

# THERMOB.RF2D3D/Z.WiFi

COMM version: when the last active zone switches off, the shared COM output remains on for the time set by PR04. ZONE version: the last active zone remains on relative to the shared output. Use the description for the actual product version.

## WIRELESS ROOM THERMOSTAT WITH WiFi FOR 2 ZONES WITH A TIME DELAY Submodels: ThermoB.RF1D+ ThermoB.BU3.WiFi FULL OPERATING INSTRUCTIONS



### COMPLIANCE

This product is declared to comply with European directives on electromagnetic compatibility 2004/108/EC, low-voltage equipment 2006/95/EEC, RoHS 2011/65/EU and marking 93/68/EEC.

### SAFETY

These instructions apply only to the ThermoB.RF2D3D.WiFi room thermostat described and illustrated above, comprising ThermoB.RF1D and ThermoB.BU3.WiFi.

Only a competent person (installer) may install this device, in accordance with local electrical and general safety standards, requirements and regulations.

The installer is fully responsible for installation and connection to the rest of the system.

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Warning: risk of electric shock.</b></p> <p>Life-threatening voltage is present inside the receiver!</p> <p>Always disconnect this device and the appliance connected to it from their power supplies before opening the enclosure and while it is open, when working on external electrical connections, and during installation, removal or relocation.</p> <p>Keep children and people with reduced sensory or mental capabilities away from the device to prevent electric shock.</p> <p>Installation must not be entrusted to anyone without the necessary qualifications.</p> |
|  | <p>Remove the room unit batteries before extended periods without use.</p> <p>The room unit contains batteries. Keep it out of reach of young children and people unable to use it safely.</p>                                                                                                                                                                                                                                                                                                                                                                                            |

|                                                                                   |                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   | Do not mix old and new batteries. Take used batteries to a battery collection point.<br><b>Rechargeable batteries are not recommended.</b>                                                                                         |
|  | Hazardous environments<br>Do not use the device in an explosive atmosphere.<br>Do not use it near fuels or easily flammable materials.<br>Do not use it where the air may contain conductive or explosive mixtures of dust or gas. |
|  | Protect the device from water and moisture.<br>If you suspect a fault, immediately disconnect the device and the equipment it controls from the mains supply.                                                                      |

Keep these instructions for future reference.

## OVERVIEW:

The ThermoB.RF2D3D.WiFi electronic room thermostat controls temperature in two separate zones (rooms). It consists of three modules: two ThermoB.RF1D room units and a remote ThermoB.BU3.WiFi output module with WiFi connectivity.

It controls heating/cooling using heat pumps, gas, electric, pellet and other systems, without a wired connection between the controlled appliance and the rooms.

The three modules communicate wirelessly using radio (RF) signals.

Room temperatures can be set locally or remotely over the Internet using an Internet-connected mobile device or computer.

Each zone output is controlled separately according to that zone's temperature settings and operating mode. A separate shared output sends a signal whenever either zone is active.

A hold time can be set for the shared signal.

The thermostat provides convenient room temperature and schedule settings, together with monitoring of the appliance control output.

The ThermoB.RF1D room unit has a built-in room temperature sensor, LCD, four control buttons and a radio transmitter. It uses 2 x AAA batteries. Its stylish plastic housing can be wall-mounted or placed at a convenient location in the room.

The ThermoB.BU3.WiFi output module has three relay outputs, five indicator lights, a radio receiver, a Wifi module and a button. Two relays control the zones individually; the third activates when either zone is active, providing overall heating/cooling start/stop control. Depending on the version, a programmable hold time applies to either the overall start/stop output or the last active zone. Five indicators show output states, selected mode and Internet connection status. The button manually switches outputs or returns to automatic mode. Relay outputs connect to the controlled appliances by wire. The module uses a 230V/AC supply and has a plastic housing with external mounting lugs for wall mounting or installation near the equipment.

## SYSTEM OPERATING MODES

- **BASIC:** simple operation with one temperature setting, fixed

cooling or heating mode and Internet connectivity.

- **ADVANCED:** full system functionality with two separate (ECO) and (COMF) temperatures, a weekly schedule and a clock and an internet connection.

## **MAIN FEATURES**

- Wireless radio connection between room units and output module
- Remote control, monitoring and configuration over the Internet through a home WiFi network and mobile app.
- Monitoring, adjustment and synchronization of all settings, both locally from the room unit and over the Internet
- Service parameters for configuration
- Frost protection with an adjustable temperature
- 3 potential-free 5A relays on the output module
- Overall heating/cooling system start/stop output
- Multiple mounting options
- Full synchronization time approximately 10-15 min.
- Time before synchronization of changes made over the Internet begins on the room unit: 2 - 3 min.
- Programmable shared-output switch-on delay after at least one zone activates, and shared-output switch-off delay after the last active zone switches off (model A)
- Programmable hold time for the last active output, with the shared output switching off immediately (model B)

### **ThermoB.RF1D room unit (2 units):**

- Built-in room temperature sensor
- Backlit LCD and four control buttons
- Wireless radio connection to the remote module
- Powered by 2 x AAA batteries
- Wall-mounted or placed at a convenient location in the room

in a stylish plastic housing

### **Remote output module ThermoB.BU3.WiFi:**

- Three relay outputs wired to the controlled appliances
- Five indicator lights
- Operating state selection button
- Wireless radio connection to the room unit
- WiFi Internet connection module with a concealed button
- Powered from the 230V/AC mains
- Wall mounting using external lugs

### **BASIC MODE OPERATION:**

Operating states:

Off (with or without frost protection\*) - [OFF]

Maintain the comfort temperature - [COMF]

Heating / cooling selection through the service settings screen

Simple operation: direct setpoint adjustment and an on/off button



**The device is supplied configured for BASIC mode, heating, with frost protection enabled at 10°C.**

### **ADVANCED MODE OPERATION:**

Operating states:

Off (with or without frost protection\*) - [OFF]

Maintain the economy temperature - [ECO]

Maintain the comfort temperature - [COMF]

Automatic (weekly temperature schedule) - [AUTO]

Manual temperature override for a set period - [MAN]

- Weekly temperature schedule. Set, view and edit the schedule from the room unit or over the Internet.
- Automatic synchronization of the current day and time over the Internet.
- Separate economy and comfort temperatures, adjustable from the room unit or over the Internet.
- Configurable time in manual mode [MAN], in hours, or indefinitely.
- Easy heating/cooling mode selection, with an option to lock the mode
- 2 room unit button lock options: child lock and PIN-protected hotel lock

\* Frost protection, its temperature and BASIC/ADVANCED mode can be selected at any time through the service parameters.



Important:

- The shared-output delay is independent of the selected operating mode.
- The delay is adjustable from 0 to 30 minutes through the service parameters. Whether it applies to the shared output or zone is predefined in the control software and cannot be changed by the customer.

## INSTALLATION

Before starting installation, read the safety instructions at the beginning of this guide!

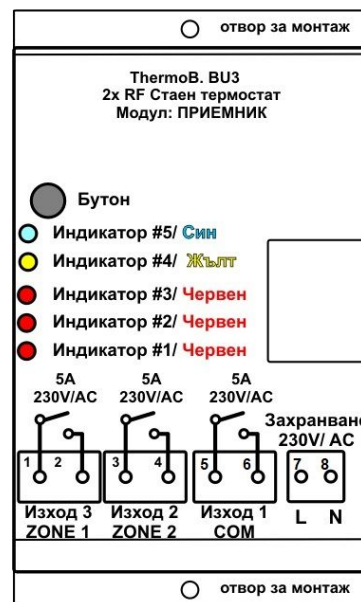
Installing the output module. Install the ThermoB.BU3.

WiFi output module in a location that provides:

- access to the equipment being controlled;
- a 230V AC power supply;
- good RF signal reception;
- good wireless Internet reception.

Protect it from high temperatures, water, moisture, condensation, heavy dust and/or direct sunlight.

Mounting on the controlled appliance's metal housing is often unsuitable because it reduces radio and WiFi reception.



Diagram



Important!

1

All installation and connection work must be carried out by a competent person.

Ceiling mounting and/or upside-down mounting is not permitted.

