AURATON Apus R

User manual ver. 20200927
The document presents collected information on safety, assembly and use of AURATON Apus R.

Daily wireless temperature regulator

❄	**FrostGuard function** to protect against freezing of the room.
⌚	Possibility of cyclic lowering the programmed temperature by 3 °C for a period of 6 hours.
LCD	**Backlit LCD display** The backlit display makes it possible to monitor the device's operation even in poorly lit rooms.

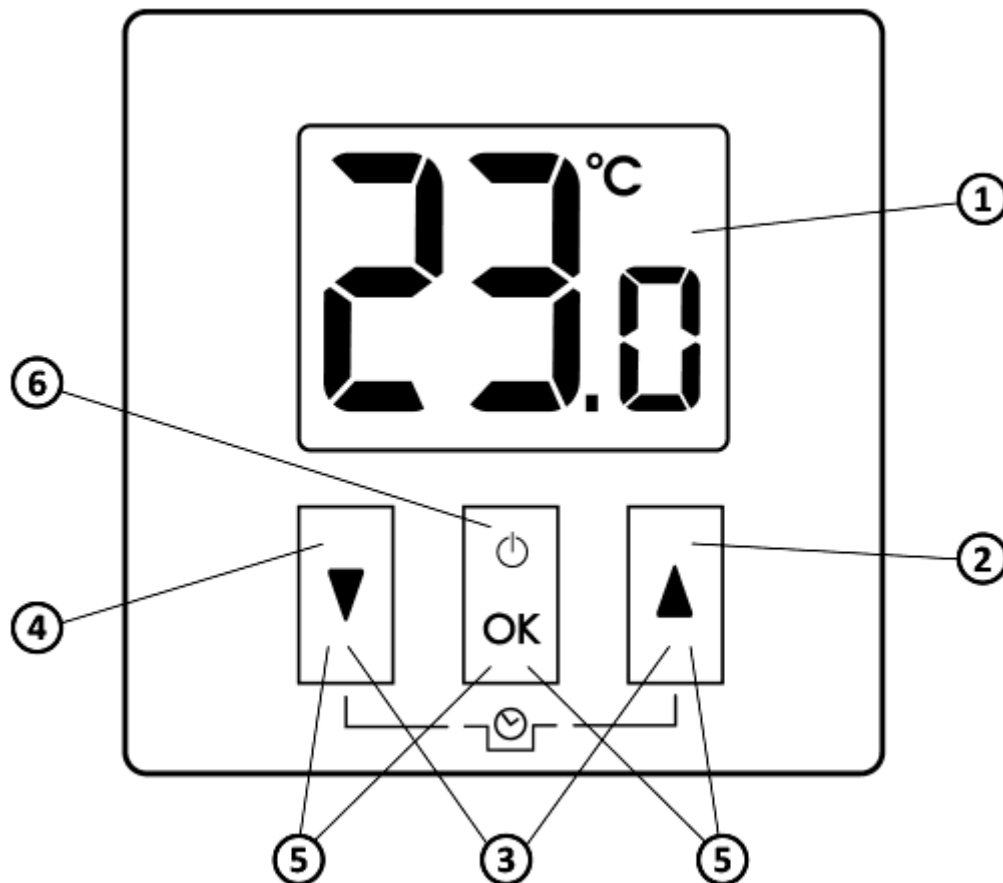
Basic information

AURATON Apus R is a daily wireless temperature regulator designed to work with the AURATON Apus head.

Description of AURATON Apus R

On the front part of the AURATON Apus R housing, there are a backlit LCD display and three function buttons.

