

*Bedienungsanleitung
Instruction manual
Mode d'emploi
Instrucciones de uso
Gebruiksaanwijzing
Istruzioni per l'uso*

TFA



CE UK

Fig. 1

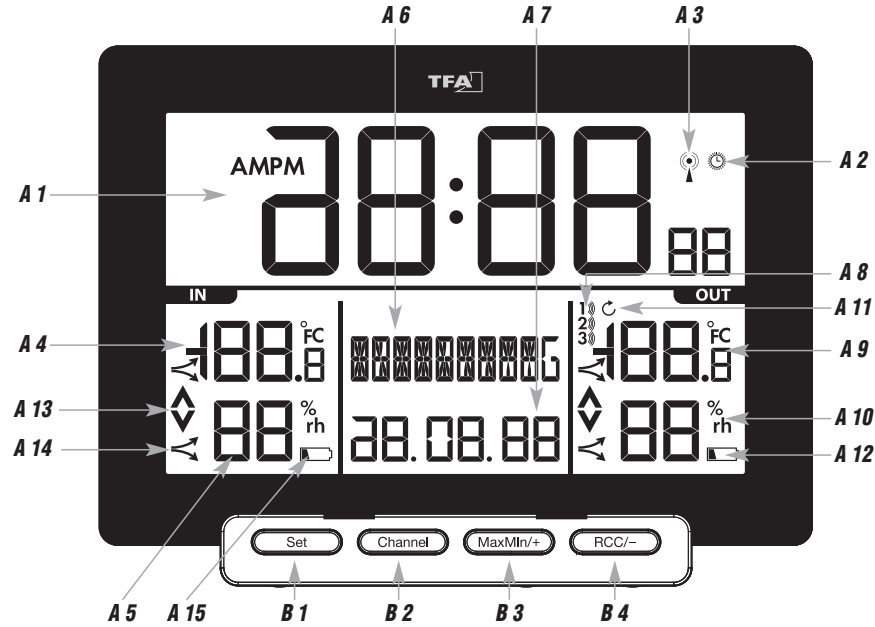


Fig. 2

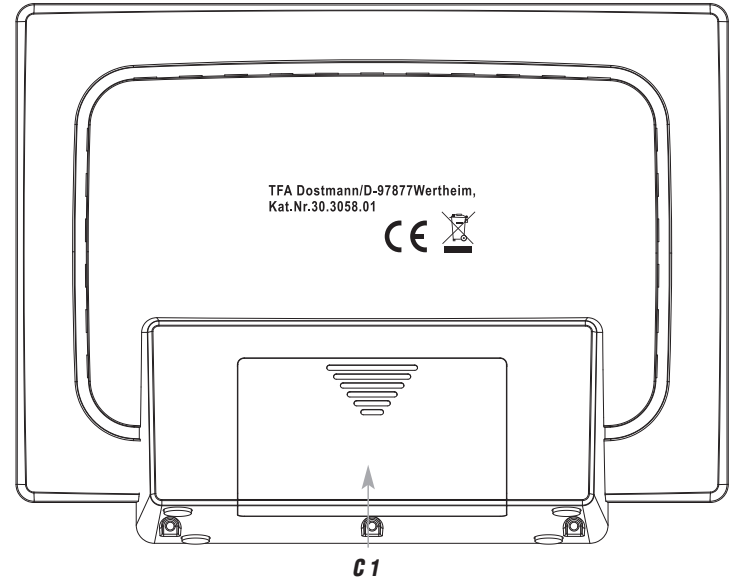
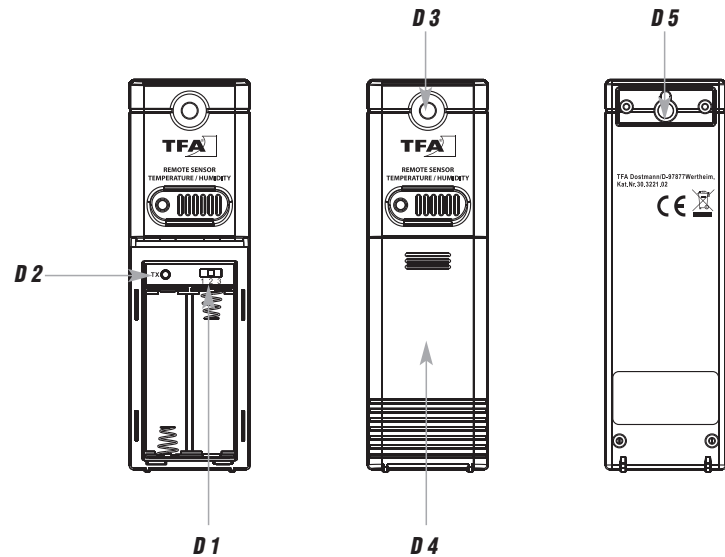


