

The product model and code (6 digits) are printed on the sticker on the outside or the inside of the battery compartment cover. The manual may not be available in the selected language.

# Silver CR/RF S

#### COD. 578826



## PRODUCT DESCRIPTION

Silver CR/RF S is a weekly digital programmable radio chronothermostat with TPI algorithm and radio control, ideal for regulating heating or cooling. The backlit LCD display shows the temperature detected, the time and temperature set, the active operating mode and the time programming in use. It offers 3 different pre-set programs (Comfort, Economy and Holiday) as well as the possibility of setting a customized manual or weekly program in 1-hour steps, on two temperature levels (comfort and reduced, day and night). Includes the Antifreeze function and allows temperature calibration with a range of  $\pm 8^{\circ}$ C.

- · Daily and weekly programming
- Radio control with receiver (included in the package)
- Battery powered (included in the package)
- · Different mode options
- Heating/cooling calibration
- ON/OFF control
- · Radio connection to the boiler
- Heating/cooling mode
- TPI algorithm
- Precise temperature measurement

#### **DECLARATION OF CONFORMITY**

We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we Compatible Directives:

Radio and Telecommunications Terminal Equipment Regulation 2014/53/EU (R&TTE/RED EN 301 489-1 V2.1.1:2017, EN 300 220-1V3.1.1:2017, EN 301 489-3 V2.1.1:2017, EN 300 220-2 V3.1.1:2017, EN 62479: 2010)

Electromagnetic Compatibility Regulation 2014/30/EU (EN 61000-6-3: 2021, EN 61000-6-1: 2019) Low Voltage Directive 2014/35/EU (EN IEC 60730-2-9:2019/A2:2020, IEC 60730-1:2013/AMD2:2020)

## **TECHNICAL DATA**

**Room Thermostat** 

Dimensions: 85mm / 125mm / 20mm

Operating Current: 3V DC (2 x AAA alkaline battery)

Temperature Measurement Accuracy: 0,1°C

Operating Sensitivity: 0,3°C

Operating Temperature Range: 5°÷30°C

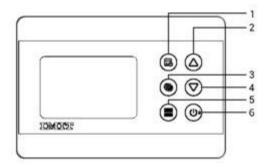
Battery Life: 1 Year (2 x AAA) Operating Temperature: -10°÷50°C Storage Temperature: -20°÷60°C

#### Receiver

Dimensions: 90 mm / 90 mm / 25 mm Operation Current: 230V AC Relay NO Switching Current: 7A (240VAC – Resistive Load) 10A (120VAC – Resistive Load) Storage Temperature: -20°÷60°C

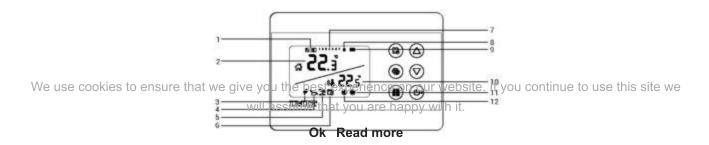
## **CONTROLS AND DISPLAY LEGEND**

#### **Buttons Functions**



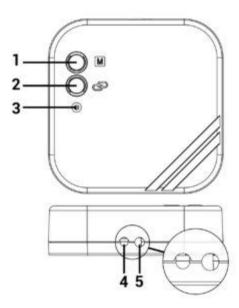
- 1 Weekly Program Button
- 2 Temperature Adjustment Button (To Increase)
- 3 Heating & Cooling Option
- 4 Temperature Adjustment Button (To Decrease)
- 5 Mode Button
- 6 On/Off Button Unlock Button

#### Screen Indicators



- 1 Hour Indicator
- 2 Room Temperature
- 3 Economy Mode
- 4 Comfort Mode
- 5 Holiday Mode
- 6 Weekly Program Mode
- 7 Day Indicator
- 8 Screen Lock
- 9 Battery Indicator
- 10 Set Temperature
- 11 "Heating Indicator
- If the Heating Indicator is blinking, the heating unit is working.
- If the Heating Indicator is steady, the heating unit is not working."
- 12 "Cooling Indicator
- If the Cooling Indicator is blinking, the cooling unit is working.
- If the Cooling Indicator is steady, the cooling unit is not working."

#### Legend of the receiver



- 1 Manual Operation Button: Deactivates the Receiver and allows you to use heating/cooling unit manually.
- 2 Pairing Button: Pairs the Receiver and the Room Thermostat.
- 3 Receiver LED Light
- 4 Receiver Power Cable Input
- 5 Heating/Cooling Unit ConnectionCable Input

#### **RECEIVER LED DESCRIPTIONS**

Constant Red – Receiver has power but Receiver and Room Thermostat are not paired.

Blinking Green - Waiting for pairing signal from the Room Thermostat.

