

REINER

REINER 940



Bedienungsanleitung

DE

Operating Manual

GB

Manual de instrucciones

ES

Mode d'emploi

FR

Manual de instruções

PT

Istruzioni per l'uso

IT

Inhaltsverzeichnis

I REINER 940	5
1.1 Operating Elements.....	6
1.2 Set Wheel.....	8
II Important Notes	9
2.1 Rechargeable Batteries.....	9
III Your safety	10
3.1 Safety, Description.....	10
3.2 Safety Notes on Rechargeable Batteries.....	11
3.3 Safety Notes.....	12
3.4 Secure Handling of Print Cartridges.....	12
IV Preparation and Taking into Operation	13
4.1 Commissioning.....	13
4.1.1 Inserting rechargeable batteries	14
4.1.2 Charge batteries	15
4.2 Inserting Printing Cartridge.....	16
4.3 Test Printing.....	17
4.4 Activate Bluetooth.....	18
4.5 Install PCset graphic Software.....	19
4.5.1 System Requirements	19
4.5.2 Installing Software	19
4.6 Firmware update.....	20
V The Software Application PCset graphic	21
5.1 Prepare REINER 940 for PCset graphic.....	21
5.2 Starting the Software.....	22
5.3 Operating Interface.....	22
5.3.1 Menu bar	23
5.3.1.1 File	23
5.3.1.1 Edit	23
5.3.1.1 View	24
5.3.1.1 Format.....	24
5.3.1.1 Extras.....	24
5.3.1.1 Help	24
5.3.2 Toolbar	25
5.3.2.2 Setting lines/grid.....	26
5.3.2.2 Selection.....	27
5.3.3 Objects	27
5.3.4 Device Safety	28
5.3.4.4 Device Safety.....	28
5.3.4.4.1 Set passw ord.....	29

5.3.4.4.1	Deactivate passw ord protection.....	29
5.3.4.4.1	Passw ord Forgotten.....	30
5.3.4.4	Unlocking Device.....	30
5.3.4.4	Lock Device.....	30
5.3.5	Device settings	31
5.3.5.5	Print settings.....	31
5.3.5.5.1	Print sequence.....	32
5.3.5.5.1	Alignment	33
5.3.5.5.1	Print intensity.....	34
5.3.5.5.1	Encoder	35
5.3.5.5	Signals.....	37
5.3.5.5	Functions.....	38
5.3.5.5.3	Test print	39
5.3.5.5.3	Repeat last imprint.....	40
5.3.5.5.3	Continue numbering machines.....	41
5.3.5.5.3	Reverse numbering machines.....	42
5.3.5.5.3	Reset numbering machines to default.....	43
5.3.5.5	Font	44
5.3.6	Status displays	45
5.3.7	Device messages	47
5.4	Establishing Bluetooth Connection	48
5.5	Example workflow: Generate Print Pattern	50
5.5.1	Configure Print Pattern	50
5.5.2	Transfer Print Pattern to the REINER 940	51
5.5.3	Print Print Pattern	52
5.5.4	Number of prints	53
5.6	Settings objects	54
5.6.1	Text	54
5.6.1.1	Presettings	55
5.6.1.1	Context menu text object.....	56
5.6.1.1	Generate graphic.....	57
5.6.2	Date/Time	57
5.6.2.2	Presettings	58
5.6.2.2.1	Tab date and time.....	59
5.6.2.2.1	Tab options	60
5.6.2.2.1	Font	61
5.6.2.2	Context menu date/time object.....	62
5.6.3	Numbering machine	62
5.6.3.3	Presettings	63
5.6.3.3.1	Numbering machine settings.....	64
5.6.3.3.1	Number circle.....	64
5.6.3.3.1	Font	65
5.6.3.3	Context menu numbering machine object.....	66
5.6.4	Barcode	67
5.6.4.4	Presettings	67
5.6.4.4	Continuous numbering/dating.....	70
5.6.4.4	Context menu barcode object.....	71
5.6.4.4	Generate graphic	71
5.6.5	Graphic	72
5.6.5.5	Dialogue load graphic.....	72
5.6.5.5	Context menu graphic object.....	73
5.6.5.5	Generate graphic.....	73
VI	Maintenance	74
6.1	Replace Print Cartridge	75

6.2	Clean Print Cartridge Contacts.....	76
6.3	Cleaning Nozzles.....	77
6.3.1	Automatic Cleaning of Nozzles	77
6.3.2	Manual Nozzle Cleaning	78
6.4	Clean Protective Nozzle Seal.....	79
6.5	Replace Protective Nozzle Seal.....	80
6.6	Clean Housing.....	81
VII	Recognising and removing interferences	82
7.1	REINER 940 does not work.....	82
7.2	Reasons for rechargeable batteries not being charged.....	83
7.3	Visual Signals (LED).....	83
7.4	Acoustic Signals.....	85
VIII	Technical Data and Accessories	86
8.1	Rating Plate.....	86
8.2	Technical data.....	87
8.3	Transport and Disposal.....	88
8.4	Accessories.....	88
IX	Contact	89
X	Operating Manual	90
	Index	91

1 REINER 940

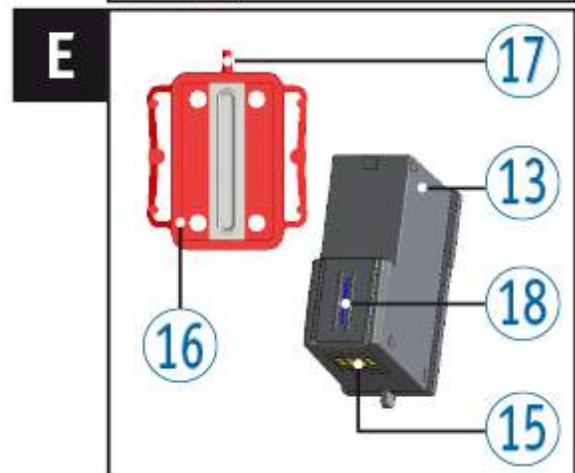
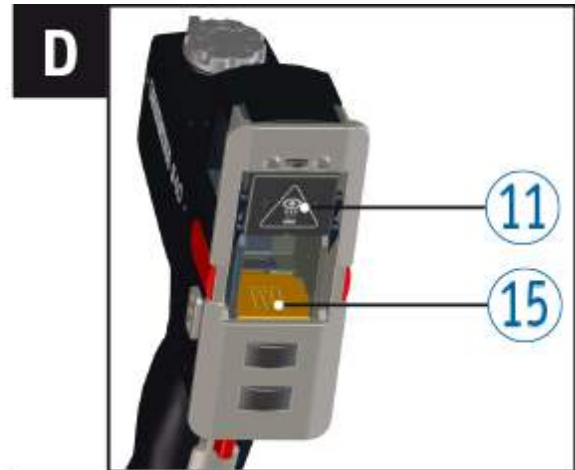
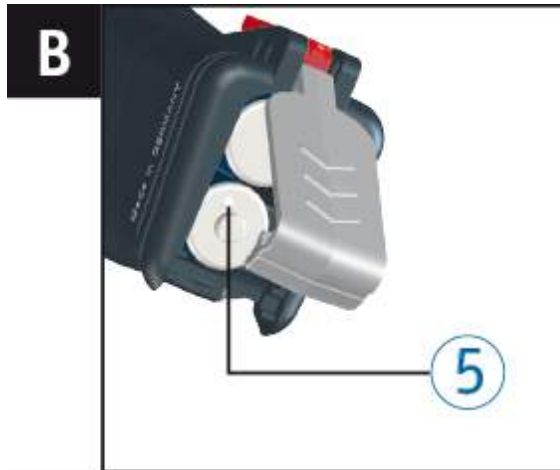
REINER

REINER 940



1.1

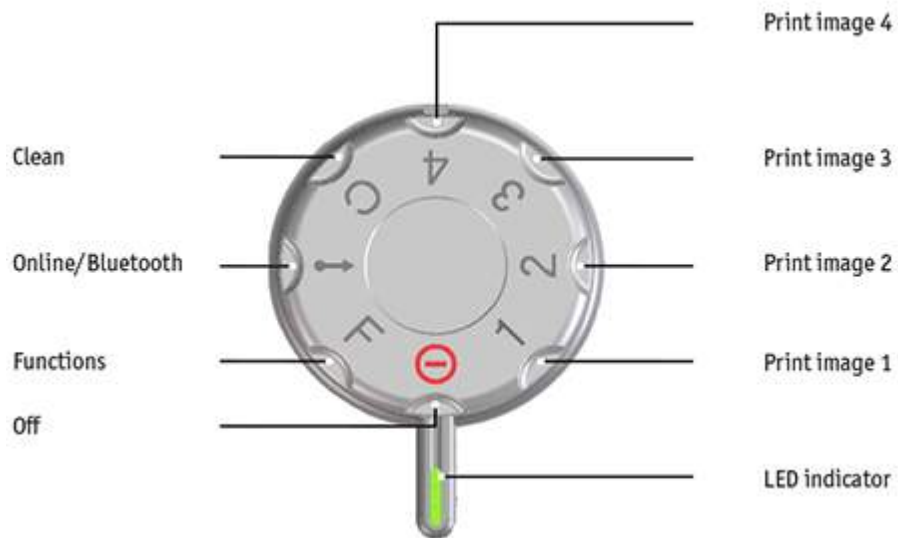








- ① Set wheel
- ② LED indicator
- ③ Mounting Flange
- ④ Micro-USB socket
- ⑤ Battery compartment
- ⑥ Shutter Lever Lock
- ⑦ Closure lever
- ⑧ Print Trigger
- ⑨ Sensor Roller

- ⑩ Positioning Guide
- ⑪ Nozzle cover
- ⑫ Cartridge Cover
- ⑬ Print cartridge
- ⑭ Cartridge Cover Release Key
- ⑮ Contact print cartridge
- ⑯ Protective Nozzle Seal
- ⑰ Sealing tip
- ⑱ Nozzles

1.2 Set Wheel



-  The **LED indicator** marks settings.
 -  On the setting **functions** (see "[Functions](#)").
 -  Note: Close the shutter lever before making any settings through the selector wheel!
 -  To avoid malfunctions align the settings precisely with the LED display!
- To activate Bluetooth, turn the setting wheel ① to position **Online/Bluetooth** (see "[Activate Bluetooth](#)").

2 Important Notes

Before commissioning of the REINER 940, always read the operating instructions and in particular the safety notes with care. This prevents mistakes in handling of the marking device and connected safety risks to keep you safe and avoid damage to the device.

[Rechargeable Batteries](#)

2.1 Rechargeable Batteries

Charging of the rechargeable batteries is electronically controlled. This warrants that the battery cells are charged in the best and protective manner.

Charging

- ▶ Charge rechargeable batteries completely before first use. Duration approx. three hours.

The rechargeable batteries will not reach their full capacity yet after the first complete charge. Expect that the regular operating times are not reached.

Reaching full capacity

The full capacity is reached when the rechargeable batteries are discharged and charged again completely several times.

3 Your safety

[Safety, Description](#)

[Safety notes on rechargeable batteries](#)

[Safety notes](#)

[Secure Handling of Print Cartridges](#)

3.1 Safety, Description



Warnings of dangers that lead to **death or severe injury directly** if not observed.



Warnings of dangers that may lead to **death or severe injury** if not observed.



Warnings of dangers that may lead to **injury** if not observed.



Warnings of dangers that may lead to **property damage** if not observed.

► You are asked to perform actions here.



Notes and advice to make handling your REINER 940 even easier.



Notes on instruction videos.

3.2 Safety Notes on Rechargeable Batteries

Rechargeable batteries are subject to wear. A longer service life than six months cannot be warranted.



Danger of explosion at contact with fire.

- ▶ Never throw rechargeable batteries into fire.



Danger of injury from destruction of the rechargeable battery jacket when using unsuitable rechargeable batteries or non-rechargeable batteries.

- ▶ Use only batteries intended for the device!

Type use

Only use the enclosed plug-in mains adapter or a PC USB connection to charge the batteries.

Only use rechargeable batteries (two each) of the nickel-metal-hydride type (REINER item number: 946 192 - 000), build AA.

Always replace all rechargeable batteries at once.

Non-approved rechargeable batteries may cause damage or functional impairment.

- ▶ Only use prescribed rechargeable batteries.

Insertion

Observe the polarity of the rechargeable batteries when inserting it, see icons!

Disposal



Defective or flat batteries

Flat batteries of rechargeable batteries must not be disposed of in the household waste.

3.3 Safety Notes

⚠ WARNING

Danger of blinding in case of contact between ink and eyes.

- ▶ Never hold the REINER 940 with its nozzles pointing at the face of persons!

⚠ CAUTION

Danger of tripping and damage to the device from device lines placed freely in the room.

- ▶ Place the device lines so that they do not pose any danger source!

NOTICE

Damage to the device due to improper transport.

- ▶ Only use packaging that provides protection from impact and shock to the device!

NOTICE

Damage to the device by moisture.

- ▶ Before commissioning, wait until the device has reached room temperature and is completely dry!

3.4 Secure Handling of Print Cartridges

⚠ WARNING

Danger of blinding in case of contact between ink and eyes.

- ▶ Never hold the REINER 940 with its nozzles pointing at the face of persons!

⚠ CAUTION

Damage to health from swallowing the ink.

- ▶ Do not swallow!
- ▶ Keep the print cartridge away from children.

4 Preparation and Taking into Operation

[Commissioning](#)

[Inserting Printing Cartridge](#)

[Test Printing](#)

[Activate Bluetooth](#)

[Install PCset graphic Software](#)

[Firmware update](#)

4.1 Commissioning



Find a clip on our homepage at www.reiner.de or youtube.



The rechargeable batteries must be charged completely before the first use.
The charging time is approx. 3 hours. The rechargeable batteries are charged when the green charge display ② goes out.

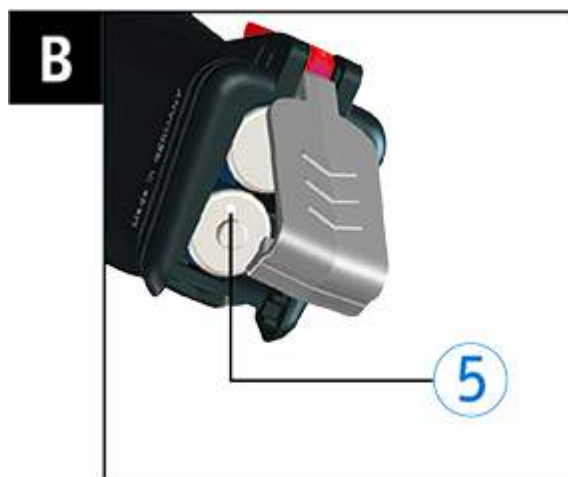
[Inserting rechargeable batteries](#)

[Charge batteries](#)

4.1.1 Inserting rechargeable batteries

Inserting rechargeable batteries → Fig. **B**

i The rechargeable batteries must be charged completely before the first use.
The charging time is approx. 3 hours. The rechargeable batteries are charged when the green charge display **2** goes out.



Always replace all rechargeable batteries at once. Date, time and counter reading of the numbering machine are retained when the rechargeable batteries are removed.

- ▶ Open the rechargeable battery compartment **5** in the direction of the arrow.
- ▶ Be careful to insert the rechargeable batteries the correct way round (+/- polarity).
- ▶ Close the rechargeable battery compartment **5**.

4.1.2 Charge batteries

Charge batteries ⇨ Fig. **A**



Only connect the device to the PC when the PCset graphic-Software was installed (see "[Install PCset graphic Software](#)").




Charging at a USB hub without dedicated power supply is not possible.

- ▶ Connect the Micro-USB socket of the device ④ to the mains unit with the USB cable and connect the mains unit to the mains.
The green charging indicator ② lights up.

4.2 Inserting Printing Cartridge

 Depending on ink type used, different Protective Nozzle Seals are required (see "[Replace Protective Nozzle Seal](#)").

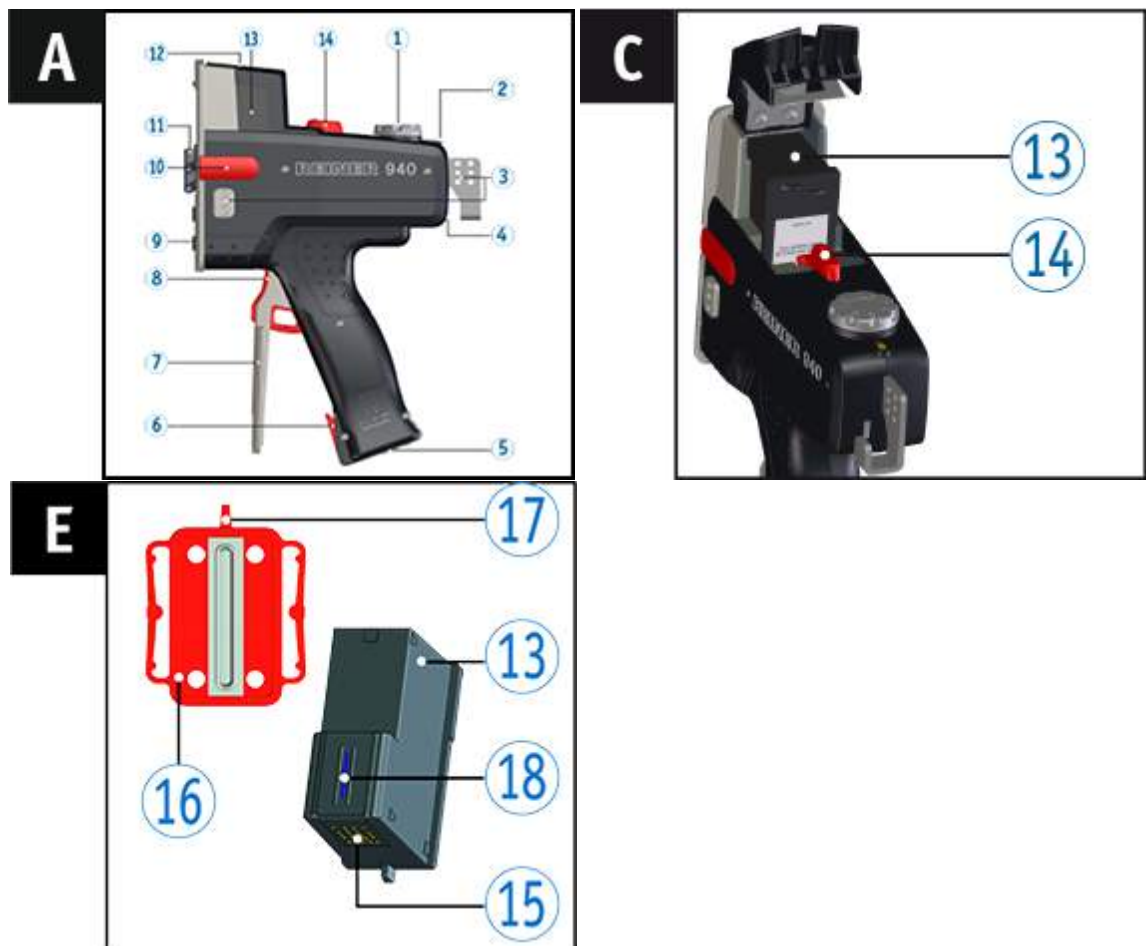
 Use sealing of the enclosed printing cartridge.

CAUTION

Damage to health from swallowing the ink.

- ▶ Do not swallow!
- ▶ Keep the print cartridge away from children.

Inserting Printing Cartridge ⇒ Fig. **A** + **C** + **E**



- ▶ Turn the setting wheel **1** to position **OFF**.
- ▶ Push the cartridge cover release key **14** downwards, to open cartridge cover **12**.
- ▶ Take the cartridge **13** out of its packaging and remove protective film from the jet **18**.
- ▶ Insert the cartridge **13**.
- ▶ Close the cartridge cover **12**.


4.3 Test Printing

WARNING

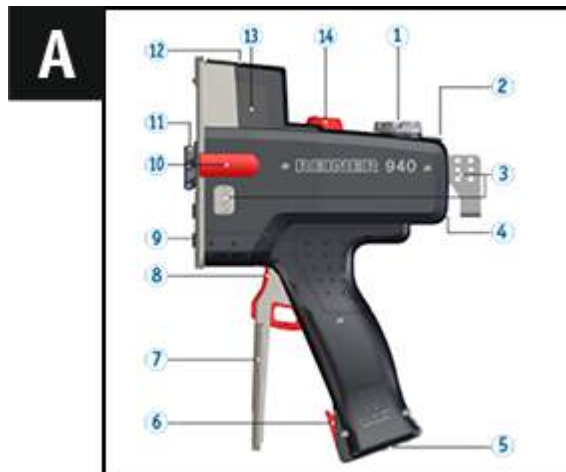
Danger of blinding in case of contact between ink and eyes.

- ▶ Never hold the REINER 940 with its nozzles 18 pointing at the face of persons!

Test Printing ⇒ Fig. A

 The imprint can only be selected if the closure lever 7 is not pushed and the nozzle cover 11 thus is closed.

 The REINER 940 is delivered with 4 factory-pre-set example print patterns.

