WIRELESS ROOM THERMOSTAT

BPT710

FOR CONTROL OF HEATING DEVICES

Comfortable control of:

- **direct heaters**
- **floor heating**
- **radiant panels, infra-panels**
- **gas and electric boilers (only with the BPT002 receiver)**

ELEKTROBOCK CZ

FUNCTION DESCRIPTION

BPT710 is a wireless thermostat (transmitter) which according to the required room temperature controls the receiver unit, BPT001, BPT002 or BPT003, which switches the heating device connected.

| DESCRIPTION AND CHARACTERISTICS OF ELEMENTS	PHOTO
BPT710 wireless thermostat (transmitter) • measures temperature in the room and controls heating according to the required temperature • enables setting of 7 weekly temperature programs with 6 changes per day • can switch up to 9 receivers (BPT001, BPT002, BPT003) • modern design and backlit display	
BPT001 wireless receiver – under switch • receiver with switched phase (suitable for, e.g., direct heaters and panels) • switches the heating device by request and sends back confirmation • simple installation into a wiring box • receiver statuses indicated by LED diodes on the front panel • automatic activation in the system after a short-term power loss (E-E-PROM)	
BPT002 wireless receiver - wall • receiver with potential-free contact (suitable for boilers, etc.) • switches the heating device by request and sends back confirmation • simple installation into a wiring box • receiver statuses indicated by LED diodes on the front panel • automatic activation in the system after a short-term power loss (E-E-PROM)	
BPT003 wireless receiver – in the socket • receiver with switched phase (suitable for. e.g., direct heaters and panels) • switches the heating device by request and sends back confirmation • simple installation into an electric socket directly • device simply connected by inserting into the socket (suitable for heaters with plug outlet) • receiver statuses indicated by LED diodes on the front panel • automatic activation in the system after a short-term power loss (E-E-PROM)	

Fig.1

Fig.2

Holes for fastening screws
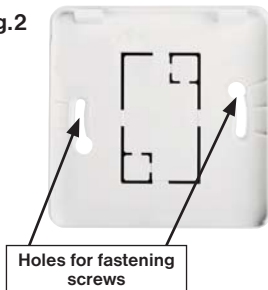
Fig.3

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Fig.4

Fig.5

- Lift off the front cover of the transmitter acc. to Fig. 1.
- Fasten the back cover to the wall (or on the wiring box directly); see Fig. 2.
- Insert 2 x 1.5 V alkaline batteries, type AAA (not included in the packing); heed the correct polarity!
- Fasten the front cover on the back one; see Fig. 4,
- Necessity of battery exchange is indicated by the " " LCD symbol.
- Always use the 2 x 1.5 V alkaline batteries, type AAA! (Do not use rechargeable batteries.)
- **For correct function of BPT710, activate the receivers according to the instructions on page 7!**

<u>**Note:**</u> **Dispose of old batteries according to regulations for hazardous waste treatment!**

3

DISPLAY DESCRIPTION
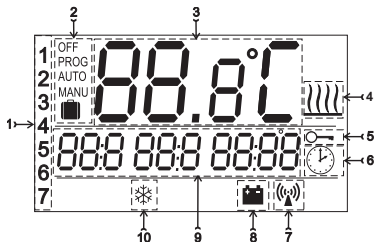
1, Current day (in the Prog mode, selection of the number of days to be programmed)
2, Operating mode OFF/PROG/AUTO/MANU/ ▮=HOLIDAY
3, Current room temperature
4, Heating on indication
5, Key lock indication
6, CLOC mode indication (current day and time setting)
7, Wireless signal transmission indication
8, Low battery indication
9, Required temperature and current time display/ list of operating modes (this line is explained in detail for every mode)
10, Indication of anti-freeze temperature of 3°C

DESCRIPTION OF CONTROL BUTTONS
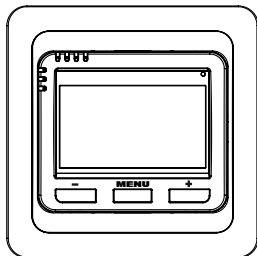
MENU button:

short press = opening the main menu and confirmation (ENTER)

long press (for approx. 3 s) = return from current mode

+ / **−** button:

in the basic mode = opening info

in the main menu = browsing and setting current values

simultaneous press of the **MENU** *and* **−** *buttons (in the basic mode) = locking of the keys*

simultaneous press of the **MENU** *and* **+** *buttons (in the basic mode) = unlocking of the keys*

simultaneous press of the **MENU** *and* **+** / **−** *buttons (in the main menu) = return to the basic mode*

**Note: By pressing any button first, you activate the LCD backlight!**

OPERATING MODES

By pressing any button first, you activate the display backlight. By another short press of the MENU button, you open the main menu in which you can choose operating modes.

