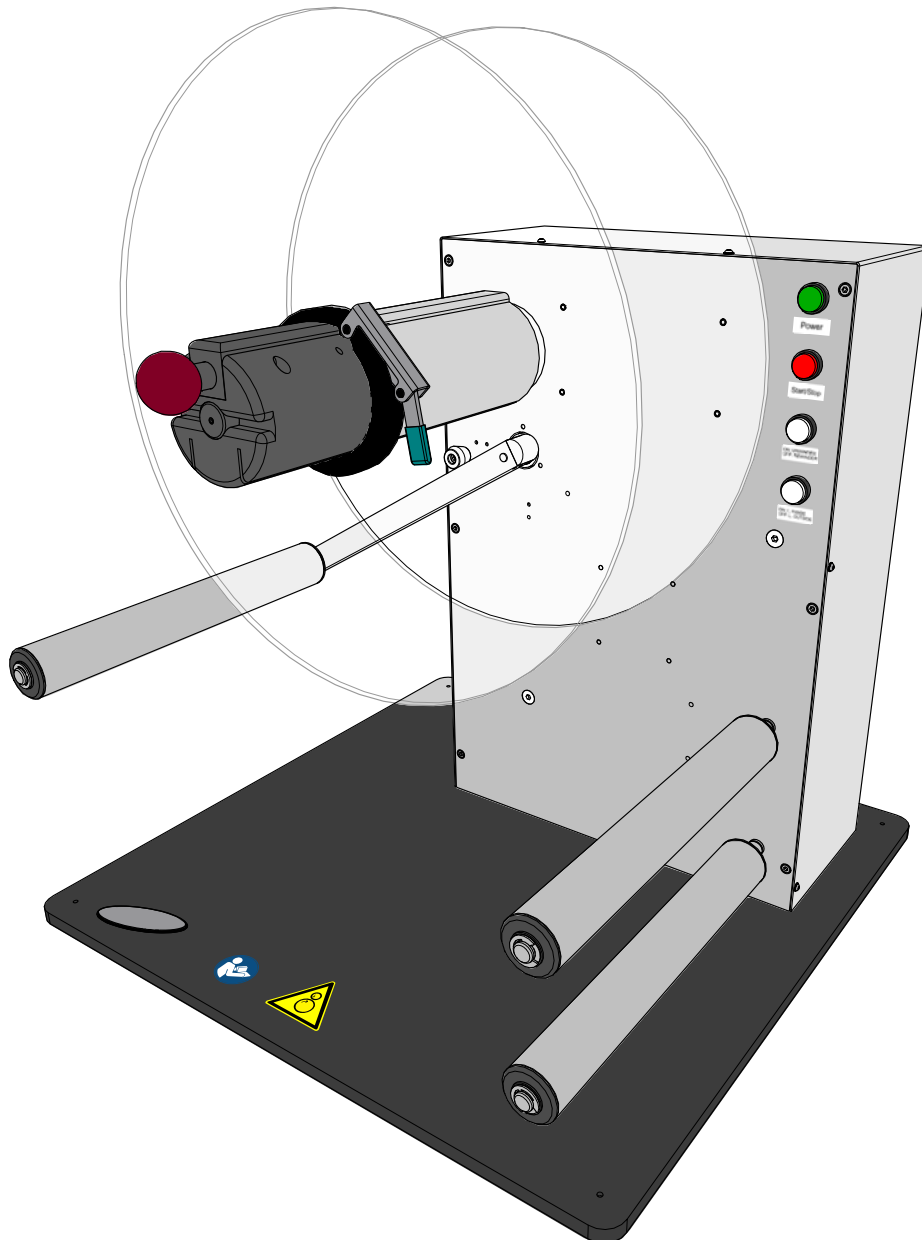


USER MANUAL

U-RX

Label Un-/Rewinder





Safety Notes

Information and qualifications	2
Follow the instructions	2
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Ensure necessary qualifications	2
Machine operating safety	3
Conditions for safe use	3
Protect against injuries that can result from electrical current	3
Protect against injuries that can result from mechanical actions	3

Information and qualifications



Follow the instructions

Safe and efficient operation of the U-RX can only be guaranteed if you observe all necessary information.

Product liability and warranty can only be claimed, if the U-RX was operated according to the notes and instructions in the user manual.

→ Before operating the device, read the operating instructions and all other notes carefully.

→ Observe the additional safety and warning notes on the device.

Information must be made available

This operating manual...

→ is to be stored at the U-RX operating location and made accessible to the operator.

→ is to be maintained in legible condition.

→ If the machine is sold, it must be made available to the new owner

→ Safety and warning notices attached to the machine must be kept clean and legible. Missing or damaged warning labels and plates are to be replaced.

Ensure necessary qualifications

Operation

→ Only allow the U-RX to be operated, adjusted and serviced by instructed and authorised personnel.

Instruction of the operating personnel must ensure

- that operating personnel can use the machine independently and without posing a danger.
- that operating personnel can remedy minor operational malfunctions themselves.

→ Train at least 2 persons to operate the machine.

→ Make label materials for test purposes available in sufficient quantities.

→ Moreover, personnel are to be regularly instructed about work safety and environmental protection issues.

→ The responsibilities for operation, adjustment and servicing of the machine must be clearly defined and consistently maintained.

→ Only make adjustments to the machine in accordance with this manual and with all due care.

Service

Special servicing, fault searching and fault correction are to be carried out by the manufacturer, his appointees or other authorised service agents.

Machine operating safety



Conditions for safe use

- Only use the machine in enclosed areas with environmental conditions matching the values given in the technical specifications.
- Only operate the machine on a plane, solid support.
- Only trained and authorized personnel should operate the printer!
- Do not make any modifications or any additional casing for the machine!
- Do not allow any liquids to enter into the machine!
- Repairs to the machine may only be performed by authorized specialists who are aware of the risks involved!
- Make sure that the power supply socket for the machine is readily accessible!
- Lay the power supply cable, data cables in a way that nobody can stumble over it.
- In case of emergency, switch off the machine and pull off the power supply cable!
- Only use original accessories!



