

EN

OPERATING MANUAL
ENERGY COST MEASURING
DEVICE



Table of contents

Notes regarding the operating manual..... 2

Safety 2

Information about the device..... 3

Transport and storage..... 4

Operation 5


Maintenance and repair 5


Errors and faults..... 6


Disposal 6

Notes regarding the operating manual


Symbols


 **Warning of electrical voltage**
This symbol indicates dangers to the life and health of persons due to electrical voltage.

 **Warning**
This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.

 **Caution**
This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note
This signal word indicates important information (e.g. material damage), but does not indicate hazards.

 **Info**
Information marked with this symbol helps you to carry out your tasks quickly and safely.

 **Follow the manual**
Information marked with this symbol indicates that the operating manual must be observed.

You can download the current version of the operating manual and the EU declaration of conformity via the following link:



BX09



<https://hub.trotec.com/?id=42345>

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use!



Warning

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury. **Save all warnings and instructions for future reference.**

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Do not immerse the device in water. Do not allow liquids to penetrate into the device.
- Observe the input values specified in the Technical data chapter and do not exceed them under any circumstances.
- Protect the device from permanent direct sunlight.
- Do not cover the device! With a higher power input the device will warm up. Covering the device may cause overheating and consequently may cause a fire!
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Do not open the device.
- Do not connect several devices by plugging one into another.
- Only operate the device in dry surroundings.
- Please note that the device is only de-energized when the plug has been disconnected from the mains.

- Observe the storage and operating conditions as given in the Technical data chapter.

Intended use

Only use the device for measurements on circuits directly connected to the low-voltage grid via a plug connection, e. g. household appliances, portable electrical appliances etc., whilst adhering to the technical data.

To use the device for its intended use, only use accessories and spare parts which have been approved by Trotec.

Improper use

The device is not suitable for use with any type of extension cables. The device may not be used in potentially explosive atmospheres, when wet or very humid.

Personnel qualifications

People who use this device must:

- have read and understood the operating manual, especially the Safety chapter.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning

Risk of suffocation!
Do not leave the packaging lying around. Children may use it as a dangerous toy.



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Caution

Keep a sufficient distance from heat sources.

Note

To prevent damages to the device, do not expose it to extreme temperatures, extreme humidity or moisture.

Note

Do not use abrasive cleaners or solvents to clean the device.

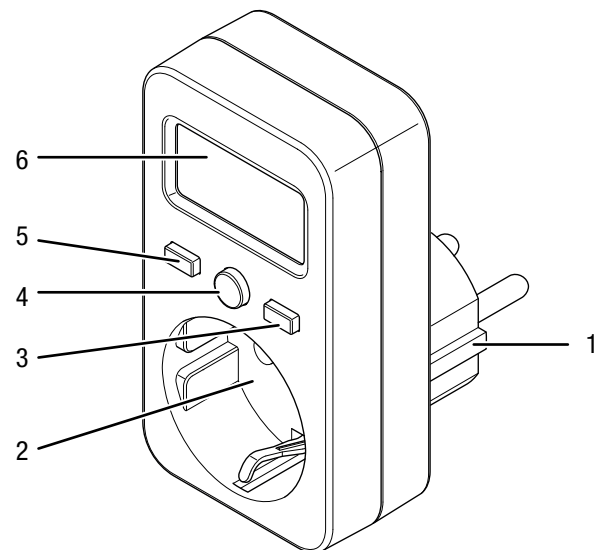
Information about the device

Device description

The device BX09 measures the energy demand of a connected terminal device.

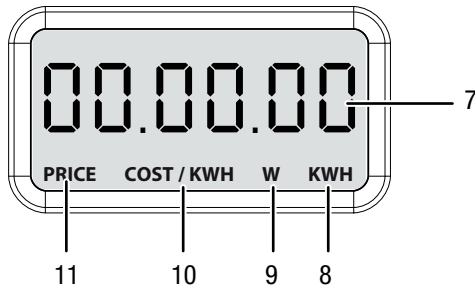
The consumption of the device can be displayed in watts, kWh, the price or costs per kWh.