AUTO

The thermostat works according to the weekly program settings.

Press the MENU button and choose the mode **AUTO** with the
➕ / ➖ button; press the MENU button to confirm.

AUTO

AUt 0
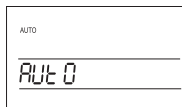
MANU (default temperature setting of 21°C)

The thermostat works according to the manual temperature setting which remains current until the next manual change.
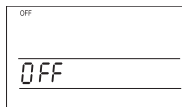
Press the MENU button and choose the mode **MANU** with the
➕ / ➖ button; press the MENU button to confirm.
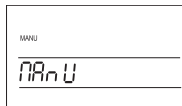
MANU

MAn U

OFF

The thermostat is switched off until the next manual change of the mode.

Press the MENU button and choose the **OFF** mode with the ➕ / ➖ button; press the MENU button to confirm. The anti-freeze mode is still enabled!

OFF

_0 FF_

HOLIDAY

The thermostat maintains the preset temperature until the given time and date. After expiry of the preset period, it automatically returns to the previously set AUTO / MANU mode.
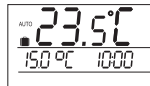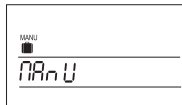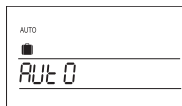
Press the MENU button and choose the **AUTO** or **MANU** mode with the
➕ / ➖ button; press the MENU button to confirm.
Press the MENU button again and choose the ▮ mode with the ➕ / ➖ button; press the MENU button to confirm.

The temperature value is flashing on the LCD; set the required temperature with the ➕ / ➖ button and confirm it with the MENU button. Then set the hour, minute, day, month and year when your holiday ends; confirm each setting with the MENU button.

After the setting, the HOLIDAY mode will be automatically activated within 1 minute!

The LCD shows the date of the end of the holiday!

AUTO
▮
AUt 0

MANU
▮
MAn U

AUTO
_23.5°C_
_15.0 °C   10:00_

AUTO
_23.5°C_
_1. 09. 09_

CLOC

Setting the correct day and time.

Press the MENU button and choose the mode **CLOC** with the
➕ / ➖ button; press the MENU button to confirm.

The current hour value is flashing on the LCD; set the current hour with the
➕ / ➖ button and confirm with the MENU button. Stepwise, set minutes
and seconds; then the current date appears; again, set the current day, month
and year with the ➕ / ➖ button.

Confirm each setting with the MENU button.
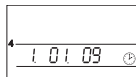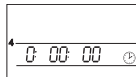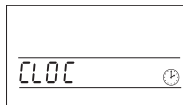
PROG

Setting the weekly programs (7 weekly programs available with up to
6 changes per day).

Press the MENU button and choose the **PROG** mode with the ➕ / ➖
button; press the MENU button to confirm. **P1** (the first weekly program) is
flashing on the LCD, confirm with the MENU button. The number of days
programmed appears, choose one of the options with the ➕ / ➖ button
(you can program day-by-day or in day blocks of Mon-Fri, Sat-Sun or
Mon-Sun). Press the MENU button to confirm.

When **U1** appears, set the temperature of the **1st temperature change** with
the ➕ / ➖ button and confirm it with the MENU button.

Set the switching time with the ➕ / ➖ button and confirm it with the
MENU button again.

U2 appears on the LCD for setting the 2nd temperature change.
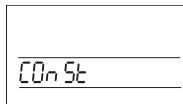
Proceed in the same way as with the 1st change.

In this way, you can set up to 6 temperature changes per day. To return to the
basic mode, simultaneously press the MENU and ➕ / ➖ buttons.
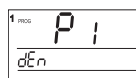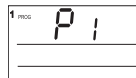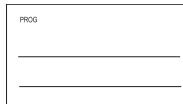
CONST

Setting of control parameters.