1. LCD display
2. Temperature increase button
3. Temporary temperature reduction mode buttons
4. Temperature decrease button
5. Pairing buttons
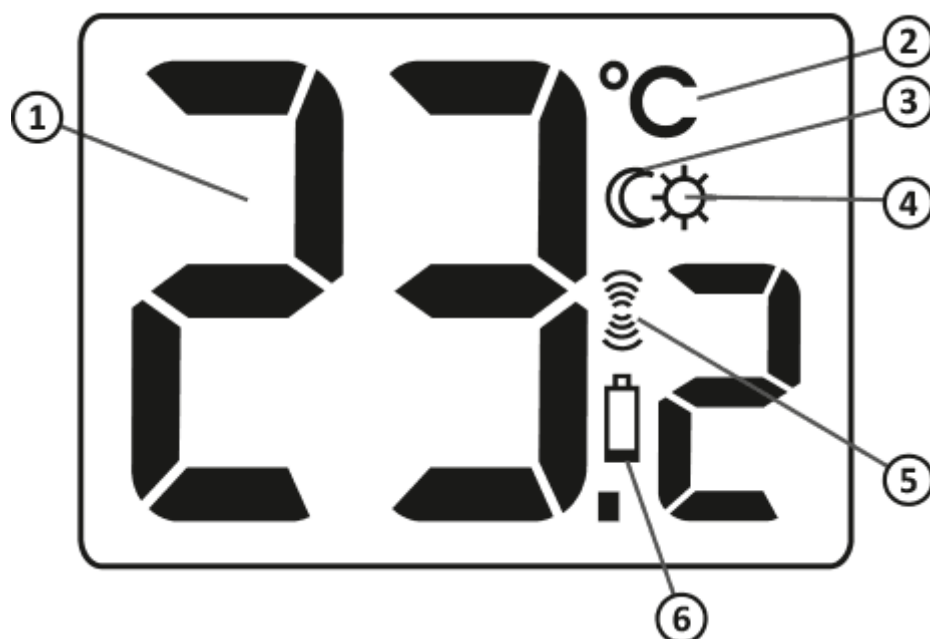6. Confirm and ON / OFF button

[⏻ OK] • **hold for 5 seconds** – on/off termostat (⏻)

• **short pressing** – confirms temperature setting

(OK)

Display

1. **Temperature**
   In normal operation mode, AURATON Apus R displays the temperature of the room in which it is

installed.

2. **Temperature unit (°C)**

Indicates that the temperature is displayed in degrees Celsius.

3. **Temporary temperature lowering mode indicator (☾)**

Active during a temperature cutback timer program.

4. **Temporary temperature lowering mode programming indicator (☼)**

It indicates that the user has enabled temporary temperature lowering mode. Visible when the mode is not in effect, but the temporary temperature lowering function is active *(for more information see the chapter "Setting the temporary temperature lowering mode")*.
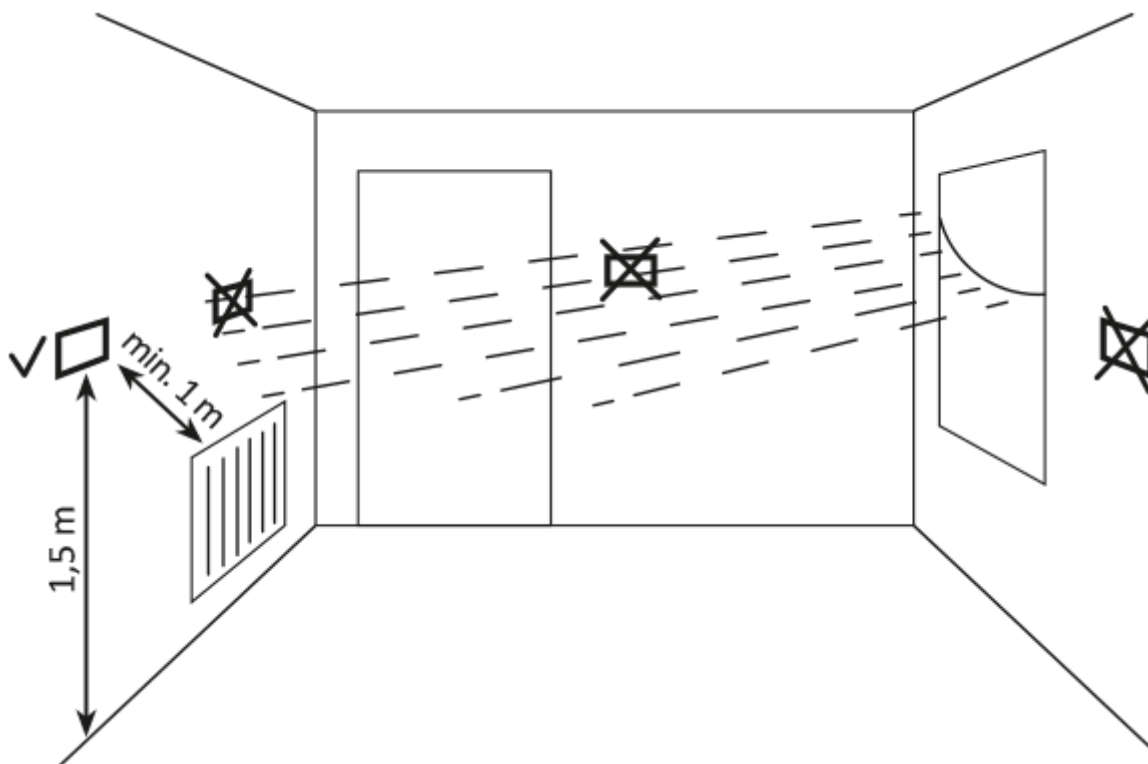
5. **Transmission symbol (📶)**