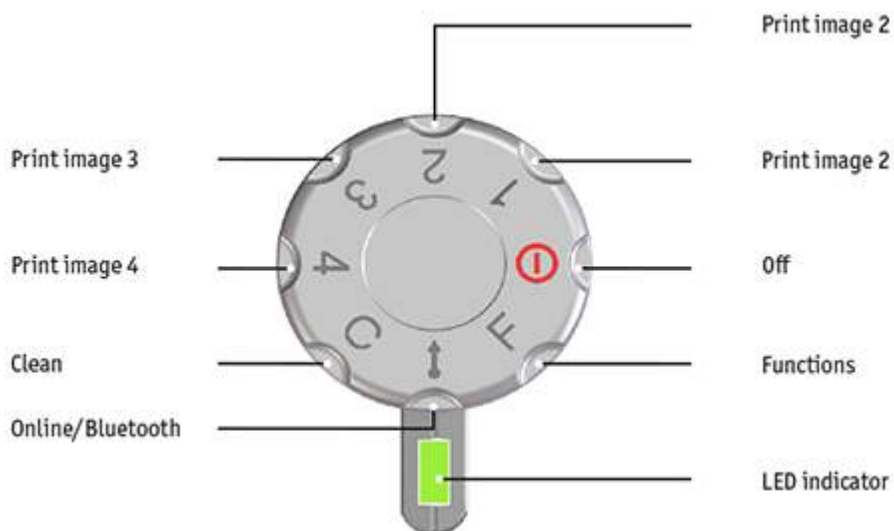


- ▶ Turn the setting wheel 1 to position 1.
- ▶ Pull print head shutter lever 7 towards the device.
- ▶ Position REINER 940 on the printing surface.
- ▶ Release the print trigger 8.
- ▶ Unroll the device with a constant velocity in the direction of printing.
The imprint was printed.



My 1st Imprint 28.06.2020

4.4 Activate Bluetooth



i Bluetooth cannot be activated while an a USB connection is active. With an active Bluetooth connection, a USB connection cannot be established either.

i If Bluetooth is active, the battery runtime reduces since Bluetooth is active in standby mode as well.

- ▶ To activate Bluetooth at the device, the setting wheel **1**, must be turned to position **Online/Bluetooth**.
- ▶ To establish the Bluetooth connection with the device, follow the instructions "[Establishing Bluetooth Connection](#)".

4.5 Install PCset graphic Software

[Systems Requirements](#)

[Installing Software](#)

4.5.1 System Requirements

Supported REINER devices

- *jetStamp graphic 970*
- REINER 940

Hardware

- PC with Pentium processor (also compatible) or higher
- Graphics adapter with a min. resolution of 800 × 600 pixels
(at least 256 colours; optimal: TrueColor, 24 Bit, 16.78 million colours)
- RAM, at least 32 MB
- 10 MB free hard disc memory
- 1 free USB interface

Supported operating systems

- Windows 7, Windows 7 64 Bit, Windows 8, Windows 8 64 Bit

4.5.2 Installing Software

Installation is only possible with administrator rights on the computer.

- ▶ Insert PCset graphic-CD into the drive.
- ▶ If the installation programme does not start up automatically, start the file "**setup.exe**".
- ▶ Observe the installation programme's instructions.

4.6 Firmware update

The current firmware of the REINER 940 can be downloaded from www.reiner.de, "**Downloads**".



Before performing a firmware update, transfer and save the print images on the REINER 940 to the PCset graphic. The print images can be damaged during the Firmware update.



Ensure that the PCset graphic is installed on your PC but **not** opened before the firmware update is started. While the firmware update is being installed, the REINER 940 must not be switched off.

- ▶ Connect Micro USB socket ④ to the PC via the USB cable.
- ▶ To activate the device, turn the setting wheel ① to position 1.
- ▶ Unpack "**Firmware update**" and start "**940 Firmware xxxx.exe**". The firmware is installed automatically. After a successful firmware update, the PCset graphic can be opened again.

5 The Software Application PCset graphic

[Prepare REINER 940 for PCset graphic](#)

[Starting the Software](#)

[Operating Interface](#)

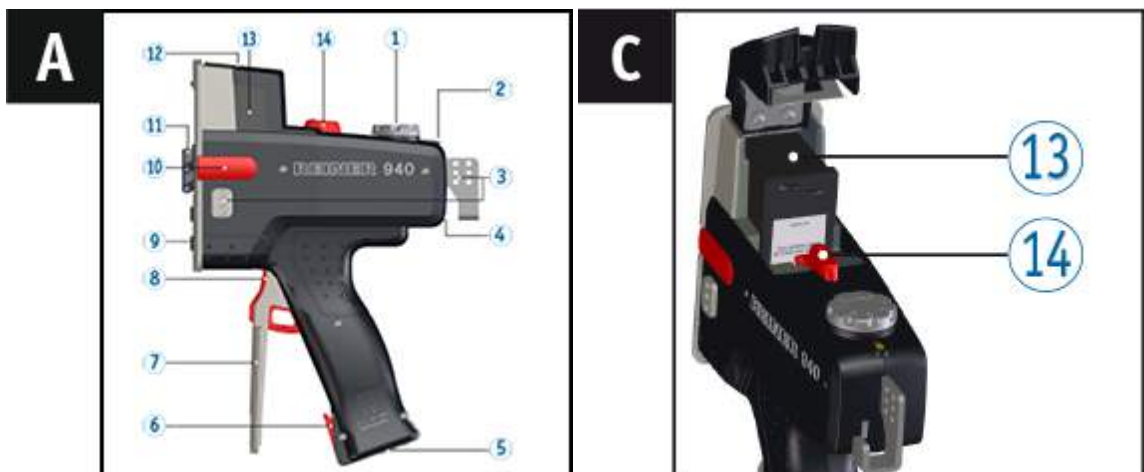
[Establishing Bluetooth Connection](#)

[Example Workflow: Generate Print Pattern](#)

[Settings objects](#)

5.1 Prepare REINER 940 for PCset graphic

Prepare REINER 940 for PCset graphic ⇒ Fig. **A** + **C**



i For the device to be correctly recognised by the computer, the PCset graphic software must be installed first.

- ▶ Connect the micro-USB socket ④ to the computer via the USB cable.
- ▶ Turn the setting wheel ① to 1 to activate the device.
The PC recognises the REINER 940 as a new USB device.
The device driver software is installed automatically.

i When the device is connected to the PC, the rechargeable batteries are charged via the USB connection.

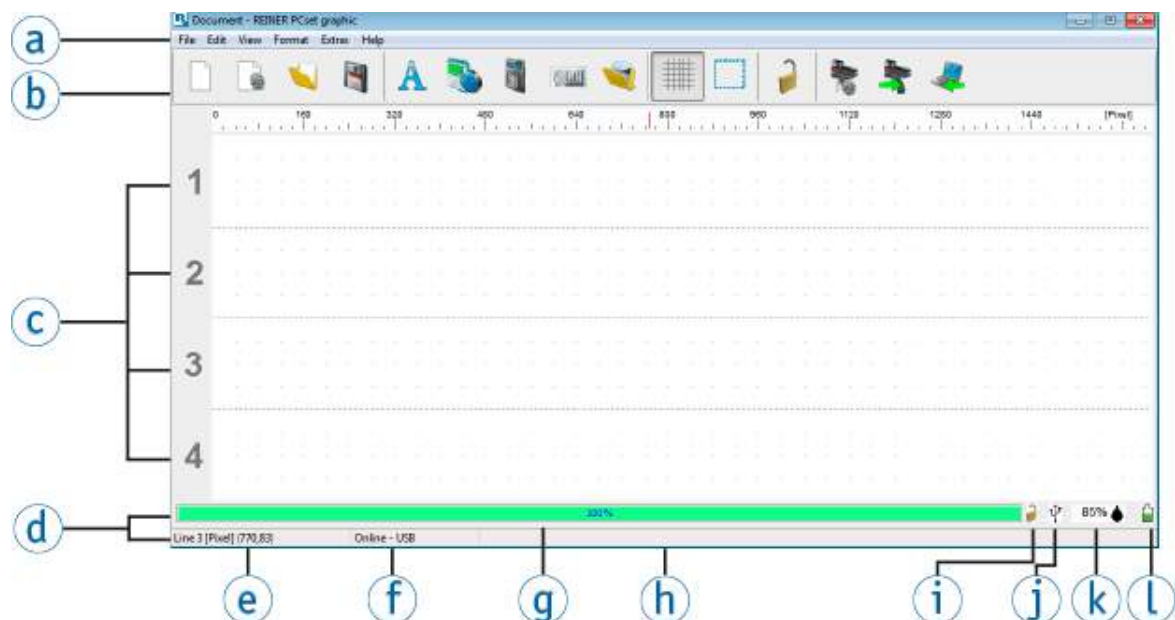
5.2 Starting the Software

- ▶ Double-click the **REINER PCset graphic** icon . The PCset graphic software is started.

5.3 Operating Interface

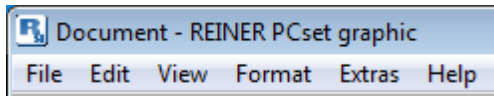
The operating interface is structured in four areas:

- a Menu bar with Windows-typical and Pcset graphic-specific functions
- b Toolbar
- c 4 lines for print pattern design
- d Bar with different [status displays](#).



- | | |
|-----------------------------------|-------------------------------------|
| a Menu bar | g Transfer process |
| b Toolbar | h Device messages |
| c Print patterns | i Device Safety |
| d Status displays | j Connection |
| e Cursor position | k Ink level display |
| f Online/Offline | l Charge display |

5.3.1 Menu bar



The menu bar contains both common, self-explanatory standard commands and PCset graphic-specific menu commands. The latter usually can also be called via the icons of the toolbar.

[File](#)

[Edit](#)

[View](#)

[Format](#)

[Extras](#)

[Help](#)

5.3.1.1 File

Function	Description
New	Resetting the display. Deleting the displayed draft.
Open	File selection menu to load saved print patterns.
Save	Saving displayed print patterns as XML file.
Save as	The dialogue for saving the print patterns appears.
Settings	Configure print settings, signal, function and font.
Transfer	The displayed print patterns are transferred to the device.
Upload	Save the print patterns saved in the device for processing.
Find a REINER Bluetooth device	Finds REINER Bluetooth devices.
Last opened	Shows the last opened print images.
Exit	Terminates the PCset graphic.

5.3.1.2 Edit

Function	Description
Delete	Deletes selected objects.
Copy	Loads selected contents into the clipboard.
Paste	Paste contents from the clipboard.

Cut	Deletes selected contents and sends them to the clipboard.
-----	--

5.3.1.3 View

Function	Description
Lines/Grid	Setting lines/grid.
Display lock in toolbar	Button Display or hide device safety.
<i>jetStamp graphic 970</i>	Operating interface <i>jetStamp graphic 970</i> appears.

5.3.1.4 Format

Function	Description
Text	Settings for text objects can be configured.
Date/Time	Settings for date/time objects can be configured.
Numbering machine	Settings for numbering machine objects can be configured.
Barcode	Settings for barcode objects can be configured.












5.3.1.5 Extras

Function	Description
Device Safety	The device safety locks printing and protects the print data from abuse.
SF-Modul	Service and maintenance module for REINER.

5.3.1.6 Help

Function	Description
Help	Help with detailed configuration notes and operating instructions in electronic form.
Info	Version information on the software. When the REINER 940 is connected, the information on model, serial number and firmware version appear here.

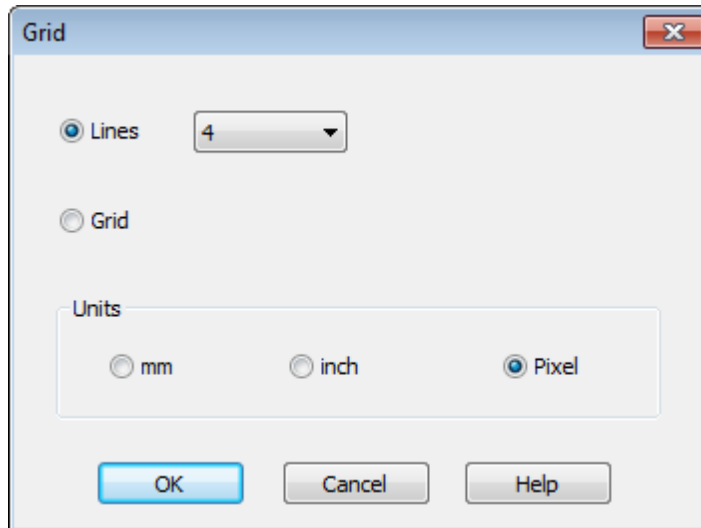
5.3.2 Toolbar

Toolbar 	Menu command	Description
	New	Resetting the display. Deleting the displayed draft.
	Font	Display the tab " Font " in the menu "Settings".
	Open	File selection menu to load saved print patterns.
	Save	Saving displayed print patterns as XML file.
	Lines/Grid	Activates the grid to align the objects.
	Selection	For areas that were fastened via the additional function "Generate graphic" (see " Selection ").
	Device Safety	Device safety can be set (see " Device Safety "). In the tab "View", clicking "Display lock in toolbar" shows and conceals the button for device safety.
	Settings	Display the tab "Print settings" in the menu " Settings ".
	Transfer	The displayed print patterns are transferred to the device. The data present on the REINER 940 are overwritten.
	Upload	Save the print patterns saved in the device for processing.

5.3.2.1 Setting lines/grid

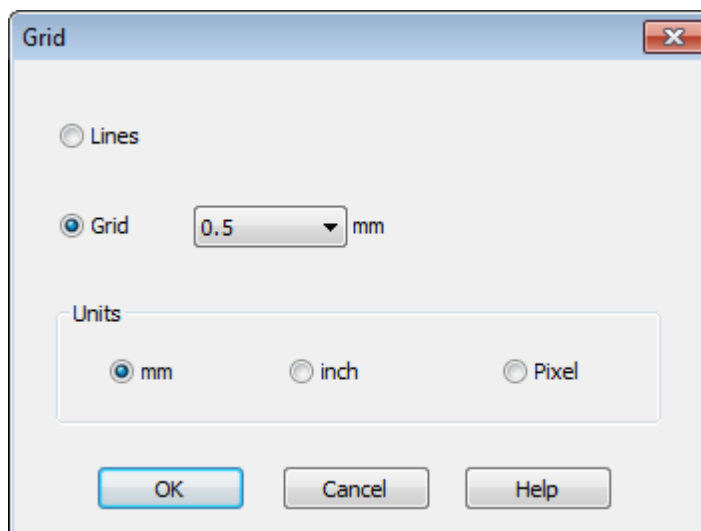


Each print line is structured by the number of selected or the selected grid size.



Unites

Grid/rulers are displayed in the selected unit.



Unit	Description
mm	Ruler is labelled in mm .
inch	Ruler is labelled in inch .
Pixel	Ruler is labelled in pixels .

5.3.2.2 Selection









- ▶ Activate "Selection".
- ▶ With the left mouse button pressed down, drag the selection frame over the desired area.
- ▶ Click inside the frame with the left mouse button. The selection can now be edited like a graphic object.

5.3.3 Objects

Print patterns are assembled from objects of the five object groups described below. Objects can be freely placed by Drag & Drop (see "[Example Workflow: Generate Print Pattern](#)").



The format of each object group can be individually configured. Menus for format settings are called by right-clicking the respective object or in the tab "Format" in the [menu bar](#).

Toolbar 	Command	Description
	Text	Enter the desired text in the cursor position. Font type and style depend on the set text format. Double-clicking the text terminates text input mode. Text can also be inserted via the Windows clipboard. The font size is adjusted to the grid height automatically when the grid is active.
	Date/Time	Font type, style, size and format can be set individually (see " Font " and " Presettings ").
	Numbering machine	The numbering machine is used for continuous numbering. Starting value, step width and direction, font type, style and size can be set (see " Font " and " Presettings ").
	Barcode	The format settings offer several barcode formats (see " Presettings ").
	Graphic	After insertion of a graphical object, a file selection window opens. Select the desired graphic and confirm with "Open".

5.3.4 Device Safety

[Device Safety](#)

[Unlocking Device](#)

[Lock Device](#)

5.3.4.1 Device Safety

The device safety locks printing and protects the print data from abuse.



Devices without the current firmware version do not support device safety. The latest firmware version can be downloaded from www.reiner.de in the area "Downloads".

- The device safety can be set in the menu bar  under tab "Extras → "Device safety"
or in the toolbar  via the buttons  /  / .

You can choose between **three** functions:



1. Device safety is deactivated.



2. Device safety is activated.

Print images **cannot** be transferred and printed without password input.



3. Device safety is activated.

Print images can be transferred and printed **without** password input.

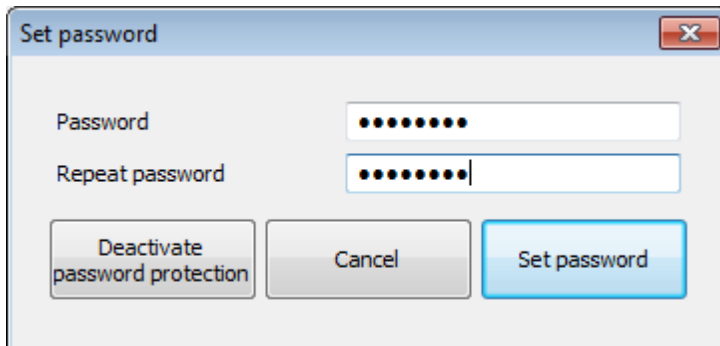
[Set password](#)




[Deactivate password protection](#)

[Password Forgotten](#)

5.3.4.1.1 Set password






 "Set password" activates the device safety and protects the print data from abuse.



- ▶ To activate the device safety, select the tab "Extras" in the menu bar  and click "Device safety → Set password" or button  in the toolbar .
- ▶ Assign a password.
- ▶ Repeat the password.

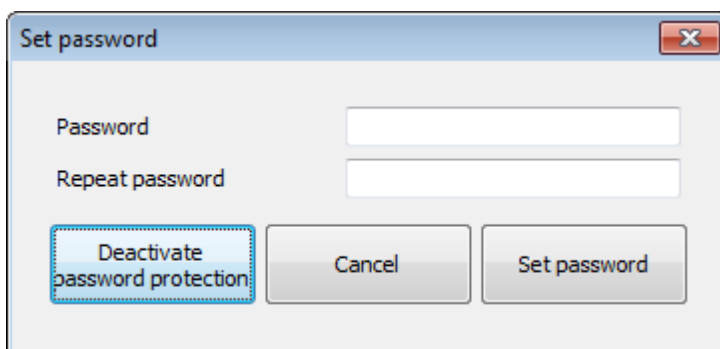
The password may consist of up to 8 characters.


The following characters can be used: 0-9, A-Z, a-z and the characters! "\$ % & ' () * + , - . / : ; < = > ? [] { } ~ .


- ▶ To activate device safety, click button "Set password".
In the toolbar , the icon changes from  to  and the icon  appears in the status line .

5.3.4.1.2 Deactivate password protection

 "Deactivate password protection" deactivates device safety.




- ▶ To **deactivate** the device safety, select the tab "Extras" in menu bar  and click "Device safety → Set password".
- ▶ Click "Deactivate password protection".




In the status display  and the toolbar , the symbol changes from  to .

5.3.4.1.3 Password Forgotten

 When resetting the password, the REINER 940 is reset to factory settings. All saved print patterns are deleted.

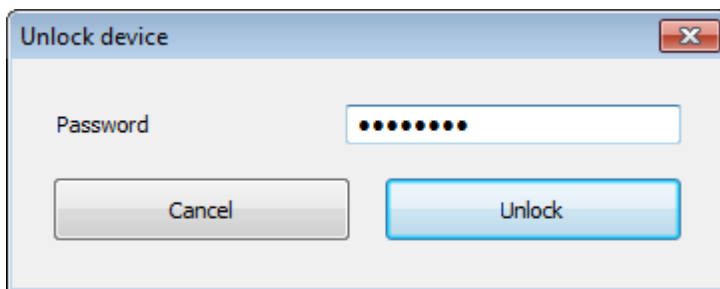
 The password can only be reset when the REINER 940 has no device error.






If the set password has been forgotten, it can be reset as follows:

- ▶ Remove print cartridge .
- ▶ Set setting wheel  to position **C**.
- ▶ Push the print trigger  or at least 10 seconds.
If the password is reset, a warning signal sounds.

5.3.4.2 Unlocking Device







 Print images can be transferred and printed **without** password input.



- ▶ To **unlock** the device, select the tab "Extras" in the menu bar  and click "Device safety → Unlock device" or click the icon .
- ▶ Enter password and click "Unlock".
In the toolbar , the symbol changes from  to .

5.3.4.3 Lock Device

 Print images **cannot** be transferred and printed without password input.

- ▶ To **lock** the device again, select the tab "Extras" in menu bar  and click "Device safety → Lock device".
- OR -
- ▶ Click the button .
- OR -
- ▶ Switch the device off and on again.
In the status display  and the toolbar , the symbol changes from  to .

5.3.5 Device settings



Device settings will only become active when they have been transmitted to the REINER 940.