Protect against injuries that can result from electrical current

- Only put the machine into operation when installed in a correctly installed housing.
- Only operate the machine using the system voltage indicated on the nameplate!
- Assure, that the voltage, which is set at the device, matches the local mains voltage!
- Only connect the machine to a grounded power socket fitted to authorized standards!
- Only connect devices to the interfaces at the machine that fulfil SELV (safety extra-low voltage) circuit requirements according to EN 60950!



Protect against injuries that can result from mechanical actions

- Don't wear loose long hair (if necessary, wear a hairnet).
- Keep loose jewellery, long sleeves, etc. away from rotating parts or the printer.
- Wear sufficient personal protective equipment.



Setting up, Operation

Mounting the U-RX	2	Rewinding settings	11
Lifting	2	Settings for unwinding	12
Mounting	2	Assembling a rewinding mandrel with a different diameter	13
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Connections	5	U-RX as unwinder	18
Warning labels on the U-RX	6	Cleaning the unit	20
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Mounting the U-RX

Lifting

**WARNING!**

The U-RX may weight up to 38 kg. Lifting it improperly can cause back injury.

- Two persons are required to lift it.
- Try to lift the unit in a safe way, for example by
 - carrying it close to your body, by
 - bending your knees, and by keeping your back straight.



CAUTION! To avoid damaging the unit:

- Do *not* use the deflection rollers and dancer arms as handles when lifting.
- Grip under the base plate to lift the unit.

Mounting

The U-RX is designed for rewinding and unwinding rolls of label material.
Device orientation: Standing on the base plate[1].

**WARNING!**

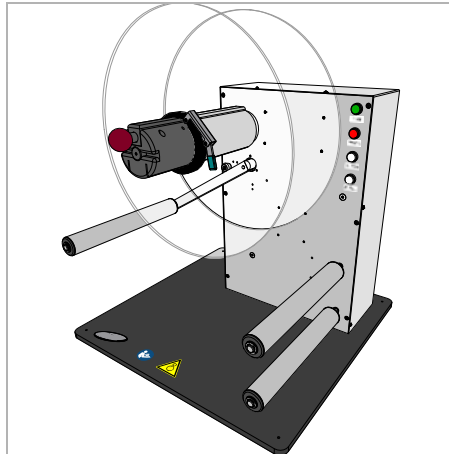
When choosing a base, observe the following guidelines to avoid dangerous operating conditions:

- The base needs to be at least the same size as the unit itself.
- The surface needs to be level, solid and dry.
- The environmental conditions specified (temperature, air humidity, etc.) need to be complied with.
- The power cable should not be more than 3 meters long.

The device can *only* be disconnected *completely* by pulling off the power supply cable. For this reason:

- Make sure that the power supply socket for the device is readily accessible!
- In case of emergency, switch off the device and disconnect the power supply cable!

U-RX



[1] Operating position of the U-RX

Checking the contents

Before using the U-RX for the first time, take a few minutes to check that the following is in order:

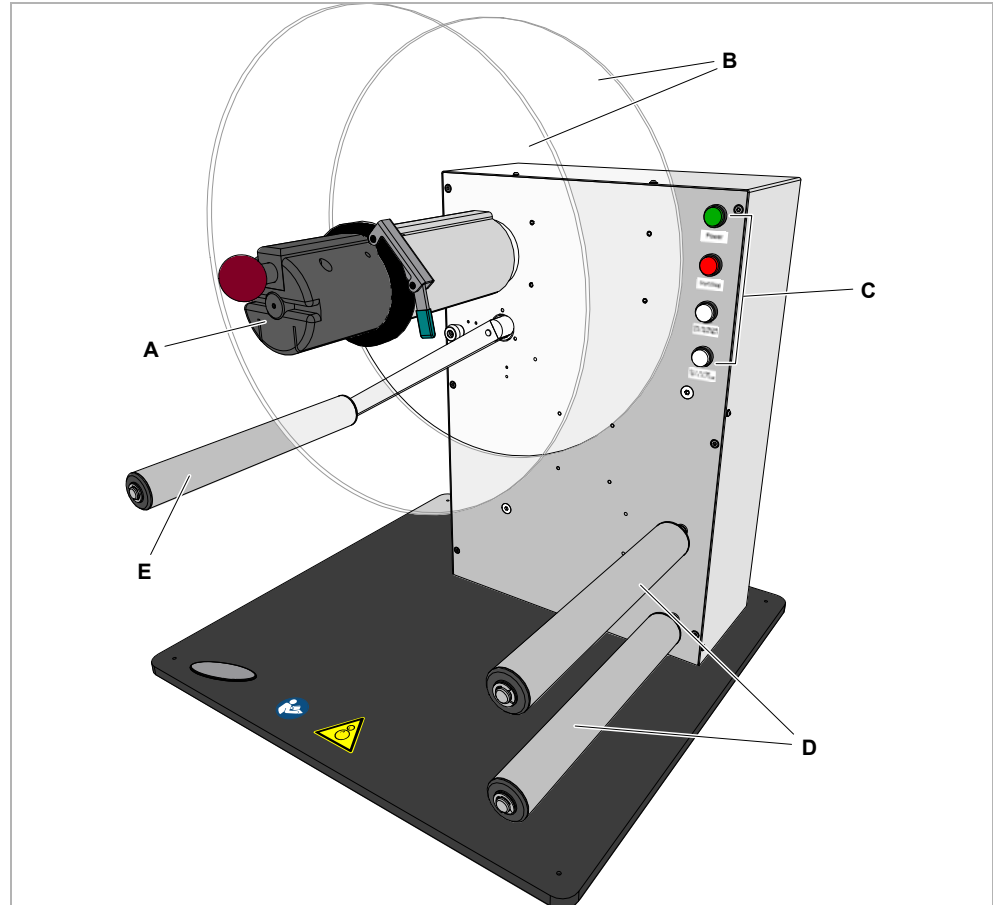
Check that the unit has not been damaged in transit. If the packaging has been dented or torn, check the contents particularly carefully for shipping damage.

Are the articles listed below included in the box?

- *U-RX*
- *Documentation CD*
Contains the complete operating instructions and service manual for the U-RX in German and English.
- *Power cable*
The plug for the power supply may vary depending on the country of delivery.