Mount ThermoB.BU3 using its mounting lugs, with one fastener on each side. See Diagram 1.

We recommend orienting it for convenient reading and operation by the customer.



Provide a 230V/AC supply for ThermoB.BU3 through a series fuse rated at no more than 6A.

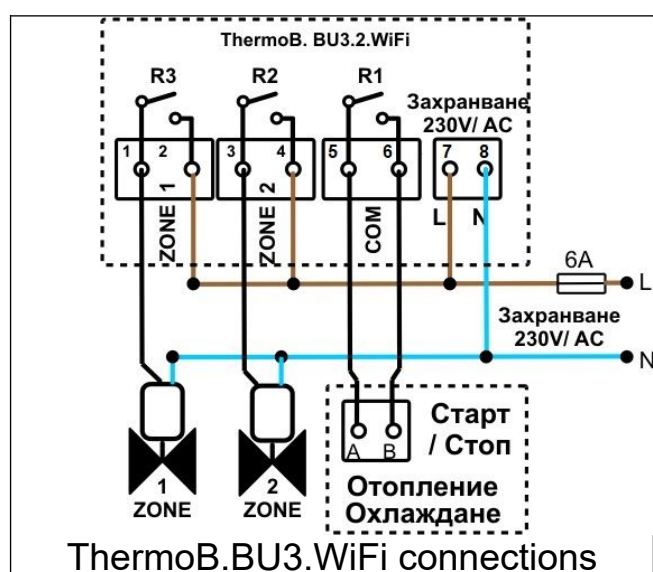
Provide the required cable to the controlled equipment.

Secure the cables so that they cannot move at the receiver or place excessive strain on its terminals.

Output module indicator lights:

|   |        |                                         |
|---|--------|-----------------------------------------|
| 1 | red    | zone 2 output active                    |
| 2 | red    | shared output active                    |
| 3 | red    | zone 1 output active                    |
| 4 | yellow | room unit connection and Automatic mode |
| 5 | blue   | WiFi and Internet connection            |

### Connection to the controlled appliance – Diagram 2



| Terminal                                                      |                           |
|---------------------------------------------------------------|---------------------------|
| 1 and 2                                                       | Zone 1 control            |
| 3 and 4                                                       | Zone 2 control            |
| 5 and 6                                                       | Shared control output     |
| 7 and 8                                                       | 230V/AC/50Hz power supply |
| Permitted conductor cross section:<br>0.5 -1.5mm <sup>2</sup> |                           |

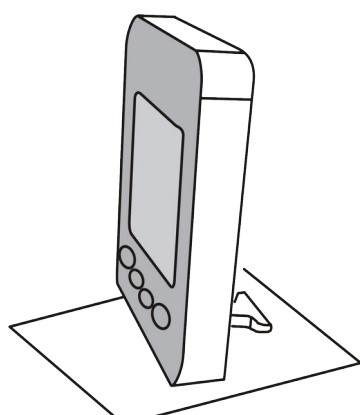
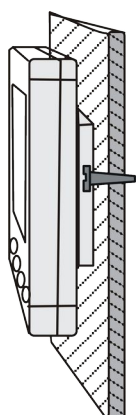


Important: the receiver requires a permanent 230V AC/50Hz supply.

## Installing the room transmitter

### Installing the room transmitter **ThermoB.R1D.**

The room unit can be wall-mounted (Figure 1) or placed on a flat surface (Figure 2) using its stand.



Install the room unit 1.0 -1.2m above the floor, away from direct sunlight, windows, heaters or other equipment that could affect the measured temperature.

Choose a location that allows good radio (RF) signal transmission, away from large metal objects, radio transmitters and similar equipment.

Figure 1

Figure 2

## REPLACING THE BATTERIES

Batteries must be installed for the module to operate. You need 2 AAA batteries.

Press the cover tab on the back of the room unit to open the battery compartment (Figure 3).

Insert the batteries, observing plus and minus polarity.

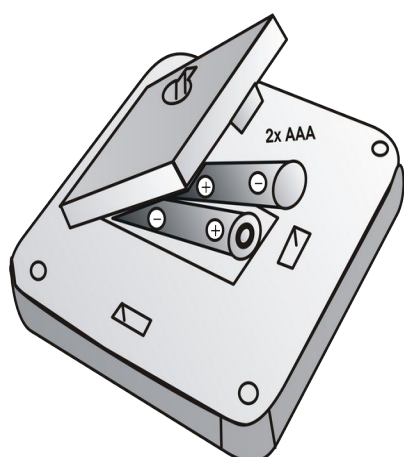
Use new batteries only.

We recommend alkaline batteries for longer life.

**Rechargeable batteries are**

Figure 3

**not recommended!**



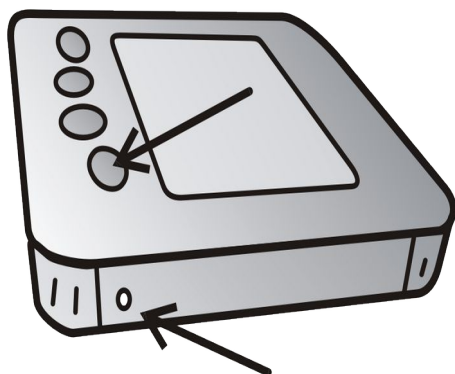
Important! After replacing batteries or powering up for the first time, allow approximately 10-15 minutes for synchronization, or wait until indicator 12 on the main screen disappears.

## **Pairing the modules**

This procedure is needed only when replacing the receiver/room unit pair or when another nearby device happens to use the same channel. The device supports 250 channels.

All three modules must be powered: the output module connected to its supply and both room units operating with batteries installed.

Output module: hold the ThermoB.BU3.WiFi button for 10 sec. The yellow indicator starts flashing rapidly.



Room unit 1: hold “Increase” for at least 5 sec while using a thin pointed object to press and hold the concealed pairing button. Figure 4. The pairing screen appears; see Operating screens.

- Wait briefly for the procedure to finish.

Figure 4

- Once paired, room unit 1 exits pairing and returns to the main screen; see “Operating screens”.

The yellow indicator on the Themob.BU3 receiver starts flashing in pairs of short flashes, indicating that it is ready to pair room unit 2.

Repeat the room unit 1 pairing procedure with room unit 2. Do not press the Themob.BU3 receiver's pairing button again.

- Once paired, room unit 2 exits pairing and returns to the main screen. The Themob.BU3 receiver's yellow indicator stays on.

Important!



- Pairing ends automatically when the timeout expires.

- Pairing can be stopped on each unit by pressing any button at least 10 sec after starting.

- Starting new pairing erases the previous

pairing!

### Checking communication:

The room units periodically check their connection to the receiver. A connection symbol is displayed when connected. On the output module, the yellow indicator goes out briefly during successful communication. If communication is unavailable, the yellow indicator goes out.

## **System functions**

The system maintains the selected temperature in the controlled room.

Use the service parameters to select one of the two main operating modes: **BASIC** or **ADVANCED**.

In **BASIC** mode, one temperature setting is available: the comfort temperature (COMF).

In **ADVANCED** mode, two temperature settings are available: economy (ECO) and comfort (COMF), together with a weekly schedule.

Users can adjust the temperature settings freely. The adjustment range of each setting can be restricted through the service parameters.

The system supports both heating and cooling.

The room unit measures and displays room temperature and sends it to the receiver. The receiver compares it with the current setpoint and controls its output accordingly.

The room unit also exchanges additional parameters with the output module.

The output module exchanges another set of parameters with the online system.

The system continually updates information in both directions: room unit -> output module -> Internet -> mobile app, and mobile app -> Internet -> output module -> room unit.

Changes made online or on a room unit initiate synchronization. Small changes often synchronize relatively quickly, in 2-3 minutes, aligning the room unit display with the mobile app (Internet). Full synchronization requires at least 10-15 minutes.

When batteries are inserted, the room unit immediately starts synchronizing all parameters. **We recommend NOT changing modes and/or temperatures immediately after system startup** unless absolutely necessary, so synchronization can complete and the information is correct.

If the receiver loses power, previous adjustments are retained. Synchronization starts when power returns. Output states are also retained and restored.

In **ADVANCED** mode, the system also has a clock showing the current time and day, and a weekly temperature schedule.

