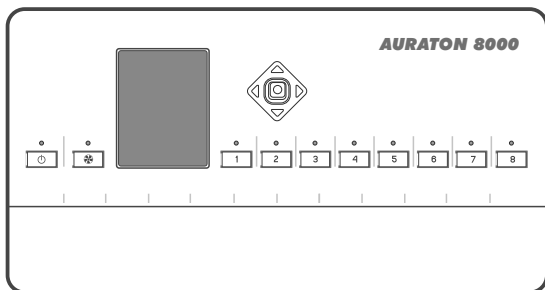


AURATON 8000

www.auraton.pl

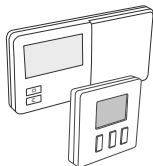
Owner's manual

CE



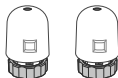
Optional elements of the system to cooperate with AURATON 8000 *(sold separately)*

AURATON 8000 controller may operate with the following products:



- Wireless temperature regulators operating in LMS (Logic Management System) **AURATON 2025 RTH**, **AURATON 2030 RTH**, **AURATON 200**, **AURATON T-1**.

AURATON 8000 may simultaneously operate with 8 controllers (one controller in each zone).



- **AURATON Te230** thermo-electric regulators .
Maximum 6 AURATON regulators for each zone .



- **AURATON H-1** window handle.

A window handle with a position sensor and transmitter is an optional part of the system. It provides information about the window position to the controller. The handle recognizes 4 window positions: open, closed, pivoted and trickle vent position (micro ventilation).

The handle transmits information to AURATON 8000 controller, which activates the relay, e.g. switching off a heater after opening the window or reducing temperature by 3°C when the window is pivoted, in order to save energy.

AURATON 8000 may operate up to 6 handles in one zone.



- **AURATON T-2** wireless thermometer.

Optional element of the system, enabling the user to control temperature in a room other than the room, where the wireless controller is installed.

AURATON 8000

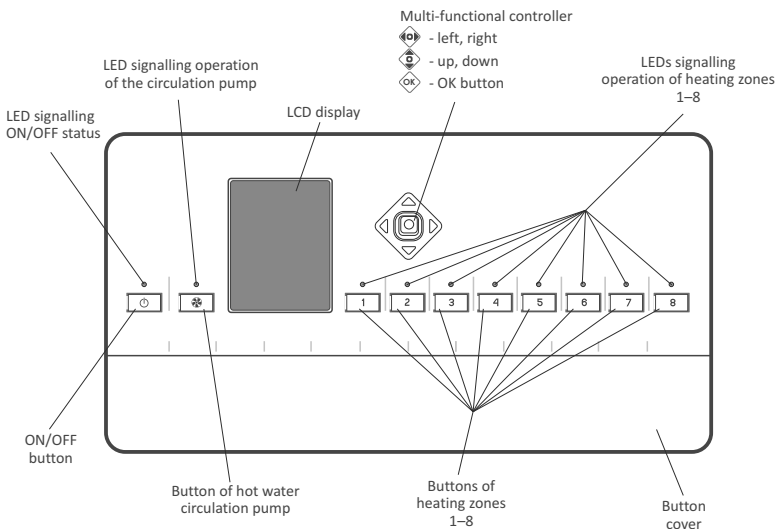
Intelligent wireless controller of 8 heating zones

AURATON 8000 is an advanced, intelligent wireless digital controller designed for controlling 8 heating zones.

AURATON 8000 has voltage outputs for controlling thermo-electric valves, voltage outputs for controlling hot water circulation pump and central heating pump and a potential-free output that may be used for controlling central heating furnace.

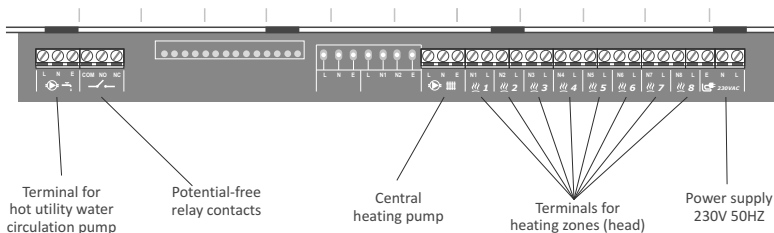
AURATON 8000 communicates with wireless transmitters using modern transmission protocol LMS.