Press the MENU button and choose the **CONST** mode with the ➕ / ➖
button; press the MENU button to confirm; the first constant appears on the
LCD.

1 CURRENT TEMPERATURE CORRECTION

It is used for correcting the temperature measured by the thermostat. We recommend that you do the setting after 12-hour operation when the internal sensor temperature settles. Measure the room temperature with a thermometer; if it differs from the thermostat temperature, set the correction within the range of **-5°C to +5°C**.

Set the pertinent value with the ➕ / ➖ button; confirm it with the **MENU** button.

2 "OPEN WINDOW" FUNCTION

If the room temperature drops suddenly (by 1-2 °C in 2 minutes), BPT710 sends out a signal to switch off the heaters to save energy in this way.

To enable this function, set the „ **A**" option with the ➕ / ➖ button and confirm it with the **MENU** button. To disable, choose the „ **-**" symbol and confirm it with the **MENU** button.

If the function is active, the **UtLUM** message appears on the display.
The mode is terminated if the temperature rises, or after 30 minutes.
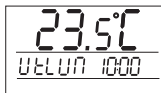
3 ACTIVATION OF RECEIVERS

This function is used for activation of **up to 9 receivers.**

The display shows **tESt 1-**, where 1 indicates the sequence of the activated receiver. Press the „**FUNCTION BUTTON**" on the receiver (for about 1.5 s), thus you introduce the receiver into the learning state (see the pertinent receiver manual – BPT001, BPT002 or BPT003). The LED1 and LED2 diodes are flashing alternately on the receiver. Press the ➖ button on the BPT710 transmitter; **tESt On 1A/tESt OFF 1A** appears on the LCD and the code is send to the receiver. Code acceptance is confirmed on the receiver by simultaneously flashing diodes, thus the activation is completed. To activate the next receiver, proceed in a similar way.

Choose another receiver with the ➕ button, **tESt 2-** appears on the LCD. Introduce the next receiver into the learning state by pressing the „**FUNCTION BUTTON**" (for about 1.5 s) and start the activation with the ➖ button on BPT710. In this way, you can gradually activate up to 9 receivers.

If you do not want to activate another receiver, simultaneously press the **MENU** and ➕ / ➖ buttons to return to the basic mode.
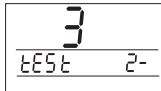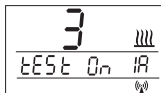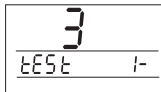
DEACTIVATION OF RECEIVERS

For deactivation, choose the **tESt nUL** option with the ➕ button and confirm with the ➖ button. Thus all the receivers will be disabled!
PTo return to the basic mode, simultaneously press the MENU and
➕ / ➖ buttons.

Communication error between the receiver and transmitter is indicated by the **ErPr1** message on BPT710, where the last number is a sequence number of the receiver activated incorrectly.

```
     3
 tESt    nUL
```

```
   23.5°C
 ErPr1   1000
```
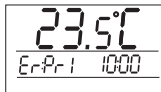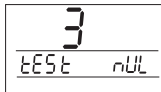
4 FIRMWARE VERSION / FACTORY SETTING RESTORATION

Information on the firmware version. If you press the ➖ button long (for approx. 3 s), the **rESEt** message appears on the display shortly and the thermostat resumes the factory setting!

```
     4
   1001
```
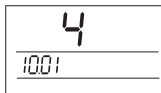
OTHER FUNCTIONS

INFO

By pressing the ➕ / ➖ button in the basic mode, you can view the following information:

REQUIRED TEMPERATURE

Press the ➕ / ➖ button in the basic mode; the LCD shows the required temperature value in the current operating mode (can be changed with the ➕ / ➖ buttons; in the AUTO mode, the change is short-term – lasts until the next program change; in the MANU mode, it is permanent;

By further pressing the MENU button, you can move on to the next info

```
 MANU
  19.0°C   P0. t
```
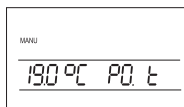
SELECTED PROGRAM NUMBER – only in the AUTO mode

It is used for quick change of the selected program in the AUTO mode. If both P1 and P2 programs are set, they can, for example, be changed with the ➕ / ➖ button;

By further pressing the MENU button, you can move on to the next info
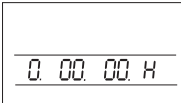
```
 AUTO
     P 1
  19.0°C   P0. t
```
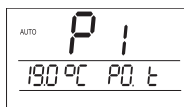
OPERATING HOURS

The LCD shows data on the operating hours of the heating device.
The hours can be reset by pressing the ➖ button for about 3 s.

