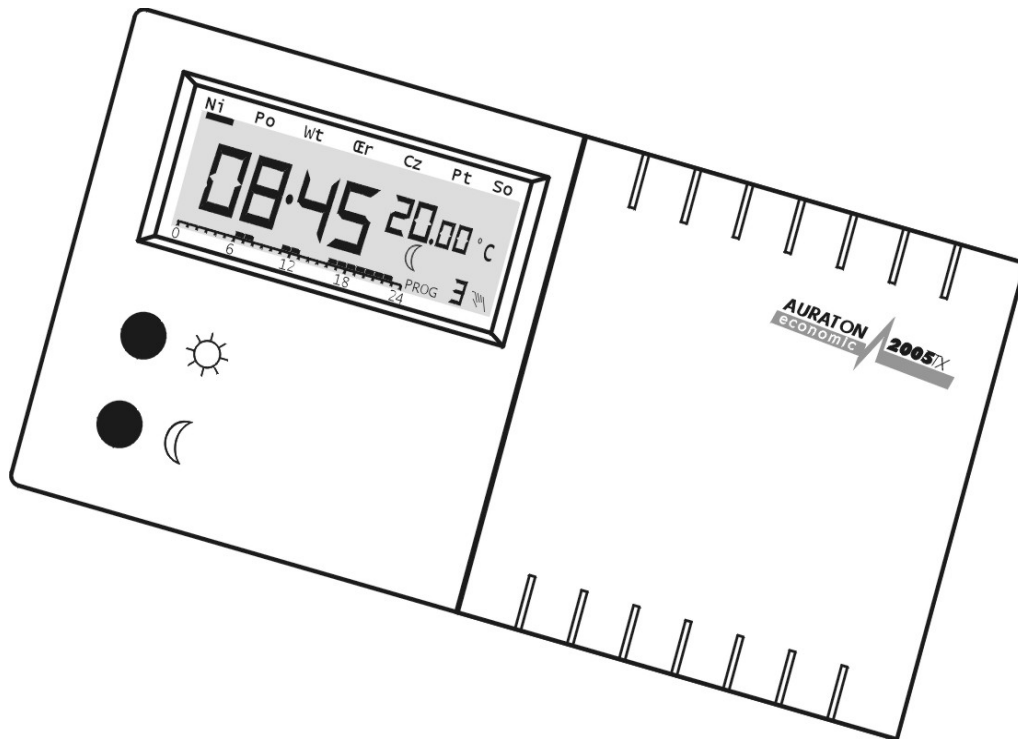


AURATON 2005 / 2005 TX



AURATON
economic **2005TX**

USER MANUAL

PP LARS 2003

Thank you for purchasing the AURATON 2005. Your new programmable thermostat will serve your family for years and significantly save the energy cost. The large multi-data liquid crystal display allows you to operate the feature-rich design with a touch of a button. Before operating the thermostat, we hope you can read this manual thoroughly.

INSTALLATION INSTRUCTIONS

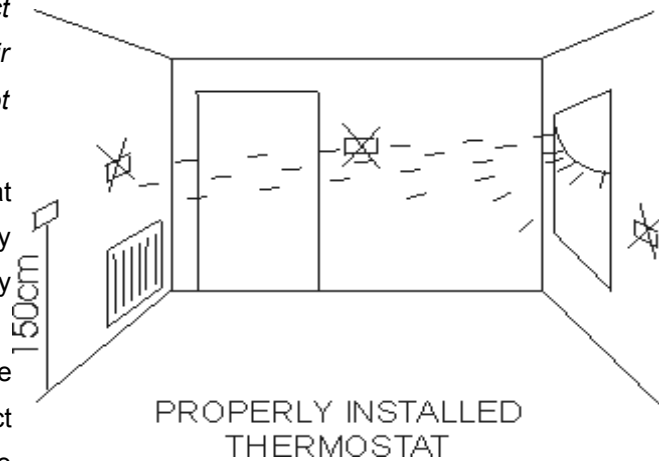
Caution: Switch off the electric source before installing the thermostat. We recommend that the installation should be performed by a trained personnel.

Select a suitable location for the AURATON.

