

**WIRELESS ROOM THERMOSTAT WITH DISPLAY  
T2WBD**

The wireless room thermostat is a smart device for the temperature control of a room; it guarantees environmental comfort and energy saving at the same time.

The wireless thermostat with display **T2WBD** has a modern design. These wireless units have many features to control room conditions managing a set of specific parameters.

Sensor precision allows to create a monitoring system per room, in order to ensure the maximum user comfort.

The wireless room thermostat **T2WBD**, powered by batteries, is equipped with a radio antenna which sends to the control unit (different models are available among **U2W4 / U2W4E / U2W2 / U2W2E**) operation data, the measured temperature and the target temperature.

The wireless room thermostat **T2WBD** guarantees a bidirectional data exchange with the control unit (**U2W4 / U2W4E / U2W2 / U2W2E**) to clearly display information about operative status.

Every action can be done using the knob placed under the little screen. All components of this device are safe and at the forefront; the operative radio frequency is 868 MHz which gives a high range and reduces interferences.

This temperature management system has an elevated flexibility, especially for new building construction and building renovation. Installation is easy because no wiring is needed.

With the wireless room thermostat **T2WBD** 868 MHz the user can achieve the optimal comfort by single room temperature adjustment along with a suitable energy savings.


**TECHNICAL FEATURES**
**Wireless room thermostat with display T2WBD**

- Wireless communication between control unit **U2W4 / U2W4E / U2W2 / U2W2E** and room thermostat **T2WBD**
- Technology 868 MHz
- Limitation of the setting temperature range
- Precise response of sensors
- Functional design
- Wireless
- Easy installation
- System operation status display
- Constant display of the measured temperature, hour and selected operating mode (Auto, Day, Night, Party).

**Whole wireless system**

- Receiver and emitter work at the frequency of 868 MHz
- Protection function in case of failure of the wireless room thermostat **T2WBD** or low battery (function "antifreeze")
- Automatic start of function "first opening" of actuators afterwards the first system activation
- Display error in case of radio signal loss, low battery or bad reception
- Intuitive display of all status messages
- Radio transmission test between the antenna and the receiver in order to make installation and configuration easier

**USE**

- Individual control system of the room temperature; perfect

for floor heating and cooling and fan coil units.

- High heating system flexibility, especially for new or rebuilt buildings. No wiring makes the installation immediate.
- It can manage both the heating and the cooling. It allows the optimal control of the temperature in each room which is installed; this device is ideal for radiant surfaces where a minimum temperature is request (for example in bathrooms)

**GENERAL INFORMATION**
**Name**

T2WBD

**Box content**

1 x Wireless room thermostat **T2WBD**  
2 x batteries AAA, 1.5V  
1 x handbook

**Other kind of wireless room thermostat**

- T2WB – Wireless room thermostat without display

**FUNCTIONS**

The wireless room thermostat **T2WBD** 868 MHz enables individual temperature room control. It has a battery radio emitter which sends operation data, measured temperature and set-point temperature to the control unit **U2W4/U2W4E U2W2/U2W2E**.

Thermostat default codes ensure the exclusive communication with the control unit radio channel **U2W4/U2W4E U2W2/U2W2E**.









**OPERATIONS AND INDICATIONS**

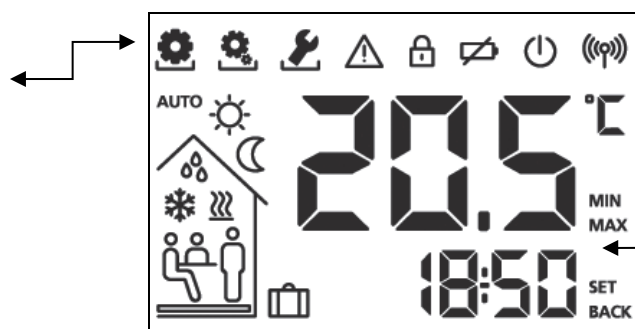
User functions	User set-up	Expert set-up
<b>Party</b> function for hour-wise extension of the operating status " <b>Presence + Day</b> "	Preset lifestyle time programs (4 x Mon-Fri)	Protection against unauthorized access by PIN code
Deactivation of room control unit (frost protection active)	Preset lifestyle time programs for the week-end (4 x Sat-Sun)	Selection of heating type (control with 2-point or PI behavior per heating zone can be selected)
Operating statuses: <b>Day, ECO, Night, Auto</b>	Child safety lock	Activation of active toggle between heating / cooling
<b>Holiday</b> function with date indication (date from / to)	Target temperature (room, floor) ( <b>Day / ECO / Night</b> )	Smart Start technology (the room control unit learns the room condition and reaches target at the set time)
Application of appropriate operating statuses for heating and cooling: <b>Presence + Day / Stand-by + Day / ECO (Night)</b>	Automatic switching between summer and winter time	Setting of the frost protection temperature
<b>Radio 868 MHz</b> : information about low battery status	Entry of system date & time	Block of heating / cooling
		Duration of background illumination
		Toggle between Fahrenheit (°F) e Celsius (°C)
		Control direction of pump/boiler

