



**KERN & Sohn GmbH**

# Operating Instructions

## Dot Matrix Printer

### KERN YKG-01

Version 1.1  
2024-08  
GB



**YKG-01-e-2411**



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Version 1.1 2024-08

## Operating Instructions Dot Matrix Printer

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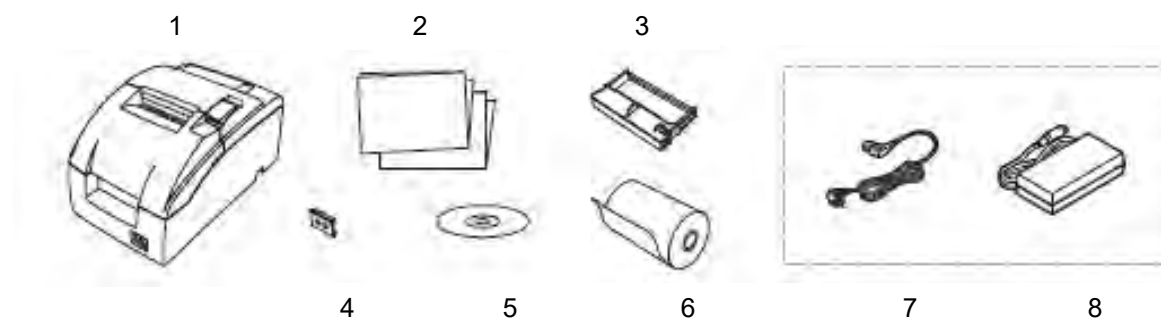
## 1 Technical data

KERN	YKG-01	
Item no./ Type	TYKG-01-A	
Printing technique	9-Dot Matrix Serial Printer	
Fonts	Font (default)	Font A 7x9, Font B 9 x9
	Character size	1.2 mm (B) x 3.1 mm (H) / 1.6 mm (B) x 3.1 mm (H)
	Column capacity	7 x9 / 9 x9 Paper width 58 mm, 30 / 25 Paper width 70 mm, 36/ 30 Paper width 76 mm, 40 / 33
	Characters per inch	Font A 7x9 : 16 cpi Font B 9 x9 : 13.3 cpi
	Character set	95 alphanumeric, 48 international, 128 x 12 graphics
Print speed	4.70 rows / sec (40 columns, 16 cpi)	
Supported paper width	58mm, 70,mm, 76 mm	
Power pack Input voltage	100 -240 V	
Weighing scales Input voltage	24 V DC, 1.5 A	
Operating temperature	-10°C – 50°C	
Humidity of air	max. 10-90 % relative (not condensing)	
Dimensions [H x W x D]	139 x 160 x 248 mm	
Weight	2.3kg	
Ink ribbon cartridge	KERN YKG-A03 (Option)	

## 2 Unpacking

Remove device and accessories carefully from packaging, remove packaging material and place device at the planned work place. Check if that there has been no damage and that all packing items are present.

## 2.1 Scope of delivery







Pos.	Designation
1	Printer
2	Operating manual
3	Ink ribbon cartridge
4	Power switch cover
5	Software CD (not documented)
6	Paper roll
7	Mains cable
8	Mains adapter
	Serial adapter (without illustration)

### 3 Appliance overview



Pos.	Designation
1	Paper cover
2	Ink ribbon cover
3	Operating panel
4	ON/OFF switch

#### Operating panel:

<b>Power - Operating display</b> 	Lights up when the printer is turned on.
<b>Error LED - Error display</b> 	<p>Lights up when the printer is offline (when the paper roll is finished or the printer cover is open).</p> <p>Does not light up when the printer is operating properly.</p> <p>Flashes when an error occurs. (See "Troubleshooting" section.)</p>
<b>Paper out</b> 	Indicates that the paper is finished.
<b>FEED</b> 	Paper forward feed button

## 4 Basic instructions



- ⇒ Carefully read this operation manual before setup and commissioning, even if you are already familiar with KERN products.
- ⇒ All language versions contain a non-binding translation. The original German is binding.

