...step by step

INNGENSO
Thermostat
Manual

IT 201 | EN

The IT 201 thermostat is designed to control heating systems. Unlike standard home thermostats, IT 201 has two separate and wirelessly connected units (thermostat + receiver).

The receiver is a switching device used to connect heating systems, and a thermostat is a portable control unit for handling and setting the temperature. The units communicate with each other using a radio signal. The advantage of the system is the variability and easier availability of temperature control.

Important notes

• Read the user manual not only for the thermostat, but also the the boiler.

• Turn off the power supply before installing the thermostat.

• We recommend installation by a qualified technician.

• Be aware of the required standards for installation.

• The electrical circuit should be secured with a fuse that does not exceed 20 A.

Specifications

Thermostat

Power supply	3 V DC, 2 AA batteries
Mounting	Wall or portable
Schedule	7 Days
Manual control	Full
Frost protection	Yes
Hysteresis setting	0.2 °C - 5 °C
Temperature sensor calibration	-5 °C - 5 °C
Sensitivity	0.5 °C
Temperature setting	7 °C – 35 °C
Temperature measurement	5 °C – 40 °C
Dimensions	86x86x29 mm

Receiver

Power supply	230 V AC
Maximum switching power	2000 W (At 70 °C)
Output/Input	Lin, N, PE, Lout, N, PE
Frequency	868 MHz
Dimensions	120 x 90 x 25 mm
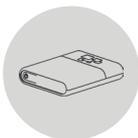
Safety

Risks due to poor handling

Due to poor handling of the product you can harm yourself and cause material damage.

• Read the accompanying instructions carefully, especially the chapter on safety and important notes.

Danger of malfunctioning

• Ensure that the air in the room can circulate freely around the thermostat and that the thermostat is not covered by furniture, curtains and other objects.

• Only operate the heating system if it is in technically perfect condition.

Freezing damage due to too low room temperature

If the room temperature is set too low in some rooms, the heating system can be damaged due to freezing:

• Ensure that during the frost period the heating system remains in operation and that all rooms during your absence are sufficiently heated.

• Default frost protection temperature is 5 °C and can be changed in the range from 0 to 17 °C.

Proper use of the device

Improper use can result in health and life hazards to the plant operator or third parties.

This product is not intended for use by people (including children) with limited physical, sensory or intellectual abilities or people without experience and / or knowledge, unless they are under the supervision of a person in charge of their safety or have been instructed by that person to use the product.

Children must be supervised to ensure that they do not play with the product.

Intended use includes:

• Following the included instructions for use, installation and maintenance of the device, as well as all other system components.

• Compliance with all inspection and maintenance requirements stated in the instructions.

Use that is different from the one described in this manual or use that goes beyond the scope of the use described here will be considered as non-intended.

It is not intended for any direct commercial or industrial use.

Overview of command elements

Room thermostat

1. Display
2. Left button for decreasing the value
3. Middle button for confirmation of selection
4. Right button for increasing the value
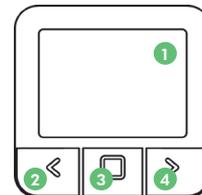
Receiver

1. Receiver ON/OFF/AUTO Button
2. RGB light signal indicators

• RED - Heating request is active
• GREEN - Device is turned on but there is no heating request
• BLINKING YELLOW - There is no communication between the thermostat and the receiver
• BLINKING GREEN - Receiver is in pairing mode

Display description

Description of the basic display

Open window detected
Child lock
Setting the program
Program mode
Manual mode
Set temperature
Battery low
Days of the week
Weekly program

Current room temperature
Connection to receiver
Antifrost mode
Comfort mode
Heating indicator
Eco mode
Time
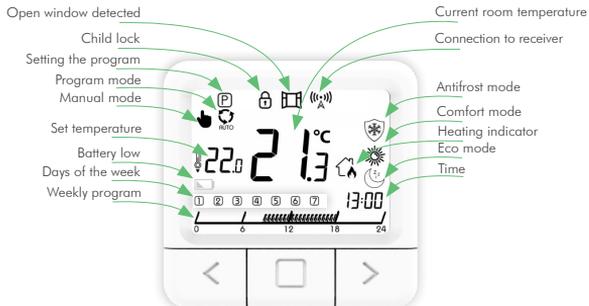
Overview of the basic functions

