

Regulus

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TP44 RF

Installation and Operation Manual | **EN**
TP44 RF
Digital Wireless Programmable Thermostat

TP44 RF

1. Description



The wireless digital thermostat is suitable to control temperature in a living room and is very easy to use. It allows you to control heating or cooling when the room temperature is lower or higher than set by the user. Installation is very easy thanks to the step-by-step instructions.

IMPORTANT: Installation of the equipment must be performed by a trained specialist. The user manual is intended for authorized operators.

IMPORTANT: Please read the instructions carefully before installation and follow the instructions provided when using the thermostat.

Recommendation regarding batteries

- Use only batteries of the specified type.
- Make sure that you insert the batteries as marked in the appropriate compartment. Inserting batteries with reverse polarity can damage the thermostat.
- Do not mix batteries of different types, e.g. alkaline with zinc-carbon batteries or old ones with new ones.
- If you know that the thermostat will not be used for a long time, remove the batteries to prevent damage to the thermostat by leakage.

Recommendations regarding installation and use of the thermostat

- This thermostat is intended for indoor use only (rooms, garages, verandas). Do not place it outdoors, do not expose it to rain.
- Do not place it in high humidity areas.
- It should be installed on an inner wall, about 1,5 m above the floor, located where room temperature changes can be felt thanks to freely circulating air.
- Do not install above a heat source (a TV set, heater, fridge etc.) or to places where it may be exposed to direct sunshine, draught, radiation from other devices.
- This thermostat can control only one device. Connecting several devices in cascade or in series (e.g. a heater and fan) does not guarantee its proper functioning.
- Turn off the power before connecting any equipment.
- Be extremely careful when connecting the equipment and power; improper connection or insufficient shielding of electrical cables can damage the equipment and endanger your safety.

Note: The manufacturer disclaims any liability for damage caused by improper installation or use of the device contrary to the instructions.

2. Specifications (code: 17174)

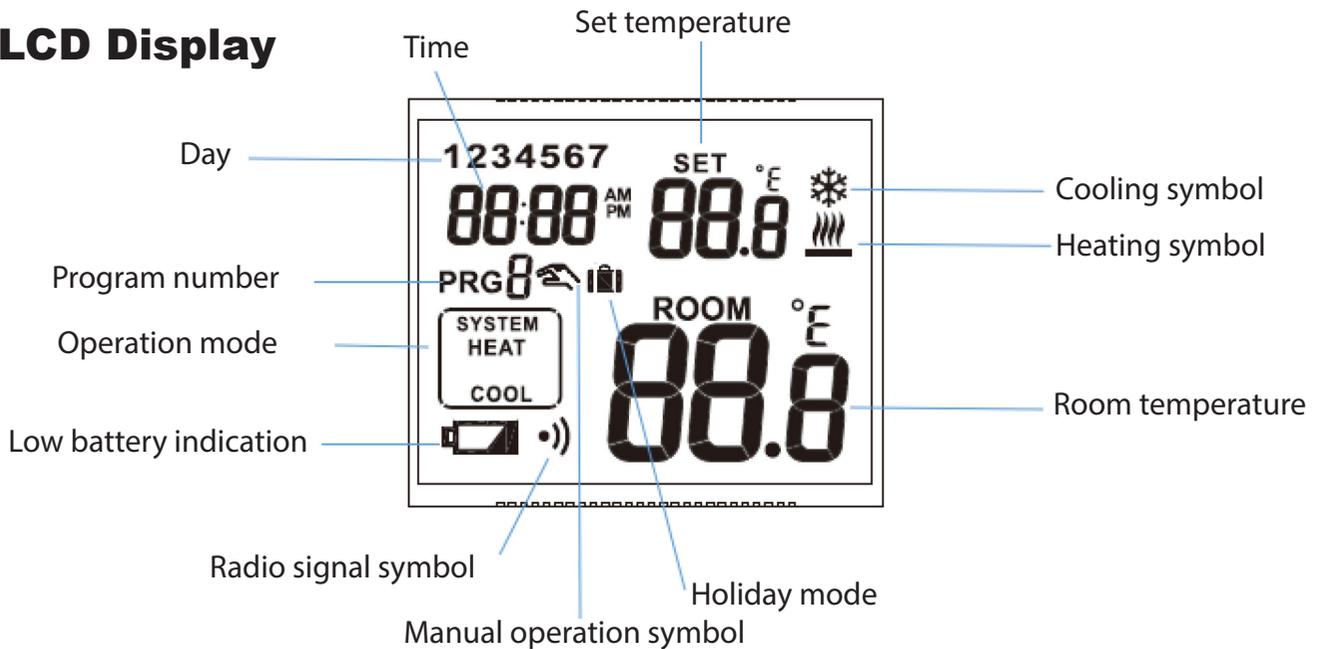
Transmitter (Thermostat)