### 4.1 Safety instructions / warning signs



- ⇒ Switch off the device immediately if you notice smoke or unusual smells or noises. Continued use of the device could result in fire or an electric shock. Immediately unplug the appliance from the mains socket and notify your dealer.
- ⇒ Never attempt to repair this product yourself. Improper repairs may be hazardous.
- ⇒ Do not disassemble or modify this product. Improper use of this product may result in personal injury, fire, or an electric shock.
- ⇒ Make sure that you use the specified AC adapter. Connecting the device to an unsuitable power source may result in a fire.
- ⇒ Never plug or unplug the mains cable with wet hands. This may result in a severe electric shock.
- ⇒ Do not use table sockets on the wall plug-in socket. Always obtain power directly from a standard power plug-in socket. Overloading the plug-in socket may cause a fire.
- ⇒ Be careful when handling the cables. Improper use may result in fire or an electric shock.
  - Do not use damaged cables.
  - Do not modify or repair the cables.
  - Do not place any objects on the cables.
  - Avoid excessive bending, twisting and pulling of the cables.
  - Do not lay the cables near heaters.
- ⇒ Do not allow foreign objects to enter this product. Danger of burning!
- ⇒ If water or other liquids enter this product, immediately unplug the mains cable and notify your dealer. Danger of burning!
- ⇒ Do not use any flammable detergents on or near the device. Danger of burning!



- ⇒ Do not use the device in locations with a high moisture or dust content. If excessive moisture or dust are generated, this may damage the product or cause a fire.
- ⇒ Place the product on a fixed, stable, horizontal surface. The product may be damaged or cause injuries if dropped.
- ⇒ Ensure that you do not suffer an injury to your hand(s) from the manual cutter during the following operations:  
When removing the printed document.  
When performing other operations, such as inserting the paper roll.



- ⇒ Do not touch the print head as this may be very hot after printing.

## 4.2 User Instructions

- ⇒ Do not install the printer in a dusty location.
- ⇒ Protect the printer from shocks.
- ⇒ Cables and other foreign objects must not get tangled with the printer.
- ⇒ Do not apply excessive force to the printer housing.
- ⇒ Do not place food or drinks (coffee, etc.) on the printer housing.

## 4.3 Warranty

Warranty claims shall be voided in case

- ⇒ Our conditions in the operation manual are ignored
- ⇒ The appliance is modified or opened
- ⇒ Mechanical damage or damage by media, liquids, natural wear and tear
- ⇒ The appliance is improperly set up or incorrectly electrically connected

## 4.4 Mains connection



Do not connect the appliance to the power mains unless the information on the appliance (sticker) matches the local mains voltage.

Only use KERN original mains adapters. Using other makes requires consent by KERN.

### Important:

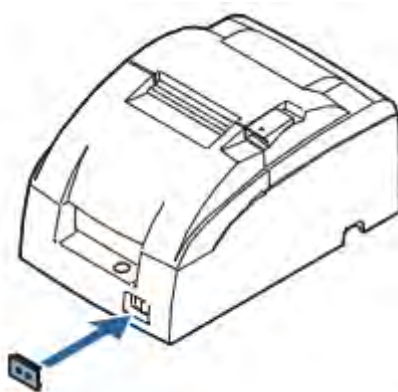
- Before starting your weighing balance, check the mains cable for damage.
- Ensure that the mains adapter does not come into contact with liquids.
- Ensure access to mains plug at all times.

## 5 Commissioning

### 5.1 On/Off switch and switch cover

The on/off switch is located on the front of the printer. Press the On/Off switch to turn on the printer.

#### Switch cover



You can use the on/off switch cover provided to ensure that the switch is not operated unintentionally. To install, simply push the cover over the switch. If you want to turn the On/Off switch on or off with the cover attached, you can insert a thin object into one of the holes in the cover and use this to operate the switch.