When Internet access is available, the clock synchronizes automatically. The correct time zone must be set!

Internet access is provided through Proxel Connect, available for both iOS and Android.

A web version is also available for computer access through a browser.

Operating states provide quick selection of temperature and system behavior, using a room unit button or over the Internet.

The operating states are:

- **“Off” (OFF)**: outputs are off but may activate for frost protection.
- **“Comfort” (COMF)**: the device aims to maintain a comfortable room temperature by switching the outputs on or off as needed, for example 24°C.
- **“Economy” (ECO)**: [\*available only in **ADVANCED** mode]:  
The device aims to maintain the selected energy-saving temperature, for example 21°C, switching the outputs on/off as needed.
- **“Scheduled operation” (AUTO)**: [\*available only in **ADVANCED** mode]:  
The maintained temperature is selected automatically by a predefined weekly temperature schedule.
- **“Manual temperature override” (MAN)**: [\*available only in **ADVANCED** mode]:

During scheduled operation (AUTO), a different temperature can be set manually, independently of ECO and COMF. The system maintains this new value for a set period, then automatically returns to the schedule. MAN duration is configured in the service parameters and may also be unlimited.

Exiting manual mode:

- On the room unit: select “ECO” / “COMF” / “OFF”.
- On the output module: hold its button for 5 sec.
- The yellow indicator stays on.

**OUTPUT MODULE** The receiver also provides fully manual control of its outputs, independently of the room unit, using its own button. This mode is also displayed as **“Manual” (MAN)**.

Exiting manual mode:

- On the room unit: select “ECO” / “COMF” / “OFF”.
- On the output module: hold its button for 5 sec.
- The yellow indicator stays on.

Manual mode CANNOT be selected over the Internet!

Service parameters allow the installer to fine-tune the system for the required temperature comfort and operating behavior.

Parameters include adjustable hysteresis, heating and/or cooling mode locking, BASIC or ADVANCED mode selection, measured temperature calibration, economy and comfort temperature limits, and the time zone. Two screen lock options prevent unauthorized access: a child lock using a button combination and a PIN-protected hotel lock.

An additional parameter selects the synchronization speed between the room unit and receiver. Users can choose faster response with higher battery consumption or longer battery life with slower synchronization.

In the “Off” state (**OFF**), synchronization is slower to extend battery life.

### **Temperature schedule and priority:**

*available only in ADVANCED mode*

The weekly temperature schedule combines a period, defined by start and end times, with a selectable state: off, economy temperature or comfort temperature. A state is assigned to each day of the week for that period.

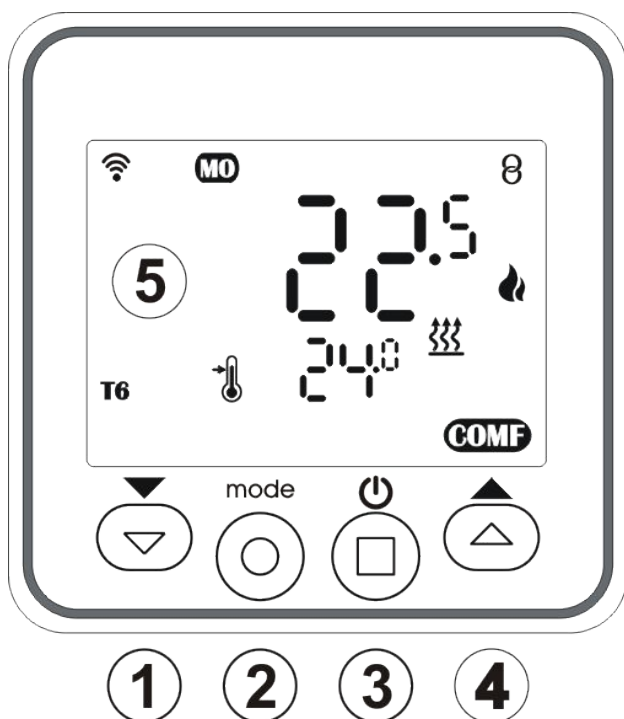
The device provides 6 independent time periods and corresponding states for each day of the week.

**Priority:** two or more periods may overlap. When the current day and time fall within an overlap, the highest-priority state determines the temperature.

Priority increases as follows: “Off” (OFF) -> “Economy temperature” (ECO) -> “Comfort temperature” (COMF).

## **USING THE ROOM UNIT**

The ThermoB.R1D room unit includes:



- a large LCD screen
- 4 control buttons
- a temperature sensor;
- a backlight

Button functions:

- Buttons [1] and [4]: “Decrease” / “Increase”  
to decrease / increase the displayed temperature or value.
- Button [2], “Mode”: selects the operating mode using Economy (ECO), Comfort (COMF), or the temperature schedule (AUTO).
- Button [3], “ON/OFF”: switches the system on or off.

Figure 6

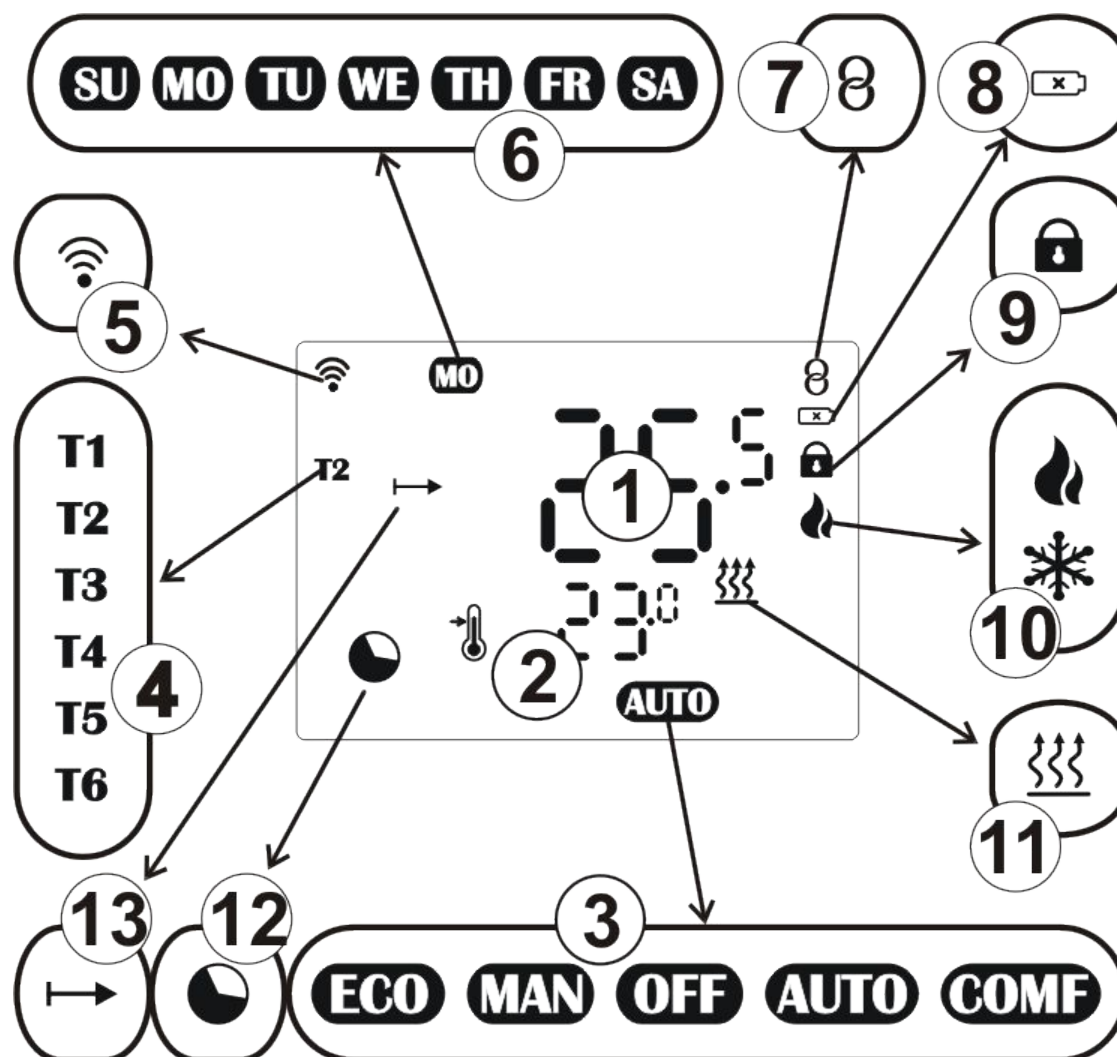
**Operating screens:** 6 information and service screens are available.