1. Programmable: yes, 7 days, 5/2 days and 24 hours, 6 temperature changes per day
2. Displayed temperature range: 0-40 °C (in 0.1 °C increments)
3. Adjustable temperature range: 7-35 °C (in 0.5 °C steps)
4. Temperature measurement accuracy: ± 1 °C (at 20 °C)
5. Power supply: 2x 1.5A AAA batteries, alkaline
6. Low Battery Indication: When the battery voltage drops below 2.7 volts, the symbol  appears.
7. Standby power consumption: 30 μ A, backlight ≤ 6 mA
8. Backlight colour: white
9. Dimensions: 120 x 77 x 28 mm (without support)

Receiver

1. Power supply : 230 V AC, 50 Hz
2. Operating frequency: 868,35 MHz
3. Transmission distance: approx. 100 m in open air
4. Consumption: 6 W
5. Max. load: 6(2) A, 230 V
6. Dimensions: 86 x 86 x 26 mm

3. LCD Display



4. Operating Modes

Keep pressed the middle of the circle for 5 sec., that opens operating mode selection. Press **+** or **-** to select heating mode (HEAT) or cooling mode (COOL), press to confirm.

5. Time Settings

1. Press once the symbol , until the day number starts flashing, using a **+** or **-** key select 1 to 7.
2. Press once the symbol , until the hours symbol starts flashing, using a **+** or **-** key select from 0 to 23.
3. Press once the symbol , until the minutes symbol starts flashing, using a **+** or **-** key select from 0 to 59.
4. To confirm the changes, press or wait for 15 s for the values to be saved and the thermostat returns to the operating mode set.

6. Program Settings

1. Press once the symbol **PRG** key, the weekday numbers will start flashing (1, 2, 3, 4, 5, 6, 7).
2. Use the **+** or **-** key to select a setting „1 2 3 4 5” or „6 7” (mode 5/2), „1 2 3 4 5, 6 7” (7 days mode), or gradually „1, 2, 3, 4, 5, 6, 7” (24h mode).
3. Press the **PRG** key once, **PRG1** will appear on the display and the time will flash, use the **+** and **-** keys to set the first time of the desired program (in 10 minute increments).
4. Press the **PRG** key again, the temperature will flash, use the **+** and **-** keys to adjust the temperature (in 0.5 °C increments).
5. Press the **PRG** key again, the display shows **PRG** and the time flashes. Repeat steps 3 and 4 until all 6 times and temperatures are set for Monday (selected day).
6. When the times and temperatures are set for Monday and 1 (Monday) is flashing, press the **PRG** key again and repeat steps 2 to 4 until the desired times and temperatures for all 7 days are set.
7. Once the times and temperatures are set for all 7 days of the week, press the key as confirmation or wait for 60 seconds before the values are accepted and the thermostat returns to its operating mode.

8. Press **PRG** repeatedly to scroll through the set parameters.
9. Default settings:
Day 1 to Day7:
PRG1: 6:00 20 °C PRG2: 8:00 15 °C PRG3: 12:00 15 °C
PRG4: 14:00 15 °C PRG5: 17:00 21 °C PRG6: 22:00 15 °C

7. Manual Temperature Setting

Press + or - to set the temperature, then press or wait for 15 seconds before the values are accepted. The symbol  is displayed. The thermostat will run following this value until the program changes or until the key . The display shows alternatively clock and the time remaining to return to the program.

8. Temperature Calibration

Hold down the key for 5 seconds to enter the operation mode selection, then press the  key and the option opens to calibrate the temperature "CAL" (from -3 °C to + 3 °C in 0.5 °C increments). Use the + and - keys to set the desired value and press the key to confirm.

9. Backlight

The backlight turns on when the dial is used and turns off after 15 s of inactivity.

10. Battery Replacement

The average battery life is 1 year, but it can be significantly reduced if backlight is often switched on. When the low battery symbol  appears on the display, the batteries need to be replaced. Battery replacing will cause loss of preset time.

11. Permanent Temperature / Holidays

Press + or -, the temperature will flash. Then press  to enter continuous temperature mode. Confirm changes by pressing or wait 15 seconds for the values to be accepted. The temperature set in this way will remain in effect until you terminate it by pressing .