Description of the settings display

Setting the program
Return to the previous screen

Advanced settings
Antifrost mode
Comfort mode
Eco mode
Setting the time
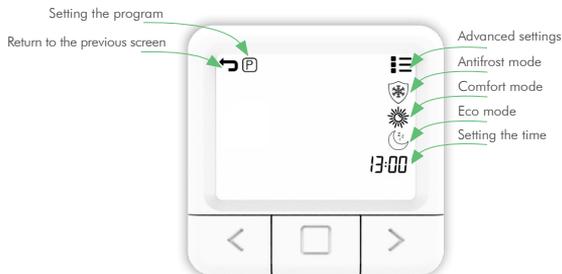
*Overview of the functions
on the settings display*

Temperature setting

1. Press the RIGHT button to increase the set temperature.

2. Press the LEFT button to decrease the set temperature.

Setting the working mode

There are 4 working modes of the thermostat: SYSTEM OFF mode, MANUAL mode, PROGRAM mode and ANTIFROST mode. To access each mode you need to press on the middle button until the icon you wish to set the temperature of, appears on the top of the screen. To better understand read appears through explanations comming in the following pages.

SYSTEM OFF mode

1. Press the middle button to enter MANUAL mode.

2. The upper left end of the screen shows the symbol ✋.

3. While thermostat is in MANUAL mode press and hold LEFT button decrease temperature to minimum 7 °C.

4. Press and hold LEFT button for 5 sec. to enter SYSTEM OFF mode.

5. To exit SYSTEM OFF mode press and hold MIDDLE button for 5 sec.

OFF mode is active

Manual mode ☙

1. Briefly press the middle button.

2. The upper left end of the screen shows the symbol ☙.

3. MANUAL MODE successfully activated.

Manual mode is active

Program mode ♺

1. Briefly press the middle button.

2. The upper left end of the screen shows the symbol ♺.

3. PROGRAM MODE successfully activated.

Program mode is active

Antifrost mode ❄

1. Briefly press the middle button.

2. The upper right end of the screen shows the symbol ❄.

3. ANTIFROST MODE successfully activated.

Antifrost mode is active

The settings display

1. Hold down the MIDDLE button for 5 seconds until the settings display shows.

2. Release the MIDDLE button (See the picture illustrated on page 8.).

Setting the Eco temperature

1. Open the SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the Eco symbol ⏱ and briefly press the CONFIRM button (middle button) to enter the Eco setting.

3. Press the left or right button and set the desired temperature.

4. Eco temperature can be changed in the range from 10 to 30 °C.

The screen forsetting the Eco temperature

Setting the Comfort temperature

1. Open the SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the Comfort symbol ☀ and briefly press the CONFIRM button (middle button) to enter the Comfort setting.

3. Press the left or right button and set the desired temperature.

4. Comfort temperature can be changed in the range from 15 to 35 °C.

Overview of the screen for setting the Comfort temperature

Setting the Antifrost temperature

1. Open the SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the Antifrost symbol ❄ and briefly press the CONFIRM button (middle button) to enter the Antifrost setting.

3. Press the left or right button to set the desired temperature.

4. Antifrost temperature can be changed in the range from 0 to 17 °C.

Overview of the screen for setting the Antifrost temperature

Setting the weekly program

Program can be set for each day in a week separately. The program bar will show the current program. Icons ANTIFROST/ECO/COM and the set temperature will show which one of them is active for the selected half an hour.

1. Open the SETTINGS display.

2. Press the left or right button to navigate to the symbol Ⓟ, select program symbol Ⓟ and press and hold the middle button to enter the program setting.

3. Navigate to the DAY, select the DAY for which you want to set the program and click the middle button. The days Monday

to Sunday are represented by the numbers 1 to 7, respectively.

4. Navigate through program bar with LEFT or RIGHT button.

5. Press the MIDDLE button to change between ANTIFROST /ECO/COM temperature for the selected half hour.

6. Repeat steps 4 and 5 for each hour in a day.

7. Repeat all steps for each day of a week.

8. Hold the MIDDLE button to confirm program settings and enter settings main screen.

NOTE: Thermostat will then save the program for each day (takes 1 minute) and the program will be shown setting screen.