- Main screen: the system is on when this screen is displayed.
- Off
- Current time (*available only in ADVANCED mode*)

- Schedule (*available only in ADVANCED mode*)
- Service settings
- Pairing with the receiver

### **CHANGING THE SET TEMPERATURE**

To change the selected temperature, press “Decrease” [1] or “Increase” [4]. During adjustment, the set temperature (2) flashes on the main screen.

**MAIN SCREEN**

1. Measured temperature
2. Set temperature
3. Selected operating state:
  - (ECO) Economy temperature – (COMF) Comfort temperature
  - (AUTO) Scheduled operation – (MAN) Temporary
  - (OFF) System off\* temperature override
4. Active programs: shows which program is active at the current time.
5. Internet connection indicator
6. Day of the week
7. Receiver link indicator
8. Low battery indicator
9. Keypad lock indicator
10. Heating or cooling indicator
11. Output indicator: visible icon means the output is on
12. Initial synchronization (after battery replacement)
13. Synchronisation in progress

Note: \* with or without frost protection; see Service parameters.

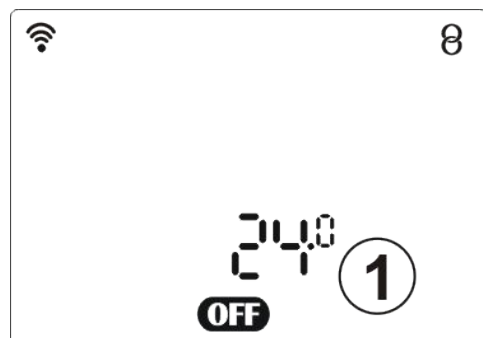
\* When the main screen is displayed, the system is **on**.

## Switching the system on or off

Briefly press button [3], On/Off, to switch the system on or off. When the Off screen is displayed, the system is off.

If frost protection is enabled, the system monitors the temperature and maintains the selected frost protection setting (see Service parameters).

### “Off” screen in BASIC mode

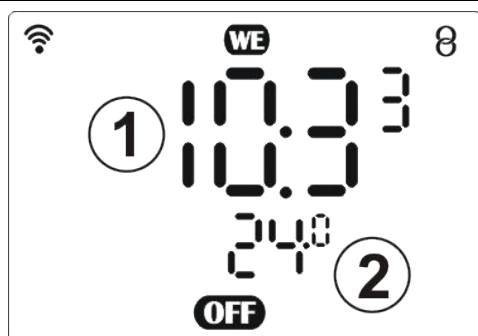


Item 1: measured temperature  
OFF indicates that the system is off.

When the system is:

- on, you will see the **main screen**.
- off, you will see the **Off screen**.

### “Off” screen in ADVANCED mode



Item 1: current time and day of the week  
Item 2: measured temperature  
OFF indicates that the system is off.

When the system is:

- on, the “**main screen**” is displayed.
- off, you will see the **Off screen**.

- The system retains the previously selected state when switching off and back on.

- While the system is off, pressing:

“Decrease” [1] switches it on in “ECO”.

“Increase” [4] switches it on in “COMF”.

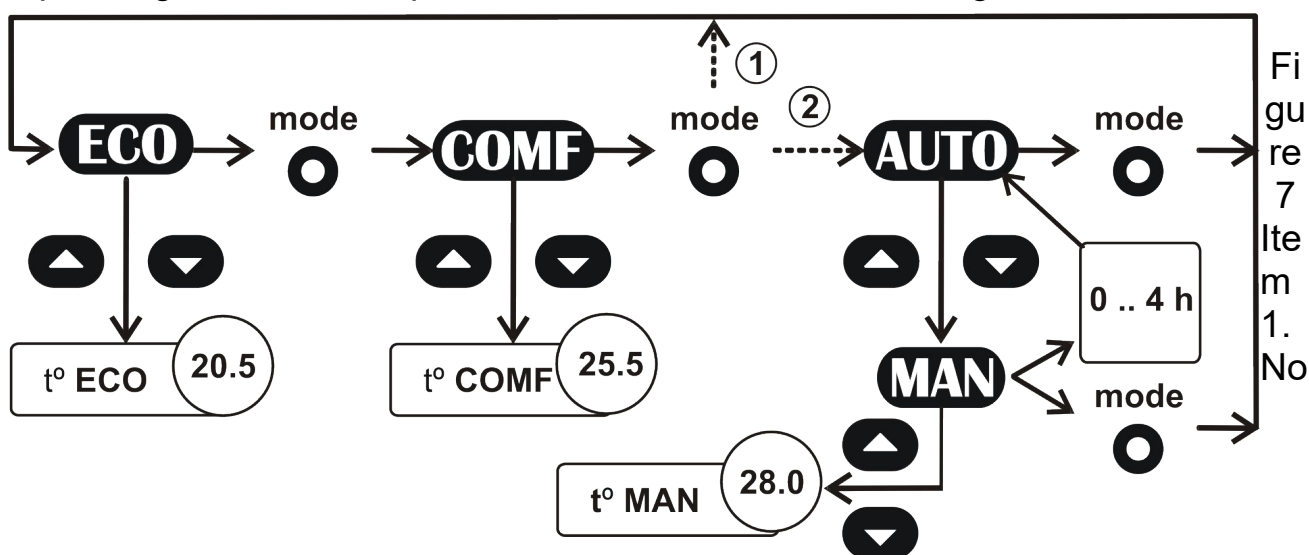
“Mode” [2] has no effect.



\* In “**Off (OFF)**”, the room unit communicates at longer intervals to conserve battery power.

## Selecting an operating state and set temperature with the system on and in ADVANCED mode

Operating state and temperature selection are shown in Figure 7.



schedule set

Item 2. Schedule set

## Selecting an operating state

Briefly press button [2], “Mode”, to cycle through (ECO) → (COMF) → (AUTO) → (ECO)...

**In BASIC mode, COMF is the only operating temperature and active state.**

Important! Selecting (AUTO) operation using a temperature



schedule is only available when a valid schedule requires at least one period with different start and end times, enabled for at least one day, and ADVANCED mode selected. Without a valid schedule, states are limited to (OFF), (ECO) and (COMF).

In BASIC mode, states are (OFF) and (COMF).

## Setting the desired temperature

The system has two main temperature settings: comfort (COMF) and economy (ECO).

To change a temperature, first select its state (ECO) or (COMF) by briefly pressing button [2], “Mode”.

With (ECO) or (COMF) selected, press “Decrease” [1] or “Increase” [4] to adjust the corresponding temperature. During adjustment, the set temperature (2) flashes on the main screen.



Important! Each temperature (ECO) and (COMF) has a permitted range defined in the service parameters. If a value outside that range is entered, the temperature automatically returns within it.

### **“Manual temperature override” (MAN)**

An exception is pressing “Decrease” [1] or “Increase” [4] while the system is in “AUTO”.

The system then enters temporary manual temperature override (MAN), starting with direct adjustment of the last operating temperature. This value is freely selectable, independent of ECO and COMF, and does not change them.

(MAN) can be ended in one of the following ways:

- by pressing Mode [2] to select another mode;
- by pressing On/Off [3] to switch the system off.
- Automatically returning to (AUTO) after a preset period of 1, 2, 3 or 4 hours, if enabled in the service parameters.

### **Selecting heating or cooling**

Whether the system operates in heating or cooling depends on several conditions:

- A service parameter can fix heating or cooling mode, or allow the user to select freely.
- When free heating/cooling selection is enabled, the relationship between (COMF) and (ECO) determines the mode.

When (COMF) is higher than (ECO), the mode is HEATING.

When (COMF) is lower than (ECO), the mode is COOLING.

