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**RV2 Thermaltransferprinter**

**Quick reference guide**



Modellinformationen

[](https://rosenbaum-kennzeichnung.de/rv2-drucker/)



**Quick reference guide and product safety**

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# Intended Use

* The label printer is a state-of-the-art device which complies with the recognized safety-related rules and regulations. Despite this, a danger to life and limb of the user or third parties could arise and the label printer or other property could be damaged while operating the device.
* The label printer may only be used while in proper working order and for the intended purpose. Users must be safe, aware of potential dangers and must comply with the operating instructions. Faults, in particular those which affect safety, must be remedied immediately.
* The label printer is solely intended to print suitable media which have been approved by the manufacturer. Any other or additional use is not intended. The manufacturer/supplier is not liable for damage resulting from misuse. Any misuse is at your own risk.
* Intended used includes heeding the operating manual, including the maintenance recommendations/regulations specified by the manufacturer.

# Safety Notes

* The label printer is designed for power supply systems from 110 … 230 V AC. Connect the label printer only to electrical outlets with a ground contact.
* Couple the label printer to devices using extra low voltage only.
* Before making or undoing connections, switch off all devices involved (computer, printer, accessories etc.).
* Operate the label printer in a dry environment only and do not get it wet (sprayed water, mist etc.).
* Maintenance and servicing work can only be carried out by trained personnel.
* Operating personnel must be trained by the operator on the basis of the operating manual.
* If the label printer is operated with the cover open, ensure that clothing, hair, jewellery and similar personal items do not contact the exposed rotating parts.
* The print unit and parts of it (e.g. printhead) can get hot during printing. Do not touch the printhead during operation. Cool down the print unit before changing material, removal or adjustment.
* Never use highly inflammable consumables.
* Carry out only the actions described in these operating instructions. Any work beyond this may only be performed by the manufacturer or upon agreement with the manufacturer.
* Unauthorized interference with electronic modules or their software can cause malfunctions.
* Other unauthorized work or modifications to the direct print module can endanger operational safety.
* Always have service work done in a qualified workshop, where the personnel have the technical knowledge and tools required to do the necessary work.
* There are warning stickers on the direct print modules that draw your attention to dangers. Therefore the warning stickers are not to be removed as then you and others cannot be aware of dangers and may be injured.

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|  | DANGER!  Danger to life and limb from power supply!   * Do not open the casing. |

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| i-kreis | NOTICE!  **For Norway and Sweden:** Devices which are attached via a power connector with a connection to safety earthing to the safety earthing of the electric equipment of the building and to a cable distribution system with coaxial cables can cause fire risks under certain circumstances. Therefore the connection with a cable distribution system must be made by a device which provides an electric insulation underneath a specific frequency range. |

# Environmentally-Friendly Disposal

Manufacturers of B2B equipment are obliged to take back and dispose of old equipment that was manufactured after 13 August 2005. As a principle, this old equipment may not be delivered to communal collecting points. It may only be organised, used and disposed of by the manufacturer. Rosenbaum products accordingly labelled can therefore be returned to Zeichentechnik Rosenbaum GmbH & Co.KG.

This way, you can be sure your old equipment will be disposed of correctly.

Zeichentechnik Rosenbaum GmbH & Co.KG thereby fulfils all obligations regarding timely disposal of old equipment and facilitates the smooth reselling of these products. Please understand that we can only take back equipment that is sent free of carriage charges.

The electronics board of the printing system is equipped with a battery. This must only be discarded in battery collection containers or by public waste management authorities.

Further information on the WEEE directive is available on our website wwwr.rosenbaum-kennzeichnung.de.

# Operating Conditions

Before initial operation and during operation these operating conditions have to be observed to guarantee save and interference-free service of our printers.

Therefore please carefully read these operating conditions.

As the delivery is customised, please compare the supplied accessories with your order.

# General Conditions

Shipment and storage of our printers are only allowed in original packing.

Installation and initial operation of printer is only allowed if operating conditions were fulfilled.

Initial operation, programming, operation, cleaning and service of our printers are only recommended after careful study of our manuals.

Operation of printer is only allowed by especially trained persons.

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| i-kreis | NOTICE!  Perform trainings regularly. Content of the training are the chapters 'Operating Conditions', 'Loading Media' and 'Maintenance and Cleaning'. |

These indications are also valid for someone else's equipment supplied by us.

Only use original spare and exchange parts.

Please contact the manufacturer with respect to spare/wear parts.

# Conditions for Installation Place

The installation place of printer should be even, free of vibration and currents of air are to be avoided.

The printers have to be installed to ensure optimal operation and servicing.

# Installation of Power Supply

The installation of the power supply to connect our printers has to be effected according to the international rules and regulations, especially the recommendations of one of the three following commissions:

* International Electronic Commission (IEC)
* European Committee for Electro technical Standardisation (CENELEC)
* Verband Deutscher Elektrotechniker (VDE)

Our printers are constructed according to VDE and have to be connected to a grounded conductor. The power supply has to be equipped with a grounded conductor to eliminate internal interfering voltage.

# Technical Data of Power Supply

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| --- | --- |
| Power line voltage and power line frequency: | see type plate |
| Allowable tolerance of power line voltage: | +6 % … −10 % of nominal value |
| Allowable tolerance of power line frequency: | +2 % … −2 % of nominal value |
| Allowable distortion factor of power line voltage: | ≤ 5 % |

Anti-Interference measures:

In case your net is infected (e.g. by using thyristor controlled machines) anti-interference measures have to be taken. You can use one of the following possibilities:

* Provide separate power supply to our printers.
* In case of problems please connect capacity-decoupled isolation transformer or similar interference suppressor in front of our printers.

# Stray Radiation and Immunity from Disturbance

Emitted interference according to EN 61000-6-3: 2007 industrial sector

* Interference voltage to wires according to EN 55022: 09-2003
* Interference field power according to EN 55022: 09-2003
* System perturbation according to EN 61000-3-2: 09-2006
* Flicker according to EN 61000-3-3: 1955 + A1:2001 + A2:2005

Immunity to interference according to EN 61000-6-2: 2005 industrial sector

* Electromagnetic fields according to EN 61000-4-3: 11-2003, ENV 50204: 03-1995
* Fast transient burst according to EN 61000-4-4: 07-2005
* Surge according to EN 61000-4-5: 12-2001
* High-frequency voltage according to EN 61000-4-6: 12-2001
* Voltage interruption and voltage drop according to EN 61000-4-11: 02-2005

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| i-kreis | NOTICE!  This is a machine of type A. This machine can cause interferences in residential areas; in this case it can be required from operator to accomplish appropriate measures and be responsible for it. |

# Connecting Lines to External Machines

All connecting lines have to be guided in shielded lines. Shielding has to be connected on both sides to the corner shell.

