

EN

INSTRUCTIONS
THERMOHYGROMETER



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Information on the use of these instructions

Symbols



Warning

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



Warning of electrical voltage

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

Notice

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 instructions must be observed.

You can download the current version of these instructions via the following link:



BC06



<https://hub.trotec.com/?id=40276>

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.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in an aggressive atmosphere.
- Do not immerse the device in water. Do not allow liquids to penetrate into the device.
- The device may only be used in dry surroundings and must not be used in the rain or at a relative humidity exceeding the operating conditions.
- Protect the device from permanent direct sunlight.
- Do not expose the device to strong vibrations.
- Do not open the device.
- 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 Technical data).

Intended use

Only use the device for indoor temperature and humidity measurements within the measuring range specified in the technical data. Observe and comply with the technical data.

Any use other than the intended use is regarded as misuse.

Reasonably foreseeable misuse

Do not use the device in potentially explosive atmospheres, for measurements in liquids or at live parts.

Any unauthorised modifications, alterations or structural changes to the device are forbidden.

Personnel qualification

People who use this device must:

- have basic knowledge of how to safely handle electrical equipment.
- have read and understood the instructions, especially the Safety chapter.

Residual risks



Danger

There is a danger of suffocation for children due to packaging material! Keep packaging films and parts away from children. There is a risk of death due to suffocation.



Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing!
Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.



Warning of electrical voltage

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



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.

Notice

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

Notice

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

Information about the device

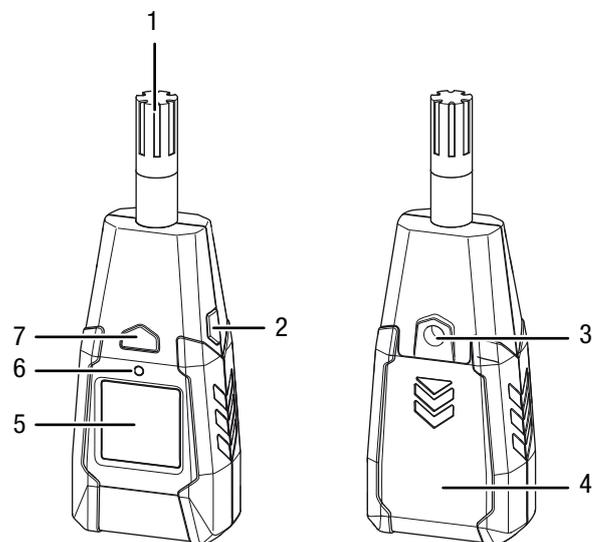
Device description

The thermohygrometer BC06 can be used to determine the air, dew point and wet-bulb temperature as well as the humidity level of indoor areas.

For assessing the measurements, a Max / Min function (maximum and minimum value) and a Hold function for freezing the currently measured value are also available. The display illumination is automatically activated in poor lighting conditions.

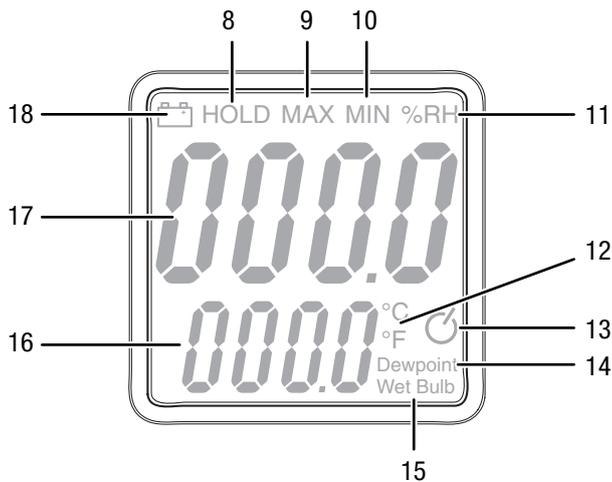
When not in use, an automatic switch-off saves the battery.

Device depiction



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

Display



No.	Indication
8	<i>HOLD</i>
9	<i>MAX</i>
10	<i>MIN</i>
11	<i>%RH (relative humidity)</i>
12	<i>Temperature unit</i>
13	<i>Automatic switch-off</i>
14	<i>Dew point</i>
15	<i>Wet-bulb temperature</i>
16	<i>Measured temperature value</i>
17	<i>Measured humidity value</i>
18	<i>Battery status</i>

Technical data

Parameter	Value
Model	BC06
Temperature	
Measuring range	-20 °C to +60 °C or -4 °F to 140 °F
Accuracy	±1 °C (0 °C to 40 °C) ± 2 °C (-20 to 0 °C and 40 °C to 60 °C) ±1.5 °F
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 (3.6 °F)
Measuring range resolution	0.1 °C / 0.1 °F
Wet-bulb temperature	
Measuring range	0 °C to +50 °C or 32 °F to 122 °F
Accuracy	±2 °C / 3.6 °F
Measuring range resolution	0.1 °C / 0.1 °F
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
General technical data	
Display	LCD (monochrome)
Operating conditions	0 °C to 50 °C with < 80 % RH (non-condensing)
Storage conditions	-40 to 85 °C with < 99 % RH (non-condensing)
Power supply	1 x 9 V battery
Automatic switch-off	if automatic switch-off is activated, after approx. 30 minutes of non-use
Weight	approx. 145 g
Dimensions (height x width x depth)	146 mm x 56 mm x 34 mm

Scope of delivery

- 1 x Device BC06 (without batteries)
- 1 x Bag/holster
- 1 x Quick guide

Transport and storage

Notice

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

For transporting the device, use the bag included in the scope of delivery in order to protect the device from external influences.

