only with mounted and activated (external) rewinder
(SYSTEM PARAMETERS > Periph. device = „Rewinder").
Determines the sense of rotation of the optional Rewinder.

Printing outside   Rewind direction: The printed label is facing *outside*.

Printing inside   Rewind direction: The printed label is facing *inside*.

Rotated Barcodes

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Improves readability of rotated (90° and 270°) bar codes.

Normal   „Normal" printing without special processing of rotated bar codes.

Optimized   (Default setting) The line and gap widths of rotated bar codes are modified to improve readability.

X - Printadjust

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The zero point of the mask is moved in relation to the edge of the label on the X- axis, i. e. lengthways to the material.

▥➡ If the setting is changed, while the print job is stopped, the printer recalculates the format using the changed values.

▥➡ Caution with graphics, which are generated via one of the Easy Plug commands #YI, #YIR or #YIB! If the graphics is shifted beyond the label border as a consequence of changing the parameter "X-Printadjust", the part of the graphics which "juts out" will get lost.

x.x mm

Setting range: -15.0 to +15.0 mm; Unit interval: 0.1mm
Default setting: 0.0 mm

- Maximum offset away from the edge of the label: +15.0 mm
- No offset: 0.0mm
- Maximum offset towards the edge of the label: -15.0 mm

Y – Printadjust

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The zero point of the mask is moved in relation to the gap position on the Y-axis, i. e. in the feed direction.

▥➡ If the setting is changed, while the print job is stopped, the printer recalculates the format using the changed values.

▥➡ Caution with graphics, which are generated via one of the Easy Plug commands #YI, #YIR or #YIB! If the graphics is shifted beyond the label border as a consequence of changing the parameter "Y-Printadjust", the part of the graphics which "juts out" will get lost.

x.x mm

Setting range: -15.0 to +15.0 mm; Unit interval: 0.1mm
Default setting: 0.0 mm

- Maximum offset in feed direction: +15.0 mm
- No offset: 0.0mm
- Minimum offset against feed direction: -15.0 mm

Punch mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Automatic

Automatic mode, for material with a contrast zone = gap in the label.

"Automatic" is the default setting, suitable for all materials with which there is a difference in the transparency between the label and gap of more than 2 values (see Description, sensor check).

Manual

Manual setting, for material with several varying contrast zones. Settings are made using the parameter PRINT PARAMETERS > Punch level.

The range of the value automatically measured by the gap detection can be defined specifically for the label material. This allows materials with high-contrast proof points within the label to be processed, which would otherwise be measured as 'false' gaps by the system. The corresponding setting value is then equal to, or smaller than, the value measured at the actual gap.

Punch level

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▒➡ Only if PRINT PARAMETERS > Punch mode = „Manual".

xxx   Setting range: 0 to 255; Unit interval: 1

The value xxx stands for the current contrast within the photoelectric switch of the material which has just been inserted. This serves to determine a threshold value for the inserted material.

> Punch level
> Punch xxx Val yyy

xxx = current measurement at the punch sensor
yyy = set threshold value

Example

Self-adhesive material with black bars lengthways across the label

- Reading:
  – Masking paper: 30
  – Masking paper + label: 60
  – Masking paper + label + black bars: 190

- Setting value: 60
  A setting value of 60 means that all readings over 60 are ignored, therefore also the reading 190 at the black bar.

INTERFACE PARA

Interface parameter

> EASYPLUGINTERPR

Print interface

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

This parameter sets the interface, by which the printer will receive data.

Serial Com1   Serial interface Com1.

Centronics   Parallel interface

▥➡ Only with installed Centronics adapter board.

Only for Ethernet interface (10/100 Base T):

TCP/IP Socket   Print data can be sent to the printer via a TCP/IP socket

LPD Server   Print data can be sent to the printer via the LPR/LPD-protocol

USB   USB interface

Serial Com3   Serial interface Com3.
▥➡ Only with optional I/O board mounted.
▥➡ Selection of the type of serial interface is done with parameter INTERFACE PARA > >COM PORT > Serial Port Mode

Automatic   (Default setting) All interfaces are enabled to receive data, but *not simultaneously*.
▥➡ Don´t send data to more than one interface at a time.
▥➡ Except are interfaces, which are being used by an option (e.g. OLV).

Spooler mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The operating mode of the spooler determines whether print series are processed individually, or whether the spooler can receive print data when printing several series.

Single print job   Single print series mode (the interface can only receive data after printing the required number of labels of a single series)

Mult. print jobs   Multiple print series mode (the interface can receive data while the series is being printed)

Printer ID No.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Printer identification number

Determines the identification number of the printer. In such a way, the printer can be addressed by the Easy Plug command #!An (n=printer ID).

The use of ID numbers is in particular reasonable for data transfer by RS422/ 485 interface, if several printers are connected by one data line. Each of the connected printers then only incorporates the data mapped to him by #!An command.

xx　　　　Setting range: 0 to 31; Unit interval: 1

Spooler size

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The memory capacity of the printer buffer can be set according to the requirements of each customer.

xxx Kbyte　　　Unit interval: 16-2048 kBytes; step width: 16 kBytes; default setting: 64 kBytes

Offline mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Interf. disabled　　(Default setting) Easy-Plug commands are *not* accepted, while the machine is in offline mode (no print jobs and no status queries).

Interf. enabled　　Print jobs are *not* accepted in offline mode, but status queries with Easy Plug immediate commands (e. g. #!X) *are* accepted.

Interface delay

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▯▶ Only visible, if INTERFACE PARA >EASYPLUGINTERPR > Offline mode = „Interf. enabled"

After switching from online to offline mode, the printer interface is deactivated. This parameter offers a setable delay time before deactivating the interface.

xxxx ms　　Setting range: 0-1000; Unit interval: 100; Default setting: 0

Baud rate

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Data transfer speed

Speed of data transfer using the serial interface.

xxxxxx Baud Setting range: 300 to 115200 Baud; Unit interval: 300/600/1200/2400/4800/ 9600/19200/38400/115200 (default)

No. of data bits

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

This parameter can be defined in connection with both the serial and the parallel interface.

7 7 Data bits

8 8 Data bits

Parity

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Defines the parity check of serial transmitted data.

The parity bit is for checking data transmission. If the check shows an error, a corresponding message is displayed. The setting must be identical at the sender and the receiver. Normally transmission is set without a parity bit.

Odd Odd parity.
A parity bit is added so that there is an odd number of 1 Bits.

Even Even parity.
A parity bit is added so that there is an even number of 1 Bits.

None No check bit. Sending and receiving without check bit.

Always zero Check bit is always 0 (zero). Sending and receiving without parity check.

Stop bits

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Number of stop bits

1 Bit 1 stop bit

2 Bit 2 stop bits

Data synch.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Data synchronisation at the serial interface.

RTS/CTS   Data synchronisation through hardware

XON/XOFF   Data synchronisation through software

None   Handshake signals are ignored

Frame error

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Display   (Default) An error message is displayed, if a framing error is detected while the printer is receiving serial data.

Ignore   Framing errors will be ignored, no error messages are displayed.

> COM3 PORT

➠ This menu only appears, if the optional I/O board is installed.

Baud rate

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ With mounted and connected I/O board only.
Speed of data transfer using the serial interface.

xxxxxx Baud   Setting range: 2400 to 115200 Baud; Unit interval: 2400/4800/9600/19200/38400/115200 (default)

No. of data bits

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ With mounted and connected I/O board only.
The number of data bits is always 8.

Parity

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ With mounted and connected I/O board only.
Defines the parity check of serial transmitted data.

The parity bit is for checking data transmission. If the check shows an error, a corresponding message is displayed. The setting must be identical at the sender and the receiver. Normally transmission is set without a parity bit.

Even   Even parity.
                              A parity bit is added so that there is an even number of 1 Bits.

None   No check bit. Sending and receiving without check bit.

Stop bits

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ With mounted and connected I/O board only.
The number of stop bits is 2 and cannot be changed.

Data synch.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ With mounted and connected I/O board only.
❍ See parameter Data synch. ▯ on page 59.

Frame error

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ With mounted and connected I/O board only.
❍ See parameter Frame error ▯ on page 59.

Serial Port Mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ With mounted and connected I/O board only.
Setting of the serial interface type.

RS232   Sets Com2 to RS 232.
                              Data synchronisation may be done by hardware (RTS/CTS) or by software
                              (XON/XOFF). Maximum cable length is 15 m.

RS422   Sets Com2 to RS 422.
                              RS 422 is a 4 wire point to point connection, suitable for only one device.
                              Receiver and driver of the printer are always enabled. Data synchronization
                              is only possible by software (XON/XOFF). Maximum cable length is 1 km with
                              twisted telecommunication cable.

RS485   Sets Com2 to RS 485.
                              RS 485 is a 2 or 4 wire bus system for up to 30 devices. The printer´s receiver
                              is always enabled, the printer´s driver is only enabled, if the printer sends
                              data to the host. Data synchronization is only possible by software (XON/
                              XOFF). Maximum cable length is 1 km with twisted telecommunication cable.

> COM4 PORT

Internal interface, to which the optional RFID read/write unit can be connected.

Baud rate

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

❍ See parameter Baud rate 🗋 on page 58.

No. of data bits

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Fixed setting of 8 Bits.

Parity

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

❍ See parameter Parity 🗋 on page 58.

Stop bits

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Fixed setting of 2 Bits.

Data synch.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

❍ See parameter Data synch. 🗋 on page 59.

Frame error

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

❍ See parameter Frame error 🗋 on page 59.

> CENTRONICS

PnP function

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Off
The printer doesn´t send any identification signals to the Centronics port.

On
The printer sends identification signals via the Centronics port (if any is connected) to the host computers Windows operating system. Windows will search for an appropriate driver. (Default setting).

> NETWORK PARAM.

IP addressassign

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ A change of this parameter setting forces a printer restart.

Fixed IP address
This setting activates the parameters "Net mask" and "Gateway address" (see below).

DHCP
IP address is assigned automatically. The assigned IP address is displayed for a moment on the printer display, while the printer is starting.

IP address

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

xxx.xxx.xxx.xxx
Setting range per xxx value: 0 to 255

Change between the digits by pressing the Cut or Feed button; Acknowledge the setting by pressing the Online button. After a change of the IP address, the printer will reset automatically.

Net mask

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

xxx.xxx.xxx.xxx
Setting range per xxx value: 0 to 255

Depending on the set IP address appears a default value.

⫸ We recommend to use the default value!

Gateway address

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

xxx.xxx.xxx.xxx   Setting range per xxx value: 0 to 255

000.000.000.000 = no gateway is used

Port address

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Setting range: 1024 to 65535. Default: 9100.

Ethernet speed

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Auto negotioation   The communication speed is selected automatically.

10M half duplex   The communication speed is set to 10 MBit/s *half duplex*.

10M full duplex   The communication speed is set to 10 MBit/s *full duplex*.

100M half duplex   The communication speed is set to 100 MBit/s *half duplex*.

100M full duplex   The communication speed is set to 100 MBit/s *full duplex*.

MAC address

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Displays the MAC address of the CPU board. This address can not be changed in the parameter menu.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

FTP server

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The File Transfer Protocol (FTP) server (RFC959) allows access to the internal RAM disk of the printer and, if available, to the memory card. The FTP server is capable of multisession mode, without evaluating the user name when logging in. The password must match the set password (see below).

❍ For further information read the user manual, topic section „Advanced Applications", chapter „Data transmission with FTP".

On   Switches the FTP server *on*.

Off   Switches the FTP server *off*.

FTP password

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Parameter only appears in production mode.

Input of the FTP server password by means of a connected keyboard or the printers operation panel. Default setting: „novexx".

Changing the password:

1. Press the Esc button. The cursor jumps to the first character.

2. Press the Cut- or Feed button until the wanted character appears. Acknowledge by pressing the Online button.

3. Put in the next character.

4. Acknowledge the new password by pressing the Online button.

WEB server

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The web server may be used to

• read out or change parameter settings of the printer with a web browser
• operate the printer via a web browser.

➠ The WEB server is not multi-session capable, what means that only one user at a time can be logged in.

Requirements for use of the web server function:

• Printer is connected to network
• A valid IP address is assigned to the printer (by the network administrator or by a DHCP server)
• INTERFACE PARA > NETWORK PARAM. > WEB server must be set to „On".

Starting the web server:

1. Write down the printers IP address (INTERFACE PARA > NETWORK PARAM. > IP address*)*.

2. Start the web browser.

3. Insert into the address field:

   http://[IP address without leading zeros]
   Example: IP address = 144.093.029.031
   Input: http://144.93.29.31

4. Click „Login".

5. Type in user name (admin) and password (admin).

   If the login was successful, you will find the following menu items at the left window margin:

Menu item	Function
Home	Jump to the home page
Logout	Interrupt the connection to the printer
Parameter	Opens the parameter menu. By clicking on submenus and parameters, those can be opened and the parameter setttings be changed. �➡ Some parameters force the printer to reset, if their setting is modified by means of the operation panel. If the parameters are changed via the web server, this doesn´t happen automatically. Therefore, the modifications only become effective after the next printer restart. A restart can be triggered remote in the „Display view".
Display view	Opens the display operation panel. Enables remote operation of the printer.
Download	Opens another browser window with the URL of the FTP server. For more information read the description of INTERFACE PARA > NETWORK PARAM. > FTP server.
Help	Help texts

  [5]   Functions of the web server.

On   Switches the web server *on*.

Off   Switches the web server *off*.

WEB display refr

(WEB display refresh)

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➡ Only appears, if INTERF.PARAM > NETWORK PARAM. > Time client = „On".

Automatic updating of the web browser display. The setting determines the time in seconds between two updates.

➡ Setting 0 = „no automatic updating".

xx s   Setting range: 0 to 20; Default setting: 5

WEB admin passw.

(WEB administrator password)

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only in production mode.
Modifying the password for web server access as admin.
Default setting: „admin"
⯈ The user name is also „admin".
⯈ If the user logs in as admin to the web server, he/she has access to all parameters, which are *not* marked with the footmark „only in production mode".
Changing the password at the operating panel:

1. Press the Esc button. The cursor jumps to the first character.

2. Press the Cut- or Feed button until the wanted character appears. Acknowledge by pressing the Online button.

3. Type in the next character.

4. Acknowledge the new password by pressing the Online button.

   ⯈ Alternatively, the password can be typed in using a keyboard, or via the web server.

WEB supervisor p.

(WEB supervisor password)

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only in production mode.
Modifying the password for web server access as supervisor.
Default setting: „supervisor"
⯈ The user name is also „supervisor".
⯈ If the user logs in as supervisor to the web server, he/she has access to *all* parameters.
Changing the password at the operating panel:

1. Press the Esc button. The cursor jumps to the first character.

2. Press the Cut- or Feed button until the wanted character appears. Acknowledge by pressing the Online button.

3. Type in the next character.

4. Acknowledge the new password by pressing the Online button.

   ⯈ Alternatively, the password can be typed in using a keyboard, or via the web server.

66

02/23 Rev. 09 · USER- / SERVICE MANUAL · Info-Printouts & Parameters

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

WEB operator p.

(WEB operator password)

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only in production mode.

Modifying the password for web server access as supervisor.

Default setting: „operator"

▥➡ The user name is also „operator".

▥➡ If the user logs in as operator to the web server, he/she has access to a selection of parameters, which are necessary for settings during labelling operation.

❍ For details see paragraph 64-xx operator parameters 🗋 on page 15 or paragraph DPM / PEM / ALX 92x operator parameters 🗋 on page 20.

Changing the password at the operating panel:

1. Press the Esc button. The cursor jumps to the first character.

2. Press the Cut- or Feed button until the wanted character appears. Acknowledge by pressing the Online button.

3. Type in the next character.

4. Acknowledge the new password by pressing the Online button.

   ▥➡ Alternatively, the password can be typed in using a keyboard, or via the web server.

Time client

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Loads the current time from a time server.

Off The time client is switched off.

On The time client is switched on. The time is loaded with the frequency set under Sync. interval from a time server with the IP address Time server IP.

If there is no valid time server response within 2 s after system start, an error message appears:

Status num:	9040
No Time Server	

🛈 With the time client service, the current date and time can be obtained from a time server using RFC868 time protocol on UDP port 37. For this purpose, a time server IP address needs to be given. Date and time are initially requested at start up an optional in a setable update interval during operation time. It is also stored in the internal real time clock. There is no time offset or daylight saving hour, so the server time must exactly match the local time of the printer.

Time server IP

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

IP address of the time server.

▮▮▶ Only appears if INTERFACE PARA > NETWORK PARAM. > Time client = „On".

xxx.xxx.xxx.xxx   Enter the IP address following the xxx.xxx.xxx.xxx schema.
Setting range for each xxx value: [0…255].

Sync. interval

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Determines the frequency for time requests.

▮▮▶ Only appears if INTERFACE PARA > NETWORK PARAM. > Time client = „On".

xxxx   Setting range: [0…9999] s; Default setting: 3600 s.

Time zone

64-xx	ALX 92x	DPM	PEM

Correction of the time received by the time server by a value expressed in hours (hh) and minutes (mm).

▮▮▶ Only appears if INTERFACE PARA > NETWORK PARAM. > Time client = „On".

+/- hh:mm   Setting range: [-12:00…+12:00]; Default setting: 00:00; Step width: 00:30

DHCP host name

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Host name of the printer. Default setting: „Device name" + the last 3 figures of the MAC adress.

Typing in the host name at the operating panel:

1. Press the Esc button. The cursor jumps to the first character.

2. Press the Cut- or Feed button until the wanted character appears. Acknowledge by pressing the Online button.

 ▮▮▶ Valid characters: A-Z, a-z, 0-9, -
3. Type in the next character.

4. Acknowledge the new password by pressing the Online button.

 ▮▮▶ Alternatively, the password can be typed in using a keyboard, or via the web server.

WLAN SSID

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Only with plugged-in WLAN CF-card
A Service Set Identifier (SSID) is the identification of a radio frequency net-work, which is based on IEEE 802.11.

Each WLAN owns a configurable SSID, by which the network is identified. The SSID is the name of the network.

The SSID character string is configured in the base station (Access Point) of the WLAN. It must be also configured on all clients, which are supposed to access the access point. The SSID is attached uncoded to all pakkets to identify them as part of that network.

xxxxxxxxxx...   The SSID consists of a maximum of 32 alphanumeric characters. Default set-ting: „novexx"

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

WLAN WEP

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Only with plugged-in WLAN CF-card
WEP („Wired Equivalent Privacy") is an encryption scheme for WLAN.

Off   (Default setting) Communication with the host is *not* encoded.

64Bit key   Communication with the host is encoded using 64 Bit WEP encoding.

128Bit key   Communication with the host is encoded using 128 Bit WEP encoding.

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

WLAN default key

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Only with plugged-in WLAN CF-card
Selection of the encryption key, which is used for packet transmission.

x   Setting range: 1-4; Default setting: 1

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

WLAN 64Bit key 1

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only with plugged-in WLAN CF-card

Definition of an encryptioin key for pakket transmission. The key will be used, if it is enabled under INTERFACE PARA > NETWORK PARAM. > WLAN default key.

xxxxxxxxxx...   Character string of 26 hexadecimal characters. Default setting: „123456789abcd123456789abcd"

⯈ Admissible characters: A-F, a-f, 0-9

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

WLAN 64Bit key 2

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only with plugged-in WLAN CF-card

❍ See parameter WLAN 64Bit key 1 🗋 on page 70.

WLAN 64Bit key 3

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only with plugged-in WLAN CF-card

❍ See parameter WLAN 64Bit key 1 🗋 on page 70.

WLAN 64Bit key 4

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only with plugged-in WLAN CF-card

❍ See parameter WLAN 64Bit key 1 🗋 on page 70.

WLAN 128Bit key 1

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only with plugged-in WLAN CF-card

Definition of an encryptioin key for pakket transmission. The key will be used, if it is enabled under INTERFACE PARA > NETWORK PARAM. > WLAN default key.

xxxxxxxxxx...   Character string of 26 hexadecimal characters. Default setting: „123456789abcd123456789abcd"

⯈ Admissible characters: A-Z, a-z, 0-9

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

WLAN 128Bit key 2

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➤ Only with plugged-in WLAN CF-card

❍ See parameter WLAN 128Bit key 1 🗋 on page 70.

WLAN 128Bit key 3

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➤ Only with plugged-in WLAN CF-card

❍ See parameter WLAN 128Bit key 1 🗋 on page 70.

WLAN 128Bit key 4

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➤ Only with plugged-in WLAN CF-card

❍ See parameter WLAN 128Bit key 1 🗋 on page 70.

WLAN com quality

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➤ Only with plugged-in WLAN CF-card

This value represents the signal-to-noise ratio (SNR) of the connection. The value is shown in % and is a measure for the connection quality.

x%   WLAN communication quality in %

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

WLAN signal lev.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➤ Only with plugged-in WLAN CF-card

Shows the WLAN average signal level in percent. This value suits for optimizing the location of the printer or access point to get the best network connection.

x%   Signal level in %

❍ Detailed information about using the WLAN feature: read the user manual, topic section Advanced Applications 🗋.

> OPTIONS

OLV Option

64-xx	ALX 92x	DPM	PEM

Off	OLV-Option is *not* activated (OLV = Online Verifier).
Serial Com1	Com1 is activated for OLV application. ➠ This setting option is only visible, if Com1 is not activated for any other option.
Serial Com2	Com2 is activated for OLV application. ➠ This setting option is only visible, if Com2 is not activated for any other option.

RFID Option

64-xx	ALX 92x	DPM

Off	RFID-Option is *not* activated (RFID = Radio Frequency Identification).
Serial Com1	This setting option is not relevant for application of the RFID option. ➠ This setting option is only visible, if Com1 is not activated for any other option.
Serial Com4	Com4 is activated for application of the RFID option (Setting for 64-xx Gen 3, DPM Gen 3, ALX 92x Gen 3). ➠ This setting option is only visible, if Com4 is not activated for any other option.

StandAlone Input

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Defines an interface for data input in standalone mode.

➠ Interfaces are only selectable, if installed and not used by another function (e. g. as data interface). If INTERFACE PARA >EASYPLUGINTERPR > Print interface = „Automatic", all interfaces besides Com3 are blanked out.

None	No data input via interface.
Serial Com1	Com1 is activated for data input in standalone mode.
Serial Com2	Com2 is activated for data input in standalone mode.
Serial Com3	Com3 is activated for data input in standalone mode.
TCP/IP SOCKET	Ethernet interface is activated for data input in standalone mode.

#VW/I Interface

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Defines the output interface belonging to the Easy-Plug command #VW/I.

Easyplug　　　　(Default) Interface that is defined in INTERFACE PARA >EASYPLUGINTERPR > Print interface as input interface for print data.

Serial Com1　　　Serial interface Com 1.
▥➡ Only available for selection, if the interface is not occupied by another function.

USB　　　　　　USB interface
▥➡ Only available for selection, if the interface is not occupied by another function.

TCP/IP SOCKET　　Ethernet interface
▥➡ Only available for selection, if the interface is not occupied by another function.

Serial Com3　　　Serial interface Com 3.
▥➡ Only available for selection, if the optional I/O board is installed and if the interface is not occupied by another function.

> DRIVEASSIGNMENT

❍ For detailed information read the Easy-Plug manual, topic section General Notes, Definitions and Command Overview 🗋, chapter „Drive names".

Drive C

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Assigns drive letter C: to one of the card slots.

None　　　　　　C: is not assigned

CompactFlash　　(Default for CPU boards *up to* index A6621-06) C: is assigned to the standard CF card slot (left slot at the 64-xx)

SD card　　　　(Default for CPU boards with index A6621-07 *or higher*) Assigns drive letter C: to the SD card slot

USB-stick　　　　C: is assigned to the USB host port.

Drive E

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only with CPU boards *up to* index A6621-06

Assigns drive letter E: to one of the card slots or USB ports.

None　　　　　　E: is not assigned

CompactFlash　　E: is assigned to the standard CF card slot (left slot at the 64-xx)

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

SD card   (Default) Assigns drive letter E: to the SD card slot

USB stick   E: is assigned to the first detected USB host connector

Drive F

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Assigns drive letter F: to one of the card slots or USB ports.

None   F: is not assigned

CompactFlash   F: is assigned to the standard CF card slot (left slot at the 64-xx)

SD card   Assigns drive letter F: to the SD card slot

USB stick   (Default) F: is assigned to the first detected USB host connector

SYSTEM PARAMETER

Speed unit

ALX 92x	DPM	PEM

The print or feed speed can optional be set in mm/s or in inch/s.

mm/s   Set speeds in mm/s

Inch/s   Set speeds in inch/s (default)

Cover open error

64-xx	ALX 92x	DPM	PEM

Defines, when the status message „Cover open" appears:

PrintStatus:	5003
Cover open	

Immediately   (Default) Status message appears immediately after opening the hood.

If material feed (Default for 64-xx) Statusmessage appears if the hood is open and material feed is supposed to start.

Foil end warning

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Setting of a limit diameter for the ribbon roll. If the ribbon roll diameter falls below the set value, the displayed message changes from…

ONLINE	X JOBS

…to…

FOLIE	X JOBS

…while the display is blinking.

64-xx, DPM / PEM, ALX 92x:
Additionally to the display message, a signal is set at the (optional) USI.

❍ For details refer to the parameters DP INTERFACE > Ribbon signal and
  SERVICE DATA > OPERATION DATA > Foil diameter

x.xx mm   Setting range: 25.4 to 50.0 mm; Unit interval: 0.1 mm;
Default setting: 25.4 mm

Foil warn stop

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Off   (Default setting) Printer does *not* stop in case of a „Foil end warning".

On   If a „Foil end warning" occurs, the printer stops after the current label and shows the status message:

> PrintStatus: 5110
> Foil low

➜ Press the online button to acknowledge the message, then the feed button to continue printing.

Disp. Cnt. Reset

64-xx	ALX 92x	DPM	PEM

Dispense Counter Reset

▥➡ Only with SYSTEM PARAMETER > Periph. device = „Dispenser"

No   The dispense counter is not reset (default setting)

Yes   The dispense counter is reset

Autom. dot check

64-xx	ALX 92x	DPM	PEM

Automatic dot check

Checks the print head for defective dots. The dot check can be carried out either after powerering on the printer or in print pauses between print jobs.

Continuous   The dot check is carried out in pauses between print jobs. If a new print job arrives bevor the dot check is done, the print job will be prefered. The printer then interrupts the dot check and proceeds later with the next "opportunity" at the last tested dot.

The parameters *Early dottest, Latest dottest, Dottestarea from, Dottestarea to* determine the conditions under which the dot check is executed.

▥➡ Those parameters show up only,
– if "continuous" has been selected
– after the following automatic restart of the printer!

Power on only   The dot check is proceeded immediately after powering on the printer. During testing appears the – blinking – display message:

> OFFLINE   0 JOBS
> Head   dot   test

Off   The automatic dot check is switched off.

Early dottest

64-xx	ALX 92x	DPM	PEM

▥➡ Only if SYSTEM PARAMETER > Autom. dot check = „Continuous".
Earliest dot check

Determines the number of printed labels, after which the dot check should at the earliest start.

Example:
The setting 3 means that the dot check starts in the first printing pause after three printed labels. After a successfully executed dot check starts the next dot check again in the first pause after three printed labels.

after x label   Setting range: 1 to 9999; Unit interval: 1; default setting: 10

Latest dottest

64-xx	ALX 92x	DPM	PEM

➠ Only if SYSTEM PARAMETER > Autom. dot check = „Continuous".
Determins the number of printed labels, after which the dot check must be finished.

Example:
The setting 5 means that the dot check has to be finished at the latest after the fifth printed label. If necessary, printing is interrupted after the fifth label. After a successfully proceeded dot check has the next dot check again to be finished after five labels.

after x label　　　Setting range: 1 to 9999; Unit interval: 1; default setting: 0

➠ The setting "after 0 label" means, that the dot check will possibly be never finished! – given a high utilization of the printer (A printing pause will never be forced).
➠ The value for "Latest dottest" must be set higher than the value for "Early dottest"! (exception: value 0).

Dottestarea from

64-xx	ALX 92x	DPM	PEM

➠ Only if SYSTEM PARAMETER > Autom. dot check = „Continuous".
Limitates the area of a print head, in which the dots are checked. The parameter sets the lower border of the dot check area. The value equals the distance to the left print head end in mm, looked at the print head from above (see Fig. 13).

x mm　　　Setting range: refer to Tab. 3; Unit interval: 1; default setting: 0 mm

Printer type	Setting range in mm	No. of dotss
64-04 / Chess 4	0-107	1280
64-05 / Chess 5	0-128	1536
64-06 / Chess 6	0-160	1920
64-08 / Chess 8	0-214	2560

[6]　*Setting range for the dot check, depending on the print head width. Right column: Total number of dots of the print head.*

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)
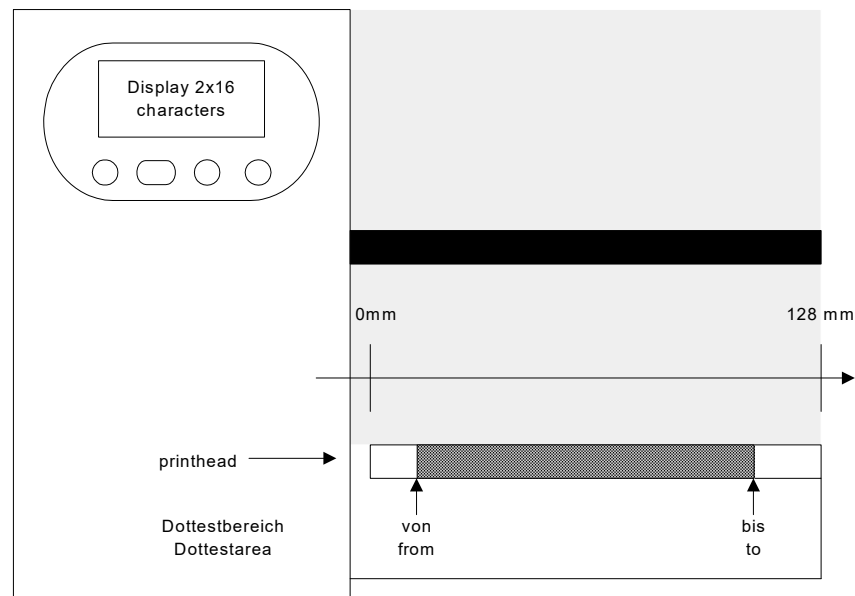
[16] *Dot check area (=Dottestarea) of the printer (schematic).*

Dottestarea to

64-xx	ALX 92x	DPM	PEM

▥➡ Only if SYSTEM PARAMETER > Autom. dot check = „Continuous".
Upper border of the dot check area. The value sets the distance in mm to the left print head end, looked at on the print head from above.

x mm   Setting range: refer to Tab. 3; Unit interval: 1; Default setting: 0 mm

Print Interpret.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Easyplug   Printjobs written in the Easy-Plug command language can be interpreted.

Lineprinter   Lineprinter (or similar to Lineprinter), print-out of the print command.

Hex Dump   Print-out in hexadecimal format.

In Lineprinter and Hex Dump, commands are printed out in the form of a list with the character set 12.

▥➡ When setting Lineprinter or Hex Dump, Easy Plug commands which have not yet been processed are deleted!

ZPL Emulation   Printjobs written in the ZPL II[®1)] command language („ZPL") can be interpreted.
▥➡ Firmware loading requires changing into EasyPlug first.

EasyPlug/ZPL Emu   Printjobs in EasyPlug and ZPL can be interpreted.

---

1) ZPL II is a registered trademark of ZIH Corp.

⫸ Use this setting only for simple printjobs. Complications are more likely with this setting.

Character sets

64-xx　　ALX 92x　　DPM　　PEM　ALX 73x (PMA)

Setting the character set:

- *16bit:* UTF-8 coding.

- *8bit*: Choose between IBM and ANSI character set.

- *7Bit*: Additionally to the IBM and ANSI character sets, some country specific character sets are provided, which have some characters allocated differently (see table below)

⫸ The country specific character sets are only suitable for older 7bit applications!

Decimal	35	36	64	91	92	93	94	96	123	124	125	126	>127
ASCII	#	$	@	[	\	]	^	'	{	|	}	~	
UTF-8	#	$	@	[	\	]	^	`	{	|	}	~	print
ISO 8859-2	#	$	@	[	\	]	^	`	{	|	}	~	print
ANSI (CP 1250)	#	$	@	[	\	]	^	`	{	|	}	~	print
ANSI (CP 1252) [a]	#	$	@	[	\	]	^	`	{	|	}	~	print
IBM	#	$	@	[	\	]	^	`	{	|	}	~	print
Special	ƒ	¢	blank	blank	¼	½	blank	blank	«	•	»	±	blank
Norway	#	$	@	Æ	¥	Å	^	`	æ	¢	å	~	blank
Spain	#	$	@	i	Ñ	Ç	^	`	¿	ñ	ç	~	blank
Sweden	#	•	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü	blank
Italy	Š	$	§	°	ç	é	^	ù	à	ò	è	`	blank
Germany	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß	blank
France	£	$	à	°	ç	§	^	`	é	ù	è	~	blank
United Kingdom	£	$	@	[	\	]	^	`	{	|	}	½	blank
USA	#	$	@	[	\	]	^	`	{	|	}	~	blank
	blank = space, print = printable												

[7]　Country settings for applications, which base on 7bit ASCII code.

a) *Covering ISO 8859-1.*

❍ For complete tables of all fixfonts characters available with setting "IBM" refer to the User Manual, topic section "Internal Fonts". You also find there a comparison of the IBM and ANSI character sets.

Character filter

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Character >= 20Hex   Filter function is activated. Characters smaller than 20H are filtered out of the data flow.

All character   Filter function is deactivated. Characters smaller than 20H are treated as normal characters.

Light sens. type

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Light sensor type

The optional reflex photoelectric switch for labels with reflecting length markings, or the normal factory-fitted photoelectric switch for labels with transparent or register gaps (self-adhesive labels), must be defined according to the application.

Full Size   Full Size photoelectric switch (Adjustment range is the material width).

Reflex   Reflex photoelectric switch (for reflecting markings)

Punched   Transparent photoelectric switch (for gaps)

Head-sensor dist.

(Distance between printline and label sensor)

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Parameter appears only in production mode or if a value > 0 is set.
Printhead-sensor distance

Special function for setting non-standard punch sensors. Such sensors can be applied in special application devices ("Nistan"). The value x is the distance between thermal edge and punch sensor in millimeters.

x mm   Setting range: 0 to 400 mm

➠ A „non standard sensor" must be installed and connected instead of the regular punch sensor.
➠ 0 = disabled (the regular punch sensor is used).

Ribbon autoecon.

64-xx	DPM	PEM	ALX 92x

Ribbon automatic economy mode („ribbon saving")

Generally can be chosen between thermal transfer printing and thermal direct printing. It is necessary to select the type of printing in order to be able to switch over the ribbon end detection.

Switching on the Ribbon automatic economy mode in *thermal transfer* mode interrupts the ribbon feed between print periods. This saves ribbon, particularly with long labels with a minimum print area. The additional feature in turbo mode is that a higher feed speed is used between the print periods. The feed speed is set in PRINT PARAMETERS > Feed speed.

With the setting „Thermal/headlift" activated in *thermal direct* mode, the printhead is lifted between print periods. This reduces printhead abrasion.

➠ The settings „On", „Thermal/headlift" and „On Turbo" should only be activated with unprinted areas from at least approx. 10 mm in length.

Thermal/headlift	Thermal direct printing with printhead lifting
Thermal printing	Thermal direct printing (Ribbon-end-LS switched off)
On	Thermal transfer printing with ribbon automatic economy mode on
Off	Thermal transfer printing with ribbon automatic economy mode off
On Turbo	Thermal transfer printing with turbo ribbon automatic economy mode on

Ribbon economy limit

64-xx	DPM	PEM	ALX 92x

The ribbon economy limit determins the length of the printing free area on the label from that on the ribbon economy automatic should be activated.

➠ Only with SYSTEM PARAMETER > Ribbon autoecon. = „On".

x,xx mm Setting range: xx up to 100,0 mm; Unit interval: 0,1 mm (the initial value depends on the feed speed)
Default-value: 5.0 mm

Head down lead

64-xx	DPM	PEM	ALX 92x

Defines the distance the printhead has to touch down *before* the first printed dotline. The function improves the print quality when entering a printed area with activated ribbon autoeconomy function.

➠ Only with SYSTEM PARAMETER > Ribbon autoecon. = „On".
➠ Only in production mode or with a setting of x > 0.

x.x mm Setting range: [0.0...10.0] mm; Default setting: 0.0 mm; Step width: 0.1 mm

Feed mode

64-xx	DPM	PEM	ALX 92x

Head up (Default) The printhead is *lifted* during label material initialization and label feeding.

Head down The printhead is *down* during label material initialization and label feeding. For certain critical label materials, this setting can result in a better impression accuracy on the first label compared to the following labels.

Turn-on mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Operating mode of the printer after it has been switched on.

Online　　　　　　Printer starts in on-line mode.

Offline　　　　　　Printer starts in off-line mode.

Standalone　　　　Printer starts in standalone mode.

Error reprint

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

If an error occurs while a label is printed, the last printed label is reprinted. For label layouts containing variable data (for example, count fields), disable the reprint function.

On　　　　　　　　Reprint in error cases (default setting)

Off　　　　　　　　No reprint in error cases.

EasyPlug error

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Handling of errors caused by faulty Easy-Plug commands.

Tolerant handl.　　The label is printed, after the Easy-Plug/Bitimage error was acknowledged (default setting).

Strict handling　　The Easy-Plug command, which caused the error, is displayed after approx. 2 seconds in the lower display line. The displayed text is up to 30 characters long and is scrolled automatically.

If a single character caused the error, this character is marked with „>> <<„ in the display text, to facilitate the detection.

By pressing the cut button, the display can be toggled between error message and Easy-Plug command text.

After acknowledging the first occured Easy-Plug error, the printjob and the spooler are deleted (as by #!CA). This prevents the printing of labels with format errors.

Single job mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

In single job mode (also stop mode) the printer stops after every job and waits until the operator restarts the print process.