It is not allowed to guide lines parallel to power lines. If a parallel guiding cannot be avoided a distance of at least 0.5 m has to be observed.

Temperature of lines between: −15 to +80 °C.

It is only allowed to connect devices which fulfil the request 'Safety Extra Low Voltage' (SELV). These are generally devices which are checked corresponding to EN 60950/EN 62368-1.

# Installation of Data Lines

The data cables must be completely protected and provide with metal or metallised connector housings. Shielded cables and connectors are necessary, in order to avoid radiant emittance and receipt of electrical disturbances.

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| Allowable lines |  |
| Shielded line: | 4 x 2 x 0,14 mm² ( 4 x 2 x AWG 26)  6 x 2 x 0,14 mm² ( 6 x 2 x AWG 26) 12 x 2 x 0,14 mm² (12 x 2 x AWG 26) |

Sending and receiving lines have to be twisted in pairs.

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| Maximum line length: | with interface V 24 (RS232C) - 3 m (with shielding)  with parallel interface - 3 m (with shielding)  with USB - 3 m  with Ethernet - 100 m |

Air Convection

To avoid inadmissible heating, free air convection has to be ensured.

# Limit Values

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| Protection according IP: | 20 |
| Ambient temperature °C (operation): | min. +5 max. +35 |
| Ambient temperature °C (storage): | min. −20 max. +60 |
| Relative air humidity % (operation): | max. 80 |
| Relative air humidity % (storage): | max. 80 (bedewing of printers not allowed) |

# Guarantee

We do not take any responsibility for damage caused by:

* Ignoring our operating conditions and operating manual.
* Incorrect electric installation of environment.
* Building alterations of our printers.
* Incorrect programming and operation.
* Not performed data protection.
* Using of not original spare parts and accessories.
* Natural wear and tear.

When (re)installing or programming our printers please control the new settings by test running and test printing. Herewith you avoid faulty results, reports and evaluation.

Only specially trained staff is allowed to operate the printers.

Control the correct handling of our products and repeat training.

We do not guarantee that all features described in this manual exist in all models. Caused by our efforts to continue further development and improvement, technical data might change without notice.

By further developments or regulations of the country illustrations and examples shown in the manual can be different from the delivered model.

Please pay attention to the information about admissible print media and the notes to the printer maintenance, in order to avoid damages or premature wear.

We endeavoured to write this manual in an understandable form to give and you as much as possible information. If you have any queries or if you discover errors, please inform us to give us the possibility to correct and improve our manual.

# Note on the EU declaration of conformity

Llabel printer of Zeichentechnik Rosenbaum GmbH&Co.KG meet the following safety guidelines:

 **CE** EG-Low Voltage Directive (2014/35/EU)

EG-Directive Electromagnetic Compatibility (2014/30/EU)

# Unpack the Label Printer

* Lift the label printer on the bottom and remove the printer from the carton.
* Check the label printer for transport damages.
* Check delivery for completeness.

# Scope of Delivery

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| * Label printer. * Empty core, mounted on the transfer ribbon rewinder. * Tear-off edge (basic printers only). * Dispensing edge (printers with dispenser option only). | * Power cable. * Documentation. * Printer driver CD. * Labelstar Office LITE. |

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| i-kreis | NOTICE!  Retain the original packaging for subsequent transport. |

# Set up the Label Printer

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| ausrufezeich | CAUTION!  The label printer and the print media can be damaged by moisture and water.   * Set up the label printer only in a dry place protected from sprayed water. |

* Set up the label printer on a level, vibration-free and air draught-free surface.
* Open the cover of label printer.
* Remove the foam transportation safeguards near the printhead.

# Connect the Label Printer

The printer is equipped with a versatile power supply unit. The device may be operated with a mains voltage of 110 … 230 V AC / 50-60 Hz without any adjustments or modifications.

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| ausrufezeich | CAUTION!  The label printer can be damaged by undefined switch-on currents.   * Set the power switch to '0' before plugging in the label printer. |

* Insert the power cable into the power connection socket.
* Insert the plug of power cable into a grounded electrical outlet.

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| i-kreis | NOTICE!  Insufficient or missing grounding can cause faults during operation.  Ensure that all computers and connection cables connected to the label printer are grounded. |

* Connect the label printer to a computer or network with a suitable cable.