The location of the thermostat can greatly affect its performance. If it is located at where circulate air cannot reach, or exposed to direct sun light, it will not adjust the room temperature properly.

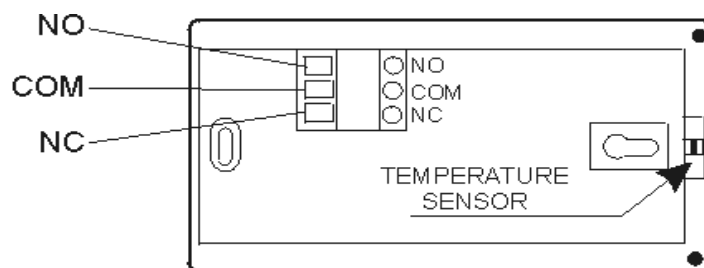
To ensure proper operation, the thermostat should be installed at an inside wall with freely circulating air. Find a place where your family usually occupied.

Avoid close to some heat generating appliance (e.g. TV, heater, refrigerator) or exposed to direct sun light. Do not install near a door where the thermostat will suffer from vibration.



Wiring.

Wiring terminals are at the back of the thermostat. Press down the terminal cover, you can find three terminals which labelled COM, NO and NC. It is a typical single-pole, double throw (SPDT) contact. In most COM and NO are used.



Mounting the thermostat.

Use the template provided, drill two $\Phi 6\text{mm}$ holes on the wall. Insert the wall anchors and tighten the left screw with 3mm clearance. Fix the thermostat by putting it over the screwhead and slide it rightward (note the keyhole like opening at the back of the thermostat). Tighten the remain screw to lock it in place.

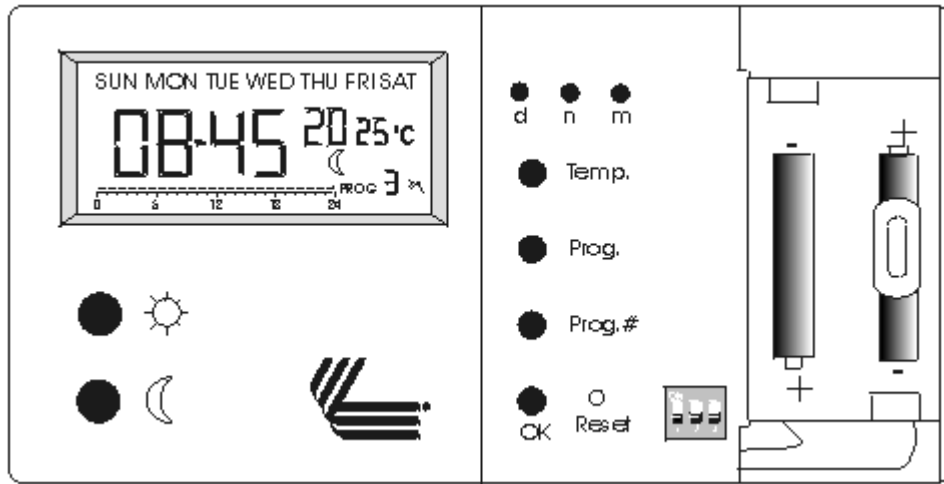
Note:

If the wall is made of wood, there is no need to use the wall anchors. Drill two $\Phi 2.7\text{mm}$ holes instead of $\Phi 6\text{mm}$.

FAMILIAR WITH YOUR AURATON 2005

Appearance.

There is a sliding door at the right of the thermostat. If you open the door, you can see some buttons. This door is removable for the replacement of batteries. To rise up the sliding door, you can see the dip switch.

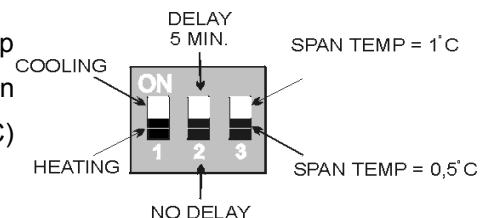


Temperature mode.

You can see ☀ and ☾ on both the buttons and the LCD. ☀ means comfort temperature and ☾ means economy temperature. These two temperatures are user changeable. Furthermore, there is a fixed defrost temperature (7°C) indicated by ❄ on the LCD. Throughout the operation of the thermostat we will refer them as comfort, economy or defrost temperature instead of numeric values.