Off　　　　　　　　Single job mode is switched off (default setting).

On   Single job mode is switched on. The printer always displays "Start next job",
                           before starting a new print job. This requests the user to acknowledge by
                           pressing the Online button.

Head resistance

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

For optimum print quality, the individual print head resistance of the thermo
head employed in the device must be set once with this parameter.

When replacing the print head, the resistance value of the print head (to be
read off from the print head) must be entered again.

⚠️   CAUTION!

        Entering a false value can damage the print head.

   ➔ Read off the correct value from the print head and set it accordingly.

---

xxxx Ohm   ⇒ The value set here remains when the factory settings are carried out.
                 Setting range: 1000 to 1500 Ohm; Unit interval: 1 Ohm

                 Setting the print head resistance:

                 Setting:

1. From the print head, read off the resistance value to be set and make a note
   of it (1000 to 1500).

2. In off-line mode press the Prog. button, display: *PRINT INFO*.

3. Press the Cut button until *SYSTEM PARAMETER* is displayed.

4. Press the Online button, display:

   SYSTEM PARAMETER
   Foil end warning

5. Press the Cut button until the following is displayed:

   SYSTEM PARAMETER
   Head resistance

6. Press the Online button, set value is displayed.

7. Set the previously noted resistance value of the print head using the Feed
   and Cut buttons.

8. Press the Online button to confirm the set value.

9. Press the Prog. button to return to the display *OFFLINE 0 JOBS*.

Temp. reduction

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Reduction in the print head temperature

The parameter SYSTEM PARAMETER > Temperature reduct. allows the power supply to be reduced in the event of an increase in the print head temperature, thereby ensuring an evenly good print image.

xxx%   Setting range: 0 to 100 %; Unit interval: 5 %

The following setting alternatives are available:

- 0%: No temperature reduction.
- xx%: Up to xx% temperature reduction with a hot print head.
- Default setting: 20 %.

❍ For further information refer to the user manual, topic section „Advanced Application", chapter „Printing with Termperature Compensation"

Voltage offset

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The voltage offset increases the head voltage and therefore the head temperature which e.g. was set by Easy Plug command (HV).

xx%   Setting range: 0 to 30%; Unit interval: 1%; Default setting: 0%

Expand Logo

64-xx	ALX 92x	DPM	PEM

▥➡ Only with 8-Dot emulation.

Off   Logos are printed in normal size.

On   Logos are printed enlarged.

Miss. label tol.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Missing label tolerance

The maximum search path for gaps which cannot be found can be varied. In cases of difficult gap detection (i. e. minimum variation in the light transparency, gap to label), shortening the search path is to be recommended. Label loss resulting from gaps not being detected can be reduced in this way. Printing does not take place during the search process.

xx   Setting range: 0 to 50; Unit interval: 1

- Example 0 (Zero label length):
  A gap must be found after a printed label otherwise an error message is given. This setting is for detecting every missing label.

- Example 5 (Five label lengths):

A gap must be found after a maximum of 5 label lengths otherwise an error message is given.

Gap detect mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

After one of the following events, the printer must always search for the punch, that is initialize the label material:

- After switching the printer on
- After changing the label material

Manual
The operator has to initialize the material the first time always manually by pressing the feed key several times.

Autom. Forward
(Default for printers) The material initialization is always done automatically, if necessary. There is no backward movement of the material during the initialization.

Autom. feed back
⫸ Only *64-xx Dispenser, ALX 92x, DPM/PEM*
(Default for those devices) The material initialization is always done automatically, if necessary. The label material is moved forward and backward during the initialization. The stretch of backward movement can be set with parameter SYSTEM PARAMETER > Max InitFeedback **(see below).**

Foil stretching

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ 64-xx: Only standard printers (without dispenser).
After stopping and restarting the print process, the print quality can fall off for a short stretch in the area printed first after the restart. The reason for this behaviour is the foil tension, which relaxes slightly due to the stopping.

The foil stretching function feeds the label material backwards for the defined stretch befor restarting the print process. Afterwards, feeding starts befor the printing. This stretches the foil before printing starts.

- Advantage: High print quality from the beginning
- Disadvantage: Higher foil consumption; lower label rate

Feedback = xx mm
Setting range: 0 to 20 mm; Step width: 1 mm; Default setting: 5 mm

Head lift autom.

			PEM	ALX 73x (PMA)

Some applications with high print speed and/or small labels have shown that the imprint accuracy differs, depending on if there is a print stop between two labels or not. The function „Head lift automatic" lifts the printhead between all labels for a short time and thus provides a more regular imprint accuracy.

⫸ The function reduces the label throughput, because each head lift needs about 80 ms time.

Off   Head lift automatic is switched off.

On   Head lift automatic is switched on. The printhead is lifted automatically after each printed label.

Mat.end detect.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Material end detection.

The material end detection can be deactivated for processing labels with gaps longer than 15 mm, or if using material with a high fluctuation in light transparency (Status message „5002 material end" is displayed even though material is present).

> **CAUTION!**
>
> Soiling or damaging the print roller.
>
> → Endless (= not converted) material should not be processed when the material end detection is deactivated (otherwise, printing is continued on the print roller after material end).

Reflex   Material end detection by means of a reflex sensor.

Transparent   Material end detection by means of a transmission sensor.

Off   No material end detection.

Periph. device

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

After installation, options must be selected under "Peripheral device" in order to be assured of the corresponding sensor queries and printer reactions.

> **CAUTION!**
>
> Selecting an incorrect option can lead to malfunctions or damage.

None   No peripheral device is installed.

Cutter   Sets the printer firmware to the cutter option. Selection permits access to the cut parameters.

Rewinder   Sets the printer firmware to the rewinder option. Selection permits access to the rewinder setting parameters.

Tear-off edge   (Default setting) Sets the printer firmware to the tear-off edge option. The punch is fed forward to the tear-off edge.

Dispenser   Setting for 64-xx dispenser version.

➠ (ALX 92x/DPM) Parameter is displayed in production mode only.

➠ (64-04/05) After selecting this value, the parameter SPECIAL FUNCTION > Disp. Head Offs. appears automatically, if the parameter SPECIAL FUNCTION > Printhead type is set to „KCE 4 Inch".

❍ See parameter Disp. Head Offs. 🗋 on page 131.

❍ See parameter Printhead type 🗋 on page 130.

Disp. with LTSI   Setting for operation of a LTSI applicator, see Technical Manual LTSI 🗋

Singlestartquant

64-xx	ALX 92x	DPM	PEM

Determines the label quantity, which will be printed after a start signal.

xx   Setting range: 1 to 10; Unit interval: 1; Default setting: 1

Head disp dist

(Distance printhead - dispensing edge)

64-xx	ALX 92x	DPM

⫸ 64-xx: 64-xx dispenser only and only with SYSTEM PARAMETER > Dispensing edge = „User defined"

For setting the distance between printhead and dispensing edge.

xxx.x mm   Setting range: 10.0 to 100.0 mm; Unit interval: 0.1 mm; Default setting: 20 mm

External signal

64-xx	ALX 92x	DPM	PEM

The parameter determines, if and how an incoming signal at the - optional - single start connector will be interpreted.

Off   Signal interpretation disabled.

Singlestart   The signal triggers the printing of a single label. This setting may be used e.g. for printing single labels by means of a foot switch.

Stacker full   The signal triggers the display of a status report and stops the printer. This setting may be used when using a stacker (= stacker full signal).

❍ Detailed information about using start signals can be found in the user manual, topic section „Advanced Applications", chapter „Printing with start signal", Settings in the parameter menu 🗋

Start print mode

64-xx	ALX 92x	DPM	PEM

Selecting a print mode. Depending on the selected mode, a start signal at the single-start input will be interpreted differently.

❍ Information about using the start signal: see user manual, topic section „Special applications", chapter „Printing with start signal".

Pulse fall/ris   The printing of a label is triggered by a low-high-change as well as by a high-low-change of the start signal. The printing occurs only after the set delay time.

Level high activ   Labels are being printed as long as the start signal is held high.

Pulse rising   The printing of a label is triggered by a low-high-change of the start signal. The printing occurs only after the set delay time.

Level low active   Labels are being printed as long as the start signal is held low.

Pulse falling   (Default setting) The printing of a label is triggered by a high-low-change of the start signal. The printing occurs only after the set delay time.

Apply key

64-xx	ALX 92x	DPM	PEM

➠ 64-xx: Only if SYSTEM PARAMETER > Periph. device is set to „Dispenser".
➠ Parameter is displayed in production mode only.
➠ Only if SYSTEM PARAMETER > External signal is set to „Singlestart"

On   (Default) The application can be triggered by pressing the cut respectively apply key.

Off   Triggering the application by pressing the cut/apply key is *not* possible.

Print contrast

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

xxx%   Setting range: 1 to 110%; Unit interval: 1; Default setting: 60

> ⚠ CAUTION!
>
> The parameter Print contrast affects directly the life durance of the printhead. It counts: „The higher the setting of Print contrast is, the lower is the life durance of the printhead". This counts even more for settings above 100%. Therefore mind:
>
> ➔ Always choose the lowest possible setting necessary to produce an acceptable print result.

Ram disk size

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

A part of the printer memory can be identified as a RAM disk. The RAM disk can be used in the same way as the Compact Flash Card, e.g. for storage of logos or fonts.

With the parameter Ram disk size, the customer can set the size of the RAM disk to his needs. Be aware, that RAM disk memory is not available for print picture buildup. Use of much RAM disk memory reduces the picture buildup rate of the printer.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

▥➡ Switching the printer off extinguishes the memory content! Fonts, logos etc., which were loaded on the RAM disk, must be loaded again after switching the printer off.

xxxx KBytes Setting range: 128 KBytes to the maximum size, which depends on the memory configuration and allocation of the printer; Unit interval: 128 KBytes; Default setting: 512 KBytes.

❍ See also parameter PRINT INFO > Memory status.

Font downl. area

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

If speedo-fonts are supposed to be used, they have first to be copied to a reserved RAM disk area. Use parameter „Font downl. area" to reserve the RAM disk area in the required size.

The size of the required RAM disk area depends on the size of the font files to be loaded.

▥➡ Mind to reserve a big enough RAM disk area!
There are two ways to copy the font files to the RAM disk:

• Copy from CompactFlashcard:
The font files must be placed in a folder named \fonts on the CompactFlashcard during system startup. The files must be named fontxxx.spd (xxx = No. from 200 up to 999).

❍ For details refer to the „Plugin-card manual", topic section „Application", paragraph CF/SD-cards ⃞.

• Copy via Easy Plug command #DF (download file).

❍ More information about the #DF command: See manual „Easy Plug", topic section Description of Commands ⃞.

xxx KBytes Setting range: 128 KBytes to the maximum size, which depends on the memory configuration and allocation of the printer; Unit interval: 128 KBytes; Default setting: 256 KBytes

▥➡ Switching the printer off extinguishes the memory content! Fonts, logos etc., which were loaded on the RAM disk, must be loaded again after switching the printer off.

Free store size

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

By setting this parameter, a part of the memory is reserved, which the printer firmware can use if necessary (dynamic memory allocation). If this memory area is dimensioned too small, the printer firmware can not work and the error message „8856 Free store size" shows up.

▥➡ The more memory is allocated using this parameter, the less memory is available for print jobs.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

xxx KBytes   Setting range: 4 MB to the maximum size, which depends on the memory configuration and allocation of the printer; Unit interval: 128 KBytes; Default setting: 4 MB.

➜ A good advice is to increase the set value step by step, starting with the minimum of 4 MB, until the status message 8856 ("Free store size", what means the memory area is low) does no longer appear during data conversion.

❍ Use with the Easy Plug command #YG, see manual Easy Plug ⬚.
❍ See parameter Memory status ⬚ on page 31.

Print info mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Structure option for info printouts.

Par. values right   Setting for 100 mm material width. The parameter values are printed on the right side of the parameter names:

Parameter name: Value

Par. values left   Setting for 100 mm material width. The parameter values are printed on the left side of the parameter names:

Value: Parameter name

Compact right   Setting for 50 mm material width. The parameter values are printed on the right side of the parameter names:

Parameter name: Value

Compact left   Setting for 50 mm material width. The parameter values are printed on the left side of the parameter names:

Value: Parameter name

Reprint function

64-xx	ALX 92x	DPM	PEM

Off   (Default setting) Reprinting is not possible.

On   The last printed label can be reprinted by pressing the feed button in online mode, if the printer is not printing at that moment.

Language

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Setting the display language.

Japanese
Chinese   ➠ Not all chinese display texts are translated. Not translated texts are displayed in english.

Czech
Russian
Turkish
Polish
Italian
Danish
Dutch
Spanish
French
English
German

Keyboard

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Setting the keyboard layout country version for standalone operation.

Polish
Swedish
Finish
Danish
Spanish
French
English
German

Signal / buzzer

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

On   Tone signal activated

Off   Tone signal deactivated

Access authoriz.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Access authorization

Limits the access either to all printer functions (Power-up code) or only to the parameter menu (user or supervisor mode). Changed settings become active after the next switch-on.

Key codes

Regardless when the code is prompted, can three different key codes be typed in tab. 8.

Enter code

Entering a key code: Type the corresponding buttons of the control panel in succession. A valid key code switches the printer into the appropriate mode.

Mode	Key code	Impact
User	2x Cut [a], Feed, Online	Access only to the submenus PRINT INFO and SERVICE DATA
Operator	Cut, Online, Feed, Prog	Access to reduced parameter menu
Supervisor	2x Online, Feed, Cut, 2x Online	Access to all parameters except production parameters
Production	Cut, Online, Feed, Cut, 3x Online	Access to all parameters

[8]   *Permissible key codes.*

a) *With DPM, PEM, ALX 92x press Apply-key instead.*

⚠️ CAUTION!

Production mode: Input errors to certain parameters can make the printer in-operable or can damage it.

➜ The production code may only be applied by *trained service technicians*.

〰➜ Especially service technicians may use the direct access into production mode, even if the parameter Access authoriz. is set to „Off", what means that no password will be queried at all. To do so, proceed as follows:

1. Switch printer off.

2. Switch printer on, simultaneously press the Feed+Prog-key until the printer type is displayed.

   After the printer was powered up, the key code will be queried:

3. Enter the production code.

   Possible Settings

Off   Password interrogation switched off (default)

Power-up code   Activates the password interrogation directly after switching the printer on.

After the input of a valid key code, the printer switches into offline mode. Depending on the entered key code, the printer starts in user, supervisor or production mode.

User   Activates the password interrogation when accessing the parameter menu.
- The printer is in the offline mode after switch-on
- Change to the online mode is possible without restriction
- To reach the parameters-menu, enter a valid key code
- Valid key codes: all

Operator   Access to reduced parameter menu; contains only parameters which are necessary for daily use of the printer.

❍ For details see paragraph 64-xx operator parameters 🗎 on page 15 or paragraph DPM / PEM / ALX 92x operator parameters 🗎 on page 20.

Supervisor   As setting „User", with different valid key codes:
- Valid key codes: Supervisor, Production

User auto start   Printer starts without password interrogation. Only the menus PRINT INFO and SERVICE DATA are accessible.

Realtime clock

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The realtime clock provides actual date and time. Those data can be pro-cesses using the Easy-Plug #YC, #YS or #DM commands.

Realtime Clock	dd=Day, mm=Month, yyyy=Year, hh=Hour,
dd.mm.yyyy hh:mm	mm=Minute (Example: 19.02.2001 14:41)

Setting date / time:

1. Press the CUT(Apply) button repeatedly, until the digit blinks which you want

to alter.

2. Set the intended value to the digit by pressing the FEED button (repeatedly).

3. Repeat steps 1 and 2 until date / time is set correctly.

4. Press the ONLINE button.

▥➡ Press the ESC button to leave the parameter without altering the setting.

Ribbon pre Start

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only visible in production mode

This parameter helps to solve possible printing problems with activated foil saving function. In rare cases, white areas may appear on the printout shortly after the print head has lowered again. By setting this parameter, the film movement will start a little bit earlier and thus solve this problem.

xxx ms   Setting range: 0 to 100 ms; step width: 1 ms; Default setting: 0 ms

Material feed

	ALX 92x	DPM

Suppresses backwards material feeding.

For-/backwards   Standard setting; material is fed forwards and backwards.

Only forwards   The label material is only fed forwards. Printjobs, which contain commands for using R 1:1 or N 1:1 mode, are automatically printed in batch mode. The batch mode is modified in a way, that the label following after a printjob is not drawn back under the printhead, but is ejected in forward direction. The effect is, that one label stays unprinted between two succeeding printjobs.

Print mode	Feed direction following label	
	„for-/backwards"	„Only forwards"
Batch	<-->	-->
R 1:1	<-->	Batch [a]
N 1:1	<-->	Batch [a]

[9] Suppression of the backward movement with the setting „Only forwards".
<--> = Material feeding in both direction; --> = Material feeding only forwards.

a) The backwards movement is suppressed during initialization.

DISPENSER PARA

▥➡ This menu appears only, if SYSTEM PARAMETER > Periph. device is set to „Dispenser“.

Head disp dist.

(Distance printhead - dispensing edge)

ALX 92x	DPM

xxx,x mm   Setting range: 10.0 to 200.0 mm; Step width: 0.1 mm; Default setting: 20 mm

Dispense Mode

64-xx	ALX 92x	DPM

Governs the run of the print-dispense procedure.

▥➡ Only if SYSTEM PARAMETER > Periph. device = „Dispenser“.

▥➡ The ribbon autoeconomy function can only be used in "Real 1:1 Mode"!

Dispense only   With this setting, the printer can be used as a mere dispenser without processing print jobs. Set the material length before you use this function.

❍ See parameter PRINT PARAMETERS > Material length.

After calling "Dispense only", the printer restarts; afterwards, the following is displayed:

| Dispense only | | 0 = Number of dispensed labels. |
| Labels | 0 | |

The parameters menu can be activated as usual after having switched to the offline mode by pressing the Online button two times.

Normal 1:1 Mode
- The printer cannot print on the whole label surface. A stripe at the label beginning stays unprinted.
- The label is being dispensed while printing.
- The output volume is at its maximum level.

▥➡ The width of the unprintable strip is calculated as follows:
Distance print line to dispensing edge (25 mm) + Dispense position (tab. 10)

Printer	Distance print line - dispensing edge
64-xx	39.8 mm (long dispensing edge) 24.2 mm (short dispensing edge)
AP 5.4	25.0 mm

[10] Distances between print line and dispensing edge for some printers.

▥➡ The position of the print image on the label depends on the length of the unprintable strip. If the dispensing position is changed, or printed on a different device or with a different dispensing edge, the position of the print image shifts in or against the print direction.

❍ Also refer to parameter PRINT PARAMETERS > Dispense position.
❍ A graphic can be found under PRINT PARAMETERS > Cut mode > Normal 1:1 mode.
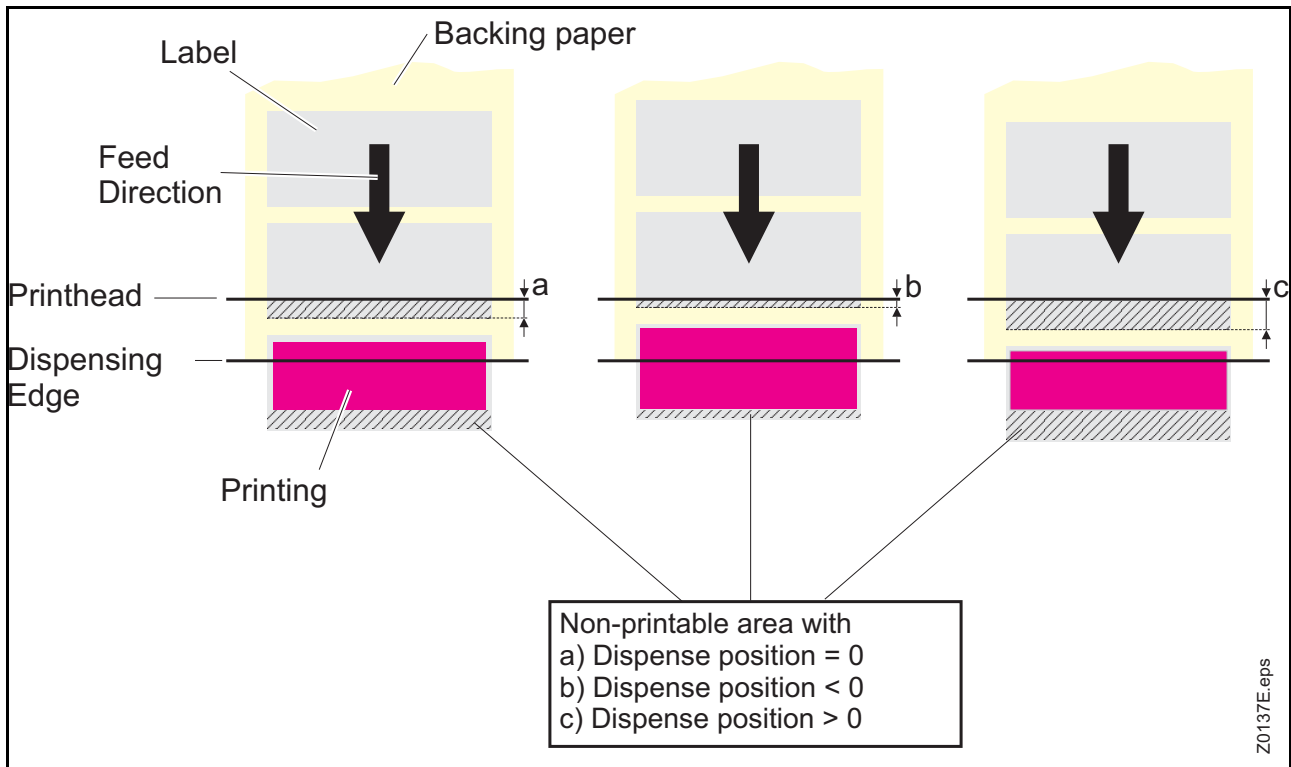
[17] The size of the not imprintable area in Normal 1:1 depends of the setting of parameter DISPENSE PARAMETERS > Dispense Position.

Batch Mode
- The printer can print the whole label surface.
- Dispensing of the label takes place during printing. Printing of the next label is interrupted until the label is completely dispensed.
- The output volume is at its maximum level.

  ➠ The *Batch mode* is optimised for printing and dispensing at high speeds. Due to this, it is not possible to use all features awaliable in modes *Normal 1:1* or *Real 1:1*. Also consider, that printing data must be available on time and in sufficient quantity.
  ➠ The following must be considered in batch mode:
- Printjobs must not contain counter fields or variable fields
- DISPENSE PARAMETER > Dispensing mode must be set to "fast".
- The USI reprint function is not supported. DP INTERFACE > Reprint signal must be set to "deactivated".
- Foil save must not be activated

  ❍ A graphic can be found under PRINT PARAMETERS > Cut mode > Batch mode.

Real 1:1 Mode
(Default setting)

- The printer can print the whole label surface.
- After dispensing a label, the beginning of the next label is drawn back under the print head.
- The output volume is lower than in *Batch Mode* or *Normal 1:1 Mode*.

  ❍ A graphic can be found under PRINT PARAMETERS > Cut mode > Real 1:1 mode.

Dispenseposition

64-xx	ALX 92x	DPM

▬▶ **Only if** SYSTEM PARAMETER > Periph. device = „Dispenser".

Adjusts the dispense position in or against the feed direction. Depending on the set dispense position, the dispensed label sticks to the backing paper with a more or less wide strip [18]. The required width of this strip depends on the further processing.
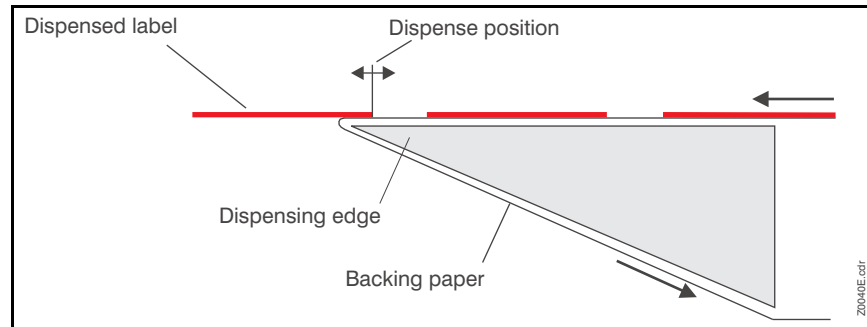
[18] Dispense position of the dispensed label.

x.x mm   Setting range: -30.0 to +20.0 mm; Unit interval: 0.1 mm; Default setting: -6.0 mm

Display mode

64-xx	ALX 92x	DPM

▸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".
Makes the *already* printed labels appear in the display instead of the *not yet* printed ones.

Job rest quant.   Display of the *not yet* printed labels of a print job.

Dispense counter   Counting of start pulses. Activate the counter by selecting "Dispense counter". The counted number appears on the display after the parameter *Dispense counter* (see below) has been selected.

▸ The counter keeps it´s value even after switching the printer off.

Dispense counter

64-xx	ALX 92x	DPM

▸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".

Dispense counter	xxxxxx = Number of dispensed labels.
xxxxxx	

The displayed value can be varied by pressing the Cut or Feed button.

Resetting the counter: SYSTEM PARAMETER > Disp. Cnt. Reset = „Yes"

Dispensing mode

64-xx	ALX 92x	DPM	PEM

▸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".
▸ Only effective in real 1:1 mode!
Real 1:1 mode normally bears the disadvantage of a slightly lower impression accuracy, caused by the additional slippage at the rollers while feeding back.

The parameter "Dispensing mode" enables optimal positioned printouts even in real 1:1 mode. This accuracy is reached by feeding back the next label to be printed behind the gap sensor instead of "only" as far as under the print head. The additional distance of backwards feeding reduces the output rate slightly.

exact   Printout with a maximum impression accuracy

fast   (Default) Printout with a lower impression accuracy but higher output rate.

Application mode

64-xx	ALX 92x	DPM

▸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".

Save Mode   A start signal is required to draw the next label back under the print head. This setting bears advantages for label material with a strong adhesive, which would not stay attached to the applicator when the backing paper is fed backwards.

Immediate Mode   After the just printed label has reached the dispense position, the following label is drawn back under the print head. The dispensed label stays attached to the applicator (default setting).

Synchronous mode   Drawing back of the next label to be printed is triggered by the *not* active edge of the start signal. The active edge is defined with Start print mode. *Not* active is the opposite signal edge.

Requirements:

- USI:
  – USI firmware version: 7 or higher
  – DP INTERFACE > Start print mode = „Pulse rising" or „Pulse falling"
- AI: APPLICATOR PARA > Start print mode = „Pulse rising" or „Pulse falling"

Start source

64-xx

⫸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".
Choose a signal source for the start signal:

Foot switch   Optional foot switch is used to generate the start signal.

Light barrier   (Default setting) Photoelectric switch at the dispensing edge which detects the taking off of the dispensed label.

⫸ The setting "Light barrier" is unsuitable for product sensors! Product sensors must be connected to the I/O board!

Dispensing edge

64-xx

⫸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".
Adapts the feeding to the length of the dispensing edge.

long   Long dispensing edge

short   Short dispensing edge (Default setting)

User defined   The distance between print line and dispensing edge can be set by SYSTEM PARAMETER > Head disp dist (see below). This is helpful if none of the standard dispensing edges are applied.

Max InitFeedback

64-xx   ALX 92x   DPM

⫸ 64-xx: Only with dispenser version.
⫸ Only if SYSTEM PARAMETER > Gap detect mode = „Autom. feed back".

During initialization, the label material is fed back until the next punch/reflex mark is reached. This parameter defines the maximum admissible backwards feeding length.

xx mm   Setting range: 0 to 200 mm; Step width: 1 mm; Default setting: 80 mm

Transport mode

64-xx

⫸ Only if SYSTEM PARAMETER > Periph. device = „Dispenser".

In normal operation mode, the rewinder motor (Dispenser Motor) feeds the material, while the feed motor runs idle. When applying very slim material, it can be advisable to add the power of the feed motor in order to prevent material rupture (Dual Motors). To run the printer like a usual non-dispenser, the rewinder motor can be switched off (Printer Motor).

⫸ Absolutely use the "Dual Motors" mode, if the following three conditions are the case:
- Printer is used as dispenser
- Ribbon autoeconomy mode switched on
- Print speed higher than 203 mm/s (8 inch/s)

Printer Motor   Rewinder motor switched off. The printer behaves like a model without dispenser option.

Dual Motors   Both motors (feed and rewinder) are activated.

Dispenser Motor   The feed motor is switched off. The rewinder motor feeds the material (Default setting).

Start offset

64-xx   ALX 92x   DPM

Function for operation with product sensor.

Use this parameter to set the distance between product sensor (light barrier) and dispensing edge. The recommended delay time is calculated of the "Start delay" distance and the conveyor speed (= print speed in cases of direct application).

xxx.x mm   Setting range: 15.0 bis 2999.9 mm; Unit interval: 0.1 mm;
                         Default setting: 15.0 mm

Start error stop

64-xx   ALX 92x   DPM

Function for operation with product sensor.

Determines the reaction of the machine on a product start error. A product start error occurs in the following cases:

- If a further start signal arrives, before the current label is completely printed.

- *With mounted I/O board or USI board only*: If a reprint is requested, before the first label after powering on is printed.
- If a start signal arrives and no printjob is loaded.

  If a product start error occurs, the machine stops and displays the appropriate status message. If an I/O board or an USI is installed, the following output signals are activated (set low):

- ERROR\
- MACHINE STATUS\

On   (Default) Start errors are worked up (the machine stops!)

Off   Start errors are being ignored.

Product length

64-xx	ALX 92x	DPM

Function for operation with product sensor.

If this function is activated, the printer ignores all start signals until the product has passed the dispensing edge.

0.0 mm   Setting range: [0.0…1999.9] mm; Default setting.: 0.0

Speed Adaption

	ALX 92x	DPM	PEM

Aktivieren der Geschwindigkeits-Adaption (APSF)

On   The dispensing speed adapts automatically to match the speed of the conveyor belt.

Prerequisites:

- APSF kit installed
- Rotary encoder installed
- The following parameters must be set to match the applied rotary encoder:
  - DISPENSER PARA > Encoder Type
  - DISPENSER PARA > Encoder Resol.
  - DISPENSER PARA > Encoder Diameter

Off   (Default setting) The dispensing speed remains constant, at the value that was set using parameter PRINT PARAMETERS > Print speed.

Encoder Type

	ALX 92x	DPM	PEM

Type of rotary encoder used.

▥➡ Only if DISPENSER PARA > Speed Adaption = „On"

Single Phase   (Default setting) Setting for single phase rotary encoder

2 Phases normal   Setting for normal 2 phase rotary encoder

2 Phases invert.   Setting for inverted 2 phase rotary encoder

Encoder Resol.

	ALX 92x	DPM	PEM

Resolution of the rotary encoder used.

▥➡ Only if DISPENSER PARA > Speed Adaption = „On"

xxxx   Setting range: 0,0 bis 9999 pulses/turn; Default setting: 500

Encoder Diameter

	ALX 92x	DPM	PEM

Diameter of the measuring wheel at the rotary encoder used.

▥➡ Only if DISPENSER PARA > Speed Adaption = „On"

xxx,x   Setting range: 0,0 bis 200,0 mm; Default setting: 64,0

Encoder Diameter	
200.0 mm	20.6 var

The diameter of the measuring wheel is shown on the left. The current product speed as calculated by the machine appears on the right. If this speed is not equal to the actual speed, the setting for the measuring wheel diameter can be changed to align the actual and measured values for the conveyor speed.

Example shown on display: The speed of the conveyor belt is calculated at 20.6 m/min for a measuring wheel of diameter 200 mm at the current rate of rotation.

Forw feed rat.

64-xx

▥➡ 64-xx dispenser only
▥➡ Only if DISPENSER PARA > Transport mode = „Dual motors"

Forward feed ratio

Setting the forward feed ratio (in dispensing direction)

$$\frac{\text{Dispensing motor feed speed}}{\text{Feed motor feed speed}} \cdot 100\% = \text{Setting value}\%$$

xxx%   Setting range: 90 - 110%; Step width: 1; Default setting: 100%

Backw feed rat.

64-xx

▥➡ 64-xx dispenser only
▥➡ Only if DISPENSER PARA > Transport mode = „Dual motors"

Backward feed ratio

Setting the backward feed ratio (contrary to the dispensing direction)

$$\frac{\text{Dispensing motor feed speed}}{\text{Feed motor feed speed}} \cdot 100\% = \text{Setting value}\%$$

xxx%   Setting range: 90 - 100%; Step width: 1; Default setting: 100%

Multi label mode

ALX 92x   DPM

▮▮▶ Only works if a singlestart connector or an USI is used as signal input - it doesn´t work, if an AI or the operation panel is applied as signal input.

Off   One label is printed/dispensed per start signal.

x labels/start   x labels are printed/dispensed per start signal; x = [2…20]

– For *2 labels* counts: The spacing of the second label corresponds to the value set in DISPENSER PARA > Label 2 offset [19, second row]

– For *3 labels* counts: The spacing of the third label corresponds to the value set in DISPENSER PARA > Label 3 offset [19, third row]

– For *4 to 20 labels* counts: The spacing of all subsequent labels after the 2nd label corresponds to the value set in DISPENSER PARA > Label 2 offset [19, fourth row]
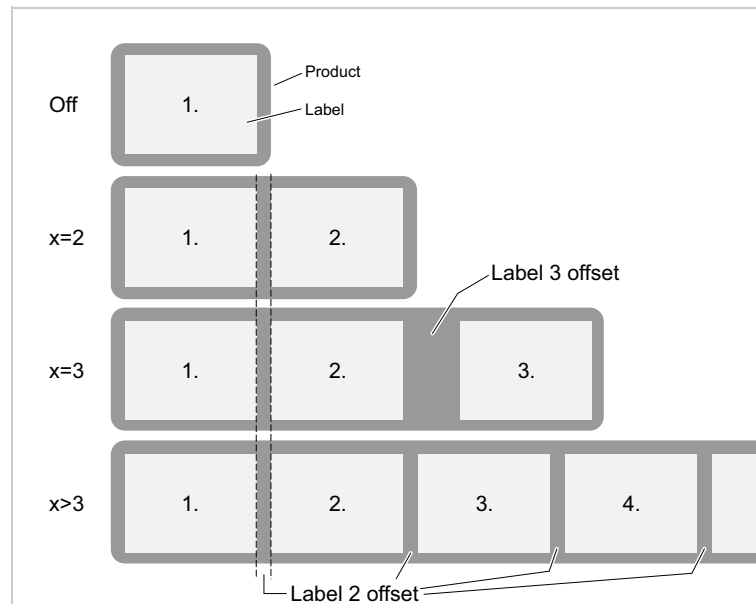
[19] *For 3 labels in a row (x=3) there is the special case that the distances between the first and second label and between the second and third label can be set differently. For all other cases, the distance is the same for all subsequent labels.*

Label 2 offset

ALX 92x   DPM

▮▮▶ Only if DISPENSER PARA > Multi label mode = „x labels/start"

Defines the distance between all labels following the first label, if x = 2 or x > 3 (see DISPENSER PARA > Multi label mode). The distance is measured from the front label edge of the preceding label.

x mm   Setting range: x…9999.9 mm; Default: x, with x = PRINT PARAMETERS > Material length.

⫸ ATTENTION - For the Dispense Mode = „Real 1:1 Mode" the parameter does not work as described. The distance of the next label cannot be entered in millimetres, but must be determined by "trial and error":

1. Set a rather high value, e. g. 700.

2. Trigger the start signal.

3. Will the desired number of labels be dispensed?

   – *Yes*: Continue with step 4.
   – *No*: Increase the value generously (approx +50) and repeat step 2.

4. Decrease value step by step until the desired label distance is reached.

Label 3 offset

ALX 92x	DPM

⫸ **Only if** DISPENSER PARA > Multi label mode = „3 labels/start"

Defines the distance of the 3rd label if x = 3 (see parameter DISPENSER PARA > Multi label mode). The distance is measured from the front label edge of the preceding label.

x mm Setting range: x…9999.9 mm; Default: x, with x = PRINT PARAMETERS > Material length.

⫸ ATTENTION - For the Dispense Mode = „Real 1:1 Mode" the parameter does not work as described. The distance of the next label cannot be entered in millimetres, but must be determined by "trial and error":

1. Set a rather high value, e. g. 700.

2. Trigger the start signal.

3. Will the desired number of labels be dispensed?

   – *Yes*: Continue with step 4.
   – *No*: Increase the value generously (approx +50) and repeat step 2.

4. Decrease value step by step until the desired label distance is reached.

APPLICATOR PARA

▸ This menu only appears in printers of the types DPM, PEM and ALX 92x, and only, if the optional Applicator Interface (AI) is connected.

Applicator type

ALX 92x	DPM

▸ Only with an AI installed.
Selection, which applicator type will be applied:

LTP-LTPV
LTP = Light Touch Pneumatic
LTPV = Light Touch Pneumatic Vacuum
Applicator with „Light Touch" function. „Light Touch" means, that the movement of the (compressed air) cylinder is limited by sensors, which react to a light touch onto the product. The LTPV additionally sucks the labels on with a vacuum nozzle.

Advantages:
- Application on products with different heights possible
- Only light pressure onto the product (important with sensitive products)

○ Refer to Technical Manual LTP/LTPV 🗎.

PEP
The cylinder movement is limited by a setable length of time. After the run out of this application time, the cylinder moves back into home position.

PEP Blow on
PEP-type applicator with blow on function: After run out of the application time, the blow on function is activated. After run out of the blow on time, the applicator moves back into home position.

PEP II Sensor
The cylinder movement is limited by a (touch down) sensor, which signals the contact to the product and triggers the backwards-movement.

ASA
ASA = Air stream applicator. This applicator type has no moving parts, but blows the label onto the product (also called „blow box"). After the start signal, the blow on valve is opened for a setable time length.