Fig. 3



TRINITY – Wireless thermo-hygrometer

GB

Thank you for choosing this instrument from TFA.

1. Before you use this product

- Please make sure you read the instruction manual carefully.
- Following and respecting the instructions in your manual will prevent damage to your instrument and loss of your statutory rights arising from defects due to incorrect use.
- We shall not be liable for any damage occurring as a result of non-following of these instructions. Likewise, we take no responsibility for any incorrect readings or for any consequences resulting from them.
- Please pay particular attention to the safety notices!
- Please keep this instruction manual safe for future reference.

2. Delivery contents

- Wireless thermo-hygrometer
- Thermo-hygro sensor (cat.-no. 30.3221.02)
- Instruction manual

3. Range of application and all the benefits of your new instrument at a glance

- Wireless (433 MHz) outdoor temperature and humidity, distance range up to 80 m (open field)
- Expandable up to 3 outdoor transmitters, also for the climate control of remote rooms, e.g. children's room, wine-cellar etc.
- Indoor temperature and humidity
- Maximum and minimum values, trend indicators
- Large radio-controlled clock with alarm, date and weekday written in full letters (6 languages)

TRINITY – Wireless thermo-hygrometer

GB

4. For your safety

- This product is exclusively intended for the range of application described above. The product should only be used as described within these instructions.
- Unauthorized repairs, alterations or changes to the product are prohibited.



Caution! **Risk of injury:**

- Keep these devices and the batteries out of reach of children.
- Small parts can be swallowed by children (under three years old).
- Batteries contain harmful acids and may be hazardous if swallowed. If a battery is swallowed, this can lead to serious internal burns and death within two hours. If you suspect a battery could have been swallowed or otherwise caught in the body, seek medical help immediately.
- Batteries must not be thrown into a fire, short-circuited, taken apart or recharged. **Risk of explosion!**
- Low batteries should be changed as soon as possible to prevent damage caused by leaking.
- Never use a combination of old and new batteries together, nor batteries of different types.
- Avoid contact with skin, eyes and mucous membranes when handling leaking batteries. In case of contact, immediately rinse the affected areas with water and consult a doctor.



Important information on product safety!

- Do not expose your device to extreme temperatures, vibrations or shocks.
- Protect it from moisture.
- The outdoor transmitter is splashproof, but not watertight. Choose a shady and dry place for the transmitter.

TRINITY – Wireless thermo-hygrometer

GB

5. Elements

Base station (Receiver)

Display (Fig. 1)

- A 1:** Time with seconds
- A 3:** DCF symbol
- A 5:** Indoor humidity
- A 7:** Date
- A 9:** Outdoor temperature
- A 11:** Symbol for alternating channels
- A 13:** Maximum and minimum values
- A 15:** Battery symbol for base station

Buttons (Fig. 1)

- B 1:** **SET** button
- B 3:** **MAXMIN/+** button

Housing (Fig. 2)

- C 1:** Battery compartment

Transmitter (Fig. 3)

- D 1:** Channel switch 1, 2, 3
- D 3:** LED signal lamp
- D 5:** Wall mount hole