Description of AURATON 8000



Description of connection terminals

Connection terminals are located under the button cover. To remove the cover, unscrew two fixing screws located at the bottom side of the device.



ATTENTION: All connections should be made with disconnected power supply

Mounting the controller






The controller may be mounted on a wall using two fixing screws (rawplugs with screws are provided with the controller).

Cables of the controller shall be fixed to the wall with brackets.

NOTE:

Do not mount the controller on metal boxes. It may cause interferences in proper operation of the device.




Turning ON/OFF

- In order to **turn on** the device press  button and keep it pressed for 3 sec.
- In order to **turn off** the device:
 - press  button and keep it pressed for 3 sec .
 - or press , button and the display will show a pick list. Use controller for “up” and “down” selection  and select **TURN OFF** option, then confirm the choice by pressing .



NOTE: the “pick list” enables user to set the language of displayed messages.

Pairing and deleting wireless temperature controllers shown on the example of AURATON 200 and AURATON 2030 RTH (clock)

- Each zone may be paired with a wireless thermostat (and/or thermometer) and a wireless window handle operating in LMS standard
- Thermostat transmits the following 3 parameters to the paired channel of A-8000:
 -  - current temperature
 -  - set hysteresis
 -  - set temperature
- When after pairing the thermostat, the user adds T-2 thermometer to the paired channel, the actual temperature will be read from T-2 thermometer, whereas only the set temperature will be read from the thermostat. This allows the user to control the temperature in a room other than the room, where thermostat is installed.


NOTE: In the configuration with thermostat and T-2 thermometer it is important to keep the correct order of pairing the devices. Always pair the thermostat first and then T-2 thermometer. Re-pairing thermostat will delete T2 thermometer from the channel. The window handle should be paired as the last element.

NOTE: If a given zone is paired only with T-2 thermometer, then AURATON 8000 will maintain default (factory set) temperature of 20°C in the room where this thermometer is installed.

NOTE: Manufacturer suggests to log-in at least 1 AURATON regulator with a clock (e.g. AURATON 2030 RTH in wireless version), to make AUTO24 function operate accurately.

Pairing wireless devices to a zone

In order to pair wireless temperature sensors, thermostats or LMS window handles with the selected zone perform the following procedures:

1. Press the button of a selected zone () for 3s, wait for a single acoustic signal and then release the button. Entering the zone into pairing mode is signalled by pulsating LED of this zone (every 0.5s) and by displayed antenna symbol on the display.
After a zone enters the pairing mode, other zones may be also entered into this mode by briefly pressing the button of any other zone. This enables the user to simultaneously pair the same thermostat and/or thermometer to more than one zone.
2. Then, in order to pair a LMS wireless device (e.g. temperature regulator) to the zone, run "pairing" mode in the selected LMS wireless device (*detailed instructions on activating "pairing" mode in a selected device is in its manual*).
3. Correct pairing of a LMS device is confirmed by a 1-second acoustic signal.
4. When the button of the zone in "pairing" mode is shortly pressed, then the "pairing" mode is turned off.
5. When the „pairing" mode is turned off in all zones, A8000 enters the mode of normal operation.



NOTE: The "pairing" mode is automatically switched off 60 seconds after the last zone is entered or after correctly completed pairing of a LMS device or after a short press of the selected zone button.

NOTE: One zone may be paired only with one thermostat. Remember that, after pairing a zone with a new thermostat, the thermostat paired previously with this zone will be deleted.

NOTE: If the zone was paired with a thermostat and then with a thermometer, then the zone will log-in both devices. The set temperature will be read from the thermostat, and the actual temperature from the thermometer. One zone may be paired only with one thermostat and/or thermometer.