Reverse PEP
This applicator is partly time related. Working procedure:
The applicator moves to its end position and "waits" for the start signal. The start signal triggers the blow on valve which is active for the defined blow on time. After the run out or the blown on time, the applicator moves to home position, gets the next label and moves to the wait position.

Direct Dispense
Dispensing with dispensing edge (without applicator).

BTS
BTS = Bad tag separator. This device does the opposite of an applicator: it removes labels from the dispensing edge of a labeller. The BTS is used for sorting out RFID labels, which could not be read/written properly.

O-ring applicat.
Setting for an O-ring applicator.

LA-BO
Label **A**pplicator **B**low **O**n.
○ For details refer to the User Manual LA-BO 🗎

LA-CE
Label **A**pplicator **C**orner **E**dge, applies the label around a corner edge.

LA-SO

Label **A**pplicator **S**wing **O**n, applies the label with a rotation movement.
❍ For details refer to the User Manual LA-SO 🗋

LA-TO Timed

Label **A**pplicator **T**amp **O**n, time controlled

LA-TO Sensor

LA-TO, sensor controlled

LA-TO BO Timed

Label **A**pplicator **T**amp **O**n with **B**low **O**n function, time controlled

LA-TO BO Sensor

Label **A**pplicator **T**amp **O**n with **B**low **O**n function, sensor controlled

❍ For details about LA-TO and LA-TO BO refer to the User Manual LA-TO 🗋

Application mode

ALX 92x	DPM

▥➡ Only with an AI installed.
Defines, if the application process starts with applying („After start signal") or with printing the label. Precondition: A printjob is loaded and the printer is in online mode.

After print

The start signal triggers the immediate printing, dispensing and applying of a label.

After start sig.

The start signal triggers the application of an already printed and dispensed label. After applying the label, the next one is immediately printed and dispensed.

❍ A flow chart illustrating the application process can be found in the User Manual LTP/LTPV 🗋, topic section "Installation / Setup", paragraph „Product description" > "Function diagram LTSI / LTP / LTPV".

Start print mode

ALX 92x	DPM

▥➡ Only with an AI installed.
Selecting a print mode. Depending on the selected mode, the start signal will be interpreted differently by the AI.

Requirements:

- SYSTEM PARAMETER > External signal = „Singlestart"
- A printjob was transferred (DATA READY)
- Printer is switched „Online"
- No error messages

▥➡ Start Print Mode replaces the Parameter SYSTEM PARAMETER > Signal edge, which can be found in older firmware versions.

❍ Further information about using a start signal: Read the user manual, topic section „Advanced Applications", chapter Printing with start signal 🗋.

▥➡ 64-xx: This parameter has priority over SYSTEM PARAMETER > Signal edge, which is relevant for setting the triggering of the single start connector.

Pulse fall/ris

The printing of a label is triggered by a low-high-change as well as by a high-low change of the start signal. The printing occurs only after the set delay time.

Level high active	Labels will be printed as long as the start signal is held high.
Pulse rising	The printing of a label is triggered by a low-high change of the start signal. The printing occurs only after the set delay time.
Level low active	Labels will be printed as long as the start signal is held low.
Pulse falling	(Default setting) The printing of a label is triggered by a high-to-low change of the start signal. The printing occurs only after the set delay time.

Dwell time

ALX 92x	DPM

⮕ Only with an AI installed.
⮕ Only if APPLICATOR PARA > Applicator type = „PEP", „PEP Blow on", „Reverse PEP", „BTS", „LA-SO", „LA-TO zeitgest.".
Defines the dwell time for the apply cylinder. The dwell time is the time during which the cylinder valve is turned on.

xxxxx ms   Setting range: 1 to 99999 ms; Unit interval: 1 ms; Default setting: 1 ms

Blow on time

ALX 92x	DPM

⮕ Only with an AI installed.
⮕ Only if APPLICATOR PARA > Applicator type = „PEP Blow on", „PEP II Sensor", „ASA", „Reverse PEP", BTS, „O-Ring Applikator", „LTP - LTPV" or „LA-BO".

$\boxed{i}$ Standard applicators of the LTP/LTPV types don´t need the „Blow on time" signal, therefore this parameter is not relevant for them. The parameter is intended for special variants of the LTP/LTPV applicator, which provide an additional blow-on function using this signal.

xxxxx ms   Setting range: 0 to 99999 ms; Unit interval: 1 ms; Default setting: 1 ms

Restart delay

ALX 92x	DPM

⮕ Only with an AI installed.
Sets the delay time after the application, during which no start signals are accepted.

xxxxx ms   Setting range: 0 to 99999 ms; Unit interval: 1 ms; Default setting: 0 ms

Apply comp. time

ALX 92x	DPM

⮕ Only with an AI installed.
⮕ Only if APPLICATOR PARA > Applicator type is not „Direct Dispense"

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Compensation time for the applicator stroke time; required for operation with variable conveyor speed.

xxxxx ms Setting range: 0 to 99999 ms; Unit interval: 1 ms; Default setting: 0 ms

❍ For details refer to the service manual ALX 92x, topic section „Installation/ Deinstallation", chapter „Installing APSF" > „Compensation time with applicator operation".

Position timeout

ALX 92x	DPM

▦➡ Only with an AI installed.
▦➡ *Not* with APPLICATOR PARA > Applicator type = „ASA", „Direct Dispense", „LA-BO".

Sets the delay time, after which a position error of the applicator is displayed as an error. A position error occurs, if the applicator doesn´t reach any of its end positions within the required time frame.

xxxxx ms Setting range: 200 to 99999 ms; Unit interval: 1 ms;
Default setting: 2000 ms

Off Set x<200 to disable the function.

Lab release time

ALX 92x	DPM

▦➡ Only with an AI installed.
▦➡ *Not* with APPLICATOR PARA > Applicator type = „ASA".
▦➡ Required setting: APPLICATOR PARA > Application mode = „After printing"
Defines a delay between the dispensing and the start of application of the label.

xxxx ms Setting range: 1-99999 ms; Unit interval: 1 ms; Default setting: 0 ms

Touch down sens.

ALX 92x	DPM

Switching behaviour of the touchdown sensor.

▦➡ Only with an AI installed.
▦➡ Only visible with certain applicator types.

Pulse falling The *falling* signal edge at the sensor triggers the touchdown trigger event

Pulse rising The *rising* signal edge at the sensor triggers the touchdown trigger event

TouchDownTimeout

ALX 92x	DPM

Timeout at the touchdown sensor.

⫸ Only with an AI installed.

⫸ Only visible with certain applicator types.

This time specifies the maximal wait time for the touchdown trigger event. If the specified time is exceeded without the touchdown event, the applicator continues operation in the same manner as the touchdown event would have taken place. *No* error message will appear in this case.

xxxxx   Setting range: 100 to 99999 ms

Off   (Default setting)

I/O BOARD

▥➡ This menu appears only if the optional I/O Board is mounted.

Start print mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only with an I/O board mounted.

Selecting a print mode. Depending on the selected mode, the input signal START_PRINT will be interpreted differently by the I/O Board signal interface. The parameter is also used for the device connected to the foot switch jack.

- Make sure to select SYSTEM PARAMETER > External Signal = „Single Start".
- ❍ See parameter External signal 🗋 on page 88.
- Note: The parameter Start Print Mode replaces the parameter Signal Edge in the SYSTEM PARAMETER menu.
- Preconditions: Print job is available (DATA READY), printer is in "Online" mode, no error messages.

Pulse falling   (Default setting) The printing of a label is triggered by a high-to-low change of the signal at the input START PRINT. The printing occurs only after the set delay time.

Pulse rising   The printing of a label is triggered by a low-high change of the signal at the input START PRINT. The printing occurs only after the set delay time.

Pulse fall/ris   The printing of a label is triggered by a low-high-change as well as by a high-low change of the signal at the input START PRINT. The printing occurs only after the set delay time.

Level low active Labels will be printed as long as the signal at input START PRINT is held low.

Level high activ Labels will be printed as long as the signal at input START PRINT is held high.

Reprint Signal

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only with an I/O board mounted.

Off   The input signal is disabled

On   The last printed label will be reprinted on the falling edge of the REPRINT signal.

Preconditions:

- The label to be reprinted, should be printed and dispensed.
- Printer is in online mode.

▥➡ If a REPRINT is triggered while the printer is in "I/O-Board Pause" mode, the reprint will proceed as soon as the printer is switched back in online mode. Precondition: in level mode START PRINT must be inactive.

Feed input

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▌➡ Only with an I/O board mounted.
Concerns the input signal FEED at the signal interface.

On   (Default setting) Feeding of one label on the falling signal edge. The display shows „I/O board feed" during feeding. Requirements are:

- Offline mode, „stopped mode" or „pause mode"
- Online mode and no print job loaded.

Off   Signals at the FEED input are ignored.

Pause input

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▌➡ Only with an I/O board mounted.
Concerns the input signal PAUSE at the signal interface.

Off   Signals at the PAUSE input are ignored.

Pause   A high-to-low transition switches the printer into the "I/O-Board Pause" mode. The next high-low-transition switches the printer back into the online mode. If parameter I/O-Board > Start print mode is set to „Level high active" or „Level low active", any activating of the PAUSE signal stops the printing after the current label.

Features:

- Printer display shows „I/O-Board pause"
- ERROR is active (only if I/O Board > Error output is set to „Printer err+Offl")
- If a print job is available: DATA READY becomes inactive (if I/O Board > Status output is set to „Print job ready")
- START PRINT signals are suppressed
- REPRINT requests are processed after switching into online mode.

A "low" signal for 20 ms switches the printer into the pause mode. The pause mode is the same as the "Online stopped" mode and can be switched to the "Online" mode by pressing the feed button.

Error output

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▌➡ Only with an I/O board mounted.
This parameter defines different events, which activate the output signal ERROR.

Printer error   ERROR will be activated in all of the following cases:

- Material end
- Ribbon end (only if SYSTEM PARAMETER > Foil mode = „Thermo transfer")
- No punch recognized (only if PRINT PARAMETERS > Material type = „punched")
- Printhead pressure lever was opened during the printing of a label.

- Start print error
- Other errors, which keep the printer from printing

⫸ During the initialization (powering up) of the printer, the ERROR-signal is instable!

Printererr + Offl   In addition to the above mentioned cases avtivate the following events the ERROR-signal:
- The printer is in offline mode
- The printhead pressure lever is open
- „I/O board pause" mode
- Stopped mode (the printing was stopped)

Error Polarity

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with an I/O board mounted.
Switches the polarity of the ERROR signal.

Level high activ   The output is high when it is active, otherwise low.

Level low active   The output is low when it is active, otherwise high. (Default)

Status output

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with an I/O board mounted.
This parameter defines different events, which activate the output signal MACHINE STATUS.

Low ribbon warn   The signal is activated, if the ribbon roll diameter is less than the limit.

◯ See parameter Foil end warning 🗋 on page 75.

Print job ready   (Default setting) The signal is activated, if the printer has finished image processing and is ready to start printing.

The signal is *not activated*, if:
- the print job is done,
- the print job was stopped,
- the printer was switched to offline mode,
- the printer is in pause mode.

Status polarity

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with an I/O board mounted.
Switches the polarity of the MACHINE STATUS signal.

Level high activ   The output is high when it is active, otherwise low.

Level low active   (Default setting)The output is low when it is active, otherwise high.

End print mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only with an I/O board mounted.
Concerns the output signal PRINT_END at the I/O board signal interface.
Determines the signal response after printing of a label.

Mode0 inactve   No print end signal.

Mode1 low level   Low, if the print module is just printing a label, otherwise high.
The output is also deactivated (= low) as long as labels are fed with "Feed Button" or "Feed Signal".

Mode2 high level   High, if the print module is just printing a label, otherwise low.
The output is also deactivated (= high) as long as labels are fed with "Feed Button" or "Feed Signal".

Mode3 low pulse   (Default setting) Low for 20 ms after printing and dispensing a label.
The output is also activated (= low) after a label is fed with "Feed Button" or "Feed Signal".

Mode4 high pulse   High for 20 ms after printing and dispensing a label.
The output is also activated (= high) after a label is fed with "Feed Button" or "Feed Signal".

OLV PARAMETERS

▟➡ This menu only appears, if an online verifier (OLV) is connected to the printer. For this, the parameter INTERFACE PARA > COM2 PORT > Function Option must be set to „Barcode OLV".

Verify mode

64-xx	ALX 92x	DPM	PEM

▟➡ Only if OLV PARAMETER > Cancel. printing = „On".

All bar codes   All bar codes are being checked according to the limits set at the printer.

▟➡ Easy-Plug print jobs don´t have to be modified when using this setting.

Easyplug select.   Only those bar codes are being verified, which have the „V" set in the command option.

❍ For details refer to the Easy-Plug manual, command #YB.

Cancel. printing

64-xx	ALX 92x	DPM	PEM

▟➡ 64-xx: Parameter is not supported for dispenser version.
Cancellation printing

Off   No cancellation printing.

On   If no validation data for the printed bar code was sent, or if the bar code exceeds the set limits, the faulty printed label is cancelled. Afterwards, the same label is reprinted. The amount of reprints can be set with the parameter „Reprint quantity". If the error still occurs after the so defined quantity of labels was reprinted, the printing stops and an adequate error message appears.

Reprint quantity

64-xx	ALX 92x	DPM	PEM

▟➡ Only, if OLV PARAMETER > Cancel. printing = „On".
Defines the maximum amount of reprint attempts after a bar code read error.

xxx   ❍ Setting range: 0 to 10, Unit interval: 1; Default setting: 0

OLV mode

64-xx	ALX 92x	DPM	PEM

Fast legacy   No additional material feed is made, if the bar code is near the end of a label. An additional material feed is only made if the last label of a job is printed and the printer has to stop. This is the behaviour of a Gen. 1 printer with firmware 3.40.

Limitations:
• OLV PARAMETERS > Cancel. printing is not available

- It is not recommended to use the setting „Fast legacy" as a standard, as some unexpected behavior, depending on the label format, may occur. Each label format has to be tested explicitly.

fast   Standard verification mode.

slow   Each print job is proceeded as if it contained counting fields. Additionally, each labels is moved forward underneath the laser beam and backwards again. This procedure slows down the label throughput, but on the other hand it ensures that the correct counting field content is printed after an error occured.

Ref Decode

64-xx	ALX 92x	DPM	PEM

➧ Only if OLV PARAMETER > Cancel. printing = „On".

No Test   The bar code doesn´t have to be decodable.

Pass   The bar code must be decodable.

Decodability

64-xx	ALX 92x	DPM	PEM

➧ Only if OLV PARAMETER > Cancel. printing = „On".
➧ Condition: Value >= Limit.

xxx   Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

Modulation

64-xx	ALX 92x	DPM	PEM

➧ Only if OLV PARAMETER > Cancel. printing = „On".
➧ Condition: Value >= Limit.

xxx   Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

Defects

64-xx	ALX 92x	DPM	PEM

➧ Only if OLV PARAMETER > Cancel. printing = „On".
➧ Condition: Value <= Limit.

xxx   Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

Edge contrast

64-xx	ALX 92x	DPM	PEM

➧ Only if OLV PARAMETER > Cancel. printing = „On".
➧ Condition: Value >= Limit.

xxx   Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

Rmin/Rmax

64-xx	ALX 92x	DPM	PEM

Minimaler/maximaler Reflexionsgrad.

➡ Only if OLV PARAMETER > Cancel. printing = „On".
➡ Condition: Value <= Limit.
xxx Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

Symbol contrast

64-xx	ALX 92x	DPM	PEM

➡ Only if OLV PARAMETER > Cancel. printing = „On".
➡ Condition: Value >= Limit.
xxx Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

PCS

64-xx	ALX 92x	DPM	PEM

Print Contrast Signal.

➡ Only if OLV PARAMETER > Cancel. printing = „On".
➡ Condition: Value >= Limit.
xxx Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

R (white)

64-xx	ALX 92x	DPM	PEM

Reflectance.

➡ Only if OLV PARAMETER > Cancel. printing = „On".
➡ Condition: Value >= Limit.
xxx Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

R (black)

64-xx	ALX 92x	DPM	PEM

Reflectance.

➡ Only if OLV PARAMETER > Cancel. printing = „On".
➡ Condition: Value <= Limit.
xxx Setting range: -1 to 100; Unit interval: 1; -1 = No checking.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Ratio

64-xx	ALX 92x	DPM	PEM

➠ Only if OLV PARAMETER > Cancel. printing = „On".
➠ Condition: Value >= Limit.

xxx   Setting range: -1 to 99; Unit interval: 1; -1 = No checking.

ANSI symbol grade

64-xx	ALX 92x	DPM	PEM

➠ Only if OLV PARAMETER > Cancel. printing = „On".
➠ Condition: Value >= Limit.
For most applications, it is sufficient to set only this parameter. The previously listed parameters are checked automatically according to ANSI grade.

xxx   Setting range: -1 to 40; Unit interval: 1; -1 = No checking.

Value	ANSI Grade
0-5	F
5-15	D
15-25	C
25-35	B
35-40	A

[11] ANSI symbol grades

Dist. head-beam

64-xx	ALX 92x	DPM	PEM

For most applications, it is sufficient to set only this parameter. The previously listed parameters are checked automatically according to ANSI grade.

Setting of the distance between reading position of the laser beam and print head.

xx mm   Setting range: 6 to 18; Unit interval: 1

DP INTERFACE

⫸ The parameters described in this section only appear in the parameter menu after a USI board is mounted.

❍ For information on signals and pin assignment of the USI, refer to the Service Manual, topic section "Electronics", chapter "USI board".

Interface type

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with USI board.
Sets the machine to the used application procedure.

USI interface Setting for direct dispensing.

USI applicator Setting for operation of an applicator with additional PLC.

Start print mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with USI board.
Selecting a print mode. Depending on the selected mode, the input signal START_PRINT will be interpreted differently by the USI interface.

Requirements:

• SYSTEM PARAMETER > External signal = „Singlestart"
• A printjob was transferred (DATA READY)
• Printer is switched „Online"
• No error messages

⫸ Start Print Mode replaces the Parameter SYSTEM PARAMETER > Signal edge, which can be found in older firmware versions.

⫸ 64-xx: This parameter has priority over SYSTEM PARAMETER > Signal edge, which is relevant for setting the triggering of the single start connector.

❍ Further information about using a start signal: Read the user manual, topic section „Advanced Applications", chapter Printing with start signal 🗎.

Pulse fall/ris The printing of a label is triggered by a low-high-change as well as by a high-low-change of the signal at the input START PRINT\. The printing occurs only after the set delay time.

Level high activ Labels are being printed as long as the signal at input START PRINT is held high.

Pulse rising The printing of a label is triggered by a low-high-change of the signal at the input START PRINT. The printing occurs only after the set delay time.

Level low active Labels are being printed as long as the signal at input START PRINT is held low.

Pulse falling (Default setting) The printing of a label is triggered by a high-low-change of the signal at the input START PRINT. The printing occurs only after the set delay time.

End print mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▦➡ Only with USI board.
Concerns the output signal PRINT_END at the USI interface. Determins the signal response after printing of a label.

Mode 0   No print end signals.

Mode 1   Low, if the print module is printing a label, otherwise high.

Mode 2   High, if the print module is printing a label, otherwise low.

Mode 3   (Default setting) Low for 20 ms after printing and dispensing a label. The signal is also low, if the label material is *only* fed - triggered by pressing the feed button or by a feed signal.

Mode 4   High for 20 ms after printing and dispensing a label. The signal is also high, if the label material is *only* fed - triggered by pressing the feed button or by a feed signal.

Mode 5   The PRINT_END signal is *low* as long as the material is fed forwards (even for gap initialization).

Mode 6   The PRINT_END signal is *high* as long as the material is fed forwards (even for gap initialization).

Reprint signal

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▦➡ Only with USI board.
Determins the reaction on an incoming signal at pin REPRINT\ at the USI.

Off   (Default setting) Incoming signal is ignored.

On   On a high-low toggle of the signal: The last printout is repeated.

Ribbon signal

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▦➡ Only with USI board.
Concerns the output signal WARNING at the USI, which signalizes the close shortness of ribbon or material.

On   (Default setting) High, if the ribbon stack is less than the threshold value.

❍ The threshold setting is done with the parameter SYSTEM PARAMETER > Foil end warning.

Off   Ribbon signal deactivated.

Material signal

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▦➡ Only with USI board.
Concerns the output signal WARNING at the USI, which indicates the close shortness of ribbon or material.

On   High, if the diameter of the material roll falls below a certain value. The limit diameter is set by positioning the outer diameter (OD) sensor.

         ▦➡ Requirement: "OD sensor material" is installed.

Off   No material end warning.

Mat. signal stop

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▦➡ Only with USI board.
Defines the reaction of the printer on a material low signal coming from the OD-sensor.

◯ See DP INTERFACE > Material signal

Off   (Default) The output signal WARNING at the USI is activated (precondition: DP INTERFACE > Material signal is set to „enabled"). The printing will be continued.

On   After a material low warning occured, the printer finishes printing the current label and stops afterwards. The display shows:


```
Print Status:        5123
USI Material low
```

         After acknowledging the message, the printing can be continued.

Feed input

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▦➡ Only with USI board.
Concerns the output signal FEED at the USI.

Standard   (Default setting) Feed of blank labels as long as signal is "low".
Precondition: Off-line mode or printing stopped in on-line mode.

JP5   A signal different from the standard FEED can be used. Precondition: an appropriate firmware change (NISTAN).

Pause input

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥▶ Only with USI board.
Concerns the output signal PAUSE\ of the USI.

Standard (Default setting) A "low" signal for 20 ms switches the DPM / PEM to the pause status. The pause status equals the status "on-line stopped" and can be closed by pressing the feed button.

JP6 A signal different from the standard PAUSE\ can be used. Precondition: an appropriate firmware change (NISTAN).

Start error stop

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥▶ Only with USI board.
Determines the reaction of the machine on a product start error. A product start error occurs in the following cases:

- If a further start signal arrives, before the current label is completely printed.
- If a reprint is requested, before the first label after powering on is printed.
- If a start signal arrives and no printjob is loaded.

If a product start error occurs, the machine stops and displays the appropriate status report. At the same time, the following output signals are activated (set low):

- ERROR
- MACHINE STATUS

On Start errors are worked up (the machine stops!) (default setting)

Off Start errors are being ignored.

Internal inputs

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥▶ Only with USI board.
Defines, if the internal inputs (CN300) on the USI board will be used or not.

○ To find the location of the inputs, refer to the service manual, topic section "Circuit/Component Diagrams", chapter "USI board".

On The internal inputs will be enabled.

Off The internal inputs will be disabled.

Apply mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only with USI board.

▥➡ Only, if DP INTERFACE > Interface type = „USI Applicator".

Defines, if the application process starts with applying („After start signal") or with printing („After print"). Requirements: Printjob transferred, printer is switched „Online".

After print   The start signal triggers the immediate printing, dispensing and applying of a label. Precondition: A printjob is loaded and the printer is in online mode.

After start sig.   The start signal triggers the application of an already printed and dispensed label. After applying the label, the next one is immediately printed and dispensed. Precondition: A printjob is loaded and the printer is in online mode.

❍ For detailed information about the applicate mode refer to the Technical Manual LTSI, topic section "Specifications", paragraph "Function diagram LTSI / LTP / LTPV".

USI profile

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only with USI board (minimum required USI firmware version: 9).

Standard   Standard setting without forwarding the BTS (Bad Tag Signal).

Bad Tag   Forwards the BTS to the „Warning" output of the USI (pin 9). The BTS is generated, if a read/write operation on a RFID-Tag failed.

Warning signal

64-xx	DPM	PEM	ALX 92x

▥➡ Only with USI board (minimum required USI firmware version: 9).

Level low active   The warning signal will be activated with *low* level.

Level high activ   (Default setting) The warning signal will be activated with *high* level.

ZPL PARAMETERS

This section lists the ZPL II® commands that the printer can interpret with any special notes, if applicable.

▥▶ This menu appears only with SYSTEM PARAMETER > Print Interpret. set to „ZPL Emulation" or „EasyPlug/ZPL Emu".
▥▶ ZPL is not supported in Standalone Mode.
▥▶ Recommended settings:
SYSTEM PARMETER > RAM disk size at least 2048 Kbytes
SYSTEM PARAMETER > Free store size at least 4 MB

Darkness

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Print contrast for ZPL printjobs. This setting is modified by printjobs which contain print contrast information. The print contrast set by SYSTEM PARAMETERS > Print contrast is not influenced by this setting.

xx   Setting range: 0-30; Step width: 1; Default setting: the Easy-Plug setting is overtaken.

Control Prefix

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Indicates the start of a ZPL control instruction.

xxH   Default: xx = 7E (0x7E = „Tilde")

Format Prefix

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Indicates the start of a ZPL format instruction.

xxH   Default: xx = 5E (0x5E = „Caret")

Delimiter Char

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Used as a parameter place marker in ZPL format instructions.

xxH   Default: xx = 2C (0x2C = „Comma")

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Label Top

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Label top offset (y-offet) in dots. Equals the parameter PRINT PARAMETERS > Y-Printadjust, which will be ignored, when ZPL printjobs are printed.

xxx Dots   Setting range: -240 - +240; Default: 0; Step width: 1

Left Position

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Left position offset (x-offset) in dots. Equals the parameter PRINT PARAMETERS > X-Printadjust, which will be ignored, when ZPL printjobs are printed.

xxx Dots   Setting range: -9999 - +9999; Default: 0; Step width: 1

Manual Calibrate

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

For endless material, the label length information is sent in the printjob. For punched material, the label length has to be detected by activating this function.

YES   Label length calculation for punched material.

⊪➡ Activate this function, if label material has changed.
⊪➡ Calibration should be done after changing material, when there are no printjobs loaded in the printer.
⊪➡ Shortcut (in offline mode): press the feed + prog buttons simultaneously to activate the calibration.

Resolution

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Print resolution in dpi. A 200 dpi graphic printjob can be printed with a 300 dpi printhead.

xxx DPI   Setting range: 200/300 dpi; Default: 300 dpi;

Error Indication

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Selects the way, in which the printer responds in the event of error occuring during printing.

Low
High
Off

Error Level	Setting		
	LOW	**HIGH**	**OFF**
0	Ignore	Ignore	Ignore
1	Ignore	Flash on the display	Ignore
2	Prompt user for action	Prompt user for action	Ignore

[12] Error handling settings.

Error Checking

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Enables or disables error checking, when the printer is handling print fields.

YES   Error checking is enabled. (Default)

NO   Error checking is disabled.

305 DPI Scaling

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Enables the printer to emulate the printing with a 11.8 dots/mm printhead.

When a printjob is designed for a printer that uses ZPL with 300 dpi (11.8 dots/mm) and is to be printed on a 64-0x series printer (12 dots/mm), this parameter has to be set to YES.

YES   305 DPI Scaling is enabled. (Default)

NO   305 DPI Scaling is disabled.

Image Save Path

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Selects the memory to be used by the ^IS and ^IL commands.

➠ Interpreter version: 1.10 or higher.

CF Card   Optional CompactFlash card

Internal RAM   The printer´s internal RAM. (Default)

Command ^PR

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Disable   The **p**rint **r**ate sent in the ZPL printjob is ignored.

Enable   The print rate is not ignored.

Command ^MT

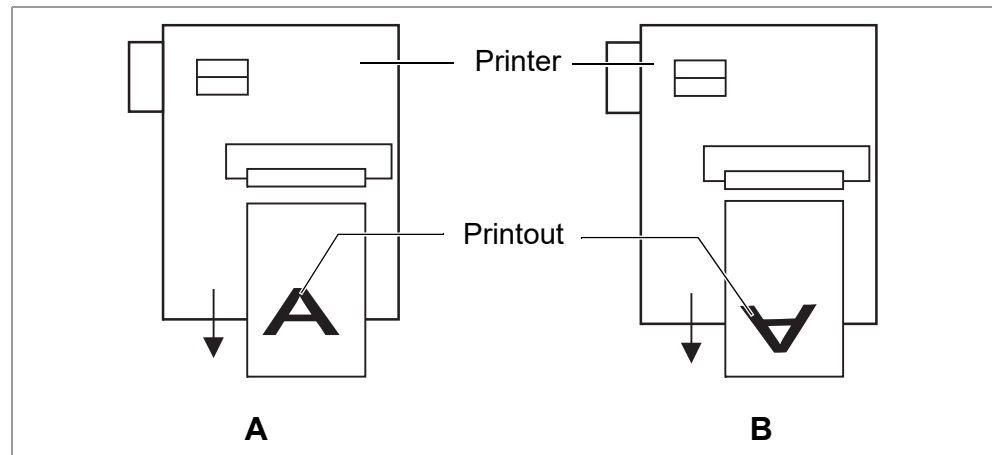| 64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Disable   The **m**aterial **t**ype sent in the ZPL printjob is ignored (thermo-transfer or thermo-direct).

Enable   The material type is not ignored.

Label Invert

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Rotates the printout by 180°. Equals the parameter PRINT PARAMETERS > Print direction, which will be ignored, when ZPL printjobs are printed.

[20] Orientation of the printout: Setting „Disable" (A) or „Enable" (B).

Disable   The label is printed with „normal" orientation [20A].

Enable   The label printout is rotated by 180° [20B].

Command ^JM

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➡ Interpreter version: 1.32 or higher
The ^JM command changes the printer resolution:
- ^JMA sets the resolution to the default value = printhead resolution.
- ^JMB sets the resolution to 200 dpi, if the actual resolution is 300 dpi. If the actual resolution is 200 dpi, this command is ignored.

Disable   The resolution setting sent in the ZPL printjob is ignored.

Enable   The resolution setting is not ignored.

Command ^MD/˜SD

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The ZPL commands ^MD and ˜SD (set printhead darkness value) are processed optionally.

Enable   ^MD- and ˜SD are processed.

Disable   ^MD- and ˜SD are ignored.

SPECIAL FUNCTION

Printer type

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▰▶ Only in production mode.
Selection of the machine type. Must be set after the CPU board was replaced or after new firmware was loaded. The „x" in the machine name stands for the printhead width. It is detected and replaced automatically.

> ⚠ CAUTION!
>
> Selecting an inappropriate machine type can lead to malfunctions or damage of the printer.
>
> → Select the printer type that is named on the printers rating plate.

64-0x	64-04/05/06/08 desktop printer.
DPM-0x LH	Printing and dispensing module DPM, lefthand machine.
DPM-0x RH	Printing and dispensing module DPM, righthand machine.
ALX 92x LH	Printing and dispensing machine ALX 924/925/926, lefthand version.
ALX 92x RH	Printing and dispensing machine ALX 924/925/926, righthand version.
MICROJET 64-0x **MICROJET 64-0xX** **MICROJET 64-0xXX**	
PEM-0x LH	Print engine module PEM, lefthand machine.
PEM-0x RH	Print engine module PEM, righthand machine.

Printhead type

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▰▶ This parameter is only visible in production mode!
This parameter chooses the applied printhead type. In most cases equals the printhead width the maximum printwidth of the printer. This parameter is called automatically, after you have modified the printer type setting (SPECIAL FUNCTION > Printer type).

KCE 8Inch	Printhead Kyocera KCE, 8" width, is applied in the following printer type: 64-08
KCE 6Inch	Printhead Kyocera KCE, 6" width, is applied in the following printer types: 64-06, DPM 6", PEM 6", ALX 926
KCE 5Inch	Printhead Kyocera KCE, 5" width, is applied in the following printer types: 64-05, DPM 5", PEM 5", ALX 925, PM 3000
KCE 4Inch	Printhead Kyocera KCE, 4" width, is applied in the following printer types: 64-04, DPM 4", PEM 4", ALX 924

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Sensor type

	PEM	ALX 73x (PMA)

▛➡ Only in production mode.

Combined sensor   Required setting, if the printer is equipped with a combined reflex/punch sensor.

Standard   Required setting, if the printer is equipped with separate light sensors for reflex marks or gaps.

Disp. Head Offs.

64-xx

▛➡ Only with 64-xx dispenser equipped with a 4" printhead.
▛➡ Only in production mode.
Dispenser Head Offset

Yes   Setting required for 64-04 dispenser with 4" printhead: At the inner side end of the printhead exists a non-printable area of 13 mm width.

No   Setting required for 64-05 dispenser with 4" printhead: Full 4" print width without restrictions. Precondition: The printhead is positioned at least 13 mm away from the innner side printhead end.

Default Values

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▛➡ Parameter appears only in production mode.

User defined   The presently selected settings of all parameters will be taken as default values. That is you will get those settings back even after a firmware update. All you have to do is to call the parameter "Factory settings".

Standard   Calling the parameter "Factory settings" will set all parameters to the factory preset values.

Command sequence

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▛➡ Parameter appears only in production mode.

~   „~" is used as start sign for Easy-Plug command sequences.

(Default setting) „#" is used as start sign for Easy-Plug command sequences.

Delete job

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Press the Online-key to cancel the active print job.

> Delete Job
> Clearing . . .

Delete spooler

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Press the Online-key to delete all print jobs contained in the spooler.

> Delete Spooler
> Clearing . . .

Factory settings

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

All parameters are preset ex works to values specific to each device type. These factory settings can be restored at any time.

⫸ All parameters are then overwritten by the factory settings.
⫸ All data present in the spooler, including data belonging to an interrupted print job, is deleted!

No   (Default) No factory setting.

Custom defaults   If custom parameter settings were stored before (see parameter Custom defaults), those are restored.

⫸ „Custom defaults" only appears, if custom settings have already been stored.

Factory defaults   The parameters are set to factory defaults.

Custom defaults

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Parameter appears only in production mode.

Apply current   Stores the current parameter settings as values for the default setup. Those settings are restored by calling parameter SPECIAL FUNCTION > Factory settings = „Custom defaults".

Delete   Deletes the stored custom default settings. „Delete" is only visible, if settings have already been stored.

Store Parameters

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Parameter settings are saved in a text file on memory card (directory FORMATS\). Considered are also parameters which belong to options, which are not activated.

Without adj. par   (Default) Parameters, which contain device specific settings, are *not* saved.

(Default file name: SETUP.FOR).

Application example: Transfer of printer settings to another printer (device specific settings as printhead resistance or sensor settings should not be overwritten).

With adjust para   Parameters, which contain device specific settings, are *also* saved. The relevant parameter names are marked with a * in the text file.

(Default file name: SETUPALL.FOR).

Application example: Service

❍ For more information about saving and reading parameter settings read topic section „Advanced Applications", chapter „Saving and Transferring parameter settings".

Store Diagnosis

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Stores the diagnostic data on memory card. The default file name composes as follows:

„Diagnose AP 5.4 203 Dpi A429403110613.log"

- *AP 5.4 203 Dpi*: printer type and printhead resolution
- *A429403110613*: serial number of the CPU board; equals the value displayed under SERVICE DATA > CPU board data > Serial number

❍ For details read the service manual, topic section „Fault Location", chapter „Reading out diagnostic data".

Gen.Support Data

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Generate support data

Generates the folder „SupportData" on the selected memory medium and stores the following diagnosis files therein:

- Setup.for (for details see SPECIAL FUNCTION > Store Parameters)
- SetupAll.for (for details see SPECIAL FUNCTION > Store Parameters)
- Diagnose.log (for details see SPECIAL FUNCTION > Store diagnosis)

Each of the file names is completed by the printer type and the serial number of the CPU board. The file content is english, regardless of the language setting at the printer.

Those data are very helpful for the technical support for fault diagnosis purposes.

EasyPl. file log

Easy-Plug file log

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only visible, if a memory card is inserted.
▥➡ Activating this parameter may slow down the label rate. Therefore disable the function after error analysis.
▥➡ Activating this parameter may cause error messages, which may be difficult to understand. Therefore disable the function after error analysis. If an error occurs, disable the function and restart the printer.

Off   The file log function is switched off.

All data   All received data, including immediate commands, are written into the log file.

Interpreter data All data is written into the log file, which the Easy-Plug interpreter reads out of the reception spooler. Immediate commands are *not* included.

Log files delete

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only visible, if a memory card is inserted.

No   (Default setting) No function.

Yes   Deletes all log files on the inserted memory card, which fulfil the following conditions:

- Filename matches the scheme „EPxxxxxx.log"
  xxxxx = number from 1 to 999999, preceding digits filled with „0". Example: „EP000001.log".
- Location: folder \LOGFILES on memory card

Those conditions are matched by logfiles, which are automatically generated by SPECIAL FUNCTION > EasyPl. file log.

Data blocks del.

Delete data blocks

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only appears, if at least one data block is in the flash memory.

Bxx   (Default setting) After calling the parameter, data block number 01 is displayed:

> Data blocks del.
> B01 diagnose inf

„B01": block number 01
„diagnose inf": name of the data block, is contained in the data block header.

If the flash memory contains more than one data block:
➜ Press the cut button several times, until the wanted data block appears.

Deleting a data block:
➜ Press the online button.

> Data blocks del.
> Delete? --> no

➜ Press the feed button to change to „yes".

➜ Press the online button to delete the block.

All   All data blocks contained in the flash memory are deleted.

RFID stat. del.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with activated RFID option.

Sets all RFID counters to zero.

❍ See PRINT INFO > RFID status.

SERVICE FUNCTION

Service

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Parameter only appears in production mode.

Increases the counter level of the "Service" counter on the "Service Status" printout by one.

❍ See parameter Service Status 🗋 on page 36.

yes   Increases the counter "Services" by one

no   Doesn´t increase the counter

Head exchange

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Parameter only appears in production mode.

Increases the counter „Head number" on the info printout „Service Status" by one.

❍ See parameter Service Status 🗋 on page 36.

yes   Increases the counter "Head number" by one

no   Doesn´t increase the counter

Roller exchange

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Parameter only appears in production mode.

Increases the counter „Roll number" on the info printout „Service Status" by one.

❍ See parameter Service Status 🗋 on page 36.

yes   Increases the counter "Roll number" by one

no   Doesn´t increase the counter

Cutter exchange

64-xx

⫸ Parameter only appears in production mode and only with a cutter mounted and activated.

Increases the counter „Cutter number" on the info printout „Service Status" by one.

❍ See parameter Service Status 🗋 on page 36.

yes	Increases the counter "Cutter number" by one
no	Doesn´t increase the counter

Serv. data reset

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Parameter only appears in production mode.
Sets all counters on the info printout „Service Status" to zero.