- A 2:** Daylight Saving Time symbol
- A 4:** Indoor temperature
- A 6:** Weekday
- A 8:** Channel number + Radio-controlled symbol
- A 10:** Outdoor humidity
- A 12:** Battery symbol for transmitter
- A 14:** Trend indicators

- B 2:** **CHANNEL** button
- B 4:** **RCC/-** button

- D 2:** **TX** button
- D 4:** Battery compartment

TRINITY – Wireless thermo-hygrometer

6. Getting started

6.1 Insert the batteries

- Place the instruments on a desk with a distance of approximately 1.5 meters. Avoid being close to possible sources of interference such as electronic devices and radio installations.
 - Open the battery compartment of the transmitter.
 - Set the switch to the channel 1 position.
 - Insert two new AA 1,5 V batteries, polarity as illustrated.
 - Close the battery compartment carefully.
- Open the battery compartment of the base station and insert two new AA 1.5V batteries, polarity as illustrated.
- All segments will be displayed briefly.
- Close the battery compartment again.

6.2 Transmitter reception




- After the batteries are inserted the base station will automatically receive the measured values. The reception symbol will be flashing on the display.
- If the reception of the measured values fails, “- -” appears on the display. Check the batteries and try it again. Check if there is any source of interference.
- As soon as the base station receives the radio-controlled time, you can start the transmitter's manual initialization. Press and hold the **CHANNEL** button for four seconds. The base station tries to receive the measured values.
- Press the **TX** button to transmit the measured values manually.

GB

TRINITY – Wireless thermo-hygrometer

GB

6.3 Radio-controlled time reception

- After the base station has completed searching for the transmitter, the device starts scanning the DCF signal and the DCF reception symbol will be flashing.
- When the time code is successfully received after 2-10 minutes, the radio-controlled time, the date, the DST (if applicable) and the DCF symbols will be shown steadily on the display.
- The DCF reception always takes place hourly between 1:00 and 5:00 o'clock in the morning. If the reception is not successfully received until 5:00 o'clock, the next DCF reception attempt will happen at 1:00 o'clock in the following morning.
- There are three different reception symbols:
 -  flashing – reception is active
 -  solid – reception is very good
 -  no symbol – no reception / set the clock manually
- If the clock cannot detect the DCF-signal (e.g. due to interference, transmitting distance, etc.), the time can be set manually. The DCF reception symbol disappears and the clock will then work as a normal quartz clock (see: Manual settings).

6.3.1 Note on radio-controlled time

The time base for the radio-controlled time is a caesium atomic clock operated by the Physikalisch Technische Bundesanstalt Braunschweig. It has a time deviation of less than one second in one million years. The time is coded and transmitted from Mainflingen near Frankfurt via the frequency signal DCF-77 (77.5 kHz) and has a transmitting range of approximately 1,500 km. The adjustment to Daylight Saving Time (summer/winter time) is automatic. In Daylight Saving Time the DST symbol is shown on the display. The reception quality depends mainly on geographic location. Normally there should be no reception problems within a 1,500 km radius around Frankfurt.

TRINITY – Wireless thermo-hygrometer

Ⓒ

Therefore, please note the following steps:

- The recommended distance to any interfering sources like computer screens or TV sets is at least 1.5 - 2 meters.
- Within concrete walls (reinforced with steel) such as basements, the received signal is naturally weakened. In extreme cases, please place the unit close to a window to improve reception.
- During night-time, the atmospheric interference is usually less severe and reception is possible in most cases. A single daily reception is adequate to keep the accuracy deviation under 1 second.

7. Operation

- **Important:** a button operation is not possible during the reception of the transmitter or of the radio-controlled time signal.
- Press and hold the **MAXMIN/+** or **RCC/-** button in the respective setting mode for fast setting.
- The device will automatically quit the setting mode if no button is pressed for 20 seconds.