Heating or cooling operation is shown by the icons at position 11 on the main screen:

- a flame for heating
- a snowflake for cooling

### **Locking the main screen**

The buttons can be locked while the main screen is displayed.

Main screen locking/unlocking is available only in ADVANCED mode.

To lock/unlock the main screen, hold “Mode” [2] and “Increase” [4] together for more than 5 sec.

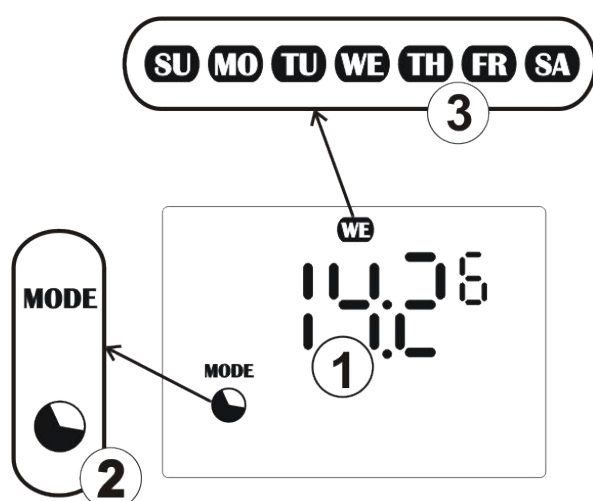
The padlock icon (9) on the main screen indicates that the keypad is locked.

A PIN set in the service settings provides an additional way to prevent changes at the display.

When the keypad is locked, parameters can only be changed after unlocking it or through the online controls.

## Setting the time

### “Current time” screen



Item 1 – current time

Item 2 – time-setting mode indicator

Item 3 – current day of the week

The current time settings screen is disabled in BASIC mode.

Day-of-week abbreviations:

|           |           |
|-----------|-----------|
| <b>SU</b> | Sunday    |
| <b>MO</b> | Monday    |
| <b>TU</b> | Tuesday   |
| <b>WE</b> | Wednesday |
| <b>TH</b> | Thursday  |
| <b>FR</b> | Friday    |
| <b>SA</b> | Saturday  |

Manually setting the current time and day is necessary for scheduled operation when there is no Internet connection.

With Internet access, the time and day synchronize automatically when the difference exceeds 5 min.

The procedure for manually setting/checking the time is shown in Figure 8.

Start from the main screen.

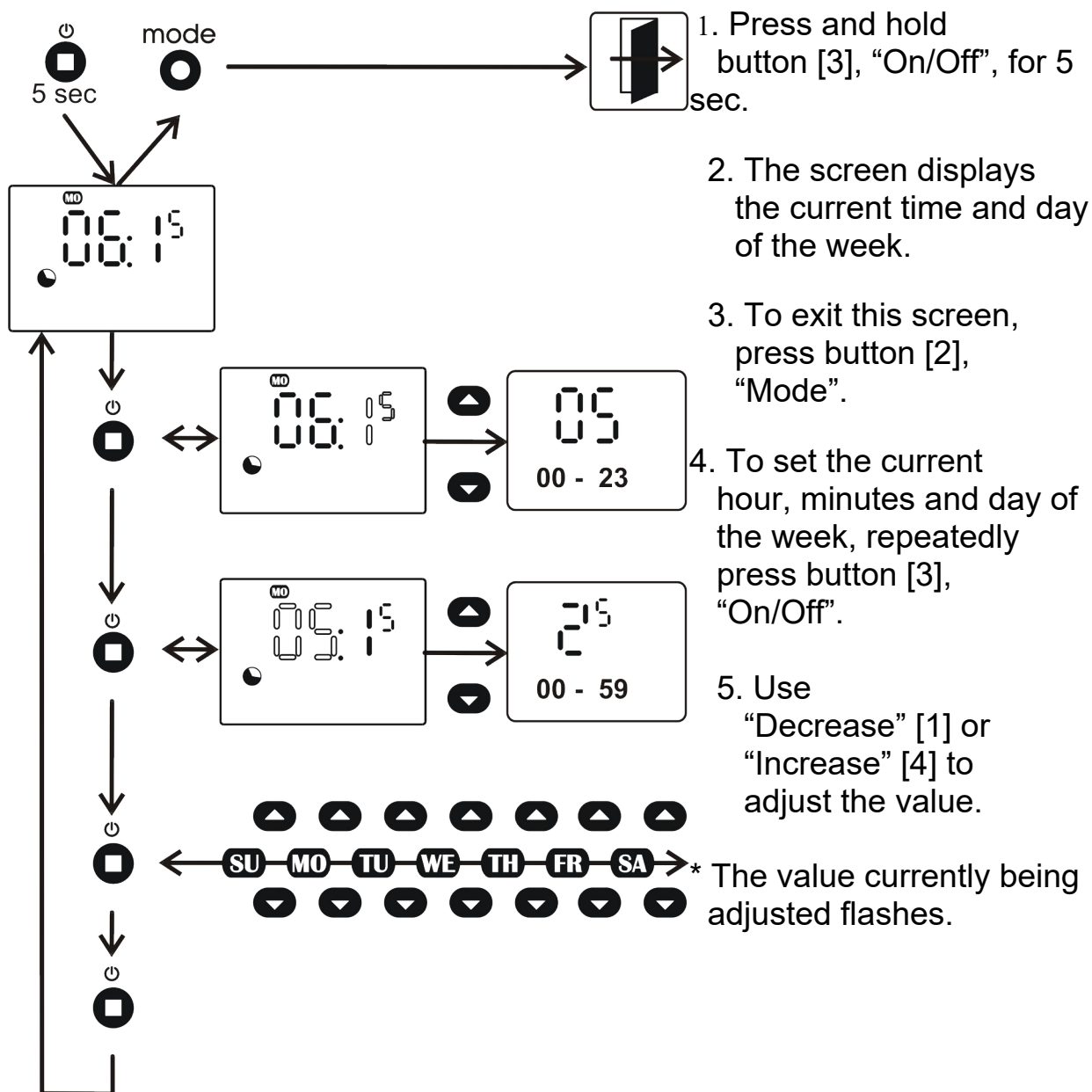


Figure 8

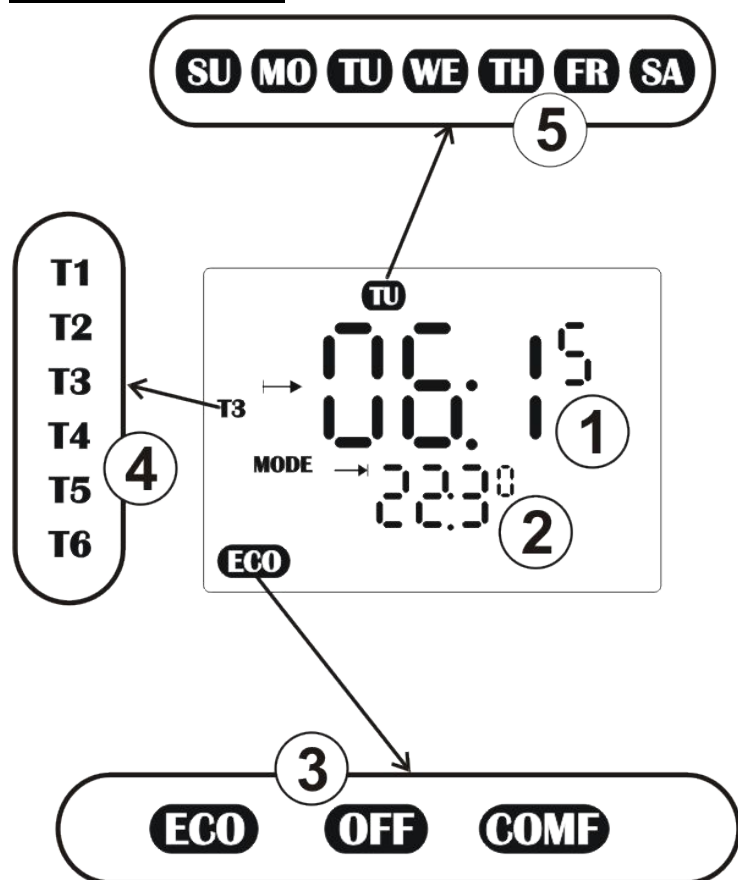


Important! Set the correct time zone in the service parameters so automatic Internet clock automatic time synchronization works correctly.