Device depiction



No.	Designation
1	Connection to socket
2	Connection to terminal device (plug adapter)
3	UP button
4	MODE button
5	SET key
6	Display

Display



No.	Designation
7	Measurement value display
8	<i>KWH</i> display – consumption indicated in kilowatt hours
9	<i>W</i> display – consumption indicated in watts
10	<i>COST/KWH</i> display – consumption indicated as costs per kilowatt hours
11	<i>PRICE</i> display – consumption indicated as the overall costs

Technical data

Parameter	Value
Model	BX09
Power supply	230 V AC , 50/60 Hz
Load, max.	16 A, 3680 W
Measuring range resolution	0.1 W 0.01 kWh
Accuracy	±2 % or ±2 W (0-100 W); ±2 % (100-3680 W)
Display range	0.00 to 9999.9 kWh 0.00 to 9999 overall costs
Storage conditions	5 °C to 40 °C, <85 % RH
Measuring circuit category	CAT II, 2500 V
Type of protection	IP20
Dimensions (length x width x height)	95 x 51 x 70 mm
Weight (packaging excluded)	100 g

Scope of delivery

- 1 x Energy cost measuring device BX09
- 1 x Quick guide

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.
Note the information regarding transport and storage of the device.

Transport

When transporting the device, ensure dry conditions and protect the device from external influences e.g. by using a suitable bag.

Storage

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- protected from dust and direct sunlight
- The storage temperature is the same as the range given in the Technical data chapter.

Operation

Switching the device on

1. Plug the device into a properly fused socket.
2. Connect the terminal device to the plug adapter.
⇒ The device is switched on.

Setting the price per kilowatt hour

Note:

The default setting ex factory of the price per kilowatt hour is 0.0.

1. Press the *MODE* button (4) several times until *COST/KWH* (10) appears on the display (6).
⇒ The currently set price per kilowatt hour is indicated on the display (6).
2. Press the *SET* button (5).
⇒ The first digit in the measurement value display (7) flashes.
3. Repeatedly press the *UP* button (3) to set the desired value.
4. Then press the *SET* button (5) again.
⇒ The second digit in the measurement value display (7) flashes.
5. Repeatedly press the *UP* button (3) to set the desired value.
6. Continue until all four digits have been set.
7. Then press the *SET* button (5) again.
⇒ The decimal point in the measurement value display (7) flashes.
⇒ If required, you can change the position of the decimal point by use of the *UP* button (3).
8. Press the *SET* button (5).
⇒ The price per kilowatt hour is set and indicated on the display (6).

Changing the display mode

The device can display the following values:

- the overall costs (*PRICE*)
 - the price per kilowatt hour (*COST/KWH*)
 - the consumption in real time (*W*)
 - the overall consumption since switch-on (*KWH*)
1. Press the *MODE* button (4) until the desired display mode is set.

Reset

Please proceed as follows to reset the display for the measured kilowatt hours to 0.00:

1. Repeatedly press the *MODE* button (4) until the device is in the display mode for overall consumption since switch-on (*KWH*).
2. Press and hold the *MODE* button (4) for approx. 3 s.
⇒ The overall consumption since switch-on is reset to 0.00.

Internal memory

The device comes with an internal memory. The price per kilowatt hour and the overall costs are saved, even if the device is not connected to the mains.

Shutdown

1. Disconnect the terminal device from the plug adapter.
2. Disconnect the device from the mains.
3. Store the device according to the Storage chapter.

Maintenance and repair

Cleaning

Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners, but only clean water to moisten the cloth.

Repair

Do not modify the device or install any spare parts. For repairs or device testing, contact the manufacturer.

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

For repairs or device testing, contact the manufacturer.

Fault	Remedy
The device display indicates unusual characters or values.	Disconnect the device from the mains and reconnect it after a brief period of time. Check whether the fault is eliminated. Please contact the Trotec customer service if the problem persists.
The device does not respond to the push of a button.	

Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website www.trotec24.com.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

Trotec GmbH

Grebener Str. 7
D-52525 Heinsberg

☎ +49 2452 962-400

☎ +49 2452 962-200

✉ info@trotec.com

www.trotec.com