Constant Green – Receiver and Room Thermostat are paired. Heating/cooling unit is not operating.

3 Short Orange Blinking - Operate the heating/cooling unit signal has reached to the Receiver.

Constant Orange – Heating/cooling unit is operating.

3 Short GreenBlinking - Shut the heating/cooling unit down signal has reached to the Receiver.

Blinking Orange - Heating/Cooling unit operates in manual mode.

Blinking Red – Receiver did not get any signal from the Room Thermostat for 22 minutes or longer. Heating/cooling unit has shut down.

We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we

will assume that you are happy with it.

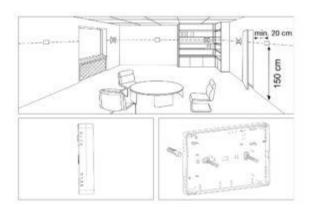
It is recommended to install the thermostate crupylously complying with the safety standards and legal provisions in force. Before making any connections, make sure that the main switch has been turned

off.

## **INSTALLATION**

## **ROOM THERMOSTAT PLACEMENT**

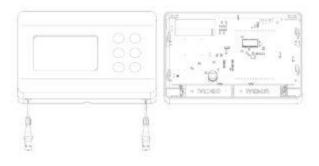
Room Thermostat needs to be placed in the room which is used most frequently. For instance; living room or lounge. Placing the Room Thermostat in a spot that have air circulation like entrance of a room or side of window should be avoided. Also anywhere close to heating/cooling units such as radiator, stove and spots which get direct sun lights would not be suitable. Room Thermostat needs to be located above the floor 150 cm height. Few trials may be made to find the most convenient spot.



## **BATTERY PLACEMENT**

Before starting, power off the device connected to the Room Thermostat and make sure that the energy is cut off.

As shown in the picture, press the screwdriver forward from the space shown, bend the tabs and separate the front cover. Insert 2 new AAA alkaline batteries in the battery housing with the correct battery direction. Replace both batteries at the same time. Then align the front part of your Room Thermostat to the back and squeeze it towards the back.



We proportion to use this site we will assume that you are happy with it.

When the icon appears on the screen, it **Plear Rendwighter** warning". It is recommended to replace the batteries when this warning appears.

**Warning:** When the product is not used for a long period (more than 15 days), remove the batteries. Otherwise, malfunctions that may occur would be out of warranty. Please throw your dead batteries into the waste bin for batteries.

## RECEIVER PLACEMENT

The important things to note for the Receiver placement is avoiding physical contact between the Receiver and heating/cooling unit, and protecting it against materials such as liquid, dust etc.

The devices should be placed in order to minimize the damage to the received and transmitted signals by paying attention to the following points;

- The devices should not be mounted on metal surfaces.
- The devices should not be installed close to electrical cables and electronic equipment such as computers and television units.
- The devices should not be installed near large metal structures or other building materials using fine metal meshes such as special glass or special concrete.
- Distance between the Room Thermostat and the Receiver should not exceed 20 meters or 2 floors.
- Receiver must be installed at least 50 cm away from the heating/cooling unit.



#### **RECEIVER SETUP**

First, shut down your heating/cooling unit and your heating/cooling unit's power source with all electrical current (fuse, socket etc.)

As shown in the connection diagram, connect one end of the heating/cooling unit connection cable to the COM and the other to the NO input of the Receiver.

Connect the other ends of the cable -which you connected to the Receiver to room thermostat connection We terminal as shown in your heating/cooling unit's user manual. We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we

You must first connect the Receiver power cable to the Receiver and then to the fuse to which the heating/cooling unit is connected.

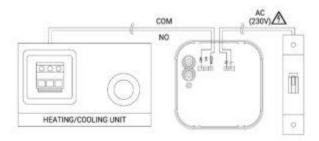
Ok Read more

After completing the cable connection process, firstly turn on your fuse and then your heating/cooling unit.

By pressing the Receiver's manual usage button for 2 seconds, you should see the Orange Light blinking on the Receiver. In this way, after making sure that the heating/cooling unit is operating, press the same button again for 2 seconds and see that the Orange LED turns off.

Set up the Room Thermostat to pair the Receiver with the Room Thermostat.

### RECEIVER WIRING DIAGRAM HEATING/COOLING UNIT



#### Warning!

Operations within the heating / cooling unit or the electrical installation must be carried out by professionally qualified persons.

#### PAIRING THE ROOM THERMOSTAT AND THE RECEIVER

Primarily press the sync button of receiver for 2 seconds and see blinking green light of receiver.

While your device is turned off, press and hold the button for 3 seconds.

Press the button until the "Adr" menu appears.

Then turn up the button to right or left way.

If the pairing is successful, the green flashing LED on the receiver will be constant.

Receiver and Room Thermostat have been paired to each other.