[Print settings](#)

[Signals](#)

[Functions](#)

[Font](#)

5.3.5.1 Print settings

Device settings

Print settings | Signals | Functions | Font

Print sequence: Print single line (Setting wheel)

Print direction: Left to right

Alignment: 0° rotated

Print intensity: Normal

Print start: Print trigger

Encoder: Scanning roll

	Lead [mm]	Print delay [s]
Line 1	23.0	0.25
Line 2	23.0	0.25
Line 3	23.0	0.25
Line 4	23.0	0.25

Print path per cycle [mm]: 0.338

Speed [mm/s]: 250

Default

OK Cancel Help

[Print sequence](#)

[Alignment](#)

[Print intensity](#)

Encoder

5.3.5.1.1 Print sequence

Device settings

Print settings | Signals | Functions | Font

Print sequence:
 Print single line (Setting wheel)
 Print single line (Setting wheel)
 Print lines in sequence (1,2,3,4)
 Continuous printing (1,1,1,1)

Print direction:
 Alignment: 0° rotated

Print intensity: Normal

Print start: Print trigger Encoder: Scanning roll

	Lead [mm]	Print delay [s]
Line 1	23.0	0.25
Line 2	23.0	0.25
Line 3	23.0	0.25
Line 4	23.0	0.25

Print path per cycle [mm]: 0.338 Speed [mm/s]: 250

Default

OK Cancel Help

Function	Description
Print single line (setting wheel)	The selected line is printed once per print trigger.
Print lines in sequence (1,2,3,4)	All lines are printed in sequence, bottom-up, starting with the line indicated on the setting wheel (1, 2, 3 or 4).
Continuous printing (1,1,1,1)	The line (1, 2, 3 or 4) set on the selector wheel is printed continuously in succession as long as the print triggered is activated.

5.3.5.1.2 Alignment

Device settings

Print settings

Signals

Functions

Font

Print sequence:

Print single line (Setting wheel)

Print direction:

Left to right

Alignment:

0° rotated

Print intensity:

0° rotated

180° rotated

Print start

Print trigger

Encoder

Scanning roll

Lead [mm]

Print delay [s]

Line 1

23.0

0.25

Line 2

23.0

0.25

Line 3

23.0

0.25

Line 4

23.0

0.25

Print path per cycle [mm]

0.338

Speed [mm/s]

250


Default

OK

Cancel

Help

Function	Description
Turned by 0°	<div> <div> <div>Ernst Reiner GmbH & Co. KG</div> <div>Reinhardtstraße 16</div> <div>D-78120 Tübingen</div> </div> <div>REINER</div> </div>
Turned by 180°	<div> <div> <div>Ernst Reiner GmbH & Co. KG</div> <div>Reinhardtstraße 16</div> <div>D-78120 Tübingen</div> </div> <div>REINER</div> </div>

 The 180° rotation is not displayed in the PCset.
The device considers the setting in print.

5.3.5.1.3 Print intensity

Device settings

Print settings | Signals | Functions | Font

Print sequence: Print single line (Setting wheel)

Print direction: Left to right

Alignment: 0° rotated

Print intensity: Normal (selected), Economical

Print start: Print trigger Encoder: Scanning roll

	Lead [mm]	Print delay [s]
Line 1	23.0	0.25
Line 2	23.0	0.25
Line 3	23.0	0.25
Line 4	23.0	0.25

Print path per cycle [mm]: 0.338 Speed [mm/s]: 250

Default OK Cancel Help

Function	Description
Normal	Default ink consumption.
Economic	Reduction of ink consumption.

5.3.5.1.4 Encoder

Device settings

Print settings

Signals

Functions

Font

Print sequence:

Print single line (Setting wheel)

Print direction:

Left to right

Alignment:

0° rotated

Print intensity:

Normal

Print start

Print trigger

Encoder

Scanning roll

Scanning roll

External cycles

Fixed speed

Lead [mm]

Line 1

23.0

Line 2

23.0

Line 3

23.0

Line 4

23.0

0.25

0.25

0.25

0.25

Print path per cycle [mm]

0.338

Speed [mm/s]

250

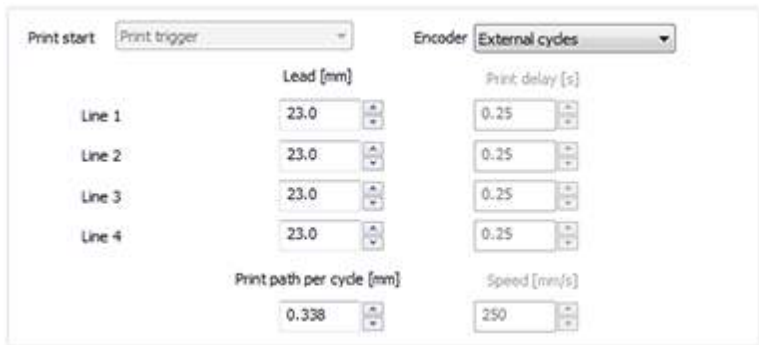
Default

OK

Cancel

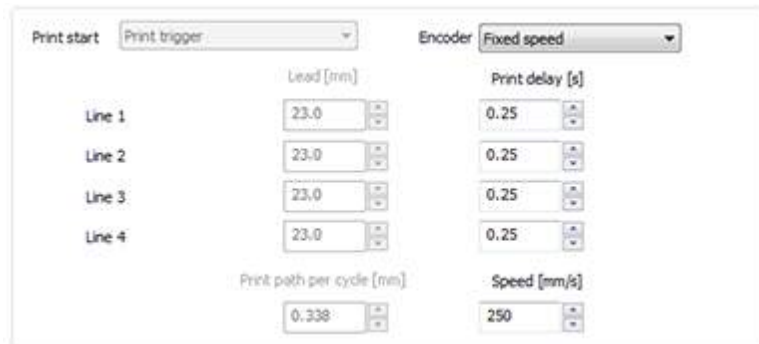
Help

Function	Description
Sensing roller (Print start with triggering)	<div> <div>Print start</div> <div>Print trigger</div> </div> <div> <div>Encoder</div> <div>Scanning roll</div> </div> <div> <div>Lead [mm]</div> <div>Line 1</div> <div>23.0</div> <div>Line 2</div> <div>23.0</div> <div>Line 3</div> <div>23.0</div> <div>Line 4</div> <div>23.0</div> </div> <div> <div>Print delay [s]</div> <div>0.25</div> <div>0.25</div> <div>0.25</div> <div>0.25</div> </div> <div> <div>Print path per cycle [mm]</div> <div>0.338</div> </div> <div> <div>Speed [mm/s]</div> <div>250</div> </div> <p>Imprint is printed as soon as the print trigger button has been pressed.</p> <p>Pre-run is the distance in mm from print triggering until print start.</p> <p>The predefinition 23 mm, is equivalent to the distance from the</p>

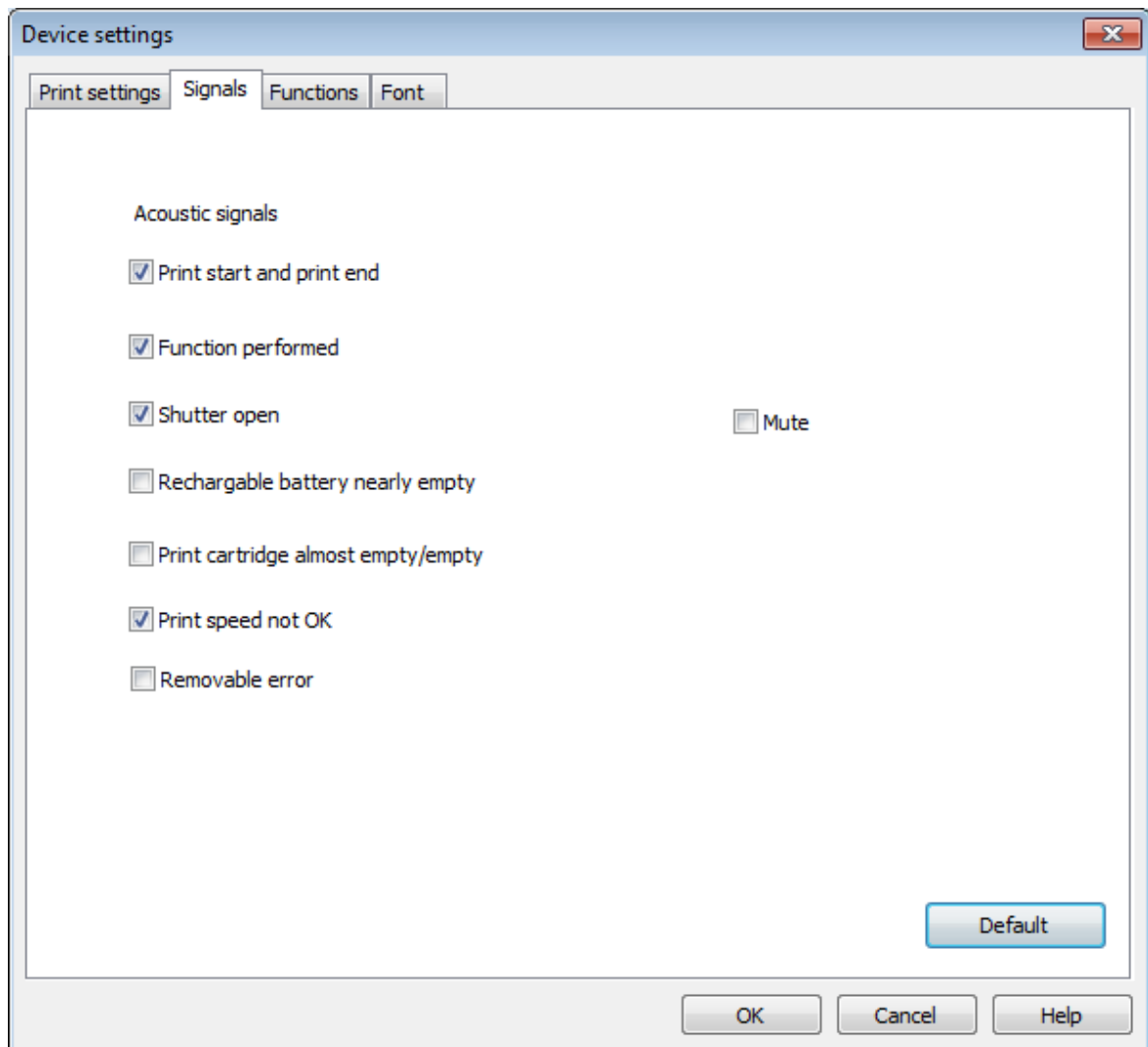
	middle of the print head to the positioning aid (print start) on the device.
External clock (Printstart with clock)	 <p>Imprint is printed as soon as the print trigger button has been pressed.</p> <p>The print distance per clock [mm] describes the path that the medium to be printed or the printer covers per clock signal.</p> <p>The printer can also be operated using an external clock (e.g. rotary encoder).</p> <p>The print path per stroke has to be determined and set.</p> <p>Note: In order not to affect the print quality, at least one clock signal should occur per 0.338 mm print path (75dpi).</p>



REINER-Service can answer any detailed questions.

Function	Description
Fixed speed (Print start with triggering)	 <p>Print delay is the free travel in seconds before printing starts</p> <p>Applications:</p> <ul style="list-style-type: none"> • Contact-free printing (hands-free method) • Used in systems and devices, in which the medium to be printed (e.g. assembly line) or the printer itself (e.g. linear drive) moves at a constant speed during printing. The speed per second is the time it takes the medium to be printed or the printer to move in mm per second.

5.3.5.2 Signals

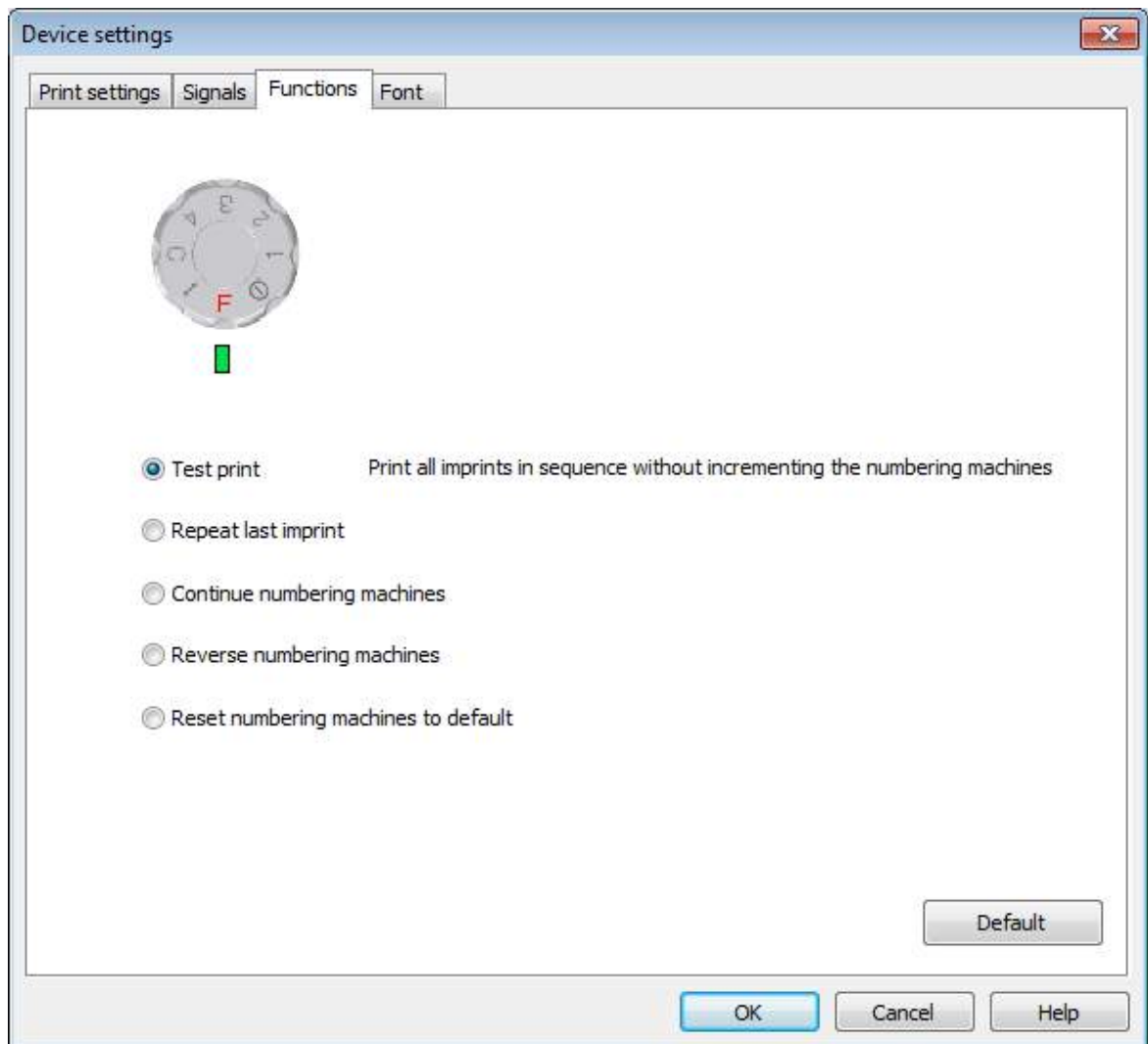


Activation or deactivation of acoustic signals for different events (see "[Acoustic signals](#)").

"Function performed": see tab "[Functions](#)".

"Removable errors": see "[Acoustic signals](#)".

5.3.5.3 Functions



[Test print](#)

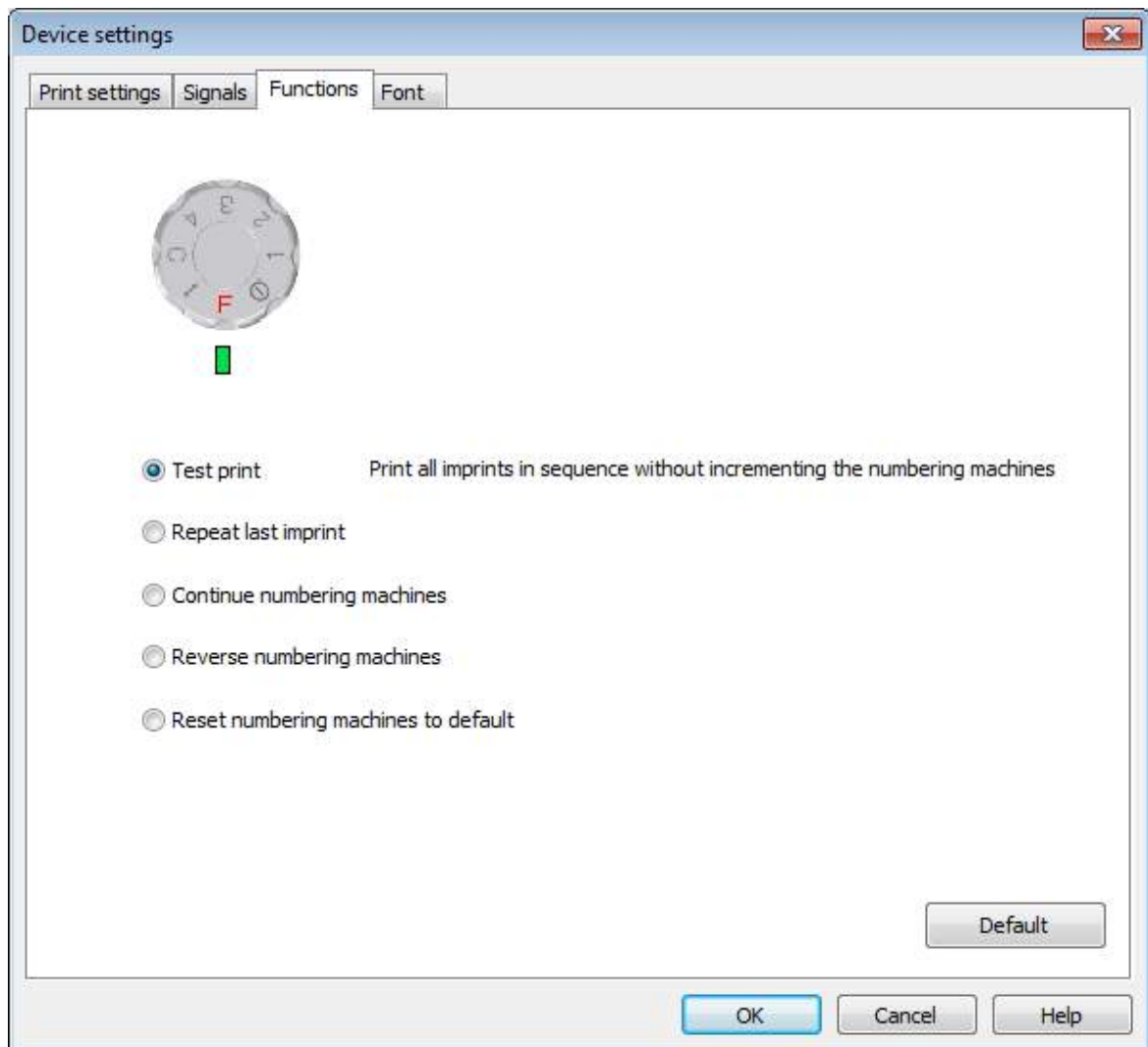
[Repeat last imprint](#)

[Continue numbering machines](#)

[Reverse numbering machines](#)

[Reset numbering machines to default](#)

5.3.5.3.1 Test print



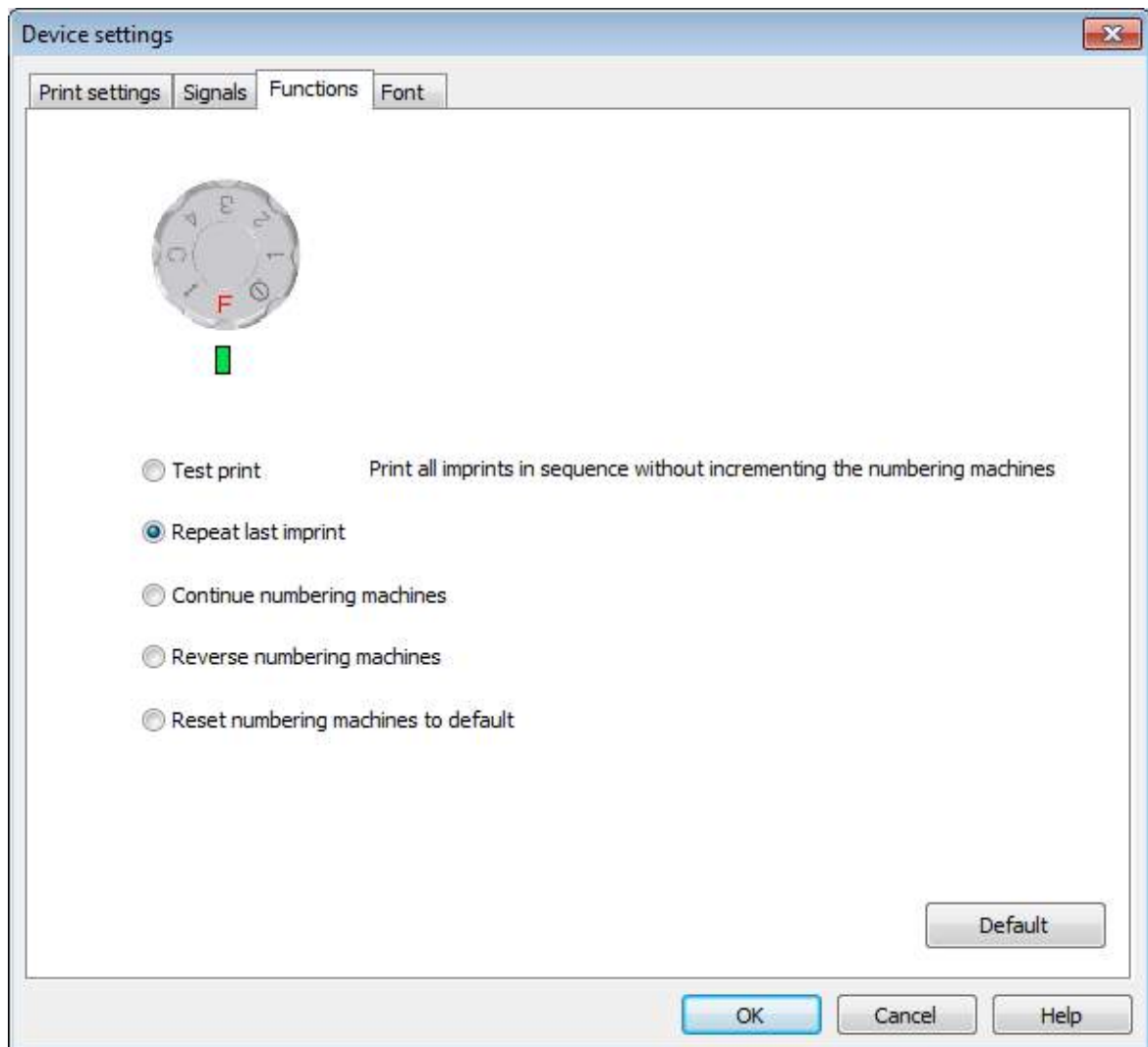
The "Test print" function permits printing all print patterns as test prints. The numbering machines are not switched on. The printout starts with print pattern no. 1 and is switched forward to the next print pattern each time it is triggered.