If an accident occurs with the on/off cover fitted, immediately unplug the mains cable to prevent a fire.

If you store the printer or do not use it for a long time, use the front on/off switch to turn off the printer.



## 5.2 Inserting and changing the ink ribbon cartridge



The print head becomes very hot during printing. Wait until the print head has cooled down before replacing the ink ribbon cartridge.

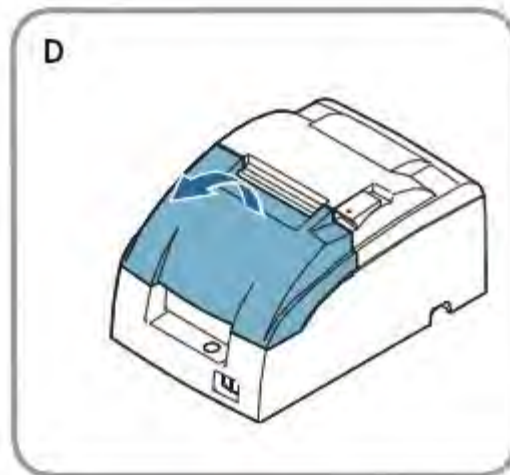


- ⇒ Never turn the ink ribbon cartridge tension knob against the direction indicated by the arrow on the cartridge as this risks damaging the ink ribbon cartridge.

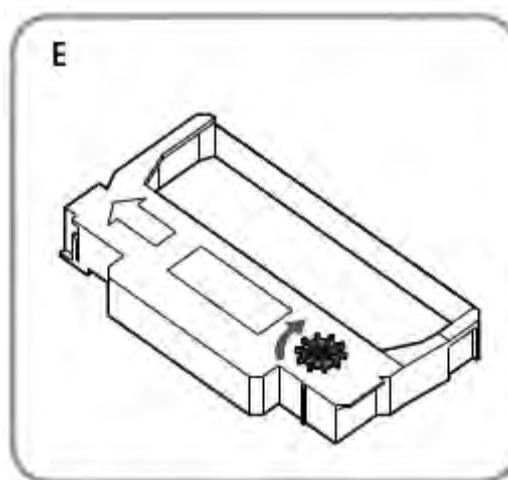
**Note:**

- ⇒ Use the following ink ribbon cartridge in your printer:  
KERN YKG-A03.

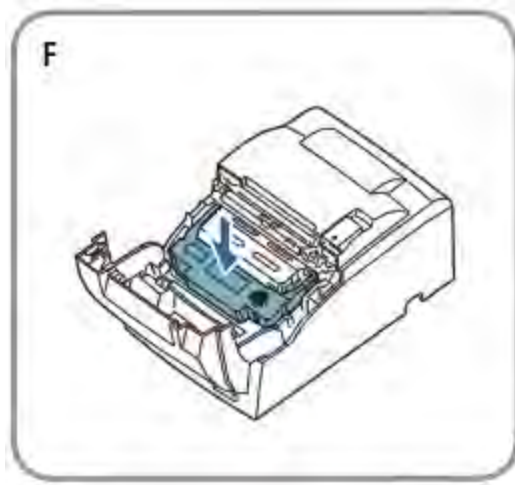
1. Open the ink ribbon cartridge cover using the tabs on the side as shown in Figure D.



2. Turn the knob two or three times in the direction of the arrow as shown in Figure E to increase the tension in the ink ribbon slightly.



3. Insert the ink ribbon cartridge in the position shown in Figure F and push it down until it clicks into place.



**Note:**

4. Make sure that the ink ribbon is smooth and free of creases between the print head and the pressure plate.
5. Turn the ink ribbon cartridge knob another two or three times in the direction of the arrow and close the ink ribbon cartridge cover.



Make sure that you do not accidentally touch the print head with your fingers when turning the ink ribbon cartridge knob, otherwise burn injuries cannot be ruled out.

When replacing the ink ribbon cartridge, first lift the left side of the ink ribbon cartridge, then lift the entire ink ribbon cartridge.