Deleting wireless devices (LMS) from a zone

In order to delete (log-out) a device from the selected zone, perform the following procedures:






1. If the zone with a paired LMS device is known, press the button of this zone and keep it pressed longer than 5sec. After 3 seconds a single acoustic signal is emitted – do not release the button and after the next 2seconds a double acoustic signal is emitted – the zone automatically enters deleting mode (the display will show the antenna symbol). After one zone is entered into deleting mode, other zones may enter this mode by short pressing the respective zone button. It enables the user to delete a device from more than one zone.
2. Then, in order to delete a LMS wireless devices (e.g. temperature regulator) from the zone, activate “deleting” mode in LMS wireless device (detailed instructions on activating “deleting” mode in a selected device is in its manual).
3. If the LED for selected zone stops blinking, it means that all LMS devices in that zone have been correctly deleted.

When a LED of any zone continues to blink after deleting process, it means that the controller waits for deleting other LMS devices.




NOTE: Deleting process in selected zone turns off automatically after 60s.

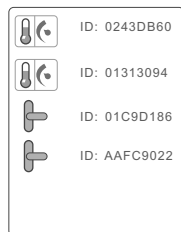
Deleting wireless devices (LMS) using a list

In order to delete all LMS from **AURATON 8000**, proceed as follows:

1. Press ON/OFF button  (single acoustic signal is emitted). The display will show a pick list.
2. Use the controller  (up & down) to select “Delete wireless devices”, and the confirm it by pressing .
3. Use the controller  (up & down) to select the device to be deleted from the pick list. Confirm the selection by pressing  for 3 seconds.

NOTE: After selecting a device from the list, LEDs are activated next to the zone to which the device is paired.

-  - temperature controller symbol
 - thermometer symbol
 - window handle symbol



Controlling the relay

- Activating the regulator head in any heating zone of **AURATON 8000** results in activating the relay.
- The relay is turned off when heating in all zones of **AURATON 8000** is turned off.

Signalling controller operation

The controller signals its operation by LEDs, LCD and acoustic signals.

- **Power supply (ON/OFF) LED:**

| | |
|--------------------------------|--|
| ON/OFF LED inactive: | The controller is switched OFF |
| ON/OFF LED is continuously on: | The controller is in normal operation mode |

- **LED signalling operation of the circulation pump and relay:**

| | |
|---------------------|--|
| LED inactive: | No central heating pump – relay turned off |
| LED active at 10%: | Central heating pump detected, but turned off – relay turned off |
| LED active at 100%: | Central heating active – relay turned on |

- **LEDs of heating zones :**

| | |
|----------------------------|---|
| LED inactive: | The heating zone has no LMS device paired; no regulation head is connected to the connection with a respective number |
| LED active at 10%: | The heating zone has a LMS device paired and a regulation head is connected – heating is turned off |
| LED active at 100%: | The heating zone has a LMS device paired and a regulation head is connected – heating is turned on |
| LED blinks once per 5 sec. | Regulation head is connected, but no LMS device is paired – The zone is not ready to implement the heating algorithm |
| LED blinks twice per 5sec. | LMS device is paired, but no regulation head is connected – The zone is not ready to implement the heating algorithm |

| | |
|----------------------------------|---|
| LED blinks three times per 5sec. | The heating zone has a regulation head connected and a LMS device is paired, but the zone does not receive correct signals from LMS device – <i>The zone implements the heating algorithm in emergency mode (AUTO 24)</i> |
| LED blinks slowly (every 0.5s.) | The heating zone is in pairing mode |
| LED blinks quickly | The heating zone is in deleting mode |

Description of voltage output of the circulation pump in hot utility water circuit.


Programming the operation the circulation pump in hot utility water circuit – example of AURATON 2030 RTH.

NOTE: In order to ensure correct operation (weekly programming), it is necessary to pair at least one regulator with a clock e.g. **AURATON 2025 RTH** or **AURATON 2030RTH**.