Dip switches.

If you remove the front cover, you can find three small switches (dip switches). These three switches are used to control the span, output-on delay and heat/cool system. Span is the temperature (1°C or 0,5°C) difference between the turn on temperature and turn off temperature.

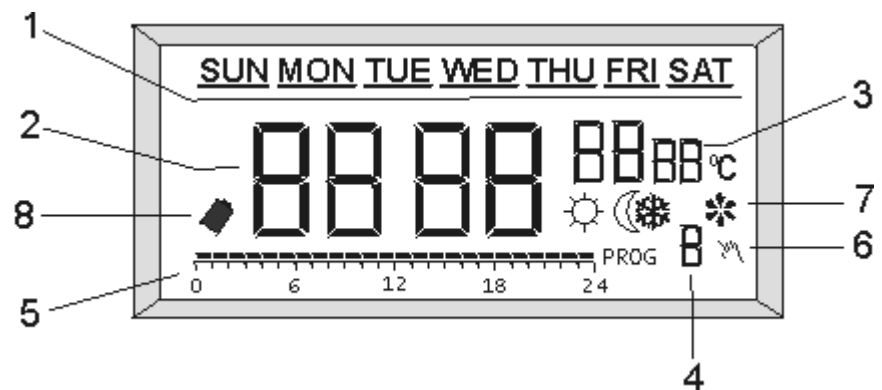


Program.

AURATON 2005 is a programmable thermostat. It can automatically adjust the room temperature to a comfortable level when you are at home, and lower it to save energy when you go out or sleep. What you have to do is to program the thermostat so that it knows when to raise the temperature. There are altogether nine programs contained in the memory of the thermostat. Six of them are preset in the factory and the remaining three are user changeable.

LCD

- 1) Day of the week Indicator
- 2) Time
- 3) Temperature
- 4) Program Number
- 5) Program Profile Indicator
- 6) Manual Override Indicator
- 7) Output-On Indicator and temperature Mode Indicator
- 8) Low Battery Indicator



Note:

- A. The output-on indicator will be displayed if the output is on. It will disappear if the output is off.
- B. The low battery indicator will be displayed if the voltage of the batteries drop to a certain level. Please change the batteries as soon as possible.

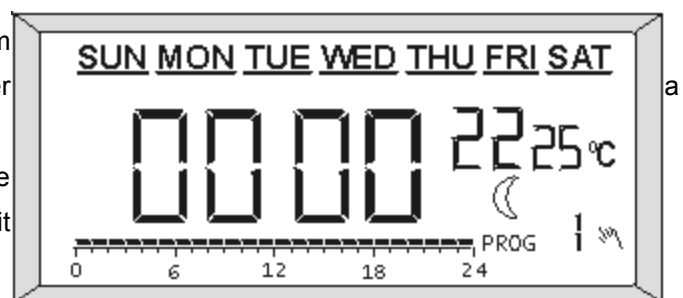
Start.

The thermostat is operated by two LR6 alkaline batteries. Please remove the front cover and install two new batteries. When the batteries are installed, the thermostat should be operating and you can see the LCD active. If the thermostat does not work properly, please check the batteries for wrong polarities and press the reset button by a ball-point pen.

The LCD after start or reset.

Note:

- A. Temperature may not be 22.25°C as the diagram shown and the Output-On indicator may active after few seconds, depend on different situations.
- B. Do not use a pencil to push the reset button. The graphite residue of a pencil can cause short circuit and damage the thermostat.








Set day/time.

To set day, press d button. Similarly, press h button to set hour and m button to set minute.






Example: When start or after reset, the time is 00:00, Sunday. To set the clock to current time (e.g., 11:23, Tuesday), press d 2 times, h 11 times and m 23 times.

Note: When you press and hold the keys for 2 seconds the day/time will change rapidly. Release when the desired setting comes.

View/Change temperature.

Press Temp, the thermostat enter View/Change temperature mode. The LCD will show the setting of the current temperature mode (,  or ) which will be flashing. Press button  or button  to review or change the temperature. Press OK will directly return to normal operation mode.

