

Operating instructions

Luxmeter LX-10

Item no. 1662853

Intended use

The product measures the luminous intensity using the measurement units Lux or Foot-candle (Fc) and is designed for measurements indoors.

It is intended as a tool to check the luminous intensity by a simple measurement of the luminous flux and is not suitable for laboratory or scientific purposes.

The maxima or minima can be recorded.

It is powered by batteries.

It may only be used in indoor rooms. Contact with moisture, e.g., in bathrooms or the like, must be avoided.

For safety and approval reasons, you may not convert and/or alter the product in any way. If you use the product for other purposes than those described above, the product may be damaged. Furthermore, improper use can cause risks such as short-circuits, fire, etc. Please read the operating instructions carefully and do not discard them. Please include these operating instructions when you pass the product on to a third party.

This product complies with the applicable national and European Regulations. All names of companies and products are the trademarks of the respective owners. All rights reserved.

Package contents

- Luxmeter LX-10
- Batteries (3 x AAA)
- Operating Instructions



Up-to-date operating instructions

Download the latest operating instructions via the link www.conrad.com/downloads or scan the QR code. Follow the instructions on the website..

Explanation of symbols



An exclamation mark in a triangle indicates important instructions in these operating instructions that must be adhered to.



The arrow symbol indicates specific tips and advice on operation.

Safety instructions



Please read the operating instructions carefully and pay particular attention to the safety instructions. We do not assume liability for any injuries/material damages resulting from failure to observe the safety instructions and the information in these operating instructions regarding the proper use of the product. Furthermore, in such cases, the warranty/guarantee will be null and void.

a) General Information

- The product is not a toy. Keep out of the reach of children and pets.
- Do not carelessly leave the packaging material lying around. It may become a dangerous plaything for children.
- Protect the product from exposure to humidity, moisture, extreme temperatures, direct sunlight, strong vibrations and combustible gases, vapours and solvents.
- Please handle the product carefully. It can be damaged by impact, blows, or by being dropped, even from a low height.
- If safe operation is no longer possible, take the device out of service and secure it against unintended use. Safe operation is no longer possible, if the product:
 - shows visible damage,
 - no longer functions properly,
 - has been stored under adverse ambient conditions for an extended period of time or
 - has been exposed to considerable strain during transport.
- On industrial sites, the accident prevention regulations of the association of the industrial workers' society for electrical equipment and utilities must be followed.
- Measurement instruments used in schools, training facilities, do-it-yourself and hobby workshops should not be handled unless supervised by trained, responsible personnel.
- Please consult a specialist if you have any doubts regarding the use or safety of the product.
- If you have any questions that are not answered in these operating instructions, please contact our technical customer service or another specialist.



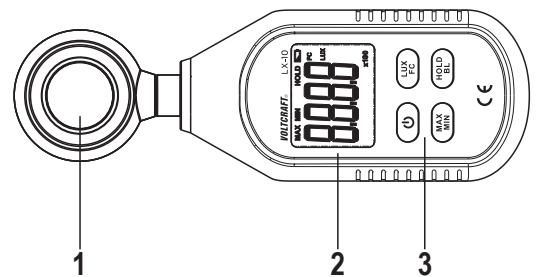
b) Weighing

- Observe the permissible ambient temperatures (Technical data) in order to avoid incorrect measurements.
- Do not switch the measuring instrument on immediately after it has been taken from a cold in to a warm environment. The condensation that forms might destroy your device. Allow the device to reach room temperature before switching it on.

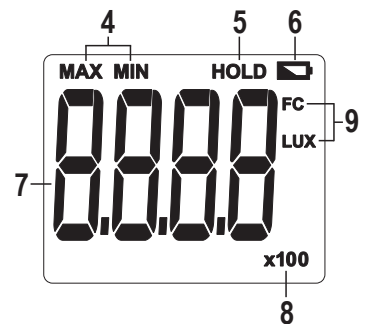
c) Battery instructions

- Batteries should be kept out of the reach of children.
- Do not leave batteries lying around in the open; there is a risk of them being swallowed by children or domestic animals. If swallowed, consult a doctor immediately.
- Leaking or damaged batteries can cause burns if they come into contact with the skin. You should therefore wear suitable protective gloves.
- Batteries must not be short-circuited, opened or thrown into a fire. There is a danger of explosion!
- Do not recharge normal, non-rechargeable batteries; they may explode! Only recharge rechargeable batteries that are intended for this purpose; use a suitable battery charger.
- Never mix batteries of different charge states or different brands.
- Please pay attention to the correct polarity (plus/+ and minus/-) when inserting the batteries.
- Remove batteries from the device if you will not be using it for a longer period.

