**BF06** 





**OPERATING MANUAL** LUXMETER

TRT-BA-BF06-TC-002-EN



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# Notes regarding the operating manual

#### **Symbols**



Danger!

Warns of a hazard which can lead to injuries.

#### Caution! Warns of

Warns of a hazard which can lead to damage to property.

The current version of the operating manual can be found at: www.trotec.de

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The scope of delivery may vary from product images. This document was created with all due care. Trotec accepts no liability whatsoever for possible mistakes or omissions.

The only party responsible for determining measured results to be valid, drawing conclusions and deriving actions is the user! Trotec accepts no claims of warranty for the correctness of the determined measured values or measured results. Further, Trotec accepts no liability whatsoever for possible mistakes or damage which have been caused by utilising the determined measured results. © Trotec

# Information about the device

### **Description of the device**

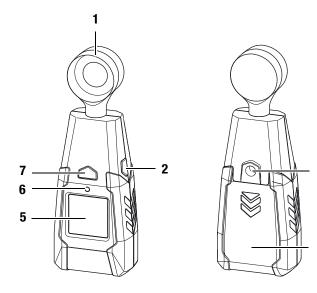
By use of the luxmeter the luminous intensity can be determined in lux or fc.

Further available for the assessment of the measurements is a MAX function (maximum value).

The display illumination automatically adjusts to the ambient light conditions.

When not in use, an automatic switch-off saves the battery.

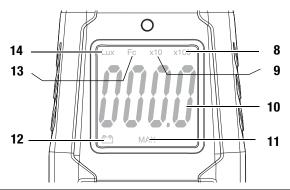
### **Device depiction**



No.	Operating element
1	Photosensor
2	MAX/LUX button
3	Tripod thread
4	Battery compartment with cover
5	Display
6	Light sensor
7	On/Off key

3

Display



No.	Display element
8	Indication of the measured value x 100
9	Indication of the measured value x 10
10	Measurement value display
11	Indication of the maximum value
12	Battery status
13	Indication fc (foot-candle)
14	Indication lux

# **Technical data**

Model:	BF06
Weight:	145g
Dimensions (H x W x D):	159 mm x 56 mm x 33 mm
Measuring range:	0.1 to 20 lx or 0.1 to 20 fc up to 2000 lx or 200 fc up to 20 klx or 2000 fc up to 40 klx or 4000 fc
Accuracy:	$\pm 5 \% \pm 10 \text{ kx/fc}$ (<10,000 k / 1,000 fc), $\pm 10 \% \pm 10 \text{ kx/fc}$ (>10,000 k / 1,000 fc)
Measuring range resolution:	$\pm 5 \% \pm 10 \text{ kx/fc}$ (<10,000 k / 1,000 fc), $\pm 10 \% \pm 10 \text{ kx/fc}$ (>10,000 k / 1,000 fc)
Measuring rate:	2.5 x per second
Operating temperature:	0 to 40 °C
Storage temperature:	-10 to 60 °C
Power supply:	1 x Alkaline 9 V battery
	Battery life approx. 5000 to 8000 measurements
Automatic switch-off of the device:	After approx. 17 minutes of non-use

# Scope of delivery

- 1 x Luxmeter BF06
- 1 x 9 V battery
- 1 x Getting started guide

# Safety

# Carefully read the operating manual before using the device and keep it within reach!

- Do not use the device in atmospheres containing oil, sulphur, chlorine or salt.
- Protect the device from permanent direct sunlight.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Observe the storage and operating conditions (see chapter Technical data).

#### Intended use

Only use the device for measurements of the luminous intensity within the measuring range specified in 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

Do not use the device in potentially explosive atmospheres, for measurements in liquids and at live parts. Trotec accepts no liability for damages resulting from improper use. In such a case, entitlements to a warranty are forfeited. Any unauthorised modifications, alterations or structural changes to the device are forbidden.

#### **Personnel qualifications**

People who use this device must:

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

## **Residual risks**

# Danger!

Keep a sufficient distance away from sources of heat.

# Danger!

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

# Danger!

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

# $\land$

# Danger!

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

#### **Caution!**

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

#### Caution!

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

# **Transport and storage**

#### Transport

For transporting the device use a suitable bag to protect it from external influences.

#### Storage

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

- dry,
- protected from dust and direct sunlight,
- with a plastic cover to protect it from invasive dust, if necessary.
- The storage temperature is the same as the range given in the chapter Technical data.
- When storing the device for a long time, remove the batteries.

## **Operation**

#### Inserting the battery

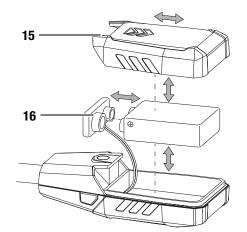
• Insert the supplied battery before first use.



Caution!



Make certain that the surface of the device is dry and the device is switched off.



- 1. Remove the cover (15) from the device by sliding it in the direction of the arrow.
- 2. Use the battery clip (16) to connect the new battery with correct polarity.
- 3. Slide the cover (15) back on the device.

#### Switch-on and measurements

- 1. Press the On/Off key (7).
  - The display is switched on and the device is ready for operation.
  - In case of poor lighting conditions the display illumination switches on automatically. The display illumination is controlled by the sensor (6).
- 2. Point the device at the area to be measured.
  - The measured value will be displayed in real time.
  - Depending on the length of the measured value, the factor x10 (9) or x100 (8) may also be indicated.
  - If the measured value exceeds the measuring range (> 40 klx or 4000 fc), the display reads OL or VO.

#### Note:

Note that moving from a cold area to a warm area can lead to condensation forming on the device's circuit board. This physical and unavoidable effect can falsify the measurement. In this case, the display shows either no measured values or they are incorrect. Wait a few minutes until the device has become adjusted to the changed conditions before carrying out a measurement.

Please note that the photosensor (1) should preferably be held at an angle of  $90^{\circ}$  to the light source. Any other angle could falsify the measurement result.

# **MAX** function

Using the MAX function you can read the highest value of the present measurement.

- 1. Briefly press the MAX/LUX button (2).
  - The indication MAX (11) appears on the display.
  - The display now indicates the highest temperature and humidity values measured since the device was switched on.
- 2. Press the MAX/LUX button (2) again.
  - The MAX function is deactivated and the currently measured values are displayed.

#### Setting the unit lux or foot-candle

- 1. Press the MAX/LUX button (2) for approx. 2 seconds.
  - The display changes from lux (14) to fc (13).
  - Repeat this process to change back from fc to lux.

#### Switch-off

The device comes equipped with an automatic switch-off function. After 15 minutes of non-use the device switches off automatically.

- Press the On/Off key (7).
  - The device will be switched off.
  - The MAX value will be reset.

#### Maintenance and repair

#### **Battery change**

The battery is to be changed when the battery symbol (12) lights up in the display or the device can no longer be switched on. See Inserting the battery on page 3.

#### Cleaning

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

#### Repair

Do not modify the device. Never open the device housing or install any spare parts. For repairs or device testing, contact the manufacturer.

## Disposal



In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and Council of

27th January 2003 concerning old electrical and electronic equipment. At the end of its life, please dispose of this instrument in a manner appropriate to the relevant legal requirements.

#### **Declaration of conformity**

in accordance with the EC Low Voltage Directive 2006/95/EC and the EC Directive 2004/108/EC about electromagnetic compatibility.

Herewith, we declare that the luxmeter BF06 was developed, constructed and produced in compliance with the named EC directives.

The  $\boldsymbol{\epsilon} \in \boldsymbol{\epsilon}$  marking is found on the rear of the device.

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