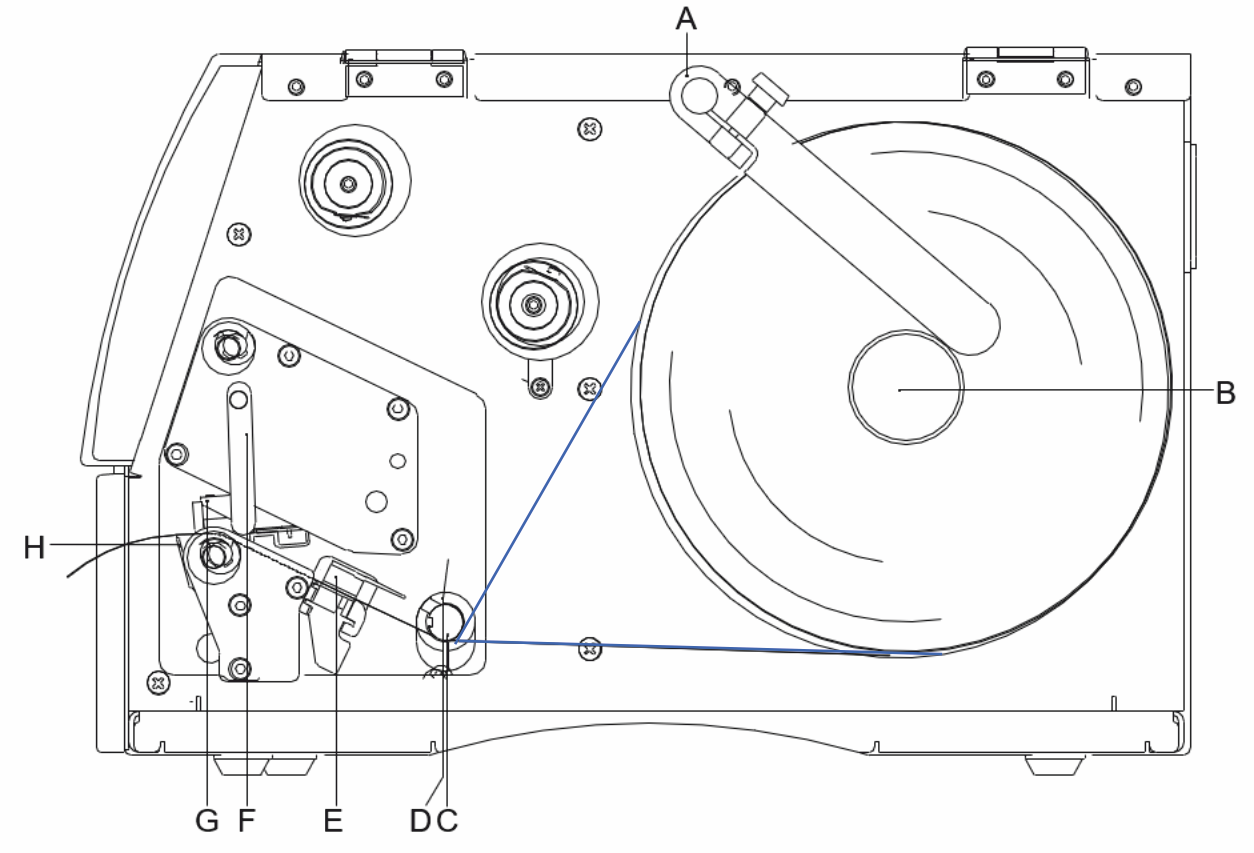
# Initial Operation of the Label Printer

* After all connections are completed, switch on the label printer. The main menu appears which shows the printer type, current date and time.
* Insert label material and transfer ribbon.
* Start measuring in the menu *Label layout/Measure label*.
* Press the key  to finish measuring.

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| i-kreis | NOTICE!  To enable correct measuring, at least two completed labels have to be passed through (not for continuous labels). |

During measuring the label and gap length small differences can occur. Therefore the values can be set manually in menu *Label layout/Label and Gap*.

# Load Label Roll in Tear-off Mode



* Open the printer cover.
* Open the printhead (G) by turning the red pressure lever (F) anticlockwise.
* Remove the outside label mounting plate (A).
* Load the label roll with inner winding onto the unwinding roll (B) and attach again the label mounting plate (A).
* Lead the label material below the return pulley (C) and the printhead (G).  
  Pay attention that the label runs through the photocell (E).
* In order to move the printhead (G) down, turn the red pressure lever (F) in clockwise direction until it locks.
* The tear off edge (H) is visible in front of the printhead.
* Enter the offset value in the menu *Print settings/Tear-off*.
* Adjust the adjusting ring (D) of the return pulley (C) to the width of material.
* Close the printer cover.

# Video „Rat und Tat:“

Set printer in the

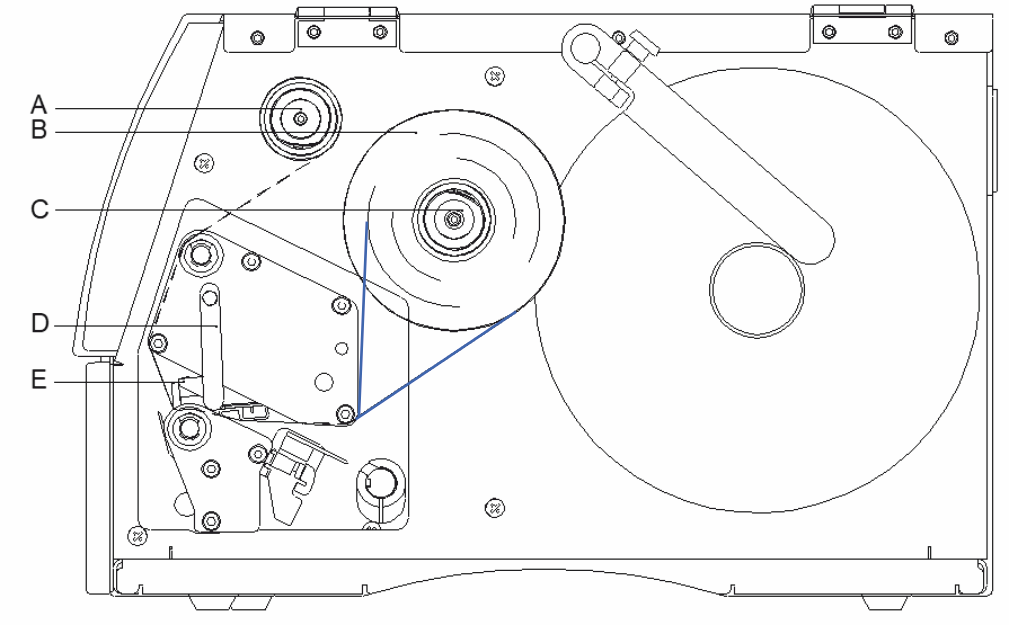
Insert material Set printer in the Download Mounting centered

programm HEROS printer driver material guidance

[](https://www.youtube.com/watch?v=nwJZr3FzDpI) [](https://www.youtube.com/watch?v=bGu8r5TIArk) [](https://rosenbaum-kennzeichnung.de/rv2-drucker-treiber/) [](https://www.youtube.com/watch?v=WC_bV6LXKas)

# Load Transfer Ribbon

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| i-kreis | NOTICE!  For the thermal transfer printing method it is necessary to load a ribbon, otherwise when using the printer in direct thermal print it is not necessary to load a ribbon. The ribbons used in the printer have to be at least the same width as the print media. In case the ribbon is narrower than the print media, the printhead is partly unprotected and this could lead to early wear and tear. |



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| i-kreis | NOTICE!  Before a new transfer ribbon roll is loaded, the printhead must be cleaned using printhead and roller cleaner (97.20.002). The handling instructions for the use of Isopropanol (IPA) must be observed. In the case of skin or eye contact, immediately wash off the fluid thoroughly with running water. If the irritation persists, consult a doctor. Ensure good ventilation. |

* Clean the printhead before loading the transfer ribbon.
* Open the printer cover.
* Open the printhead (E) by turning the red pressure lever (D) anticlockwise.

