

EN

OPERATING MANUAL
THERMOHYGROMETER



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Notes regarding the operating manual

Symbols



Danger from electric current

Warns about hazards from electric current which can lead to injuries or even death.



Danger

Warns of a hazard which can lead to personal injury.



Caution

Warns of a hazard which can lead to property damage.

The current version of the operating manual can be found at:



BC06



<http://download.trotec.com/?sku=3510205005&id=1>

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Changes to construction in the interests of constant improvements to the product, as well as changes to the shape and colour are reserved.

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 valid measured results, 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.

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Warranty and liability

The device complies with the fundamental health and safety requirements of the applicable EU regulations and was tested at the factory for perfect functionality multiple times. However, if faults in the functionality occur and cannot be remedied with the measures in the chapter Errors and faults, please get in touch with your dealer or distributor.

When manufacturer's instructions or legal regulations have not been followed, or after unauthorised changes to the device are made, the manufacturer is not responsible for the resulting damages. Changes to the device or unauthorised replacement of individual parts can drastically impact the electrical safety of this product and leads to the forfeit of the warranty. Liability does not extend to damages to people or property caused by the device being used other than as described in the instructions in this operating manual. Subject to changes to technical design and model changes as part of constant development and product improvement without prior notice.

No liability is accepted for damages resulting from improper use. In such cases, entitlements to a warranty are then also forfeited.

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!

- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Do not cover or transport the device during operation.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- Allow the device to cool down before transport and/or maintenance work.
- 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.
- Do not open the device with a tool.
- Observe the storage and operating conditions (see chapter Technical data).
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. Defective power cables pose a serious health risk.

Intended use

Only use the device for indoor temperature and humidity measurements within the measuring range specified in the technical data. Here, read and observe 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 or at live parts. Trotec accepts no liability for damages resulting from improper use. In such a case, any warranty claims be voided. 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

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.



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.

Information about the device

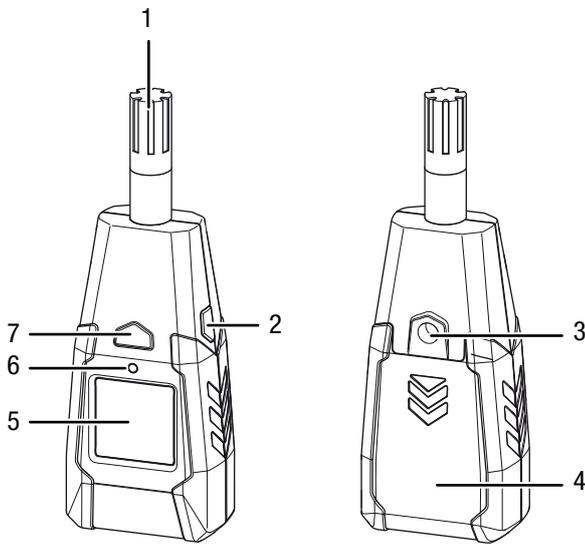
Device description

Using thermohygrometer BC06 air, dew-point and wet-bulb temperature can be determined as well as the indoor humidity level.

Further available for the assessment of the measurements is a MAX/MIN function (minimum and maximum value). The display illumination automatically adjusts to the ambient light conditions.

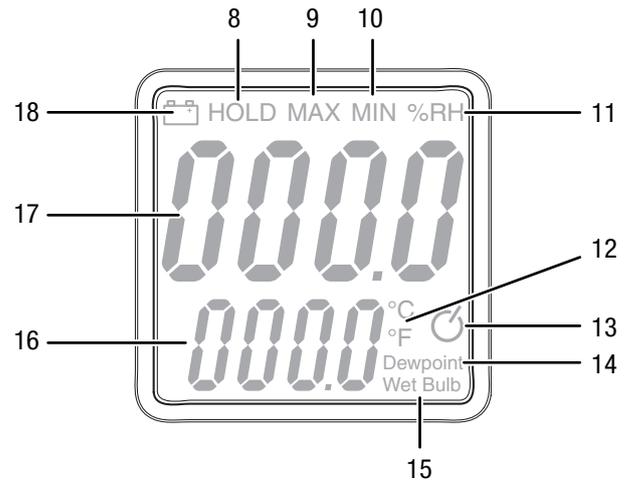
When not in use, an automatic switch-off saves the battery.

Device depiction



No.	Designation
1	Measuring sensor
2	MAX/MIN button
3	Tripod thread
4	Battery compartment with cover
5	Battery compartment with cover
6	Light sensor
7	Power button

Display



No.	Designation
8	HOLD indication
9	Indication of the maximum value
10	Indication of the minimum value
11	Indication of the relative humidity
12	Temperature unit indication °C / °F
13	Indication for automatic switch-off
14	Dew point indication
15	Wet-bulb indication
16	Indication of the measured temperature value
17	Indication of the measured humidity value
18	Battery status indication

Technical data

Parameter	Value
Model	BC06
Weight	152 g
Dimensions (height x width x depth)	148 mm x 56 mm x 33 mm
Temperature	
Measuring range	-20 to +60 °C or -4 to 140 °F
Accuracy	±1 °C (0 °C to 40 °C) ± 2 °C (-20 °C to 0 °C and 40 °C to 60 °C)
Measuring range resolution	0.1 °C or 0.1 °F
Dew point temperature	
Measuring range	0 °C to +50 °C or 32 °F to 122 °F
Accuracy	±2 °C
Measuring range resolution	0.1 °C
Wet-bulb temperature	
Measuring range	0 °C to +50 °C or 32 °F to 122 °F
Accuracy	±2 °C
Measuring range resolution	0.1 °C
Relative humidity	
Measuring range	0.0 to 100.0 % RH
Accuracy	±3.5 % RH (20 % to 80 %) ±5 % RH (0 % to 20 % and 80 % to 100 %)
Measuring range resolution	0.1 % RH
Reaction time	< 15 seconds
Operating conditions	0 to 50 °C at <80 % RH
Storage conditions	-40 to 85 °C at <99 % RH
Automatic switch-off	If activated (13), after approx. 30 minutes of non-use.