❍ See parameter Service Status ▯ on page 36.

Head dot test

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Checks the print head for defective dots. The test ends with a status printout [21], listing the defective dots. The printout is also made without having found any defective dots.

> ⚠ CAUTION!
>
> Risk of printhead damage.
>
> ➔ Never switch off the printer while the dot check is running. If not observed, dots of the print head can be damaged.

During the test appears the display:

    Head dot test
    running ...

▥➡ The printout requires 100 mm wide and 200 mm long label material.

Head Dot Test Status

Head data

Head resistance	: 1364 Ohm
Print width	: 128.0 mm
Print resolution	: 12.0 Dots/mm
Number of dots	: 1536 Dots

25 defective print dots

1,　417,　418,　419,　557,　700,　76 ,　770,　771,
772,　773,　774,　775,　776,　777,　77 ,　779,　780,
781,　782,　783,　784,　833,　834,　83 ,

[21] *Status printout after successfully proceeded dot check. Upper section: technical data of the print head; Lower section: list of defective dots.*

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

▥➡ The dot check can also be startet by pressing the Cut(Apply)+Feed buttons in Off-line mode. However, in this case is no status report printed.

Head step tune

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Only in production mode.
Fine adjustment of the printhead movement during the ribbon autoeconomy motion.

x step(s)   Setting range: -15 to +15; Unit interval: 1; Default setting: 0

EasyPlug monitor

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Parameter only appears in production mode.

The parameter activates the logging of received Easy Plug data. Data is transmitted to COM1 or COM2.

▥➡ Activating this parameter may slow down the label rate. Therefore disable the function after error analysis.
▥➡ To keep the influence of the monitoring function on the data rate as low as possible, the baud rate should be set to 115,000!

Off   (Default setting) The monitor function is disabled.

Serial Com1   The Easy-Plug monitor data is transmitted to Com1.

Serial Com2   The Easy-Plug monitor data is transmitted to Com2.

EP Monitor Mode

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Parameter only appears in production mode.
▥➡ Activating this parameter may slow down the label rate. Therefore disable the function after error analysis.

Interpreter data   (Default setting) All received Easy-Plug data, apart from immediate commands, are transmitted.

All data   All received Easy-Plug data, including immediate commands, are transmitted.

Head adjust

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Parameter only for authorised, trained service personnel!

Sensor adjust

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Parameter only appears in production mode.
❍ For detailed instructions sensor adjustment, please refer to the service manual, topic section "Service Electronics", paragraph "Settings".

Sensor test

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

❍ The description of the sensor test can be found in the printer service manual, topic section „Service Electronics", chapter Sensor test 🗋.

The values displayed are for checking the sensors (sensor check) and can by adjusted by service personnel.

Cutter test

64-xx

Makes it possible to test the cutter function without having to set the parameter SYSTEM PARAMETER > Periph. device to „cutter".

Press Cut Key   Triggers a cut, if a cutter is installed. Without a cutter nothing will happen.

Matend tolerance

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Material end tolerance

This is relevant for label stock with very long punches. To avoid those punches being recognized as material end by mistake, can here the distance be set, after which the gap over the light sensor is interpreted as material end.

▥➡ By choosing a very high material end tolerance, you loose the protection of the print roller against being printed on!
xxx mm   Setting range: 20-300 mm; Default setting: 35 mm

Feedadjust label

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Prints a scale, which enables to calculate the feed adjust value (see next parameter).

For application instructions, refer to the Service Manual, topic section „Electronics Gen. 3", chapter Adjusting the imprint position 🗋.

Feed adjust

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Corrects the material feed length. Such a correction can be necessary when printing on very long labels, to compensate slippage-related feeding inaccuracy.

For application instructions, refer to the Service Manual, topic section „Electronics Gen. 3", chapter Adjusting the imprint position 🗎.

%2.1f %% [ribbon]
Setting for *thermal transfer printing*
Setting range: -10.0 to +10.0; Step width: 0.1%; Default setting: 0%
⯈ Only appears if thermal transfer printing was selected (see SYSTEM PARAMETER > Ribbon autoecon.)

%2.1f %% [direct]
Setting for *thermal direct printing*
Setting range: -10.0 to +10.0; Step width: 0.1%; Default setting: 0%
⯈ Only appears if thermal direct printing was selected (see SYSTEM PARAMETER > Ribbon autoecon.)

Punch y calibr.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only in production mode

Compensating the variation of distance between punch sensor and thermal bar of the printhead.

x.x mm
Setting range: -3.0 to 3.0; Default setting: 0.0; Unit interval: 0.1

Foil feed adjust

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only in production mode.
Modifies the foil feed speed in comparison to the material feed speed.

xx,x %
Setting range: -20.0 to 20.0; Default setting: 0.0
• Decreasing the setting: Foil transport gets faster
• Increasing the setting: Foil transport gets slower

Punch y calibr

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only in production mode.

Compensating of variations between the label sensor and the thermal bar at the printhead.

x.xmm
Setting range: -3.0 to 3.0; Default: 0.0; Step width: 0.1

PS registers

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⯈ Only in production mode.
⯈ Parameter only for authorised, trained service personnel.
⯈ Concerns the following power supplies: HME, ME 500
By means of this parameter, the register contents of the power supply can be changed.

Scanner test

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

The scanner test is required for the ex-works adjustment of an optional scanner.

On   Switches the Scanner-Laser on.

Off   Switches the Scanner-Laser off.

Memory card test

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Pressing the online button starts a test routine for the Compact Flash Card memory. The following display shows up after successful testing:

> Memory card test
> Card Test O.K.

If the memory card is defective or not available, a corresponding error report shows up.

For test purposes, the printer creates a file named TESTXXXX.TXT in the root directory of the card. An already existing file with this name will be overwritten.

Send test

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Serial connection

Carrying out the send test requires a terminal program, e.g. the Hyper Terminal contained in Windows95.

Start send test as follows:

1. Start the terminal program and set it to the transmission parameters used by the printer.

2. Press the Online-key to start the send test.

> Send test
> running . . .
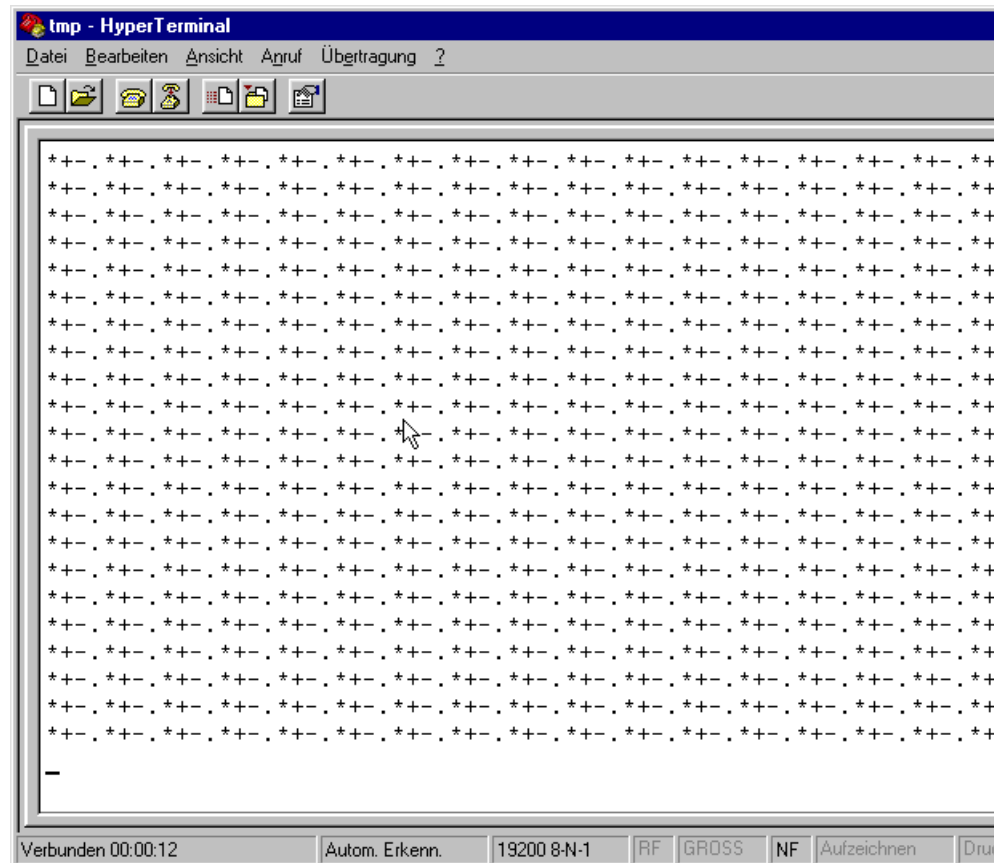
[22] Pattern in the terminal window.

The terminal window should show a regular pattern of four repeating characters. Those characters are continuous sent by the printer.

A transfer fault would be recognizable as irregularity of the pattern. Press the Prog-key to stop testing.

Parallel connection

The parallel data transfer is done bidirectionally in the Nibble Mode. The transfer test requires an aid program which is available to service engineers.

Receive test

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Serial connection

Assumption is a serial data line between PC and printer; the parameter INTERF.PARAM. > Interface must be set to „Serial Com1".

1. Start the MS-DOS-prompt (using Windows).

2. Set the interface to the values adjusted at the printer by means of MS-DOS command MODE:

   Example of printer settings:
   – Baud rate: 19200
   – No. of data bits: 8
   – Parity: none
   – Stop Bits: 1
   – Data synch.: RTS/CTS

   DOS-Command: *mode COM1 baud=19200 parity=n data=8 stop=1*
   (if com1 is the serial port)

3. Press the Online-key to start Receive test.

   > Receive test
   > 0 Bytes

4. Send any file to the printer (Condition: com1 = Printer port; anyfile.txt = any file):

   copy anyfile.txt com1 (add /b for binary files)

   The following shows up on the printer display:

   > Receive test
   > xxxxx Bytes

   xxxxxx is the size of the sent file in bytes. This value is being counted up during the test. The test is complete if the file size does not vary any more. If the bytes announced at the printer match the size visible in the MS-DOS window, transfer was successful. Otherwise, transmission errors occurred.

Parallel connection

Assumption is a parallel data line between PC and printer; the parameter INTERF.PARAM. > Interface must be set up on Centronics. Proceed as follows:

1. Run Receive test. To this call the parameter SERVICE FUNCTION > Receive test and press the Online-key.

   > Receive test
   > 0 Bytes

2. Start the MS-DOS-window (using Windows).

3. Send any file to the printer (Condition: lpt1 = printer port; anyfile.txt = any file):

copy anyfile.txt lpt1 (add /b for binary files)

The following shows up on the printer display:

> Receive test
> xxxxx Bytes

xxxxxx is the size of the sent file in bytes. This value is being counted up during the test. The test is complete if the file size does not vary any more. If the bytes announced at the printer match the size visible in the MS-DOS window, transfer was successful. Otherwise, transmission errors occurred.

Com2 commun. test

64-xx	ALX 92x	DPM	PEM

▬▶ 64-xx/ALX 92x/DPM/PEM/PM 3000: Only with installed options board. After calling this parameter, Com2 puts out all data which are received by the set Easy Plug port.

❍ See parameter Print interface ⬚ on page 56.
If this parameter is set to RS232, data can also be sent in reverse direction (that is, reception by Com2, output by Com1).

Com2 port test

64-xx	ALX 92x	DPM	PEM

▬▶ 64-xx/ALX 92x/DPM/PEM/PM 3000: Only with installed options board. Starts a selftest of the Com2 port.

▬▶ Only works with RS 232.
▬▶ Pins 2/3 and 7/8 at the interface have to be connected (use a plug with shunted pins)!
During the selftest, data transfer and handshake are tested. The test ends with one of the following display messages:

> Com2 port test
> Test failed

An error has occured while testing the interface.

> Com2 port test
> Test O.K.

Interface test successfully terminated.

Headvo. adj. 20 V

64-xx

▥➡ Not valid for 64-08.
▥➡ Only in production mode.
Adjusting the lower head voltage limit to 20 V. The head voltage adjustment makes printouts comparable.

❍ For details about adjusting the printhead voltage, refer to the Service Manual, topic section "Service print module", paragraph "Adjusting the printhead voltage".

Headvo. adj. 28 V

64-xx

▥➡ Not valid for 64-08.
▥➡ Only in production mode.
Adjusting the upper head voltage limit to 28 V. The head voltage adjustment makes printouts comparable.

❍ For details about adjusting the printhead voltage, refer to the Service Manual, topic section "Service print module", paragraph "Adjusting the printhead voltage".

Printtest

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

General printtest, prints line by line the set printer type and the firmware version. Material settings (Material type, length, width) are considered.

Stop the printtest by pressing the Online button.

Rewinder adjust

64-xx	ALX 92x

▥➡ 64-xx: Only with „Rewinder 2000" installed.
▥➡ ALX 92x: Only valid for backing paper rewinder.

Setting up the rewinder.

The rewinder setup compensates differeces in characteristic or assembly of the light barrier.

▥➡ This parameter counts for both, the external *rewinder option* for 64-xx and the *backing paper rewinder* of the ALX 92x. But mind that the setting values are different!

❍ A setting description for the *64-xx rewinder option* is given in the „User Manual Rewinder 2000", topic section „Attachment, Setup", chapter „Settings" > „Setting up 64-xx" > Adjusting the sensor 🗎.

❍ A setting description for the dancer arm of the *ALX 92x backing paper rewinder* can be found in the Service Manual, topic section „Service Electronics", chapter „Settings" > Light sensor at the rewinder dancer lever (ALX 92x) 🗎.

loose xxx   Setup of the loose dancer arm (xxx = actual sensor value).

tightened xxx   Setup of the tightened dancer arm (xxx = actual sensor value).

The setting follows in both cases this scheme:

1. Bring the dancer arm to its loose position.

2. Press the cut button (ALX 92x: Apply button)

3. Pull the dancer arm tight.

4. Press the Online button.

Rewinder values

64-xx	ALX 92x

▸ 64-xx: Only with „Rewinder 2000" installed.
▸ ALX 92x: Only valid for backing paper rewinder.

Shows the values of the position sensor at the rewinder dancer arm in middle/ tightened and in loose position.

> Rewinder values
> xxx <------ text -------> yyy

- xxx = Sensor value in *loose* position
- text = Sensor type (Opto = light barrier; Hall = hall sensor; ???? = no explicit sensor type)
- yyy = Sensor value in one of the following positions:
  – *Middle* for 64-xx with „Rewinder 2000" and for ALX 92x with R04A rewinder motor output stage (--> 01/2012, recognizable with SYSTEM PARAMETER >MODULE FW VERS. > Rewinder driver = „V2-T36")
  – *Tightened* for ALX 92x with M5A rewinder motor output stage (01/2012-->, recognizable with SYSTEM PARAMETER >MODULE FW VERS. > Rewinder driver = „V4-T5")

❍ For detailed information about setting the rewinder dancer arm refer to:
  – ALX 92x: Service manual, topic section „Electronics Gen. 3", „Settings" > Light sensor at the rewinder dancer lever (ALX 92x) 🗎
  – Rewinder 2000: Technical Manual Rewinder 2000, topic section „Attachment, Setup", chapter „Settings" > „Setting up 64-xx" > Adjusting the sensor 🗎

SERVICE DATA

System version

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the firmware version number.

System revision

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows a consecutive revision number.

▦➡ Only for factory-internal use.

System date

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the date, at which the firmware was generated.

Bootloader

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the bootloader version number.

uMon

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the bootloader version number.

Feed driver

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Applied PIC version on the output stage board driving the feed motor.

Foil driver

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Applied PIC version on the output stage board driving the foil feed motor.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Head driver

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Applied PIC version on the output stage board driving the head motor.

Peripheraldriver

64-xx

⫸ Only with mounted (optional) peripheral output stage board.
Applied PIC version on the output stage board driving the peripheral motor.

64-xx: Applied PIC version on the output stage board driving the deflection motor.

Rewinder

64-xx	ALX 92x

⫸ 64-xx Dispenser only.
Applied PIC version on the rewinder motor output stage board.

USI interface

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with USI mounted.
Applied PIC version on the USI.

Applicator int.

(Applicator Interface)

	ALX 92x

⫸ Only with mounted Applicator Interface.
Applied PIC version on the Applicator Interface.

Dispenser lift

64-xx

⫸ 64-xx: Only 64-xx dispenser version

Applied PIC version on the lift motor output stage.

Dispenser feed

64-xx

➠ 64-xx: Only 64-xx dispenser version

Applied PIC version on the dispenser rewinder and feed motor output stages.

> OPERATION DATA

Serv. operations

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the num+ber of service operations. The counter is increased by calling the parameter SERVICE FUNCTION > Service = yes. Maximum value: 4 billions.

Headnumber

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the number of printhead changes. The counter is increased by calling the parameter SERVICE FUNCTION > Cutter exchange = yes. Maximum value: 4 billions.

Roll number

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the number of exchanged print rollers. The counter is increased by calling the parameter SERVICE FUNCTION > Roller exchange > yes. Maximum value: 4 billions.

Cutter number

64-xx

➠ Only with mounted and activated cutter.
Shows the number of exchanged cutters. The counter is increased by calling the parameter SERVICE FUNCTION > Cutter exchange =yes. Maximum value: 4 billions.

Head run length

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the total "covered distance" of the printhead. The counter is reset with each calling of the parameter SERVICE FUNCTION > Cutter exchange = yes. Maximum value: 4 billions.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Roll run length

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the total "covered distance" of the print roller. The counter is reset with each calling of the parameter SERVICE FUNCTION > Roller exchange = yes. Maximum value: 4 billions.

Cuts on knife

64-xx

➠ Only with mounted and activated cutter.

Shows the number of cuts done by one knife. The counter is reset with each calling of the parameter SERVICE FUNCTION > Cutter exchange = yes. Maximum value: 4 billions.

Tot. mat. length

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the total "covered distance" of the feed roller. In comparison to the counter Roll run length, this counter is not reset after a roller exchange. Maximum value: 4 billions.

Tot. foil length

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the total "covered distance" of the ribbon roller.

Total cuts

64-xx

➠ Only with mounted and activated cutter.

Shows the number of cuts done by all knifes. In comparison to the counter Cuts on knife, this counter is not reset after a knife exchange. Maximum value: 4 billions.

Total head moves

64-xx	ALX 92x	DPM	PEM

➠ Only with mounted and activated cutter.

Shows the counter for every up and down movement of the printhead. Maximum value: 4 billions.

Head strobes

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the counted head strobes, which are a measure for the service life of the printhead. A strobe is counted for each line in which at least one dot ist printed. Maximum value: 4 billions.

Head temperature

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the current printhead temperature in °C.

Foil diameter

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the calculated foil diameter: A measurement routine calculates the actual ribbon roll diameter with an exactness of 7.5%.

The parameter SYSTEM PARAMETER > Foil end warning can be used to set a critical foil roll diameter. If the foil roll diameter equals this value, a message appears on the printer display.

❍ See parameter Foil end warning 🗎 on page 75.

64-xx, DPM / PEM, ALX 92x:
At the (optional) USI is set a signal indicating the near foil end (additionally to the display warning).

Dispensing cycl.

(Dispensing cycles)

64-xx	ALX 92x	DPM

▥➡ 64-xx: Dispenser version only.
Shows the number of dispensed labels.

Operation time

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the elapsed time since the last switch-on of the machine.

> POWERSUPPLYDATA

Type

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the type of power supply, e.g. „Blue Mountain".

PS temperature

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the current power supply temperature in °C. If for any reason the function is not supported, „??? °C" is displayed.

Version

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Availability depends on the type of power supply.
Shows the power supply version.

Serial number

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Availability depends on the type of power supply.
Shows the power supply serial number.

Standby+On time

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

➠ Availability depends on the type of power supply.
Shows the power supply operation time including the standby time.

Standby time is the duration of time, during which the printer was switched on with the power switch, but *not* with the remote on/off switch on the operation panel.

➠ Doesn´t count for 64-xx. At the 64-xx, the same time as under
SERVICE DATA > POWERSUPPLY DATA > On time
➠ The operation time tells nothing about the printing time of the printer.

On time

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▥➡ Availability depends on the type of power supply.
Shows the operation time of the printer. This does *not comprise* the standby time (see SERVICE DATA > POWERSUPPLY DATA > Standby+On time).

▥➡ The operation time tells nothing about the printing time of the printer.

> CPU BOARD DATA

CPU identifier

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the designation of the applied processor.

PCB revision

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the layout revision and part number of the CPU board.

FPGA version

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the FPGA version.

MAC address

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the MAC Address, an unchanging board address, which is programmed by the board manufacturer.

Serial number

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Serial number: Is programmed by the board manufacturer.

Production date

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Production date: Is programmed by the board manufacturer.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

PCB part number

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the part number of the board without components.

Board part numb.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the part number of the board with components.

Manufacturer

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⬛➡ Parameter appears only in production mode.
Shows the board manufacturer.

Work place

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⬛➡ Parameter appears only in production mode.
Shows the printer work place.

Company name

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⬛➡ Parameter appears only in production mode.
Shows the company name.

> DISPLAY DATA

Display version

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the *version number* of the operation panel.

Display SerialNr

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the *serial number* of the operation panel.

64-xx – DPM – PEM – ALX 92x – ALX 73x (PMA)

Remote disp. vers.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▢➡ Only if remote operation panel is connected.

Shows the *version number* of the remote operation panel.

Remote disp.

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▢➡ Only if remote operation panel is connected.

Shows the *serial number* of the remote operation panel.

> MEMORY DATA

Ram memory size

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the available RAM memory size.

Flash mem size

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the available Flash memory size. The abbreviation which is displayed behind the memory size indicates the manufacturer of the applied Flash-RAM:

Abbreviation	Manufacturer
MX	Macronix
AMD	AMD
FUJ	Fuji

[13] The displayed abbreviations indicate the manufacturer of the Flash-RAM.

CompactFlash

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

▢➡ Only with plugged-in CompactFlash card

Shows the memory size of the CompactFlash card:

> CompactFlashCompactFla
> sh
> 971 MB / 1024 MB (c:)

• 971 MB of 1024 MB are free

- Drive letter, which is assigned to the CompactFlash card (here: „C:")
❍ Assigning a drive letter: see chapter > DRIVEASSIGNMENT / on page 73.

SD card

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with plugged-in SD card

Shows the memory size of the SD card:

> SD card
> 971 MB / 1024 MB (c:)

- 971 MB of 1024 MB are free
- Drive letter, which is assigned to the SD card (here: „C:")

❍ Assigning a drive letter: see chapter > DRIVEASSIGNMENT / on page 73.

USB

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

⫸ Only with plugged-in USB stick

Shows the memory size of the USB stick:

> USB
> 971 MB / 1024 MB (c:)

- 971 MB of 1024 MB are free
- Drive letter, which is assigned to the USB stick (here: „C:")

❍ Assigning a drive letter: see chapter > DRIVEASSIGNMENT / on page 73.

Space for Jobs

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the memory size, which is available for print jobs.

Max. Labellength

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the maximum printable label length, which results from the memory allocation.

Default values

64-xx	ALX 92x	DPM	PEM	ALX 73x (PMA)

Shows the setting of parameter SPECIAL FUNCTION > Default values.

Dispenser (LMA) parameter menu

Dispenser parameter menu

Overview of parameter menu

LABEL SETUP	MACHINE SETUP	(continued)	INTERFACE PARA	(continued)
Load prod.profil	Dispenser type	Label sens. type	>EASYPLUGINTERPR	MAC Address
Gap detect. mode	Store prod.prof.	Startsen. In.Type	Interface	DHCP host name
Dispense speed	Del. prod.profil	Start disp. mode	Dispenser ID no.	FTP server
Slew speed	Dispense counter	Start error stop	Spooler size	FTP Password
Label pitch	Disp. Cnt. Reset	On inhibit enter		WEB server
Lab. stop offset	Factory settings	On inhibit leave	>COM1 PORT	WEB display refr [h]
Start offset	Custom defaults	Turn-on mode	Baud rate	WEB admin passw.
Product length	Store Parameters	Language	No. of data bits	WEB supervisor p.
Multi label mode	Loop dancer adj.	Access authoriz.	Parity	WEB operator p.
Label 2 offset [a]	Auto Sensor Adj. [c]	Materialend err	Stop bits	
Label 3 offset [a]	Sensor Adjust [c]	Materialend warn	Data synch.	
Miss. label tol.	Speed Adaption	Rewinder full	Frame error	
Miss. label mode	Encoder Type [d]	Ext. OD sensor		
Stop count. mode	Encoder Resol. [d]	OD Sens.polarity [g]	>NETWORK PARAM.	
Label stop quan. [b]	Encoder Diameter [d]	Loop supply mode	IP Addressassign	
	Rewinder Operat.	Loop setup	IP address	
	Tandem Operation		Net mask	
	Tandem startmode [e]		Gateway address	
	Tandem synchron. [e]		Port address	
	Slave IP address [f]		Ethernet speed	
	Tandem Distance [e]			

[Tab. 1]   Menu overview - part 1 (Gray background = Appears only in Production Mode).

a)   Only appears if LABEL SETUP > Multi label mode = „2 labels/start" or „3 labels/start".
b)   Only appears if LABEL SETUP > Stop count. mode = „On".
c)   Only appears if MACHINE SETUP > Label sens. type = „Optical"
d)   Only appears if MACHINE SETUP > Speed Adaption = „On"
e)   Only appears if MACHINE SETUP > Tandem Operation = „Master", „FlipFlop master" or „Slave"
f)   Only appears if MACHINE SETUP > Tandem Operation = „Master" oder „FlipFlop master" and MACHINE SETUP > Tandem synchron. = „UDP Tandem Port"
g)   Only appears if MACHINE SETUP > Ext. OD sensor = „Error" or „Warning"
h)   Only appears if INTERFACE PARA >NETWORK PARAM. > WEB server = „On"

SIGNAL INTERFACE.	(continued)	SERVICE/DIAGNOS.	SERVICE DATA	(continued)
Interface mode	Apply comp. time [b]	Service	>MODULE FW VERS.	Production date
>PLC SIGNALS [a]	Status signals [a]	Serv. data reset	System version	PCB part number
End dispense mod	Touch down sens. [b g]	Sensor Test	System revision	Board part numb.
Disp.end delay	TouchDownTimeout [b g]	PS registers	System date	Manufacturer
End pulse width		Memory card test	Applicator int. [g]	Work place
	>ACTIVE INPUTS	Test functions		Company name
>APPLIC. SIGNALS [b]	Start signal	Store diagnosis	>OPERATION DATA	
Applicator type	Inhibit signal	Gen.Support Data	Service operations	>DISPLAY DATA
Status outputs	OD sensor signal	Data blocks del.	Tot. mat. length	Display Version
Apply mode [c]		Loop dancer val.	Dispensing cycl.	Display serialNr
Dwell time [d]			Operation time	Remote disp.vers [i]
Blow on time [e]			Total Operation	Remote disp. ## [i]
Restart delay				
Position timeout [f]			>POWERSUPPLYDATA	>MEMORY DATA
Apply comp. time			Type	RAM memory size
Touch down sens. [g]			Version	Flash mem size
TouchDownTimeout [g]			Serial number	Default values
			PS Temperature	
>AI BOARD SIGNAL [h]			Standby+On time	
Applicator type [b]				
Apply mode [b c]			>CPU BOARD DATA	
Start disp. mode [b]			CPU identifier	
Dwell time [b d]			PCB Revision	
Blow on time [b e]			FPGA version	
Restart delay [b]			MAC Address	
Position timeout [b f]			Serial number	

[Tab. 2]　Menu overview　- part 2 (Gray background = Appears only in Production Mode).

a)　　Only appears, if SIGNAL INTERFACE > Interface mode = „PLC signals"
b)　　Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals"
c)　　Does *not* appear if ... > Applicator type = „Direct Dispense" or „LA-CE"
d)　　Only appears if ... > Applicator type = PEP, „PEP Blow on", „Reverse PEP", BTS or „LA-TO Timed"
e)　　Does *not* appear if ... > Applicator type = „LTP - LTPV", PEP, „Direct Dispense" or LA-TO
f)　　Does *not* appear if ... > Applicator type = ASA, „Direct Dispense" or LA-BO
g)　　Does *not* appear if ... > Applicator type = „LTP - LTPV", „PEP II Sensor", LA-TO BO Sensor", „O-ring applicat." or „LA-TO Sensor"
h)　　Only appears with AI board installed
i)　　Only appears if remote display is connected

Information about the parameter description

- The setting range or the individual settings of a parameter are shown in square brackets.
- For parameters with individual setting values, the preset value is shown in italic type.

Tips for data entry in the parameter menu

Line overflow

If the displayed text is longer than the length of the line in the display:

Move text to the *left*:

➜ Press the (↑) key.

Move text to the *right*:

➜ Press the (↓) key.

Entering network addresses

To move to the next/preceding alphanumeric character:

➜ Press the (↑) or (↓) key.

Confirm the selection and move to the next position:

➜ Press the (↵) key.

➠ It is also possible to make entries using the WEB server function.

Quick adjustment

Keys	Effect
(↓) + (↵)	Reduce value ten times faster
(↑) + (↵)	Increase value ten times faster
(↓) + (↑)	Reset value to lowest setting

[Tab. 3]   Key combinations for quick adjustment of parameters with a large value range.

LABEL SETUP menu

Load prod.profil

Load product profiles from the internal database.

Product profiles contain product-specific settings.

Max. 16 product profiles can be selected.

The number of a product profile can only be selected if a profile is already stored under that number.

Gap detect. mode

After the following events the dispenser needs to detect the punch again, i.e. initialise the label material: after switching on; after changing material.

Settings: [*Manual*, "Autom. forward"]

- Manual: The operator must start the initialisation of the the label material manually (by pressing the feed key several times).
- Autom. forward: The label material is initialised automatically if necessary.

Dispense speed   Speed at which the label is dispensed.

Setting range: [5.0…50.0] m/min; default: 10,0

Slew speed   Feed speed at which the label material is driven if missing-label-gaps occur and during the automatic measuring of the label length.

Setting range: [5.0…50.0] m/min; default: 1,0

Label pitch   Label pitch = label length+gap

Setting range: [5,0…600,0] mm; default: 100,0 mm

Lab. stop offset   Stop position of the label on the dispensing plate

Setting range: [0,0…999,9] mm; default: 20,0

Start offset   The effect of this function differs for slave machines in tandem mode.

- Standard mode or master machine:

  Distance between product sensor and the tip of the dispensing plate. The setting affects the position of the label on the product.

  Setting range: [15,0…2999,9] mm; default: 15,0

- Slave machine:

  Fine setting of the label position on the product.

  Setting range: [-30.0…+30.0] mm; default: 0,0

Product length   Start signals are suppressed while the product length is being set.

Setting range: [0.0…1999.9] mm; default: 0.0 mm

> **i** The product length function is helpful for example with products that have an uneven surface, which would cause multiple start signals.

Multi label mode   Settings: [*Off*, "x labels/start"]

- Off: One label is dispensed for each start signal
- "x labels/start": x labels are dispensed for each start signal; x = [2…20]

➠ x > 3: The distance of all following labels after the 2nd label matches the value set in LABEL SETUP > Label 2 offset.

➠ The "Multi label mode" function only works if the start signal is sent via a standard signal input (M12 or D-Sub 15). - It does *not* work if the applicator interface is used as a signal input.

Label 2 offset

➠ Only appears, if LABEL SETUP > Multi label mode = „x labels/start".

Defines the distance of the 2nd label and of all following labels, if x > 3 (see LABEL SET-UP > Multi label mode). The distance is measured from the front edge of the preceding label.

Setting range: [x…9999.9] mm; default: x, where
x = LABEL SETUP > Label pitch.

Label 3 offset

➠ Only appears, if LABEL SETUP > Multi label mode = „3 labels/start".

Defines the distance of the third label for the function LABEL SETUP > Multi label mode (see above). The distance is measured from the front edge of the preceding label.

Setting range: [x…9999.9] mm; default: x, where
x = LABEL SETUP > Label pitch.

Miss. label tol.

Missing label tolerance

Maximum permitted number of successive labels on the label belt

Setting range: [0…10]; default: 1

Miss. label mode

Missing label mode

Determines the treatment of missing labels

Settings: [*Compensate*, Simulate]

Compensate: Quick feeding with slew speed (see LABEL SETUP > Slew speed) until the next label arrives at the label sensor.

Simulate: Missing labels are simulated. Feeding is done in dispensing speed. Application example: Operation of a printer, which is mounted to the holding rods of the L-schape dispensing edge some label length above the dispensing edge. In „Compensate" mode, one or more labels would pass the printer unprinted.

With both settings, the machine switches into error state, if the max. admissible number of missing labels (LABEL SETUP > Miss. label tol.) is exceeded (machine stops; error message; error signal active).

Stop count. mode

Settings: [On, *Off*]

On: Dispensing counter counts backwards, starting with the value set in LABEL SETUP > Label stop quan. After 0 is reached, no other labels are dispensed.

Off: Dispensing counter counts forwards, i.e. each label that is dispensed increases the counter state.

Label stop quan.

After dispensing this number of labels, the dispenser stops

This function only appears if LABEL SETUP > Stop count. mode = "On"

Setting range: [0…99999]; default: 0

MACHINE SETUP menu

Dispenser type

Sets the firmware to fit the machine type. The setting must match the machine type!

Settings: [„ALS 309 RH", „ALS 309 LH", „ALS 306 RH", „ALS 306 LH", „ALS 256 RH", „ALS 256 LH", „ALX 734 RH", „ALX 734 LH", „ALX 735 RH", „ALX 735 LH", „ALX 736 RH", „ALX 736 LH"]

Store prod.prof.

Save the current settings as a product profile

With the exception of functions MACHINE SETUP > Dispense counter and LABEL SETUP > Label stop quan., all functions are saved as described under MACHINE SETUP > Store Parameters = "Without adj. par" (file "Setup.for").

Del. prod.profil

Deletion of a product profile from the internal database

Dispense counter

Enables dispense counter (displayed during labelling) to be adjusted by pressing the (↑) and (↓) keys.

Disp. Cnt. Reset

Settings: [Yes, *No*]

- Yes: Dispense counter is set to zero
- No: Dispense counter is not set to zero

Factory settings

All parameters are factory set to values depending on the relevant machine type. This factory setting can be reinstalled at any time.

➠ All function settings are overwritten by the factory setting.

Settings: [No, „Custom defaults", „Factory defaults"]

- No: No factory setting
- „Custom defaults": If customer specific function settings have been stored previously (see function Custom defaults) those are reinstalled. „Custom defaults" is only visible, if customer settings have already been stored.
- „Factory defaults": The function settings are reset to the factory setting.

Custom defaults

Settings: [„Apply current", „Delete"]

- „Apply current": Stores the current function settings as default values. The stored settings are reinstalled by calling MACHINE SETUP > Factory settings = „Custom defaults".
- „Delete": Deletes the stored, customer specific settings. „Delete" is only visible, if settings have already been stored.

Store Parameters

Saves the settings of the functions to a file on the memory card ("FORMATS\" directory)

Settings: [*With adjust para*", „Without adj. par"]

- "With adjust para" Parameters that contain devicespecific settings are included in what is saved. The names of the relevant parameters are marked with a * in the text file.

  Default file name: `SETUPALL ALS xxx yy zzzzzzzzzzzzzzz.FOR`

  Application: Service

- "Without adj. par": Parameters that contain device-specific settings are excluded from what is saved.

  Default file name: `SETUP ALS xxx yy zzzzzzzzzzzzzzzz.FOR`

  Application: Transferring settings to other devices (when device-specific settings should not be overwritten).

    – xxx = Machine type, e. g. 306
    – yy = RH or LH
    – zzzzzzzzzzzzzzzz = Serial number of the CPU board

Loop dancer adj.   Adjusts the end positions of the linear dancer lever.

Instructions: Read topic section Linear dancer arm 🗎, chapter „Settings" > „Dancer arm return points"

Auto Sensor Adj.   Automatically adjusts photoelectric label sensor

Starts slowly feeding label material until the next gap between labels

The setting that was automatically detected is shown briefly after successful adjustment. The setting can be checked or altered using the function: MACHINE SETUP > Sensor Adjust

Sensor Adjust   Adjusts the photoelectric sensors

Adjustment range: [0…100] %; default: 41

Speed Adaption   Speed adjustment

Settings: [*On*, Off]

- On: The dispensing speed adapts automatically to match the speed of the conveyor belt. A rotary encoder must be installed in order to use this function. In addition, the functions MACHINE SETUP > Encoder Type, MACHINE SETUP > Encoder Resol. and MACHINE SETUP > Encoder Diameter must be adjusted (see below).
- Off: The dispensing speed remains constant, at the value that was set using the function LABEL SETUP > Dispense speed.

Encoder Type   Type of rotary encoder used

Settings: ["Single Phase", „*2 Phases normal*", „2 Phases invert."]

Appears only if MACHINE SETUP > Speed Adaption = „On".

See topic section Installation 🗎, chapter „Installing APSF", „Entering the rotary encoder type".

Encoder Resol.   Resolution of the rotary encoder used

Adjustment range: [0.0…9999] pulses/turn; default: 500

Appears only if MACHINE SETUP > Speed Adaption = „On".

See topic section Installation 🗎, chapter „Installing APSF", „Entering the rotary encoder resolution".

Encoder Diameter   Diameter of the measuring wheel of the rotary encoder used

Adjustment range: [0.0…200.0] mm; default: 64.0

Appears only if MACHINE SETUP > Speed Adaption =„On".

Display:

200.00 mm	20.6 var

The diameter of the measuring wheel is shown on the left. The current product speed as calculated by the machine appears on the right. If this speed is not equal to the actual speed, the setting for the measuring wheel diameter can be changed to align the actual and measured values for the conveyor speed.

Example shown on display: The speed of the conveyor belt is calculated at 20.6 m/min for a measuring wheel of diameter 200mm at the current rate of rotation.

See topic section Installation ⬛, chapter „Installing APSF", „Entering the diameter of the measuring wheel".

Rewinder Operat.