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| ausrufezeich | **caution!**  Risk of scraping when inserting the transfer ribbon res. when removing the used transfer ribbon!   * Be careful with the spring steel plate edges! |

* Load the transfer ribbon roll (B) with outer winding onto the unwinding roll (C).
* Place an empty ribbon roll onto the rewinding roll (A) and lead the transfer ribbon below the printhead (E).
* Fix the ribbon with an adhesive tape in rotating direction at the empty roll of the rewinding roll (A).  
  Pay attention to the rotation direction of transfer ribbon rewinder anticlockwise.
* In order to move the printhead (E) down, turn the red pressure lever (D) in clockwise direction until it locks.
* Close the printer cover.

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| i-kreis | NOTICE!  As for the electrostatic unloading the thin coating of the thermal printhead or other electronic parts can be damaged, the transfer ribbon should be antistatic. The use of wrong materials can lead to printer malfunctions and the guarantee can expire. |

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| ausrufezeich | caution!  Impact of static material on people!   * Use antistatic transfer ribbon, because static discharge can occur when removing. |

# Print Settings

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| Keys: , | |
| Speed | Indication of print speed in mm/s. Value range: 50 mm/s … 200 mm/s (see the technical data). |
| Contrast | Indication of value to set the print intensity when using different materials, print speeds or printing contents. Value range: 10 % … 200 %. |
| Key: |  |
| Transfer ribbon control | Examination if the transfer ribbon roll is to end or if the ribbon was torn at the unwinding roll.  Off: The ribbon control is deselected, i.e. the printer continues without an error message. On, weak sensibility: The current print order is interrupted and an error message appears at the printer display. The printer reacts at approx. 1/3 more slowly to the end of the transfer ribbon (default). On, strong sensibility: The current print order is interrupted and an error message appears at the printer display. The printer reacts immediately to the end of the transfer ribbon. |
| Key: |  |
| Y displacement | Indication of initial point displacement in mm. Value range: −30.0 … +90.0. |
| Key: |  |
| X displacement | Displacement of the complete print transverse to the paper direction. Value range: −90.0 … +90.0. |
| Key: |  |
| Tear off | Indication of value to which the last label of a print order is moved forward and is moved back to the beginning of label at a new print start. Value range: 0 … 50.0 mm Standard: 12 mm. |

# Label Layout

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| Keys: , , | |
| Label length | Indication of label length in mm. Minimum height: 5 mm (dispenser mode: 25 mm). |
| Gap length | Indication of distance between two labels in mm. Minimum value: 1 mm. |
| Key: |  |
| Column printing | Indication of width of one label as well as how many labels are placed side by side. |
| Key: |  |
| Measure label | Press key  to start measuring. |
| Key: |  |
| Label type | Generally adhesive labels are set. Press key  to select continuous labels. |
| Key: |  |
| Material selection | Selection of the used label and transfer ribbon material. |
| Key: |  |
| Photocell | Selection of the used photocell. The selection of one of the following photocell types is possible: transmission photocell normal and inverse, reflexion photocell normal and inverse, ultrasonic photocell (option). |
| Scan position (AP) | Entry of percental label length by that the label end is searched. |

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| Key: |  |
| Label error length | In case an error occurs, indication after how many mm a message appears in the display. Value range 1 … 999 mm |
| **Synchronization** | **On:** If a label is missed on the liner an error message is displayed. **Off:** Missing labels are ignored, i.e. it is printed into the gap. |
| Key: |  |
| Flip label | The axis of reflection is in the middle of the label. If the label width was not transferred to the printer, automatically the default label width i.e. the width of the printhead is used. It is recommended to use labels with the same width as the printhead. Otherwise this can cause problems in positioning. |
| Key: |  |
| Rotate label | According to standard the label is printed ahead with a rotation of 0°. If the function is activated, the label is rotated by 180° and printed in reading direction. |
| Key: |  | |
| **Rotate label in degrees** | Corresponding to the parameter Rotate label, the label can be turned in 90° steps.   |  |  | | --- | --- | | i-kreis | **notice!**  Only printer internal objects (text, lines and barcodes) can be turned. The rotation of graphics is not possible. | | |
| Key: |  |
| Alignment | The adjustment of label is effected only after 'flip/rotate label', i.e. the adjustment is independent of the functions flip and rotate label. **Left:** The label is aligned at the left-most position of printhead. **Centre:** The label is aligned at central point of printhead. **Right:** The label is aligned at right-most position of printhead. |

# Device Settings

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| Keys: , , , | |
| Field handling | **Off:** The complete print memory is deleted. **Keep graphic:** A graphic res. a TrueType font is transferred to the printer once and stored in the printer internal memory. For the following print order only the modified data is transferred to the printer. The advantage is the saving of transmitting time for the graphic data. The graphic data created by the printer itself (internal fonts, bar codes, ...) is generated only if they were changed. The generating time is saved. **Delete graphic:** The graphics res. TrueType fonts stored in the printer-internal memory is deleted but the other fields are kept. **Restore graphic:** At the end of the print order the printed order can again be started at the printer. All graphics and TrueType fonts are again printed.   |  |  | | --- | --- | | i-kreis | notice!  **Exception:** With column printing always full columns must be printed (number of pieces always multiple of the columns). Deleted columns are not restored. | |
| Key: |  |
| Codepage | Indication of the font used in the printer. The following possibilities are available: Codepage 437, Codepage 850, Codepage 852, Codepage 857, Codepage 1250, Codepage 1251, Codepage 1252, Codepage 1253, Codepage 1254, Codepage 1257, WGL4.  Please find the tables referring to the above mentionned character sets on our website. |
| Key: |  |
| **External parameters** | **Label dimension only:** The parameters for label length, gap length and label width can be transferred to the printer. All other parameter settings are to be made directly at the printer. **On:** Sending parameters such as print speed and contrast via our label creation software to the printer. Parameters which are set directly at the printer before are no longer considered. **Off:** Only settings made directly at the printer are considered. |