The "Test print" for the REINER 940 is performed as follows:

- ▶ Turn the selector wheel to position **F**.
- ▶ Open the shutter.
- ▶ Print line 1 up to 4 in sequence.

 Release the shutter lever to end the "Test print" function.

5.3.5.3.2 Repeat last imprint

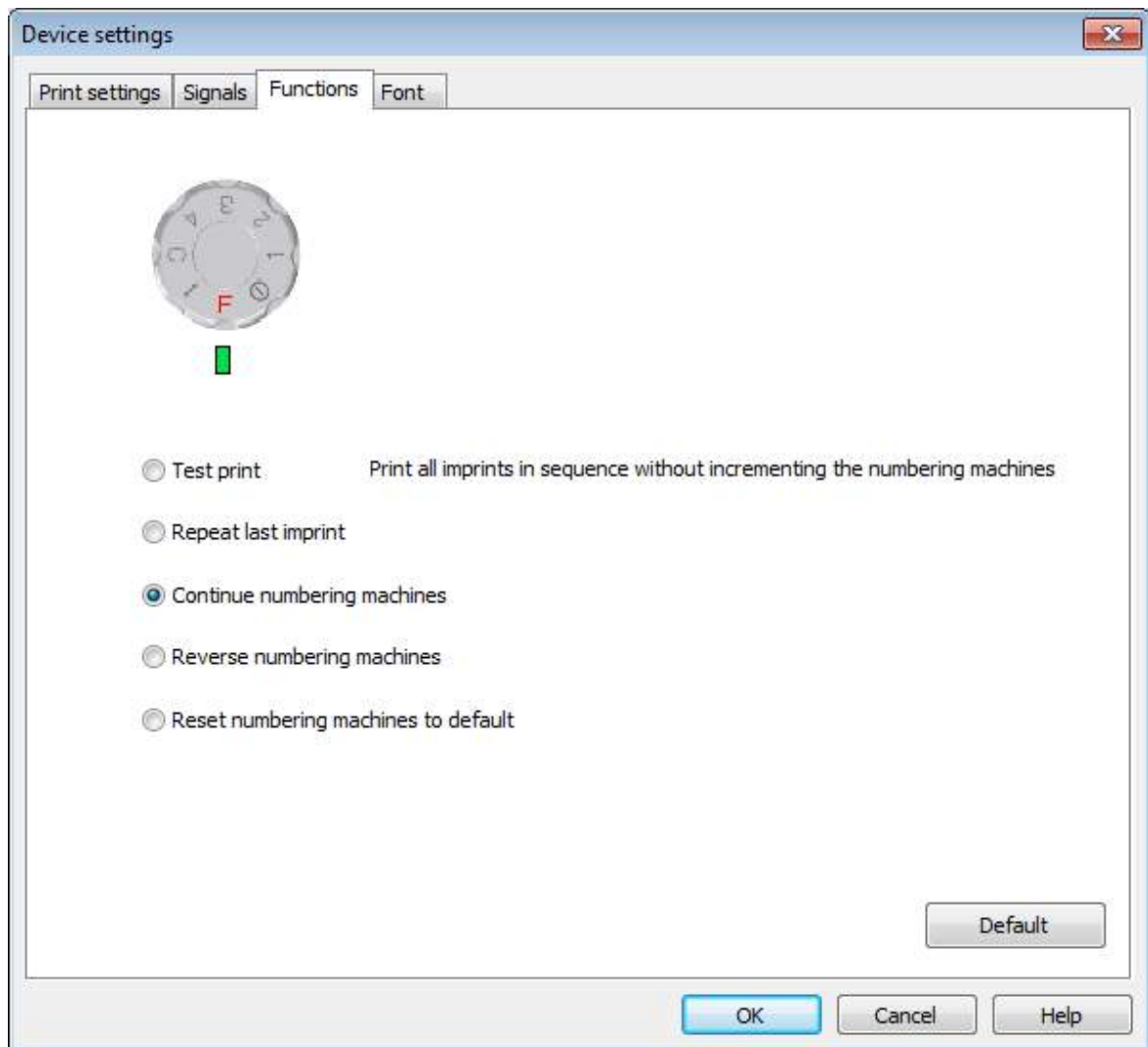


With the function "Repeat last imprint", the last imprint to be printed can be repeated. (Numbering machine does not change, time is current displayed).

The function "Repeat last imprint" is performed as follows for the REINER 940:

- ▶ Turn the selector wheel to position **F**.
- ▶ Open the shutter.
- ▶ Press print trigger.

5.3.5.3.3 Continue numbering machines



The function "Continue numbering machines" allows to increment the numbers manually in a quick and easy manner.

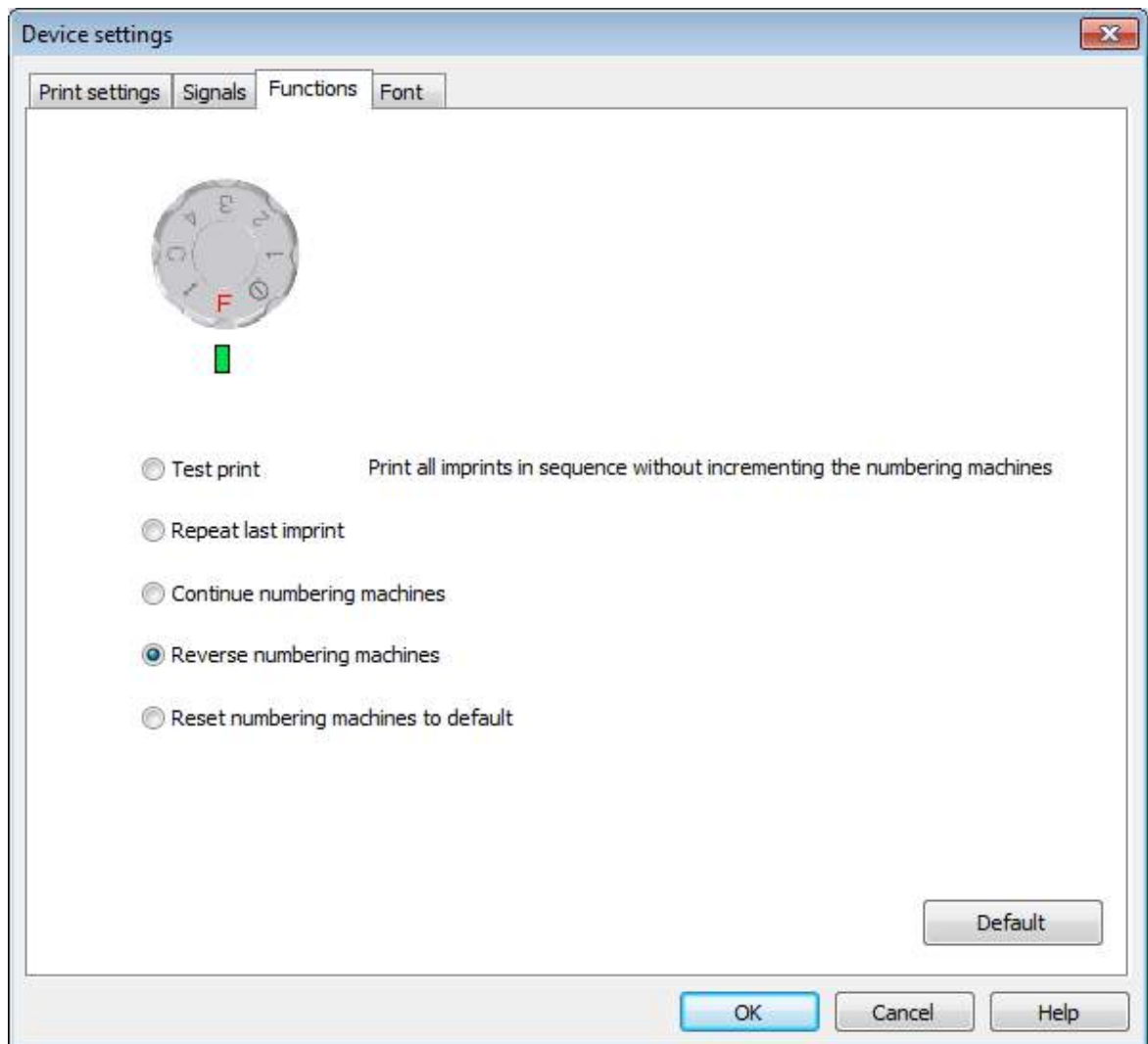
The function "Continue numbering machines" is performed as follows for the REINER 940:

- ▶ Turn the selector wheel to position **F**.
- ▶ Open the shutter.
- ▶ Press print trigger.

An acoustic signal confirms advancing of the numbering machine.

i When performing the function, the numbering machines of the last printed line are advanced by the step width set in their counting direction. The repetitions of the numbering machines are reset to the set repetition value. If the numbering machine is to be advanced manually only, "Repeat" must be set to "0".

5.3.5.3.4 Reverse numbering machines




With the function "Reverse numbering machines", the numbers can be quickly and easily manually decremented.

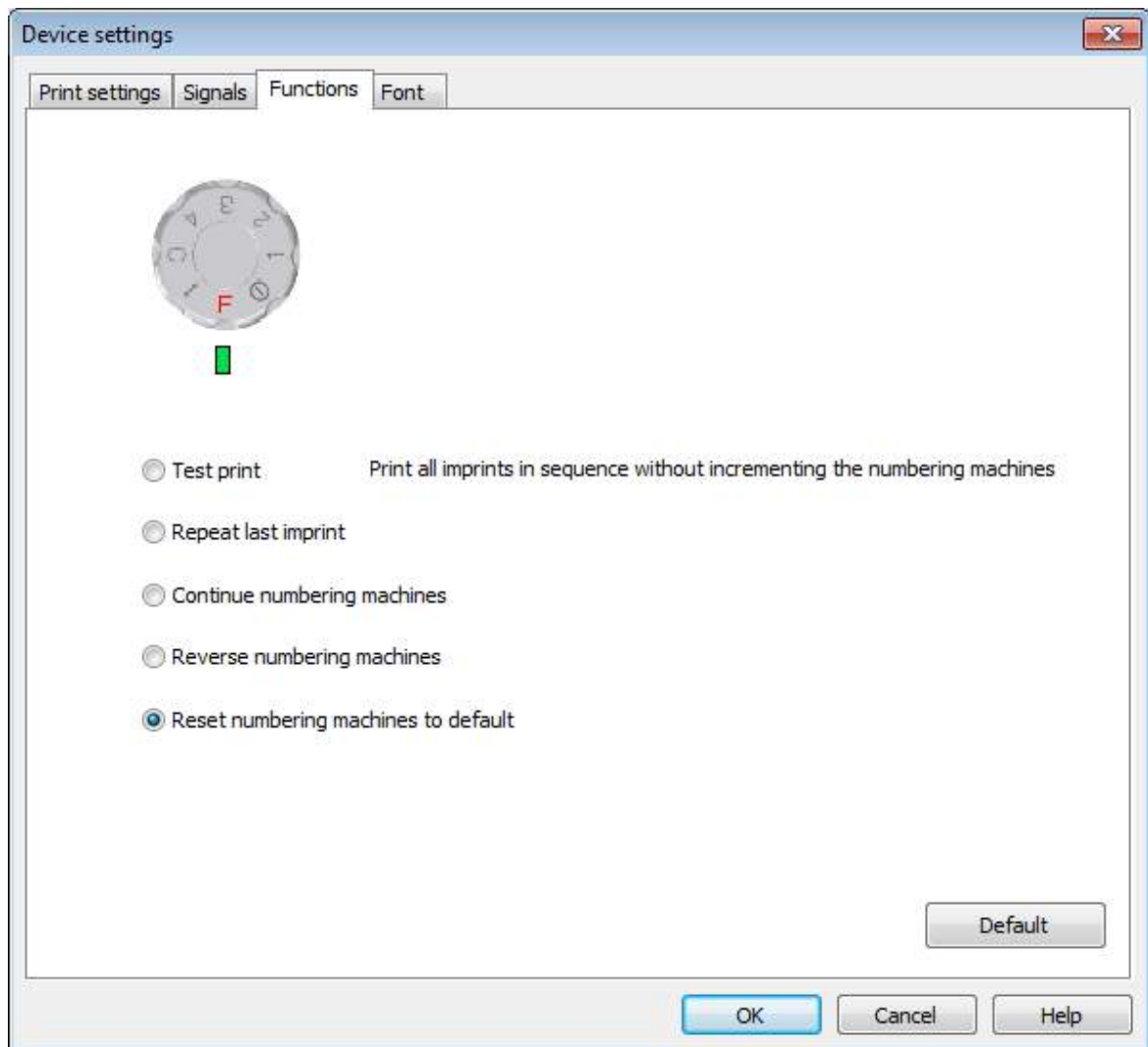
The function "Reverse numbering machines" is performed as follows for the REINER 940:

- ▶ Turn the selector wheel to position **F**.
- ▶ Open the shutter.
- ▶ Press print trigger.

An acoustic signal confirms resetting of the numbering machine.

 When performing the function, the numbering machines of the last printed line are reduced by the step width set in their counting direction. The repetitions of the numbering machines are reset to the set repetition value.

5.3.5.3.5 Reset numbering machines to default

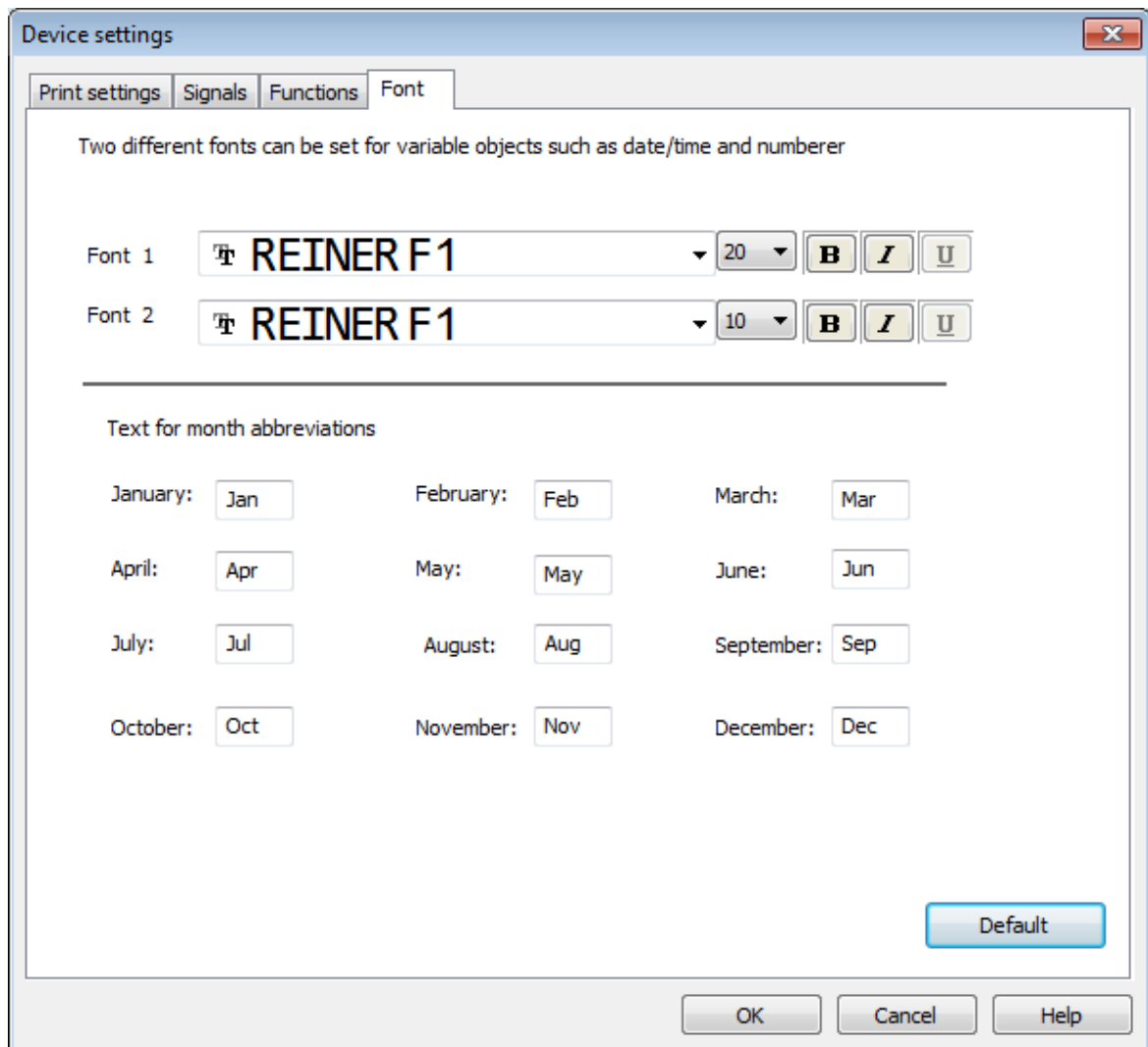


The function "Reset numbering machines to default" resets all numbering machines. The default value for upwards counting numbering machines is the minimum value, and for downwards counting ones, it is the maximum value.


For the REINER 940, the "Numbering machines are reset to default" as follows:

- ▶ Turn the selector wheel to position **F**.
 - ▶ Open the shutter.
 - ▶ Press print trigger.
- An acoustic signal confirms resetting of the numbering machines to default.

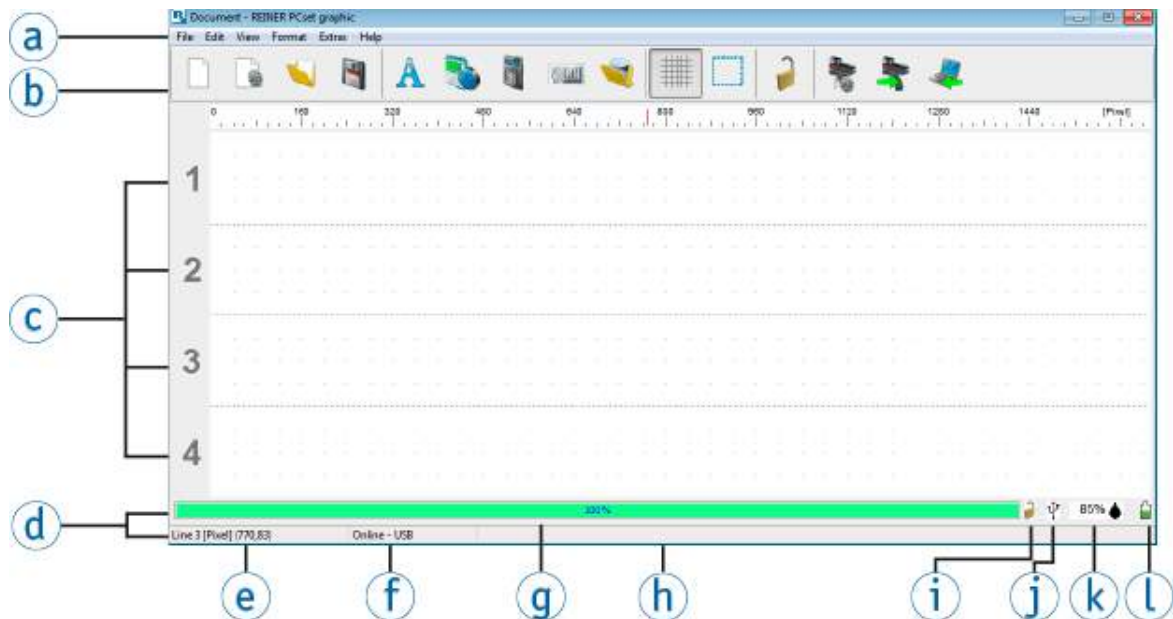
5.3.5.4 Font






 For "Font 1" and "Font 2", fonts can be stored for the objects date/time and numbered.