Product description

Operating parts



[2] Front view of the U-RX

A Rewinding mandrel: Holds the material roll; has to fit the internal diameter of the material roll

B Guide disks: Ensures the material roll is rewound straight

C Operating buttons: Sets the unit functions; Displays the rotating direction; Start/stop button.

D Deflection rollers: Ensure a wide winding angle onto the dancer arm, thereby regulating the rewinding speed

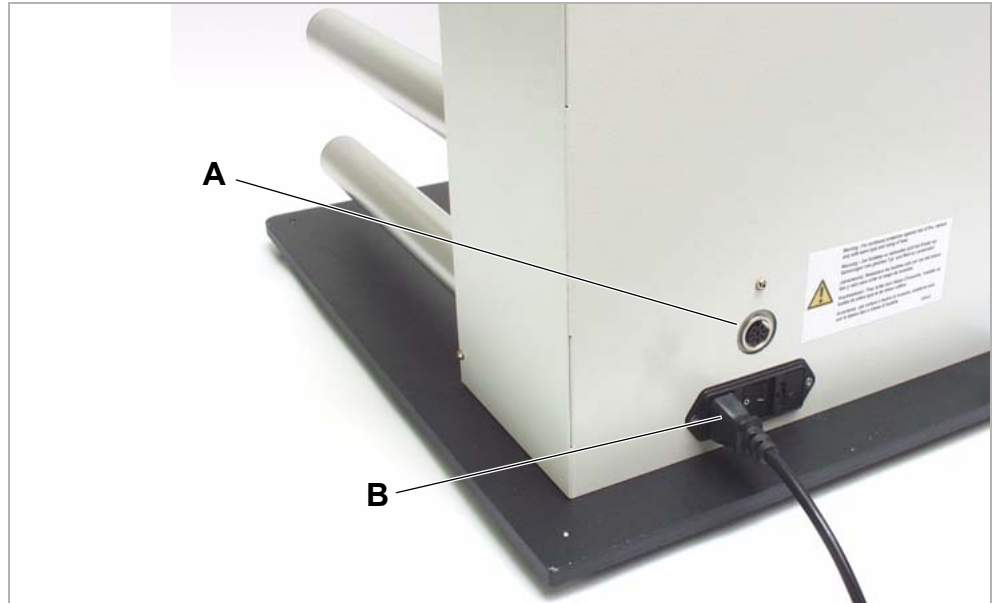
E Dancer arm: Evens out fluctuating speed of the material being fed

U-RX

Connections

CAUTION! Add-on devices of an inferior quality may damage the unit!

- Connect the printer only to devices that fulfil SELV (safety extra-low voltage) circuit requirements acc. to EN 60950.
- Only connect OEM devices.



[3] Rear view of the U-RX

A Printer-stop interface: Error signal interface to the printer. If connected with the appropriate cable, the printing stops, if an error occurs at the U-RX. This avoids paper jam

B Power supply: Connection to the power supply using the power cable provided

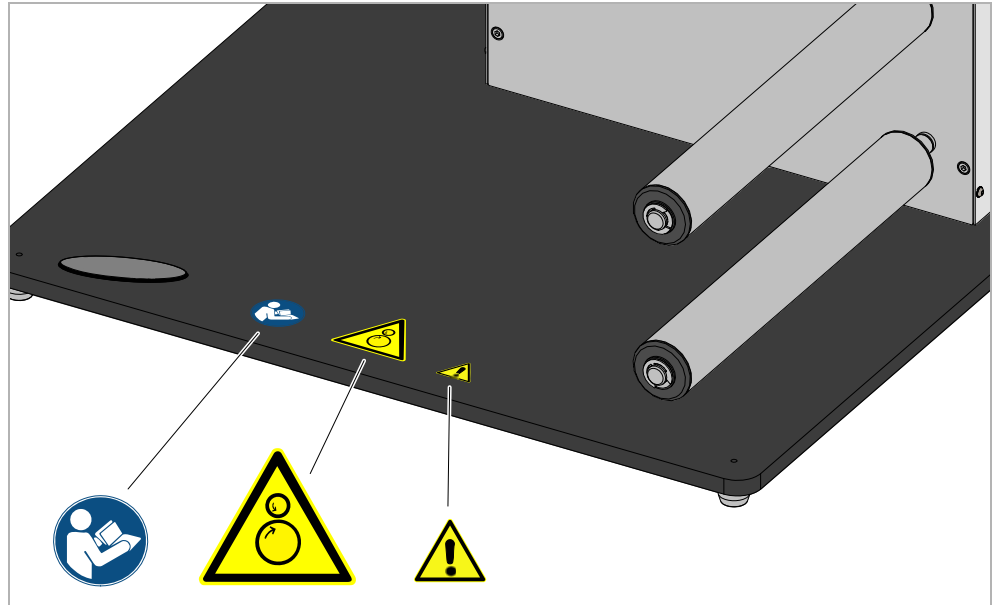
Warning labels on the U-RX






CAUTION!

Warning notes on the unit represent important information for the personnel using it.

- Do not remove warning notes.
- Replace any missing or illegible warnings.



[4] Warning stickers on the base plate of the U-RX

Warning note	Meaning	Article no.
	The 'Pinch Point' warning note warns you of the danger posed by the machine's rotating parts; they can trap items and draw them in.	A5346
	This label is a general alert about possible operational hazards.	A7368
	The blue label 'Read manual' demands that users read the unit instructions.	A5331

[Tab. 1] Meaning of the warning stickers.