The wireless room thermostat **T2WBD** is highlighted by a functional, language-neutral indication. The internationally understandable symbols guarantee intuitive operation. The separate menu structure always offers the functions needed by the user or the installer. This

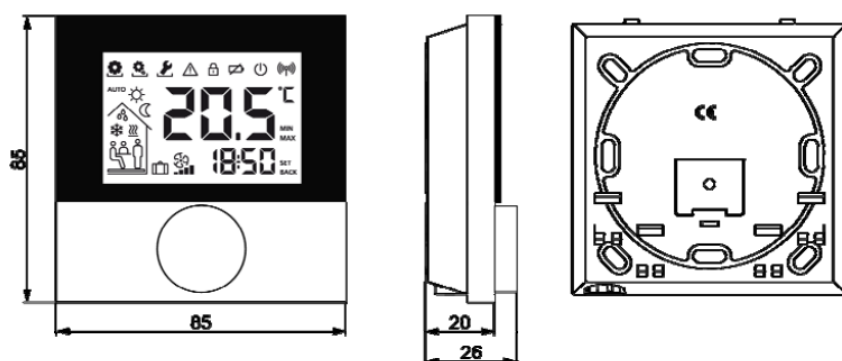
also ensures that important functions are not accidentally changed. The comfortable rotary knob allows a comfortable navigation through the intuitive menu structure of the wireless room thermostat **T2WBD**; turning to the left or to the right changes between the different functions,

pressing the rotary control activates and deactivates these functions and selects them for further parametrization.

-  User functions
-  User setup
-  Expert setup
-  Error signal
-  Child safety lock
-  Low battery
-  Off function
-  Radio



- AUTO** Auto function
-  Day operation
-  Night operation
-  Dew point
-  Cooling
-  Heating
-  At-home function
-  Party function
-  Holiday function

**DIMENSIONS**


**TECHNICAL DATA**

Type	T2WBD	CERTIFICATION
Target temperature setting range	5°C– 30°C	 <b>EN 60730/1</b>
Battery type	2x LR03/AAA Micro 1,5V	
Battery life	> 2 year	
Degree of protection	IP20 / III	
Range	25 m (inside the building)	
Emission signal interval	9 – 10 min	<b>2004/108/CE</b>
Admissible ambient temperature	0°C à 50°C	<b>2006/95/CE</b>
Storage/transport temperature	-10°C à +60°C	<b>FTEG R&amp;TTE</b>
Admissible ambient temperature	max. 80% <sup>1</sup>	
Dimension (mm)	86/86/26.5	
Weight	115 g	
Display dimensions (mm) H / L	40 X 60	
Radio technology	868 MHz SRD band	
<i>1 – non condensing</i>		

**USE**

The room control unit can be operated via the rotary knob



Pressing the rotary control activates menus and functions.



Rotating allows to set the target temperature as well as to navigate between menus and functions.

A basic level and three menus are available.

**Basic level**


Rotating sets the desired target temperature.

**Menu selection with:**


**Functions:** it includes all important lifestyle functions.



**Parameters:** it includes several parameters as e.g. heating and setback temperatures, date and many other. User will need it just for important modifications.



**Service:** it includes settings for the specialist (secured by PIN code; see the control unit manual).

**TEST RADIO**

1. A long press of the rotary knob activates the radio test.
2. The LED of the connected heating zone is toggled for 1 minute, thus switched on or off depending on its current operating state.

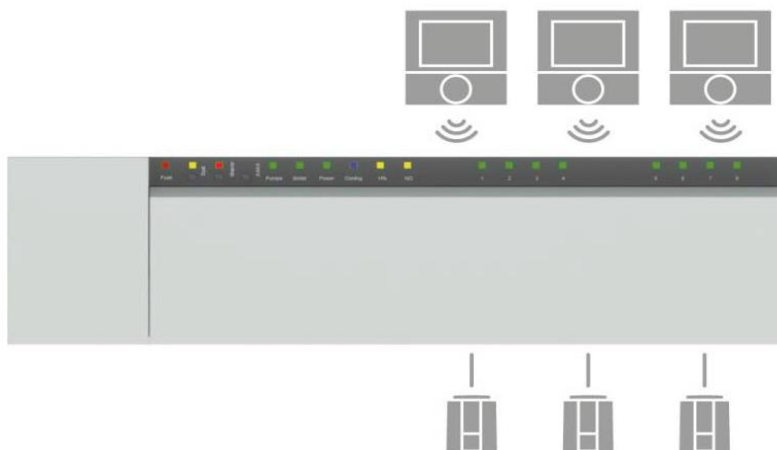
**COMMISSIONING (incl. pairing)**

1. Be sure that no other control unit are in pairing mode.
2. Activate the pairing function at the base station for the desired heating zone (see the control unit manual).
3. In order to activate the pairing function on the room thermostat, press the rotary knob for >1 sec.
4. The control unit and the room control thermostat are connected to each other.