Settings: [*On*, Off]

- On: Normal operation - the internal backing paper rewinder is enabled.
- Off: The internal backing paper rewinder is disabled. Application example: Application of an external rewinder.

Tandem Operation

Settings: [*Off*, Master, Slave, „FlipFlop master"]

- Off: Tandem Operation is disabled.
- Master: The first machine products on the conveyor belt reach. In classic master-slave mode, the slave machine replaces the master only for the short time, until an error at the master machine is eliminated.
- Slave: The second machine products on the conveyor belt reach.
- „FlipFlop master": The first machine products on the conveyor belt reach. In Flip-flop mode, the slave machine stays active until it is stopped by an error.

Tandem startmode

To gain a higher dispensing accuracy, master and slave can be operated with one start sensor each. In this case, LABEL SETUP > Start offset must be set for each machine separately.

Settings: [*1 Start sensor*, „2 Start sensors"]

- „1 Start sensor": One common start sensor for master and slave (connected via Y-cable)
- „2 Start sensors": Separate start sensors for master and slave

Tandem synchron. To choose the interface via which tandem operation is synchronised

Settings: [*None*, „Serial Com1", „UDP Tandem Port"]

- None: No tandem operation (together with Tandem Operation = „Disabled").
- „Serial Com1": Tandem synchronisation over Com1 (INTERFACE PARA >EASYPL-UGINTERPR > Interface *must not* be set to „Serial Com1" or to „Automatic").
- „UDP Tandem Port": Tandem synchronisation over Ethernet.

Slave IP address Input of the IP address of the slave if tandem synchronisation over Ethernet is selected.

Appears only if MACHINE SETUP > Tandem Operation = „Master" or „FlipFlop master" and if MACHINE SETUP > Tandem synchron. = „UDP Tandem Port".

→ Type in the IP address according to the scheme xxx.xxx.xxx.xxx.

Setting range for each xxx-value: [0…255]; default: 0

Tandem Distance Distance between the dispensing edges of master machine and slave machine

Adjustment range: [100…1500] mm; default: 500

Label sens. type Type of photoelectric label sensor

Settings: [*Optical*, Capacitiv]

- Optical: Throughbeam photoelectric sensor for transparent backing material
- Capacitiv: Capacitive or other alternative label sensor

Startsen. In.Type Product sensor input type

Settings: [*NPN*, PNP]

Start disp. mode Defines either the rising or falling side of the start signal peak as the point when dispensing is triggered.

Settings: [„*Pulse falling*", „Level low active", „Pulse rising", „Level high activ", „Pulse fall/ris"]

- "Pulse falling": Dispensing a label is triggered by a change from high to low at the "sensor signal" input.
- "Level low active": Setting is only visible in production mode. Labels are dispensed for as long as the signal at the "sensor signal" input remains at the value low.
- "Pulse rising": Dispensing a label is triggered by a change from low to high at the "sensor signal" input.
- "Level high activ": Setting is only visible in production mode. Labels are dispensed for as long as the signal at the "sensor signal" input remains at the value high.
- "Pulse fall/ris": Dispensing a label is triggered both by a change from low to high and by a change from high to low at the "sensor signal" input.

Start error stop Determines how the machine reacts to a product start error. A product start error occurs whenever a further start signal is received before the current dispensing process is finished (LABEL SETUP > Product length = 0) respectively before the product with the set length has „passed by" (LABEL SETUP > Product length > 0).

When a start error occurs, the machine shows a warning or an error message, depending on the setting.

Settings: [*On*, Off, „Off label queued"]

- On: A start error is followed by the error message:

  > Status num: 5009
  >   Start error

  The machine stops.

- Off: A start error is followed by the warning:

  >   ONLINE
  > Productstartwarn

  The machine continues labelling. The warning can be set back by Easy-Plug command #!CLRW.

- „Off label queued": Too early start signals are queued. They are processed, as soon as the machine is idle again.

On inhibit enter

„On entering inhibit" means „after the inhibit signal has been applied"

> ℹ️ „Inhibit" is an input signal, which supresses incoming start signals, what means, that start signals are being ignored as long as „Inhibit" is active. Nevertheless, incoming start signals are being registered . Registered products are products, which find themselves between start sensor and dispensing edge.

The function determines, how products are handled, which already had passed the start sensor, as the inhibit signal applied. The start signals triggered by the products are registered in a queue.

Settings: [„*Do saved starts*", „Del saved starts"]

- „Do saved starts": The queue is not touched. Registered products are labelled.
- „Del saved starts": The queue is deleted. Any started labelling cycle is finished.

See topic section Electronics Dispenser 🗎, chapter „Signal interface", „Impact of the inhibit signal".

On inhibit leave

„On leaving inhibit" means „after the inhibit signal stopped".

The function determines, how products are handled, which already had passed the start sensor, as the inhibit signal stopped. The start signals triggered by the products are registered in a queue.

Settings: [„*Do saved starts*", „Del saved starts"]

- „Do saved starts": Registered products are being labelled as soon as the first product reaches the dispensing edge.
- „Del saved starts": The queue is deleted. Incoming start signals are registered.

Turn-on mode

Operating mode the machine is in after it is turned on

Settings: [*Online*, Offline, Standalone]

- Online: dispensing mode
- Offline: setting mode
- Standalone: operation in standalone mode. Required to load firmware or configurations from CF card.

Language

Language used in the display

Settings: [German, *English*, French, Spanish, Dutch, Danish, Italian, Polish, Turkish, Russian]

Access authoriz.

Limits access to functions from the menu. Changes only come into force the next time the machine is switched on.

Settings: [„User auto", Supervisor, User, "Power-up code", *Off*]

- „User auto": Machine starts in user mode.
- Supervisor: Activates password check when the machine changes from offline mode to the parameter menu. Valid keycodes: Supervisor, Production.
- User: Same as the "Supervisor" setting, except for the valid keycodes.Valid keycodes: All
- "Power-up code": Activates password check as soon as machine is switched on. Once a valid keycode has been entered, the machine switches to Offline mode. The machine is then in either User, Supervisor or Production mode, depending on which keycode was entered.
- Off: Password check deactivated

Mode	Keycode
User	↓ - ↓ - ↑ - ↵
Supervisor	↵ - ↵ - ↑ - ↓ - ↵ - ↵
Production	↓ - ↵ - ↑ - ↓ - ↵ - ↵ - ↵

[Tab. 4] Valid keycodes

Mode	Effect
User	Access to the LABEL SETUP and SERVICE DATA menus
Supervisor	Access to all functions except production functions (indicated in the overview)
Production	Access to all functions

[Tab. 5] Effect of the different modes

⚠ CAUTION!

Improper use of the special functions only accessible in production mode can damage the labeller or stop it from functioning.

➜ Settings in production mode should only be adjusted by a trained servicing technician.

Materialend err

Related to internal OD monitoring.

- Settings: [Off, *„Mat.diam < x mm"*]
- *Setting range for x* = [40…500]
- Default setting: x= 60

Disabling the function:

➜ Set x < 40.

Re-enabling the function:

➜ Press the ↑ key.

Defines the diameter threshold for the material roll. If the (calculated) material roll diameter is below the threshold value, the following *status message* appears:

```
Status num:        5071
     Material end unw
```

An additional material end error is caused, if no unwinder rotation is detected during at least 600 mm of material feeding:

```
Status num:        5072
     Material end unw
```

Materialend warn

Related to internal OD monitoring.

- Settings: [Off, „*Mat.diam < x mm*"]
- *Setting range for x* = [50…500]
- Default setting: x= 80

Disabling the function:

➔ Set x < 40.

Re-enabling the function:

➔ Press the (↑) key.

Defines the diameter threshold for the material roll. If the (calculated) material roll diameter is below the threshold value, the following *warning* appears:

```
          ONLINE
        Material low
```

Rewinder full

Defines the maximum permissible diameter of the wound backing paper on the backing paper rewinder. If the diameter is exceeded, the following message appears:

```
Status num:        5145
     Rewinder full
```

Setting range: [50…500]; default: 270 mm

OD sensor signal

Refers to the external OD light barrier (option).

Settings: [*Off*, Warning, Error]

- Off: OD sensor is disabled.
- Warning: OD sensor is enabled. If the outer roll diameter is less than the critical value, the signal output „Warning" is activated. Additionally, the following warning message appears:

```
          ONLINE
       OD sensor warn.
```

- Error: OD sensor is enabled. If the outer roll diameter is less than the critical value, the signal output „Error" is activated. Additionally, the following status message appears:

```
Status num:        5111
     OD sensor error
```

OD Sens.polarity   Refers to the external OD light barrier (option).

Sets the polarity of the OD sensor.

Appears only if MACHINE SETUP > OD sensor signal = „Error" or „Warning"

Settings: [„Level low active", „Level high activ"]

• „Level low active": Warning is displayed, if the sensor signal is low.
• „Level high activ": Warning is displayed, if the sensor signal is high.

Loop supply mode   Settings: [*"Full label print"*, "Immediate print"]

• "Full label print": Print only if a complete label will fit into the buffer loop (loop). Recommended setting for short labels (<= 225 mm).
• "Immediate print": Print immediately after a start signal is received (condition: dispensing speed. > Print speed.; APSF turned off in LMA). Recommended setting for long labels (>= 225 mm).

Loop setup   Settings: [„1 deviator roll", "2 deviator rolls"]

• "1 deviator roll": dancer lever with one deviator roll
• "2 deviator rolls": dancer lever with two deviator rolls

INTERFACE PARA menu

>EASYPLUGINTERPR submenu

Interface   Setting the active data interface

Settings: [USB, Automatic, „TCP/IP SOCKET", *„Serial Com1"*]

• USB: USB 1.1 Interface.
USB IDs:

Machine	ID
ALX 734	0x0D44
ALX 735	0x0D54

• Automatic: All interfaces can receive data, although not simultaneously .
• "TCP/IP SOCKET": Data can be sent via a TCP/IP socket to the Ethernet interface.
• "Serial Com1": Serial interface Com1.

⚠ CAUTION!

To avoid malfunctions:

→ Do not send data to more than one interface at any one time.

ℹ During tandem operation, Com1 is used for communication between master and slave machine. Therefore, the interface function may not be set to „Automatic" or to „Serial Com 1".

Dispenser ID no.   Labeller identification number

Adjustment range: [0…31]

Sets the identification number of the labeller. The labeller can then be called with the interface command: #!An (n=labeller ID). Setting up ID numbers is particularly sensible for data transfer via RS422/485 interface, if more than one labeller is connected via a data link. Each of the labellers connected then only processes the data addressed to it using the "#!An" command.

Spooler size   The size of the data buffer memory can be set to fit customer requirements.

Adjustment range: [96…256] KBytes; default: 96; increment: 16

Interface delay   Parameter without function.

>COM1 PORT submenu

Baud rate   Data transfer rate

Settings: [300, 600, 1200, 2400, 4800, 9600, 19200, 38400, *115200*] bit/s

No. of data bits   Settings: [7, *8*]

Parity   The parity bit is used to check the data transfer. If the check reveals an error, a message is displayed accordingly. The setting must be the same for both transmitter and receiver. The normal set-up is for transfer without a parity bit.

Settings: [Odd, Even, *None*, „Always zero"]

- Odd: Odd parity. A parity bit is added in such a way that the total number of 1 bits is odd.
- Even: Even parity. A parity bit is added in such a way that the total number of 1 bits is even.
- None: No check bit.
- "Always zero": The check bit is always 0 (zero). For transmission and reception without parity checking.

Stop bits   Settings: [*1*, 2]

Data synch.   Settings: [*RTS/CTS*, XON/XOFF, None]

- RTS/CTS: Data synchronisation by hardware
- XON/XOFF: Data synchronisation by software
- None: Handshake lines are not monitored

Frame error   Settings: [*Display*, Ignore]

- Display: An error message is shown if frame errors occur during serial transfer.
- Ignore: Frame errors are ignored, no error message is displayed.

>NETWORK PARAM. submenu

IP Addressassign

Settings: ["Fixed IP address", DHCP]

- "Fixed IP address": This setting activates the "Net mask" and "Gateway address" parameters (see below).
- DHCP: The IP address is assigned automatically. The IP address assigned is shown briefly in the display while the system starts up.

IP address

Enter IP Address in the form xxx.xxx.xxx.xxx

Possible range for each xxx value: [0…255]

Net mask

Enter address of the network mask in the form xxx.xxx.xxx.xxx

Possible range for each xxx value: [0…255]

Default: Depends on the IP address set (it is recommended that you adopt the default value)

Gateway address

Enter address of the gateway in the form xxx.xxx.xxx.xxx

Possible range for each xxx value: [0…255]

000.000.000.000 = no gateway address used

Port address

Adjustment range: [1024…65535]; default: 9100

Ethernet speed

Settings: [Automatic, "10M half duplex", "10M full duplex", "100M half duplex", "100M full duplex"]

- Automatic: The transfer rate is set automatically.
- "10M Half duplex": Transfer rate = 10 MBit/s with half duplex operation.
- "10M full duplex": Transfer rate = 10 MBit/s with full duplex operation.
- "100M Half duplex": Transfer rate = 100 MBit/s with half duplex operation.
- "100M full duplex": Transfer rate = 100 MBit/s with full duplex operation.

MAC Address

Displays the MAC address of the CPU Board.

This address cannot be altered via the menu.

SNMP Agent

Function is not yet supported

SNMP password

Function is not yet supported

>NETWORK PARAM. submenu

FTP server   The file transfer protocol (FTP) server (RFC959) enables access to the labeller's internal RAM disk and to the compact flash card if one is in place. The FTP server is multisession compatible, in that the user name given when logging in is not verified. The password must match the FTP password set (see below).

Settings [Enabled, Disabled]

- Enabled: The FTP server is switched on.
- Disabled: The FTP server is switched off.

FTP Password   To input the password for the FTP server. Default: avery

WEB server   The web server makes it possible,

- to set or read the values of functions from the menu via a web browser
- to control the operator panel of the labeller via a web browser

WEB display refr   Automatic updating of the web browser display. The setting determines the time in seconds between two updates.

Setting range: [0...20] s; Default setting: 5 s

➠ Setting 0 = „no automatic updating".

WEB admin passw.   Changes the admin password for the web server

Default: "admin"

Access rights to functions are equivalent to those in supervisor mode (see MACHINE SETUP > Access authoriz.)

WEB supervisor p.   Changes the supervisor password for the web server

Default: "supervisor"

Access rights to functions are equivalent to those in supervisor mode (see MACHINE SETUP > Access authoriz.)

WEB operator p.   Changes the operator password for the web server

Default: "operator"

Access rights to functions are equivalent to those in supervisor mode (see MACHINE SETUP > Access authoriz.)

DHCP host name   Host name of the labeller.

Default: "Device Name" + the last 3 characters of the MAC address

Permitted characters: A-Z, a-z, 0-9, -

SIGNAL INTERFACE menu

Interface mode Sets the operation mode of the standard signal interface.

Settings: [„*PLC signals*", „Applic. signals"]

- „PLC signals": The signal interface provides PLC signals.
- „Applic. signals": The signal interface provides signals for applicator control.

>PLC SIGNALS submenu

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „PLC signals".

End dispense mod Affects the output signal „Dispense End" at the signal interface. Defines the signal response.

Settings: [„Mode0 inactive", „Mode1 low level", „Mode2 high level", „Mode3 low pulse", „Mode4 high pulse"]

„Mode0 inactive": Signal is disabled

Meaning of the other settings: see topic section Electronics dispenser 🗋, chapter „Signal interface", „Signals for PLC connection".

Disp.end delay Sets the delay of the „Dispense End" signal after the feed motor stopped.

Setting range: [0…10000] ms.

See topic section Electronics dispenser 🗋, chapter „Signal interface", „Signals for PLC connection".

End pulse width Sets the duration of the „Dispense End" signal.

Setting range: [0…10000] ms.

>APPLIC. SIGNALS submenu

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

Applicator type If an applicator is used to attach the labels, the applicator type is set here. Alternatively, "Direct dispense" should be selected to dispense without an applicator.

Settings: ["LTP - LTPV", PEP, „PEP Blow on", „PEP II Sensor", ASA, „Reverse PEP", „*Direct Dispense*", „BTS", „O-ring applicat.", „LA-BO", „LA-TO Timed", „LA-TO Sensor", „LA-TO BO Timed", „LA-TO BO Sensor"]

- "LTP - LTPV": "Light Touch Pneumatic" or "Light Touch Pneumatic Vacuum" Applicator
- PEP
- "PEP Blow on"
- "PEP II Sensor"
- ASA
- "Reverse PEP"
- "Direct Dispense" For labelling without an applicator

- "BTS": Setting for operation with Bad Tag Separator, an additional unit that removes "bad" RFID labels before they are dispensed.
- "O-ring applicat."
- LA-BO
- „LA-TO Timed": Setting for a time-controlled LA-TO
- „LA-TO Sensor": Setting for a sensor-controlled LA-TO
- „LA-TO BO Timed": Setting for a time-controlled LA-TO BO
- „LA-TO BO Sensor": Setting for a sensor-controlled LA-TO BO

Status outputs

Determines the output signals at pin 7 and 8 at the signal interface.

Settings: [*Off*, On]

- Off: Assignment of applicator signals (pin 7 = vacuum,
  pin 8 = blow on)
- On: Assignment of status signals (pin 7 = error, pin 8 = warning)

Apply mode

Determines whether the application process begins with application ("after start sig.")
or dispensing ("after dispensing") of a label.

Settings: ["After dispensing", „*After start sig.*"]

- "After dispensing": The start signal triggers both the dispensing and the application
  of a label.
- "After start sig.": The start signal triggers the application of a label that has already
  been dispensed. The next label is then dispensed immediately after application.

Dwell time

Appears only if SIGNAL INTERFACE >APPLIC. SIGNALS > Applicator type = PEP, „PEP Blow
on", „Reverse PEP"; BTS or „LA-TO Timed"

Determines the length of time for which the applicator is extended

Is required for applicators that are not limited by a touch-down signal

Dedicated signal output: Pin 5 at the signal interface

Adjustment range: [1…99999] ms; default: 200ms (LA-TO timed: 500ms)

Blow on time

Appears only if SIGNAL INTERFACE >APPLIC. SIGNALS > Applicator type = „PEP Blow on",
ASA, „Reverse PEP", BTS, „O-ring applicat." or LA-BO

Sets the duration for blowing on of each label

Only appears when an applicator that requires blowing on is used (e.g. "PEP Blow on")

Dedicated signal output: Pin 8 at the signal interface

Adjustment range: [0…99999] ms; default: 50 ms (LA-BO: 60 ms)

Restart delay

Determines the length of time after application for which no start signals will be accepted.

Adjustment range: [0…99999] ms; default: 0ms

Position timeout

Does not appear, if SIGNAL INTERFACE >APPLIC. SIGNALS > Applicator type = ASA, „Direct Dispense" and LA-BO

Determines the length of time after which an applicator position error is displayed as an error. A position error is considered to have occurred if the applicator has failed to reach one or both of its end positions within the time set.

Adjustment range: [500…99999] ms; default: 2000 ms

Apply comp. time

Compensation time for the applicator stroke time; required for operation with variable conveyor speed.

Setting range: [0…99999] ms.

ℹ️ Most applicators have a constant stroke time. If the labeller is driven with variable speed, this leads to different label positions on the product. With a slow conveyor speed, the touch down comes too early, with a high conveyor speed, it is too late. With the stroke time entered in the function Apply comp. time, the dispenser corrects this effect, and therefore improves the labelling precision.

When the compensation time is added, depends on the setting of the apply mode (see above):

- Apply mode = „After dispensing": Compensation time is added after the „dispense end" signal
- Apply mode = „After start sig.": Compensation time is added after the start signal

Setting instruction:

1. Setup the labeller with a slow conveyor speed.
2. Turn the conveyor speed high.
3. Adjust the labelling position by increasing the Apply comp. time step by step, until the labelling position is correct.

Touch down sens.

Switching behaviour of the touchdown sensor.

Settings: [„*Pulse falling*", „Pulse rising"]

- „Pulse falling": The *falling* signal edge at the sensor triggers the touchdown trigger event
- „Pulse rising": The *rising* signal edge at the sensor triggers the touchdown trigger event

TouchDownTimeout

Timeout at the touchdown sensor. This time specifies the maximal wait time for the touchdown trigger event.

Settings: [„*Off*", (100...99999) ms"]

- Off: The function is switched off
- xxxx ms: If the specified time xxxx mx is exceeded without the touchdown event, the applicator continues operation in the same manner as the touchdown event would have taken place. No error message will appear in this case.

>AI BOARD SIGNAL submenu

➠ This menu only appears, if an optional applicator interface (AI) is installed.

Applicator type

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Applicator type 🗋 on page 21.

Apply mode

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Apply mode 🗋 on page 22.

Start disp. mode

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

Selects a start mode. Depending on the selected mode, the start signal will be interpreted differently.

Settings: [„*Pulse falling*", „Level low active", „Pulse rising", „Level high activ", „Pulse fall/ris"]

- „Pulse falling": The dispensing of a label is triggered by a high-low-change of the start signal. The dispensing occurs only after the set delay time.
- „Level low active": Labels are being dispensed as long as the start signal is held low.
- „Pulse rising": The dispensing of a label is triggered by a low-high-change of the start signal. The dispensing occurs only after the set delay time.
- „Level high activ": Labels are being dispensed as long as the start signal is held high.
- „Pulse fall/ris": The dispensing of a label is triggered by a low-high-change as well as by a high-lowchange of the start signal. The dispensing occurs only after the set delay time.

Dwell time

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Dwell time 🗋 on page 22.

Blow on time

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Blow on time 🗋 on page 22.

Restart delay

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Restart delay 🗋 on page 22.

Position timeout

➠ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Position timeout 🗋 on page 23.

Apply comp. time

�➡ Only appears, if SIGNAL INTERFACE > Interface mode = „Applic. signals".

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Apply comp. time 🗎 on page 23.

Status signals

�➡ Only appears, if SIGNAL INTERFACE > Interface mode = „PLC signals".

Switches the signal outputs at the AI on or off.

Settings: [Off, *On*]

- Off: The AI is completely disabled
- On: The applicator control of the AI is disabled. Enabled are the status outputs at the „machine status" connector and the „Airstream support" output at the applicator connector.

Touch down sens.

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > Touch down sens. 🗎 on page 23.

TouchDownTimeout

For the parameter description refer to SIGNAL INTERFACE >APPLIC. SIGNALS > TouchDownTimeout 🗎 on page 23.

>ACTIVE INPUTS submenu

In this menu, the active input signals can be selected, if there are identical input signals at different interfaces. This can e. g. be the case with some signals at standard signal interface and optional applicator interface (AI).

Start signal

Settings: [„*Default input*", „Opt. appl.interf"].

- „Default input": Activates the standard start signal input (M12 connector).
- „Opt. appl.interf": Activates the start signal input at the optional applicator interface. Setting appears only with the optional AI board built in.

Inhibit signal

Settings: [„*Default input*", „Opt. appl.interf"].

„Default input": The Inhibit signal input at the standard signal interface is active.

„Opt. appl.interf": The Inhibit signal input at the optional applicator interface is active.

OD sensor signal

Settings: [„*Default input*", „Opt. appl.interf"].

- „Default input": The standard OD sensor signal input (M12 connector) is active.
- „Opt. appl.interf": The OD sensor signal input at the optional applicator interface is active.

SERVICE/DIAGNOS. menu

Service

Counter for service operations

Settings: [Yes, *No*]

- Yes: Increments the "Serv. operations" counter by one (see SERVICE DATA >OPERATION DATA > Service operations)
- No: Does not increment the counter.

Serv. data reset

Settings: [Yes, *No*]

- Yes: Sets all counters in the SERVICE DATA menu to zero.
- No: Counts remain unchanged

Sensor Test

See topic section Electronics Dispenser 🗋, chapter „Sensor tests".

PS registers

By means of this parameter, the register contents of the power supply can be changed

Parameter only for authorised, trained service personnel

Memory card test

Test function for memory cards

Pressing the Online key starts a test routine for the card memory. After a successful test, the following is displayed:

> Card Test O.K.

If the memory card is faulty or not in place, an appropriate error message is displayed.

Test functions

Starts motor durability test: Both motors start and stop continually at short intervals

For use at the factory

Store diagnosis

Stores the diagnostic data on memory card.

The default file name composes as follows:

```
Diagnose ALS 306 RH A637804070501067.log
```

ALS 306 RH = device type

A637804070501067 = Serial number of the CPU board; equals the value displayed under SERVICE DATA >CPU BOARD DATA > Serial number.

Store diagnosis

Stores the diagnostic data on memory card.

The default file name composes as follows:

```
Diagnose ALX 735 RH A637804070501067.log
```

ALX 735 RH = device type

A637804070501067 = Serial number of the CPU board; equals the value displayed under SERVICE DATA >CPU BOARD DATA > Serial number.

Gen.Support Data

Generate support data

Generates the folder „SupportData" on the selected memory medium and stores the following diagnosis files therein:

- Setup.for (for details see SPECIAL FUNCTION > Store Parameters)
- SetupAll.for (for details see SPECIAL FUNCTION > Store Parameters)
- Diagnose.log (for details see SPECIAL FUNCTION > Store diagnosis)

Each of the file names is completed by the printer type and the serial number of the CPU board. The file content is english, regardless of the language setting at the printer.

Those data are very helpful for the technical support for fault diagnosis purposes.

Data blocks del.   Deletes one or all data blocks in the flash memory.

Appears only, if at least one data block is in the flash memory.

Settings: [Bxx, All]

- Bxx: Deletes block number xx.

  After calling the parameter, data block number 01 is displayed:

  > B01 [a] diagnose inf [b]

  a) „B01": block number 01
  b) „diagnose inf": name of the data block; is contained in the data block header

  If the flash memory contains more than one data block:

  Press the cut button several times, until the wanted data block appears.

  Deleting a data block:

  1. Press the online button.
  2. Press the feed button to change to „yes".
  3. Press the online button to delete the block.

- All: Deletes all blocks

  > Delete ? -> no

Loop dancer val.   Shows the limit values of the loop sensor:

> xx [a] <-------------> yyy [b]

a) Value for the top limit position of the linear dancer arm
b) Value for the bottom limit position of the linear dancer arm

SERVICE DATA menu

>MODULE FW VERS. submenu

System version   Shows the firmware version of the labeller

System revision   Shows a consecutive revision number.

Only for factory-internal purpose.

System date   Shows the date, at which the firmware was generated.

Applicator int.   Shows the firmware version of the applicator interface:

> V 1 – T 17

V1 – T17 means firmware version 1.17.

>OPERATION DATA submenu

Service operations   Shows the total number of services that have been carried out.

Increment the counter by using SERVICE/DIAGNOS. > Service

Maximum value: 4 Bn.

Tot. mat. length   Displays the total material length that has been fed, i.e. the "mileage" of the drive roller.

Maximum value: 4 Bn. metres

Dispencing cycl.   Counter for the number of labels dispensed.

Operation time   Displays the total amount of time the machine has

been switched on

Total Operation   Displays the total running time of the machine since it was first powered up

>POWERSUPPLYDATA submenu

Type   Displays the type of power supply.

Version   Shows the power supply version.

Serial number   Shows the power supply serial number.

PS Temperature   Shows the temperature of the power supply in °C.

Standby+On time   Shows the total time, during which the power supply was switched on.

>CPU BOARD DATA submenu

CPU identifier   Displays the identification of the processor used

PCB Revision   Displays the layout revision und part number of the

CPU board

FPGA version   Displays the FPGA version

MAC Address   Displays the MAC address, an address for the board which is programmed by the manufacturer and cannot be changed

Serial number   Displays the serial number, which is programmed in by the board manufacturer

Production date   Displays the date of manufacture of the CPU board

PCB part number   Displays the part number of the board without components

Board part numb.   Displays the part number of the board complete with components

Manufacturer   Displays the manufacturer of the board

Work place   Displays the work place of the labeller

Company name   Displays the company name

>DISPLAY DATA submenu

Display Version   Displays the version of the operator panel.

Display serialNr   Shows the serial number of the operator panel.

Remote disp.vers   Shows the version of the remote operator panel.

Remote disp. ##   Shows the serial number of the remote operator panel.

>PERIPHERAL DATA submenu

Applicator int.   Function only appears when there is an applicator interface installed
                                  Shows the PCI model of the applicator interface

>MEMORY DATA submenu

Ram memory size   Shows the size of the available RAM.

Flash mem size   Shows the size of the available flash memory.

Custom defaults   Shows, if custom default settings are stored (diplays „Yes" or „No", see MACHINE SETUP
                                  > Custom defaults)

Alphabetical parameter list

Status Reports

3

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

General information about status reports

Area of application

This description of the status reports is valid for the print components of all the devices listed in the header bar and their options.

Display of status reports

During operation, tests are continually carried out to determine whether a malfunction has occurred. If a malfunction is detected, the corresponding status report appears on the display.

- 64-xx / ALX 92x / DPM / PEM / PM 3000 only:
  If the parameter SYSTEM PARAMETER > Signal buzzer is set to *On*, an additional tone signal is given.

- 64-xx / ALX 92x / DPM / PEM / PM 3000 with "Gen. 3" electronics only:
  During a status message, the background light changes from green to red.

  The status can be requested using the serial interface (see Easy-Plug command #!Xn).

Display   The status report shown on the display is assembled as follows:

> Status   xxxx
> TextTextTextTextTextTe

- *Status:* Is replaced by either „PrintStatus" or „QueueStatus".

  -- *PrintStatus* means, the error is caused by malfunction of the printer, independent of the sent print job. This is a message of the printer control.

  -- *QueueStatus* means, the error is caused by a faulty Easy-Plug command in the print job. This is a message of the Easy-Plug interpreter.

- *xxxx* signifies a status number in the range from 0001 to 9999. Using this number the user can look up the status of the printer in the following directory of status reports.

- *TextTextTextText* stands for a short display text which belongs to each status number. In many cases, the status of the printer can be identified just on the basis of this short display text.

  More detailed information about the status reports and any measures which may need to be taken is given in the descriptions of the status reports which follow the list of status reports.

Example
> PrintStatus   8704
> IDM Init. Error

Acknowledging status reports

Self-acknowledging   Self-acknowledging status reports only show an event taking place in the device, and are simply for informing the operator about this event. The message appears for a short period on the display and is accompanied by

a short signal tone. The device continues to operate without any intervention from the user.

IIII➡ Pay attention to each message in order to punctually prevent malfunctions.

Acknowledging   Status reports which are to be acknowledged must be confirmed by the operator as the activating event or malfunction endangers normal operation. The message appears on the display for so long until the malfunction has been corrected and acknowledged with the Enter button. A short signal tone is also given when the message appears.

Disabling   Messages which are shown following serious errors. This condition can be ended with a "warm start" (press Cut+Online+Feed buttons) or by switching off the printer.

Self-acknowledging	Header not underlined
Acknowledging	Header underlined once
Disabling	Header underlined twice

Tab. 1   The way of acknowledgment, a status message requires, can be detected by the text format used for the header. The gravity of a status message increases with the number of underlines.

General software errors

Errors in the firmware can never be completely ruled out. Such errors are described in the error directory as "General software errors". They can only be corrected by the manufacturer.

→ If errors which are described in the error directory as "General software errors" repeatedly occur, please notify the manufacturer, quoting the error number and the circumstances in which the error occurred.

Easy-Plug errors

Errors in the Easy-Plug code can be detected much easier with firmware version x.33 or higher. This requires the following setting:

SYSTEM PARAMETERS > EasyPlug error = "Strict handling"

The Easy-Plug command, which caused the error, is displayed after approx. 2 seconds in the lower display line. The displayed text is up to 30 characters long and is scrolled automatically.

If a single character caused the error, this character is marked with „>> <<„ in the display text, to facilitate the detection.

By pressing the cut button, the display can be toggled between error message and Easy-Plug command text.

Unspecific errors

Some errors can have more than one cause. To be able to find the specific reason for such an error, it is important that it can be reproduced.

→ Send the following items of information as complete as possible to the manufacturer – preferably as files:

- *Layout* and/or *printjob*, which makes the status message appear
- *Parameter configuration* of the printer, when the error occurs
- *Log file* of the printjob until the error occurs

→ Use parameter SPECIAL FUNCTION > Parameter to CF, to save the current parameter configuration.

→ Use parameter SERVICE FUNCTION > EasyPlug monitor, to send the received Easy-Plug data to a serial interface. Alternatively, with some printer types, log files of the printjob can be saved on memory card (SPECIAL FUNCTION > Parameter to CF).

Our Technical Support will try hard to find a solution by reproducing the situation which caused the error.

Not listed status reports

Some status reports are not shown in the list of status reports. They provide developers of the printer firmware and trained service personnel with information about special conditions, particularly with regards to the printer firmware.

⯈ If your printer displays status reports which are not included in the following list, please refer to the authorised service office. Make a note of the status number and the circumstances in which the message occurred.

Listing of all Status reports

1000   No new command

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

                   → Please read the notes in section General software errors 🗎.

1001   Parameter Table

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

                   → Please read the notes in section General software errors 🗎.

1002   Comm. sorting

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

                   → Please read the notes in section General software errors 🗎.

1003   Too many slashes

Status   General software error

Measure   → Please read the notes in section General software errors 🗎.

1004   Slash w/o param.

Status   General software error

Measure   → Acknowledge by pressing the on-line button.

                   → Please read the notes in section General software errors 🗎.

1005   2 same commands

Status   General software error

Measure   → Acknowledge by pressing the on-line button.

                   → Please read the notes in section General software errors 🗎.

1006   Letter incorrect

Status   General software error: self-acknowledging

Measure   → Please read the notes in section General software errors 🗎.

1007   Command incorr.

Status   Unknown command.

Measure   → Check Easy Plug sequence.

1008   Subcomm. incorr.

Status   Unknown letter in a subcommand.

Measure   → Check Easy Plug sequence.

11

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1009   Param. tab inc.

Status   General software error

Measure   ➔ Acknowledge by pressing the on-line button.

                     ➔ Please read the notes in section General software errors 🗋.

1010   #ER x #Q !

Status   One or more illegal commands between #ER and #Q.

Measure   ➔ Check transmitted Easy Plug sequence.

                     ➔ Please read the notes in section Easy-Plug errors 🗋.

1011   #ER missing

Status   One or more format commands without leading #ER (self-acknowledging)

Measure   ➔ None. The command is still carried out.

                     ➔ Please read the notes in section Easy-Plug errors 🗋.

1012   #IM x #Q !

Status   One or more illegal commands between #IM and #Q.

Measure   ➔ Check Easy Plug sequence.

                     ➔ Please read the notes in section Easy-Plug errors 🗋.

1013   Comm. flag inc.

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                     ➔ Please read the notes in section General software errors 🗋.

1014   Uninit integer

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                     ➔ Please read the notes in section General software errors 🗋.

1015   Uninit float

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                     ➔ Please read the notes in section General software errors 🗋.

1016   Uninit string

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                     ➔ Please read the notes in section General software errors 🗋.

1017   Uninit discr

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please read the notes in section General software errors 🗋.

1018   Too many discr

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please read the notes in section General software errors 🗋.

1019   Uninit BCD para.

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please pay attention to the notes in chapter General software errors 🗋.

1020   Too much image

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please pay attention to the notes in chapter General software errors 🗋.

1021   Uninit image par

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please pay attention to the notes in chapter General software errors 🗋.

1022   Too many files

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Pay attention to the notes in section General software errors 🗋.

1023   Uninit File Para

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please pay attention to the notes in chapter General software errors 🗋.

1024   Com. too long

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

➔ Please pay attention to the notes in chapter General software errors 🗋.

1025   Com twice there

Status   General software error

Measure   ➜ Switch printer off and then back on again after thirty seconds.

              ➜ Please pay attention to the notes in chapter General software errors 🗋.

1026   Comm. w/o. flag

Status   General software error

Measure   ➜ Switch printer off and then back on again after thirty seconds.

              ➜ Please read the notes in section General software errors 🗋.

1027   Uninit parameter

Status   Parameter could not be initialised.

Measure   ➜ Acknowledge by pressing the Online button.

1028   Parameter uninit

Status   General software error

Measure   ➜ Acknowledge by pressing the Online button.

              ➜ Please read the notes in section General software errors 🗋.

1029   Param. incorr.

Status   Incorrect parameter in the command.

Measure   ➜ Check Easy Plug sequence.

              ➜ Please read the notes in section Easy-Plug errors 🗋.

1030   Command incorr.

Status   Error during the command interpretation.

Measure   ➜ Check Easy Plug sequence.

              ➜ Please read the notes in section Easy-Plug errors 🗋.

1031   Too many slashes

Status   Too many parameters between two slashes.

Measure   ➜ Check Easy Plug sequence.

              ➜ Please read the notes in section Easy-Plug errors 🗋.

1032   Incorrect char.

Status   Parameter contains an invalid character.

Measure   ➜ Check Easy Plug sequence.

              ➜ Please read the notes in section Easy-Plug errors 🗋.

14

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1033   Uninit flash par

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

→ Please read the notes in section General software errors 🗋.

1034   Uninit restrict

Status   A „restricted string" parameter could not be initialized.

Measure   → Switch printer off and then back on again after thirty seconds.

→ Please read the notes in section General software errors 🗋.

1035   Uninit combi

Status   General software error. A combi parameter could not be initialized.

Measure   → Confirm by pressing the Online button.

→ Please read the notes in section General software errors 🗋.

1036   Wrong combi para

Status   General software error. A combi parameter could not be initialized.

Measure   → Confirm by pressing the Online button.

→ Please read the notes in section General software errors 🗋.

1037   Software error

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

→ Please read the notes in section General software errors 🗋.

1038   Software error

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

→ Please read the notes in section General software errors 🗋.

1087   OLV not active

Status   OLV- specific Easy Plug commands have been used (#OLVI or #OLVD),
without having set the printer to OLV use at first.

Measure   → Set the printer to OLV use.

❍ See parameter INTERF. PARAM > COM2 PORT > Function Option.

1088   No realtimeclock

Status   RTC-specific Easy Plug commands have been used (#YS or #YC), *without*
having a RTC installed.

Measure   → Install a RTC.