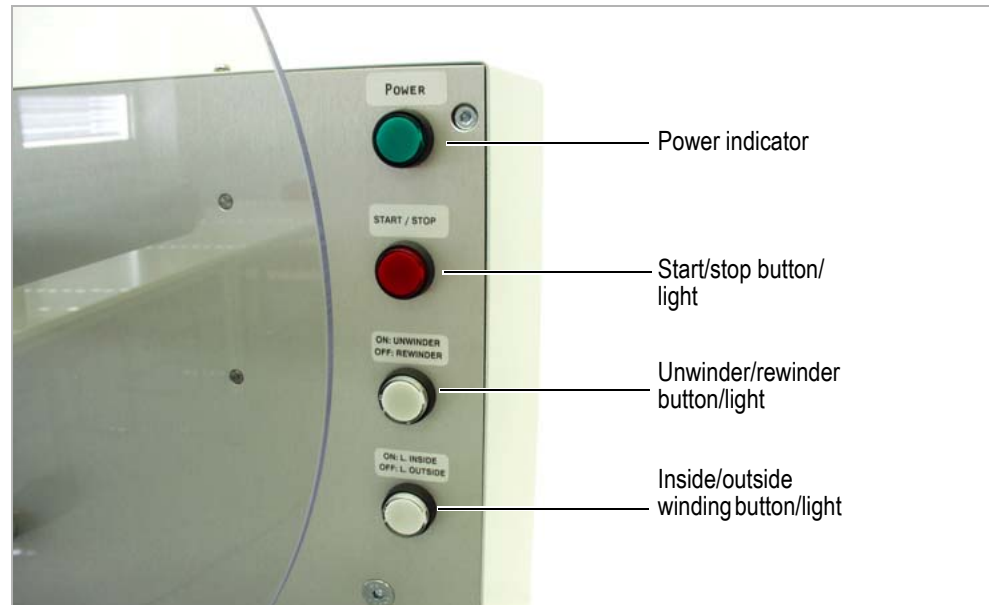
U-RX



[5] Warning stickers on the back of the U-RX

The sticker shown here [5] warns you not to replace the fuses for the power supply with other types of fuses (part no. A6642).

U-RX

Operating buttons

[6] U-RX operating buttons

Power indicator lamp

Lights up when the unit is ready for use, in other words when the power cord is plugged in and the on/off switch is at "0".

Start/stop button

The start/stop light indicates the operational status:

Start/stop light:	Message
On	"Stopped" mode: Unit is ready for use, but stopped.
Off	"Ready" mode: Unit is ready for use.
Flashing	<p>As <i>Rewinder</i>: Unit is currently rewinding material and moving the dancer arm to the start position (material initialisation).</p> <p>As <i>Unwinder</i>: Unit is currently unwinding material and moving the dancer arm to the rest position (material initialisation).</p> <p><i>Error message</i>: Internal error (e.g., overheating).</p>

[2] What the red light indicates

The start/stop button does the following:

- *Rewinder*: Starts/stops the rewinding process.
- *Unwinder*: Starts/stops the unwinding process.

Unwinder/rewinder

Toggle between unwinding and rewinding mode.

- Light on: Unwinder
- Light off: Rewinder

Inside/outside winding

Toggle between inside and outside winding.

- Light on: Inside winding (label on the inside).
- Light off: Outside winding (label on the outside).

Basic operation

Plugging in and powering up



WARNING!

The unit operates using mains voltage! Touching electrically live parts may expose you to hazardous electrical currents and may lead to burns.

- Make sure that the unit is switched off before connecting the power cable.
- Only operate the unit with mains voltage set in the fuse insert[1].
- Ensure that the unit is set to the mains voltage supplied by your electricity provider.
- Only connect the unit to a grounded power socket fitted to authorised standards.
- The power cable should not be more than 3 meters long.

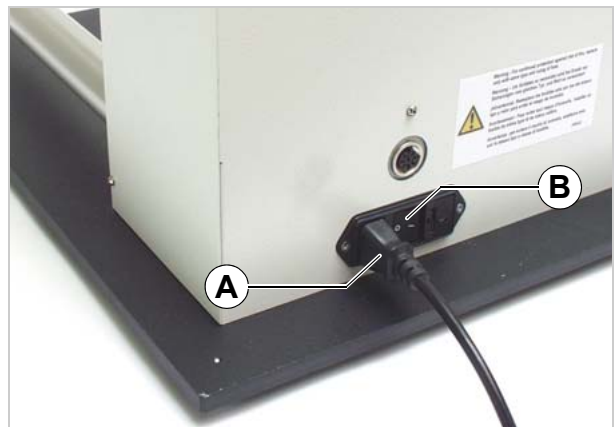
The device can *only* be disconnected *completely* by pulling off the power supply cable. For this reason:

- Make sure, that the power supply socket for the device is readily accessible!
- In case of emergency, switch off the device and disconnect the power supply cable!

1. Ensure that the mains voltage set for the unit is the same voltage as the local electricity supply. To do this, look for the number in the small window next to the power switch [1]. This number indicates the required voltage.
 - ▮ If the voltage set is not the same as the local voltage, please call a qualified technician to change the setting.
- For further information, refer to the service manual.
2. Ensure that power switch [2B] on the U-RX is set to "0" (off).
3. Using the power cord [2A] supplied, plug the U-RX into a socket connected to the local electricity supply.



[1] Check the mains voltage set for the U-RX on the power socket of the unit (shown here as 230 V).



[2] U-RX power supply

4. Turn on the unit (switch set to "I").

Setting up the print-stop function



CAUTION!

Paper jam between printer and U-RX can cause dangerous situations.

→ Always apply the print-stop function.

The print-stop function prevents paper jams between the printer and the U-RX in case the rewinder stops. If this happens, printing stops.

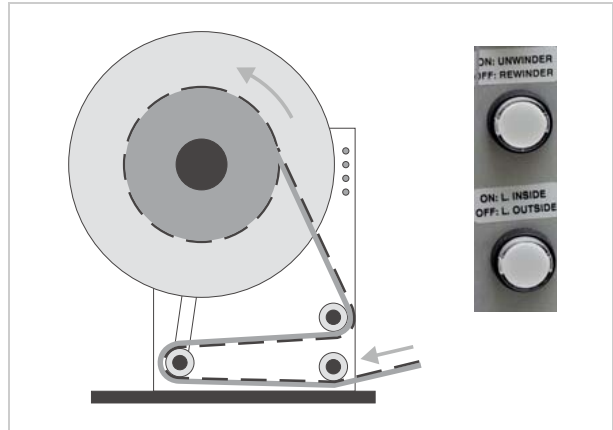
▣▶ The printer must be equipped with an USI signal interface (regardless, if 5 V or 24 V version).