12. Reset to Factory Settings

Remove the back cover and remove the batteries, press and hold the key on the front panel. Insert the batteries, the display will light up and show all symbols, then release the button and the thermostat will return to factory settings.

13. Receiver

Installation and wiring of the receiver

The receiver must be installed on a wall in a place protected from moisture and heat, not far from the boiler.

WARNING! Do not place the receiver under the boiler casing or near hot water pipes as this may damage its components or impair the wireless (radio frequency) connection. The receiver must be installed and connected by a qualified professional!

Unscrew the two screws from the receiver base but do not remove them. Then remove the front panel of the receiver and screw the rear part of the receiver onto the wall near the boiler with the supplied screws.

It is necessary to supply 230 V power to the receiver. This will power the device, but the voltage will not appear on terminals 1 and 2.

If the device is not in use, it is recommended to switch it off (e.g. in summer).

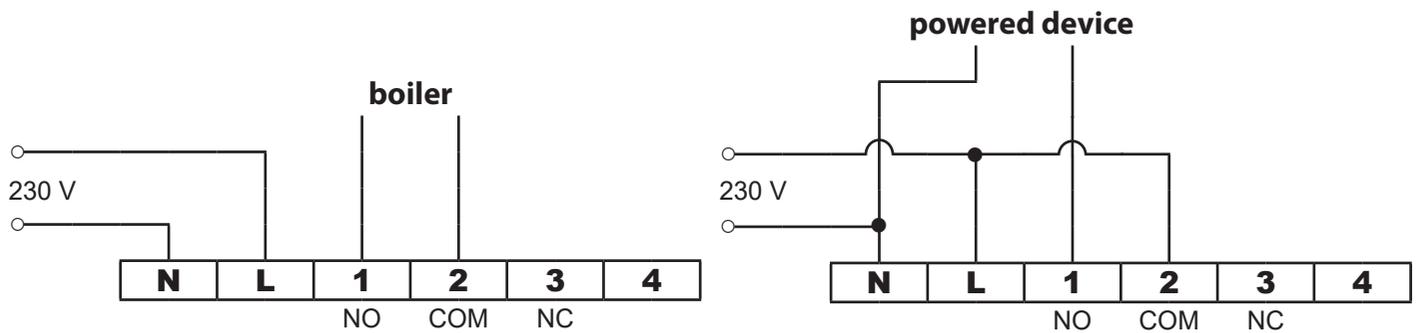
The receiver controls the boiler or air conditioning via a potential-free relay whose connection points are: 1 (NO), 2 (COM) and 3 (NC).

Heating: connect the two connecting cables of the controlled device to terminals No. 1 (NO – normally open) and No. 2 (COM).

Cooling: Connect the two connecting cables of the controlled cooling unit to terminals No. 2 (COM) and No. 3 (NC - normally closed).

WARNING! Always take into account the maximum load rating of the receiver and follow the heating / cooling manufacturer's instructions.

Thermostat Wiring Diagrams for Heating:



If the distance between the transmitter and the receiver is too big, the RF connection may be unreliable. Install the receiver as close to the thermostat as possible.

Receiver Control

Apply voltage to the receiver. After a few seconds, the wireless (RF) system of the thermostat and receiver tunes to the operating frequency. To test the system in heating mode, press the thermostat key several times until the set temperature is 2-3 ° higher than the room temperature. A few seconds later, the thermostat display should show a symbol indicating that heating is on. At the same time, a red indicator light on the receiver indicates that the receiver has been commanded by the transmitter (thermostat).

Pairing the receiver to a transmitter

If the thermostat does not connect with the receiver, it is necessary to pair them. Press the M / A key on the receiver and hold it for about 10 seconds until the green indicator light flashes. Then hold down the and keys at the same time for 5 seconds. The green light on the receiver should stop flashing and go out, indicating that the receiver has recognized the transmitter (thermostat) code. The code is retained even in the event of a power failure.

Manual receiver control

Press the MANUAL key to separate the thermostat from the receiver. Then the connected boiler or air conditioner can be controlled manually without thermostatic control. This mode is indicated by a steady green light. Pressing the M/A button turns the boiler on/off. A switched on boiler is indicated by a red indicator light. Pressing the MANUAL button again exits the manual control and the device returns to automatic thermostat controlled operation (the green LED goes out).

ON/OFF switch on the receiver

O: OFF

If the thermostat is not needed, it can be turned off simply by the switch located on the left side of the receiver without removing the cover.

I: ON

The receiver is in normal operation.

Note:

When the thermostat is not needed during a certain period, it is recommended to switch off the receiver as a protection of both the device and the thermostat and remove the batteries from the thermostat.