❍ For details refer to the Service Manual, topic section "General Service",
chapter "Assembling accessories" / "Option board".

1089   Seek Fkt. Error

Status   General software error. An error occured while processing the function „seek" in the internal file system of the printer.

Measure   ➜ Confirm by pressing the Online button.

           ➜ Please read the notes in section General software errors 🗋.

1090   Incomplete Job

Status   The actual print job was not terminated by the #Q command. In other words, after a start command #ER for a label format follows another #ER command without the first format being terminated by #Q.

Measure   ➜ Confirm by pressing the Online button.

           ➜ Terminate the print job with a #Q command.

1091   Wrong var field

Status   An error occured while interpreting the text string of a variable data field. The error could e.g. be caused by a #YT or a #YB command (Easy Plug). Self-acknowledging error.

Measure   ➜ Check the text strings of variable data fields.

1092   Rename file

Status   General software error

Measure   ➜ Please read the notes in section General software errors 🗋.

1093   Delete file

Status   File cannot be deleted.

Measure   ➜ Check whether the file name is written correctly; check whether the file is write-protected.

1094   More than 3 figs

Status   General software error

Measure   ➜ Switch printer off and then back on again after thirty seconds.

           ➜ Please read the notes in section General software errors 🗋.

1097   Out of memory

Status   General software error

Measure   ➜ Switch printer off and then back on again after thirty seconds.

           ➜ Please read the notes in section General software errors 🗋.

1099   File end

Status   General software error

Measure   ➜ Please read the notes in section General software errors 🗋.

16

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1101   Wrong time/date

Status   Easy-Plug command #RTC (set realtime clock): unvalid date or wrong date/time format.

Measure   ➔ Check command #RTC in the current printjob.

                      ➔ Please read the notes in section Easy-Plug errors 🗎.

1102   Counter offset

Status   Applies to all Easy-Plug commands with counter function, e. g. #YT: A non-valid digit was used in the offset.

Measure   ➔ Check all commands with counter function in the current printjob.

                      ➔ Please read the notes in section Easy-Plug errors 🗎.

1110   Opening Bracket

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                      ➔ Please read the notes in section General software errors 🗎.

1111   Closing Bracket

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                      ➔ Please read the notes in section General software errors 🗎.

1112   Para: No Value

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                      ➔ Please read the notes in section General software errors 🗎.

1113   No Default Value

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                      ➔ Please read the notes in section General software errors 🗎.

1114   < Limit value

Status   A sent Easy Plug command contains a value which exceeds the admissible range at the bottom limit. The faulty value is replaced automatically by a default value matching the limits.

                      Example: #YT109/-1/. The value –1 has been assigned to the parameter d. Admissible for d are the values 0, 1, 2, 3. Therefore, -1 exceeds the value range at the bottom limit.

Measure   ➔ Check the Easy Plug command on admissible values and correct them if necessary.

                      ➔ Please read the notes in section Easy-Plug errors 🗎.

1115   > Limit value

Status   A sent Easy Plug command contains a value which exceeds the admissible range at the top limit. The faulty value is replaced automatically by a default value matching the limits.

Example: #YT109/5/. The value 5 has been assigned to the parameter d. Admissible for d are the values 0, 1, 2, 3. Therefore, 5 exceeds the value range at the top limit.

Measure   → Check the Easy Plug command on admissible values and correct them if necessary.

→ Please read the notes in section Easy-Plug errors 🗎.

1120   Incorr. logo no.

Status   Logo no. is invalid because it is outside of the address field. (self-acknowledging)

Measure   → Check whether the logo no. has been given as being smaller than 0 (zero) or larger than 255.

1121   Logo exists

Status   Logo already exists.

Measure   → Change the designation of the logo; repeat saving.

1122   Creating logo

Status   General software error

Measure   → Please read the notes in section General software errors 🗎.

1123   Rename logo

Status   General software error

Measure   → Please read the notes in section General software errors 🗎.

1124   Logo file

Status   General software error

Measure   → Please read the notes in section General software errors 🗎.

1125   Delete error

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

→ Please read the notes in section General software errors 🗎.

1126   File creation

Status   Faulty Easy-Plug code. A file could not be created. The error may e.g. be caused by a faulty filename or by too less printer memory.

Measure   ➔ Check all used filenames for length, applied characters, etc. Change the name if faulty.

             ➔ Check the printer for enough memory.

             ➔ Please read the notes in section Easy-Plug errors 🗋.

1127   File format

Status   A file name doesn´t match the (DOS-) filename convention.

Measure   ➔ Check all used filenames for length, applied characters, etc. Change the name if faulty.

1128   File exists

Status   Faulty Easy-Plug code. A file is ought to be loaded into the printer memory via #DF command. The command was used without adding the parameter "O" for "Overwrite", but a file already exists under the given name.

Measure   ➔ Rename one of both files or set the parameter "O".

             ➔ Please read the notes in section Easy-Plug errors 🗋.

1130   Float overflow

Status   Number of figures is too high for a floating comma variable.

Measure   ➔ Switch printer off and then back on again after thirty seconds.

             ➔ Reduce the number of figures.

1131   Logo cache full

Status   A logo or several logos was/were sent which is/are too huge for the logo buffer.

Measure   ➔ Switch printer off and then back on again after thirty seconds.

             ➔ Reduce the logo size.

1140   Line too long

Status   Error during conversion from EPT into BIN: permitted line length exceeded.

Measure   ➔ Reduce line length.

1141   Para. incorr. BI

Status   Error during processing of a Bit Image parameter.

Measure   ➔ Acknowledge by pressing the on-line button.

1150   Integer overflow

Status   Too many figures for an integer variable.

Measure   ➔ Switch printer off and then back on again after thirty seconds.

             ➔ Reduce the number of figures.

1160   String too long

Status   A string parameter exceeds the maximum string length of 256 characters (1024 characters in 2-dimensional bar codes respectively).

Measure   → Reduce the number of characters in the string.

1170   X Pos > width

Status   Faulty Easy-Plug code. X position exceeds permitted maximum value.

Result   The previously set print offset is retained.

Measure   → Reduce value for X position.

            → Please read the notes in section Easy-Plug errors 🗋.

1171   X Pos < zero

Status   Faulty Easy-Plug code. Value for X position < zero.

Result   The previously set print offset is retained.

Measure   → Check value for X position for signs.

            → Please read the notes in section Easy-Plug errors 🗋.

1172   Y Pos > length

Status   Faulty Easy-Plug code. Y position exceeds the label length.

Result   The previously set print offset is retained.

Measure   → Reduce value for Y position.

            → Select a longer label.

            → Please read the notes in section Easy-Plug errors 🗋.

1173   Y Pos < zero

Status   Faulty Easy-Plug code. Value for Y position < zero.

Result   The previously set print offset is retained.

Measure   → Check value for Y position for signs.

            → Please read the notes in section Easy-Plug errors 🗋.

1174   Max width: right

Status   Maximum label width, right, reached. Elements such as character, line or logo do not fit into the physical print format (self-acknowledging)

result   Only elements which completely fit into the print format are printed.

Measure   → Alter value for width or position of elements.

            → Please read the notes in section Easy-Plug errors 🗋.

1175   Max width: left

Status   Faulty Easy-Plug code. Maximum label width, left, reached. Elements such as character, line or logo do not fit into the physical print format (self-acknowledging)

result   Only elements which completely fit into the print format are printed.

Measure   →   Alter value for width or position of elements.

         →   Please read the notes in section Easy-Plug errors 🗋.

1176   Max length: top

Status   Faulty Easy-Plug code. Maximum label length, top, reached.

Measure   →   Correct label layout: Position the drawing elements in a way that they fit on the label or modify the label length.

         →   Please read the notes in section Easy-Plug errors 🗋.

1177   Max length: bot.

Status   Faulty Easy-Plug code. Maximum label length, bottom, reached.

Measure   →   Correct label layout: Position the drawing elements in a way that they fit on the label.

         →   Please read the notes in section Easy-Plug errors 🗋.

1178   x Dots < zero

Status   An Element of the Easy Plug format is located at an X position < 0.

Measure   →   Adjust the Easy Plug format.

1200   GetRLE reset st

Status   (number of bytes) * (number of lines) does not correspond to the file length.

Measure   →   Switch printer off and then back on again after thirty seconds.

1201   GetRLE error st

Status   GetRLE byte has error status.

Measure   →   Switch printer off and then back on again after thirty seconds.

1210   itoa Short Strin

Status   General software error

Measure   →   Please read the notes in section General software errors 🗋.

1240   New FS>E

Status   General software error

Measure   →   Please read the notes in section General software errors 🗋.

21

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1241   New Read Pointer

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1242   New FE in job

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1243   New delete order

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1244   New wrong pos.

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1245   New no space

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1246   New HP no space

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1247   Out of memory

Status   Faulty memory assignment for print jobs.

Measure   → Please read the notes in section Unspecific errors 🗎.

1260   TimeDate string

Status   General software error

Measure   → Acknowledge by pressing the on-line button.

                     → Please read the notes in section General software errors 🗎.

1270   #-comm. invalid

Status   General software error

Measure   → Please read the notes in section General software errors 🗎.

1272   Wrong #!..

Status   Faulty Easy-Plug code. Faulty use of the immediate command "#!A..". The specified parameter value exceeds the admissible value range (0 to 31).

Measure   → Specify an admissible parameter value.

                     → Please read the notes in section Easy-Plug errors 🗎.

1273 Wrong #!C..

Status Faulty Easy-Plug code. Faulty use of the immediate command "#!C..". The specified parameter value exceeds the admissible value range (A, F).

Measure → Specify an admissible parameter value.

→ Please read the notes in section Easy-Plug errors 🗋.

1276 #!P wrong number

Status Faulty Easy-Plug code. Faulty use of the immediate command "#!P..". The specified parameter value exceeds the admissible value range (0 to 31).

Measure → Specify an admissible parameter value.

→ Please read the notes in section Easy-Plug errors 🗋.

1277 Wrong #!S..

Status Faulty Easy-Plug code. Faulty use of the immediate command "#!S..". The specified parameter value exceeds the admissible value range (P, R).

Measure → Specify an admissible parameter value.

→ Please read the notes in section Easy-Plug errors 🗋.

1278 Wrong #!X..

Status Faulty Easy-Plug code. Faulty use of the immediate command "#!X..". The specified parameter value exceeds the admissible value range (S, B, P).

Measure → Specify an admissible parameter value.

→ Please read the notes in section Easy-Plug errors 🗋.

1279 #!X wrong number

Status Faulty Easy-Plug code. Faulty use of the immediate command "#!X..". The specified parameter value exceeds the admissible value range.

Measure → Specify an admissible parameter value.

→ Please read the notes in section Easy-Plug errors 🗋.

1282 Spooler FB > L

Status General software error

Measure → Switch printer off and then back on again after thirty seconds.

→ Please read the notes in section General software errors 🗋.

1285 #!-comm. incorr.

Status Faulty Easy-Plug code. Faulty use of the immediate command "#!..!. The specified letter is unknown.

Measure → Specify an admissible letter.

→ Please read the notes in section Easy-Plug errors 🗋.

1290   Label limit

Status   Faulty Easy-Plug code. Value for x or y position exceeds the label limit.

Measure   ➔ Reduce the value for the x or y position.

                     ➔ Please read the notes in section Easy-Plug errors 🗋.

1291   Draw field

Status   Faulty Easy-Plug code. Function call, drawing object, unsuccessful.

                     ➔ Please read the notes in section Easy-Plug errors 🗋.

1300   Invalid Command

Status   General software error

Measure   ➔ Please read the notes in section General software errors 🗋.

1301   Table full

Status   General software error

Measure   ➔ Please read the notes in section General software errors 🗋.

1310   Wrong Field ID

Status   The error can have several causes.

Measure   ➔ Please read the notes in section Unspecific errors 🗋.

1320   No Default Value

Status   Faulty Easy-Plug code.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1321   Bar Code Object

Status   Faulty Easy-Plug code regarding the declaration of a bar code.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1322   Logo Object

Status   Faulty Easy-Plug code regarding the declaration of a logo.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1323   Line Object

Status   Faulty Easy-Plug code regarding the declaration of a line.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1324   Rectangle Object

Status   Faulty Easy-Plug code regarding the declaration of a rectangle.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

24

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1325   Truedoc Object

Status   The error can have several causes.

Measure   ➔ Please read the notes in section Unspecific errors 🗋.

1326   Fix Field Creati

Status   Faulty Easy-Plug code regarding the declaration of a field.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1327   Update Field Cre

Status   Faulty Easy-Plug code regarding the declaration of a field.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1328   Var Field Creati

Status   Faulty Easy-Plug code regarding the declaration of a field.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1329   Count Field Crea

Status   Faulty Easy-Plug code regarding the declaration of a counting field.

Measure   ➔ Please read the notes in section Easy-Plug errors 🗋.

1330   Create clk. field

Status   General software error

Measure   ➔ Please read the notes in section General software errors 🗋.

1331   Field type inv.

Status   Invalid field type

Measure   ➔ Acknowledge by pressing the Online button.

1332   Field length inc.

Status   General software error

Measure   ➔ Switch printer off and then back on again after thirty seconds.

                           ➔ Please read the notes in section General software errors 🗋.

1333   Logo not there

Status   Selected logo does not exist.

Measure   ➔ Check file name / existence of the logo.

1334   #YV Data incorr.

Status   Illegal entries for a #YV field (variables data field).

Measure   ➔ Acknowledge by pressing the Online button.

                           ➔ Correct data.

                           ➔ Please read the notes in section Easy-Plug errors 🗋.

1335   #YV Field cont.

Status   Content of the #YV field (variables data field) could not be pasted.

Measure   → Acknowledge by pressing the Online button.

               → Please read the notes in section Easy-Plug errors 🗋.

1336   #YV no. incorr.

Status   #YV field (variables data field) with the given no. not found.

Measure   → Acknowledge by pressing the Online button.

               → Check the number of the #YV field.

               → Please read the notes in section Easy-Plug errors 🗋.

1390   Web width zero

Status   The printer was set to printing several label rows (Easy Plug command #ER, n > 1); but the label width was by fault set to zero (b = 0).

Measure   → Correct the #ER command regarding the setting of parameter b.

               → Please read the notes in section Easy-Plug errors 🗋.

1391   Web > Width

Status   The printer was set to printing several label rows (Easy Plug command #ER, n > 1); but both or one of the parameters n and b are set in a way that n * b (label row width * no. of rows) exceeds the material width.

Measure   → Correct the #ER command regarding the setting of parameters n and b.

               → Please read the notes in section Easy-Plug errors 🗋.

1392   Job memory full

Status   The error can have several causes.

Measure   → Please read the notes in section Unspecific errors 🗋.

1393   Job struct creat

Status   The error can have several causes.

Measure   → Please read the notes in section Unspecific errors 🗋.

1394   Invalidation

Status   General software error

Measure   → Switch printer off and then back on again after thirty seconds.

               → Please read the notes in section General software errors 🗋.

1395 Label too wide

Status A printjob contains an #IM-command which sets the label width to a measure exceeding the maximum print width. The maximum print width depends on the printer type.

○ Refer to the user manual, topic section „Specifications" for the maximum label width.

Measure ➔ Reduce the label width set by the #IM-command in the concerned print job, until the label width matches the maximum print width.

➔ Please read the notes in section Easy-Plug errors 🗋.

1396 Label too long

Status Label length setting exceeds the maximum label length. The maximum label length depends on the memory configuration of the printer.

○ The info-printout „Memory Status" shows among other data the maximum label length. Read more about info-printouts in topic section „Info-Printouts and Parameters".

Measure ➔ Reduce the label width setting.

➔ Please read the notes in section Easy-Plug errors 🗋.

1397 Label too short

Status The label length defined in the #IM command is smaller than the minimum admissible length. The label length is set to the minimum value.

Measure ➔ Correct the length value in the label layout definition.

➔ Please read the notes in section Easy-Plug errors 🗋.

1398 Label too small

Status The label width defined in the #IM command is smaller than the minimum admissible width. The label width is set to the minimum value.

Measure ➔ Correct the width value in the label layout definition.

➔ Please read the notes in section Easy-Plug errors 🗋.

1404 UTF8 data wrong

Status Character code > 0xffff

Measure ➔ Check/change the character code.

1470 X-Offset

Status The x-position of a layout element (graphics, text, ...) is beyond the label margin. The element is shifted automatically to the first admissible position at the correct side of the margin.

Measure ➔ Check the x-positions of the layout elements and change them, if necessary.

➔ Please read the notes in section Easy-Plug errors 🗋.

1471   Y-Offset

Status   The y-position of a layout element (graphics, text, ...) is beyond the label margin. The element is shifted automatically to the first admissible position at the correct side of the margin.

Measure   ➔ Check the y-positions of the layout elements and change them, if necessary.

           ➔ Please read the notes in section Easy-Plug errors 🗋.

1501-1535   Messages, which can occur in ZPL emulation mode

       This section lists all error messages that may appear when using the ZPL II® interpreter function.

1501   Unknown MLI Cmd

Error level   1

Status   An uninterpretable command was encountered.

Measure   ➔ Check, if the printjob was proceeded correctly. If yes, ignore the message, if no, modify the printjob.

1502   MLI Hash Error

Error level   1

Status   General software error.

Measure   Read chapter General software errors 🗋 on page 8.

1503   Filename Too Long

Error level   1

Status   Filename is too long.

Measure   ➔ Rename the file with a shorter name.

1504   Param > Max

Error level   1

Status   Parameter exceeds the maximum value defined

Measure   ➔ Shorten the parameter.

1505   Param < Min

Error level   1

Status   Parameter is shorter than the admissible minimum value allowed.

Measure   ➔ Modify the parameter.

1506   No Previous

Error level   1

Status   Graphics command is to set current row data to previous row data, but previous row data doesn't exist.

Measure   ➔

28

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1507   Not enough data

Error level	1
Status	Data for graphics command is not enough.
Measure	➔ Check and modify graphics data.

1508   String Too Long

Error level	1
Status	String characters exceeds the maximum number of characters which the particular string parameter can take.
Measure	➔ Check and modify the command.

1509   Wrong Byte Cnts

Error level	1
Status	The row size or total size parameters is not valid (equals 0). Occurs when download graphic or download font commands in process.
Measure	➔ Check and modify the command.

1510   Wrong Param

Error level	1
Status	Control characters are not allowed for discrete parameter (single letter parameter).
Measure	➔ Check and modify the command.

1511   Bar Parm Error

Error level	1
Status	Parameters to a barcode command is wrong or does not conform with specs.
Measure	➔ Modify the bar code command.

1512   Code128 Mode Err

Error level	1
Status	Code128 barcode command specifying mode type other than 'AUTO'.
Measure	➔ Modify the bar code command.

1513   Wrong Mode

Error level	2
Status	Coda block barcode command specifying mode type other than 'F'.
Measure	➔ Modify the bar code command.

1514   ^BX Parm Err.

Error level	2
Status	Data Matrix bar code command specified an escape sequence character. This is not supported in this printer.
Measure	→ Modify the bar code command.

1515   Conv to ECC200

Error level	1
Status	Data Matrix barcode command specified non ECC200 level. Program is attempting to convert to ECC200.
Measure	→ Modify the bar code command.

1516   Bad Drive: x

Error level	2
Status	The drive selected is not a valid drive. (We support only 'R' and 'B').
Measure	→ Select a valid drive.

1517   Mask String: x

Error level	2
Status	The mask string used in ^SF command is not supported.
Measure	→ Modify the print job.

1518   Bad Format: x

Error level	2
Status	The graphic format selected is not supported by Avery ZPL Emulation (Compressed binary and PNG format).
Measure	→ Convert graphic into a supported format.

1519   Cmd Init Error

Error level	1
Status	General software error.
Measure	Read chapter General software errors 🗋 on page 8.

1520   Unsupported Cmd

Error level	1
Status	Non critical commands that is not supported by this printer.
Measure	→ Check and modify the commands in the printjob.

1521   Unsupported: x

Error level	2
Status	Critical commands that is not supported by this printer.
Measure	→ Check and modify the commands in the printjob.

30

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

1522   Bad Char Set x

Error level   2

Status   The character set selected by ^CI command is not supported.

Measure   ➜ Replace the character set by a supported set.

1523   Cmd Parm Error

Error level   1

Status   Error encountered while parsing command parameter.

Measure   ➜ Check and modify the commands in the printjob.

1524   d/mm not chg x

Error level   2

Status   Command attempting to lower print density assuming a 200 dpi printer.

Measure   ➜ Check and modify the commands in the printjob.

1525   USI not exist

Error level   1

Status   The printer is not equipped with a USI board.

Measure   ➜ Modify the printjob.

                      ➜ Install a USI board.

1526   Can't Off CV

Error level   1

Status   Command attempting to turn off barcode validations.

Measure   ➜ Check and modify the commands in the printjob.

1527   Offset illegal

Error level   2

Status   RTC command specified a clock offset not supported by this printer (possibly a negative offset).

Measure   ➜ Correct the command.

1528   Language illegal

Error level   2

Status   Language specified by RTC command is not English or German.

Measure   ➜ Correct the command.

1529   Invalid Prn Mode

Error level   1

Status   Print modes other than cutter mode are selected (Tear-off, Rewind or Peel-off modes in ^MM command).

Measure   ➔ Correct the command.

1530   Inc free str mem

Error level   2

Status   Not enough free store memory.

Measure   ➔ Increase the value set in SYSTEM PARAMETER > Free store size (at least 2048 Kbytes).

1531   Inc RAM disc

Error level   2

Status   Not enough RAM disc.

Measure   ➔ Increase the value set in SYSTEM PARAMETER > Ram disk size (at least 2048 Kbytes).

1532   No Fixfont

Error level   2

Status   No fixfonts in Flash.

Measure   ➔ Load fixfont.

1533   No Speedo Font

Error level   2

Status   No Speedo font in Flash.

Measure   ➔ Load speedo font.

1534   ^XA missing

Error level   1

Status   Command should be placed inside of ^XA…^XZ pair.

Measure   ➔ Modify the printjob.

1535   ^XZ missing

Error level   1

Status   Command should be placed outside of ^XA…^XZ pair.

Measure   ➔ Modify the printjob.

1561   Wrong Font Format

Status   Format error in a Fixfont file.

Measure   ➔ Check font file.

32

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

2000-2009   Messages caused by Easy-Plug variables

2000   Double var name

Status   Attempt to define a variable with an already existing name.

Measure   ➔ Choose another name for the variable.

2002   Var. data length

Status   The maximum allowed length of a variable was exceeded.

Measure   ➔ Correct the variable length.

2003   Expr. bracket

Status   The number of open and close brackets in the expression is not equal.

Measure   ➔ Check the brackets in t he expression and correct their number.

2004   Exp. quotemark

Status   The number of quotemarks in the expression is *not* a multiple of two.

Measure   ➔ Check the quotemarks in the expression and correct their number.

2005   Exp. comma pos.

Status   Unexpected comma in the expression.

Measure   ➔ Check the syntax of the expression regarding commas.

2006   Exp.functionname

Status   A wrong function name is used in the expression.

Measure   ➔ Check, if the function names used in the expression are spelled correctly
and if the functions exist. Change the function name.

2007   Exp.fct.paratype

Status   A wrong parameter type in an expression was detected.

Example: SubStr("Text",o,"A") would provoke this message, because "A" is
not a number.

Measure   ➔ Check the expressions. Correct the wrong expression.

2008   Exp.fct.paraCnt

Status   Wrong number of function parameters in the expression.

Measure   ➔ Check the expressions. Correct the wrong expression.

2009   Exp. name wrong

Status   A not defined variable name is used in an expression.

Measure   ➔ Check the variable names. Correct the spellling if necessary or define a
new variable.

33

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

2010   Fct. para value

Status   The error is caused by the Easy-Plug function chr(). The argument, which was assigned to the function, exceeds the admissible value range 0…255.

Measure   ➜ Change the argument (details see Easy-Plug manual)

2011   OLV variable

Status   Wrong naming of the variable in Easy-Plug command #VDO (details see Easy-Plug manual)

Measure   ➜ Check the Easy-Plug command #VDO in the current printjob.

2111   Invalid Date

Status   Invalid date specification in a string.
Example: Function call *DayOfYear(„31",„6",„2005")* would produce this error message (because the date did not exist).

Measure   ➜ Correct the date specification.

                     ❍ See Easy-Plug Manual, topic section "Description of commands", chapter "Easy-Plug variables".

2500   Multiple texts

Status   This status number may be combined with variety of texts, which all are generated by the Basic interpreter. The Basic interpreter is a function which is not realeased nor supported.

Measure   ➜ Switch off the Basic interpreter (SYSTEM PARAMETERS > Print Interpret.).

3000/3003/3006/3012/3015   Com x Overrun

Status   Receive error at the RS232 interface *COMx* (x = [1…5]).

Measure   ➜ Acknowledge by pressing the Online button.

3001/3004/3007/3013/3016   Com x Parity

Status   Receive error at the RS232 interface *COMx* (x = [1…5]).

Measure   ➜ Acknowledge by pressing the Online button.

                     ➜ Check parameter setting at printer (INTERF. PARAM. > COM1 PORT > Parity) and PC.

                     ❍ Notes about setting the printer parameters are given in the chapter "Info Print-outs and Parameters" in the User Manual.

3002/3005/3008/3015/3017   Com x Frame

Status   Receive error at the RS232 interface *COMx* (x = [1…5]).

Measure   ➜ Acknowledge by pressing the Online button.

                     ➜ Check parameter setting at printer (INTERF. PARAM. > COM1 PORT > Baud rate and   INTERF. PARAM. > COM1 PORT > stop bits) and PC.

                     ❍ Notes about setting the printer parameters are given in the chapter "Info Print-outs and Parameters" in the User Manual.

34

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

3010   Spooler Overflow

Status   Fault which is caused by a faulty handshake at an interface. The consequence is an overflowing data buffer at the printer, because the host doesn´t stop to send data to the printer.

Measure   → Acknowledge by pressing the Online button.

→ Check the connections of the data line, especially the signal wires belonging to the handshake.

→ Check the interface settings, especially the handshake settings.

3011   Send buffer full

Status   The send buffer is full. This error may happen, if the printer status was requested several times (#!Xn), but the status reply was not read out.

Measure   → Make sure that the status reply is read out.

35

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

4100-4106   Message, which can only occur with OLV-Option

4100   No OLV data

Status   The OLV found out, that the bar code type and/or the bar code data, which was just printed and read, doesn´t match the bar code specified in the print job. The error may have one of the following causes:

- OLV is not connected/switched on

- The bar code has not been printed

- The bar code has been printed poorly, so that the OLV can not detect it.

Measure   ➔ Check, if the OLV is connected correctly

➔ Check the printout quality. If the printout is poor, change the print parameters and/or use a different material/ribbon-combination.

➔ Make a dot check. May be, that a dot is defective, which was ought to print an important line of the bar code.

➔ If the bar code has not been printed at all: check the print job.

4101   OLV limit exceed

Status   The read bar code exceeds a user-specified limit. The limits, e.g. contrast or readability, can be set via the parameter menue or via Easy Plug command.

Measure   ➔ Check the printout quality.

➔ Change the limit.

➔ Eventually modify the print parameters or the material/ribbon combination.

4103   OLV barcode type

Status   The OLV found out, that the bar code type, which was just printed and read, doesn´t match the bar code specified in the print job.

Measure   ➔ Check the printout.

4104   OLV Timeout

Status   General software error

Measure   ❍ Please read the notes in section General software errors 🗋.

4105   No OLV response

Status   This error may occur shortly after switching on the printer with the OLV device already switched on. It indicates, that the OLV version number was not successfully read.

                          Possible causes are:

- Wrong connection cable between OLV and printer
- Faulty interface parameter setting for Com2
- Power supply of the OLV interrupted or not available
- Defective I/O board (Com2)

Measure   ➔ Check the possible causes of failure and exchange defective parts.

4106   OLV Software

Status   General software error

Measure   ❍ Please read the notes in section General software errors 🗎.

5000   Bus device

Status   One of the devices connected to the I^2C bus (e.g. output stage boards) does not respond. This message appears mostly first in a sequence of two or three status messages, which help to isolate the error source.

Measure   ➔ Acknowledge by pressing the Online button.

                ➔ Switch printer off and back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

Example   The parameter SYSTEM PARAMETERS > Periph. device is set to "Cutter" without an output stage board for a cutter being installed. The following status messages appear one after another:

1. | Status | 5000 | Generally tells, that something went wrong with I^2C bus communication.
   | Bus device | |

                ➔ Press Online button.

2. | Status | 5005 | Either no output stage board is prepared to drive a cutter, or the I^2C bus data cable is not connected to the output stage board (this message appears only in one of those two cases, alternative status messages see Tab. 2)
   | Knife-fault | |

                ➔ Press Online button.

3. | Status | 5020 | Time limit exceeded without getting an answer from device no. 4 (4 = Cutter, see Tab. 4) (alternative status messages see Tab. 3)
   | I2C Timeout | 4 |

                ➔ Press Online button

                          One of the following status messages may follow second:

Status #	Text	Missing output stage for the following

		device:
5005	Knife-fault	Cutter motor
5006	Head-fault	Print head liftmotor
5008	Ribbon end	Ribbon motor

Tab. 2   Those status messages indicate, that the device is not connected to the I²C bus.

Third may follow one of the status messages listed below:

Status #	Text
5020	I2C Timeout xx
5021	I2C Conf. xx
5022	I2C Busy xx
5023	I2C LAB xx
5024	I2C BER xx
5025	I2C Polling xx

Tab. 3   Status messages, which help to further locate the I²C bus error. xx = Device ID of the concerned device (see 0)

#	Device	64-xx	DPM / PEM	ALX 92x	AP 5.4	AP 7.t
0	CPU	X	X	X	X	X
1	Feed motor	X	X	X		X
2	Foil motor	X	X	X		
3	Printhead motor	X	X	X		X
4	Peripheral motor	X				X
5	Dispenser motor	X				
5	Rewinder motor			X		
8	Rewinder (internal)			X	X	
12	(Reserved)					
13	USI board	X	X	X		
15	I/O board	X	X	X	X	X
16	EEPROM	X	X	X	X	X
17	Realtime-clock	X	X	X	X	X
18	Power supply	X[1]	X	X		

Tab. 4   Assignment of device IDs as used in status messages related to the I²C bus.

1)   Only with the power supply types HME and ME 500.

5001   No gap found

Status   No gap found or several blank labels fed.

Measure   → Acknowledge by pressing the Online button.

→ Check the print mask for gap definition (material length).

→ Check whether the correct material has been inserted.

→ Check that the photoelectric switch is clean.

→ Check material feed and position of photoelectric switch.

→ Check the values of the photoelectric switch in parameter SERVICE FUNCTION > Sensor test. If necessary, readjust the sensor or replace it.

→ After confirmation using the Online button, the material is fed forward automatically and the next gap is sought.

5002   Material end

Status   Material end. Material no longer in the gap LS.

Measure   1. Press Online button in order to acknowledge the status report.
Display: *OFFLINE x JOBS*

2. Insert material and check the position of the photoelectric switch, correct if necessary.

3. Press Online button: processing of the job continues, gap is reinitialised.

5003   Cover open

Status   64-xx / DPM / PEM / ALX 92x: *Cover open*

Housing cover is open. Opening the cover causes all other eventually waiting status messages (e.g. ribbon end) to be deleted and the "Cover open" message immediately to be displayed. Closing the cover automatically acknowledges the message.

AP 4.4 / 5.4: *Printhead pressure lever open*

The printhead pressure lever was opened, during:

- the feeding of material or
- printing.

The error message is automatically acknowledged with the closing of the printhead pressure lever.

Measure   → Close the cover or printhead lever respectively.

5004   Rewinder mat. tear

Status   Label material at the backing paper rewinder is torn off.

The *AP 5.4 Dispenser* shows this message also if the backing paper sleeve was too large during material initialization; the backing paper web could not be tightened.

Measure   ➜ Acknowledge by pressing the Online button.

➜ Secure label material to the rewinder.
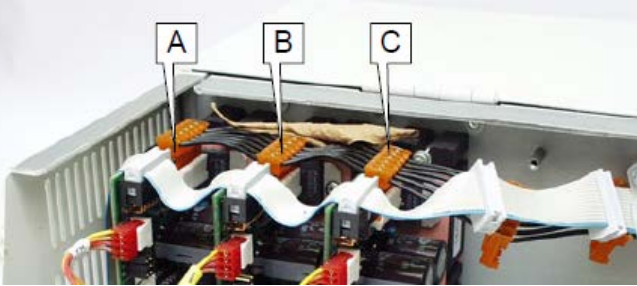
5005   Knife-fault

Status   Faults at the cutter.

Measure   ➜ Acknowledge by pressing the Online button.

5006   Head-fault

Status   The error can have the following causes. The causes are listed in order of probability of occurrence.

Cause	Measure
Bad contact	 One of the wires of the power or data cable to the output stages has a bad contact. ➜ Check that the plugs on the output stages are firmly seated. Press each stranded wire on the connectors firmly into the crimp contact. ➜ Do the same at the end connector on the CPU board..
Motor output stage defective	The motor output stage may be the cause if the error occurs directly after switching on, and not during operation. Test: Swap addresses of foil motor output stage and head motor output stage (change jumper setting, see service manual). ➜ Replace the defective output stage board.
Power supply defective	➜ Check all voltages of the power supply unit. Most important is the 48 V for the supply of the motor output stages (wiring diagram power supply unit see service manual).

Head lift mechanics	 Sensor: → Select parameter SERVICE FUNCTION > Sensor test and check function oft he head lift sensor (A). Timing disc: → Check whether the timing disc (B) runs through the centre of the head lift sensor. If it rubs on one side, this can damage the sensor and trigger the error. → Check if the timing disc is loose or deformed. If the screw on the timing disc is too tight, this can deform the timing disc. If the timing disc is loose, the gap in the timing disc may not reach the sensor, which may cause the error. Head gap: → Check whether the printhead gap is < 0.5 mm. This error is usually accompanied by a poor print image. (for details refer to the service manual, chap. „Service Mechanics" > „Printhead adjustment" > „Adjusting the printhead gap")
Firmware	If the error occurs sporadically, a firmware update to a version > V6.T20123 is recommended. This firmware can store more details in the diagnostic dump. The firmware is available from Technical Support. → As soon as the error occurs, send the dump file to Technical Support (for details refer to the service manual, chap. „Fault location" > „Reading out diagnosis data").
Printhead axle	The plastic bushing that is firmly connected to the printhead axle is broken (usually occurs in connection with poor print quality). This leads to increased friction, which means that the printhead can no longer be lifted by the motor, resulting in the error. → Replace the printhead axle.

5008   Ribbon end

Status   Ribbon end

Measure

- When using thermal printing:

1. Check whether the parameter SYSTEM PARAMETER > Ribbonautoecon. is set to "deactivated".

2. Acknowledge by pressing the Online button.

3. Switch off the ribbon end detection,
   parameter: SYSTEM PARAMETER > Ribbonautoecon.

4. Press the Online button: processing of the job continues, gap LS is reinitialised.

- When using heat transfer printing:

   Measure 1

1. Tighten ribbon or set the spring plate on the ribbon unwind mandrel so that the ribbon core turns the mandrel with it and the ribbon core can still be removed.

2. Press the Feed button in order to acknowledge the status report.
   Display: OFFLINE x JOBS

3. Press the Online button: processing of the job continues, gap LS is reinitialised.

   Measure 2

1. Press the Cut button to deactivate the acoustic signal.

2. Press the Feed button in order to acknowledge the status report.
   Display: OFFLINE x JOBS

3. Insert a new ribbon.

4. Press the Online button: processing of the job continues, gap LS is reinitialised.

5009   USI start error

Status   This status message can only be triggered with activated parameter DP INTERFACE > Start error stop. It occurs, if another start signal is given while printing a label.

Measure   → Acknowledge by pressing the Online button. Press the Feed button afterwards to proceed with the print job.

5012   Delete H8 loader

Status   Error while loading the H8 firmware: the old firmware on the machine could not be deleted.

Measure   → Acknowledge by pressing the Online button.
                     → Retry loading the firmware.
                     → If the error occurs repeatedly, the bootloader must be loaded newly.

42

09/23 Rev. 26 USER + SERVICE MANUAL Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

5013 Prog H8 loader

Status   Error while loading the H8 firmware: the new firmware could not be written.

Measure
→ Acknowledge by pressing the Online button.
→ Retry loading the firmware.
→ If the error occurs repeatedly, the bootloader must be loaded newly.

5015 Scanner

Status   Faults at the scanner.
The scanner is tested during printer initialization by switching it on for a moment. A properly working scanner will afterwards send a reply signal to the printer. A missing reply signal provokes the status message. The missing of the reply signal can have several reasons.

Measure
→ Acknowledge by pressing the Online button.

→ Red scanner LED lights up? – If not, there is a lack of power supply. Check, if the scanner connection cable is plugged in correctly and if the connection cable is damaged.

→ Yellow scanner LED lights up shortly after switching the printer on. – If not, the scanner test was faulty.

5016 ALX Rewinder

Status   (Only ALX 92x)
The output stage board belonging to the Rewinder motor is not connected or damaged.

Measure
→ Check, if the board is connected properly.

→ Exchange the board to verify if it is damaged.

After replacing the output stage board and switching on the machine, the error message is still active. In order to be able to set the light barrier with the new circuit board, the error message must first be removed. This is how it works:

→ Acknowledge the error message by pressing the enter button.

After a short time the error message appears again.

→ Acknowledge the error message again two times.

After the third time, the error message no longer appears.

→ Set the rewinder light barrier (see service manual > „Service Electronics Gen. 3" > „Settings" > „Light sensor at the rewinder dancer").

5017 Power Supply

Status   Communication fault of the power supply during the running of the service function "Head dot test".

The power supply didn´t succeed in switching to the dot check mode (that is, reducing the head voltage to 10 V). Also in this case, temporary disturbances on the measurement line of the H8 processor, caused by the power supply, are a possible reason. Even if the switchover is defective

(the status message is displayed continously), can the printer be used in normal operation mode.