1. Turn off the printer and the U-RX.
2. Connect the printer to the U-RX with the A7264 cable.
3. Turn both units back on.
4. Set the following parameter for the printer:

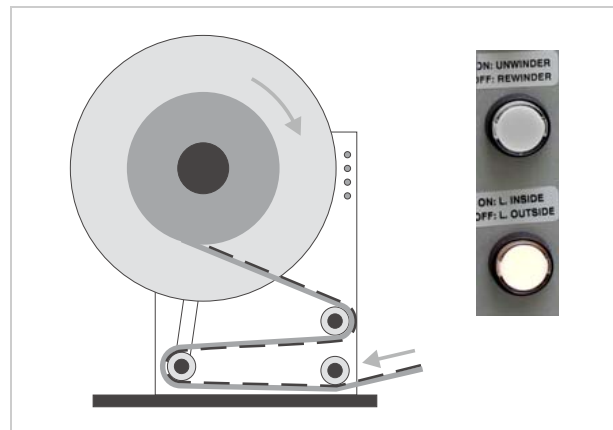
DP INTERFACE > Start print mode = "Level low active"

Rewinding settings

- Press the button to turn the indicator light on or off.
 - ▣▣▣▣ Changes to the white buttons only become effective once the operational mode has been switched from “stopped” to “ready”.
- Rewinding direction “label on the outside”: neither of the two white buttons may be lit [3].
- Rewinding direction “label on the inside”: the lower white button is lit, but the one above is not [4].



[3] Winding diagram and setting for rewinding with the label on the outside

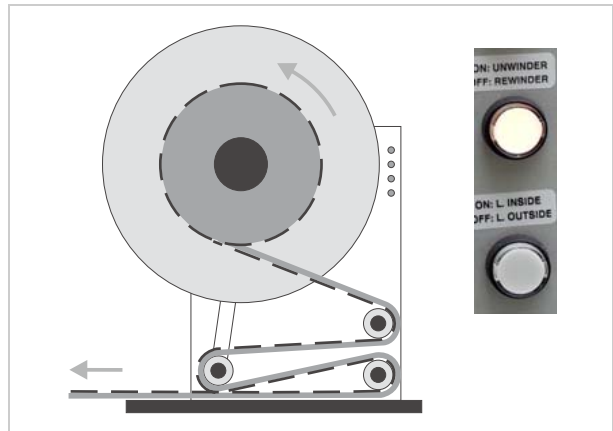


[4] Winding diagram and setting for rewinding with the label on the inside.

U-RX

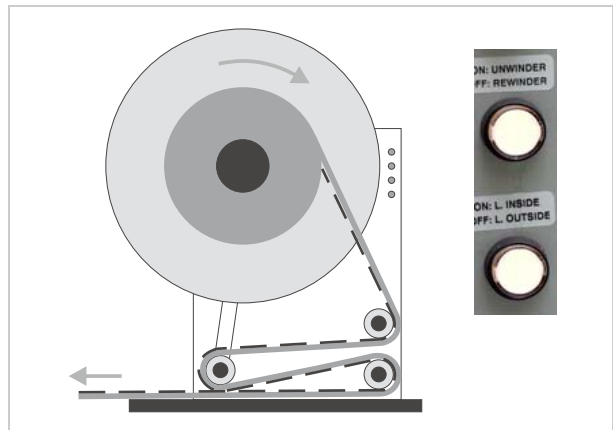
Settings for unwinding

- Press the button to turn the light on or off.
- Unwinding direction “label on the outside”: the upper white button is lit, but the one below is not [5].



[5] Winding diagram and setting for unwinding with the label on the outside.

- Unwinding direction “label on the inside”: both white buttons are lit [6].



[6] Winding diagram and setting for unwinding with the label on the inside.

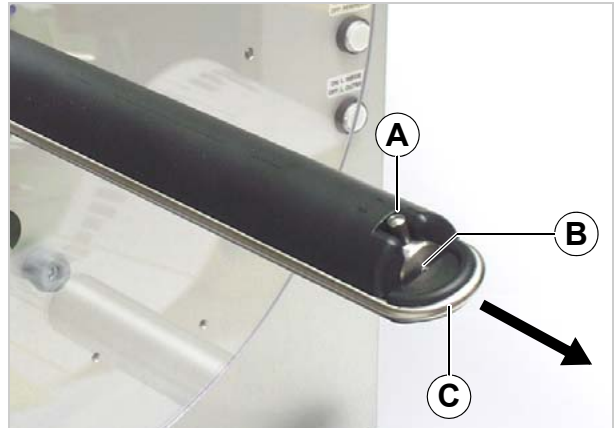
Assembling a rewinding mandrel with a different diameter

Tools

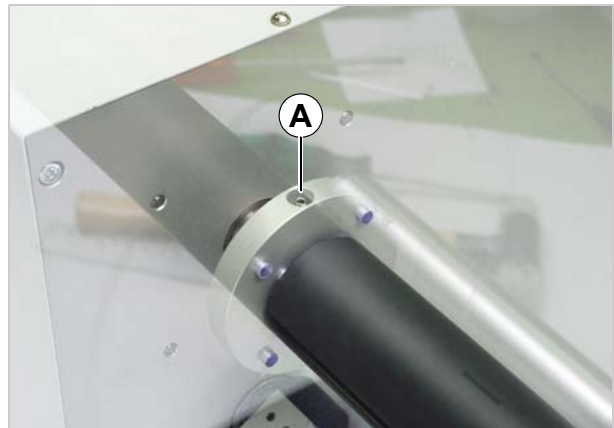
2 mm Allen screwdriver

Dismantling

1. Pull out the lock clamp [7C].
2. Loosen the set screw [7B], unscrew [8A] completely.
3. Push out parallel pin [7A] laterally.



[7] Outer rewinding mandrel fastener



[8] Inner rewinding mandrel fastener

4. Pull the rewriter mandrel off the axle [9].

Assembly

Assemble the rewriter mandrel in reverse order to dismantling it. Doing so, ensure that:

- ▮▶ The set screw [8A] catches in the groove [9A] of the axle.