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| Key: |  |
| **Buzzer** | **On:** An acoustic signal is audible when pressing a key. Value range: 1 … 7. **Off:** No signal is audible. |
| **Display** | Setting of display contrast. Value range: 45 … 75. |
| Key: |  |
| **Printer language** | Selection of language in which you want to display the text in the printer display. At the moment the following languages are available: German, English, French, Spanish, Finnish, Czech, Portuguese, Dutch, Italian, Danish, Polish, Greek, Hungarian, Russian, Chinese (option), Ukrainian, Turkish, Swedish, Norwegian. |
| Key: |  |
| **Keyboard layout** | Selection of region for the desired keyboard layout. The following possibilities are available: Germany, England, France, Greece, Spain, Sweden, US and Russia. |
| Key: |  |
| **Customized entry** | **Off:** No question appears at the display. In this case the stored default value is printed.  **On:** The question referring the customized variable appears once before the print start at the display.  **Auto:** The questions referring the customized variable and the quantity query appear after every printed layout.  **Auto without quantity query:** The question referring the customized variable appears after every layout without additional query for the quantity. |
| Key: |  |
| **Hotstart** | **On:** Continue an interrupted print order after switching on the printer anew. **Off:** After switching off the printer the complete data is lost. |
| Key: |  |
| **Autoload** | **On:** A label which was loaded once from Compact Flash card can be loaded again automatically after a restart of printer. The last loaded label from CF card is always again loaded after a restart of printer.  **Off:** After a restart of printer the last used label must be again loaded manually from the memory card. A common use of the functions Autoload and Hotstart is not possible. |
| Key: |  |
| **Manual reprint** | **Yes:** I In case an error occurred and printer is in stopped mode then you can reprint the last printed labels by means of keys  and . **No:** Only blank labels were advanced. |
| Key: |  |
| **Backfeed/Delay** | Backfeed: The backfeed was optimised in the operating modes dispenser (optional) and cutter (optional). Now, when driving into the offset, the following label is 'pre-printed' if possible and therefore the backfeed of label is no necessary and time can be saved. **Delay**: The adjustable deceleration time is only for mode *Backfeed automatic* of importance. |
| Key: |  |
| **Label confirmation** | On: A new print order is only printed after confirmation at the device. An already active continuing print order is printed as long as the confirmation is effected at the device. Off: No query appears at the display of control unit. |
| Key: |  |
| **Standard label** | On: If a print order is started without previous definition of label, the standard label is printed.  Off: If a print order is started without previous definition of label, an error message appears in the display. |

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| Key: |  |
| **Synchronization at switching on** | **Off:** The synchronization is disabled, i.e. the measuring and label feed have to be released manually. **Measure:** After switching on the printer, the loaded label is automatically measured. Label feed: After switching on the printer the label is synchronised to the beginning of label. For this one or multiple labels are advanced. |
| Key: |  |
| CMI length | If the print is interrupted in the label, at the printhead this could lead to a small interruption in the printout, showing a fine white line onto the label. To avoid this, a value for the minimum backfeed can be set (0 – 1 mm) at which the label material is moved backwards. At the next print start the free range is overprinted. The setting of CMI length has only an influence at the selection of backfeed mode 'optimised backfeed'. |

# Network

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| Keys: , , , , |
| For more information, please see the separate manual. |

# Password

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| --- | --- |
| Keys: , , , , , | |
| **Operation** | |
| **Password** | Entering a 4-digit numeric password. |
| Key: |  |
| **Protection configuration** | Printer settings can be changed (contrast, speed, operating mode, ...). The password protection prevents modifications at the printer settings. |
| Key: |  |
| **Protection favorites** | The password protection prevents the access to the favorites. |
| Key: |  |
| **Protection memory card** | With the functions of the memory card, labels can be stored, loaded, etc. The password protection has to decide if no access or only readable acces on CF card is allowed.  **No protection:** No password protection **Userview only:** Only reading access **Protected:** Access blocked |
| Key: |  |
| **Protection printing** | In case the printer is connected to a PC, it can be useful, that the user is not able to produce a print manually. So the password protection prevents that prints can be produced manually. |
| **Network** |  |
| **Password** | Entering a 15-digit password. The password can consists of alphanumeric and special characters. |
| Key: |  |
| **Protection HTTP** | The communication by HTTP can be avoided. |
| Key: |  |
| **Protection Telnet** | The settings of the Telnet service cannot be changed. |

|  |  |
| --- | --- |
| Key: |  |
| **Protection remote access** | The password protection prevents the remote control of the printer. |
| |  |  | | --- | --- | | i-kreis | notice!  In order to execute a blocked function, first of all the valid password has to be entered. If the correct password is entered then the desired function can be executed. | | |

# Interface

|  |  |
| --- | --- |
| Keys: , , , , , , | |
| **COM1 / Baud / P / D / s** | **COM1:** 0 - serial interface Off 1 - serial interface On 2 - serial Interface On; no error message occurs in case of a transmission error. **Baud rate:** Indication of bits which are transferred per second. Following values are possible: 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200. **P = Parity:** N - No parity E - Even O - Odd Please observe that the settings correspond to those of the printer. **D = Data bits** Setting of data bits. Value range: 7 or 8 Bits. **S = Stop bits** Indication of stop bits between bytes. Value range: 1 or 2 stop bits. |
| Key: |  |
| **Start sign / End sign** | **SOH:** Start of data transfer block  Hex format 01 **ETB:** End of data transfer block  Hex formal 17 |
| Key: |  |
| **Data memory** | **Standard:** After starting a print order the printer buffer receives data as long as it is filled. **Advanced:** During a current print order data is received and processed. **Off:** After starting a print order no more data is received. |
| Key: |  |
| **Port test** | Check whether the data are transferred via the interface. Press the  and  keys to select standard (on). Press the  key and the data sent via any port (COM1, LPT, USB, TCP/IP) is printed. |

# Emulation

|  |  |
| --- | --- |
| Keys: , , , , , , , | |
| Protocol | CVPL: Rosenbaum Programming Language ZPL: Zebra® Programming Language Press keys  and  to select the protocol. Press key  to confirm the selection. The printer is restarted and ZPL II® commands are transformed internally into CVPL commands. |
| Key: |  |
| **Printhead resolution** | At activated ZPL II® emulation the printhead resolution of the emulated device must be set.   |  |  | | --- | --- | | i-kreis | NOTICE!  If the printhead resolution of the Zebra® printer differs from that of the Rosenbaum device, then the size of objects (e.g. texts, graphics) complies not exactly. | | |

|  |  |  |
| --- | --- | --- |
| Key: |  | |
| **Drive mapping** | The access to Zebra® drives is rerouted to the corresponding Rosenbaum drives.   |  |  | | --- | --- | | i-kreis | NOTICE!  As the build-in fonts in Zebra® printers are not available in Rosenbaum devices this can cause small differences in the text image. | | |
| Key: |  |
| PJL (Printer Job Language) | Status information regarding the print order can be indicated. |