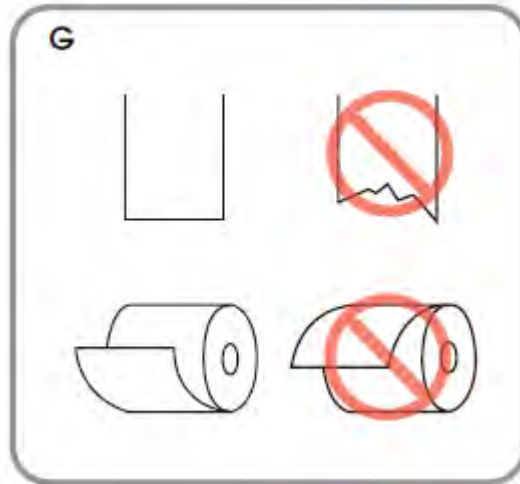
### 5.3 Inserting the paper roll



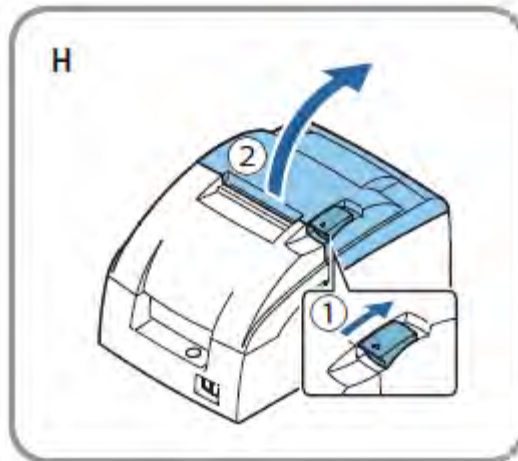
**CAUTION**

⇒ Only use paper rolls that meet the specifications. Be careful not to touch the manual paper cutter to avoid injuries.

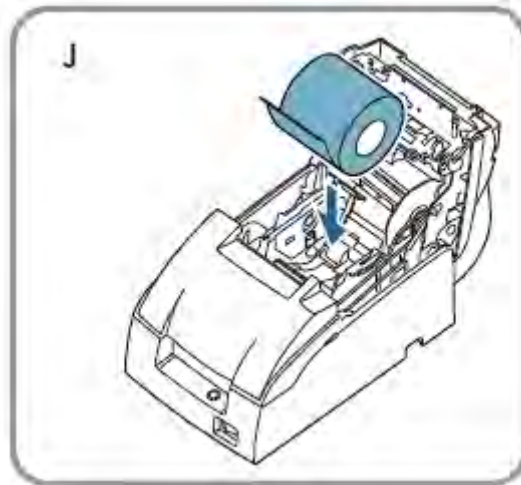
1. Cut the front end of the paper roll as described in Figure G shown using scissors.



2. Turn on the printer and open the paper roll cover using the tab.



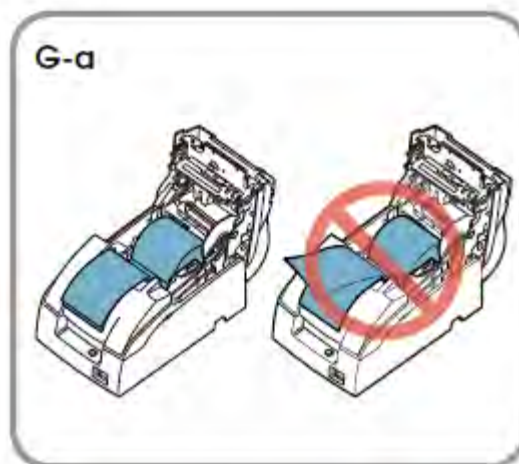
3. Insert the paper roll as shown in Figure J.