Note:



- A. The temperature setting range is 5 to 30°C.
- B. To lower the setting, enter View/Change temperature mode and press  or  until it reaches 30°C and then the setting will return to 5°C. Continue to press until the desired setting comes.
- C. Press and hold the keys, the setting will change rapidly.
- D. Please note the temperature mode indicator. A  means the comfort temperature is being viewed or changed. A  indicates economy temperature. If  is shown, it is defrost temperature. Defrost temperature is always at 7°C and is not changeable.
- E. It is not always necessary to use OK key to return to normal operation mode. After 15 seconds of no key pressed it will automatically return to normal mode.

View/Change programs.

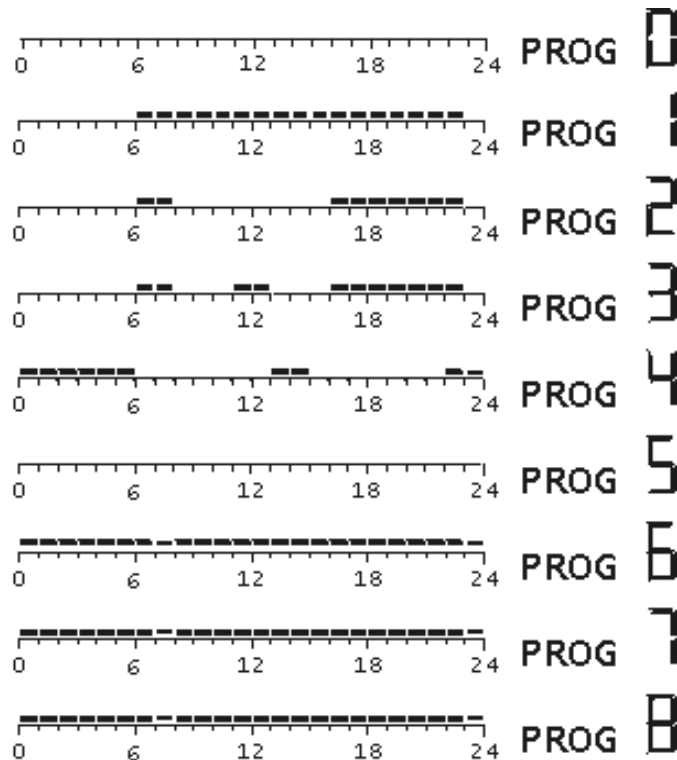
Press Prog button, the program of the current day is ready to be changed.

Press Prog button again can advance to the next day and the program of that day will be shown.

Press Prog# button to change the program.

Program 6, 7 and 8 are user-define programs. You can use  or  to change the distribution of comfort or economy temperature and h to review the setting. Press OK can return to normal operation mode.

There are altogether nine programs available, as the diagram shown:



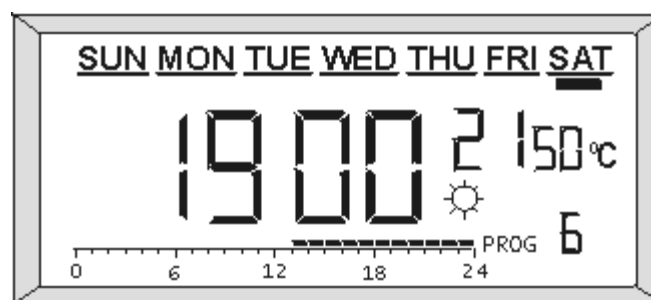
Program 0 is a special program. It will set the whole day to defrost temperature (7°C). (If cooling mode is selected, it will turn off the system). Program 1,2, and 3 are some typical schedule of a day. You can select them if you found them suitable. Program 4 set the whole day to comfort temperature while program 5 set it to economy. Program 6, 7 and 8 are user-define programs. They can be modified to suit your need.