# Date & Time

|  |  |
| --- | --- |
| Keys: , , , , , , , , | |
| **Set date and time** | The upper line of display shows the current date, the second line the current time. With keys  and  you can change to the next or previous field. With keys  and  you can increase and/or decrease the displayed values. |
| Key: |  |
| **Summertime** | **On:** Printer automatically adjust clock for daylight saving changes. **Off:** Summertime is not automatically recognized and adjusted. |
| Key: |  |
| **Start of summertime (format)** | Select the format in which you want to define beginning summertime. DD = day WW = week WD = weekday MM = month, Y = year next day = only next day is taken into consideration |
| Key: |  |
| **Start of summertime (date)** | By means of this function you can enter the date at which summertime has to start. This entry refers to the previously selected format. |
| Key: |  |
| **Start of summertime (time)** | By means of this function you can define the time when you want to start summertime. |
| Key: |  |
| **End of summertime (format)** | Select the format in which you want to define end of summertime. |
| Key: |  |
| **End of summertime (date)** | By means of this function you can define the date when you want to stop summertime. The entry refers to the previously selected format. |
| Key: |  |
| **End of summertime (time)** | By means of this function you can define the time when you want to stop summertime. |
| Key: |  |
| **Time shifting** | By means of this function you can enter time shifting in hours and minutes (for automatically adjustment from summer and wintertime). This entry refers to the currently set printer time. |

# Service Functions

|  |  |
| --- | --- |
| i-kreis | NOTICE!  So that the distributor res. the printer manufacturer at the case of service can offer fast support, the printer is equipped with the Service functions menu. Necessary information such as set parameter can read directly at the printer (see chapter 6.10 on page 53). |

|  |  |
| --- | --- |
| Keys: , , , , , , , , , | |
| **Label parameters** | Indication of label parameters in Volt. **A:** Indication of minimum value. **B:** Indication of maximum value. **C:** Indication of trigger level. The value is ascertained while measuring and can be changed. |
| Key: |  |
| **Photocell configuration** | This function enables definition of photocell levels. In case of problems while positioning or measuring of label, levels for label photocell can be set manually. Make sure that a large hub as possible (label >3 V, gap <1 V) is set. |
| Key: |  |
| **Photocell parameters** | **TLS:** Indication of transmission photocell level in Volt. **RLS:** Indication of reflexion photocell level in Volt. **SLS:** Indication of peel off photocell level in Volt. **RC:** Indication of transfer ribbon photocell status (either 0 or 1). **H:** Indication of printhead position. 0 = printhead down 1 = printhead up |
| Key: |  |
| **Paper counter:** | **D:** Indication of printhead attainment in meters. **G:** Indication of printer attainment in meters. |
| Key: |  |
| **Heater resistance** | To achieve a high print quality, the indicated Ohm value must be set after replacing the printhead. |
| Key: |  |
| **Printhead temperature** | Indication of printhead temperature. The printhead temperature corresponds normally to the room temperature. In case the maximum printhead temperature is exceeded, the current print order is interrupted and an error message appears at the printer display. |
| Key: |  |
| **Motor Ramp** | This function is often used for high printing speed as the tearing of transfer ribbon can be prevented. The higher the '++' value is set, the slower the feeding motor is accelerated. The smaller the '− −' value is set, the faster the feeding motor is decelerated. |
| Key: |  |
| **Print examples** | **Settings:** Printout of all printer settings such as speed, label and transfer ribbon material. **Bar codes:** Printout of all available bar code types. **Fonts:** Printout of all available font types. |
| Key: |  |
| Input | Indication of input signal level. 0 = Low 1 = High |
| Key: |  |
| Output | Indication of input output level 0 = Low 1 = High |

|  |  |
| --- | --- |
| Key: |  |
| **I/O status** | Relevant results are counted and registered in RAM memory. The protocole get lost after switching off the device.  **RInt** = Real Interrupts The start input impulses are counted directly at the Interrupt.  **Dbnc** = Debounced The start input impulses that are longer than the set debounce time are counted. Only these start impulses can lead to a print. If a start impulse is too short, no print is released. This is recognized by the fact that RInt is counted, Dbnc not.  **NPrn** = Not Printed The debounced start input impulses that have not lead to a print are counted. Causes: no active print order, print order stopped (manually or because of an error) or the printing system ist still active with the processing of a print order.  **PrtStrtReset** = The counters are reset.  **PrtStrtTime** = Measured length of the last start impulse in ms. |
| Key: |  |
| Cutter photocell | 1 = Printer is equipped with a cutter 2 = Printer is not equipped with a cutter |
| Cutter Home (CH) | 1 = The cutter is in the initial position and ready for the cutting procedure. 0 = The cutter is not in the initial position. Before you are going to release a cutting procedure you first have to place the cutter in its initial position. |
| Key: |  |
| **Online/Offline** | This function is activated e.g. if the transfer ribbon is to be changed. It is avoided that a print order is processed although the module is not ready. If the function is activated then press the key  to change between Online and Offline mode. The respective state is indicated in the display (Standard: Off). Online: Data can be received by interface. The keys of the foil keyboard are only active, if you changed in the Offline mode with key . Offline: The keys of the foil keyboard are still active but received data are not processed. If the module is again in Online mode then new print orders can be again received. |
| Key: |  |
| Transfer ribbon advance warning | TRB = Transfer ribbon advance warning: Before the end of transfer ribbon, a signal is send by the control output.  Warning diameter: Setting of transfer ribbon advance warning diameter. In case you enter a value in mm then a signal appears via control output when reaching this diameter (measured at transfer ribbon roll).  **Ribbon advance warning mode: Warning:** When reaching the transfer ribbon advance warning diamter, the corresponding I/O output is set. **Reduced print speed:** Speed on which the printing speed is to be reduced. **Error:** The printing system stops when reaching the transfer ribbon advance warning diameter with the message 'too less ribbon'.  **Reduced print speed:** Setting of the reduced print speed in mm/s. This can be set in the limits of the normal print speed. |
| Key: |  |
| **Zero point adjustment in Y direction** | Indication of value in 1/100 mm. After replacing the printhead - the print cannot be continued at the same position on the label, the difference can be corrected in printing direction.   |  |  | | --- | --- | | i-kreis | NOTICE!  The value for zero point adjustmentt is set ex works. After replacing the printhead, only service personnel are allowed to set this value anew. | |
| Key: |  |
| **Zero point adjustment in X direction** | Indication of value in 1/100 mm. After replacing the printhead - the print cannot be continued at the same position on the label, the difference can be corrected across the printing direction.   |  |  | | --- | --- | | i-kreis | NOTICE!  The value for zero point adjustmentt is set ex works. After replacing the printhead, only service personnel are allowed to set this value anew. | |

