KERN & Sohn GmbH

User Manual
Thermal Printer

KERN YKB-01N

Type TYKB-01-A
Version 1.0
2023-10
GB

TYKB-01-A-e-2310

KERN YKB-01N

Rev. 1.0 2023-10
User manual
Thermal printer

Content

1 Technical specification

YKB-01N is a standard thermal printer.

Print	Thermal, line head
Line height	24 points
Format	10, 20, 40, 2 × 20 columns
Set of characters	IBM (more with flash memory)
Flash memory	Set of characters (Arabic, Russian, Chinese, Polish etc.)
Bootloader	software updating
Mosaic	10*24
Internal memory	8 kB
Interface	RS-232
Thermal paper	in a roll, 57 mm wide, 20 m long
Max. winding diameter	40 mm
Power supply	9 V DC
External power supply unit	9 V DC; 3 A
Lifecycle	5000 hours
Operating temperature	0-50°C
Air humidity	20–70% (non-condensing)
Dimensions	110 × 125 × 70 mm
Weight	600 g (excluding paper roll)

2 Declaration of Conformity

The valid Declaration of Conformity EC/UE is available at:

www.kern-sohn.com/ce

3 Unpacking

Scope of delivery:
- Printer
- Power supply
- Adapter cable
- User manual

If any of the above products are missing, contact the sales representative immediately.

4 Positioning and start-up

The printer should be used solely in the following ambient conditions:
- Temperature: 0-50°C
- Humidity: 20–70% (non-condensing)

When selecting the installation place, follow the following rules:
- Protect from dust and water splashes.
- Do not place the printer near strong heat sources.
- Do not place the device near strong pulsed electric, magnetic and electromagnetic fields and surfaces accumulating static charges.
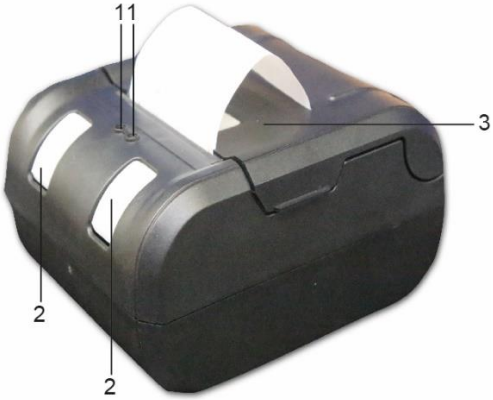- Avoid direct sunlight, impact and vibrations.

Power is supplied via a power supply.
The printed voltage value must be consistent with the local mains voltage.
Always use the original power supply by KERN.
Using any other products requires KERN consent.

5 Name of printer components

1. LEDs	1. Socket of a scale connected with the printer
2. Buttons	2. Ethernet port
3. Paper compartment cover	3. Power supply socket
	4. ON/OFF switch

6 How to prepare the printer for work

- Remove the paper compartment cover.
- Connect the power supply.
- Connect the printer cable.

| **i** | Always use KERN accessories and scales with the printer. When connecting cables, the printer must be disconnected from the mains. |

How to prepare paper

- Before you insert paper in the printer, smooth its end (by turning it in the opposite direction).

How to insert paper

- Insert the smoothed paper end in the mechanism.
- Keep the left button pressed until paper goes from the outlet slot of the mechanism.

How to tear paper off

- Pull the printout crosswise to the printing direction until it touches the cutting strip in the printer housing.

| **i** | Do not pull the printout upward. |

7 Operating controls

After the power supply is connected to the printer and the mains, and the ON/OFF switch of the printer is switched to ON, LEDs will be lit as follows:

LEDs:
- **Red** LED is lit:
  - In the process of switching on: software can be updated.
  - In operation: the paper compartment cover is open or there is no paper.
- **Green** LED is lit:
  - The printer is ready to operate.

Buttons:
The buttons on the front have the following functions:

1. **Paper feed:**
   Press and hold the left button.
2. **Printer parameter configuration:**
   a. Switch off the printer
   b. Press and hold the right button while switching on the printer.
   c. Release the right button
   d. Printout is made with current settings
   e. Use the left push-button to change parameters, and the right push-button to either confirm changed parameters or exit configuration mode.
3. **DPL mode:**
   a. Enter the DPL mode, pressing the left button when the printer is being switched.
   b. Leave the DPL mode, pressing the right button.