Example:

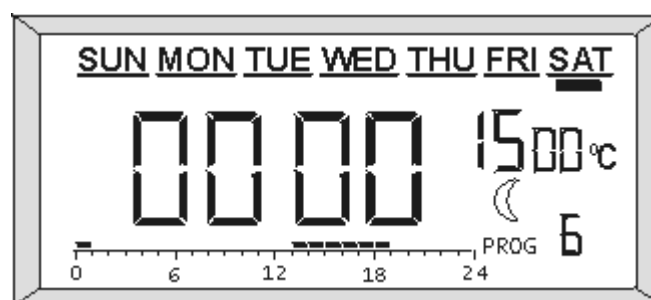
- A. Assume you want to assign program 6 to Saturday and want to set the whole day to economy temperature except 13:00 to 18:00. Press Prog. The thermostat enters program mode and the program of the current day (e.g., Tuesday) is ready to be programmed. The display shows the program for Tuesday is program 1, the temperature for 00:00 is economy temperature and is 15°C. (The flashing cursor is the time to be edited)
- B. Press Prog 4 times. The day indicator will point to Saturday:
- C. Press Prog# 5 times to change the program from program 1 to program 6
- D. Now you can set the time shown to economy temperature by pressing ☾ or press ☼ to set it to comfort temperature. Or you can use h key to pass through the time without changing the setting.

Since we want to set 13:00 to 18:00 to comfort temperature and the remains to economy temperature, press 13 times. 00:00 to 12:00 will be programmed to economy temperature

Press h or ☼ 6 times to move the flashing point to 19:00:



- E. Finally, press ☾ 5 times to set the remains of the day to economy temperature:



- F. Press OK or leaving no key pressed for 15 seconds, the thermostat will return to normal operation mode:

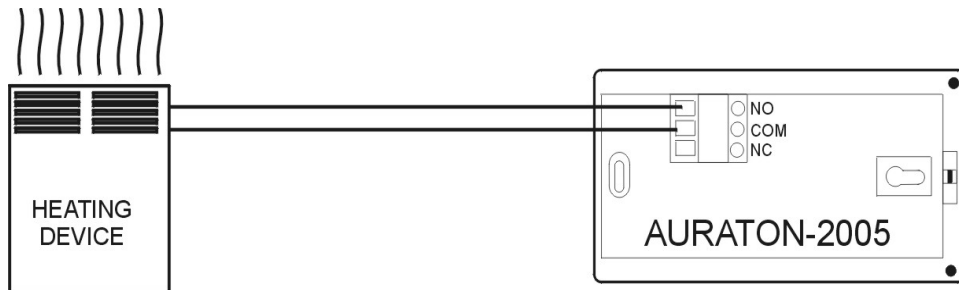
Note: Program 0, 1, 2, 3, 4, 5 are preset programs. ☼ and ☾ cannot be used to edit them. But h key is still active.

Manual Override.

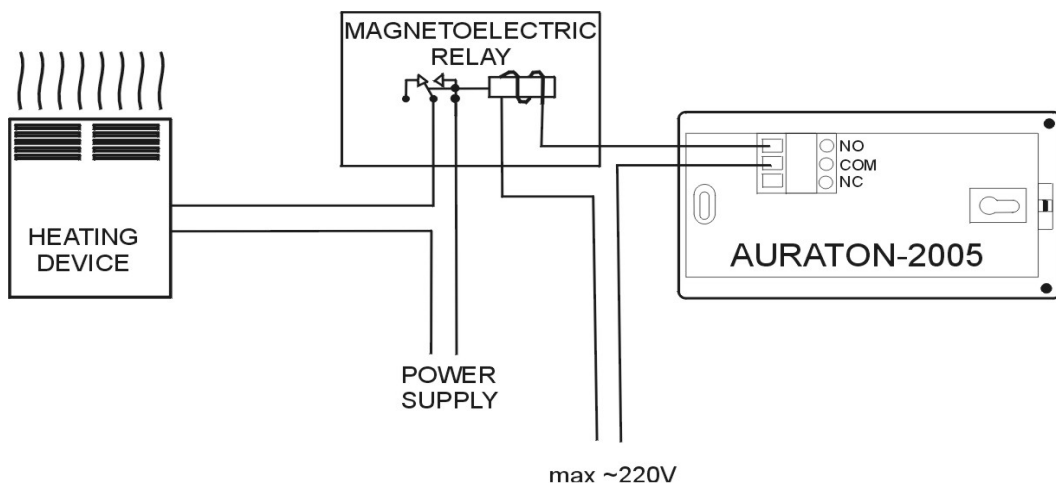
Press ☼ to select comfort temperature. Press ☾ to select economy temperature. The current temperature mode will be overrode until the next set point of the program comes. Press OK to clear override.