|  |  |
| --- | --- |
| Key: |  |
| **Print length +/**− | Indication of print layout correction in percent. By mechanical influences (e.g. label roll size) the print layout can be printed increased and reduced to its original size. Value range: +10.0 % … −10.0 % |
| Key: |  |
| **Write log files on MC** | With this command, different log files are saved on an existing storage medium (memory card or USB stick). After the 'Finish' message the storage medium can be removed.  The files are in directory 'log':  **LogMemErr.txt:** Logged errors with additional information such as date/time and file name/line number (for developers).  **LogMemStd.txt:** Logging of selected events.  **LogMemNet.txt:** Data latest send via port 9100.  **Parameters.log:** All printer parameters in human readable form.  **TaskStatus.txt:** Status of all printer tasks. |

# Main Menu

Switch on the label printer and the display shows the main menu. The main menu shows information such as printer type, current date and time, version number of firmware and the used FPGA.

The selected display is shown for a short time, then the indication returns to the first information.

Press key  to arrive the next information display.

# Technical Data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | RV2 200D | RV2 300D | RV2 600 |  |  |
| Print resolution | | 203 dpi | 300 dpi | 600 dpi |  |  |
| Max. print speed | | 200 mm/s | 150 mm/s | 100 mm/s |  |  |
| Print width | | 104 mm | 108,4 mm | 108,4 mm |  |  |
| Passage width | |  |  |  |  |  |
|  | 116 mm 112 mm | 116 mm 112 mm | 116 mm 112 mm | 116 mm 112 mm |  |  |
| Printhead | | Flat Type1 | Flat Type2 | Flat Type2 |  |  |
| Labels | | | | | | |
| Labels, continuous rolls or fan-fold | | paper, cardboard, textile, synthetics | | | | |
| Max. material weight | | 220 gr/m² (larger on demand) | | | | |
| Min. label width | | 12 mm | | | | |
| Min. label height | |  | | | | |
|  | Standard Cutter/dispenser mode | 5 mm 15 mm | | | | |
| Max. label height | | 6000 mm | 6000 mm | 3000 mm |  |  |
| Max. roll diameter | |  | | | | |
|  | Internal unwinder Internal rewinder | 180 mm --- | | | | |
| Core diameter | | 40 mm / 75 mm (option) | | | | |
| Winding | | outside or inside | | | | |
| Label sensor | | transmission or reflexion from bottom | | | | |
| Transfer Ribbon | | | | | | |
| Ink | | outside or inside | | | | |
| Max. roll diameter | | Ø 80 mm | | | | |
| Core diameter | | 25,4 mm / 1″ | | | | |
| Max. ribbon length | | 450 m | | | | |
| Max. width | | 110 mm | | | | |
| Dimensions (mm) | | | | | | |
| Width x height x depth | | 236 x 238 x 374 | | | | |
| Weight | | 11 kg | | | | |
| Electronics | | | | | | |
| Processor | | High Speed 32 Bit | | | | |
| RAM | | 16 MB | | | | |
| Slot | | for Compact Flash card Type I | | | | |
| Battery cache | | for Real-Time clock (storage of data with shut-down) | | | | |
| Warning signal | | Acoustic signal when error | | | | |
| Interfaces | | | | | | |
| Serial | | RS-232C (up to 115200 Baud) | | | | |
| Parallel | | SPP | | | | |
| USB | | 2.0 High Speed Slave | | | | |
| Ethernet | | 10/100 Base T, LPD, RawIP-Printing, DHCP, HTTP, FTP | | | | |
| WLAN (option) | | Module 802.11 b/g/n WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, EAP | | | | |

1 = Thermal direct

2 = Thermal transfer

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Operation Data | RV2 200D | RV2 300D | RV2 600 |  |  |
| Power supply | 110 … 230 V AC / 50-60 Hz | | | | |
| Power consumption | 275 VA | | | | |
| Nominal current | 2.5 A | | | | |
| Operating temperature | 5 … 35 °C | | | | |
| Humidity | max. 80 % (non-condensing) | | | | |
| Operation Panel | | | | | |
| Keys | Test print, function menu, quantity, CF Card, feed, enter, 4 x cursor | | | | |
| LCD display | Graphic display 132 x 64 pixel | | | | |
| Settings | | | | | |
|  | Date, time, shift times  11 language settings (others on demand) Label and device parameters, interfaces, password protection, variables | | | | |
| Monitoring | | | | | |
| Stop printing if | End of ribbon / end of labels / printhead open | | | | |
| Status report | Extensive status print with information about settings e.g. print length counter, runtime counter, photocell interface and network parameters Printout of all internal fonts and all supported bar codes | | | | |
| Fonts | | | | | |
| Font types | 6 Bitmap fonts 8 Vector fonts/TrueType fonts 6 proportional fonts Other fonts on demand | | | | |
| Character sets | Windows 1250 up to1257, DOS 437, 850, 852, 857, UTF-8 All West and East European Latin, Cyrillic, Greek and Arabic (option) characters are supported. Other character sets on demand | | | | |
| Bitmap fonts | Size in width and height 0,8 … 5,6 Zoom 2 … 9 Orientation 0°, 90°, 180°, 270° | | | | |
| Vector fonts/TrueType fonts | Size in width and height 1 … 99 mm Variable zoom Orientation 0°, 90°, 180°, 270° | | | | |
| Font attributes | Depending on character font Bold, Italic, Inverse, Vertical | | | | |
| Font width | Variable | | | | |
| Bar Codes | | | | | |
| 1D bar codes | CODABAR, Code 128, Code 2/5 interleaved, Code 39, Code 39 extended, Code 93, EAN 13, EAN 8, EAN ADD ON, GS1-128, Identcode, ITF 14, Leitcode, Pharmacode, PZN 7 Code, PZN 8 Code, UPC-A, UPC-E | | | | |
| 2D bar codes | Aztec Code, CODABLOCK F, DataMatrix, GS1 DataMatrix, MAXICODE, PDF 417, QR Code | | | | |
| Composite bar codes | GS1 DataBar Expanded, GS1 DataBar Limited, GS1 DataBar Omnidirectional, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Truncated | | | | |
|  | All bar codes are variable in height, module width and ratio Orientation 0°, 90°, 180°, 270° Optionally with check digit and human readable line | | | | |
| Software | | | | | |
| Configuration | ConfigTool | | | | |
| Process control | NiceLabel | | | | |
| Label software | Labelstar Office Lite, Labelstar Office | | | | |
| Windows driver | Windows 7® - Windows 10® 32/64 Bit Windows Server 2008® (R2) - Windows Server 2019® | | | | |