Controls

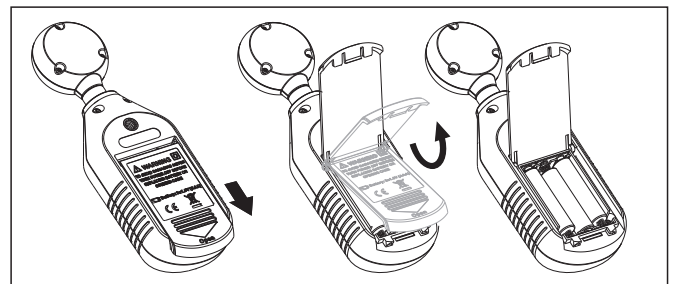


- 1 Sensor
- 2 Display
- 3 Operating buttons
- 4 Display of MAX/MIN values
- 5 Display Hold
- 6 Battery indicator
- 7 Display for measured value
- 8 Display for measured value factor
- 9 Display for measuring unit



Inserting/replacing batteries



- Move the battery compartment cover on the back towards OPEN and open it.
- Remove the empty batteries and replace with three 1.5 V AAA/Micro batteries observing the correct polarity (plus / + and minus / - terminals).
- The correct polarity is indicated inside the battery compartment.
- Close the battery compartment again.
- Battery replacement is required if the battery indicator (6) lights up in the display or if after switching on there is nothing on the display (2) showing up.





Operation








Make sure you keep a safe distant to hot sources of light. There is a risk of burns.
Never stare directly into a bright light source. This could cause damage to your eyes

- Press the button  once to switch on the device.
- Press the button  briefly to switch off the device.








The device turns off automatically after approx. 5 minutes.
To disable automatic shut-down for the next measurement, hold down the  button while the device is off and then press and hold the  button. The display (2) shows the status accordingly ("APO OFF" = automatic shut-down is deactivated).

The next time the device is turned on, the automatic shut-down will be again enabled.

- When tuned on, the instrument will instantly start measuring and will show the reading in the measured value display (7). The measured value must be multiplied by the displayed measured value factor (8) (if shown).
- Press the  button to toggle between maximum value, minimum value and instantaneous value. The currently set display mode is shown via the MAX/MIN display (4) (no display >> instantaneous value display).
- Press the  button to "freeze" the value shown. The current measured value is permanently displayed, HOLD (5) appears on the display. To return to the normal display, press the  button again.
- Hold down the  button to turn the display illumination on or off.
- Press the  button to change the measurement unit. The display will show which measurement unit (9) is used (Lux or Fc).
- If the reading is out of the measurement range, the display (2) will show "OL".

Brief overview

Button	Short actuation	Long actuation
	Switching off	Switching on
	Toggle display	
	Toggle measurement unit	
	"Freeze" measurement value display	Display illumination on/off In connection with  shut-down disabled

Troubleshooting

The device does not turn on, indicators (2) are not shown

- Are the batteries spent?
- The measured value display is incorrect or does not change when the measured value changes
- Are the batteries spent?
- Is the measured value within the measuring range?
- Has the maximum or minimum value display been enabled?
- Was the measured value display "frozen"?

Care and cleaning



Do not use abrasive cleaning agents, cleaning alcohol or other chemical solutions since these could damage the housing or even impair operation.

- The product is maintenance-free for you, apart from the occasional battery replacement. Inside the product are no components that need to be maintained by you.
- Use a dry, lint-free cloth for cleaning.

Disposal

a) Product



Electronic devices are recyclable and do not belong in the household waste. Dispose of an unserviceable product in accordance with the relevant statutory regulations.



Remove the batteries that may be inserted and dispose of them separately from the product.

b) Batteries

As the end user, you are required by law (Battery Ordinance) to return all used batteries/rechargeable batteries; disposal in household waste is prohibited!



Batteries/rechargeable batteries contain harmful materials and are labelled with the symbol shown to indicate that disposal in the household waste is forbidden. The symbols of the critical heavy metals are: Cd=cadmium, Hg=mercury, Pb=lead (marking can be seen on the battery / rechargeable battery, e.g., underneath the refuse bin symbol shown on the left).

You can return your used batteries/rechargeable batteries free of charge at the official collection points of your community, in our stores, or at places where batteries or rechargeable batteries are sold!

That way you fulfil your statutory obligations and contribute to the protection of the environment.

Technical data

Operating voltage	4.5 V/DC
Batteries	3 x 1.5 V micro-cell (AAA)
Battery life.....	approx. 13 h
Measurement range	0~199900 Lux / 0~18578 Fc
Automatic shut-down.....	approx. 5 min
Measuring interval	0.5 s
Display	4 digit
Dimensions.....	163 x 54 x 28 mm
Weight	106 g

Tolerances and resolution

Measurement range	Precision*	Resolution
0~9999 lux	±(4% display value +8 digit)	1 lux
10000~99990 lux	±(5% display value +10 digit)	10 lux
≥100000 lux	±(5% display value +10 digit)	100 lux
0~9999 Fc	±(4% display value +2 digit)	1 Fc
≥10000Fc	±(5% display value +2 digit)	10 Fc

Note: Fc = lux/10.76

* @ 2856 K / 23 ± 3 °C / max. 80% RH

Environmental conditions

Measuring conditions.....	0 bis +40 °C / ≤ 80%RH >+40 to +50 °C / ≤ 45%RH
Storage conditions.....	-20 bis +60 °C / <75%RH
Height.....	0 - 2000 m above

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