[9] Pulling out the rewriter mandrel

Changing fuses

Required fuse type: *T2AH/250 V*
(Part number: A8676)



WARNING!

The unit operates using mains voltage! Touching electrically live parts may expose you to hazardous electrical currents and may lead to burns.

- Switch off the device and unplug the power cable before removing the fuse insert.



CAUTION! - Risk of fire, if a wrong fuse type is inserted.

- Only replace fuses with the type and rating specified in this manual.
- If you are not sure about the correct fuse type, contact qualified service personnel.

Tools

Small screwdriver

1. Turn unit off. Remove power plug.
2. Remove the fuse insert to the right of the power switch. To do this, press the latch to the side [10] and pull out the insert [11].
3. Exchange the fuses [11A].



[10] Open the fuse insert latch with a screwdriver.



[11] Removing the fuse insert

Inserting the material



WARNING!

- Rotating parts can trap items and draw them in!
- When working on the U-RX, do not wear loose jewellery, long sleeves, long hair, and similar.
- The unit should only be operated by trained users.
- The U-RX can process material rolls up to about 28 kg. Using an improper lifting technique when changing the rolls can lead to back injury. Rolls that are dropped can lead to foot injury.
- Try to lift the unit in a safe way, for example by
 - carrying it close to your body, by
 - bending your knees, and by keeping your back straight.
- Wear safety shoes.



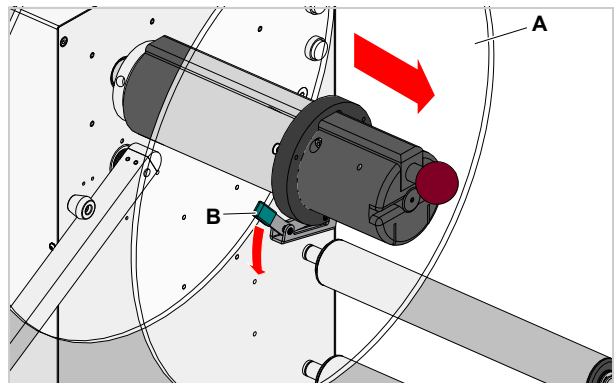
U-RX

U-RX as rewinder

- U-RX is turned on and ready for operation (red start/stop button is lit).
 - Operational mode and winding direction are already set for the unit.
- How to? – See section [Rewinding settings](#) on page 11.

▣➡ The material end is attached in a different way on U-RX with 1.5" or 3"/4" winding mandrel respectively with/without cardboard core.

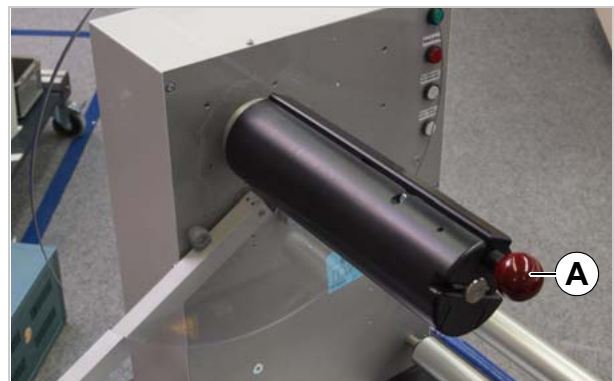
1. Remove the outer guide disk [1A]. To do this, open the locking lever [1B].
2. Preparing the rewinding mandrel:
 - (1.5" with/without core)
Pull out lock clamp [2A] from the rewinding mandrel.
 - (3"/4" without core)
Push in the lock wedge [3A] to the limit.
 - (3"/4" with core)
Pull out the lock wedge [3A] up to the limit.



[1] Remove the outer guide disk (A).



[2] The U-RX's 1.5" rewinding mandrel
A Lock clamp



[3] The U-RX's 3"/4" rewinding mandrel
A Lock wedge

U-RX

3. Attaching the material end to the rewinding mandrel:

(1.5" without core)

Slide the lock clamp over the end of the material [4].

(1,5" with core)

Push the cardboard core onto the rewinding mandrel [6]. Slide the lock clamp under the cardboard core. Fasten the end of the material to the cardboard core (adhesive tape).

(3" / 4" without core)

Push the material end into the groove in the rewinding mandrel [5] and fix it by a turn of the mandrel.

(3" / 4" with core)

Push the cardboard core [6A] onto the rewinding mandrel. Push the wedge [6B] in. Fasten the end of the material to the cardboard core (adhesive tape).

➡ Thread the material according to the winding diagram.

4. Hang the outer guide disk [7A] onto the rewinding mandrel and push it to the edge of the material web respectively the cardboard core. Close the locking lever [7B].

5. Press the start/stop button.

The U-RX will now rewind the material until the dancer arm comes to the middle position. The start/stop button light flashes during the rewinding process. When the desired position is reached, the light is turned off.

➡ During this time, the printer may not send any material to the U-RX.

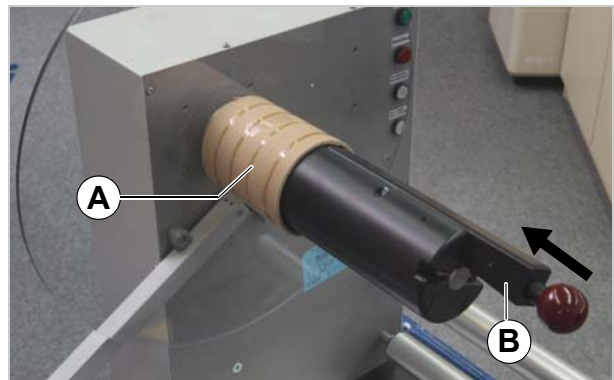
➡ If the red light does not turn off, there has been an error. In this case, repeat step 3.



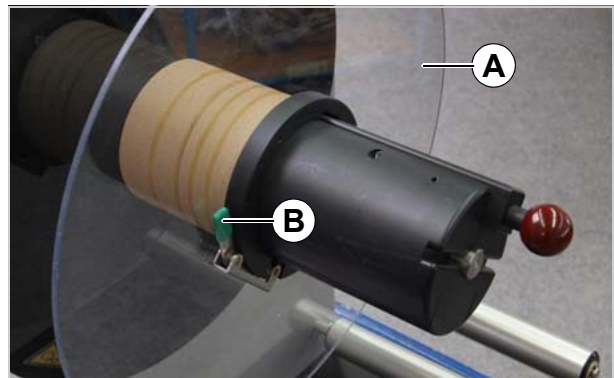
[4] (1,5") Securing the end of the material under the lock clamp.



