IMPORTANT INFORMATION

If...	Cause and solution...
the red LED is flashing **on the transmitter** 3 times in 8 s	Low battery indication *Replace the batteries; see page 3*
the red LED is flashing **on the transmitter** 2 times in 8 s	Signal transmission failure between the transmitter and receiver *Check the connection of the receiver; see page 2; on the transmitter, push long (for approx. 3 s) the ☾ button to test the connection (the relay on the receiver must switch several times).*
the green LED is flashing **on the receiver**	Empty memory; the transmitter code has not been learned *Perform the code learning; see page 2*
the green LED is permanently lit and the red one is flashing **on the receiver**	The receiver is in the error state (8 min OFF and 2 min ON) *Check the transmitter and test the connection*
the green and red LED are flashing alternately **on the receiver**	The code-learning mode; the receiver is awaiting the code *On the receiver, push long (for approx. 3 s) the ☾ button*
the both LED is lit **on the receiver,** but the relay has not been switched	Output circuit failure *Contact the manufacturer immediately.*

TECHNICAL PARAMETERS

Receiver	
Power supply	230 V/ 50 Hz
Communication type	two-way
Frequency	433.92 MHz
Range	200 m (free area) / 25 m (built-up area)
Sensitivity	< -952 dBm
Output	relay, max. 16 A
Protection	IP20
Protection class	II
Working temperature	0°C to +40°C
Dimensions	110 x 80 x31 mm

Transmitter	
Power supply	2 x1.5V alkaline AA batteries (are included)
Communication type	two-way
Hf power	< 10 mW
Frequency	433.92 MHz
Hysteresis	0,4°C
Adjustable temp. range	11 to 29°C (anti-freeze min. 3°C)
Temperature setting	by 1°C (from 11°C)
Measurement accuracy	± 1°C
Protection	IP20
Battery life	5 years acc. to the battery type used
Working temperature	0°C to +40°C

EU DECLARATION OF CONFORMITY

Hereby, ELEKTROBOCK CZ s.r.o. declares that the radio equipment type BT012 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.elbock.cz

LEAD FREE
in compliance with s RoHS

21 PAP

ELEKTROBOCK CZ
MADE IN CZECH REPUBLIC

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BT012
WIRELESS ROOM THERMOSTAT
with simple operation
and a wall-mounted receiver

The great advantage is the two-way communication, quick setting and change of the required temperature by simply turning the knob on the transmitter. The transmitter is portable, or it can be installed on the wiring box in the reference room. The receiver is equipped with the code self-learning system and the E-EPROM memory, which preserves the saved code even at power failure. The wireless version enables simple and quick installation; therefore, there is no need for laborious and time-consuming installation of a line between the thermostat and boiler with penetration through floors. The coverage of the set can reach up to 35 m.

receiver - wall-mounted

- Receiver power supply 230 V/ 50 Hz.

- Receiver with the CODE SELF-LEARNING system and the E-EPROM memory (saving the code even at power failure).

- Two-wire connection to the boiler.

- **Indication LED for signalization of the states**
  - power supply indication
  - failure state
  - relay closed.

LED 1
LED 2
BT002

2W
TWO-WAY COMMUNICATION
- Providing for reliable signal transmission and enabling return information acquisition

transmitter

- Simple control element for temperature setting – knob.

- Indication of the boiler switching and error states by means of a red LED.

- Night attenuation – button for quick selection of the night attenuation (automatic decline by 3 °C for the 8-hour period).

- Anti-freeze temperature ❄ .

- Optional internal frame of a different colour can be bought (according to the sampler at www.elbock.cz) for a perfect harmony in the interior.

BT010

ELEKTROBOCK CZ
MADE IN CZECH REPUBLIC

RECEIVER INSTALLATION

- Lift off the front cover of the receiver acc. to Fig. 1, 2.
- Fix the receiver to the wall (or directly to the wiring box).
- Switch off the main circuit breaker.
- Connect the receiver to the boiler according to the diagram (on the boiler, use the terminals for wires of the room thermostat 2).
- Connect the receiver to the mains 230 V / 50 Hz.
- Switch on the main circuit breaker; the green LED lights up on the receiver; thus the receiver is ready for further setting

Owing to disturbance of the signal reception, install the receiver (in the interior) as far as possible (no less than 0.5 m) from big metal objects and outside high-current power lines! We recommend that the installation be done by a person properly qualified in electrical engineering!

Fig.1   **Fig.2**

LED 1
LED 2
BT002

Fig.3

LED 1
LED 2
BT002

holes for installation screws

output terminals

power terminals

LED1	LED2	FUNCTION
		empty memory, code not learned
		code learned
		FLASHING ALTERNATELY= code learning mode **FLASHING SIMULTANEOUSLY**= code has been learned **SIMULTANEOUS LONG FLASH**= code has been ERASED
		relay switched
		ERROR (if no signal is received from the transmitter within approx. 6 hours, it switches to the 2-min-ON / 8-min-OFF mode). LED 2 is only flashing if the relay is on, i.e. for 2 minutes.

EXPLANATIONS: LIT   UNLIT   FLASHING

FUNCTION BUTTON:
SHORT PRESS (about 1.5 s)
- for coding.
LONG PRESS (about 5 s)
- RESET deleting the code from the memory (the green and red LEDs flash simultaneously).