## Scheduled operation

A schedule must be configured to use scheduled (AUTO) operation.

### Schedule screen



- Item 1 - interval start time
- Item 2 - interval end time
- Item 3 - temperature selected for this interval: ECO or COMF, for the relevant day of the week
- Item 4 - interval number
- Item 5 - current day of the week

The schedule consists of up to 6 time periods, each assigning (ECO), (COMF) or no activity to individual days of the week.

For each period (timers T1 to T6), select which of the two temperatures, (ECO) or (COMF), is active on each day of the week. Example: timer T1 maintains (ECO) on Monday, Wednesday and Friday; (COMF) on Thursday and Sunday; and is inactive on Saturday.

Schedule setup is shown in Figure 9.

1. Hold button [2], "Mode", for 5 sec.
  2. Select timer T1 to T6 using [1], "Decrease", or [4], "Increase".
  3. Press [3], "ON/OFF", repeatedly to move through the start time, end time and each day, selecting economy or comfort temperatures as required.
  4. Press [2], "Mode", to exit.
- \* Time settings use 15 min. intervals.



Important! When two or more (COMF) and (ECO) periods overlap, the period specifying (COMF) takes priority throughout the overlap. This allows a priority structure. Figure 10

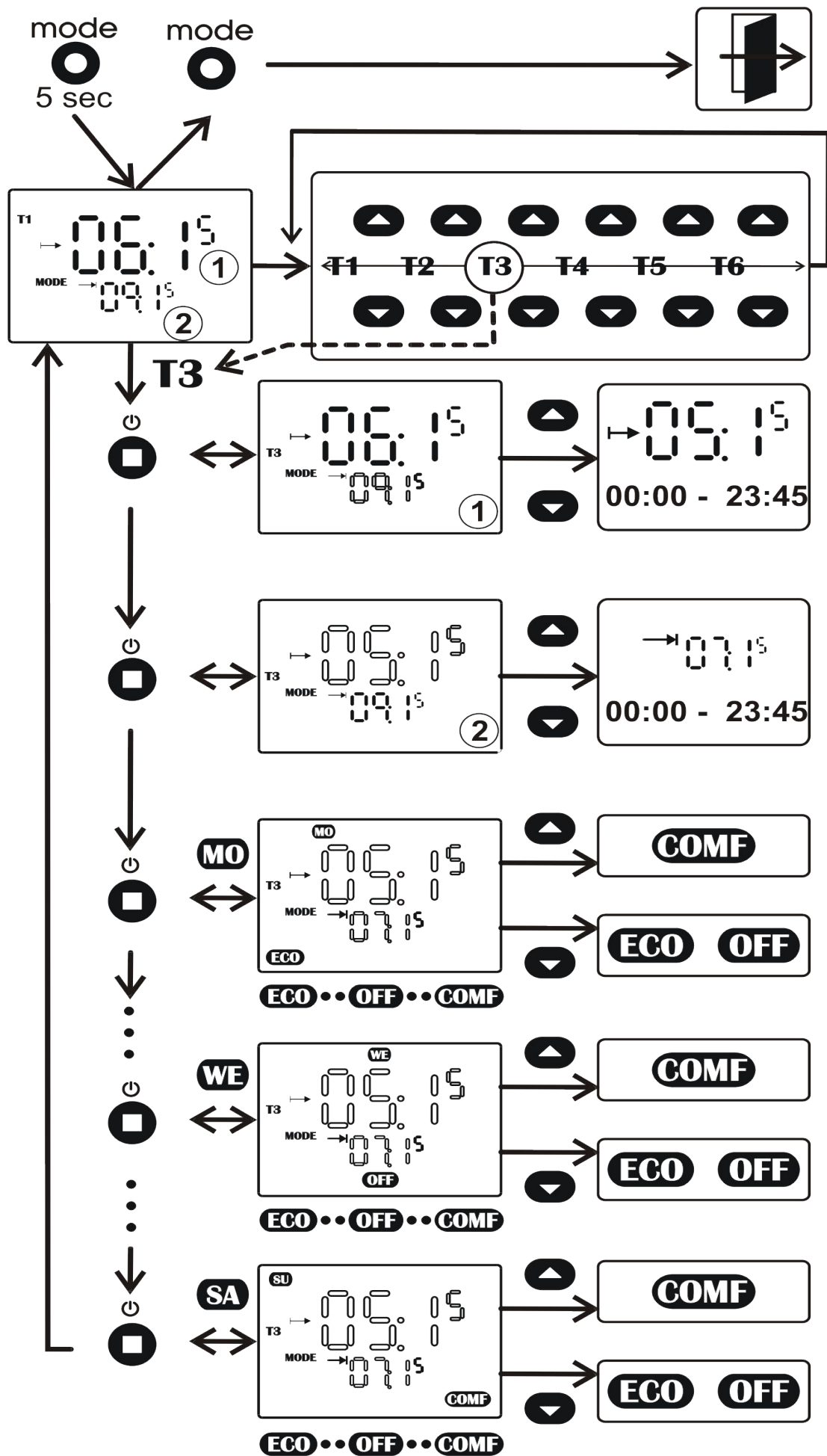


Figure 9

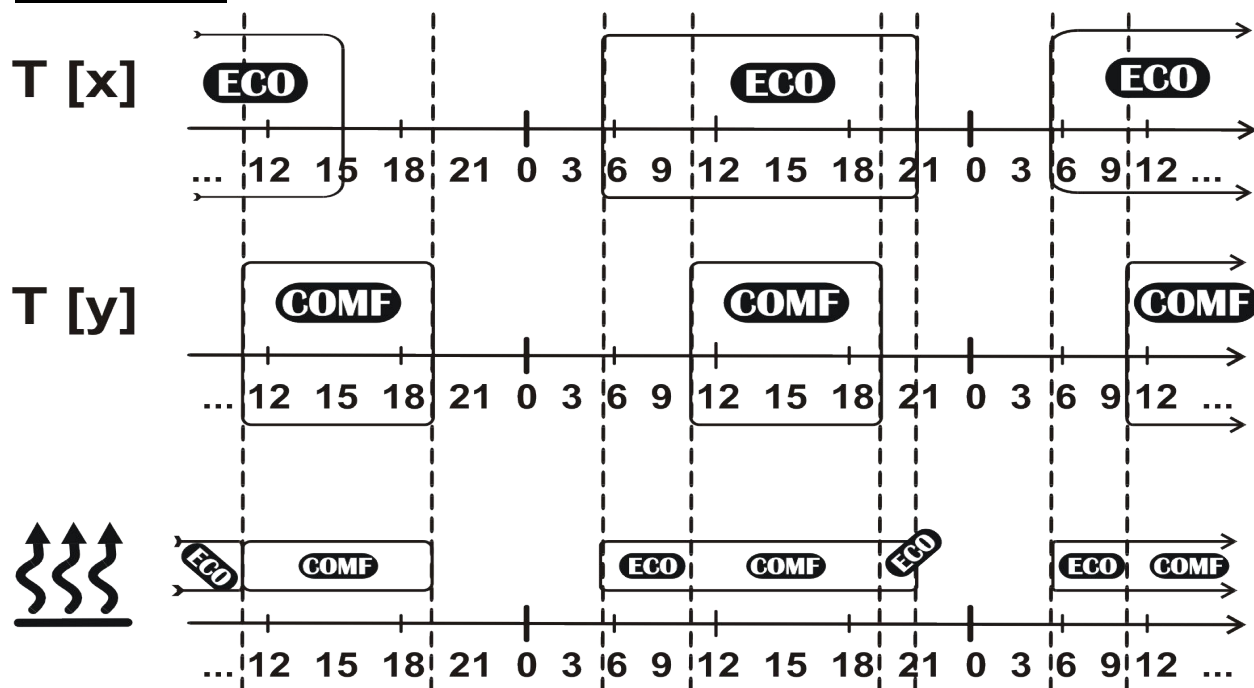
**PRIORITIES**

Figure 10

**Important!**

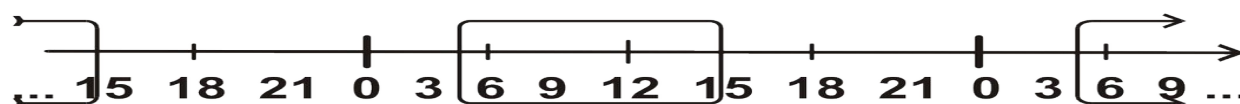
A timer behaves differently depending on whether its start time precedes its end time or vice versa. See Figure 11.