 Month abbreviations can be set individually.

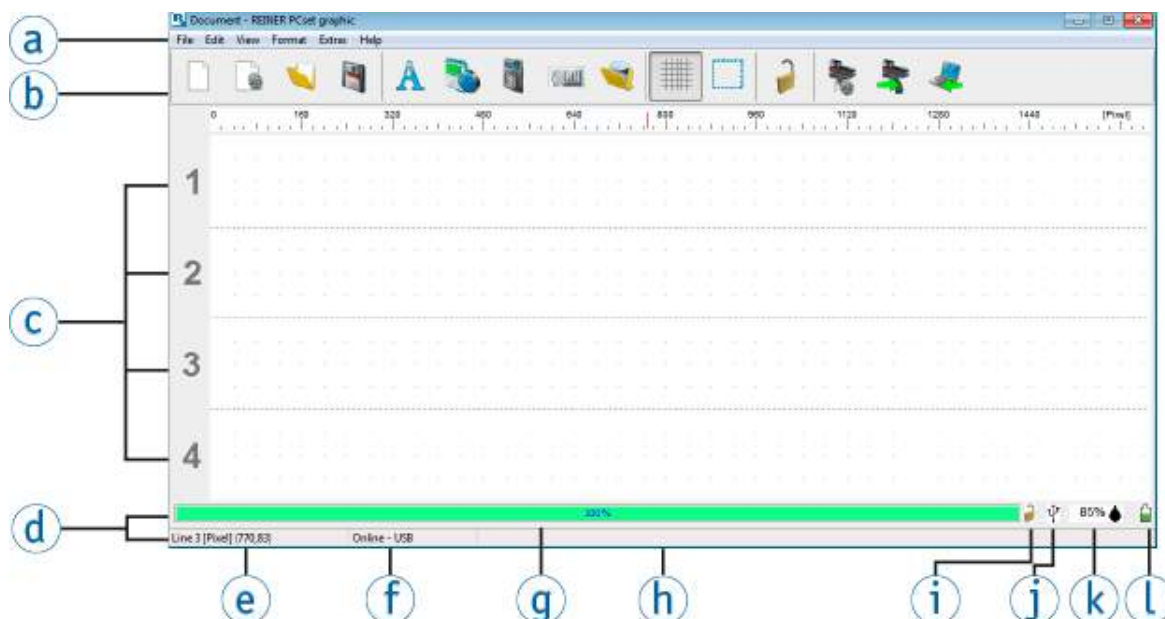
5.3.6 Status displays



Function	Description	Notes
Transfer process g	Displays the progress of transmitting the print image	
Device Safety i	Protects the print data from abuse	The device safety status depends on the status in which the device is.
	Device safety is activated	Print images cannot be transferred and printed without password input.
	Device safety is activated	Print images can be transferred and printed without password input.
Connectivity j	Displays whether the connection has been made via USB or Bluetooth	
	Connection has been made via USB	
	Connection has been made via Bluetooth	
Ink level k	Displays the fill level of the print cartridge in %	
Rechargeable battery level l	Displays the charge condition of the rechargeable battery	
	Rechargeable battery full	
	Rechargeable battery charging	
	Rechargeable battery empty	

Cursor position 	Displays the position in the print line	The measuring unit depends on the unit set under grid .
Online/Offline 	Displays whether the device is connected to the software	
Online-USB	Device is connected via the USB cable	
Online-Bluetooth	Device is connected via Bluetooth	
Offline	<ul style="list-style-type: none"> - Device not on - USB cable not plugged in - Rechargeable battery empty 	
Device messages 	Here, notes on troubleshooting are displayed	

5.3.7 Device messages



i Device messages **h** in the status display.

General warning notes

Warning notes	Cause	Removal
Please charge or replace the rechargeable battery	Rechargeable battery capacity almost nearly empty	► Charge rechargeable battery
Please check the printout	Print cartridge almost empty	► Insert a new print cartridge
Please insert a new print cartridge	Print cartridge almost empty	► Insert a new print cartridge

Warning notes for which printout is no longer possible


Warning notes	Cause	Removal
Please insert print cartridge	<ul style="list-style-type: none"> - No or defective print cartridge - Wrong print cartridge 	► Insert print cartridge
Remove and re-insert print cartridge	<ul style="list-style-type: none"> - Print cartridge not inserted correctly - Ink level writing error 	► Insert print cartridge correctly
Charge battery	<ul style="list-style-type: none"> - Rechargeable battery empty - No rechargeable battery/ defective rechargeable battery 	<ul style="list-style-type: none"> ► Charge rechargeable battery ► Insert/replace rechargeable battery
Device error xxx	Device error	<ul style="list-style-type: none"> ► Disconnect device from the power supply for approx. 3seconds (including rechargeable batteries and USB connection). If the error remains after activation,

	have the device inspected by the REINER-Support.
--	--

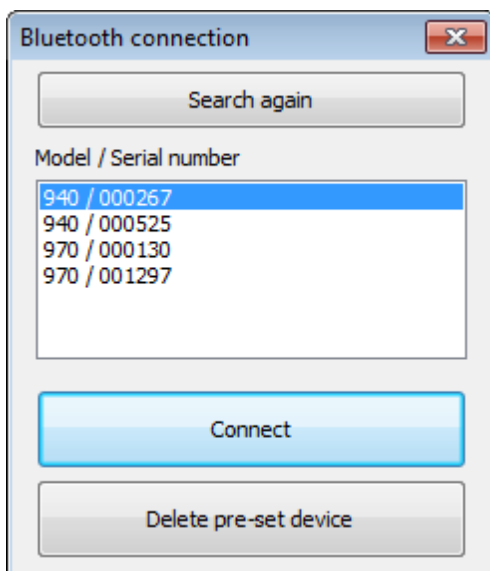
Warning notes presented in a message box

Warning notes	Cause	Removal
Transmission error	Device defective or missing connection	▶ Check device/connections and try again
Error in barcode generation	Not enough characters entered	▶ 7 characters required ▶ 12 characters required

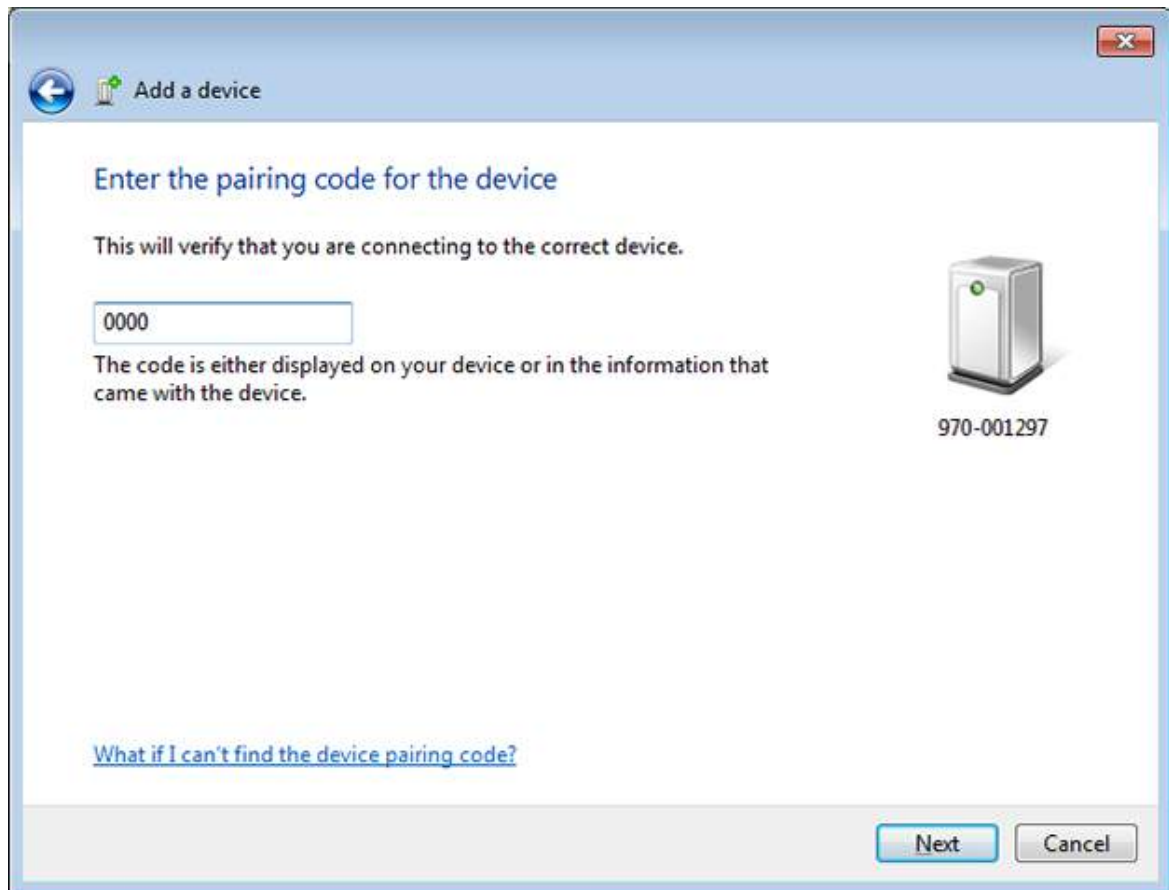
5.4 Establishing Bluetooth Connection


- ▶ To establish a Bluetooth connection, activate Bluetooth (see "[Activating Bluetooth](#)").
- ▶ Open PCset graphic.
- ▶ Select the tab "File" in the menu bar  and click "Find a REINER Bluetooth device".
An automatic search run is started.
All devices found and all devices that have been connected to the PCset graphic before are displayed with model and serial number. .

 If the REINER 940 is not found, start a new search run with the button "Search again".




- ▶ To establish a Bluetooth connection, click "Connect".
In the Windows status bar, a pop-up menu "Connection via a Bluetooth device is being established." appears.
- ▶ To enter the factory password "0000", click the pop-menu "Connection via a Bluetooth device is being established".
The window for password input opens.



- ▶ Enter the factory password "0000".
The REINER 940 is connected to the PCset graphic.
-  The connected device is saved as permanent connection, so that the PCset graphic will always connect with this device once it is available.
- ▶ To revoke the permanent connection, click the button "Preset device" in the Bluetooth dialogue or make a connection with another device.

5.5 Example workflow: Generate Print Pattern

 Entering own print patterns overwrites all 4 print patterns saved in the device. The factory pre-installed print patterns can be uploaded into the software and saved as XML files before ("[Menu Commands](#)").

[Configure Print Pattern](#)



[Transfer Print Pattern to the REINER 940](#)

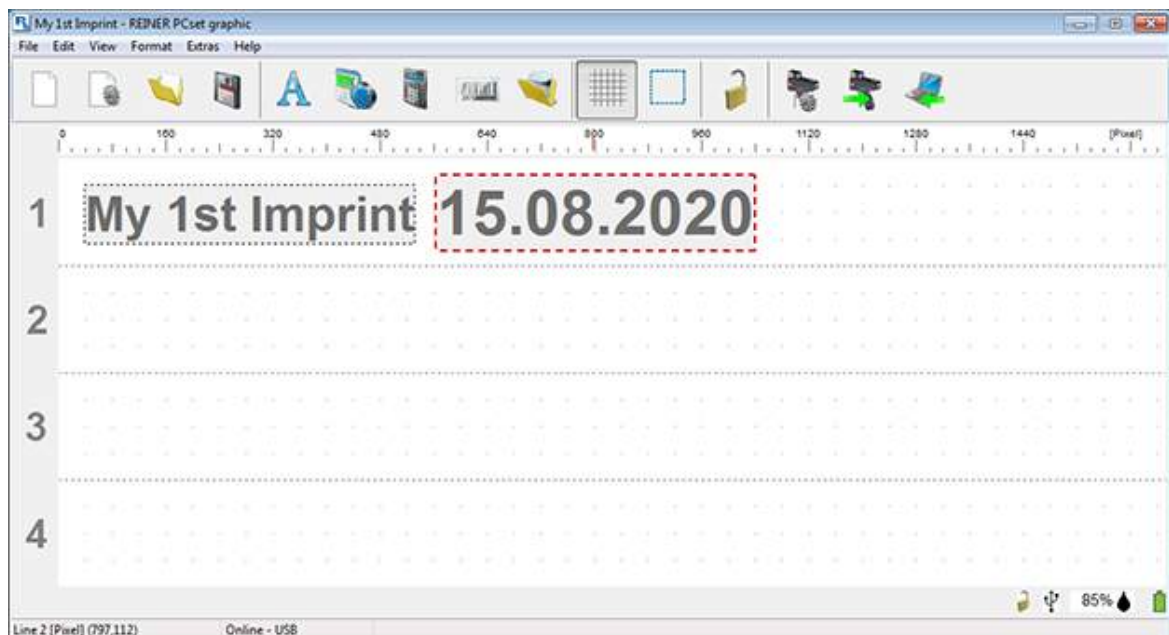
[Print Print Pattern](#)

[Number of prints](#)


5.5.1 Configure Print Pattern

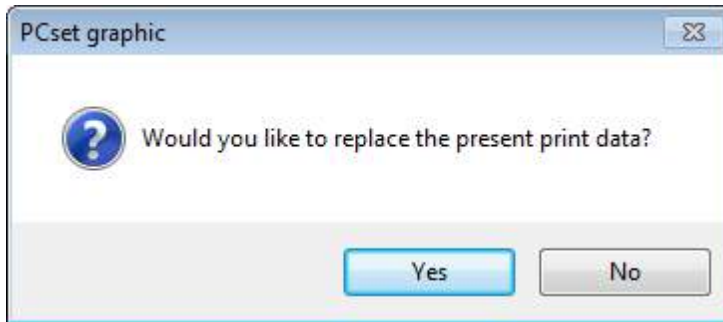
Insert Text and Date/Time

- ▶ To generate a text object, pull the **text icon**  in line 1 (print pattern 1) with the mouse and release it in the desired position.
- ▶ Enter the desired text in the text field.
- ▶ Doubleclick the text field to place the text object.
- ▶ To generate a date/time object, pull the **date/time icon**  into line 1 (print pattern 1) with the left mouse button.
- ▶ Release it in the desired position.

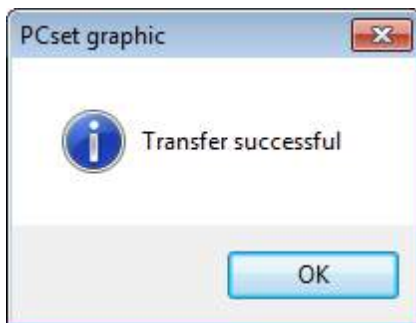


5.5.2 Transfer Print Pattern to the REINER 940

- ▶ Click the **icon transfer** .
- ▶ Confirm the following dialogue window with **Yes**.



The following message will appear after a few seconds if the transfer is successful.




- ▶ Confirm message with **OK**.
The print pattern is saved in the REINER 940 now and can be printed.

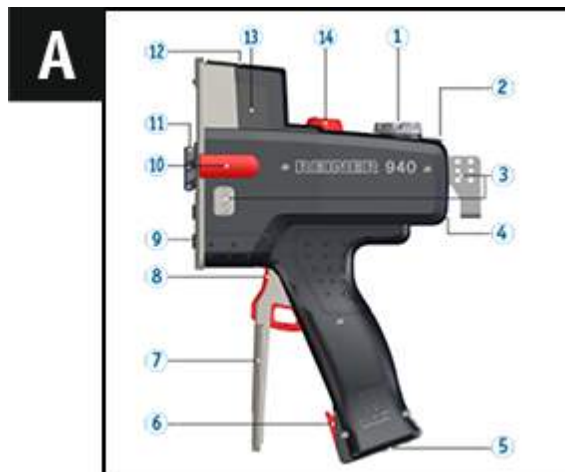
5.5.3 Print Print Pattern




WARNING

Danger of blinding in case of contact between ink and eyes.

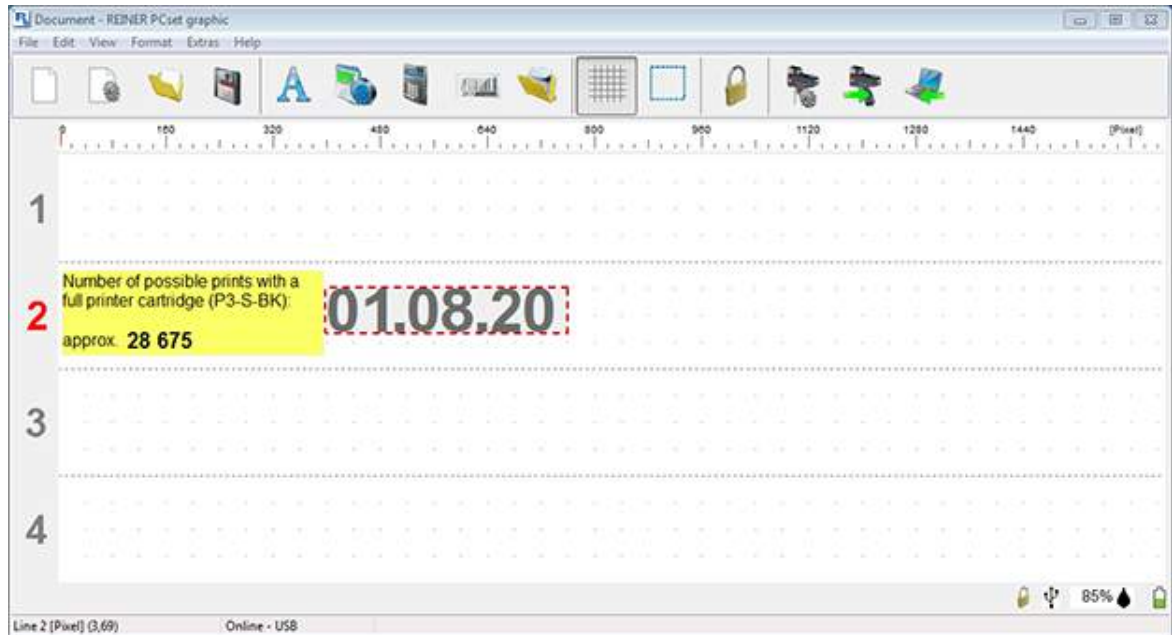
- ▶ Never hold the REINER 940 with its nozzles  pointing at the face of persons!

Print print pattern ⇒ Fig. **A**



- ▶ Turn the setting wheel  to position 1.
- ▶ Pull print head shutter lever  towards the device.
- ▶ Position the REINER 940 on the printing surface.
- ▶ Release the print trigger .
- ▶ Unroll the device with a constant velocity in the direction of printing.
Example print pattern 1 is printed.


5.5.4 Number of prints



The number of possible prints with a full printer cartridge is displayed by placing the mouse points over the print image number.

5.6 Settings objects



 The object settings can also be made in the menu bar  under the tab "Format" or via the context menu.

 The active object is framed in red in the print area.



[Text](#)

[Date/Time](#)

[Numbering machine](#)


[Barcode](#)

[Graphic](#)

5.6.1 Text



Creates text fields.
Object can be placed precisely according to the grid.

 The font size is adjusted if the grid is on.
Example: If a grid of 4 lines is set, the text object has the height of one line.