**Note:**

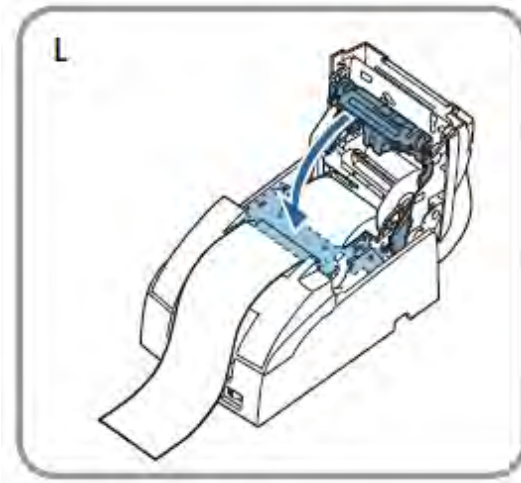
Figure G shows the direction in which the paper is unwound from the roll.

When using 2-ply roll paper, make sure that the top and bottom sheets are aligned with the paper output. See figure G-a.



4. If you are not using a paper take-up reel, pull out a short piece of paper and close the paper roll cover; then tear off the paper using the manual paper cutter.

5. Close the unit as shown in Figure L.



**Note:**

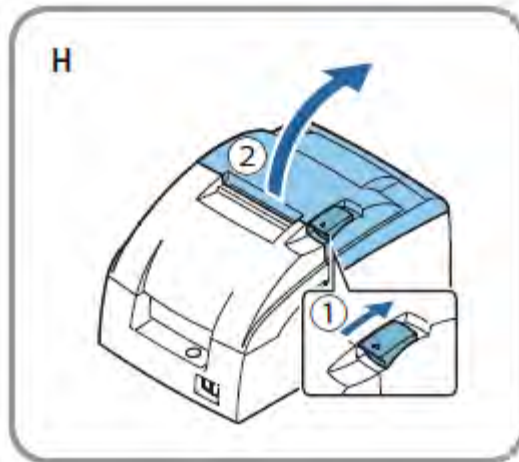
DO NOT open the paper roll cover during printing or while paper is being fed through.

When using the printer, do not forget to tear off the paper using the manual cutter after the paper has been fed through.

## 5.4 Replacing the paper roll

⇒ Only use paper rolls that meet the specifications. Be careful not to touch the manual paper cutter to avoid injuries.




1. Open the paper roll cover using the tab as shown in Figure H.



2. Remove what is left of the paper roll.
3. Insert a new paper roll. See section "Inserting the paper roll" (chapter 5.3).

## 5.5 Connecting the cable

### Connections:

 RS-232		 DC24V
RS-232	Connection Cash box drawer	Mains cable



- ⇒ When using a serial interface, error-free operation is only ensured with the enclosed interface cable and the corresponding KERN interface cable (option).  
If necessary, use the zero modem supplied and a gender changer.
- ⇒ Never attempt to stretch the cable or over-extend the cable to establish a connection. The mains cable must not be taut during use.

1. Make sure that the printer is switched off.
2. Connect the interface cable to the printer.
3. Connecting the Interface cable to the scales
4. Connecting the AC cable to the AC adapter
5. Plug in the mains cable for the mains adapter and connect it to the power supply.

## 6 Configuring the printer

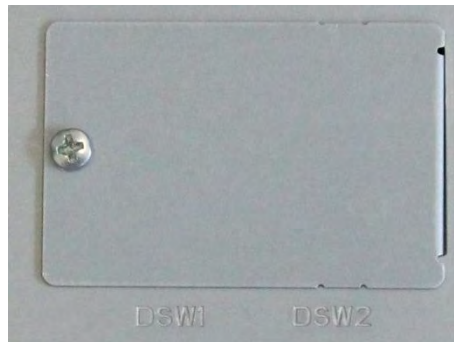
The following conditions must be met to provide successful communication between the weighing balance and the printer.

Disconnect balance from the power supply and connect to the printer interface with a suitable cable. Error-free operation is only guaranteed with the enclosed interface cable and the corresponding KERN interface cable.