It indicates communication with the receiver.

6. **Battery depletion (🔋)**

Indicator visible when the minimum acceptable battery voltage is exceeded. Replace the batteries as soon as possible.

Choosing the right location for AURATON Apus R

The correct operation of AURATON Apus R is largely influenced by its location. Using the device in a place with no air circulation or a place with direct sunlight may result in incorrect temperature control. AURATON Apus R should be installed on the internal wall of a building (a partition wall), in an environment with free air circulation. You should avoid proximity to heat-emitting devices (TV, heaters, refrigerators) or locations exposed to direct sunlight. The vicinity of doors and exposing AURATON Apus R to possible vibrations may also cause problems with proper operation of the device.

Battery installation/replacement

The battery sockets are located inside AURATON Apus R on both sides of the display. To install the batteries, remove the AURATON Apus R housing as shown in the figure.
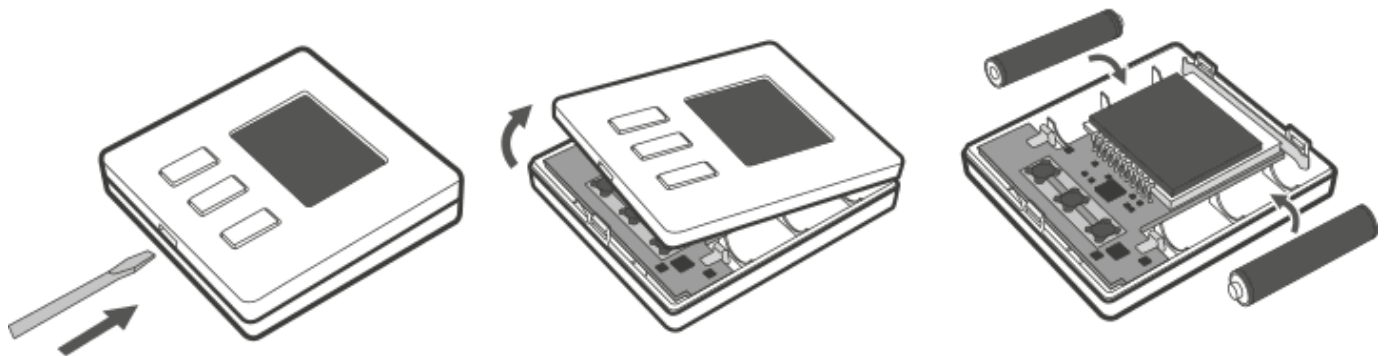
Insert two AAA 1.5V batteries into the battery socket, making sure that the battery terminals are properly aligned.

NOTE:

To power AURATON regulators, we recommend alkaline batteries. Do not use "rechargeable batteries" because the voltage rating is too low.

Mounting of AURATON Apus R

In order to fix **AURATON Apus R** to the wall one should:

1. Remove the enclosure *(as shown in the "Battery Installation/replacement" section).*
2. Drill two holes of 6 mm diameter in the wall (the spacing of the holes should be determined by the rear part of the AURATON Apus R housing).
3. Insert the wall plugs into the drilled holes.
4. Screw the back part of the AURATON Apus R housing to the wall using the screws provided.
5. Install the batteries and attach the housing.