7.1 Manual settings

- Press and hold the **SET** button in normal mode.
- **RCC** appears on the display and on (default) will be flashing.
- Press the **MAXMIN/+** or **RCC/-** button to deactivate (OFF) or activate (on) the DCF time reception.
- Once the DCF time reception is deactivated, the clock must be manually set.
- Press the **SET** button to do the settings in the following sequence: Time zone (0 - default), the 12 or 24-hour system (24hr - default), the hours, the minutes, the year, the month, the day, the language of the day of the week (GERMAN - default), and the temperature display (°C - default). Press the **MAXMIN/+** or **RCC/-** button to adjust it.
- Confirm with the **SET** button.

TRINITY – Wireless thermo-hygrometer

Ⓒ

- Once the DCF time signal is successfully received, the manually set time is overwritten, if the DCF reception is activated.

7.1.1 Time zone setting

- In the setting mode you can make the time zone correction (-12/+12).
- The time zone correction is needed for countries where the DCF signal can be received but the time zone is different from the DCF time (e.g. +1=one hour plus).

7.1.2 12/24-hour display setting

- Press the **MAXMIN/+** or **RCC/-** button in the setting mode to choose between the 12 or 24-hour system.
- In the 12-hour system AM or PM (after 12 o'clock) appears on the display as well as the American date format (month first, then the day).

7.1.3 Day-of-the week language

- Press the **MAXMIN/+** or **RCC/-** button in the setting mode to select between the day-of-the week language: GERMAN, ENGLISH, FRENCH, SPANISH, ITALIAN and DUTCH.

7.1.4 Temperature display setting

- Press the **MAXMIN/+** or **RCC/-** button in the setting mode to select the temperature display in °C (Celsius) or °F (Fahrenheit) as temperature unit.

7.2 Trend arrows

- The trend arrows indicate whether the temperature and humidity values are currently increasing or decreasing. If the arrows are steady, there is no change.

TRINITY – Wireless thermo-hygrometer

7.3 Maximum/Minimum function

- Press the **MAXMIN/+** button in normal mode.
- **▲** appears on the display.
- The maximum values measured since the last reset appear on the display.
- Press the **MAXMIN/+** button again.
- **▼** appears on the display.
- The minimum values measured since the last reset appear on the display.
- When the maximum or the minimum values are displayed, press and hold the **MAXMIN/+** button for four seconds to reset the corresponding values.
- Press the **MAXMIN/+** button again to return to normal mode.

7.4 Additional outdoor transmitters

- To have more than one outdoor transmitter select a different channel (CH1, CH2 or CH3) for each single outdoor transmitter with the CH1/2/3 switch on the transmitter's battery compartment.
- Insert two new 1.5 V AA batteries, polarity as illustrated. Start the base station operation or search for the transmitter(s) manually:
- Choose the respective transmitter by pressing the **CHANNEL** button.
- Hold the **CHANNEL** button on the base station for three seconds. The registered transmitter (channel) will be canceled.
- Press the **TX** button in the transmitter battery compartment. The transmission of the outdoor data takes place immediately.
- The outdoor values and the channel number will be shown on base station display. If you have installed more than one outdoor transmitter, press the **CHANNEL** button on the base station to change between the channels 1 to 3.

GB

TRINITY – Wireless thermo-hygrometer

GB

- You can also choose an alternating channel display. Press **CHANNEL** button. A circle symbol will appear for the alternating channel after the last registered channel (1 to 3). To deactivate the function press the **CHANNEL** button again.
- After successful installation of the outdoor transmitter(s), close the battery compartment carefully.

8. Positioning and mounting of the base station and the transmitter

- Place the base station at the final position. Avoid the vicinity of any source of interference such as computer screens, TV sets or solid metal objects.
- The transmitter can be wall mounted (mounting hole at the back). When placed outdoors, choose a shady and dry place for the transmitter. Direct sunlight may trigger incorrect measurement and continuous humidity strains the electronic components needlessly.
- Once the desired location is chosen, check if the transmission from transmitter to the base station is possible (transmission range of up to 80m in open areas), within solid walls, especially with metal parts, the transmission range can be considerably reduced.
- If necessary choose another position for the transmitter and/or base station.