Scope of delivery

- 1 x Thermohygrometer BC06
- 1 x 9 V battery
- 1 x Device bag
- 1 x Getting started guide

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 cover to protect it from invasive dust, if necessary.
- Remove the batteries from the device.
- Place no further devices or objects on top of the device to prevent it from being damaged.

Operation

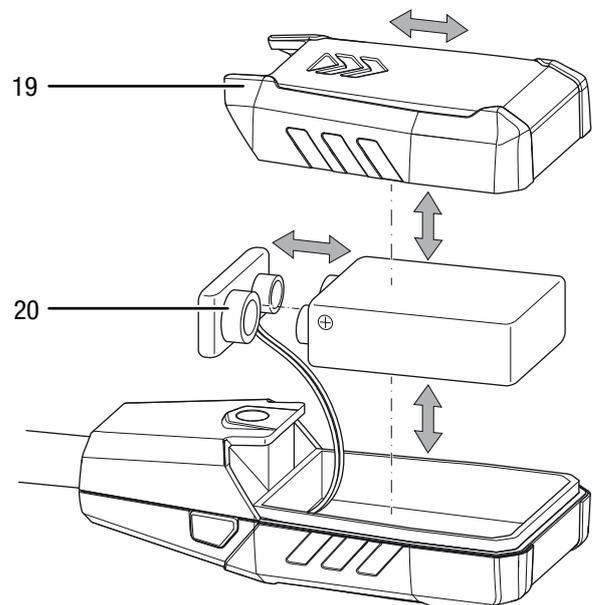
Inserting the batteries

- Insert the supplied battery before first use.



Caution

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



1. Remove the cover (19) from the device by sliding it in the direction of the arrow.
2. Use the battery clip (20) to connect the new battery with correct polarity.
3. Insert the battery in the battery compartment.
4. Slide the cover (19) back on the device.

Switch-on and measurements

1. Press the Power button (7).
 - ⇒ The display will be switched on and the device 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 values are indicated in % RH and °C.
 - ⇒ Wait for a moment to achieve a stable measured value.

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.

Changing the unit °C / °F

The default setting for the temperature unit is °C.

1. Open the battery compartment.
2. Remove the battery.
 - ⇒ At the upper edge you can see an opening leading to the inside of the device. That is where the switch is located.
3. Flip the switch by means of a suitable tool (e.g. a paper clip).
 - ⇒ The unit is set to °F.

Setting the HOLD function

1. Press the MAX/MIN button (2).
 - ⇒ The current value will be held.
2. Press the MAX/MIN button (2) three times.
 - ⇒ The display again indicates the current measured value.

Setting the MAX/MIN function

By use of the MAX/MIN function you can either read the highest or the lowest value of the current measurement interval.

1. Press the MAX/MIN button (2) twice.
 - ⇒ The *MAX* indication (9) 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/MIN button (2) again.
 - ⇒ The *MIN* indication (10) appears on the display.
 - ⇒ The display now indicates the lowest temperature and humidity values measured since the device was switched on.

Setting the wet-bulb or dew point temperature

The device additionally offers the option of displaying the wet-bulb or dew point temperature.

1. Press the MAX/MIN button (2) for approx. 2 seconds.
 - ⇒ The dew point indication (14) appears on the display.
 - ⇒ The dew point temperature is now indicated on the measured temperature value display (16).
2. Press the MAX/MIN button (2) again for approx. 2 seconds.
 - ⇒ The wet-bulb indication (15) appears on the display.
 - ⇒ The wet-bulb temperature is now indicated on the measured temperature value display (16).
3. Press the MAX/MIN button (2) again for approx. 2 seconds.
 - ⇒ The room temperature is again indicated on the measured temperature value display (16).

Automatic switch-off

If the automatic switch-off indication (13) is displayed, the device will switch off automatically when not in use for 5 minutes.

To deactivate automatic switch-off, please proceed as follows:

1. Press the Power button (7) to switch the device off.
2. Press and hold the MAX/MIN button (2).
3. Simultaneously press the Power button (7).
 - ⇒ The display will be switched on and the device ready for operation.
 - ⇒ The automatic switch-off indication (13) is no longer displayed.
 - ⇒ Automatic switch-off is deactivated.

Repeat these steps to switch automatic switch-off back on.

Switch-off

If automatic switch-off (13) is activated, the device switches off after 5 minutes of non-use.

1. Press the Power button (7).
 - ⇒ The device is switched off.
 - ⇒ The MAX and MIN values are reset.

Maintenance and repair

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, 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.

Battery change

A battery change is required when the battery status indication flashes or the device can no longer be switched on (see chapter Inserting the batteries).

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 of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE). At the end of its life, please dispose of this device according to the valid 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 device BC06 was developed, constructed and produced in compliance with the named EC directives.

The **CE** marking is found on the rear of the device.

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