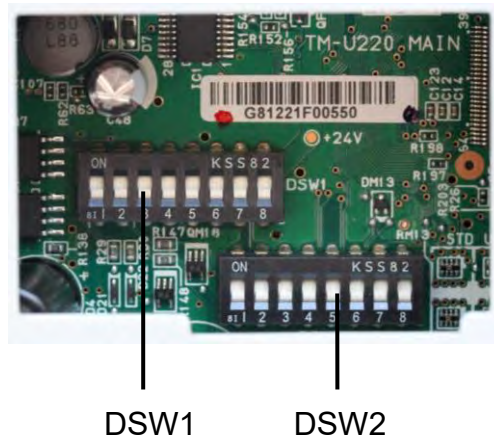
Communications parameters (e.g. baud rate, bits and parity) for the scales and printer interface must match. The communication parameters for the printer are set with the DIP switches as described below.

## 6.1 Setting the communications parameters with the DIP switches

- ⇒ Disconnect the printer from the power supply,
- ⇒ Remove the cover from the base plate.



- ⇒ Setting the communications parameters with the DIP switches



### DSW1 :

SW	Function	On	Off
1	Data receive error	Ignored	Prints „?“
2	Receive buffer capacity	40 bytes	4 KB
3	Handshaking	XON/XOFF	DTR/DSR
4	Word length	7 bits	8 bits
5	Parity check	yes	no
6	Parity selection	Even	Odd
7	Transmission speed	4800 bps	9600 bps
8	BUSY condition	Receive buffer full	Receive buffer full or Offline



**DSW2:**

SW	Function	On	Off	Not documented
1	Printcolumn	42/35	40/33	
2	For internal use only (autocutter)	Enabled	Disabled	
3	Undefined	-	-	
4	Serial interface selection	Memory switch	DIP switch	
5	Undefined	-	-	
6	For internal use only (flash memory rewriting)	Enabled	Disabled	
7	Pin 6 reset signal	Used	Not used	
8	Pin 25 reset signal	Used	Not used	

⇒ Reattach the cover to the base plate.

## 7 Cleaning the printer housing

Make sure the printer is turned off and wipe any dirt off the printer housing with a dry or damp cloth.



Never clean the product with alcohol, petrol, thinner, or other solvents. Plastic or rubber parts may be damaged or broken by these.

## 8 Instant help

### Symptom

### Remedy

**No lamps illuminated on the control panel**

Check cable connections and mains connection

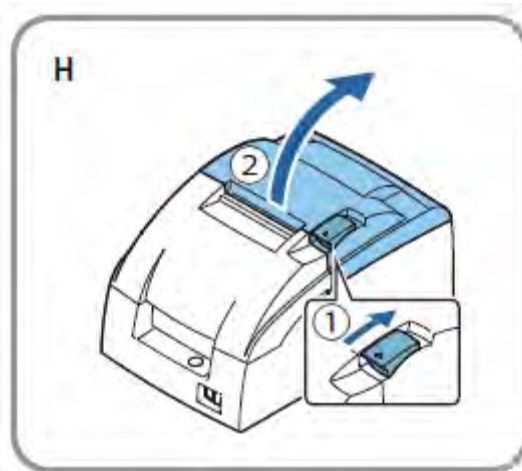
**ERROR LED flashes or lights up**

- The print head temperature may potentially be too high or too low. Wait until the print head reaches a normal temperature and the printer automatically resumes operation.
- Make sure the paper roll cover is firmly closed.
- A paper jam has occurred. To remove the paper jam, refer to the instructions below.
- If there is a problem, turn off the printer, wait a few seconds, and turn it back on. Contact your dealer if the error persists.

**Paper jam**

**CAUTION:** The print head gets very hot during printing. Allow it to cool down before reaching into the printer.

- ⇒ Open the paper roll cover using the tab as shown in Figure H and clear the paper jam.



- ⇒ Reinsert the paper roll and close the paper roll cover.