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GB

Operating Instructions Second display

KERN YKD

Version 1.0 1/2007



YKD-BA-e-0710



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Operating Manual

Second display

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1 Technical data

Second LCD with a numeral height of 25 mm

Voltage supply is provided by the supplied plug-in power unit 9V 300 mA or by a 9V block battery.

3 x RS232 interface:

1 input port for link-up to balance

2 output ports for connection of printers, PC, label printers etc.

2 Basic Information (General)

2.1 Proper use

The second display unit acquired by you serves as an additional display unit away from the balance and is used for the display of the weighing value for material to be weighed. It is possible to connect a further 2 devices with serial RS232 interfaces.

2.2 Improper Use

Never operate second display unit in explosive environment. The serial version is not explosion protected.

The structure of the second display may not be modified. This may result in incorrect display results, safety-related defects as well as destruction.

The second display may only be used according to the described conditions. Other areas of use must be released by KERN in writing.

2.3 Warranty

Warranty claims shall be voided in case

- Our conditions in the operation manual are ignored
- The appliance is used outside the described uses
- The appliance is modified or opened
- mechanical damage and damage caused by media, liquids
natural wear and tear
- The appliance is improperly set up or incorrectly electrically connected

3 Basic Safety Precautions

3.1 Pay attention to the instructions in the Operation Manual

Carefully read this operation manual before setup and commissioning, even if you are already familiar with KERN appliances.

3.2 Personnel training

The appliance may only be operated and maintained by trained personnel.

4 Transport and storage

4.1 Testing upon acceptance

When receiving the appliance, please check packaging immediately, and the appliance itself when unpacking for possible visible damage.

4.2 Packaging

Keep all parts of the original packaging in case you need to return the appliance. Only use original packaging for returning. Before sending, disconnect all connected cables and loose/movable parts.

5 Unpacking, Setup and Commissioning

5.1 Installation Site, Location of Use

The unit is designed to achieve reliable display results under normal conditions of use.

Therefore, observe the following for the installation site:

- Protect the unit against severe vibrations;
- Protect the appliance against high humidity, vapours and dust;
- Do not expose the device to extreme dampness for longer periods of time. Non-permitted condensation (condensation of air humidity on the appliance) may occur if a cold appliance is taken to a considerably warmer environment. In this case, acclimatize the disconnected appliance for ca. 2 hours at room temperature.
- Avoid static charge.

Major display deviations (incorrect weighing results) may be experienced should electromagnetic fields (e.g. due to mobile phones or radio equipment), static electricity accumulations or instable power supply occur. Change location or remove source of interference.

5.2 Unpacking

Carefully take the unit out of the packaging, remove the plastic jacket and mount the second display unit at the intended workplace.

5.2.1 Scope of delivery

Serial accessories:

- 1 interface cable to balance
- Mains power supply
- Operating Manual

5.3 Mains connection

Power is supplied via the external mains adapter. The stated voltage value must be the same as the local voltage.

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

5.4 Battery operation

Lift-off the battery cover on the lower side of the appliance. Connect 9 V compound battery. (not included in standard scope of delivery) Reinsert battery cover.

5.5 Connection of peripheral devices

Always disconnect the unit from the mains before connecting or disconnecting peripheral devices (balance, printer) or the PC.

With your second display, only use accessories and peripheral devices by KERN, as they are ideally tuned to your second display.

5.6 Initial Commissioning

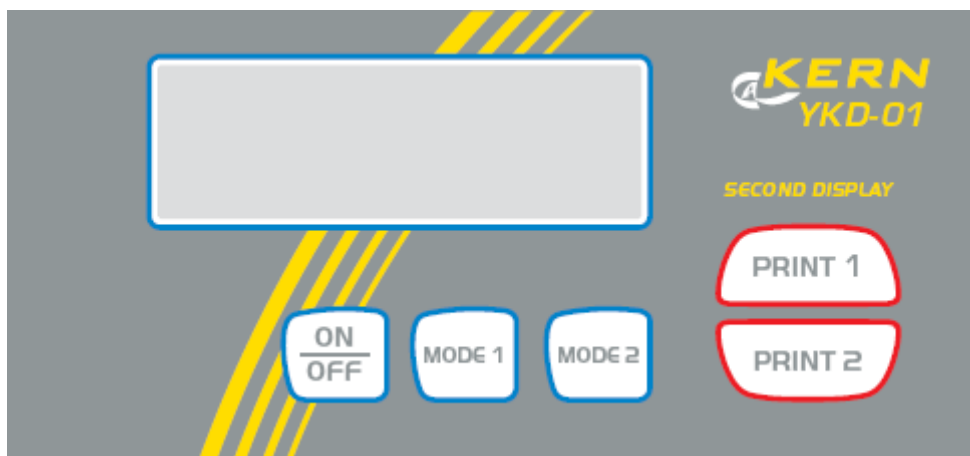
Go to the menu of the connected balance and set the parameter PR to rECr and the baud rate at 9600 baud.

For details please see operating instructions for the connected balance.