[Presettings](#)

[Contextmenu text object](#)

[Generate graphic](#)

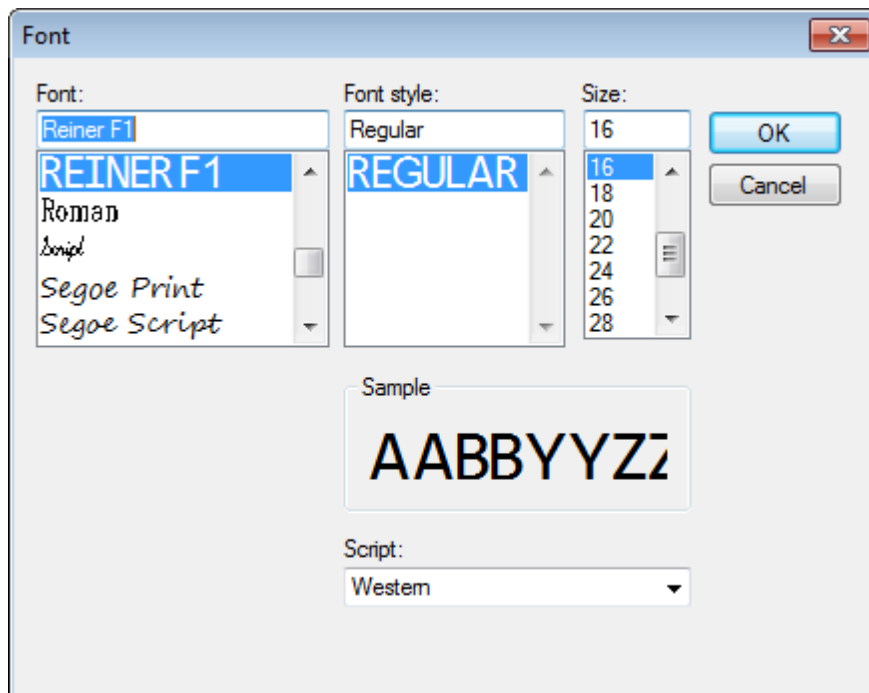
5.6.1.1 Presettings

Changed presettings apply to all future text objects.

- ▶ Select the tab "Format" and click "Text" in the menu bar . The configuration window for text appears.

The tab "Text" is structured in four areas:

- Font
- Font style
- Size
- Script



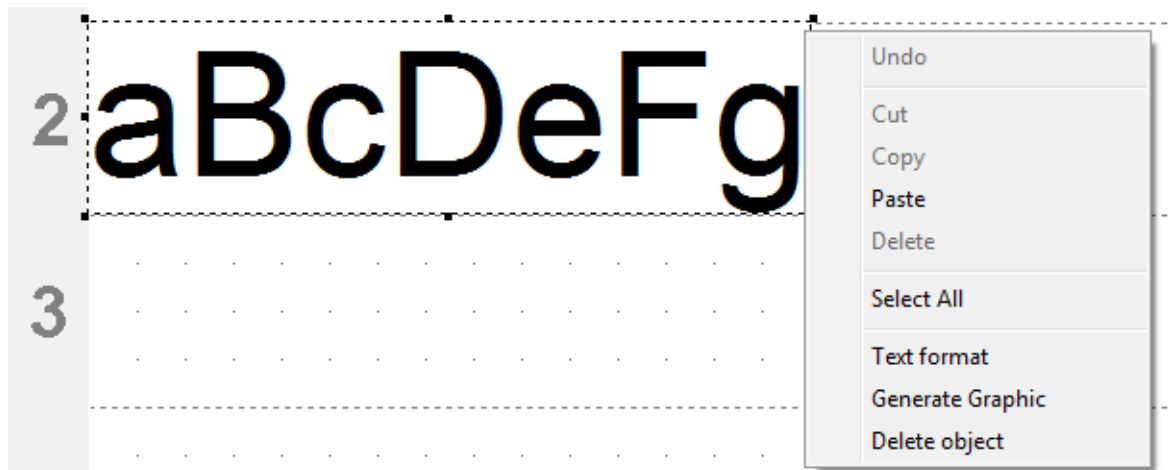
Format settings text

Function	Description
Font	Selection from the list of fonts installed on the current system.
Font style	Selection of desired font style from the list (standard, bold, italics or bold italics).
Size	Selection of the font size in points or input of the font size in points.
Script	Shows a list of available language scripts for the indicated font.

5.6.1.2 Context menu text object

If a text object is inserted (see "[Objects](#)"), the configuration corresponds to the presets (see "[Presets](#)"). The context menu can be used to individually set each date/time object deviating from this.

- To open the context menu, right-click the desired text object.
The context menu opens as in the following figure.



Function	Description
Undo	Undoes the input.
Cut	Cuts out the marked area.
Copy	Copies the selected area.
Paste	If there is a text in the clipboard, it is inserted.
Delete	Deletes the selected area.
Select All	Selects the entire text.
Text format	To change the font.
Generate Graphic	Converts the text into a graphic and attaches it to the current position. Note: the text can no longer be edited after conversion.
Delete object	Deletes the object.



Enter or double click fastens the object and is therefore inactive.

Inactive object



Function	Description
Copy	Copies the object.
Edit	Object becomes active and can be edited.
Generate Graphic	Converts the text into a graphic. Note: the text can no longer be edited after conversion.
Delete object	Deletes the object.

5.6.1.3 Generate graphic



Text and barcode objects can be converted to graphics. Graphics are fixed and cannot be moved. Limited editing is possible via the additional function "Selection".

- ▶ Click object with the right mouse button.
- ▶ Select "Generate graphic".
The object is converted into a graphic.

5.6.2 Date/Time



Font, font style, font size (see "[Font](#)") and format can be set. The date/time format can be globally preset. Additionally, deviating settings can be performed for every single date/time object (see "[Context menu date/time object](#)").




Up to five date/time objects can be placed.

[Presettings](#)

[Context menu date/time object](#)

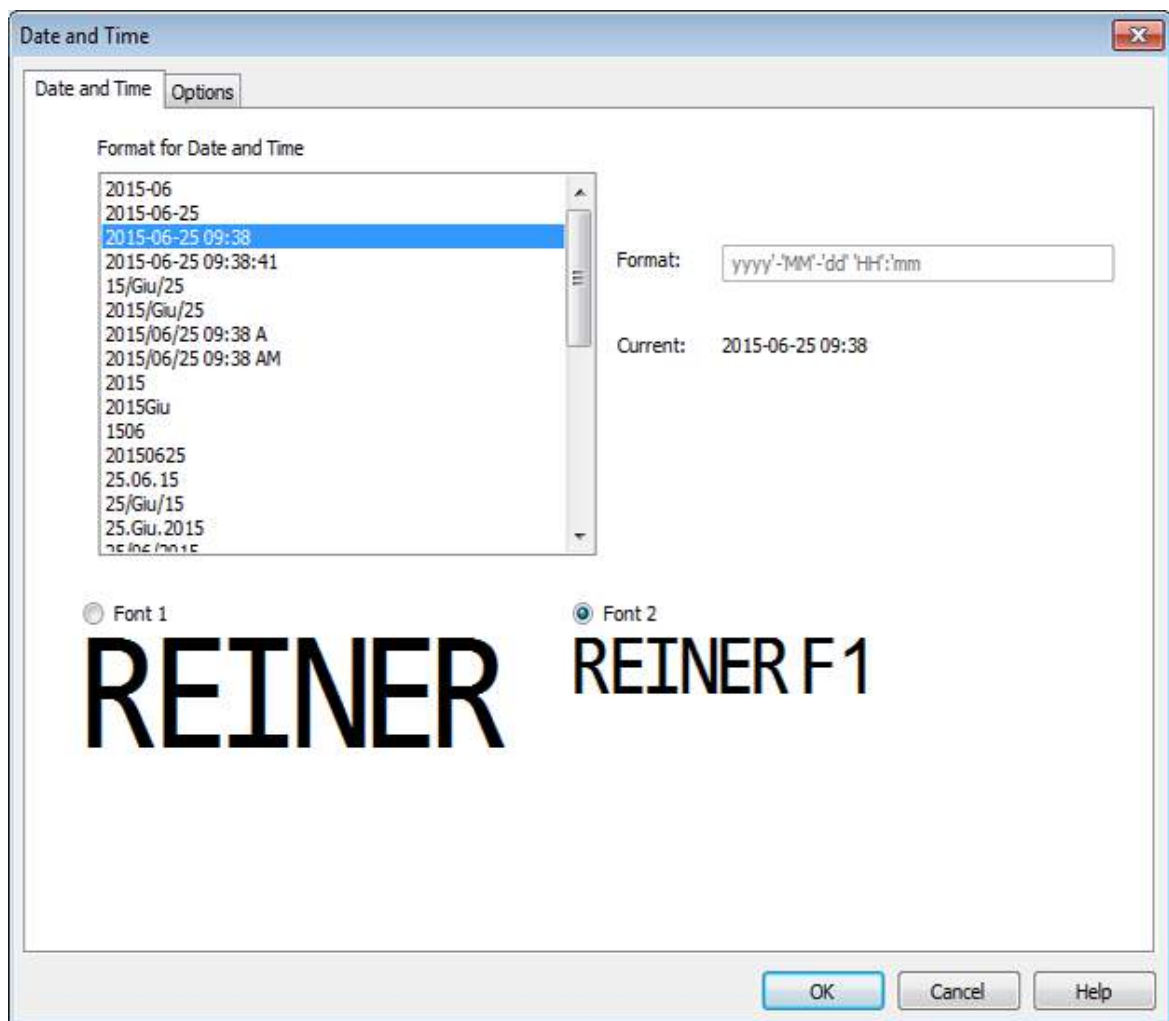
5.6.2.1 Presettings

Changed presettings apply to all future date/time objects.

- ▶ Select the tab "Format" and click "Date/Time" in the menu bar .
The configuration window for date and time appears.

The tab "Date and time" is structured in two areas:

- Format for date and time
- Font



[Tab date and time](#)

[Tab options](#)

[Font](#)

5.6.2.1.1 Tab date and time

Function	Description
Format for date and time	List of preconfigured formats. Selection by clicking.
Format	Shows the selected format in the draft view. The format can be manually configured. One abbreviation of a category each from the following table "Format abbreviations" can be used once each. Additional characters (also spaces) are inserted by being included in simple apostrophes ('). For verification purposes, whether or not the entered format is "OK" is displayed above the input field.
Current	Shows the current format in the current date.


Format abbreviation

Function	Description
dd	Day of the month with two graphics (01 to 31)
MM	Day of the month with two graphics (01 to 12)
MMM	Abbreviation of the month (up to 4 characters)
yy	The last two graphics of the year (00 to 99)
yyyy	The complete year (0000 to 9999)
HH	Hour with two graphics (00 to 23)
hh	Hour with two graphics (01 to 12)
mm	Minutes with two graphics (00 to 59)
ss	Seconds with two graphics (00 to 59)
t	One character for twelve-hours format with the letters A or P
tt	Two characters for twelve-hours format with the letters AM or PM

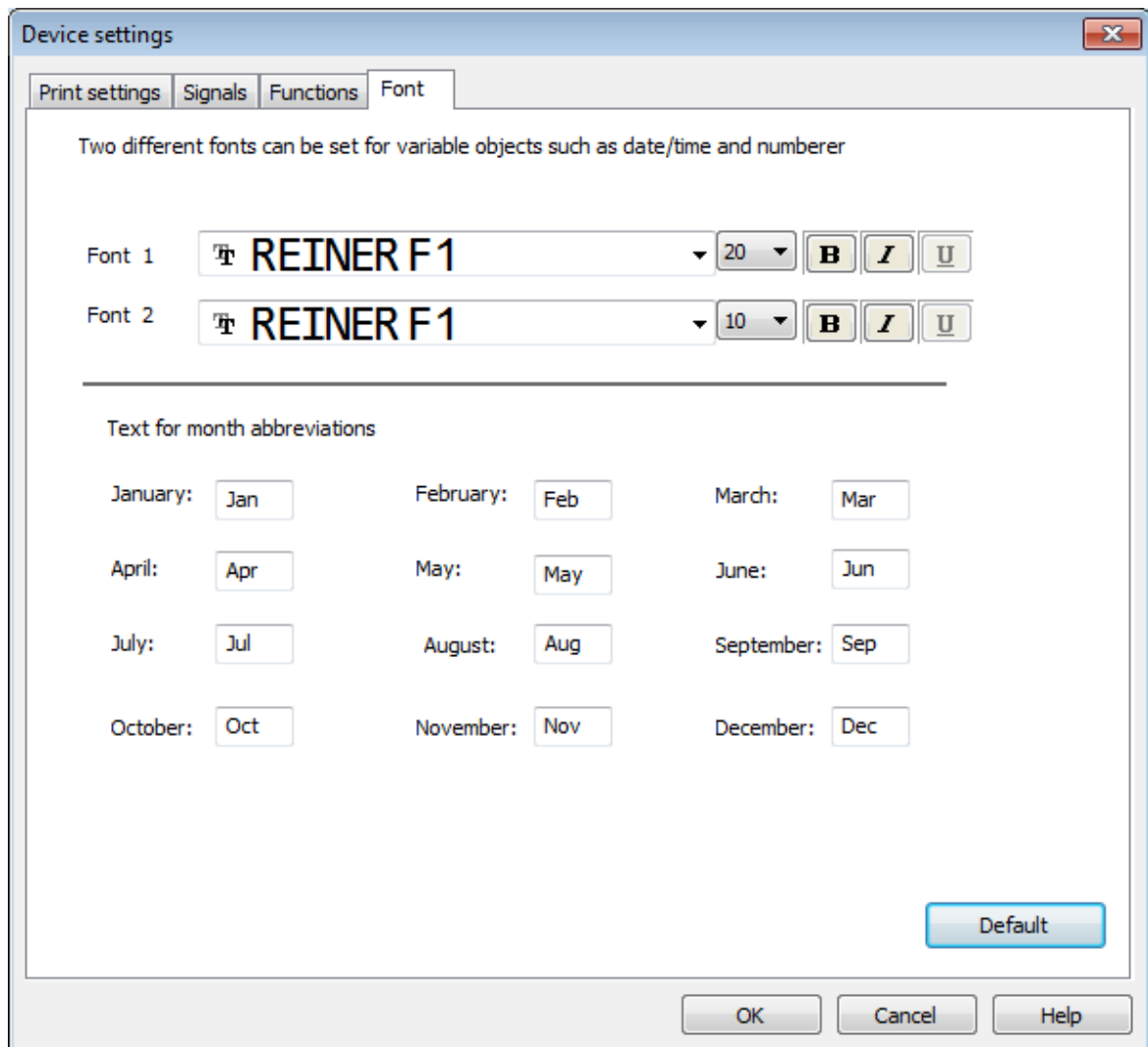
5.6.2.1.2 Tab options

An offset for date and time takes is configured in the tab "Options".
The offset can be used to, e.g., have best-before dates calculated automatically.




The screenshot shows a window titled "Date and Time" with a close button (X) in the top right corner. Inside the window, there are two tabs: "Date and Time" and "Options". The "Options" tab is currently selected. Below the tabs, the text "Offset for date and time" is displayed. There are four spinners arranged horizontally, each with a label above it: "Days (0-10000)", "Hours (0-23)", "Minutes (0-59)", and "Seconds (0-59)". The "Days" spinner shows the value "1", while the others show "0". Each spinner has up and down arrow buttons. Below these spinners is a "Reset" button. At the bottom of the window are three buttons: "OK", "Cancel", and "Help".

- ▶ Click into the respective text field.
 - ▶ Enter or select offset.
 - ▶ Confirm with **OK**.
- The set values are added to the current system date.
The result appears in the configuration view of the imprints .

5.6.2.1.3 Font



Selection option between "Font1" and "Font 2".

"Font 1" and "Font 2" can be configured in the menu bar  under tab "File → Settings → Font" or in the toolbar  via the button  (see "[Font](#)").

5.6.2.2 Context menu date/time object

If a date/time object is inserted (see "[Objects](#)"), the configuration corresponds to the presets (see "[Presettings](#)"). The context menu can be used to individually set each date/time object deviating from this.

- To open the context menu, right-click the desired date/time object.
The context menu opens as in the following figure.



Function	Description
Date/time format	Opens the configuration window for date and time for the selected date/time object.
Delete object	Deletes the object.

5.6.3 Numbering machine



The numbering machine is used for consecutive numbering.

Starting value, repetitions, step width and direction, as well as font, font style and font size (see "[Font](#)") can be set. The numbering machine format can be globally preset. Additionally, deviating settings can be performed for every single numbering machine object (see "[Context menu numbering machine](#)" object").



Up to five numbering machine objects can be placed.



The numbering machine reading of a numbering machine is switched forward **after each** printout according to the step width, repetitions and counting direction set.

Observe: The following configuration may lead to nonsensical numbering machine readings:


- Print sequence "Print lines in sequence"
- Linked numbering machines with different repetitions each

[Presettings](#)

[Context menu numbering machine object](#)

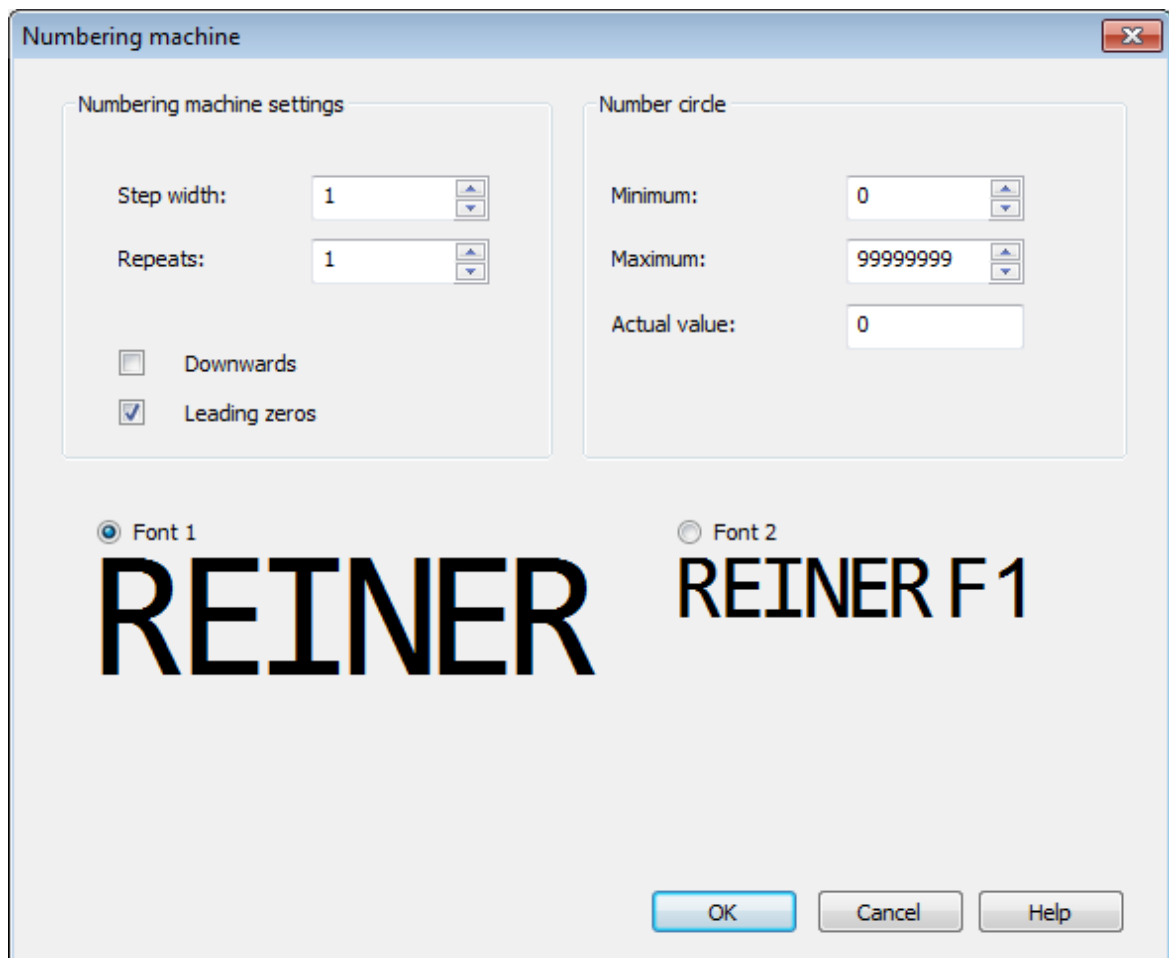
5.6.3.1 Presettings

Changed presettings apply to all future numbering machine objects.

- ▶ Select the tab “Format” and click “Numbering machine” in the menu bar .
The configuration window for numbering machines appears.

The configuration window for numbering machine is structured in three areas:

- Numbering machine settings
- Number circle
- Font



[Numbering machine settings](#)

[Number circle](#)

[Font](#)

5.6.3.1.1 Numbering machine settings

Function	Description
Step width	Indicates the interval at which the numberer counts on (e.g. 1,4,7... in steps of 3).
Repeats	Indicates the number of repetitions of an imprint. If, e.g., the value 3 is set, the numberer remains on the same number for three imprints before it counts on. The repeat factor can be set from 0 to 99. The numberer switches on at the value 0.
Downwards	The numberer can count up (e.g. 10, 11, 12 ...) or down (e.g. 10, 9, 8, ...).
Leading zeros	Leading zeroes can be suppressed or printed (e.g. 5 or 00000005). The number of printed digits depends on the maximums set under "Number circle".