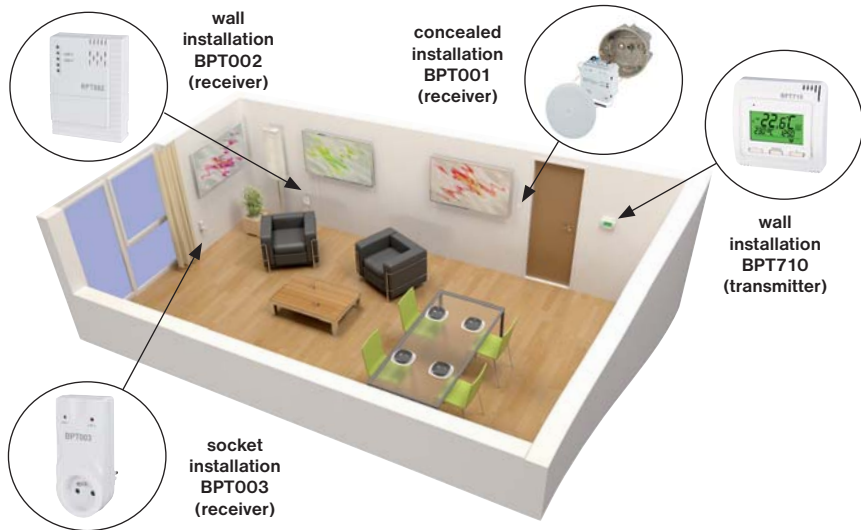By pressing the MENU button for approx. 3 s, you return to the basic mode.

```
0. 00. 00. H
```

LOCK

In the basic mode, press simultaneously the MENU and ➖ buttons; the keys will be locked (key sign appears on the LCD); unlocking can be done by simultaneously pressing the MENU and ➕.

ANTI-FREEZE PROTECTION

If the room temperature drops below 3 °C, the heating is switched on automatically (the ❄ symbol appears on the display). As soon as the temperature rises, the thermostat resumes the preset mode and controls according to the required temperature.

EXAMPLE OF CONNECTION

wall installation BPT002 (receiver)

concealed installation BPT001 (receiver)

wall installation BPT710 (transmitter)

socket installation BPT003 (receiver)

WIRELESS ROOM THERMOSTAT

BPT710

The BPT710 wireless thermostat can bring you substantial savings, not only in the energy necessary for heating, but also in the costs resulting from heating system installations. BPT710 can control up to 9 switching elements (receivers). The elements are switched subsequently to prevent current surges in the mains. The coverage in built-up area is approx. 35 m.

Characteristics:

- 7 weekly programs with 6 temperature changes per day
- backlit display
- modes: AUTO/MANU/OFF/HOLIDAY
- quick change of the required temperature
- possibility of programming day-by-day or in blocks of Mon-Fri, Sat-Sun, Mon-Sun
- information on operating hours
- child lock – key lock
- automatic transfer to SUMMER / WINTER time
- „OPEN WINDOW" function (automatic switch-off of the heating during ventilation)
- optional setting of the current temperature correction
- anti-freeze protection (3°C)

TECHNICAL PARAMETERS	
Power supply	2 x1.5 V AAA alkaline batteries (not included in the packing)
Communication type	two-way
HF power	< 10 mW
Frequency	433.92 MHz
Hysteresis	0.2°C
Number of temp. changes	6 temp. changes per every day
Minimum program time	10 minutes
Temperature setting range	by 0.5°C
Temperature setting	5 to 39°C (anti freeze 3°C)
Minimum indication step	0.1°C
Measurement accuracy	± 0.5°C
Battery life	heating season
Protection class	IP20
Working temperature	0°C to +40°C

DECLARATION OF CONFORMITY

We, ELEKTROBOCK CZ s.r.o., herewith declare that the product BPT710 conforms to the basic requirements and other corresponding provisions of the Directive 1999/5/EC.

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on www.elbock.cz

CE

LEAD FREE
in compliance with RoHS

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