[5] (3" / 4") Feed the material end into the groove in the rewinding mandrel.



[6] (3" / 4") Fixing the cardboard core (A) with the wedge (B).



[7] (3" / 4") Outer guide disk (A) at the U-RX.

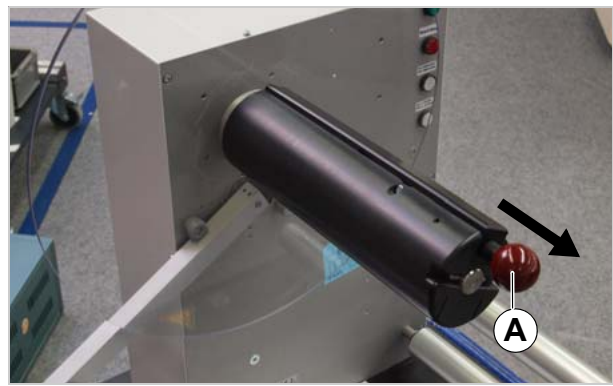
U-RX

U-RX as unwinder

- U-RX is turned on and ready for operation (red start/stop button is lit)
 - Operational mode and winding direction are already set for the unit.
- How to? – See section [Settings for unwinding](#) on page 12.
1. Preparing the rewinding mandrel:
 - (1.5") Pull out lock clamp [8B] from the rewinding mandrel [8A].
 - (3"/4") Pull out lock wedge [9A] to the limit.

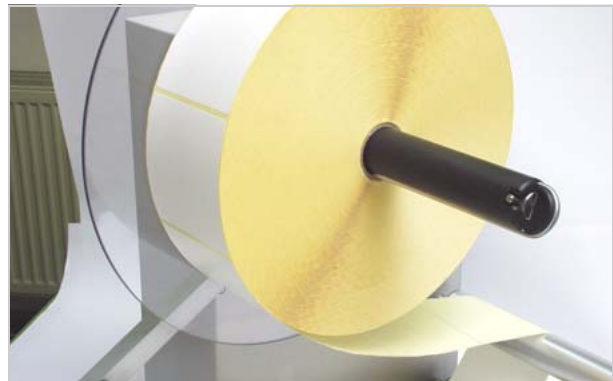


[8] U-RX with 1.5" rewinding mandrel.
A Rewinding mandrel
B Lock clamp

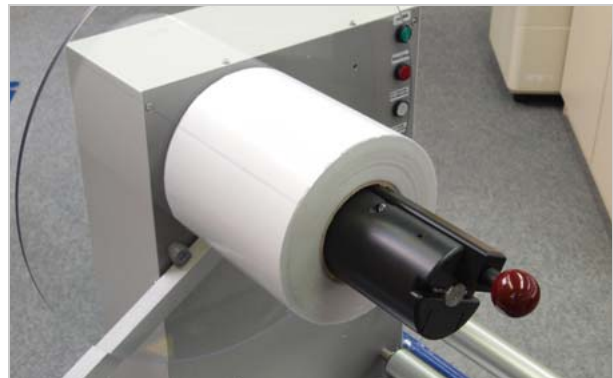


[9] U-RX with 3"/4" rewinding mandrel.

2. Insert the material roll according to the winding diagram.
3. Fasten the material roll:
 - (1.5") Push the lock clamp under the cardboard core [10].
 - (3"/4") Push the lock wedge in.



[10] (1.5") Material is inserted and fastened with the lock clamp.



[11] (3"/4") Material is inserted and fastened with the lock wedge.

Continued overleaf.

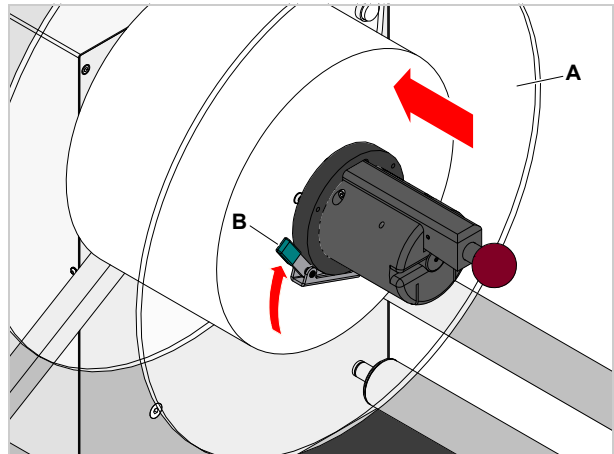
U-RX

4. Hang the outer guide disk [12A] onto the rewinding mandrel and push it to the edge of the material roll. Close the locking lever [12B].
5. Press the start/stop button.

The U-RX will now unwind the material until the dancer arm comes to the resting position (left stop). The start/stop button light flashes during the unwinding process. When the desired position is reached, the light is turned off.

▮▮▮▮ ➔ During this time, the U-RX may not send out any material.

▮▮▮▮ ➔ If the red light does not turn off, there has been an error. In this case, repeat step 3.



[12] (3³/₄" Outer guide disk (A).

Cleaning the unit



WARNING!

Maintenance and cleaning may result in hazardous situations. Accidents can occur by mechanical or electrical means if safety instructions are not observed!

- Turn off the unit and remove from the power supply prior to cleaning or maintenance work!
- On no account should liquid be allowed to enter the unit!
- Do not use any of kind of spray directly on the unit! Moisten a cloth with a cleaning agent to clean the unit!
- Repairs to the unit may only be carried out by a trained service technician!

Cleaning agents



CAUTION! - Observe the following instructions in order not to damage the unit:

- Do not use any cleaning agents that could damage or destroy the finish, the labels, the display, the nameplates, the electrical components, etc.
- Do not use any cleaning agents that are abrasive or damaging to plastics. Avoid acid or alkaline solutions.