- When the start time precedes the end time, operation stays within the current day.
- When the end time precedes the start time, operation runs from 00 h of the current day to the start time, and from the end time to 24h.

Note: enabling such a period on consecutive days extends operation across midnight.



**Start (05:15h) < Stop (14:30h)**



**Start (16:30h) > Stop (06:30h)**

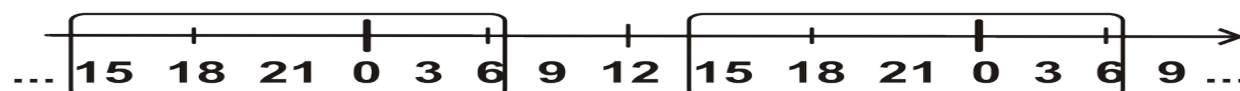


Figure 11

## Example schedule:

|    | Period        | Monday | Tue. | Wedne<br>sday | Thu. | Friday | Saturda<br>y | Sunday |
|----|---------------|--------|------|---------------|------|--------|--------------|--------|
| T1 | 06:30 – 08:30 | COMF   | COMF | COMF          | COMF | COMF   |              |        |
| T2 | 12:00 – 14:15 | COMF   | COMF | COMF          | COMF | COMF   |              |        |
| T3 | 18:30 – 21:45 | COMF   | COMF | COMF          | COMF | COMF   | COMF         | COMF   |
| T4 | 05:30 – 23:45 | ECO    | ECO  | ECO           | ECO  | ECO    | ECO          | ECO    |
| T5 | 23:45 – 01:30 | ECO    | ECO  | ECO           | ECO  | ECO    | ECO          | ECO    |
| T6 | 09:00 – 22:00 |        |      |               |      |        | COMF         | COMF   |

Assuming HEATING, COMF = 24° and ECO = 20°, the periods and day selections above produce the following:

- Monday to Friday, 06:30 to 08:30 h: 24° – T1.
- Monday to Friday, 12:30 to 14:15 h: 24° – T2.
- Monday to Sunday, 18:30 to 21:45 h: 24° – T3.
- Monday to Friday, 05:30 - 06:30, 08:30 - 12:00 and 14:15 – 18:30: 20° – T4.
- Every day, 21:45 to 01:30: 20° – T4 and T5.
- Saturday and Sunday, 09:00 to 22:00: 24° – T6.

### Service settings



To access the service settings, press and hold for more than 10 seconds buttons [2], “Mode”, and [3] together, On/Off, together.  
Item 1 - value  
Item 2 - parameter number

If a PIN has been set, the system first asks you to enter

the correct PIN.

If an incorrect PIN is entered, the system locks temporarily.

Press [3], “ON/OFF”, to move through the parameters in sequence.

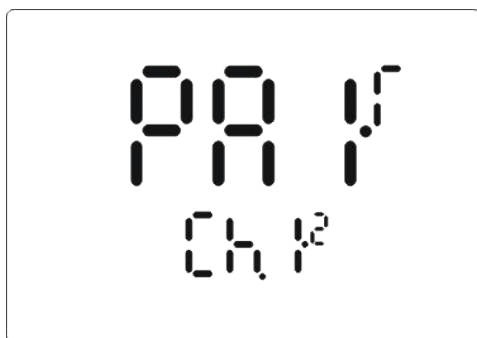
Press [2], “Mode”, to exit this screen.

Use [1] and [4], “Decrease” / “Increase”, to adjust a parameter while it is displayed. Values do not flash!

**Service parameter table**

|      | Description                                                                                                                                                                                                                                                                                      | Step   | Min    | Max    | Default |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|---------|
| PR01 | Hysteresis                                                                                                                                                                                                                                                                                       | 0.5°   | 0.5°   | 3.0°   | 0.5°    |
| PR02 | Frost protection temperature.<br>0 disables this function.                                                                                                                                                                                                                                       | 0.5°   | -9.5°  | +15.0° | 10.0°   |
| PR03 | BASIC/ADVANCED mode and fixed heating/cooling selection<br>0 – ADVANCED mode; heating/cooling is determined by the relationship between ECO and COMF.<br>1 – ADVANCED mode, heating only; 2 – ADVANCED mode, cooling only<br><b>3 – BASIC mode, heating only</b><br>4 – BASIC mode, cooling only | 1      | 0      | 4      | 3       |
| PR04 | Keeps the last active zone output on for the specified time after COM switches off. The setting is individual for Zone 1 and Zone 2. The step is 30 seconds.                                                                                                                                     | 1      | 0      | 30     | 1.5 min |
| PR05 | Local time zone, UTC = 0                                                                                                                                                                                                                                                                         | 1 hour | -12    | +14    | +3      |
| PR06 | Measured temperature calibration                                                                                                                                                                                                                                                                 | 0.5°   | -5.0°  | +5.0°  | 0.0°    |
| PR07 | PIN to restrict access to the device<br>0 - no PIN required                                                                                                                                                                                                                                      | 1      |        |        | 0       |
| PR08 | Temporary manual temperature (MAN) duration:<br>0 - no automatic return to AUTO                                                                                                                                                                                                                  | 1h     | 0      | 4      | 1h      |
| PR09 | Minimum permitted ECO set temperature                                                                                                                                                                                                                                                            | 0.5°   | +10.0° | +40.0° | +15.0°  |
| PR10 | Minimum permitted COMF set temperature                                                                                                                                                                                                                                                           | 0.5°   | +10.0° | +40.0° | +15.0°  |
| PR11 | Maximum permitted ECO set temperature                                                                                                                                                                                                                                                            | 0.5°   | +15.0° | +45.0° | +45.0°  |
| PR12 | Maximum permitted COMF set temperature                                                                                                                                                                                                                                                           | 0.5°   | +15.0° | +45.0° | +45.0°  |
| PR13 | I Synchronisation I Battery<br>I <u>speed</u> I <u>life</u><br>1 I Fast I Short<br>2 I standard I standard<br>3 I Slow I Extended<br>4 I Very slow I Long                                                                                                                                        | 1      | 1      | 4      | 2       |
| PR14 | Software version and zone number, 1 or 2                                                                                                                                                                                                                                                         |        |        |        |         |

## Pairing with the receiver



Hold the concealed pairing button together with “Increase” for more than 5 sec.

When pairing ends, the device returns to the main screen automatically.

See “Pairing the room unit with the receiver”.

## OPERATING THE OUTPUT MODULE

The **ThermoB.BU3.WiFi** receiver has five indicator lights, yellow, blue and red, and one button; see Diagram 1.

|   |        |                                                                                                                  |
|---|--------|------------------------------------------------------------------------------------------------------------------|
| 1 | red    | zone 2 output active                                                                                             |
| 2 | red    | shared output active                                                                                             |
| 3 | red    | zone 1 output active                                                                                             |
| 4 | yellow | the operating state (manual / automatic) and RF connection status.                                               |
| 5 | blue   | Internet connection status. The indicator stays on when connected to the Internet and flashes when disconnected. |

The possible indications are:

- **Manual mode:** indicator #4 flashes steadily at approximately 1 sec intervals. Outputs are controlled manually. Each subsequent press of the button cycles through the output states.
- **Automatic mode:** indicator #4 stays on. In this mode, the measured and set temperatures are monitored to control the outputs.
- \* Indicator #4 flashes briefly when an RF signal is received successfully.
- \* If no RF signal is received for more than 5 minutes, indicator #4 goes out and lights briefly every 5-6 sec.