If the base station has been programmed before, the date and time of the wireless room thermostat are set automatically. For first commissioning of the control unit, date and time has to be set by rotating the knob; to confirm entries, press the knob.

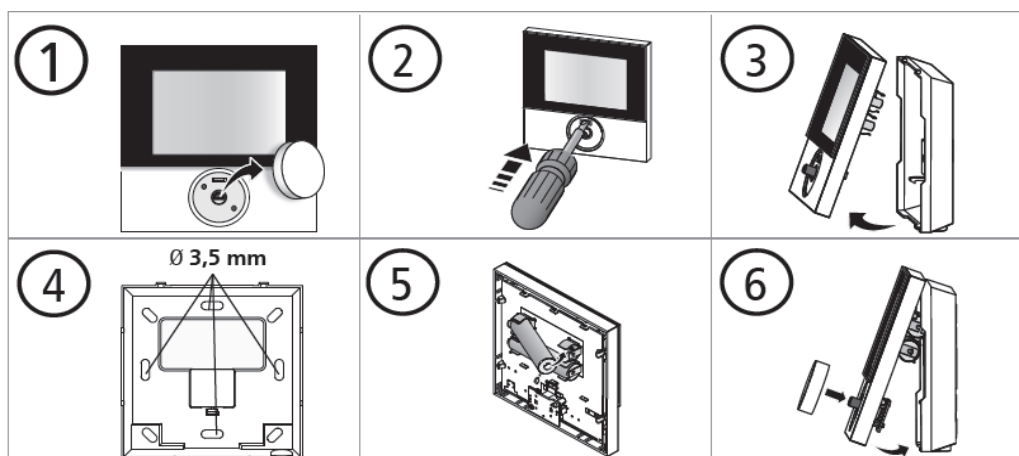
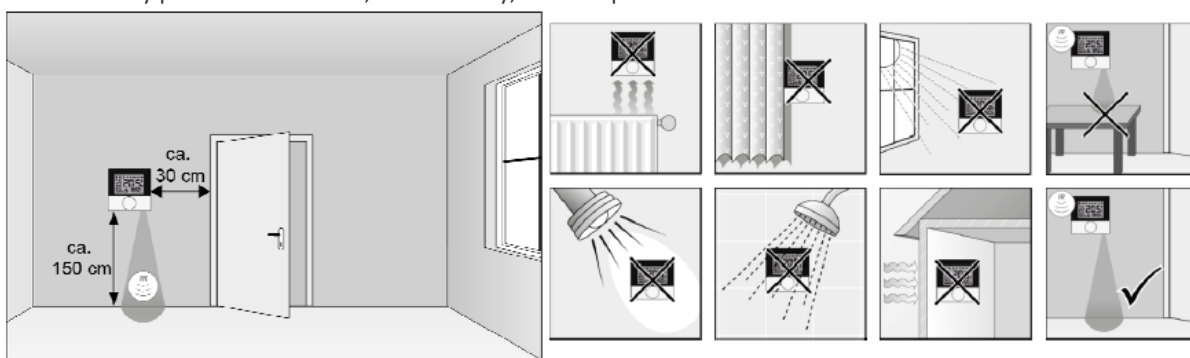
Each room thermostat can drive several zones.

## OPERATION EXAMPLE



## RECOMMENDED INSTALLATION PLACE

In order to ensure optimal operative conditions and clear temperature control, the wireless room thermostat **T2WBD** must be installed far from any perturbation source, like humidity, direct exposition to the solar radiation or other heat source.



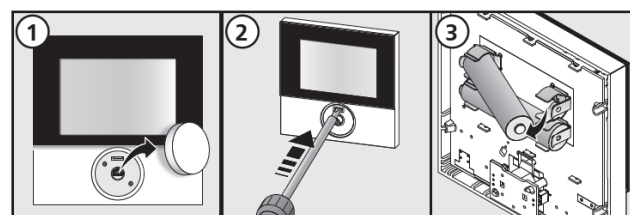
## ADDITIONAL INFORMATION

### Batteries installation

Imperatively respect the polarity (+ and -). A wrong battery input can damage the device. Do not handle batteries without gloves: bare-handed handling can reduce battery range.

### Changing batteries

Do not throw low batteries away! Change batteries with 2 x LR03/AAA Micro 1,5V. Do not use any other kind of batteries. Dispose of low batteries in accordance to the environmental local regulation.



Once batteries are changed, activate the room thermostat by pressing the rotary knob. All settings will be restored.