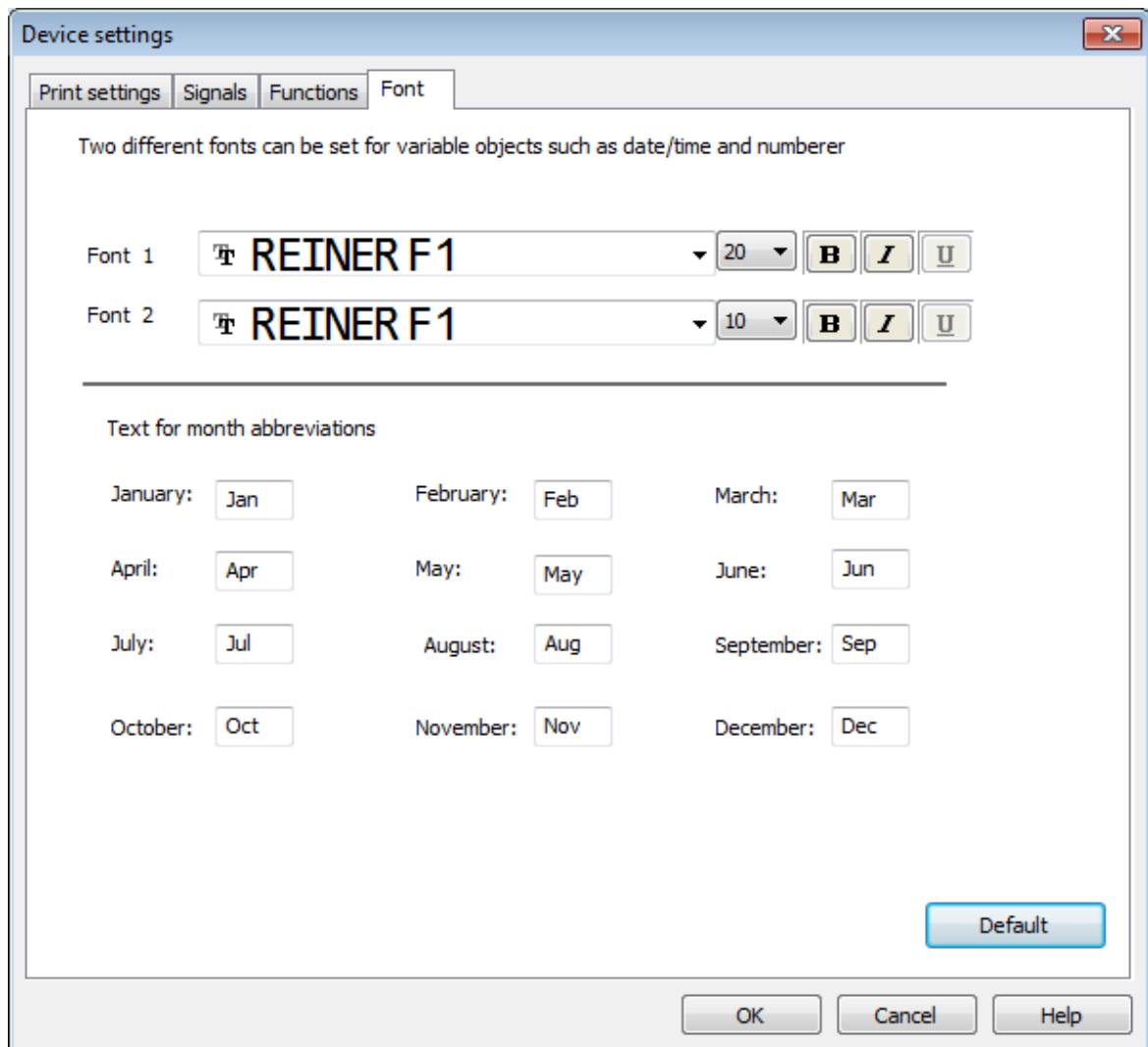
5.6.3.1.2 Number circle

The number circle defines the value range in which a numberer counter.




When the maximum or minimum value is reached (when the numberer counts up or down), the count is continued on the respective other end of the scale.

Function	Description
Minimum	This value marks the lower limit of the number circle.
Maximum	This value marks the upper limit of the number circle.
Actual value	The current counter reading can be set within the defined value range.

5.6.3.1.3 Font



Selection option between "Font1" and "Font 2".

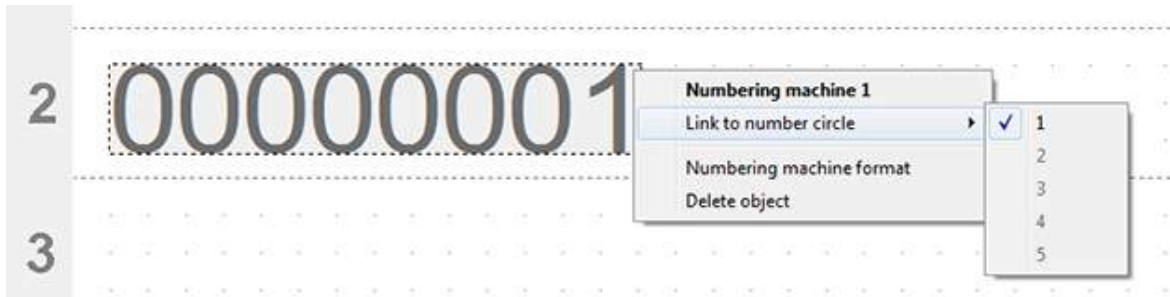
"Font 1" and "Font 2" can be configured in the menu bar  under tab "File → Settings → Font" or in the toolbar  via the button  (see "[Font](#)").

5.6.3.2 Context menu numbering machine object

If a numbering machine object is inserted (see "[Objects](#)"), the configuration corresponds to the presettings (see "[Presettings](#)").

The context menu can be used to individually set each numbering machine object deviating from this.

- To open the context menu, right-click the desired numbering machine object object.
The context menu opens.



Function	Description
Numbering machine	The number of the selected numberer object (1-5) is displayed.
Link to number circle	Each numberer (1-5) is first linked to a separate number circle (1-5). If several numberer objects are placed, the numberer selected can be linked to the number circle of another numberer. The dedicated number circle is rendered inactive by this. The link is used to synchronise the counter reading of different numberers. Each printing system of a linked numberer updates the counter reading of the shared number circle.
Numbering machine format	Opens the configuration window for numberer for the selected numberer. The numberer range can also be set deviating from each other for numberers that are linked to a shared number circle. Settings for the number circle can only be made here when the selected numberer is linked to the dedicated number circle.
Delete object	Deletes the object.

5.6.4 Barcode



The PCset graphic can be used to generate different barcode formats.

Barcode type, character sequence, parameters and barcode size can be set.

The barcode object format can be globally preset.

Presettings

Continuous numbering/dating

Context menu barcode object

Generate graphic

5.6.4.1 Presettings

Global presets can be set in the menu bar via the tab "Format → Barcode".

- OR -

Settings of already-inserted barcode objects can be called via the right mouse button "Barcode Format".

The configuration window for barcode appears.

The barcode window is structured in 3 areas:

Barcode

Function	Description
Type	Select the barcode type from the dropdown list.
Character sequence	Enter your desired character sequence.
Plain text preview	Indicates the character sequence without control characters.

Parameter

Function	Description
Display plain text	Inserts plain text below the barcode. The plain text is the character sequence that you have entered into the barcode object.
Display check figure	Indicates the check figure additionally in plain text. To be able to use this option, you need to activate display plain text. The check figure is the last digit or position of the barcode information.

Start and stop characters	Start and stop characters from A - D for the barcode coda bar.
---------------------------	--

Barcode size

Function	Description
Height (mm)	Barcode height. Can be set from 3.5 mm - 13.5 mm.
Module height	Height of the narrowest element in pixels (stroke or gap). Only for 2D barcodes.
Module width (pixels)	Width of the narrowest element in pixels (stroke or gap).
Module ratio X:1	Ratio of wide to narrow element in calculation of the code length.
Module ratio (2/5 matrix)	Start and stop characters for the barcode type coda bar. May contain letters A - D.

5.6.4.2 Continuous numbering/dating

The PCset graphic differs between **fixed** and **variable** barcodes. Fixed barcodes do not change their content during printing. Variable barcodes are made up of the text as well as the date/time and/or numberer, which change during printing.



All in all, the variable barcode objects are limited to four. Fixed barcode objects can be inserted in any number.




The variable barcodes include the barcode types "2/5 Interleaved", "Code 39" and "Code 128 B".



Only **one** numberer and/or **one** date/time can be inserted in each barcode.



At first insertion of a numberer or a date/time object, the presettings of the respective objects are loaded.

- ▶ To generate a barcode object, left-click the **barcode icon**  and pull it into a line to the desired position.
- ▶ Push right mouse button, select context menu "Barcode Format".
The configuration window for barcode appears.
- ▶ To insert the **numberer**, pull it into the character sequence by Drag & Drop.
The line "Character sequence" shows %N for numberer.
- ▶ To make the settings for the numberer, right-click %N or numberer.
The context menu opens (see "[Numberer](#)").
Make the desired settings and confirm with **OK**.
- ▶ To insert the **date/time**, pull it into the character sequence by Drag & Drop.
The line "Character sequence" shows %D for date/time.
- ▶ To make the settings for the date/time, right-click %D or date/time.
The context menu opens (see "[Date/time](#)").
Make the desired settings and confirm with **OK**.
- ▶ To save the settings made, click **OK**.



The red dash below the editing field determines the inserted position of the date/time and numberer object.

5.6.4.3 Context menu barcode object


If a barcode object is inserted (see "[Objects](#)"), the configuration corresponds to the presets. The context menu can be used to individually set each barcode object deviating from this.

- To open the context menu, right-click the desired barcode object.
The context menu opens as in the following figure.



Function	Description
Barcode format	To change the barcode format.
Generate Graphic	Fastens the barcode in the current position. Note: the barcode cannot be processed anymore after fastening.
Delete object	Deletes the object.

5.6.4.4 Generate graphic

 Text and barcode objects can be converted to graphics. Graphics are fixed and cannot be moved. Limited editing is possible via the additional function "Selection".

- Click object with the right mouse button.
- Select "Generate graphic".
The object is converted into a graphic.

5.6.5 Graphic



Generates a graphic object
Object can be placed precisely according to the grid.

[Context menu graphic object](#)

[Generate graphic](#)

[Dialogue load graphic](#)

5.6.5.1 Dialogue load graphic



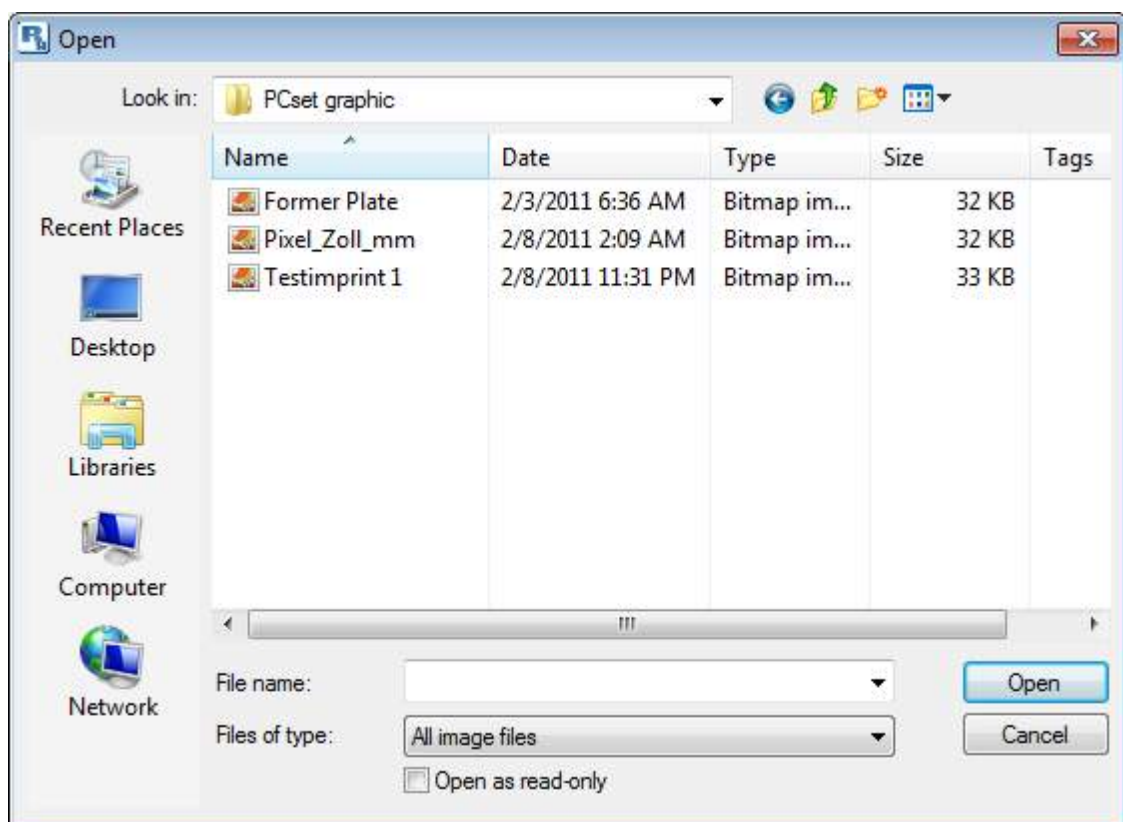
Imported colour and grey scale images are converted into a black/white image when the application is loaded. Use of black/white images is recommended.



Only graphics of the file type BMP, JPG, TIF or GIF can be loaded. The graphics should have a resolution of 300 dpi to match the print pattern 1:1.



For distortion-free printout in bet quality, a graphics should not exceed the maximum height of 160 pixels and the maximum width of 768 pixels.




5.6.5.2 Context menu graphic object



Function	Description
Black/White threshold	Select the black/white threshold.
Copy	Copies the object.
Generate Graphic	Anchors the graphic in the current position. Note: the graphic can no longer be edited after anchoring.
Delete object	Delete object.

5.6.5.3 Generate graphic

 Text and barcode objects can be converted to graphics. Graphics are fixed and cannot be moved. Limited editing is possible via the additional function "Selection".

- ▶ Click object with the right mouse button.
- ▶ Select "Generate graphic".
The object is converted into a graphic.

6 Maintenance

[Replace Print Cartridge](#)

[Clean Print Cardridge Contacts](#)

[Cleaning Nozzles](#)

[Clean Protective Nozzle Seal](#)

[Replace Protective Nozzle Seal](#)

[Clean Housing](#)

6.1 Replace Print Cartridge

The ink level of the print cartridge can be determined in the status display **d** of the PCSet graphic software.

i Depending on ink type used, different Protective Nozzle Seals are required (see "Replace Protective Nozzle Seal").

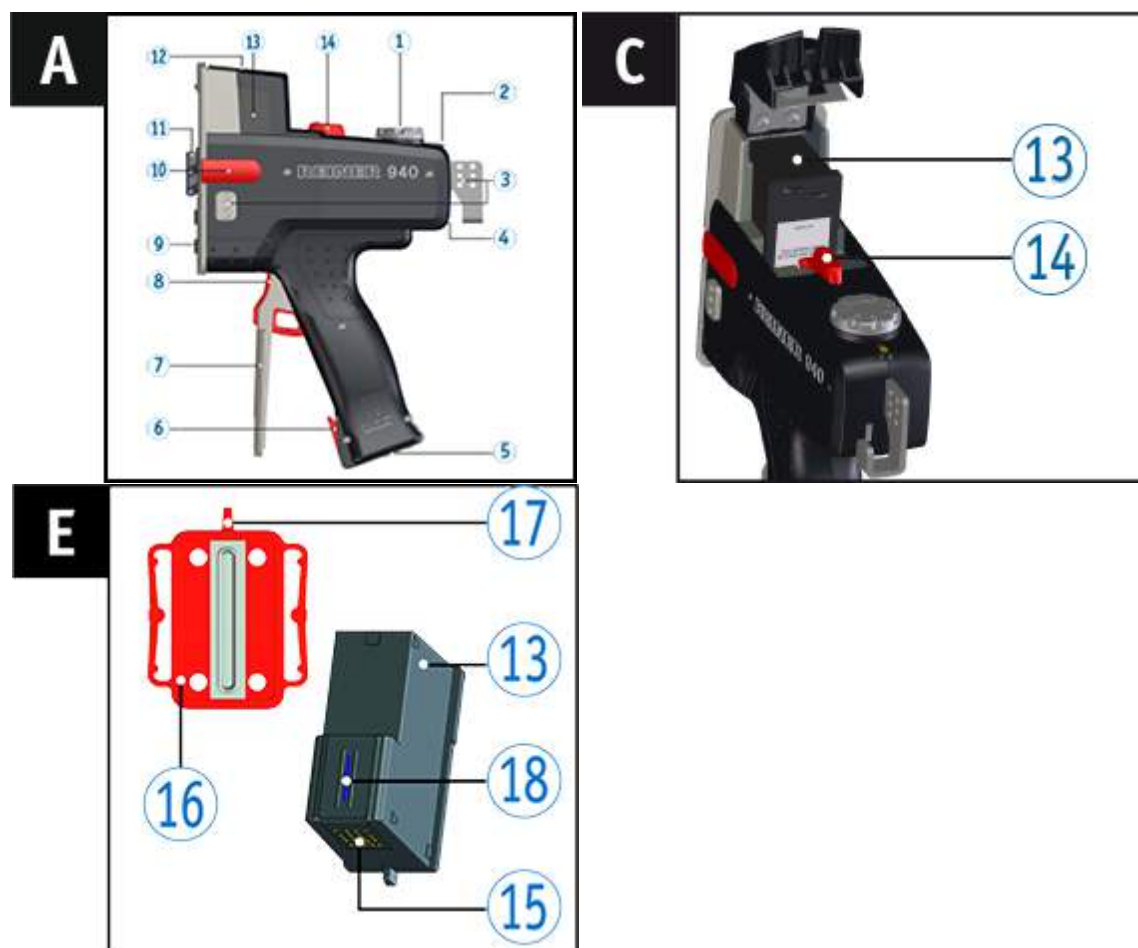
i Use sealing of the enclosed printing cartridge.

CAUTION

Damage to health from swallowing the ink.

- ▶ Do not swallow!
- ▶ Keep the print cartridge away from children.

Replace Print Cartridge ⇒ Fig. **A** + **C** + **E**

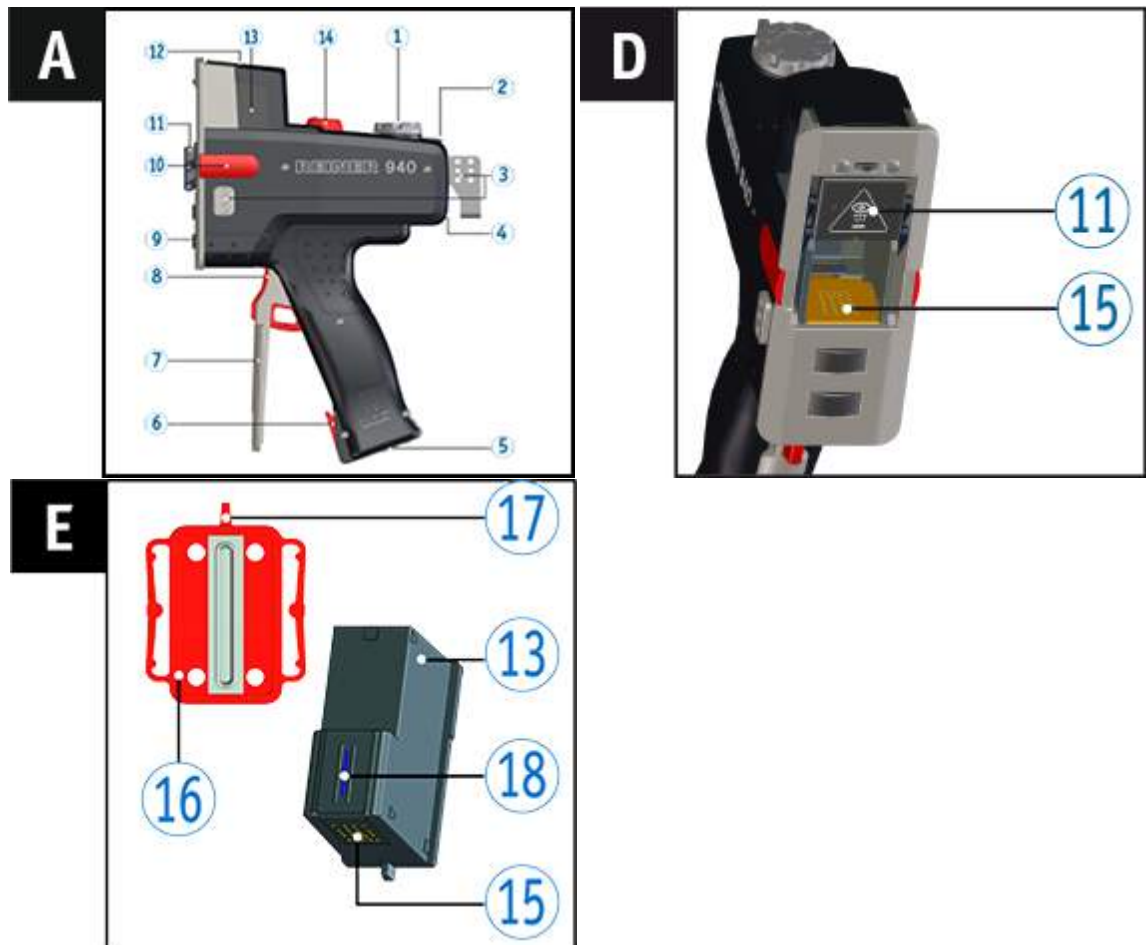


- ▶ Turn the setting wheel **1** to position **Off**.
- ▶ Push the cartridge cover release key **14** downwards, to open cartridge cover **12**.
- ▶ Remove the printing cartridge **13** from the device.