> **NOTE:**
>
> **In the case of a wooden wall, there is no need to use wall plugs. It is enough to drill holes with a diameter of 2.7 mm (instead of 6 mm) and screw the screws directly into the wood.**

> **NOTE:**
>
> **Do not mount AURATON Apus R regulator on metal surfaces, because it significantly reduces the range of radio communication**
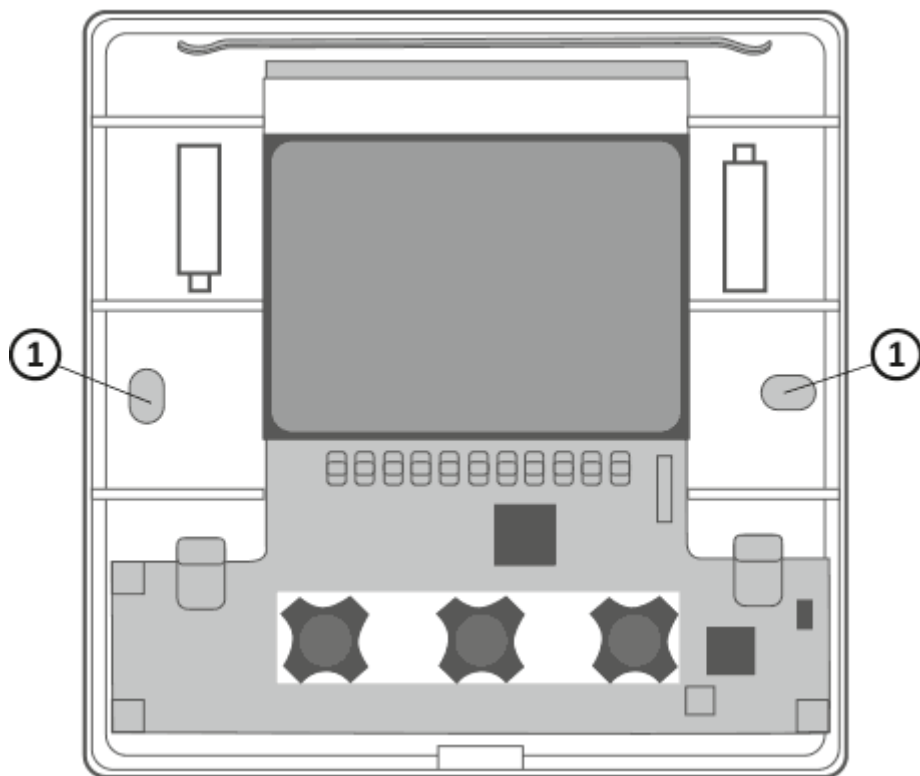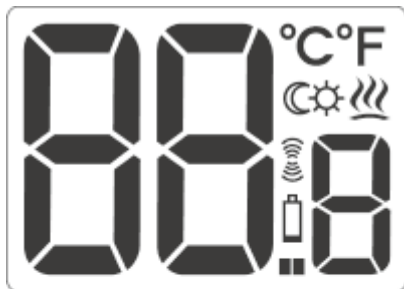
1. Holes for fixing screws.

Alternative mounting methods

AURATON Apus R can be fixed to a smooth surface using e.g. a double-sided tape. AURATON Apus R can also be placed anywhere on a level surface using the stand located on the back of the housing.

First start-up of AURATON Apus R

When the batteries are properly inserted in the sockets, the LCD display will show all segments for a second (display test) followed by the software version number. After a moment, the current temperature is displayed. AURATON Apus R is ready for operation.

Temperature setting

In order to set the desired (setpoint) temperature in the normal mode of operation, you should

1. Press the ▼ or ▲ button. The segment responsible for the temperature display will go into edit mode, and start flashing.
2. Using the ▼ and ▲ buttons, set the desired (setpoint) temperature with an accuracy of 0.2 °C
3. Confirm your choice by pressing ⊙ briefly

FrostGuard function

AURATON Apus R is equipped with a special FrostGuard function protecting the room against possible freezing. This function is activated even if **AURATON Apus R is switched off.**

With AURATON Apus R switched off, when the temperature in the room drops to 2 °C, the symbols (Fr) appear on the display, and a signal is sent to the head, which will switch on the heating. When the temperature rises to 2.2 °C, the display turns off again, and a signal is sent to the head unit to switch off the heating.