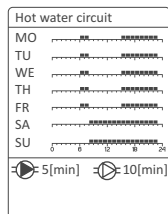
When only 24 h regulators without a clock (e.g. **AURATON 200**) are paired, then the pump operates only in interval mode (operating time and break time may be programmed).



Controlling the circulation pump in hot utility water circuit

The controller may be programmed with a weekly operation schedule of the circulation pump. In order to program the operation pump, follow the procedure:



1. Press the circulation pump button  , to enter "**Hot water circuit**" mode.


The display will show a weekly schedule of pump operation. Each day of the week is presented on the timeline.





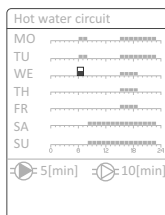
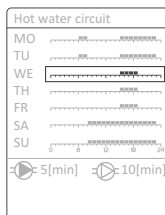
2. Use controller  (up & down), to select a day of the week and confirm it by pressing  button.

3. To set operating hours for the pump activate/inactivate rectangles at the time line – (activated rectangle – the pump works; inactivated the pump is turned off).

Rectangles are activated (lit) by the controller's up arrow  and inactivated by its down arrow .

The hour (0:00 - 24:00) is selected by the controller's  left-right arrows. After selecting each hour activate/inactivate the respective rectangle at the time line.

4. After completing the settings for the whole day, confirm it by pressing  button and proceed to the next day use controller's  up/down arrows. Proceed similarly to the previous day.






Copying time line settings from one day to another



In order to speed up the programming of the whole week, settings of one day of the week may be copied to another.

(e.g. the time line from Monday may be copied for Tuesday, Wednesday, Thursday and Friday)

To copy the time line from a day of the week, proceed as follows:

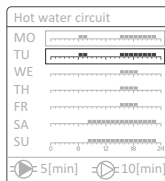
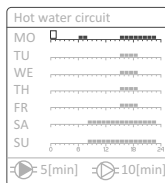
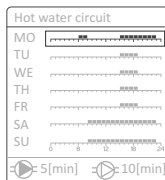
1. Use controller  (up & down), to select a day of the week to be copied (e.g. Monday) and confirm it by pressing  button.

2. After that, changes may be introduced to the time line (but they are not necessary). Press again  button. The time line of the selected day is copied to the memory of the device. It is indicated by a green frame around the copied day.








3. To paste the copied time line to another day – use controller  (up & down) to select the day where the time line is to be pasted (e.g. Tuesday) and confirm it by pressing  button for approx. 2 sec. Acoustic signal will confirm pasting the time line.

4. Pasting (sec. 3) may be repeated for the next days of the week.

NOTE: Green frame indicates that the selected time line remains in the memory of the device.





An example of programmed timeline for pump operation from Monday to Sunday.

| Day | Pump operating hours | |
|-----------|------------------------|---|
| Monday | 6:00–8:00; 15:00–23:00 |  |
| Tuesday | 6:00–8:00; 15:00–23:00 |  |
| Wednesday | 6:00–8:00; 15:00–23:00 |  |
| Thursday | 6:00–8:00; 15:00–23:00 |  |
| Friday | 6:00–8:00; 15:00–23:00 |  |
| Saturday | 8:00–23:00 |  |
| Sunday | 8:00–23:00 |  |

Setting pump operation time




After completing the programming of the whole week of pump operation, the user should program the pump operation in a selected hour (active [lit] rectangle).



1. Remain in "Hot water circuit" (), mode  use controller (up & down), to select the pump operation in a given hour (bottom of the screen).




2. Settings cover two parameters.



 - pump operation time

 - pump stoppage time

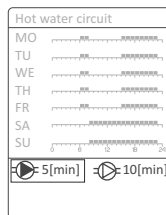
3. Use controller  (up & down, left & right) to select "operation time" icon  and confirm it by pressing  button.

Now it is possible to set the "operation time" of the pump in minutes - use  (up & down). After this value is set, confirm it by pressing  button.