WIRING DIAGRAM

BOILER

L   N
230 V/50Hz
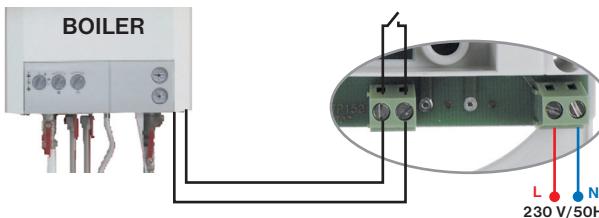
CODE LEARNING

Use if the receiver memory has been erased – the green diode is flashing!

1) Push the receiver's "**FUNCTION BUTTON**" for about 1 s; the green and red LEDs start flashing alternately; and the receiver is awaiting the code ("learning mode").
2) On the transmitter (after insetting batteries, see page 3), push the ☾ button for approx. 5s (push it until the red LED on the transmitter lights up); then a signal is send out to the receiver and the TEST starts up.
3) The code receipt in the receiver is indicated by simultaneous flashing of the green and red LED; thus the code has been learnt. After the code receipt, the output relay is switched several times to verify correct function of BT012 (the so-called TEST).

TRANSMITTER DECRIPTION

Indication LED

short push (approx. 1s) – night attenuation
long push (approx. 5 s) – TEST (code learning)

Fig.6

Fig.5

BT010

control element – knob for temperature setting

holes for installation screws
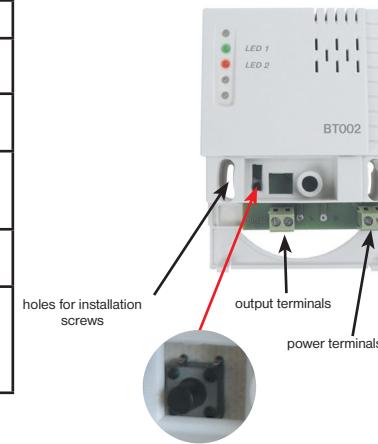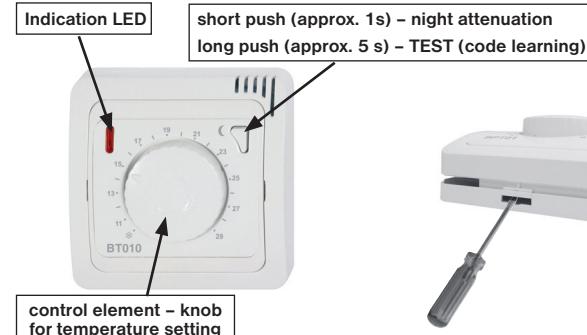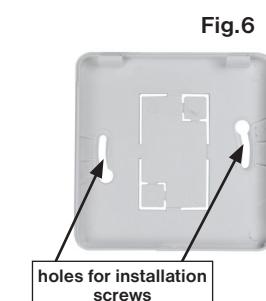
Fig.7   **Fig.8**   **Fig.9**
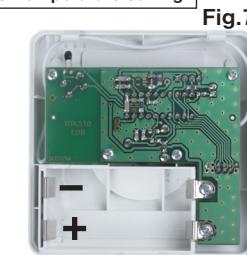
TRANSMITTER INSTALLATION

- Lift off the front cover of the transmitter according to Fig. 5.
- Fix the back cover to the wall (or directly to the wiring box), see Fig. 6.
- Remove the protective paper from the batteries; the transmitter will be fully functional (batteries are included in the delivery of the BT012 purchased).
- Snap back the front cover onto the back one, see Fig. 8–9.
- When replacing the batteries, heed their correct polarity (Fig. 7).
- The necessity to replace the batteries is indicated by the red LED; **it flashes 3 times in 8 s**.
- Always use alkaline batteries **2 × 1.5 V, type AA**! (Do not use rechargeable batteries.)

Note: Dispose of old batteries in conformity with regulations on hazardous waste handling!

TRANSMITTER MODES

Temperature setting/change:
- By simply turning the knob, set the required temperature by the scale (± 1 °C from 11 °C).
- SWITCHING ON of the boiler is indicated by the red LED; **it flashes once per 8 s.**

Night attenuation:
It is used to automatically reduce the temperature by 3 °C for the 8-hour period. This cycle is automatically repeated every day.
- Within the required time, shortly push (for approx. 1 s) the ☾ button; the diode flashes 4 times; thus the mode is active.
- If you again shortly push the ☾ button during the night attenuation, the starting hour of the night attenuation changes and a new 8-hour cycle starts to count down.
- **By turning the temperature change knob, you can cancel the NIGHT ATTENUATION!**

EXAMPLE:

Set the required temperature, e.g. to 22 °C.
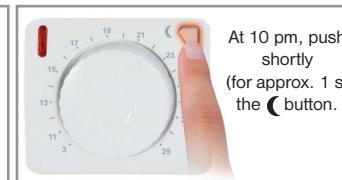
At 10 pm, push shortly (for approx. 1 s) the ☾ button.

12
19 °C
9   3
22 °C
6

The thermostat automatically reduces the required temperature by 3 °C for the period of 8 hours from pushing of the button.