Set the temporary temperature lowering mode

If you would like to lower the room temperature by 3 °C every day at the same time, there is a possibility of temporary temperature reduction for a period of 6 hours. In order to do this you need to:

1. Press and hold both ▼ ▲ buttons for 3 seconds. The moon symbol (☾) will appear on the display.
2. AURATON Apus R enters the temporary temperature lowering mode, and every day **at the same time** it will reduce the temperature programmed in the normal mode by 3 °C for a period of 6 hours.

> **NOTE:**
> After 6 hours, AURATON Apus R returns to the basic temperature setting. Instead of the moon
> symbol (☾), the sun symbol (☼) will appear on the screen.

> **UWAGA:**
> The "temporary temperature lowering " mode always starts when the function is activated. This
> means that a possible temporary temperature reduction should be programmed at the time when
> we you such a change to take place.

> **NOTE:**
> Activating the function of temporary temperature lowering by 3 °C does not guarantee that such
> lowering will take place within 6 hours. This depends on the thermal inertia of the building.

Deactivating the "temporary temperature lowering" mode

To deactivate the "temporary temperature lowering" mode, press the ▼ ▲ buttons again for 3 seconds.

The moon (☾) or sun (☼) symbol will be turned off on the display, and only the room temperature will remain displayed. AURATON Apus R has returned to normal operation mode.

Pairing devices

For proper operation of AURATON Apus R, it is required to pair it with AURATON Apus R. The pairing process is as follows:

1. Restore AURATON Apus to factory settings *(see section "Restoring the head to factory settings")*
2. In **AURATON Apus R** press ▼ 🔲 or ▲ 🔲 simultaneously for more than 3 seconds.
3. After the countdown of 3 seconds, AURATON Apus R will send its identifier to AURATON Apus, which will be signalled by the head with a triple beep.
4. After successful pairing of AURATON Apus R with AURATON Apus, close the battery cover (if it

was already mounted on the radiator).

If the first pairing fails, restore **the factory settings**, move closer to AURATON Apus, and perform the pairing again.

NOTE:

The wireless AURATON Apus R regulator sold together with the AURATON Apus head is already paired. Devices purchased separately require pairing.

Communication of AURAON Apus R with AURATON Apus and error signalling

In order to save the battery, AURATON Apus R communicates with AURATON Apus periodically every 2 minutes. Immediately after pairing AURATON Apus R with AURATON Apus, the synchronization process takes about one minute. It is not signalled, but is necessary for the proper operation of the set.

If radio communication is disturbed, e.g. due to depletion of the battery in AURATON Apus R or during its replacement, AURATON Apus will signal a lack of communication after 6 minutes by lighting the LED every 8[s]. After max. 4 hours, the head should automatically re-synchronise with AURATON Apus R. This time can be shortened to 2 minutes if, after losing synchronisation, the flap is removed from AURATON Apus and fitted again.

Even after communication between AURATON Apus R and AURATON Apus is disrupted, the user should not experience any deterioration of comfort. AURATON Apus will automatically stabilize the room temperature at the level it memorized before the loss of communication with AURATON Apus R.

Signalling after starting-up AURATON Apus

After inserting the battery, AURATON Apus signals readiness for operation with a sound signal and LED diode. Two scenarios are possible:

1. a single beep – means that AURATON Apus is already paired with AURATON Apus R. It is then sufficient to mount AURATON Apus on the radiator insert or the underfloor heating manifold, and close the battery cover. After approx. 30 [s], AURATON Apus starts adjusting the temperature.
2. triple beep – AURATON Apus is not paired with AURATON Apus R. After closing the battery cover, AURATON Apus WILL NOT execute the temperature regulation algorithm. You will need to perform the pairing process described in the [Pairing Devices](#) section.