HOW TO CONNECT AURATON 2005

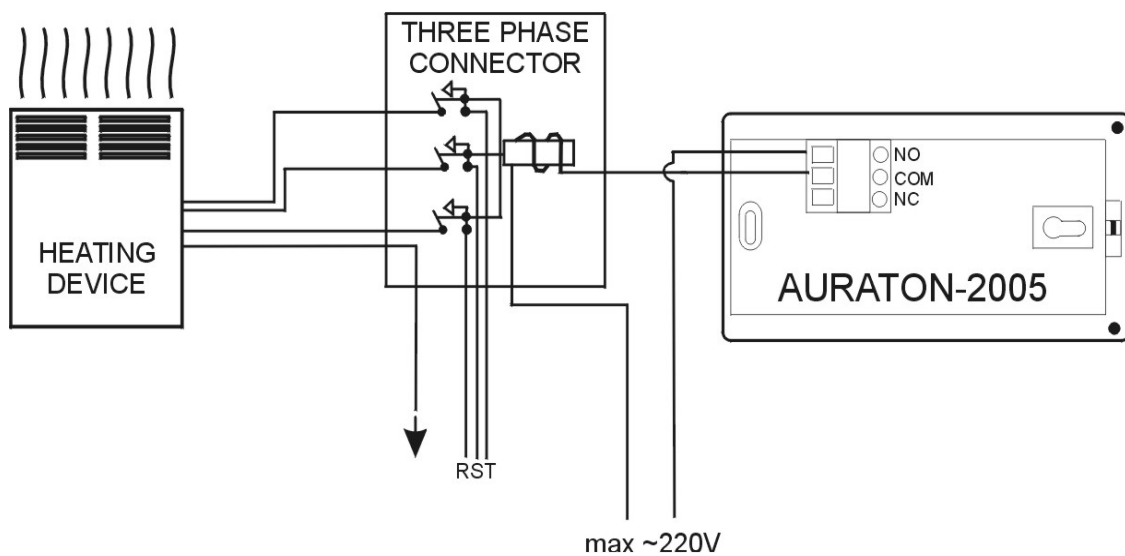
D1. How to connect AURATON 2005 directly to a heating device.



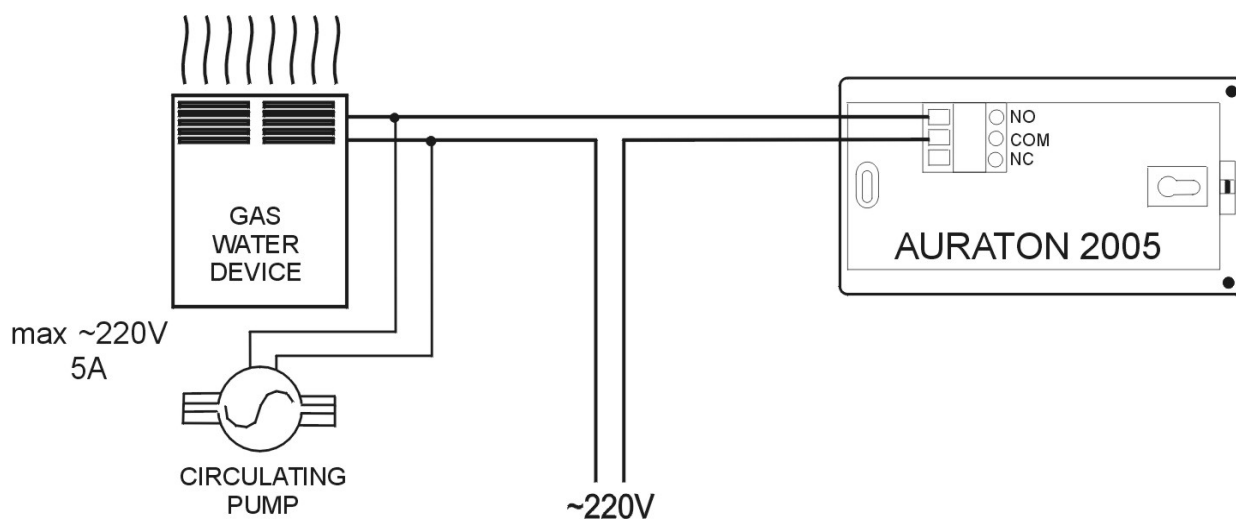
D2. How to connect AURATON 2005 to single-phase heating device with working load exceeding 5A through magnetoelectric relay.