4. Then use controller  (left & right) to set the "stoppage time"  and confirm it by pressing  button.

Now it is possible to set the "stoppage time" of the pump in minutes - use  controller (up & down). After this value is set, confirm it by pressing  button.

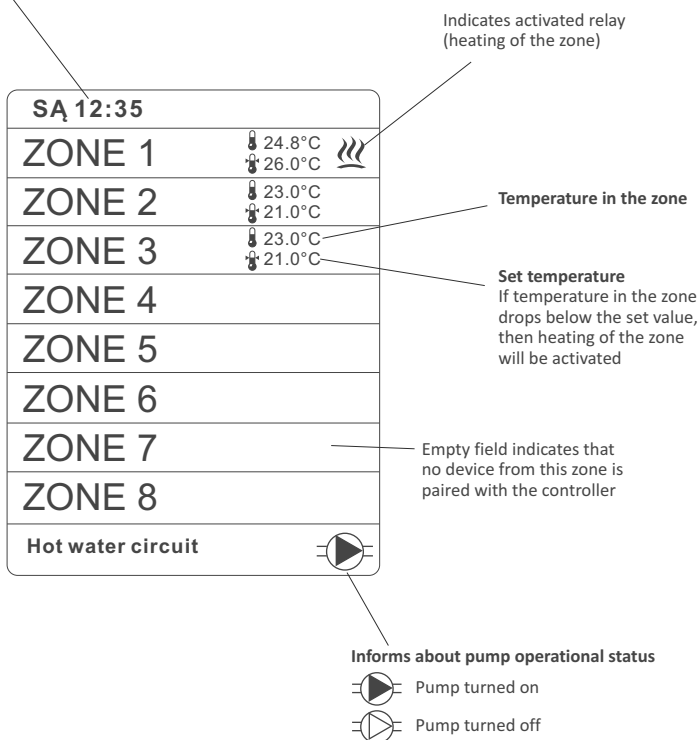
5. Now operation parameters of the circulation pump in the selected hour are set (active rectangle).





Description of display during normal operation mode

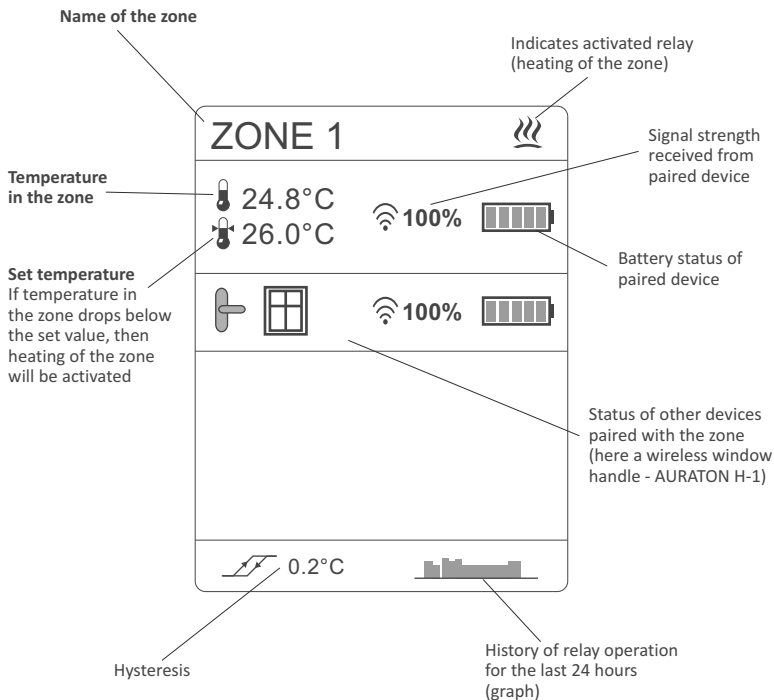
Clock with days of the week – set automatically by a signal from the temperature regulator, equipped with a clock (e.g. AURATON 2030RTH).