> **NOTE:**
>
> **If the AURATON Apus pressure pin was not in the extremely open position, the engine will also be started, and the actuator will be moved to the rear position, which facilitates the assembly of AURATON Apus.**

Calibration error indication

After mounting the underfloor heating manifold on the radiator and closing the battery cover, AURATON Apus performs calibration of the mechanical system. If an error occurs during calibration, it is indicated audibly by activating the speaker for 1[s] every 1[s]. If a calibration error occurs, check:

1. Whether face bushing A is screwed properly to the radiator insert or the underfloor heating manifold.
2. Whether face bushing B (for Danfoss inserts) is correctly fastened on the insert, and whether face bushing A is correctly screwed into face bushing B
3. Whether the safety ring is correctly set in the "locked" position.
4. Whether the installed batteries are not discharged *(see section: "Radiator with M30x1.5 insert or underfloor heating manifold" point 2. i 3.*
5. If the above-mentioned actions do not result in correct calibration, it may mean incorrect operation of the radiator valve or underfloor heating manifold itself, or incompatibility of AURATON Apus with the valve.

Installation instructions

AURATON Apus R should be placed in the room where AURATON Apus with a radiator is located or the room to which appropriate underfloor heating circuits are connected. It should not be placed near a radiator, by a door or in a sunny location.

Battery life

Declared operating time on one set of AAA alkaline batteries is one year. Discharging the battery has no effect on the temperature control. AURATON Apus signals low battery level by lighting the LED twice every 8[s]. In addition, when the battery becomes even more discharged, the head starts generating a double beep every 8 minutes. In order to switch off the sound signalling for 24 h, press any key on the AURATON Apus R paired with this AURATON Apus, or lift the AURATON Apus flap for 2[s], and reinstall it.
After 24 hours, the signal will turn on again to remind you to change the battery. Then, we can again turn off the signalling for another 24 hours, but this process will repeat until the batteries are replaced.

Unique features of AURATON Apus R

- In the first phase of use, Auraton Apus R and Auraton Apus "learn" the room in order to control the heating as precisely as possible.
- Initially, temperature fluctuations may be greater, but they will decrease over time.

Cleaning and maintenance

1. Clean the outside of the device with a dry cloth. Do not use solvents (such as benzene, thinner or alcohol).
2. Do not touch the device with wet hands. It may result in an electric shock or serious damage to the device.
3. Do not expose the device to excessive smoke or dust.
4. Do not touch the screen with a sharp object.
5. Avoid contact of the device with liquids or moisture.

RESET – restoring the factory settings of AURATON Apus

1. Remove the battery cover of AURATON Apus.
2. Remove the battery (one is enough).
3. Press the battery cover closure button (located on the electronics board between the batteries)
4. While holding down the button, install the batteries, and wait for about 4 seconds.
5. Release the button when it beeps three times.

Technical specifications

Power supply:	2 x AAA (2 x 1.5 V), alkaline
Working temperature range:	0 – 45 °C
Working status signaling:	LED indicators, sound
Number of temperature levels:	1
Anti-freeze temperature:	2 °C
Temperature measurement range:	0 – 35 °C
Temperature control range:	5 – 30 °C
Temperature setting accuracy:	0.2 °C
Temperature measurement accuracy:	±0.1 °C
Working cycles:	Daily
Operation range:	in a typical building with standard wall construction – approx. 30 m; in open space – up to 300 m
Radio frequency:	869.000 MHz
Radio signal strength:	Up to 11 dBm
Level of security:	IP20
Dimensions [mm]:	70 x 70 x 14,5

Disposing of the devices

The devices are marked with the crossed-out wheeled bin. According to European Directive 2012/19/EU and the Waste Electrical and Electronic Equipment Act, this kind of marking indicates that the equipment, after its operational life must not be disposed of together with other waste from households.
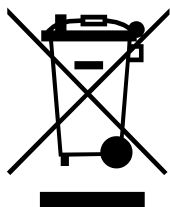
The user shall return it to a collection point for electrical and electronic waste.

Hereby, LARS Andrzej Szymanski declares that the radio equipment type AURATON Apus is in compliance with Directive 2014/53/EU and 2011/65/EU. The full text of the EU declaration of conformity is available in the download section below.

Contact and address of the manufacturer

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Polska
www.auraton.pl

Download

- User manual
- Declaration of conformity