Measure	→	Acknowledge by pressing the Online button.
	→	Try again. If the error message continues to appear, exchange the power supply.
	❍	For detailed information refer to the appropriate service manual, topic section "General Service", chapter "Connections and electrics", "Powerpack".

5020   I2C Timeout xx

Status   Timeout error during communication via the I^{2}C bus with the device xx (see Tab. 4 on page 37).

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

5021   I2C Conf. xx

Status   Confirmation error during communication via the I^{2}C bus with the device xx (see Tab. 4 on page 37).

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

5022   I2C Busy xx

Status   Error during communication via the I^{2}C bus with the device xx (see Tab. 4 on page 37). Device always reports that it is busy.

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

5023   I2C LAB xx

Status   Error during communication via the I^{2}C bus with the device xx (see Tab. 4 on page 37).

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

5024   I2C BER xx

Status   Error during communication via the I^{2}C bus with the device xx (see Tab. 4 on page 37).

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

5025   I2C Polling xx

Status   Polling error during communication via the I^{2}C bus with the device xx (see Tab. 4 on page 37).

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

44

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

5026   Motorprotect CPU

Status	(AP x.x only) The motor driver board (output stage board) is overheated or defective.
Measure	→ Switch printer off and then back on again after 30 sec.
	If the error message continues to appear:
	→ Replace the motordriver board.

5028   PS overheat

	(AP x.x only)
Status	The temperature inside of the power supply exceeded the admissible range.
Measure	→ Let the power suppy cool down for some minutes.

5029   I2C checksum xx

Status	During I^2C communication with device xx occured a checksum error. xx = I^2C device number (see Tab. 4 on page 37).
Measure	→ Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

5051-5058   Messages which can only occur with a TT4 printer

5051   Barcode Infeed 1

Status	(TT4 only) Error while reading the bar code on the material in infeed 1
Measure	→ Check, whether material in infeed 1 is inserted correctly. The bar code must be in front (in advance direction) on the material bottom. Insert material correctly, if necessary.
	→ Check, whether the bar code print is erroneous on material in infeed 1. Exchange material, if necessary.

5052   Barcode Infeed 2

Status	(TT4 only) Error while reading the bar code on the material in infeed 2
Measure	→ Check, whether material in infeed 2 is inserted correctly. The bar code must be in front (in advance direction) on the material bottom. Insert material correctly, if necessary.
	→ Check, whether the bar code print is erroneous on material in infeed 2. Exchange material, if necessary.

5053   Barcode Infeed 3

Status	(TT4 only) Error while reading the bar code on the material in infeed 3
Measure	→ Check, whether material in infeed 3 is inserted correctly. The bar code must be in front (in advance direction) on the material bottom. Insert material correctly, if necessary.
	→ Check, whether the bar code print is erroneous on material in infeed 3. Exchange material, if necessary.

5054 Barcode Infeed 4

Status (TT4 only) Error while reading the bar code on the material in infeed 4

Measure → Check, whether material in infeed 4 is inserted correctly. The bar code must be in front (in advance direction) on the material bottom. Insert material correctly, if necessary.

→ Check, whether the bar code print is erroneous on material in infeed 4. Exchange material, if necessary.

5055 Infeed 1 empty

Status (TT4 only) While initializing, TT4 reports no material in infeed 1.

‖‖➡ Precondition for this status message is, that parameter SYSTEM PARAMETERS > w/wo magazine is set to „with".

Measure → Check, if the material in infeed 1 is loaded correctly, respectively if it´s loaded at all. Acknowledge by pressing the Online button.

5056 Infeed 2 empty

Status (TT4 only) While initializing, TT4 reports no material in infeed 1.

‖‖➡ Precondition for this status message is, that parameter SYSTEM PARAMETERS > w/wo magazine is set to „with".

Measure → Check, if the material in infeed 1 is loaded correctly, respectively if it´s loaded at all. Acknowledge by pressing the Online button.

5057 Infeed 3 empty

Status (TT4 only) While initializing, TT4 reports no material in infeed 1.

‖‖➡ Precondition for this status message is, that parameter SYSTEM PARAMETERS > w/wo magazine is set to „with".

Measure → Check, if the material in infeed 1 is loaded correctly, respectively if it´s loaded at all. Acknowledge by pressing the Online button.

5058 Infeed 4 empty

Status (TT4 only) While initializing, TT4 reports no material in infeed 1.

‖‖➡ Precondition for this status message is, that parameter SYSTEM PARAMETERS > w/wo magazine is set to „with".

Measure → Check, if the material in infeed 1 is loaded correctly, respectively if it´s loaded at all. Acknowledge by pressing the Online button.

5059 Stacker full

Status (AP 7.t only) This message can only appear if a TCS is applied as peripheral device. It indicates, that the stacker is full or the protection cover is opened.

Measure → Empty stacker

→ Close cover

→ If the message appears in spite of a closed cover and an emptied stacker, check the function of lid switch and microswitch.

5060   Stacker full

Status   This message can only appear if a TCS is applied as peripheral device. It indicates, that the stacker is full or the protection cover is opened.

Measure   → Empty stacker

→ Close cover

→ If the message appears in spite of a closed cover and an emptied stacker, check the function of lid switch and microswitch.

5061   Dispenser motor

Status   The output stage board for the dispenser motor is not present or defective.

Measure   → Press the Online button to acknowledge.

→ Check the output stage board for the dispenser motor and eventually exchange it.

5062   Disp. lift motor

Status   The output stage board for the dispenser lift motor is not present or defective.

Measure   → Press the Online button to acknowledge.

→ Check the output stage board for the dispenser lift motor and eventually exchange it.

5063   Press roll

64-xx dispenser / DPM / PEM / ALX 92x

Status   The press roll lever is not closed. Opening the lever causes the immediate deletion of all potentially queued status messages (e. g. ribbon end) and display of the "Press roll" message. Closing the lever automatically acknowledges the status message..

Measure   → Close the press roll lever.

5063   Lever open

AP 5.4/5.6

Status   The printhead lever is not closed. Opening the lever causes the immediate deletion of all potentially queued status messages (e. g. ribbon end) and display of the "Lever open" message. Closing the lever automatically acknowledges the status message.

Measure   → Close the printhead lever.

5064   Backing paper

Status   Happens with dispenser version printers: Shows up, when the diameter of the rewinded backing paper roll has become too large.

Measure   → Clear the rewinding mandrel.

→ Press the Online button to acknowledge.

5071   Material end unw

Status   Occurs during operation with activated *internal* OD control. The message appears, if the material roll diameter has reached the critical value (setable by MACHINE SETUP >Materialend err).

Measure   → Replenish the material roll.

5072   Material end unw

Status   Occurs during operation with activated *internal* OD control. The message appears, if no rotation of the mate-rial roll has been registered during at least 600 mm of material feeding.

Measure   → Check the material feeding; if necessary, replenish the material roll.

5100   No H8 response

Status   Communication fault with H8 processor (occurs only at devices with Gen. 2 electronics).

Measure   → Acknowledge by pressing the Online button.
                      → Switch device off and on again.

                      If the message continues to appear:
                      → Contact service technician.

                      Instructions for service technicians:

                      The error can occur in connection with the exchange of the CPU board of an ALX 92x machine.

                      → Acknowledge error, set all sensors, restart.
                      → If the error message still appears: Reload firmware and/or carry out a forced bootloader start with "Clear params".
                      → If the error continues to appear: send CPU board with a fault description to the manufacturer.

5100   Printengine lock

Status   Printengine error (occurs only at devices with Gen. 3 electronics).

Measure   → Acknowledge by pressing the Online button.

                      → Switch device off and on again.

                      If the message continues to appear:
                      → Contact service technician.

5101   Headadjust error

Status   Error during the running of the "Head Alignment" service function.

Measure   → Acknowledge by pressing the Online button.

                      → Contact service technician.

5102   Dot Defective

Status   Defective dot detected during the running of the "Head dot test" service function.

Measure   → Acknowledge by pressing the Online button.

48

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

5110   Foil low

Status   The diameter of the foil roll fell below the set warning diameter (see
                             SYSTEM PARAMETER > Foil warning).

                             The message is caused by a foil warning in addition with the following
                             setting: SYSTEM PARAMETER > Foil warn stop = „Enabled".

Measure   ➔ Acknowledge by pressing the Online button, then press the Feed button to
                             continue printing.

5120   Home position

Status   The applied applicator cannot reach the home position; this can be caused
                             by an impact from outside (e.g. extending it manually), which has moved
                             the applicator. In those cases, the stepper motor looses steps and doesn´t
                             regain its home position.

                             Preconditions for this error to occur:

                             ● The parameter DP INTERFACE > Interface type is set to *USI Applicator*.
                             ● Internal inputs are enabled.

Measure   ➔ Take care not to move the applicator by force.
                       ➔ Ackknowledge by pressing the Online button.

5121   Touch down

Status   The applied applicator doesn´t reach the Touch Down Position, what
                             means that it extends completely without reaching any product or other
                             resistance. .

                             Preconditions for this error to occur:

                             ● The parameter DP INTERFACE > Interface type is set to *USI Applicator*.
                             ● Internal inputs are enabled.

Measure   ➔ Correct the applicator position. The applicator must reach the product
                             before it is completely extended.
                       ➔ Ackknowledge by pressing the Online button.

5122   PLC not ready

                             Situation:
                             ● The parameter DP INTERFACE > Interface type is set to *USI Applicator*.
                             ● Internal inputs are enabled.

Status   The connected PLC is not on line.

Measure   ➔ Check if the PLC is powered on.
                       ➔ Check if the PLC shows any error status.
                       ➔ Ackknowledge by pressing the Online button.

5123   USI Material low

                             The error can only occur with an ALX 92x with optional OD control sensor.

Status   The outer diameter of the material roll has reached the set minimum value.

Measure   ➔ Insert a new material roll.
                       ➔ Ackknowledge by pressing the Online button.

5125   Vn for USI req.

Status

This message shows up, if the firmware of the USI doesn´t match the printer firmware.

n = Required USI firmware version

- USI firmware version is higher than the required version:

Message is automatically quit after approx. 2 s. This combination should work without problems.

Measure

- USI firmware version is older than the required version:

➔ Update the USI firmware.

◯ See service manual, topic section Firmware Gen. 3 ⃞

50

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

5130   PSU xxxxxxxx

Status   Failure of the power supply. "xxxxxxxx" = four byte long error code in
                        hexadecimal form. Every bit stands for a certain status of the power supply.
                        The bit is set to "1", if the status occured.

- Byte 1: xxxxxx**XX**

7	6	5	4	3	2	1	0

Output 1 (5 V logic):
The output voltage exceeds the admissible range.

Output 2 (20-28 V printhead):
The output voltage exceeds the admissible range.

Output 3 (galv. 24 V):
The output voltage exceeds the admissible range.

Output 4 (48 V motor):
The output voltage exceeds the admissible range.

Dot Check defective:
Indicates a detected power supply fault in the course of a Dot-Check-Measurement. Example: While measuring the internal reference resistance, have the admissible tolerances been exceeded.

Fan defective:
Indicates a fan-fault, if its control allows any error detection.

Critical overheat:
A critical temperature is set in register "critical temperature limit". If the critical value is exceeded, the power supply switches off immediately and sets this bit to 1.

Overheat:
A critical temperature is set in register "critical temperature limit". If the critical value is exceeded, the power supply switches off well controlled and sets this bit to 1.

- Byte 2: xxxx**XX**xx

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

Reserved (must be 0):
Shows an error bit, which is provided by the printer controller.

Reserved (must be 0):
Shows an error bit, which is provided by the printer controller.

not used

not used

not used

Temperature sensor defective:
The measurement at the A/D-converter leads to a temperature below –20°C or over +170°C. All outputs except the logic supply are switched off.

Operation time counter:
Data are not consistent in connection with the operation time counter.

EEPROM error:
Data content of the EEPROM is not consistent.

- Byte 3: xx**XX**xxxx

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

not used

not used

not used

not used

not used

not used

not used

I^2C transfer error

- Byte 4: **XX**xxxxxx (is not being used yet)

52

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

Example: 0000F020

Bit no.	7	6	5	4	3	2	1	0	Meaning
Byte 1 (here: 20)	0	0	1	0	0	0	0	0	Fan defective
Byte 2 (here: F0)	1	1	1	1	0	0	0	0	Temperature sensor defective, operation time counter is not consistent, EEPROM error
Byte 3	0	0	0	0	0	0	0	0	
Byte 4	0	0	0	0	0	0	0	0	

5131   PSU communicat.

Power supply communication
(64-xx / DPM / PEM / ALX 92x / PM 3000 only)

Status   A fault occured during communication with the power supply via I^{2}C bus.

Measure   → Switch the printer off and after 30 seconds on again. If the message continues to appear, contact the manufacturer.

5140   Rewinder control

(ALX 92x with M5A motor output stages only)

During problem-free operation, the rewind unit dancer arm only moves a minimal distance around the "control position". This is the position the dancer arm takes up after initialisation of the machine.

Status   *Cause*: Any force applied that moves the dancer arm from its control position.

Example: The feed motor is blocked; the backing paper is not conveyed quickly enough; as a result the dancer arm is pulled upwards.

Example: The backing paper is torn; the dancer arm springs downwards.

Measure   → Press the Enter-key.
This reinitialises the dancer arm control; the dancer arm moves back into the control position.

5144   Rewinder Init

(ALX 92x with M5A motor output stages only)

Status   The message has a couple of possible causes:

- No label material inserted.
- Rewinder sensors are not or not pro-perly connected.
- Sensor board position is faulty.
- Sensor defective.

→ Insert material.
→ Check the connection. Connect the sensors properly.
→ Correct the position of the sensor board.
→ Exchange the sensor board.

5145   Rewinder full

(ALX 92x with M5A motor output stages only)

Status   The maximum permitted diameter (205mm) for the rewinder roll has been reached.

> This error can only occur if the end of a new label roll was glued on to backing paper that had already been wound onto the rewinder.

Measure   → Remove the rewound backing paper.
               → Press the Enter-key to confirm the error message.

5150   No USI interface

Status   (DPM / PEM / ALX 92x only)
               This error appears, if no USI is detected while the printer is powering up.

Measure   → Check, if the USI is defective or not built in.

5151   Applic. interf.

Applicator interface

Status   (DPM / PEM / ALX 92x only)
               Neither Applicator Interface (AI), nor USI are connected to the device.

Measure   → Connect a USI or AI to the device.

5152   Winding direct.

(ALX 92x with M5A motor output stages only)

Status   The backing paper end is not correctly attached to the rewinder mandrel.

Wrong machine type selected (SPECIAL FUNCTION > Printer type).

→ Attach the backing paper web to the rewinding mandrel as described in the user manual.

→ Setting „RH" at a LH machine or vice versa.

5200   Home position

Status   The applicator did not reach its home position within the given time frame.

Possible causes:

- The applicator is jammed
- Applicators driven by compressed air: The air supply may be interrupted or switched off
- Cable not connected properly
- Cable for interlock circuit (2-pole plug) not connected to connector box

Measure   → Check cable and compressed air connections; reconnect them properly, if necessary.
               → May the applicator move unhindered? – remove any obstacles.
               → Connect interlock circuit.

5201   Touch down

Status   The applicator did not reach its touch down position within the given time frame.

Measure   ➔ Check cable and compressed air connections; reconnect them properly, if necessary.

                    ➔ May the applicator move unhindered? – remove any obstacles.

5203   Touch down sens.

Status   The touchdown sensor(s) was/were already triggered before the application.

Measure   ➔ Check cable and compressed air connections; reconnect them properly, if necessary.

5204   Appl. Starterror

Status   The device received another start signal during printing/applying a label.

                    Precondition: Parameter APPLICATOR PARA > Start error stop or DP INTERFACE > Start error stop is set to *On*.

Measure   ➔ Check the labelling procedure; increase the product distance.

                    ➔ Set parameter *Start error stop* to *Off*.

5205   Applicator gen.

Status   General software error

Measure   ❍ Please read the notes in section General software errors 🗎.

5206   Applicator resp.

Status   Communication with the AI exceeded a given time frame.

Measure   ➔ Switch the printer off and on again after half a minute. If the error still occurs after several trys, please contact our technical support.

5207   Appl. driver 1

Status   Shortcut or overheat at power output 1 at the applicator connector (CN603) on the AI board. The power output 1 comprises the following output signals:

                    • Cylinder
                    • Vacuum
                    • Airstream Support
                    • Blow On

Measure   ➔ Check the connections.

55

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

5208   Appl. driver 2

Status   Shortcut or overheat at power output 2 at the applicator connector (CN603) on the AI board. The power output 2 comprises the following output signals:

- BTS
- Reserved 1
- Reserved 2
- Reserved 3

Measure   → Check the connections.

5209   Appl. driver 3

Status   Shortcut or overheat at power output 3 at the machine status connector (CN602) on the AI board. The power output 3 comprises the following output signals:

- Error
- Warning
- Ready

Measure   → Check the connections.

5210   Appl. driver 4

Status   Shortcut or overheat at power output 4 at the machine status connector (CN602) on the AI board. The power output 4 comprises the following output signals:

- Cycle
- OD-Foil
- OD-Sensor
- Offline

Measure   → Check the connections.

5212   Vx.x for AI rec

Status   The required AI firmware (version x.x) is not installed.

Measure   If the installed AI firmware is older than the required version:
                     → Acknowledge message. Load AI firmware version x.x.

                         If the installed AI firmware is newer than the required version:
                         The message is acknowledged automaticallly.

5300   BLDC EEPROM err.

Status   General EEPROM read/write error on the BLDC driver board (AP 5.4 with internal rewinder).

Measure   → Switch printer off and than on again after 30 seconds. If the status message continues to appear, change the BLDC board.

5301   BLDC rewinder Ø

Status   The stored rewinder diameter exceeds the admissible range (AP 5.4 with internal rewinder).

Measure   → Acknowledge the status message by pressing the online button.

              → Switch to offline mode and feed the label web for approx. 200 mm. This re-initializes the rewinder diameter.

            ▮▮▮➡ If the printer is switched off and on again *whithout prior initialization*, the status message will be displayed again.

5500   Unknown

Status   General software error

Measure   ○ Please read the notes in section General software errors 🗋.

5501   General

Status   General software error

Measure   ○ Please read the notes in section General software errors 🗋.

5502-5551   Messages, which can only occur with RFID option

5502   RFID internal

Status   General software error

Measure   ○ Please read the notes in section General software errors 🗋.

5504   No RFID job

Status   A print job, which is not declared as RFID printjob, contains RFID-specific Easy-Plug commands (e. g. #RT, #RFW, …).

              RFID printjobs are declared in the #IM command by defining the distance between label edge and optimum of transponder antenna (parameter "d").

Measure   → Modify the print job.

5510   RFID COM timeout

Status   Timeout error. There was no communication between reader module and COM2 in the time slot where it should be performed.

Measure   → Repeat the operation, in the course of which the error occured.

              → Check, if the reader module board is connected correctly.

              → Check if the reader module board is defective.

5512   COM open failed

Status   There was a communication problem at COM2 while powering up the printer. The interface cannot be opened by the printer firmware – or it is used by another firmware part.

Measure   → Check, if COM2 is available (that is, if it is built-in).

              → Check the function of the COM2 interface.

5513 Get baud failed

Status
There was a communication problem between COM2 and reader module while powering up the printer. The baud rate of the reader module is not detected correctly by the printer firmware. Baud rate and/or parity and/or another setting of transmission parameters at the reader module is faulty.

Measure
➔ Check, if the reader module board is connected correctly.

➔ Check if the reader module board is defective.

➔ Check the setting of the transmission parameters at the reader module.

5521 No transponder

Status
Either there is no transponder (=tag) or more than one transponder within reach of the antenna.

Measure
➔ Check the label material feeding; remove paper jam, if necessary.

5522 Tag write err

Status
A transponder (=tag) cannot be written on for one of the following reasons:

- Faulty address: e.g. an attempt to write into a protected area.
- The tag is out of reach of the antenna, after it has already been recognized.
- Noise signals avoid the transmission.

Measure
➔ Check the system for the mentioned error causes and correct them.

5523 Tag address err

Status
Faulty address: The address data targets beyond the logical or physical address range of the transponder.

Measure
➔ Change the address.

5524 CMD not applicable

Status
A command cannot be interpreted by the transponder.

Measure
➔ Change or remove the command.

5525 Tag read err

Status
The plausibility test of the read data failed. Possible reasons are:

- The tag is out of reach of the antenna, after it has already been recognized.
- Noise signals avoid the transmission.

Measure
➔ Check the system for the mentioned error causes and correct them.

5526 Tag select first

Status
A read or write command was given without selecting the transponder at first.

Measure
➔ Add a select command before using the read/write command.

5527   Tag RF comm err

Status   Transponder and reader are unable to communicate. Possible reasons are:

- More than one transponder is within reach of the antenna.
- No transponder is within reach of the antenna.

Measure   → Check the label material feeding; eventually remove paper jam.

5528   EEPROM failure

Status   • The reader cannot write on the transponder EEPROM.

- A faulty checksum was detected before writing on the EEPROM.

Measure   → Repeat the writing attempt.

→ Try another transponder

5529   Parameter range

Status   Faulty address. Transponders of the same type may have memory ranges of different sizes; according to this, the admissible addresses differ too.

The fault occurs, if a block address targets beyond the address range of the transponder.

Measure   → Change the address.

→ Use a transponder with a wider address range.

5530   Unknown CMD

Status   The reader doesn´t support the used command.

Measure   → Change or replace the command.

5531   Protocol length

Status   General software error

Measure   ❍ Please read the notes in section General software errors 🗋.

5532   CMD not avail.

Status   The sent command cannot be executed at the moment.

Measure   → Check, if all system components match the spezifications.

5540   ISO error #1

Status   Faulty system configuration. Possible reasons may be:

- Faulty firmware version of the reader
- The applied transponders doesn´t match the reader.

Measure   → Check if the reader has the correct firmware version installed.

→ Compare the applied transponder type with the specification of the reader. If necessary, use another transponder type.

5541   ISO error #2

❍ See ISO error #1 🗋.

59

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

5542   ISO error #3

❍ See ISO error #1 🗋.

5543   ISO error #15

❍ See ISO error #1 🗋.

5544   ISO error #16

❍ See ISO error #1 🗋.

5545   ISO error #17

❍ See ISO error #1 🗋.

5546   ISO error #18

❍ See ISO error #1 🗋.

5547   ISO error #19

❍ See ISO error #1 🗋.

5548   ISO error #20

❍ See ISO error #1 🗋.

5549   ISO error ???

❍ See ISO error #1 🗋.

5550   Wrong tag type

Status   A transponder type was detected, which is not known by the reader – it cannot be used.

Measure   ➔ Use another transponder type, which is known to the reader.

5551   Max Tags failed

Status   The maximum permissible number of invalid labels was reached. This value is to be set via parameter RFID PARAMETERS > Max Tags To Stop.

▥➡ Invalid labels are being printed on with diagonal stripes.

Measure   ➔ Find out, why the labels are invalid; put things right.

➔ Increase the maximum value.

5560   TCS full / cover

Status   This message can only appear, if a TCS is applied as peripheral device. The message shows up, if:

- the stacker is full
- the stacker cover is open

Measure   ➔ Empty the stacker, or
➔ close the cover

5590   Odd hex string

Status   A character string was sent to the transponder (Easy Plug command #RFS) and was ought to be interpreted hexadecimal (use #RFS with parameter "B"). For this, the character string must consist of an equal number of characters. This was not the case, what triggered this error message.

Measure   → Send an equal number of characters.

5600   Job without #Q

Status   The print job misses the declaration of the print amount (Easy-Plug command #Q).

Measure   → Insert a #Q command with the print amount.

5601   Job memory full

Status   The job memory for Easy-Plug printjobs is full.

Measure   → Reduce the reserved memory for one or more of the following memory areas:

- Free store size (SYSTEM PARAMETER > Free store size)
- RAM disk size (SYSTEM PARAMETER > Ram disk size)
- Font download size (SYSTEM PARAMETER > Font downl. area)

    → If there are already some printjobs in the printer queue: wait until those are processed.

6000   Param. incorrect

Status   Novram check sum error.

    ⫸ Check the setting of the printhead resistance (parameter SYSTEM PARAMETER > Head resistance) , before you press the Online button – possibly the value is faulty.

Measure   → Confirm error by pressing the Online button. All parameters are set back to the factory settings.

6001   Nov. prog. err.

Status   Error during allocation of main memory.

Measure   → Switch printer off and then back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

6002   New prog. vers.

Status   Occurs after firmware update. The printer hereby reports that new firmware is available.

Measure   → Confirm by pressing the Online button. All parameters are set back to the factory settings.

6003   Memory error

Status   Error during partitioning of the main memory.

Measure   → Switch printer off and back on again after 30 sec. If the error message continues to appear, please contact the manufacturer.

6004   Load H8 program

Status   Appears, when
a) no valid H8 firmware is loaded
b) after a forced start of the boot loader

Measure   Case a)

1. Press the Online button to confirm.

2. Load H8 firmware.

❍ For details, refer to the service manual, topic section "Firmware", section "Loading the H8 system".

Case b)

→ Press the Online button to confirm.

❍ For details, refer to the service manual, topic section "Firmware", section "Loading the Firmware (using boot loader)".

6005   Fixfont data

Status   Defective fixfonts.

Measure   → Load the firmware new.

❍ Refer to the service manual, topic section "Firmware".

6006   Speedofont data

Status   Defective speedo fonts.

Measure   → Load the firmware new.

❍ Refer to the service manual, topic section "Firmware".

6007   Print ctrl. stop

Status   The print control doesn´t start, what means that the printer doesn´t finish the initialization phase after switching it on.

Measure   → Read in the service manual, what to do:

❍ Refer to the service manual, topic section "Firmware" or "Firmware Gen. 3", chapter "Error messages".

6008   ZPL Fixfont data

Status   Defective fixfonts.

Measure   → Load the firmware new.

❍ Refer to the service manual, topic section "Firmware".

62

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

6009   ZPL Speedo data

Status   Defective speedo fonts.

Measure   → Load the firmware new.

                 ❍ Refer to the service manual, topic section "Firmware".

6010   Printengine soft

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                 ❍ Please read the notes in section General software errors 🗅.

6011   Material Change

Status   Not an error but a request to change the material.

                 If the material designation of a print job differs from that of the previous one, the printer shows the new designation with the message 6011 on the display to alert the user to a necessary material change. The material designation can optionally be defined in the Easy Plug command #IM.

Measure   → Acknowledge by pressing the online button. Insert the matching material. Start next printjob.

6012   Start next job

Status   The message appears at the end of a printjob, if the single job mode (SYSTEM PARAMETERS > Single job mode) is activated. It indicates, that the next printjob should be started.

Measure   → Acknowledge by pressing the online button. Start next printjob.

6030   New Parameters

Status   By loading a new firmware version, some new parameters have been added to the parameter menu.

Measure   → None. The message is merely informativ.

6101   No sensor found

Status   Error during the running of the "Sensor Test" service function.

Measure   → Acknowledge by pressing the online button.

                 → Contact service technician.

6200   Filesystem regis

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                 ❍ Please read the notes in section General software errors 🗅.

6201   File sys. format

Status   Error during formatting of the RAM disk or the memory card.

| **Measure** | → Switch printer off and then back on again after thirty seconds. If the error message continues to appear, please contact the manufacturer. |

6202   Drive open

Status   Accessing the memory card failed.

Measure   → Format the memory card using the PC card drive. Try again to write onto the card.

           → Try another memory card.

6203   Filesystem close

Status   Accessing the memory card failed.

Measure   → Format the memory card using the PC card drive. Try again to write onto the card.

           → Try another memory card.

6204   Disk directory

Status   Work directory cannot be opened.

Measure   → Acknowledge by pressing the Online button.

           → Check designation existence of the work directory.

6205   Write disk

Status   Error during writing on RAM disk or memory card.

Measure   → Acknowledge by pressing the Online button.

6206   Read disk

Status   Error during reading from RAM disk or memory card.

Measure   → Acknowledge by pressing the Online button.

6207   No file card

Status   No CompactFlash-card found.

Measure   → Acknowledge by pressing the Online button.

           → Check, if a memory card is inserted.

           → If the memory card was inserted after switching on the printer: switch the printer off and on again.

6208   Drive xx full

Status   Writing on drive xx failed, because there is not enough free space.

Measure   → Acknowledge by pressing the Online button.

           → Free space on the drive.

6300   Out of memory

Status   Not enough free memory available, to load additional print jobs. The job buffer is completely filled with print jobs.

Measure   ➔ Delete spooler using the parameter SPECIAL FUNCTION > Delete spooler.

6301   Incomplete job

Status   The Easy Plug interpreter failed interpreting a certain print job to the end. The print job has possibly not been terminated by a #Q-command.

Measure   ➔ Check, if the print job is properly terminated with #Q.

6310   Centr. Timeout

Status   The Easy Plug command #!Xn triggers a status acknowledgement via centronics Interface. But the PC dosn´t pick up the supplied data.

Measure   ➔ Check the data line connecting printer and PC.

6311   Centr. Timeout

Status   The Easy Plug command #!Xn triggers a status acknowledgement via centronics Interface. But the PC dosn´t pick up the supplied data.

Measure   ➔ Check the data line connecting printer and PC.

8001   Shared Memory

Status   General software error.

Measure   ➔ Switch printer off and then back on again after thirty seconds.

         ◯ Please read the notes in section General software errors 🗋.

8002   Stream Buffer

Status   General software error.

Measure   ➔ Switch printer off and then back on again after thirty seconds.

         ◯ Please read the notes in section General software errors 🗋.

8103   TrueDoc Font

Status   Error: font with the number given is not contained in the system.

Measure   ➔ Check font no., if necessary select another font.

8104   Speedo alloc

Status   Fault while initializing the speedo fonts.

Measure   ➔ Load firmware new.

         ◯ Refer to the service manual, topic section "Firmware".

8105   Load TrueType

Status   Damaged font file.

Measure   ➔ Switch printer off and then back on again after thirty seconds.
           ➔ Reload font file, if necessary select another font.

8106   Fonttype wrong

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                         ○ Please read the notes in section General software errors 🗎.

8107   Character set

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                         ○ Please read the notes in section General software errors 🗎.

8108   Symbol set

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                         ○ Please read the notes in section General software errors 🗎.

8109   TT-specifications

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                         ○ Please read the notes in section General software errors 🗎.

8110   Unknown char.

Status   Character is not included in the character set (character set does not support all characters).

Measure   → Select another character / character set.

8111   Stream type

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                         ○ Please read the notes in section General software errors 🗎.

8112   Font not supp.

Status   The applied Truetype font is not supported by the system. Text, which uses this font, is ignored.

Measure   → Use another Truetype font.

8200   Fixfont number

Status   Incorrect fix font no.

Measure   → Check fix font no., alter if necessary.

8201 Font downl. full

Status The font download buffer is full.

Measure → Allocate more memory for the download buffer using the parameter
SYSTEM PARAMETERS > Font downl. area.

→ Rename some speedo-fonts on the CompactFlash-Card, you actually don´t
use. All speedo-fonts named fontxxx.spd (xxx = font no.) are being loaded
into the font download buffer while system startup.

○ For Details refer to the manual „Cards", subject section „Using cards",
paragraph „memory card".

8202 Font deleted

Status Attempt to access a font, which is no longer available on memory card or
on RAM disk (font was deleted or renamed).

Measure → Check the label layout. Load the not available font or use another,
available, font.

8300 Bar code corr.

Status Error: a bar code correction factor greater than +/- 25% has been selected.

Measure → Reduce correction factor.

8301 Bar code data

Status Incorrect bar code data. The bar code data is not permitted for the selected
bar code type.

Measure → Use data permitted for the bar code type.

8302 Barcode checksum

Status Error during calculation of the bar code check sum.

Measure → Check transmitted data.
→ If the error continues to occur please contact the manufacturer. Send the
transmitted Easy Plug data.

8303 Bar code sample

Status Error during calculation of the bar code sample.

Measure → Check whether the transmitted data is permitted for the bar code type; if
necessary alter the data.

8304 Bar c. plain-copy

Status Error during integration of the plain-copy line in the bar code sample.

Measure → Check whether the transmitted data is permitted for the bar code type; if
necessary alter the data.

8305   Bar code print

Status   Error during calculation of the bar code print image.

Measure   → Acknowledge by pressing the Online button.

Measure   → Check whether the transmitted data is permitted for the bar code type; if necessary alter the data.

8306   Plain-copy len.

Status   Illegal: bar code plain-copy line has more than 300 characters.

Measure   → Reduce line length.

8307   Readline dist.

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

         ❍ Please read the notes in section General software errors 🗋.

8308   Bar code ratio

Status   Illegal bar code ratio.

Measure   → Select another ratio.

8309   Module range

Status   Maximum range of the bar code module exceeded.

Measure   → Reduce module range.

8310   Bar code element

Status   Bar code element exceeds the maximum permitted size of 253 dots (21 mm).

Measure   → Reduce size of the bar code element.

8311   Barcode table

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

         ❍ Please read the notes in section General software errors 🗋.

8400   PDF417 ECC

Status   Bar code PDF417: incorrect ECC level (Error Correction Level).

Measure   → Alter ECC level.

8401   PDF417 Lines

Status   Bar code PDF417: illegal number of lines.

Measure   → Alter number of lines.

68

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

8402   PDF417 Columns

Status   Bar code PDF417: illegal number of columns.

Measure   ➜ Alter number of columns.

8403   PDF417 Style

Status   Bar code PDF417: incorrect style.

Measure   ➜ Alter style.

8404   PDF417 Command

Status   Bar code PDF417: incorrect command.

Measure   ➜ Acknowledge by pressing the on-line button.

                     ➜ Check and alter commands.

8405   PDF417 Size

Status   Bar code PDF417: incorrect size.

Measure   ➜ Alter size.

8406   PDF417 Details

Status   Bar code PDF417: incorrect details.

Measure   ➜ Alter details.

8407   PDF417 Coding

Status   Bar code PDF417: coding error.

Measure   ➜ Switch printer off and then back on again after thirty seconds.

                     ➜ Acknowledge by pressing the Online button.

8500   Code 25Int len.

Status   Bar code Code 25 Interleaved: input line too long.

Measure   ➜ Shorten input line.

8501   Postcode length

Status   Bar code postcode: illegal data length.

Measure   ➜ Check length of the transmitted data and set it to the permitted length.

8600   EAN Length

Status   Bar code EAN: illegal data length.

Measure   ➜ Check length of the transmitted data and set it to the permitted length.

8601   UPCE Numbers sys.

Status   Error: First data character of the transmitted data is not 0 or 1.

Measure   ➜ Alter first data character to 0 or 1.

8705 IDM rows/columns

Status The input data does not match the given matrix or the number of rows/columns is invalid.

Measure → Change the number of rows/columns or the input data.

8760 EAN128 field len

Status The number of data after a data identifier does not correspond to the definition for this data identifier.

Measure → Change the number of data.

8761 EAN128 Data type

Status The data type (alphanumeric, numeric) after a data identifier does not correspond to the definition for this data identifier.

Measure → Change the data type.

8762 EAN128 Ident.

Status Invalid data identifier.

Measure → Change the data identifier.

8800 Maxicode Mode

Status Maxicode: faulty mode

Measure → Change mode.

8801 Maxicode Sys no

Status Maxicode: incorrect system no.

Measure → Correct system no.

8802 Maxicode Zipcode

Status Maxicode: incorrect zipcode.

Measure → Correct zipcode.

8803 Maxicode Class

Status Maxicode: faulty class code.

Measure → Correct class code.

8804 Maxi. Sec. mess.

Status Maxicode: secondary message has an illegal length.

Measure → Correct length of secondary message.

8805 Maxicode Country

Status Maxicode: faulty country code.

Measure → Correct country code.

8830   Cod49 Datalength

Status   The user data string is too long. Not all characters can be coded in the bar code. The bar code is not printed.

Measure   → Shorten the data string.

8031   Cod49 wrong data

Status   The data string contains wrong characters. The bar code is not printed.

Measure   → Correct the content of the data string.

8850   Unknown filetype

Graphic files with the extention declared in the Easy Plug command #YG are not supported.

Measure   → Transform the graphics file into another file format or use another graphic in a supported format. Check, if the spelling of the file extention is correct.

8851   Graphic open

Status   The graphics file declared in the Easy Plug #YG command cannot be found on the compactflash card. Possible reasons are:

- Path and/or designation of the graphics file stored on the compactflash card doesn´t match the path and/or designation declared by the #YG command.

- The file is not available on the compactflash card.

Measure   → Check if the spelling of the graphics file is the same both in the #YG command and on the compactflash card.

8852   Graphic header

Status   A graphics file declared by a Easy Plug #YG command should be proceeded. The file header doesn´t match the file.

Measure   → The graphics file is possibly faulty. Check the file and replace it if necessary.

8853   Graphic palette

Status   A graphics file declared by a Easy Plug #YG command should be proceeded. Error reading the graphics palette.

Measure   → The graphics file is possibly faulty. Check the file and replace it if necessary.

8854   Graphic read

Status   A graphics file declared by a Easy Plug #YG command should be proceeded. Error reading the file.

Measure   → The graphics file is possibly faulty. Check the file and replace it if necessary.

71

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

8856   Free store size

Status   By setting parameter SYSTEM PARAMETER > Free store size, a part of the
                        memory is reserved, which the printer firmware can use if necessary
                        (dynamic memory allocation). If this memory area is dimensioned too small,
                        the printer firmware can not work and this error message shows up. One
                        cause may for example be, that data are supposed to be loaded, whose
                        size exceeds the reserved memory (e. g. graphics).

Measure   ➔ Enlarging the reserved memory partition, that is increasing the value of
                        SYSTEM PARAMETER > Free store size.

8857   Wrong mem config

                        Wrong memory configuration

Status   Too much memory requested by parameters. The following parameters
                        request more or less memory:

                        ● SYSTEM PARAMETER > Font downl. area
                        ● SYSTEM PARAMETER > Ram disk size
                        ● SYSTEM PARAMETER > Free store size

                        The fault occurs, if the sum of requested memory space exceeds the
                        amount of available memory.

                        After error confirmation, the relevant parameters are set back to their
                        default values. Furthermore, a restart is triggered.