#### **ROOM THERMOSTAT TEMPERATURE CALIBRATION**

Temperature sensors which are used in Room Thermostats are highly sensitive. You may need to calibrate your Room Thermostat if you would like to get the same temperature values with other thermometers in your living space. While your device is turned off, press and hold the button for 3 seconds.

Press the button until the "CAL" menu appers. In order to see the desired temperature, set the temperature difference by turning the button to right or left. This value can be arranged between "-8°C" and "+8°C".

To save the settings and exit, press the "On/Off" button until the device turns off.

We Note: Becommended tempreture valibration is "9:0°C" experience on our website. If you continue to use this site we

-will-assume that you are happy with it

# FACTORY SETTINGS RESET<sup>Ok Read more</sup>

You can reset your Room Thermostat to its default factory settings. This operation resets the calibration setting and heating/coling modes to factory setting. To reset your Room Thermostat to factory setting:

While your device is turned off, press and hold the button for 3 seconds.

Press the button until the "RST" menu appears.

While in the "RST" menu, turn the button to right or left in order to select "YS" option and press the button.

Your device will be turned off and reset to factory settings.

#### **KEY LOCK**

In the Room Thermostat there is a key lock function to avoid any unintended contact. In order to unlock the Room Thermostat's key lock the "On/Off" button should be pressed for 3 seconds. If buttons on Room Thermostat are not touched for 10 seconds, key lock will be reactivated.

#### **DAY AND HOUR SETTINGS**

While your Room Thermostat is on, keep pressing the "Weekly Program" button for 3 seconds.

At the first screen that appears, hour part will be blinking. You may set the time with the "Up" and "Down" buttons.

After setting the time, the "Heating & Cooling Option" button needs to be pressed once. For minute setting, minute part will be blinking. You may set the minute with the "Up" and "Down" buttons.

After setting the minute, the "Heating & Cooling Option" button needs to be pressed once to set the day of the week.

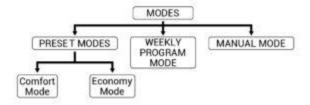
Monday has set as the first day of the week and indicated with number "1".

Numbers indicate the following days respectively 2-Tuesday, Saturday and 7-Sunday 3-Wednesday, 4-Thursday, 5-Friday, 6-

When setting is done, you may exit by pressing the "Weekly Program" button for 3 seconds.

## DESCRIPTION OF CONTROLS AND OPERATION

#### **MODE SETTING**



We Your Books Thermostat has 5 different modes 3 of them (Comfort and Economy Mode) are preset modes site we Other modes are manual mode and weekly program mode, are happy with it.

In preset modes, temperature values are based in uses which have been set in the beginning. Manual mode allows the Room Thermostat to operate within the temperature which is required and set

directly by user. Weekly Program mode continues to work according to the weekly schedule determined by the user.

In order to change the temperature values of preset modes:

Press and hold the "Mode" button for 3 seconds while your Room Thermostat is on.

Comfort Mode temperature value will appear. You may adjust the temperature value of Comfort Mode by pressing the "Up" and "Down" buttons.

When setting is done, you may adjust the temperature value of Economy Mode with the "Up" and "Down" buttons by pressing the "Mode" button again.

You may exit the setting screen by pressing the "Mode" button 3 seconds.

#### MANUAL MODE

In order to change the manual mode temperature, press the "Up" or "Down" button while in the main screen. The Room Thermostat will switch to Manual Mode once pressed the "Up" or "Down" button.

You may press the "Mode" button to switch to the other modes.

### **WEEKLY PROGRAM**

You may set the operating schedule of your Room Thermostat with weekly program mode. 7 different temperature values can be set for each day in weekly programming. These values can be set in temperature adjustment screens "P0-P6".

In order to set the weekly schedule, press and hold the "Weekly Program" button for 3 seconds while your Room Thermostat is on. The "Hour, Minute and Day" setting will appear. Press the "Heating & Cooling Option" button until the "Weekly Program" menu (P0) appears.

Days of the week will be blinking on the screen. You can initiate the weekly program setting if you wish to set the same schedule for every day of the week.

Press the "Up" button once if you wish to set the same schedule for the weekdays. First five days of week will be blinking on the screen.

Press the "Up" button once more if you wish to set the same schedule only for the weekend. Last two days of the week will be blinking on the screen.

Press the "Up" button one more time if you wish to set the same schedule for every day of the week. 1st day of the week will be blinking on the screen. You can switch between the days by pressing the "Up" button. Press the "Down" button in order to switch to the previous day.

Press the "Weekly Program" button once to set a schedule.

"P0" will be blinking on the screen. Set the temperature value of "P0" by pressing the "Weekly Program" button once more. The hour setting of "P0" cannot be changed since it's factory setting.