- *Housing, base plate*: Commercially available neutral cleaning liquid
- *Rollers, rewinding mandrel*: Cleaning solvent, label remover solvent (part no. 90073)

Cleaning



WARNING!

Cleaning solvent is highly flammable and can lead to fires.

- Follow safety guidelines for working with flammable liquids.
- Do not smoke.

- Wet a cloth with the cleaning solvent and wipe down the part that is dirty.



Technical Data

Application	2
Technical Specifications	3
Dimensions	3
Performance Data	3
Material roll	4
Connection, Interfaces	4
Environmental Conditions	4

U-RX

Application

The U-RX is designed for rewinding and unwinding of roll label material.

Examples of applications are:

- Winding up label material after it was printed with a label printer [1].
- Unwinding unprinted label material and supplying it to a label printer (extension of the roll capacity of the printer).
- Unwinding label material from one U-RX and rewinding it with another U-RX for the purpose of changing the winding direction of the label material.

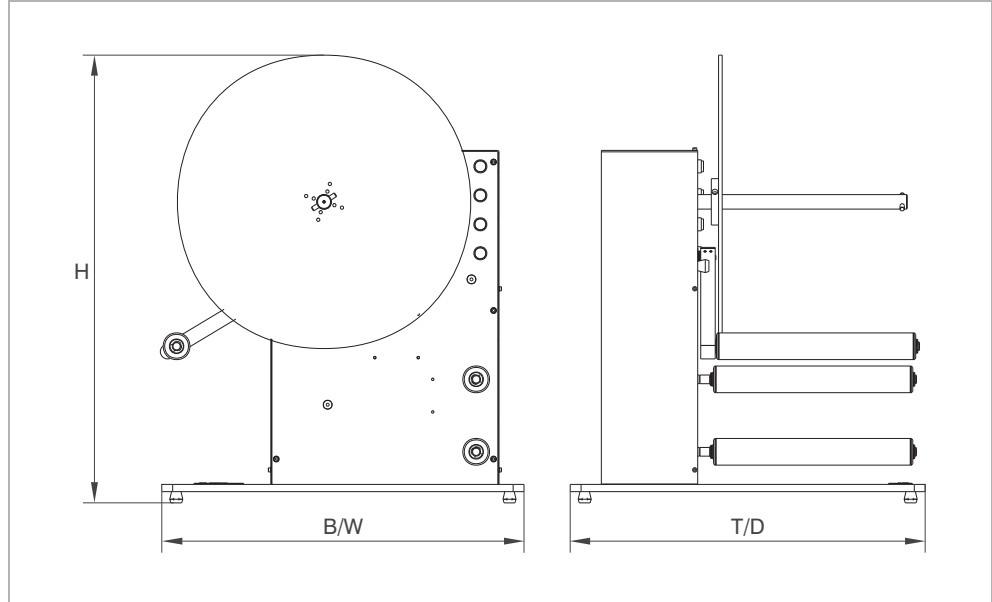


[1] *The U-RX in a typical application: Rewinding label material after it was printed with a PEM printing module.*

U-RX

Technical Specifications

Dimensions



[2] Dimensions of the U-RX (H=Height; W=Width; D=Depth).

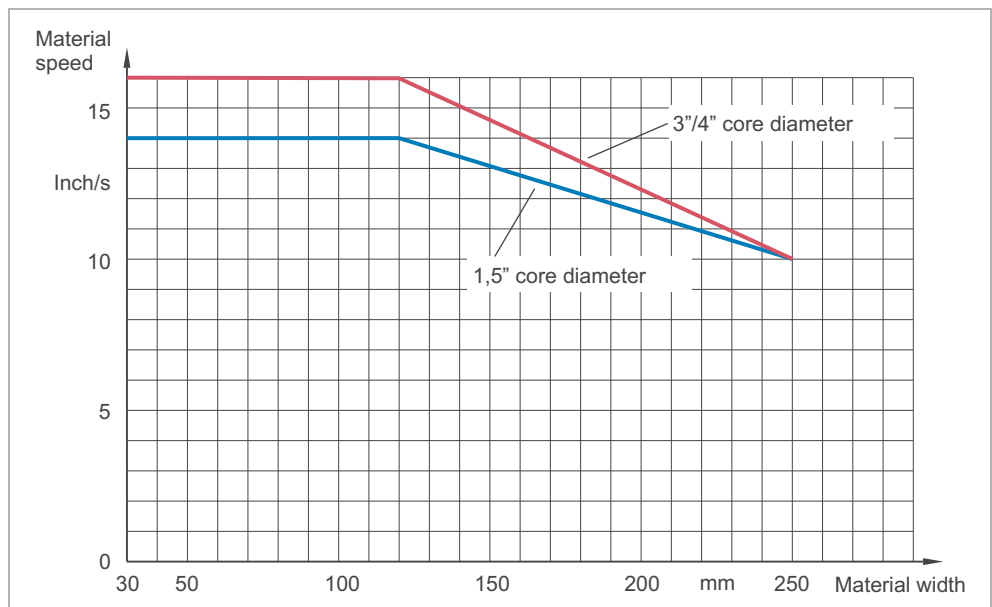
- H: 620 mm
- W: 500 mm
- D: 490 mm

Weight

Max. 38 kg (with a 101.6 mm (4") material roll mandrel mounted.)

Performance Data

Material speed



[3] The maximum material speed depends on the core diameter and of the material width.

U-RX

Material roll

Core Inner-Ø	38.1 / 76.2 / 101.6 mm (1.5 / 3 / 4")
Outer-Ø	max. 400 mm
Material Width	25 -254 mm
Weight	max. 28 kg

Connection, Interfaces

Mains Voltage	115 V (AC) at 60 Hz mains frequency 230/240 V (AC) at 50 Hz mains frequency
Power Consumption	max. 115 W
Current Cons.	max. 1.2 A
Interface	Open collector 2-wire output, to stop the material supply, if an error occurs

Environmental Conditions

Operating temp.	5 to 40 °C
Storage Temp.	-20 to +70 °C
Relative Humidity	30 to 85 % (non-condensing)
Noise	< 65 dB(A)
Protection Class	1