- ▶ Take a new printing cartridge **13** from the packaging and remove the protective foil or clip from the nozzles **18**.
- ▶ Insert the cartridge **13**.
- ▶ Close the cartridge cover **12**.

6.2 Clean Print Cartridge Contacts


Clean Print Cartridge Contacts ⇒ Fig. + **D** + **E**



In rare case, contamination of the print cartridge contacts **15** may cause defective print results.

- ▶ Push down the printing cover locking button **14**.
The latch of the printing cartridge cover **12** is loosened.
- ▶ Fold open the printing cartridge cover **12**.
- ▶ Remove the printing cartridge **13** from the device.
- ▶ Push the locking lever **7** and latch the locking closure lever **6**.
- ▶ Clean the contact printing cartridge **15** at the printing cartridge **13** and inside the REINER 940 with a soft cloth, poss. slightly soaked in spirits.

6.3 Cleaning Nozzles

If stripes are printed or if there are any problems with print quality, there may be dry ink at the nozzles .

Print without stripes



Print with stripes




[Automatic Cleaning of Nozzles](#)

[Manual Nozzle Cleaning](#)

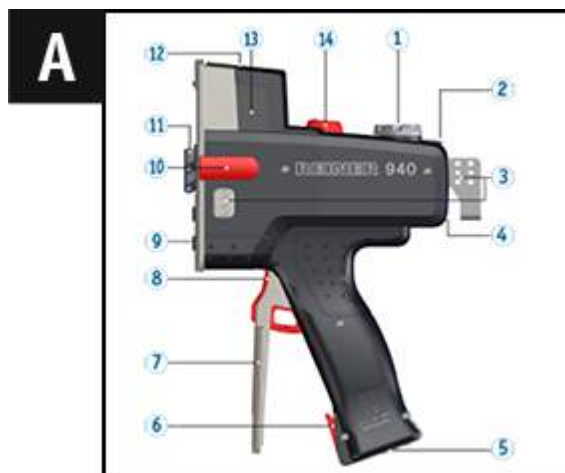
6.3.1 Automatic Cleaning of Nozzles



Danger of blinding in case of contact between ink and eyes.

- ▶ Never hold the REINER 940 with its nozzles  pointing at the face of persons!

Trigger cleaning mechanism ⇒ Fig. **A**

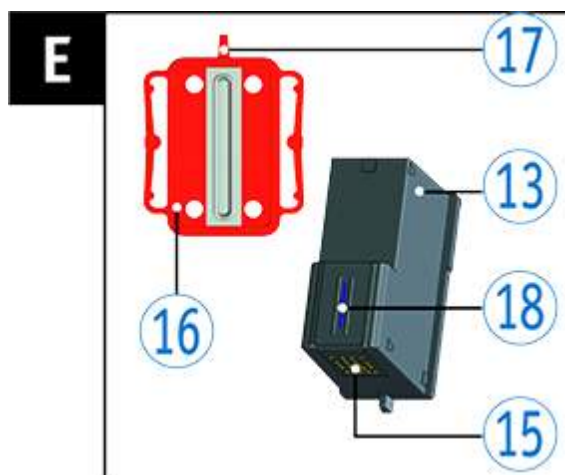


i A small amount of ink is ejected for cleaning of the nozzles 18.

- ▶ Turn the setting wheel 1 to position C.
- ▶ Press the print trigger 8.

6.3.2 Manual Nozzle Cleaning

Manual nozzle cleaning ⇒ Fig. **E**

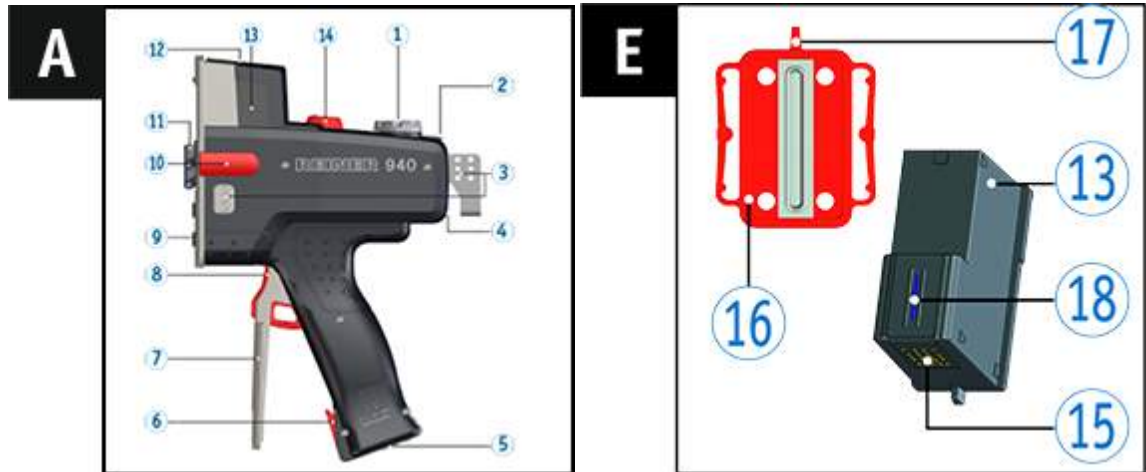


When the automatic nozzle cleaning does not lead to the desired success, we recommend the following measure:

- ▶ To loosen the dried ink, slightly push a soft cloth possibly moisten slightly with Ethanol (spirit) against the nozzles 18 for approx. three seconds.
- ▶ Dab off dissolved ink and wipe the nozzles 18 dry.

6.4 Clean Protective Nozzle Seal

Clean Protective Nozzle Seal ⇨ Fig. **A** + **E**



The seal **16** is behind the nozzles cover **11**.

- ▶ Push down the printing cover locking button **14**.
The latch of the printing cartridge cover **12** is loosened.
- ▶ Fold open the printing cartridge cover **12**.
- ▶ Remove printing cartridge **13**.
- ▶ Dab dry the seal **16** with a soft cloth.

i Clean the Protective Nozzle Seal **16** at regular intervals.
Replace at stronger contamination or damage.

6.5 Replace Protective Nozzle Seal



Find a clip on our homepage or at www.reiner.de or youtube.

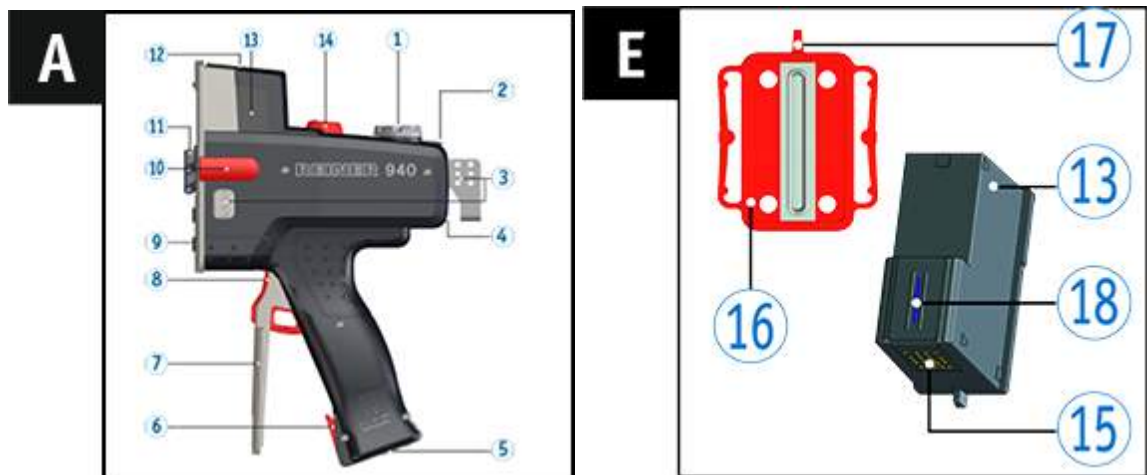
Replace Protective Nozzle Seal ⇒ Fig. **A** +



Depending on ink type used, different seals are required.



- Inkjet print cartridge P3-S-BK: use red seal
- Inkjet print cartridge P3-MP3-BK: use blue seal



- ▶ Push down the printing cover locking button 14.
The latch of the printing cartridge cover 12 is loosened.
- ▶ Fold open the printing cartridge cover 12.
- ▶ Remove printing cartridge 13.
- ▶ To loosen the seal 16 insert the seal tip 17 of the new seal 16 or another pointy object into the holes of the nozzle cover 11.
- ▶ To remove the seal 16, turn the REINER 940.
- ▶ Position the new seal 16 with the seal tip 17 first behind the nozzle cover 11 and latch it with slight pressure.

6.6 Clean Housing

CAUTION

Danger of electric shock when liquids enter the inside of the device.

- ▶ Pull the mains adapter from the socket.
- ▶ Inform specialist dealer or REINER service.

NOTICE

Aggressive cleaning agents may damage the housing surface.

- ▶ Do not use abrasives and plastic-dissolving detergents for cleaning.
- ▶ Clean the housing surface of the device with a soft cloth if required. Slightly moisten the cloth in water with mild detergent at stronger contamination.

7 Recognising and removing interferences

[REINER 940 does not work](#)

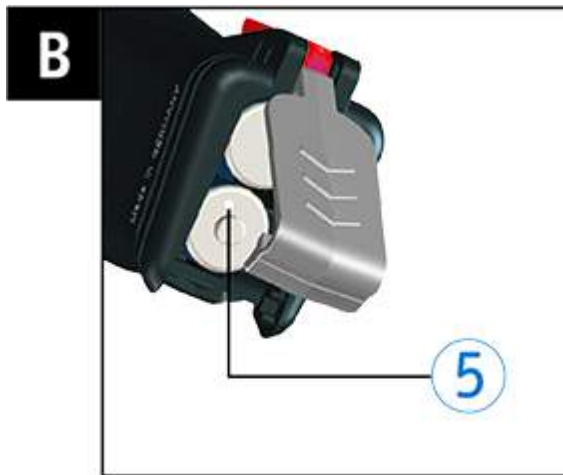
[Reasons for rechargeable batteries not being charged](#)

[Visual signals \(LED\)](#)

[Acoustic signals](#)

7.1 REINER 940 does not work

Troubleshooting ➡ Fig. **B**



- ▶ Remove the USB cable from the REINER 940.
- ▶ Open the battery compartment ⑤ in the arrow direction.
- ▶ Remove the rechargeable batteries.
- ▶ Wait for approx. 3 seconds.
- ▶ Replace the rechargeable batteries.
- ▶ Connect the micro-USB socket of the device ④ to the computer via the USB cable.
- ▶ Turn the setting wheel ① to position 1.
- ▶ Start the PCset graphic.
- ▶ Check [charge status display](#).

7.2 Reasons for rechargeable batteries not being charged

- No rechargeable batteries inserted or rechargeable batteries inserted incorrectly
- Contacts in the battery compartment defective
- Temperature of rechargeable batteries above 40 degrees Celsius
- Rechargeable batteries too old
- Rechargeable batteries defective
- Rechargeable batteries completely discharged (deep discharge)

Capacity and service life

The rechargeable batteries reach their full capacity after several charge/discharge cycles. With increasing age, the rechargeable batteries' operating time reduces. Batteries are subject to wear. A longer service life than six months cannot be warranted.

7.3 Visual Signals (LED)




When the indicator flashes orange (warning), the status display of the PCset graphic software shows a detailed device message (see "[Operating Interface](#)").

LED Anzeige	Condition	Cause	Removal	Notes
Green		Ready		
Green	Flashing	Device is in standby mode	▶ Switch off and on again	The power saving mode is activated automatically after 10 minutes when the device is not in use
Orange (warning)	Flashing, interval of 1	<ul style="list-style-type: none"> - No or defective print cartridge - Wrong print cartridge - Ink level writing error - Print cartridge not inserted correctly - Rechargeable battery empty - No rechargeable battery/defective rechargeable battery 	▶ Insert print cartridge ▶ Insert print cartridge correctly ▶ Charge the rechargeable battery ▶ Insert/replace rechargeable battery	The detailed cause and removal can be determined in the status display of the PCset graphic software
Orange (warning)	Flashing, interval of 2	<ul style="list-style-type: none"> - Print cartridge almost empty - Print speed is not ok 	▶ Check print	Acoustic signal as well
Orange (warning)	Flashing, interval of 3	Print cartridge empty	▶ Replace ink cartridge	Acoustic signal as well

Orange (warning)	Falshing, interval of 4	Lock is open	► Close lock	<ul style="list-style-type: none"> - Acoustic signal as well - The display appears after 30 seconds of non-use in standard ink, after 10 seconds in MP2 ink and after 6 seconds in MP3 ink
Orange (warning)	Falshing, interval of 5	Battery nearly flat/ capacity low	► Charge/replace rechargeable battery	Acoustic signal as well
Orange (warning)	Permanently lit	Print speed too fast or too slow	► Adjust print speed	Continuous movement necessary
Red (error)	Falshing, interval of 1	Device error	► Disconnect device from the power supply for approx. 10 seconds (including rechargeable batteries and USB connection)	If the error remains after activation, have the device inspected by the REINER support
Red	Permanently lit	<ul style="list-style-type: none"> - Firmware has not been installed correctly - Device error 	► Install firmware again ► Switch the device off and on and charge rechargeable battery	<ul style="list-style-type: none"> - If the error remains after activation, have the device inspected by the REINER-Support - Deep discharge of rechargeable batteries or safety deactivation - If the error remains after activation, have the device inspected by the REINER-Support
Off		<ul style="list-style-type: none"> - Device is switched off - Rechargeable battery empty - Rechargeable battery faulty - No rechargeable battery inserted - Device error 	► Switch device on ► Charge the batteries ► Replace the rechargeable batteries ► Insert the rechargeable batteries ► Please contact your specialist dealer or the REINER Support team	

7.4 Acoustic Signals

Signal	Cause	Rectification	Notes
Continuous tone	Print speed is not ok	▶ Check imprint	Continuous movement necessary
1 sound impulse	<ul style="list-style-type: none"> - Print start - Print end - When in stepping function and if, while the dial is in F, the print trigger is activated 		
1 sound impulse every 10 seconds	<ul style="list-style-type: none"> - No or a defective print cartridge - Wrong print cartridge - Ink level writing error - Print cartridge not inserted correctly - Rechargeable battery empty - No rechargeable battery/ defective rechargeable battery 	<ul style="list-style-type: none"> ▶ Insert ink cartridge ▶ Insert print cartridge correctly ▶ Charge the rechargeable battery ▶ Insert/replace rechargeable battery 	The detailed cause and rectification can be determined in the status display  of the PCset graphic software
2 sound impulses every 30 seconds	Print cartridge almost empty	▶ Check print	
3 sound impulses every 10 seconds	Print cartridge empty	▶ Replace print cartridge	
4 sound impulses	Lock is open	▶ Close lock	<ul style="list-style-type: none"> - Risk of ink drying - The signal becomes of higher frequency and more penetrating, the longer the lock remains open - The signal ends when the lock is closed again or a new imprint is carried out - The display appears after 30 seconds of non-use in standard ink, after 10 seconds in MP2 ink and after 6 seconds in MP3 ink
5 sound impulses per minute	Battery nearly flat/capacity low	▶ Charge/replace rechargeable battery	

8 Technical Data and Accessories

[Rating Plate](#)

[Technical data](#)

[Transport and disposal](#)

[Accessories](#)

8.1 Rating Plate



Observe the rating plate before the device is connected.

Nameplate is located on the inside of the print head lock of the REINER 940.
The following information has the following meaning:

Mod. = Model

S/N = Serial Number



= REINER 940 has the CE-mark according to the currently valid low-voltage and EMC directive.



= REINER 940 is in accordance with the following standards or standardized documents
FCC 47 CFR Ch.1 Part 15 Bluetooth: FCC: R7TAMB2300.



= Safety of Information Technology Equipment.



= REINER 940 is produced according to the safety standards IEC/EN 60950-1.



Electrical and electronic waste devices

Waste devices must not be disposed of in the conventional household waste. They must be returned to a special collection point for recycling of electrical and electronic devices.



8.2 Technical data

Technical Data	
Dimensions	47 x 147 x 221 mm (L x W x H)
Weight	approx. 530 g
Max. printing range	140 x 12.7 mm (W x H)
Max. printing speed	400 mm/st
Print resolution	300 dpi
Battery capacity	up to 1,000 imprints
Print technology	inkjet
Barcode print	EAN 8, EAN 13, 2/5 Interleaved, 2/5 Industrial, 2/5 Matrix Code 39, Code 39 Full ASCII, Code Codabar, Code 93, Code 93 Full ASCII, Code 128 B, GS1 128 (EAN 128)
Barcode for continuous numbering/dating	Code 128 B, Code 39, 2/5 Interleaved
Graphic	BMP, JPG, TIFF, GIF
Ambient temperature for operation	10 °C ... +40 °C
Recommended ambience temperature for operation	16 °C...+32 °C
Humidity for operation	8 % ... 80 % relative humidity
Recommended humidity for operation	10 % ... 70 % relative humidity
Temperature for storage	
With standard cartridges	1 °C ... +43 °C
With MP cartridges	10 °C ... +20 °C
Humidity for storage	5 %... 80 % relative humidity
Temperature for transport	
With standard cartridges	-20 °C ... +60 °C (up to 12 hours)
With MP cartridges	10 °C ... +20 °C (up to 12 hours)
Humidity for transport	10 %... 90 % relative humidity
Data transfer	USB or Bluetooth
Power supply	2 x AA NiMH rechargeable battery Chargeable through supplied power supply unit. Input: 100 - 240 VaC, 50 - 60 Hz, 0.3 a Output: 5 VDC 1A
Standby time per battery charge	approx. 72 hours
Battery charge time	approx. three hours.
Data retention (independent of batteries)	approx. 10 years
Print capacity per print cartridge	approx. 5,000 imprints depending on ink and print mode
Protection type	IP 20, Degree of contamination 2, equipment class 3
External cycles	max. Frequency 3 kHz (Normal), 6 kHz (Economic) PWH > = 50µs VIL < = 0,7V VIH 2,4 V - 5,0V

8.3 Transport and Disposal

Transport

NOTICE

Damage to the device at improper transport.

- ▶ Only use packaging that protects the device from impact and hits!

Disposal



Defective or flat batteries

Flat batteries of rechargeable batteries must not be disposed of in the household waste.



Electrical and electronic waste devices

Waste devices must not be disposed of in the conventional household waste. They must be returned to a special collection point for recycling of electrical and electronic devices.



8.4 Accessories

Inkjet cartridges

- Order-N° P3-S-BK: 947 100 - 000
- Order-N° P3-S-MG: 947 100 - 002

Inkjet cartridges MP3 (quick drying)

- Order-N° P3-MP3-BK: 947 100 - 120

9 Contact

Ernst Reiner GmbH & Co. KG

Baumannstr. 16

78120 Furtwangen/Germany

Phone: +49 7723 657-0

Fax: +49 7723 657-200

Email reiner@reiner.de

www.reiner.de

© 2015 Ernst Reiner GmbH & Co. KG

All rights reserved. Translation, reprint and other reproduction of these operating instructions, even in parts and no matter the form, shall require our express written consent. We reserve the right to make content changes to these operating instructions without notice. These operating instructions were drawn up with care; however, we cannot assume any liability for any defects and errors or resulting consequential damage.

10 Operating Manual

REINER

REINER 940



Bedienungsanleitung
Operating Manual
Manual de instrucciones
Mode d'emploi
Manual de instruções
Istruzioni per l'uso

DE
GB
ES
FR
PT
IT

Operating Manual GB

Index

- A -

Accessories 88
Acoustic Signals 85

- B -

Barcode 67

- C -

Charge batteries 15
Contact 89

- D -

Date/Time 57
Device messages 47
Disposal 88

- E -

Example workflow: generate print pattern 50
 Configure print pattern 50
 Print print pattern 52
 Transfer Print Pattern 51

- F -

Firmware update 20

- G -

Graphic 72

- I -

Ink level 45
Inserting Printing Cartridge 16
Inserting rechargeable batteries 14
Installing Software 19
Interferences 82

- M -

Maintenance 74
 Clean Housing 81
 Clean Print Cartridge Contacts 76
 Clean Protective Nozzle Seal 79
 Cleaning Nozzles 77
 Replace Protective Nozzle Seal 80

- N -

Numbering machine 62

- O -

Objects 27
Operating Element 6
Operating Interface 22
 Menu Bar 23
 Objects 27
 Toolbar 25

- R -

Replace Print Cartridge 75
Replace Protective Nozzle Seal 80

- S -

Safety, Description 10
Set Wheel 8
Setting objects 54
 Barcode 67
 Date/Time 57
 Graphic 72
 Numbering machine 62
 Text 54
Status displays 45

- T -

Technical Data 87
Text 54



REINER

www.reiner.de