**Button:** changes the operating mode.

- **Single press:** selects Manual mode. Each subsequent press cycles through output states 1 to 4.

| Number | Output #1<br>Zone 1 | Output #2<br>Zone 2 | Output #3<br>Shared |
|--------|---------------------|---------------------|---------------------|
| 1      | OFF                 | OFF                 | OFF                 |
| 2      | ON                  | OFF                 | ON                  |
| 3      | OFF                 | ON                  | ON                  |
| 4      | ON                  | ON                  | ON                  |

- **Hold for 5 seconds:** selects Automatic mode.
- **Hold for 10 sec:** starts RF pairing

## Connecting to home WiFi:

1. Hold the device's WiFi button for 10 sec (see Diagram 1).
2. The blue WiFi indicator #5 starts flashing rapidly.
3. Connect an external device by WiFi to the **THERMOB-SETUP** network.  
Turn off mobile data and/or other network connections.

### Using the mobile app



Proxel Connect

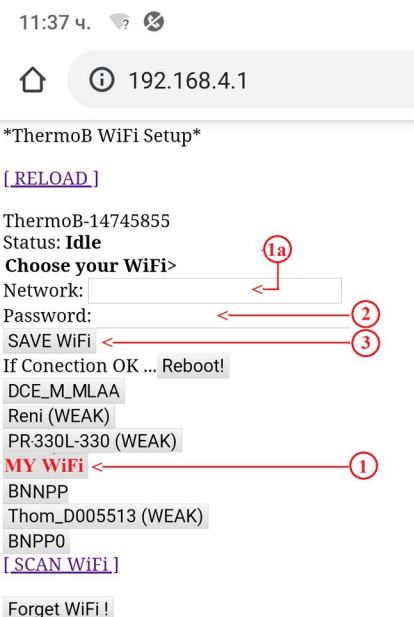


### using a web browser

1. Open a browser and enter in the address bar **192.168.4.1**



Important: enter the numbers in the address bar,  
not in the search box.



2. On the setup page, select your WiFi network, enter its password and tap SAVE WiFi.

Item 1: select your home network from the list, for example MY WIFI.

Item 1a: the selected network name appears here.

Item 2: enter the network password, or leave this blank if the network does not require one.

Item 3: tap SAVE WIFI.

3. Wait for confirmation that setup has succeeded or for an error message.

If an error occurs, repeat the procedure.

## Creating your account




### Register

E-mail

Password

Name

New password confirmation

☐ I'm not a robot  
reCAPTCHA is changing its terms of service. [Take action.](#)



1. Open the Proxel Connect app's main screen or, on an Internet-connected device, open **web.proxel-bg.com** in a browser (or scan the QR code).
2. Select SIGN UP to create an account.



### Login

Username or Email

Password

[Forgotten password?](#)



3. Complete the username, password, name and email fields. Select **I'm not a robot**, then press **REGISTER**.
4. After registration, enter your device's Identifier and Key by selecting **Devices** → **Add**.

(The device identifier is on the receiver label and looks like “ID: **123141134** – key: **ABCD**”, where “**123141134**” is the identifier and “**ABCD**” is the key.)

This device has two identifiers (xxxxxx001 and xxxxxx002) for zones 1 and 2. If the zones are not added automatically, add them manually using these additional identifiers. The key is the same.

You can add several devices to one account.

You can add the same device to several accounts.

The ThermoB team wishes you a comfortable home.

#### Accessing the control panel

1. Control the system from the Proxel Connect app's main screen, or open [web.proxel-bg.com](http://web.proxel-bg.com) in a browser on an Internet-connected device, or scan the QR code.
2. Enter the username and password from your registration if they are not already saved.



#### Technical data

| ThermoB.BU3.WiFi:                                                             |                                   |
|-------------------------------------------------------------------------------|-----------------------------------|
| - SELV power supply                                                           | 230V / AC / 50Hz                  |
| - Power consumption                                                           | <2VA                              |
| - 3 potential-free relay outputs                                              | 5A x 3/ 230V AC                   |
| - Overall dimensions                                                          | 72x50x127mm                       |
| - WiFi network with WEP / WPA-PSK / WPA2-PSK encryption                       |                                   |
| ThermoB.RF1D:                                                                 |                                   |
| - Power supply                                                                | 2 x AAA batteries                 |
| - Overall dimensions                                                          | 90x90x23mm                        |
| - Measured temperature                                                        | -10° .. +45° in 0.5°C steps       |
| Set temperature range: as defined by PR09–PR12 in the service settings table. |                                   |
| General                                                                       | General                           |
| Operating frequency                                                           | 866 MHz                           |
| RF radio range                                                                | 80-100m outdoors                  |
| Contains TX FCC ID:2ADUIESP-1218                                              |                                   |
| Ingress protection rating                                                     | IP20                              |
| Operating conditions                                                          | -5T45, RH80%                      |
| Transport and storage                                                         | -20T60, RH90%                     |
| Current time                                                                  | Synchronization over the Internet |

**QUICK REFERENCE:**

Mobile app: Proxel Connect – Android and iPhone  
 Web control panel: WEB.PROXEL-BG.COM

**Manual control**

- On the output module: press the button once. The “MAN” indicator should light up. Each press cycles zone 1 and zone 2 through off/on combinations.

**Automatic control**

- On the output module: hold the button for 5 sec. The yellow indicator should stay on and “MAN” should go out. Select the desired mode and temperature on the room unit.

Indicator meanings

| Indicator                       | Behaviour                           | Description                                                    |
|---------------------------------|-------------------------------------|----------------------------------------------------------------|
| <b>Red</b><br>(indicator #1)    | On                                  | Output #1 for zone 1 is on                                     |
| <b>Red</b><br>(indicator #2)    | On                                  | Shared output #2 is on                                         |
| <b>Red</b><br>(indicator #3)    | On                                  | Output #3 for zone 2 is on                                     |
| <b>Yellow</b><br>(indicator #4) | Off, with occasional flashes        | Automatic operation, but no RF connection to the room unit     |
|                                 | On, with occasional 1-second pauses | Automatic operation, receiving an RF signal from the room unit |
|                                 | Slow flashing (every 1 sec)         | Manual mode selected                                           |
|                                 | Rapid flashing (every 0.3sec)       | RF pairing in progress                                         |
| <b>Blue</b><br>(indicator #5)   | Off, with occasional 1 sec flashes  | Searching for a WiFi and Internet connection                   |
|                                 | On                                  | Internet connection established                                |

**RF pairing:**

- Hold the output module button for 10 sec until the yellow indicator starts flashing rapidly.  
 - Hold room unit 1's pairing button together with “Increase” for 5 sec. The pairing screen appears. Wait and release the button. Repeat pairing with room unit 2.

**Selecting a WiFi network:**

- Hold the receiver's concealed WiFi button for at least 10 sec until the blue indicator starts flashing rapidly.  
 - Connect to the device by selecting “THERMOB-SETUP”.  
 - Use Proxel Connect for Android and iPhone to connect to your home network. www.ThermoB.eu

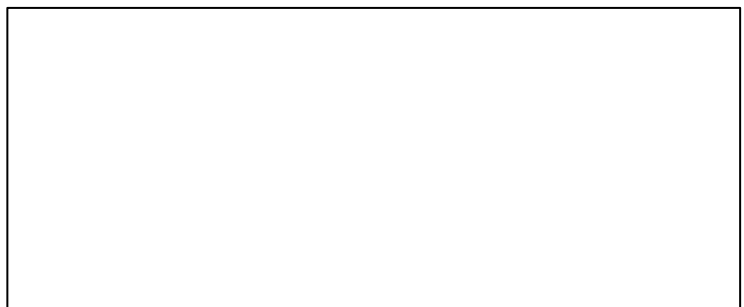
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## Notes:

### Your device

- identifier (ID:)
- Key
  - ID1: Zone 1:
  - ID2: Zone 2:
- Serial number



[www.proxel-bg.com](http://www.proxel-bg.com)  
[www.ThermoB.eu](http://www.ThermoB.eu)

### Ordering information

Base product code: RF2D3.WiFi.

Room unit housing color: white or black. Specify the color when ordering.

Display: positive LCD, with dark characters on a light background. A negative display is not available for this wireless room unit.

WiFi: included in the receiver of this system. The room unit communicates with the receiver by RF, not directly with the WiFi network.

RF: the radio link between the room unit and receiver is included. It is not an optional R suffix for this product code.

System version: ZONE. Specify the exact version described in this guide when ordering.