9. Care and maintenance

- Clean the devices with a soft damp cloth. Do not use solvents or scouring agents.
- Remove the batteries if you do not use the devices for a long period of time.
- Keep the devices in a dry place.

9.1 Battery replacement

- When the battery symbol appears on a channel display, change the batteries of the respective transmitter.
- Change the batteries of the base station, when the battery symbol appears on the display of the indoor values.

TRINITY – Wireless thermo-hygrometer

(GB)

- **Please note:** When the batteries are changed, the contact between transmitter and base station must be restored – so always start a manual transmitter search or make a restart according to the manual.

10. Troubleshooting

Problems	Solution
No indication at the base station	→ Ensure the batteries polarity are correct → Change the batteries
No DCF reception	→ Activate DCF reception in the setting mode → Wait for an attempt reception during the night → Choose another place for the base station → Set the clock manually → Check if there is any source of interference → Restart the base station according to the manual
No transmitter reception Display “----”	→ No transmitter installed → Check batteries of transmitter (do not use rechargeable batteries!) → Restart the transmitter and the base station according to the manual → Search the transmitter manually according to the instruction manual → Choose another place for the transmitter and/or the base station → Reduce the distance between the transmitter and the base station → Check if there is any source of interference.
Incorrect indication	→ Change the batteries

If your device fails to work despite these measures contact the retailer where you purchased the product.

TRINITY – Wireless thermo-hygrometer

(GB)

11. Waste disposal

This product and its packaging have been manufactured using high-grade materials and components which can be recycled and reused. This reduces waste and protects the environment.

Dispose of the packaging in an environmentally friendly manner using the collection systems that have been set up.



Disposal of the electrical device

Remove non-permanently installed batteries and rechargeable batteries from the device and dispose of them separately.

This product is labelled in accordance with the EU Waste Electrical and Electronic Equipment Directive (WEEE).

This product must not be disposed of in ordinary household waste. As a consumer, you are required to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment, in order to ensure environmentally-compatible disposal. The return service is free of charge. Observe the current regulations in place!



Disposal of the batteries

Never dispose of empty batteries and rechargeable batteries with ordinary household waste. They contain pollutants which, if improperly disposed of, can harm the environment and human health. As a consumer, you are required by law to take them to your retail store or to an appropriate collection site depending on national or local regulations in order to protect the environment. The return service is free of charge.

The symbols for the contained heavy metals are:
Cd=cadmium, Hg=mercury, Pb=lead.

TRINITY – Wireless thermo-hygrometer

GB

12. Specifications

Measuring range

Indoor temperature 0 °C... 50°C (+32 °F ...+122 °F)

Indoor humidity 1% to 99%

Temperature (transmitter) -40 °C... +60 °C (-40 °F ...+140 °F)

Precision temperature ±1°C @ 0..50°C

Resolution temperature 0.1°C

Humidity (transmitter) 1% to 99%

Precision humidity ±5% rH (@ 30 ... 80% rH)

Resolution humidity 1%RH

Range max. 80 m (open area)

Transmission frequency 433 MHz

Maximum

radio-frequency power: < 10mW

Transmission time approx. every 50 seconds

TRINITY – Wireless thermo-hygrometer

GB

Power consumption

Base station: 2 x AA 1.5 V batteries (not included)

Transmitter: 2 x AA 1.5 V batteries (not included)

We recommend Alkaline batteries

Dimension and weight (device only)

Base station: 157 x 42 x 117 mm, 214 g

Transmitter: 40 x 21 x 130 mm, 47 g

No part of this manual may be reproduced without written consent of TFA Dostmann. The technical data are correct at the time of going to print and may change without prior notice.

The latest technical data and information about this product can be found in our homepage by simply entering the product number in the search box.

EU declaration of conformity

Hereby, TFA Dostmann declares that the radio equipment type 30.3058 is in compliance with Directive 2014/53/EU.