Measure   ➔ Change the settings of the relevant parameters.

8900   Codablock columns

Status   Bar code Codablock: illegal number of columns.

Measure   ➔ Correct number of columns.

8901   Codablock rows

Status   Bar code Codablock: illegal number of rows.

Measure   ➔ Correct number of rows.

8902   Codablock softw.

Status   Bar code Codablock: software error.

Measure   ➔

8903   Codablock infogr

Status   Bar code Codablock: info not in line.

Measure   ➔

8950   Logo open

Status   Failure when attempting to read a logo, which has previously been copied on RAM disk or on memory card (thus using Easy Plug command #DK).

Measure   → Repeat loading the logo via #DK command.

                   → In cases of continuous occurence of this error, please contact the technical support.

8951   File format

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                   ○ Please read the notes in section General software errors 🗋.

8952   Not installed

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                   ○ Please read the notes in section General software errors 🗋.

9000   Wrong errornum

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                   ○ Please read the notes in section General software errors 🗋.

9001   Software Error

Status   General software error.

Measure   → Switch printer off and then back on again after thirty seconds.

                   ○ Please read the notes in section General software errors 🗋.

9003   Print head type

Status   A wrong printhead type is selected in the printer menu.

Measure   → Correct the setting of the printhead type.

                   ○ Set the printhead type using parameter SPECIAL FUNCTION > Printhead type.

9005   No Printhead

Status   Printhead could not be detected. Possible causes:
-   Printhead cable not connected
-   Wrong printhead type
-   Defective printhead cable
-   Defective CPU board
-   Printhead cable plugged into wrong connector on the CPU board

Measure   → Check printhead cable, printhead and CPU board and replace defective parts.

9007   Bad MAC Address

Status   This error message is displayed, if an invalid MAC address is programmed
                        to the CPU board. Valid means, the MAC address matches the range
                        00.0a.44.xx.xx.xx.
                        In this case, the network will not be initialised. To enable work with the
                        network, a valid (Avery-) MAC address must be programmed on the board.
                        This can only be done by an authorized service technician or by the
                        manufacturer.

Measure   → Acknowledge the status message by pressing the Online button. The
                        printer will be starting, but cannot be used with a network.
                        → Contact the technical support for a new programming of the board´s MAC
                        address.
                        → If a new programming is not possible, exchange the CPU board.

9008   Powerfail signal

                        "powerfail" is a signal at the power supply, which is normally activated for a
                        short time, after the printer has been switched off. It triggers the storing of
                        parameter settings and counter values, using the leftover of supply voltage.

Status   The powerfail signal is already active after switching the printer on. The
                        following causes are possible:

                        -- Defektive power supply
                        -- Defektive data cable
                        -- Defektive board

Measure   → Switch the printer off and on again. If the error occurs repeatedly:

                        → Check the hardware (see above).

                        ▌▌▶ After acknowledging the message (pressing the online button), the printer
                        works normal. But be aware that the powerfail signal is deactivated, what
                        means, that no parameter settings and counter values are stored, when the
                        printer is switched off.

9009   Temporary MAC

                        Temporary MAC address.

Status   This error message is displayed, if the MAC address has the value
                        00.0a.44.00.00.00. This MAC address is used only during production.

Measure   → Acknowledge the status message by pressing the Online button. The
                        printer will be starting and the network can be used.
                        → Contact the technical support for a new programming of the board´s MAC
                        address.
                        → If a new programming is not possible, exchange the CPU board.

74

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

9011   Load firmware for x

Status   At least one external device has no valid (e.g. an incomplete) application program loaded. This is the reason, why the device remains in the bootloading status and signalizes this status message. „x" can be one of the following module names:

- Feed driver
- Foil driver
- Peripheraldriver
- USI interface
- Intern. rewinder
- Applicator int.

Measure   ➔ Load a valid application program.

9013   Head voltage

Status   Faulty 5 V print head supply voltage. Possible causes are:

- *Only AP 5.4*: Printhead was connected to the wrong connector on the CPU board.
- Short circuit, possibly is the printhead defective.

Measure   ➔ *Only AP 5.4*: Check if the printhead is connected to the correct connector on the CPU board. Change the connector, if necessary.

                        ➔ Replace the printhead

9014   Motor voltage

Status   Faulty 45 V motor supply voltage. A possible cause is a short circuit, that is the printhead is defective.

Measure   ➔ Replace the printhead

9015   Network init.

Status   Error during the network initialization.

Measure   ➔ Contact your network administrator.

9016   DHCP Failed

Status   DHCP failed. This may happen, if parameter INTERF. PARAM. > ETHERNET PARAM. > IP Adressassign is set to *DHCP*, but no IP-address can be drawn.

Measure   ➔ Contact your network administrator.

9017   RTC read failed

Status   Error, while trying to read the realtime clock (RTC). Happens, if an Easy-Plug command to read out the RTC is sent, but no RTC is built in.

Measure   ➔ Check, if the printer is supplied with a RTC. To do so, print a status printout.

❍ See parameter INFO PRINTOUT > Printer status

You find the actual date on the printout, below the header „Systemversion", if a RTC is installed.

➔ Check, if the error occurs repeatedly or sometimes.

If it occurs repeatedly:

➔ *AP 5.4*: replace the CPU board.
64-xx / ALX 92x / DPM / PEM: Replace the RTC. If the error still occurs, replace the CPU board.

❍ If the error occurs sometimes, please refer to the notes in section General software errors 🗋.

9018　　#!CA wrong Pos.

Status　　　　The #!CA command is placed at an inadmissible position – the Easy-Plug interpreter can not proceed the command at this position (e. .g during the loading of files onto a memory card).

Measure　　　➔ Call the #!CA command at an admissible position.

9021　　Unmg. Exception

Unmanaged exception

Status　　　　General software error.

Measure　　　➔ Switch printer off and then back on again after thirty seconds.

❍ Please read the notes in section General software errors 🗋.

9022　　No network link

Status　　　　This message can only occur, if the Ethernet address assign is set to DHCP. The cause is nearly always a badly connected network connector.

Measure　　　➔ Check, if the network connector is plugged in properly.

9023　　Filename: Functionname() Line: xxx

Status　　　　This status message indicates a software error. The error source is located in the source file "Filename" in function "Functionname()" in line xxx.

Measure　　　➔ Switch device off and on again.

If the error occurs repeatedly:

➔ Contact the manufacturer.
When doing so, it is important to be able to reproduce the error. Gather the following informations before calling the technical support of the manufacturer:
-- Displayed information about the error source
-- Label layout, logfiles, etc. as described in chapter Unspecific errors 🗋

9024　　Not possible !

Status　　　　Detecting the material length (a function, which is normally used with MLI) is not possible, because a printjob is currently processed.

Measure　　　➔ Retry as soon as the printjob is processed.

9025   24V Voltage miss

> ⫸ Concerns machines with APSF function.

Status The 24 V supply at the APSF interface is interrupted.

Measures → Check 24 V at the power supply.

→ Check cable for contact.

9030   Log file:CF full

Status An attempt to store data on the memory card was not successful, because of a full card.

Measure → Clear some storage space on the memory card, or
→ Insert an empty memory card.

9031   Log file: nnnn

Status File access error. *nnnn* = error code of the operating system.

Measure → Repeat the operation, which led to this message. If it comes to this message repeatedly, send a message to the Technical Support, including the error code.

9032   EP file log stop

Status Internal error during Easy-Plug file logging (SPECIAL PARAMETER > EasyPl. file log).

Measure → Repeat operation. If the error occurs repeatedly: switch off the file logging.

> ⫸ Use parameter SPECIAL PARAMETER > EasyPl. file log only for error analysis purposes. Using the parameter in continous operation can cause error messages, which are hard to understand.

9034   Use min 16MB RAM

Status The printer has not enough RAM. The applied firmware version needs at least 16 MB RAM for faultless operation.

Measure → Extend the pritners RAM.

9035   No printpr. stop

Status This status message may appear during the loading of new firmware onto the H8 (64 Bit) or onto boards, which are connected to the H8 (e.g. Applikator Interface).

Measure → Switch the printer off and on again and retry the firmware loading.

9038   No gap found

Status The automatic calibration of the label pitch (Feed + Prog keys) failed because no punch was detected after 500 mm feed.

Measure If the label pitch is greater than 500 mm:
→ Enter label pitch value manually in the parameter menu

If the label pitch is less than 500 mm (punch was not detected):

➔ Check function/setting of label sensor, see description of measures for error 5001

9039   Ribbon mode chg.

Status   The ribbon mode was changed between two consecutive printjobs via Easy-Plug command (from thermal transfer to thermo or vice-versa).

Measure   ➔ Check the ribbon mode setting and, if necessary, change the setting (SYSTEM PARAMETERS > Ribbon autoecon.).

9040   No Time Server

Status   Comes up one times at startup, if INTERFACE PARA > NETWORK PARAM. > Time client is set to "On" and there is no response from the set time server.

Measure   ➔ Check the time server availability respectively the time server settings.

9100-9119 Messages during firmware update

9100   Invalid format

Status   Occurs during a download. The sent data is faulty, e. g. regarding an
- invalid data format
- invalid check sum
- invalid address
- invalid record type

Measure   ➔ Switch printer off and on again. Check the download data.

9101   Invalid Header

Status   Occurs during a download. The sent files have a format error in the header.

Measure   ➔ Switch printer off and on again. Check the download data.

9102   Inv.Board Rev.

Status   Occurs during a firmware download. The sent firmware does not match the *version* of the CPU board.

Measure   ➔ Switch printer off and on again. Check the download data.

9103   Inval. firmware

Status   Occurs during a firmware download. The sent firmware does not match the installed CPU board.

Measure   ➔ Switch printer off and on again. Check the firmware file.

9104   Inv. Data Size

Status   Occurs during a download. The size of the sent data doesn´t match the file size indicated in the header.

Measure   ➔ Switch printer off and on again. Check the download data.

9107   Flash Overflow

Status   Occurs during a download. The flash memory on the CPU board is full. No more data can be loaded.

Measure → Switch printer off and on again.

9108   Flash Ovf. Diag.

Status Occurs during a download. The flash memory on the CPU board has not enough free memory space left for diagnose data.

Measure → Delete data blocks in the flash memory or reduce max. size of the diagnose data.

9109   Flash Ovf. Params.

Status Occurs during a download. The flash memory on the CPU board has not enough free memory space left to store the current parameter settings.
▐▐▐▶ After a restart, the parameters are set to "Factory setting".

Measure → Delete data blocks in the flash memory.

9110   Flash Write Err.

Status Occurs during a download. The flash memory can´t be accessed for writing.

Measure → Switch printer off and on again.

9111   PIC Update Fail.

Status Occurs during a firmware update or a PIC-controlled device, if the update failed.

Measure → Switch printer off and on again.

9112   PIC missing

Status Occurs during a firmware update of a PIC-controlled device, if no such device was found.

Measure → Check the configuration.
The status message is cancelled automatically. The download continues.

9113   RFID Update Fail.

Status Occurs during a firmware update of a RFID module, if the update failed.

Measure → Switch printer off and on again.

9114   RFID missing

Status Occurs during a firmware update of a RFID module, if no such device was found.

Measure → Check the configuration.
The status message is cancelled automatically. The download continues.

9115   AWID missing

Status Occurs during a firmware update of an AWID RFID module, if a RFID module of another manufacturer was found.

Measure → Check the configuration.
The status message is cancelled automatically. The download continues.

79

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

9116   Ser. Disp. Missing

Status   Occurs during a firmware update of a serial operation panel, if no such device was found.

Measure   → Check the configuration.
                        The status message is cancelled automatically. The download continues.

9117   Device Unknown

Status   Occurs during a firmware update, if the device information in the header is missing.

Measure   → Switch printer off and on again. Check the configuration.

9118   H8 Update Fail.

Status   The update of a H8 device failed.

Measure   → Switch printer off and on again.

9119   H8 missing

Status   Occurs during a firmware update of a H8 device, if no such device was found.

Measure   → Check the configuration.
                        The status message is cancelled automatically. The download continues.

9122   Checksum error

Status   Checksum error while loading a firmware file. The checksum of the loaded data doesn´t match the calculated checksum.

Measure   → Repeat the download.

                     → If the error continues to occur, the file is probably damaged or corrupted. Check/ exchange the firmware file.

9123   Memory unavailable

Status   Error while loading a firmware file. There is not enough free memory available.

Measure   → Restart machine and repeat the download.

                     → If the error continues to occur: Reduce the memory which is assigned by the following parameters:

                          - SYSTEM PARAMETERS > Ram disc size
                          - SYSTEM PARAMETERS > Font downl. area
                          - SYSTEM PARAMETERS > Free store size

81

09/23 Rev. 26   USER + SERVICE MANUAL   Status Reports
64-xx – DPM – PEM – ALX 73x (PMA) – LPA 81x (Printer) – ALX 92x – AP 5.4 – AP 5.6

LIST OF ILLUSTRATIONS (internal)

20.09.23

C:\Novexx_Doku\Printers\Doku_CD\Txt\Txt200\64XSTAME.docm

**Es wurden keine Einträge für das
Inhaltsverzeichnis gefunden.**

Dispenser (LMA) status messages

Status messages on the dispenser

Error messages

When an error occurs, the dispenser stops immediately and shows an error message on the control panel.

Error messages are based on the following outline:

> Status num: 5144 [a]
> Rewinder init [b]

a) 5144 = The status number. This number is an easy way to identify the message.

b) "Rewinder init" = Status text; brief description of the error.

To delete an error message:

1. Rectify the cause of the fault. For further details see section List of error messages⧉ on page 5.

2. Press the (↵) key to delete the message.

Error messages that are *not* described below can only be rectified by qualified service personnel.

If an error that is not described here occurs:

1. Press the (↵) key to delete the message.

2. Switch off the device, wait for 30 seconds and switch it on again.

Warnings

Warnings refer to states less critical than error messages.

Labelling operation is not interrupted by a warning.

Warnings may occur in dispensing mode or in online settings mode.

Warnings are based on the following outline:

> ONLINE
> Material warning [a]

a) "Material warning" = brief description depending on what triggered the warning.

EXPERTS While a warning is being displayed, the "Warning" signal output is active.

Reset warnings A warning is displayed until…

- the cause of the warning has disappeared

  or

- the warning has been reset

➠ Warnings can only be reset in online mode. If the warning occurs in online setting mode or standalone mode, the user must switch to online mode before resetting the warning.

To reset a warning in online mode:

➜ Press the (↵) key.

EXPERTS It is also possible to reset warnings with Easy-Plug command #!CLRW.

➠ If several warnings are active simultaneously, the warning with the highest priority is displayed first. When it has been confirmed the next one is displayed, and so forth.

General software errors

Errors in the firmware can never be completely ruled out. Such errors are described in the error directory as "General software errors". They can only be corrected by the manufacturer.

If errors which are described in the error directory as "General software errors" repeatedly occur, please notify the manufacturer, quoting the error number and the circumstances in which the error occurred.

Reference status messages - dispenser

List of warnings

Productstartwarn

☹ New start signal during the dispensing cycle. The contour of the product is resulting in multiple start signals.

→ Activate LABEL SETUP > Product length.

☹ Several missing labels on the label belt; unable to compensate for the gap.

→ Check the label material.

PMA warning

☹ The printer (PMA) has stopped or an error has occurred on the printer.

The warning shows up before the error message „PMA not ready", 5153 ⬚ on page 12.

→ Check the printer.

Material low

☹ (Internal OD sensor) critical material roll diameter reached.

→ Prepare for material change

APSF speed warn.

EXPERTS

☹ The speed of the conveyor belt has exceeded the maximum speed of the dispenser.

→ Reduce the speed of the conveyor belt.

OD sensor warn.

☹ (External OD sensor) critical material roll diameter reached.

→ Prepare for material change

Toomany products

EXPERTS

☹ Each product triggers more than one start signal.

→ Activate LABEL SETUP > Product length.

→ Verify, if there are other causes which trigger start signals (e.g. reflections). If yes, eliminate those causes.

☹ Too many products are between product sensor and dispensing edge (>64). The buffer for product start signals is about to overflow.

→ Move the product sensor closer to the dispensing edge.

☹ The resolution of the rotary encoder is set wrong.

→ Verify, if the conveyor speed matches the speed which is displayed on the operator panel. If not, correct the resolution setting of the rotary encoder.

Int. mod. synch

☹ Although communication between printer and dispenser has been interrupted, labels can currently still be dispensed from the buffer loop.

→ Check the connection line; see status message 5068 🗋 auf Seite 8.

Module speed

☹ The printer is printing too slowly. Start signals must therefore be left out.

→ Increase the print speed or reduce the dispensing speed/dispensing rate.

Foil low

☹ Critical foil roll diameter at the printer reached.

→ Prepare for foil roll change

Loop empty

☹ The buffer loop of the linear dancer arm is empty. Currently, there is no label available from the loop.

The dancer arm has moved out of the control position. The warning precedes the warning „LDU lower limit", see error 5069 🗋 on page 10. The warning has the same causes as the error message.

Tandem Synch.

☹ Communication between master and slave machine is not working.

The warning can for example show up shortly after switching the machine on, when the communication between the machines is *not yet* established. If the communication is *still* established within 5 minutes after the warning showed up, the warning will disappear, otherwise, after the 5 minutes are over, the error message „Tandemsynch.init" will appear, see 5147 🗋 on page 11. The warning has the same causes as the error message.

List of error messages

1007	**Command incorr.**

☹ Unknown interface command at data interface.

→ Check the command that was sent to the data interface as necessary.

1272	**#!A wrong Number**

☹ Error in command „#!A..". The value entered for the parameter is outside of the permitted range (0 to 31).

→ Enter a value within the permitted range.

1276	**#!P wrong Number**

☹ Error in command „#!P..". The value entered for the parameter is outside of the permitted range (0 to 31).

→ Enter a value within the permitted range.

1285	**#-comm. incorr.**

☹ Error in a command "#!..". The letter entered is not valid.

→ Enter a valid letter.

1401	**Para value wrong**

☹ A not defined parameter value was sent. The error occurs for example, if a product profile was called with a wrong number (Easy-Plug command #!PC).

→ Correct the sent parameter values.

3000	**RS232 Overrun**

☹ RS232 interface receive error at *COM1* (Overrun).

→ Press the ⏎-key to acknowledge.

3001	**RS232 Parity**

☹ RS232 interface receive error *COM1* (Parity).

→ Press the ⏎-key to acknowledge.

→ Check setting in labeller's function menu: (INTERFACE PARA. > COM1 PORT > Parity) and on host computer.

3002	**RS232 Frame**

☹ RS232 interface receive error *COM1* (Frame).

→ Press the ⏎-key to acknowledge.

→ Check the setting in the labeller's function menu: (INTERFACE PARA. > COM1 PORT > Baud rate and in the menu INTERFACE PARA. > COM1 PORT > Stop Bits) as well as on the host computer.

3011	**Send buffer full**

The send buffer is full. This error can occur when the status of the labeller was queried several times (#!Xn), but the response was not read out.

→ Ensure that status response is read out.

5000	**Bus device**

🛈 This message appears in most cases as the first of a series of two or three messages that more closely limit the source of the error.

☹ Unable to access device on the I²C bus.

→ Delete the message after pressing the ⏎ key.

→ Switch off the machine, wait for 30 seconds and switch it on again.

→ If the error message occurs repeatedly, call in a service technicians.

5001	**No gap found**

No punches were found

The label sensor has not found any label gap or punch.

☹ Material end (if no roll diameter sensor is activated).

→ Insert material.

☹ The limit value for missing labels has been exceeded (LABEL SETUP > Miss. label tol.).

→ Check the label material.

☹ Label type is not set correctly (MASCHINEN SETUP > Label sens. type).

→ Check/change setting.

☹ The label length is not set correctly (LABEL SETUP > Label pitch).

➔ Check/change setting.

☹ Label sensor is dirty.

➔ Clean the label sensor.

☹ Label sensor is not in the correct position.

➔ Check/change the position of the label sensor.

☹ Label sensor is not correctly connected.

➔ Check whether the label sensor is plugged into the correct connection.

☹ Label sensor is faulty.

➔ Replace the label sensor.

☹ Rotary encoder is not correctly connected.

➔ Check/change the rotary encoder settings.

➔ In all cases: Press the ⏎ key to confirm the error message.

5002   **Material end**

☹ Material end (if the internal OD sensor is connected and activated).

→ Insert a new label roll.

☹ Internal OD sensor is *not* connected, but is activated.

→ To deactivate the internal OD sensor: MASCHINEN SETUP > Mat. Ende Fehler = „Off".

5009   **Start error**

Refers to the standard start sensor input (M12).

☹ The device received another start signal while applying a label.
Prerequisite: MACHINE SETUP > Start error stop is set to "on" .

→ Check the operation of the labeller; increase distance between products if required.

→ Set MACHINE SETUP > Start error stop to "off".

5019   **Startsig. overrun**

Too high start signal frequency caused start signal buffer overflow.

Possible causes:

☹ Distance between product sensor and dispensing edge is too high.
→ Decrease distance between product sensor and dispensing edge.

☹ Products and product distance are too small.
→ Increase product distance.

☹ Dispensing speed is too high.
→ Decrease dispensing/conveyor speed.

5020   **I2C Timeout 16**

☹ Timeout error while communicating via the I^{2}C Bus with device No. 16 (EE-ROM, contains manufacturing data).
→ Switch the machine off, wait 30 seconds and switch it back on.

→ Replace EEPROM

☹ If the error message appears repeatedly:
→ Contact the manufacturer.

5021   **I2C Conf. 16**

☹ Confirmation error while communicating via the I2C Bus with device No. 16 (EEPROM, contains manufacturing data).

5022   **I2C Busy 16**

☹ Error while communicating via the I2C Bus with device No. 16 (EEPROM, contains manufacturing data). Device constantly transmitting "busy" message.

5024   **I2C BER 16**

☹ Error while communicating via the I^{2}C Bus with device No. 16 (EEPROM, contains manufacturing data).

5030   **MotorProtectFeed**

☹ Dust filter fleece dirty. This will cause the machine to overheat.

→ Replace the dust filter fleece. Allow the machine to cool off.

☹ Connector cable between CPU board and motor driver board not connected or faulty.

➔ Check whether the cable is connected correctly.

➔ Check the cable.

☹ Motor driver board overheated or faulty

➔ Switch off the machine, wait for 30 seconds and switch it on again.

If the error message occurs repeatedly:

➔ Replace the motor driver board.

5031	**MotorProtectRew.**

☹ Dust filter fleece dirty. This will cause the machine to overheat.

➔ Replace the dust filter fleece. Allow the machine to cool off.

☹ Connector cable between CPU board and motor driver board not connected or faulty.

➔ Check whether the cable is connected correctly.

➔ Check the cable.

☹ Motor driver board overheated or faulty

➔ Switch off the machine, wait for 30 seconds and switch it on again.

If the error message occurs repeatedly:

➔ Replace the motor driver board.

5064	**Rewinder full**

☹ The critical roll diameter on the backing paper rewinder is reached (settable by MASCHINEN SETUP > Rewinder full)

➔ Empty the unwinder.

5067	**L.DancArm Sensor**

Linear dancer lever sensor

Bad connection to the dancer lever sensor.

☹ Sensor cable is not connected.

➔ Connect the sensor cable.

☹ Sensor cable is faulty.

➔ (Service) Check the sensor cable and if necessary replace it.

5068	**Int. mod. synch**

Communication between printer and dispenser has been interrupted or doesn´t (yet) take place.

☹ Printer and dispenser start up at different speeds after the machine is switched on, i.e. the printer is not yet ready when the dispenser is ready.

➔ Confirm error. The startup process is then completed without problems.

☹ The printer is switched off.

➔ Switch on printer

☹ The connector cable between printer and dispenser is damaged or not connected.

➔ Check the connector cable between printer and dispenser and replace it, if necessary.

5069	**LDU lower limit**

The linear dancer lever has reached the lower limit stop.

☹ Dispensing speed and/or dispensing rate are too high relative to the print speed.

➔ Increase the print speed

➔ Reduce dispensing speed

➔ Reduce the dispensing rate (number of labels dispensed per unit of time)

☹ Linear dancer lever sensor is not connected.

➔ (Service) Check the sensor cable.

☹ Sensor cable of the linear dancer lever sensor is faulty.

➔ (Service) Replace sensor cable.

5070	**LDU upper limit**

The linear dancer lever has reached the upper limit stop. This causes the printer to stop.

☹ The material ribbon is torn.

➔ Insert new label material.

➔ If this error occurs repeatedly reduce the spring tension of the linear dancer arm.

☹ Linear dancer lever sensor is not connected.

➔ Check the sensor cable.

☹ Sensor cable of the linear dancer lever sensor is faulty.

➔ Replace sensor cable.

5073	**APSF direction**

☹ The rotary encoder belonging to the APSF steering has recognized a wrong rotation direction for a transportation stretch of at least 100 mm.

➔ Check the conveyor direction.

➔ Check the connection of the rotary encoder.

5111	**OD sensor error**

☹ Regards the external OD sensor. The material roll diameter has reached the critical value (required setting: MASCHINEN SETUP > Ext. OD sensor = „Error"). The label material will soon be gone.

➔ Prepare to insert a new material roll

5130	**PSU xxxxxxxx**

☹ Communication fault between control unit and power supply regarding the I2C bus. The 4 byte long error code (xxx...) provides information about the cause of the error.

➔ Switch the printer off and - after 30 seconds - on again. If the error repeatedly occurs, please notify the manufacturer.

ⓘ In most cases, the power supply has to be exchanged.

5140	**Rewinder control**

ⓘ During problem-free operation the rewinder dancer lever moves only minimally around the "control position". This is the position the dancer lever assumes after the machine is initialised.

☹ The dancer lever is moved by the effect of a force from outside the control position.

➔ Press the ⏎ key.

The dancer lever controller is then reinitialised. The dancer lever moves back to the control position.

Example: feed motor blocked; the backing paper is not moved quickly enough; this causes the dancer lever to be drawn upward.

Example: tearing of the backing paper; the dancer lever moves back down by spring force.

| 5142 | **Dancer home pos.** |

☹ Homeposition of the rewinder dancer arm could not be found.

➜ Check, if the sensor board of the dancer arm is connected properly.

➜ Replace the sensor board.

| 5143 | **Rewinder stop** |

The rewinder dancer lever is no longer able to move. Therefore the rewinder motor is switched to a powerless state.

> 🛈 This can be selectively used to insert a new label roll because the rewinder can easily be turned when the motor is switched off.

☹ The dancer lever was held at the upper limit stop for longer than two seconds.

➜ Press the ⏎ key to confirm the error message.

| 5144 | **Rewinder Init** |

The message has a couple of possible causes:

☹ No label material inserted.

➜ Insert material.

☹ Rewinder sensors are not or not properly connected.

➜ Check the connection. Connect the sensors properly.

☹ Sensor board position is faulty.

➜ Correct the position of the sensor board.

☹ Sensor defective.

➜ Exchange the sensor board.

| 5145 | **Rewinder full** |

☹ The maximum permissible diameter of the rewinder roll has been reached.

➜ Remove wound backing paper

➜ Press the ⏎ key to confirm the error message.

> 🛈 This error can only occur if the end of a new label roll has been pasted onto a backing paper that is already wound around the rewinder.

| 5147 | **Tandemsynch.init** |

Initialization of tandem synchronisation

> 🛈 This message can only occur in tandem operation mode at the *master* machine.

☹ Communication between master and slave machine is not working.

➜ Check the tandem interface cable (cable present and correctly connected?).

➜ Check the settings on both machines.

5148	**Tandemsynch.init**

Initialization of tandem synchronisation

i This message can only occur in tandem
operation mode at the *slave* machine.

☹ Communication between master and slave machine is not working.

➔ Check the tandem interface cable (cable present and correctly connected?).

➔ Check the settings on both machines.

5151	**Applic. interf.**

☹ Applicator interface is missing or not connected.

➔ Connect and/or install applicator interface.

5152	**Winding direct.**

☹ The backing paper was incorrectly fastened on the rewinder core.

➔ Fasten the backing paper on the rewinder as described in the operating manual.

☹ Wrong machine type set (MASCHINEN SETUP > Dispenser type)

➔ "RH" setting on LH machine or vice versa.

5153	**PMA not ready**

☹ The printer (PMA) is offline or an error has occured.

➔ Check the printer

5200	Home position

The applicator has not reached its home position (upper limit stop) within the assigned time period. This message can only occur in applicator mode.

☹ No applicator present, but applicator mode is set.

➔ Set SIGNAL INTERFACE > Interface mode to "PLC interface".

☹ Applicator is jammed

➔ Eliminate the obstruction

☹ Compressed air applicator: compressed air supply is interrupted or switched off

➔ Check the compressed air connection and if necessary connect it correctly

☹ Cable not correctly connected.

➔ Check the cable and if necessary connect it correctly.

5201	**Touch down**

The applicator has not reached its lower end position (touch down) within the assigned time period. This message can only occur in applicator mode.

☹ No applicator present, but applicator mode is set.

➔ Set SIGNAL INTERFACE > Interface mode to „PLC signals".

☹ Applicator is jammed

➔ Eliminate the obstruction

☹ Compressed air applicator: compressed air supply is interrupted or switched off

➔ Check the compressed air connection and if necessary connect it correctly

☹ Cable not correctly connected.

➔ Check the cable and if necessary connect it correctly.

5203	**Touch down sens.**
	☹ The touch down sensor(s) are/were triggered before the application process was started.
	➔ Check the cable and compressed air connection; connect correctly if necessary.

5204	**Appl. Starterror**
	Refers to the start input at the optional applicator interface.
	☹ The device received another start signal while applying a label.
	Prerequisite: MACHINE SETUP > Start error stop is set to "on" .
	➔ Check the operation of the labeller; increase distance between products if required.
	➔ Set "Start error stop" function to "off".

5205	**Applicator gen.**
	☹ General software error
	➔ Switch the machine off, wait 30 seconds and switch it back on.
	See topic section Printer status messages , chapter „General software errors".

5206	**Applicator resp.**
	☹ A time limit was exceeded while communicating with the applicator interface (AI).
	➔ Switch the machine off, then back on again after half a minute.
	➔ If the error continues to occur after switching on and off several times, please contact our technical support.

5207, 5208, 5209, 5210	**Appl. driver x** *(x=[1…4])*
	☹ Short circuit or over-temperature at power output x of the applicator interface (AI).
	➔ Check connections.

5212	**Vx.x for AI rec**
	☹ Wrong firmware for applicator interface (AI) installed.
	➔ Install AI firmware version x.x.

5250	**PLC Out overload**
	At least one PLC output signal is over-loaded. Possible causes:
	☹ Load to big
	➔ Reduce load.
	☹ Wrong wiring
	➔ Correct wiring.
	☹ CPU board defective
	➔ Replace CPU board.

5251	**PLC 24V missing**
	24V supply for PLC is missing. Possible causes:
	☹ 24V cabling between power supply and CPU is not available or defective
	➔ Check voltage cable; replace if necessary.
	☹ Power supply is defective
	➔ Replace power supply.

☹ CPU is defective

➔ Replace CPU board.

5252   **PLC out disabled**

PLC outputs are disabled. Possible causes:

☹ Watchdog timer expired

☹ Firmware error

➔ Switch the machine off, wait 30 seconds and switch it back on.

See General software errors 🗋 on page 3.

☹ CPU board defective

➔ Replace CPU board.

5253   **24V switched off**

24V output of the power supply is switched off. Possible causes:

☹ General firmware error

➔ Switch the machine off, wait 30 seconds and switch it back on.

See General software errors 🗋 on page 3.

☹ CPU board defective

➔ Replace CPU board.

5500   **Unknown**

☹ General software error

➔ Switch the machine off, wait 30 seconds and switch it back on.

See topic section Printer status messages 🗋, chapter „General software errors".

6000   **Param. incorr.**

☹ NOVRAM checksum error.

➔ Press online button to acknowledge error. This resets all parameters to their factory settings.

6001   **NOV. prog. err.**

☹ Error programming user memory.

➔ Switch the machine off, wait 30 seconds and switch it back on.

➔ Please contact the manufacturer if the error message appears repeatedly.

6002   **New prog. vers.**

☹ New firmware has been loaded. The dispenser is reporting by way of this message that new firmware is present.

➔ Press the online key to confirm.

All parameters are reset to the factory setting.

6003   **Memory error**

☹ Error allocating user memory.

➔ Switch the machine off, wait 30 seconds and switch it back on.

➔ Please contact the manufacturer if the error message appears repeatedly.

6030	**New parameters**

☺ New firmware has been loaded, which has caused new functions to be added to the menu.

➔ Press the online key to confirm.

The system is restarted.

All parameters are set to the factory setting.

6031	**Param. checksum**

☹ The parameter checksum is incorrect.

6200	**Filesystem regis**

☹ General software error that can occur when installing file system.

➔ Switch the machine off, wait 30 seconds and switch it back on.

6201	**File sys. format**

☹ Error while formatting RAM disk or compact flash card.

➔ Switch the labeller off, wait 30 seconds and switch it back on. Please contact the manufacturer if the error message appears repeatedly.

6202	**Drive open**

☹ Error accessing compact flash card.

➔ Reformat compact flash card; test again to see if you can write to the card.

➔ Test with a different compact flash card

6203	**FileSystem close**

☹ Error accessing compact flash card.

6204	**Disk directory**

☹ Working directory cannot be opened.

➔ Press the ⏎-key to acknowledge

➔ Check the name of the working directory and that it exists.

6205	**Write disk**

☹ Error writing to RAM disk or memory card.

➔ Press the ⏎-key to acknowledge

6206	**Read Disk**

☹ Error reading from RAM disk or compact flash card.

➔ Press the ⏎-key to acknowledge

6207	**No file card**

☹ No memory card was found.

➔ Check to see whether a memory card is inserted. If the memory card was not inserted until after the machine was switched on: Turn the machine off and on again.

9000	**Wrong errornum**

☹ General software error

➔ Switch the machine off, wait 30 seconds and switch it back on.

See topic section Printer status messages 🗅, chapter „General software errors".

9001	**Software error**

☹ General software error

➔ Switch the machine off, wait 30 seconds and switch it back on.

See topic section Printer status messages 🗅, chapter „General software errors".

9007	**Bad MAC address**

☹ The MAC address is not valid

ℹ This error is displayed if the CPU board has a MAC address that lies outside of the range reserved for Novexx (00.0a.44.xx.xx.xx). In this case the network cannot be initialised. To be able to work with the network, the CPU board must be programmed with a MAC address which is valid for Novexx. This can only be carried out by an authorised servicing technician or at the factory.

➔ Press the ⏎ -key to acknowledge the status message.

The labeller boots up, but cannot be operated as part of a network.

➔ Contact technical support.

➔ Replace the CPU board if necessary.

9009	**Temporary MAC**

☹ Temporary MAC address

ℹ This error is displayed if the MAC address of the CPU board has the value *00.0a.44.00.00.00* . In this case, the network can be initialised. This MAC address is only used during manufacture of the labeller.

➔ Press the online button to acknowledge the status message. The labeller boots and the network is operational.

➔ Contact technical support.

➔ Replace the CPU board if necessary.

9011	**Bootloader ext.**

☹ The applicator interface has no valid (e.g. an incomplete) firmware loaded. This is the reason, why the device remains in the bootloading status and signalizes this status message.

➔ Reload the applicator interface firmware.

9015	**Network init**

☹ Error initialising the network.

➔ Call in network administrator.

9016	**DHCP Failed**

☹ DHCP has failed. Occurs when the parameter: INTERFACE PARA > NETWORK PARAM > IP Addressassign is set to *DHCP* and no IP address can be allocated.

➔ Call in network administrator.

9019	**Filename wrong**

☹ The entered filename has a length of 0 characters

➔ Change filename.

9020	**Param ID incorrect**

☺ An invalid parameter ID was used.

➜ Correct parameter ID.

9022	**No network link**

i This status message can only occur if the Ethernet address assignment is set to DHCP (INTERFACE PARA >NETWORK PARAM. > IP Addressassign).

☺ Network plug not correctly connected.

➜ Check whether the network plug is correctly connected and correct it if necessary.

9025	**24V voltage miss**

☺ The 24 V output voltage was not detected during system start.

➜ Switch machine off and on again after 30 s. If the message continues to appear, check power supply.

9100	**Invalid format**

☺ Format error in download data, e. g.:

  • invalid data format

  • invalid checksum

  • invalid address

  • invalid record type

➜ Check and modify download data.

➜ Restart machine.

9101	**Invalid header**

☺ Format error in the dowload data header.

➜ Check and modify header of download data.

➜ Restart machine.

9102	**Inv. board rev.**

☺ Download data is incompatible to the current board revision.

➜ Check and modify download data.

➜ Restart machine.

9103	**Invalid firmware**

☺ Download data is incompatible to the current board.

➜ Check and modify download data.

➜ Restart machine.

9104	**Inv. data size**

☺ The size of download data exceeds the predefined size, which is set in the header.

➜ Check and modify download data.

➜ Restart machine.

9107	**Flash overflow**

☺ Onboard flash memory is full.

➜ Restart machine.

9108	**Flash ovf. diag.**

☹ The available flash area doesn´t provide enough space for diagnosis information.
→ Delete flash data blocks.

→ Reduce max. size of diagnosis information.

9109	**Flash ovf. params**

☹ The available flash area doesn´t provide enough space to store the activ system parameters.
→ Functions are set to factory settings after restart.

9110	**Flash write err.**

☹ The program flash cannot be accessed for writing.
→ Reset machine.

9116	**Ser. disp. missing**

☹ No (serial) operation panel found for update.
→ Check machine, if an operation panel is connected.

Download continues after the error message.

9117	**Device unknown**

☹ Missing device information in the header of the download data.
→ Check and modify download data.

→ Restart machine.

9122	**Checksum error**

☹ Checksum error while loading a firmware file. The checksum of the loaded data doesn´t match the calculated checksum.
→ Repeat the download.

→ If the error continues to occur, the file is probably damaged or corrupted. Check/ exchange the firmware file

9123	**Memory unavailable**

☹ Error while loading a firmware file. There is not enough free memory available.
→ Restart machine and repeat the download.