D3. How to connect AURATON 2005 to three-phase heating device through three-phase contactor.



D4. How to connect AURATON 2005 directly to gas water heating device powered by ~220V and equipped with circulating pump.



AURATON 2005 TX

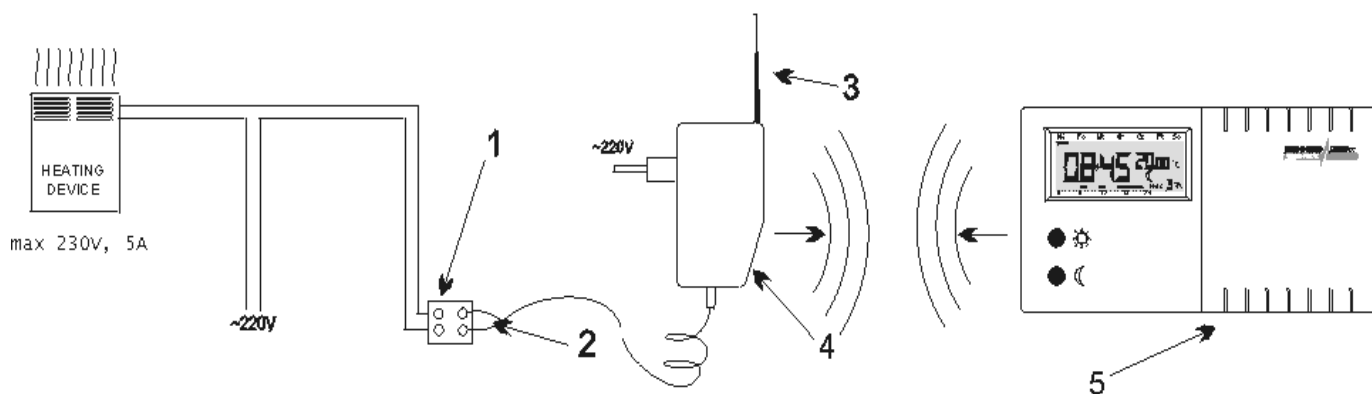
Programmable Temperature Controller AURATON 2005 TX is almost the same product as AURATON 2005. The only difference is way of transmitting on/off signal. AURATON 2005 TX uses radio waves. That eliminates wires between AURATON 2005 TX and controlled device. Receiver of radio waves is module called AURATON RX. Range of AURATON 2005 TX is very high but depends on materials that house is made of. AURATON 2005 TX with AURATON RX module is capable to hold range of over 100mtrs outdoor and up to 30mtrs indoor.

Turning on your AURATON 2005 TX for the first time.

1. Insert the batteries.
2. Wait for 10 minutes to achieve full range by transmitter.
3. Green diode lighted - receiver is in range of transmitter. This process repeats every minute for about 5 seconds. Absence of this signal means out of range.
4. Red diode lighted - heating device is on.

HOW TO CONNECT AURATON 2005 TX

D1. How to connect AURATON 2005TX with a heating device



1. cube-connector
2. 2-wire cord (max. load 5A, 230V)
3. 12cm antenna
4. AURATON RX (receiver)
5. AURATON TX

SPECIFICATION
AURATON 2005 / 2005 TX

Temperature measurement range:	0-34.75 °C (0.25°C step)
Temperature control range:	5-30°C (0.25°C step)
Temperature accuracy:	+/- 1°C
Clock accuracy:	+/- 70 seconds/month
Program:	6 preset, 3 user-define
Switching span:	0,5°C or 1°C
Control mode:	Heating or Cooling system
Minimum air-con. cycle time:	5 minutes
Switching:	230VAC 50Hz 5A resistive
Dimensions:	154 x 80 x 30 (mm) (W x H x D)
Operation temperature:	0 - 45°C
Storage temperature:	-20 - 60°C
Operating humidity:	5 - 90% non-condensing