Plug one end of the supplied interface cable into the balance and the other end into the right side of the case of the second display unit.

6 Operation

6.1 Overview of display



6.2 Display

Turn on appliance by pressing the **ON/OFF** key.

Unit displays “8888” for approximately 3 seconds. Afterwards the display of the connected balance will be imported. Now it is ready for operation.

“ON” will be displayed if the connected balance does not send a signal or is not connected correctly.

6.3 Configuring the two serial interfaces

The 2 output ports of the unit are identical.
Each port has the same functionality and may be connected to a PC or printer.
(configuration of print-out is achieved via the menu of the balance)

To set the parameters for the two interfaces, call the relevant menu.

One of the following operating modes may be set for each interface.
rE CR, AU PC, AU Pr, Pr PC and bAPr.
For respective definitions please refer to the operating instructions of the balance.

You may also select a baud rate for each interface.
1200, 2400, 4800, 9600, 19200, 38400 baud.

Settings for interfaces:

The menu of **interface 1** and the related steps to be taken are described below:
To set interface 2, use the **Mode2** or **Print2** key.

6.4 Display background illumination

To set the backlighting, use parameter bL
ON – backlighting turned on
OFF – backlighting turned off
CH – automatic cut-off of backlighting after 20 seconds.

Setting the backlighting	Balance display
Press the Mode 1 key and keep it pressed down. Additionally press the Print1 key and keep it pressed down until “Pr 1” appears. Release both keys.	Pr 1
Press the Print1 key 2 x, “bL” appears.	bL
Press the Mode1 key	bL Ch
The mode can be converted using the Print1 button (Ch, on, off).	bL on
The changed setting is taken over by pressing the Mode1 button.	
Display returns to display mode.	0.0 g

6.5 Setting of data transfer mode

<i>Setting of data transfer mode</i>	<i>Balance display</i>
Press the Mode 1 key and keep it pressed down. Additionally press the Print1 key and keep it pressed down until “ Pr 1 ” appears. Release both keys.	Pr 1
Press the Mode1 key, e.g. “ Pr PC ” appears.	Pr PC
The mode can be converted using the Print1 button (Pr PC; AU PC; AU Pr ; re Cr ; bA Pr).	AU Pr
The changed setting is taken over by pressing the Mode1 button.	
Display returns to display mode.	0.0 g

6.6 Setting of baud rate

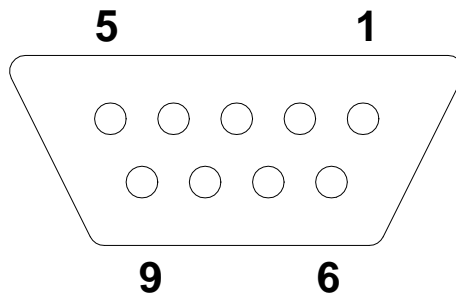
<i>Setting of baud rate</i>	<i>Balance display</i>
Press the Mode 1 key and keep it pressed down. Additionally press the Print1 key and keep it pressed down until “ Pr 1 ” appears. Release both keys.	Pr 1
Press Print1 button, „ baud “ appears.	bAUd 1
Use the Mode1 key, to confirm.	4800
The baud rate can be changed using the Print1 button (1200, 2400, 4800, 9600, 19200, 38400).	9600
The changed setting is taken over by pressing the Mode1 button.	
Display returns to display mode.	0.0 g

7 Data output RS 232 C

7.1 Technical data

- 8-bit ASCII Code
- 1 start bit, 8 data bits, 1 stop bit, no parity bit
- Baud rate selectable at 1200, 2400, 4800, 9600 and 19200 Baud
- Miniature plug-in necessary (9 pole D-Sub)
- For operation with interface faultless operation is only ensured with the correct KERN – interface cable (max. 2m)

7.2 Pin allocation of output jack (front view)



Pin 2: Transmit data
Pin 3: Receive data
Pin 5: Signal ground

8 Service, maintenance, disposal

8.1 Cleaning

Before cleaning, please disconnect the appliance from the operating voltage.

Please do not use aggressive cleaning agents (solvents or similar agents), but a cloth dampened with mild soap suds. Ensure that no liquid penetrates into the device and wipe with a dry soft cloth.

8.2 Service, maintenance

The appliance may only be opened by trained service technicians who are authorized by KERN.

Before opening, disconnect from power supply.

8.3 Disposal

Disposal of packaging and appliance must be carried out by operator according to valid national or regional law of the location where the appliance is used.

9 Instant help

In case of an error in the program process, briefly turn off the appliance and disconnect from power supply. The process must then be restarted from the beginning.

Help:

Fault

Possible cause

Display is not lit up.

- *The display unit is not switched on.*
- *The mains supply connection has been interrupted (mains cable not plugged in/faulty).*
- *Power supply interrupted.*
- *Batteries are inserted incorrectly or empty*
- *No batteries inserted.*

The display only shows "ON"

- *Unit is not connected to balance*
- *Incorrect definition for balance interface*
- *Electromagnetic fields / static charging (choose different location/switch off interfering device if possible)*