8 Switching on

- Switch the ON/OFF switch of the printer to ON.
- Several printer tests will be carried out, completed with paper feed.
- A green LED will turn on, and the red one will go off. The printer is ready to operate.

9 Switching off

- Switch the ON/OFF switch of the printer to OFF or disconnect the printer from the mains.

10 Setup parameters

The printer has a setup menu. Parameter status and the list of their functions can be printed, including:

- communication parameters (speed, parity etc.),
- CR or CR+LF,
- character size,
- character settings (Character Set)
- contrast,

11 Setting date and time

Switch the printer on.
When the printer is ready, press and hold the right button and then press and hold the left button. Release the button right after printing is started.

"Press right to change date or left to valid" message will be printed. This means that the setting is changed with the right button, and the entered setting is confirmed with the left one.
For this reason, to change date and time, press the right button first.
"Press right to change Year or left to valid" message will be printed.

Date is being set starting from the **year**:

The last set year will be displayed:	36 20**36**
	(example)

Press the right button. "Press right to change decade and left to valid" message will be printed.

Press the right button the number of times required to set the correct decade. Confirm the setting by pressing the left button. "Press right to change unit and left to valid" message will be printed.	**4**6
	(example)

This is where the year is set. Press the right button the number of times required to print the current year and confirm by pressing the left button.	4**7**
	(example)

"Press right to change Month or left to valid" message will be printed.
This is when the **month** is set.

Press the right button the number of times required to print the current month and confirm by pressing the left button.	11
	(example)

The following tip will be printed:
"Press right to change Month or left to valid".
This is when the **day** is set.

Press the right button the number of times required to print the current day and confirm by pressing the left button.	22 (example)

"Press right to change time or left to valid" message will be printed.
This is when the **time** is set.

Press the right button to do it. "Press right to change Hour or left to valid" message will be printed.

This is when the **hour** is set. Press the right button the number of times required to print the current hour and confirm by pressing the left button.	01 (example)

"Press right to change Minute or left to valid" message will be printed. This is when the **minutes** are set, Using the right button, select the current minutes and confirm by pressing the left one.	04 (example)

Date and time input is completed. The entered date and relevant time will be printed.	22/11/2047 01:04:08 (example)

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i	You may switch on and off date and time printing by pressing and holding the right button.

12 DPL report

    a. Enter the DPL mode, pressing the left button when the printer is being switched.
    b. Leave the DPL mode, pressing the right button.

The report below will be created. It may be filled in manually later on:

Adjustment
documentation (DPL)

Date:
Time:

Scale
Manufacturer: _____
_____
Model: _____
_____
Serial no.:   _____
_____
ID: _____
_____

Adjustment weight:

☐ external   ☐ internal

Serial no.:   _____
Rated value: _____
Class: _____
_____

Adjustment successful:

☐ yes   ☐ no
_____

Inspector: _____
Signature: _____
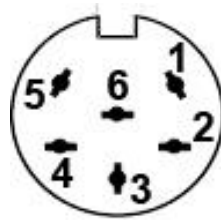
13 Conditions to store and use thermal paper

To ensure a long-term usability of thermal paper, you need to store it correctly.

ℹ Storage:
– store in a dark place (no direct sunlight);
– max. humidity of air 65%;
– max. temperature 25°C.

The printed paper should be stored in the following conditions:

ℹ – no direct sunlight or intense room light;
– no contact with alcohol, solvents and similar substances (e.g. glues);
– do not store in PVC sleeves;
– storage temperature < 25°C.

14 Printer cable

1	RXD
2	DTR
3	GND
4	CTS
5	TXD
6	PWR

15 Cleaning

- Clean the rubber rolls and the printing head cautiously with isopropyl alcohol.
- When cleaning, take care not to move the printing head.

16 Help for any minor failures

Symptom	Solution
The right LED indicating power supply is not lit.	Check if the power supply is connected to the printer and the mains.
No paper feed.	Check if paper is installed correctly and the mechanism outlet slot is not blocked.
Unprinted paper leaves the printer.	Check if the paper is installed with the thermal side to the printer head.
No printing and paper feed.	Check if the connection cable is connected correctly both ways and if the printer autotest is completed.
The printout is illegible.	• Check if the working temperature does not exceed the recommended value and if the paper recommended by the manufacturer is used. • Follow the tips in the "Cleaning" chapter.

If the errors cannot be removed, contact the sales representative.