Technical modifications are subject to change

# Cleaning

|  |  |
| --- | --- |
|  | DANGER!  Risk of death by electric shock!   * Before opening the housing cover, disconnect the label printer from the mains supply and wait for a moment until the power supply unit has discharged. |

|  |  |
| --- | --- |
| i-kreis | NOTICE!  When cleaning the label printer, personal protective equipment such as safety goggles and gloves are recommended. |

|  |  |
| --- | --- |
| Cleaning task | Frequency |
| General cleaning. | As necessary. |
| Clean the transfer ribbon drawing roller. | Each time the transfer ribbon is changed or when the printout is adversely affected. |
| Clean the pressure roller. | Each time the label roll is changed or when the printout and label transport are adversely affected. |
| Clean the printhead. | Direct thermal printing: Each time the label roll is changed.  Thermal transfer printing: Each time the transfer ribbon is changed or when the printout is adversely affected. |
| Clean the label photocell. | When the label roll is changed. |

|  |  |
| --- | --- |
| i-kreis | NOTICE!  The handling instructions for the use of Isopropanol (IPA) must be observed. In the case of skin or eye contact, immediately wash off the fluid thoroughly with running water. If the irritation persists, consult a doctor. Ensure good ventilation. |

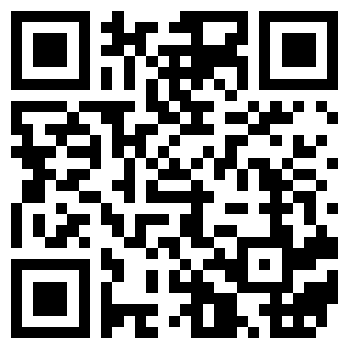
|  |  |
| --- | --- |
|  | WARNING!  Risk of fire by easily inflammable label soluble!   * When using label soluble, dust must be completely removed from the label printer and cleaned. |

# General Cleaning

|  |  |
| --- | --- |
| ausrufezeich | CAUTION!  Abrasive cleaning agents can damage the label printer!   * Do not use abrasives or solvents to clean the outer surface of the label printer. |

* Remove dust and paper fuzz in the printing area with a soft brush or vacuum cleaner.
* Clean the outer surfaces with an all-purpose cleaner.

# Clean theTransfer Ribbon Drawing Roller

[](https://www.youtube.com/watch?v=vkqwDw96bqA)A soiled drawing roller can lead to a reduced print quality and can affect the transport of material.

* Remove the printer cover.
* Remove transfer ribbon from the label printer.

Video to clean

* Remove deposits with the roller cleaner and a soft cloth.
* If the roller appears damaged, replace it.

# Clean the Pressure Roller

A soiled pressure roller can lead to a reduced print quality and can affect the transport of material.

|  |  |
| --- | --- |
| ausrufezeich | CAUTION!  Pressure roller can be damaged!   * Do not use sharp or hard objects to clean the pressure roller. |

* Turn the lever counter clockwise to lift up the printhead.
* Remove labels and transfer ribbon from the label printer.
* Remove deposits with the roller cleaner and a soft cloth.
* If the roller appears damaged, replace it.

# Clean the Printhead

Printing can cause accumulation of dirt at the printhead e.g. by colour particles of the transfer ribbon, and therefore it is necessary to clean the printhead in regular periods depending on operating hours, environmental effects such as dust etc.

|  |  |
| --- | --- |
| ausrufezeich | CAUTION!  Printhead can be damaged!   * Do not use sharp or hard objects to clean the printhead. * Do not touch the protective glass layer of the printhead. |

* Turn the lever counter clockwise to lift up the printhead.
* Remove labels and transfer ribbon from the label printer.
* Clean the printhead surface with a special cleaning pen or a cotton swab dipped in pure alcohol.
* Before using the label printer, let the printhead dry for about two to three minutes.

# Clean the Label Photocell

|  |  |
| --- | --- |
| ausrufezeich | CAUTION!  Label photocell can be damaged!   * Do not use sharp or hard objects or solvents to clean the label photocell. |

The label photocell can be soiled with paper dust. This may affect the label scanning.



* Turn the lever counter clockwise to lift up the printhead.
* Remove labels and transfer ribbon from the label printer.
* Blow out the photocell (A) with the compressed air spray. You have strictly to observe the instructions mentioned on the can.
* Moisten a cleaning card (B) with printhead and roll solvent to clean additionally the photocell inside.
* Reload labels and transfer ribbon.

|  |  |
| --- | --- |
|  | For professional users it is the universal label and signage software for Windows ™ 7, 8 und 10,11.  The Windows™ signed version is very user-friendly.  This is recommended for automatic outputs **Auto-Job-Module**  Suitable for thermal transfer printers, laser and inkjet printers, plotters, engraving machines and marking lasers with Windows™ based drivers. |
|  |  |
|  |  |
|  | The **transfer ribbons** are available in different colors.  Depending on the label material and application, we recommend different transfer ribbon qualities, such as wax, resin and special resin. |
|  |  |
|  |  |
|  | **Labels**  made of polyester, vinyl, acetate, acrylate, polyolefin, fabric,... |

RV2\_Quickref\_ 20220121E