Press the "Weekly Program" button again. Day indicator will be blinking. If you will not change the day, press we the "Weekly Program" button again and switch to the "P1" setting by pressing the "Up" button. We use cookles to ensure that we give you the best experience on our website. If you continue to use this site we

will assume that you are happy with it. First, hour setting will appear on the screen. Once you complete the hour setting, adjust the minute setting by pressing the "Weekly Program" button. After the minute setting, press the "Weekly Program" button to set the temperature value.

Follow the same steps for other schedule settings.

Once all changes made, press and hold the "Weekly Program" button for 3 seconds to save.

**Note:** In order to check the weekly schedule which has been set without making any changes, press the "Weekly Program" button once while your Room Thermostat is on. Press the "Up" and "Down" buttons to see the days, press the "Mode" button to see the settings between "PO-P6".

#### TPI ROOM THERMOSTAT WORKING LOGIC

Your Room Thermostat works with the TPI algorithm. Room Thermostats using TPI technology predict when the temperature of your home will rise above or below the set temperature and turn the heating / cooling unit on and off accordingly. This ensures that your home stays at the temperature you set without maximum deviations up and down.

#### What is TPI?

TPI technology is designed to ensure that you get the best possible energy efficiency from your heating / cooling system. It measures and applies the best possible timings to deliver and maintain your home at the set temperature level.

#### How does TPI work?

Thanks to the advanced artificial intelligence technology found in the software, it adapts to the temperature change of the environment in which it is located. By creating a general temperature map of your home, it learns how long it takes to reach the desired room temperature and how to maintain this temperature. In this way, it provides minimum energy consumption by calculating how long your heating / cooling unit should work for.

#### What is the difference?

In non-TPI room thermostats, the heating / cooling unit works and stops continuously until it exceeds the set temperature value. If the set temperature drops below a certain amount, the heating / cooling unit will work again. This creates greater temperature fluctuations and less energy control. TPI Room Thermostats, on the other hand, provide higher savings and comfort compared to On/Off room thermostats with the advantages it has.

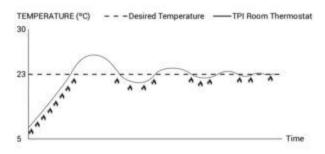
# **Heating Mode**

Your room thermostat takes the average room temperature of last 40 seconds as basis. With the TPI algorithm in the product by creating a general temperature map of your home, it learns how long it takes to reach the desired room temperature and how this temperature is maintained. Thus, it ensures that the room temperature remains within a certain range.

#### TPI ROOM THERMOSTAT HEATING MODE WORKING GRAPHIC

We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we will assume that you are happy with it.

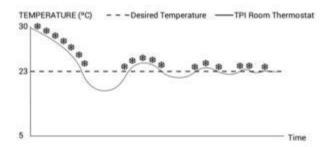
### Ok Read more



# **Cooling Mode**

Your room thermostat takes the average room temperature of last 40 seconds as basis. With the TPI algorithm in the product by creating a general temperature map of your home, it learns how long it takes to reach the desired room temperature and how this temperature is maintained. Thus, it ensures that the room temperature remains within a certain range.

#### TPI ROOM THERMOSTAT COOLING MODE WORKING GRAPHIC



## WHAT TO KNOW ABOUT TPI ROOM THERMOSTAT

If the placement of the TPI Room Thermostats is changed, the learning process will restart. If the TPI Room Thermostats are de-energized (battery replacement), the learning process will restart. The learning process should be considered as 7 days.

# FREQUENTLY ASKED QUESTIONS

Is my Room Thermostat compatible with my heating/cooling unit?

If your heating / cooling unit has on-off connections, your Room Thermostat is compatible. You can find information about your heating / cooling unit from your heating / cooling unit operating manual or from your heating / cooling unit service.

How will I connect my Room Thermostat to the heating/cooling unit?

We recommend that the connection between your Room Thermostat and the Heating/Cooling unit should be made by professionally qualified persons.

2×0.75 mm cable is sufficient for the Room Thermostat – heating / cooling unit connection.

Connect one end of the cable pair to the room thermostat connection terminals stated in the user manual of the heating / cooling unit.

We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we Connect the other end of the cable pair to COM and NO inputs of the terminal inside the Wall Hanger of Room Thermostat as shown in the "ROOM THERMOSTAT WIRING DIAGRAM" section.

#### Ok Read more

The direction of the cable ends does not matter.

## **WARRANTY CONDITIONS**

Refer to the warranty conditions in our catalog or production guide currently in force, which can be downloaded from the lmit.it website, or request a copy at info@imit.it

#### **IMIT CONTROL SYSTEM s.r.l.**

Via Varallo Pombia,19 Castelletto Sopra Ticino (NO) Tel (+39)0331941600 Fax (+39)0331973100 P.IVA IT02223920063 www.imit.it - info@controlsys.it

We use cookies to ensure that we give you the best experience on our website. If you continue to use this site we will assume that you are happy with it.

Ok Read more