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
- protected from dust ingress in the supplied bag
- at the temperature specified in the technical data
- battery is removed from the device

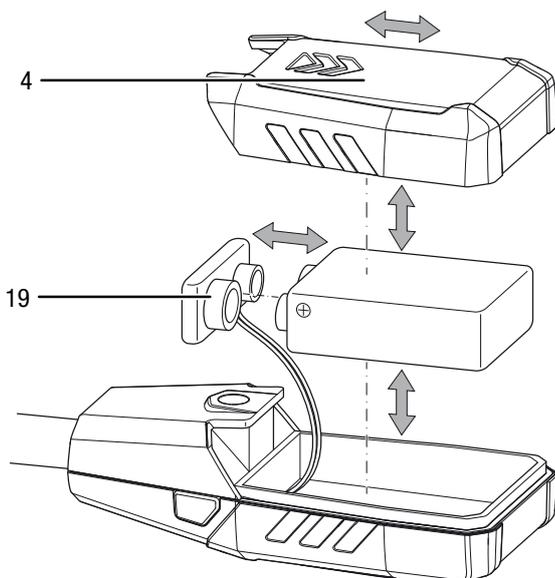
Operation

Inserting the battery

- Insert a suitable battery before first use.

Notice

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



1. In the direction of the arrow, remove the battery compartment cover (4) from the device.
2. Use the battery clip (19) to connect the new battery with correct polarity.
3. Insert the battery in the battery compartment.
4. Slide the battery compartment cover (4) back on the device.

Switch-on and measurements

Notice

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.

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. Hold the sensor (1) into the area where the measurement is to be performed.
 - ⇒ The measured values are indicated in % RH and °C.
 - ⇒ Wait for a moment to achieve a stable measured value.

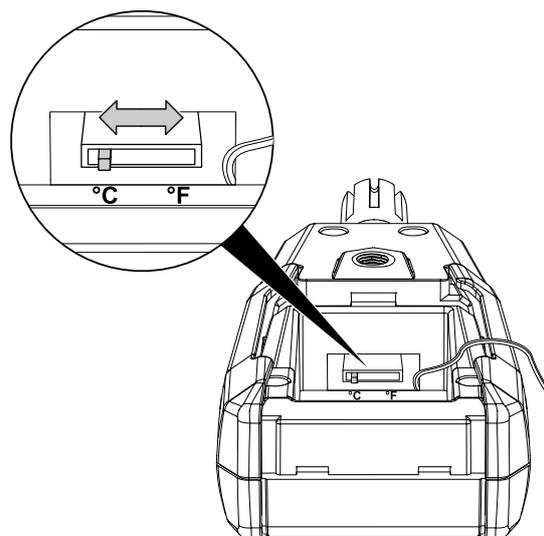
Changing the unit °C / °F

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.

Notice

Proceed with great caution when sliding the switch. Make sure not to damage the sensitive board components.



3. Use a suitable tool (e.g. a small screwdriver) to slide the switch to the desired unit. In doing so, pay attention to the label inside the battery compartment. This label indicates the correct switch position.
 - ⇒ The display is now set to the desired unit (°C/°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.
3. Press the *MAX/MIN* button again.
⇒ The display again indicates the current measured value.

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.



Info

The next time the device is switched on, the device activates automatic switch-off. If you do not like to use the function, deactivate automatic switch-off again.

Switch-off

To switch off the device manually, please proceed as follows:

1. Press the *Power* button (7).
⇒ The device will be switched off.
⇒ Maximum and minimum values are reset.

Maintenance and repair

Battery change

A battery change is required when the *Battery status* indication (18) flashes or the device can no longer be switched on.

Change the battery, if required (see chapter Operation, Inserting the battery).

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.

Display segments are only faintly visible or flicker:

- Check the charging status of the battery. Change the battery, if required (see chapter Inserting the battery).
- Make sure that the battery is properly positioned. Check the polarity is correct.

The device displays implausible measured values:

- Check the charging status of the battery. Change the battery, if required (see chapter Inserting the battery).
- Make sure that the battery is properly positioned. Check the polarity is correct.
- The sensor is defective or soiled. Clean the device as described in the Cleaning chapter.

Disposal

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.



The icon with the crossed-out wheeled bin indicates that this device and any associated components (e.g. remote controls) must not be disposed of with household waste at the end of their life, in accordance with the Waste Electrical and Electronic Equipment Directive (2012/19/EU) and national laws.

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. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

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.



This icon with the crossed-out wheeled bin indicates that batteries or accumulators must not be disposed of with household waste at the end of their life. If the device contains batteries or accumulators that contain mercury, cadmium or lead, the respective chemical symbol (Hg, Cd or Pb) is shown below the icon of the crossed-out wheeled bin. To prevent environmental pollution, do not carelessly leave batteries or electrical and electronic equipment containing batteries in public areas. In the European Union, batteries and accumulators must be returned to a designated collection point in accordance with REGULATION (EU) 2023/1542 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 July 2023 concerning batteries and waste batteries. Remove batteries/accumulators and dispose of them separately according to the relevant legal requirements.

Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) and the Waste Batteries and Accumulators Regulations 2009 (SI 2009/890) (as amended), devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

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