At least one 1 temperature regulator, equipped with a clock must be paired with the device. If not, this information will not be displayed.



Description of zone screen

When during normal operation mode, one of the zone buttons is pressed (...), then the zone screen is displayed.



Description of AUTO 24 function

NOTE: The manufacturer suggests to log in (pair) at least one 1 **AURATON** regulator, equipped with a clock (e.g. **AURATON 2030 RTH**), to make **AUTO 24** function operate precisely.

AUTO 24 function enables the user to control valves (heating), central heating pump and the relay which controls the furnace when communication with the controller fails due to discharged batteries or controller malfunction.

In this case **AURATON 8000** runs the same heating schedule for a given zone (the one with lost communication) as for the last 24 hours stored in the controller memory.

Description of voltage output of central heating pump

The central heating pump is turned on, when any of heating zones is activated.

The central heating pump is turned off, when no heating zone is activate.

A special anti-seizing algorithm overrides any other control settings of the heating pump. It activates the pump for 15 seconds in the following cases:

- After the controller detects the pump for the first time or each time after turning on the power supply and the relay.
- Every 14 days after turning the pump is turned off, provided that A-8000 is turned on.

Description of potential-free output for controlling central heating furnace

Controlling the relay (e.g. central heating furnace)




Activating a regulation head in any zone results in activating the relay.

The relay is turned off, when the heating is turned off in all zones.

This function operates simultaneously to the control of the output of central heating pump.

RESETTING the controller

In order to reset the controller to its default settings, proceed as follows:

1. Press ON/OFF button  (a single acoustic signal will be emitted). The display will show a pick list.
2. Use controller  (up & down) to select option "**Delete wireless devices**", and then press  button and keep it pressed for 5 seconds.
3. Correctly performed RESET operation will be confirmed by acoustic signal.



NOTE: RESET of the controller results in deleting all paired devices and user's settings from the controller's memory.

Comments

- Do not mount the controller in a metal cabinet, as it will reduce (shield) its radio signal.
- In case of any problems with communication due to e.g. excessive distance of **Auraton 8000** from the regulators a repeater (signal amplifier) may be used.
- It is assumed that a signal level below 20% requires the use of a repeater (LMS signal amplifier).
- In some locations LMS signal propagation from wireless devices may be very difficult. In such cases a repeater (amplifier) installed between the transmitter (device) and **Auraton 8000** will ensure correct proper operation of the system.
- In extreme cases (large distances, metal barriers, more floors), it may be necessary to use more than one repeater to ensure the correct transmission of the signal.
- More information about repeaters may be found on the manufacturer's website WWW.AURATON.PL
- All connections shall be always made with disconnected power supply.
- It is recommended to commission the installation of the controller to a specialized company.

Additional information

- **Left side of the controller** is the place where antenna socket is installed (used in case of radio communication problems) and mini USB slot (for servicing purposes).
- **Right side of the controller** is the place where fuse socket is located (4A, time-delay fuse).

Technical specifications

| | |
|---|---|
| Power supply: | 230VAC 50Hz |
| Number of independently controlled heating zones: | 8 |
| Maximum number of paired devices: | 8 thermostats and/or 8 thermometers |
| Output load capacity of the outputs controlling heads 230V: | 30 W per zone up to 6 AURATON regulators |
| Output load capacity of the central heating pump 230V: | 200 W |
| Load capacity of the relay: | 230 VAC, 2 A (potential-free contacts COM, NO, NC) |
| Indication of the operational status: | optical – LEDs, LCD display and acoustic signal |
| Automatic detection of connected heads, central heating pump and circulation pump | |

Disposal



The devices are marked with a crossed wheeled bin. In accordance with European Directive 2002/96/EC and the Act on Waste Electrical and Electronic Equipment this marking indicates that the device, after completing its operational lifetime cannot be disposed together with other household waste.

The users must deliver it to a disposal point for Waste Electrical and Electronic Equipment.