Overview of settings main screen   *Overview of weekly program setting*

Setting the time

Setting the time can be done following the steps written below:

1. Open the SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the time symbol and briefly press the CONFIRM button (middle button) to enter the clock setting.

3. By pressing the RIGHT and LEFT button, set the current

MINUTE and briefly press the CONFIRMATION button (middle button).

4. Navigate RIGHT and LEFT button to set the clock, then set the current CLOCK and briefly press the CONFIRM button (middle button).

5. Navigate RIGHT and LEFT button to set the day, then set the current DAY and briefly press the CONFIRM button (middle button).

6. Use the RIGHT and LEFT button to navigate to the symbol to exit the SETTINGS display, then press the CONFIRM button (middle button).
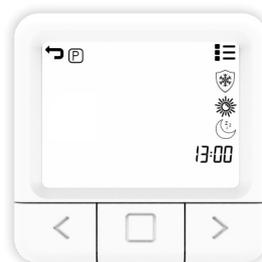
Overview of settings main screen   *Overview of time setting*

Setting the All Days program

The All Days program gives you the possibility to preview the settings for individual days or to set settings of the desired values individualy or for the all days in the week with the ALL option. The program bar will show the current program. Icons ANTIFROST/ECO/COMFORT and the set temperature will show which one of them is active for the selection.

1. Open the settings display.

2. Press the left or right button to navigate to the symbol , select program symbol Ⓟ and press and hold the middle button to enter the program setting.

3. Press the LEFT or RIGHT button, select the ALL to set temperature automatically for all days in the week.

4. Press the LEFT or RIGHT button to change for which half an hour you want to set the temperature.

5. Press the MIDDLE button to change between ANTIFROST /ECO/COMFORT temperature for the selected half hour.

6. Hold the MIDDLE button to go back.
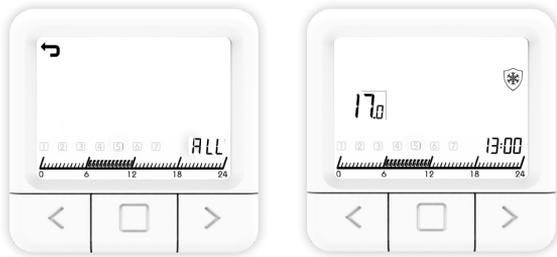
Overview of All Days program setting

ADVANCED settings

In advanced settings, there are settings for SP SmartPairing, FS Factory settings, SE Season settings, CA Calibration settings and HS Hysteresis settings. In the next couple of pages each setting will be explained in details.

SmartPairing mode

SmartPairing allows easy connection of the thermostat with the receiver.

1. Open the ADVANCED SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the "SP" option.

3. When "SP" flashes, press the MIDDLE button and hold it for 5 seconds.

4. Now it should show the symbol SP on the side, and 00 will flash on the screen in the center, until it finds the device. When the device is found, it shows 01.

5. Start SP mode on the receiver by pressing and holding the button until the green light signal appears.

6. Release the button on the receiver on the green light signal and then the green light will flash.

7. You have now entered SP mode on both devices and you need to wait until the devices are paired with each other.

8. The connection status of the device is known when the lights are no longer flashing but the lights are steady green and the thermostat displays the home screen.

In case of adding another receivers that was already added to the network, we need to reset the desired receiver to factory settings which will be explained in the next few pages.
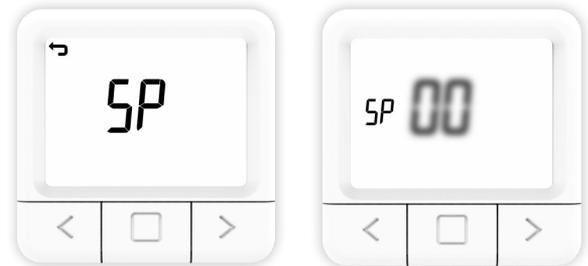
Symbol SP starts to blink when entering the SmartPairing mode.

Factory reset

Factory reset sets all values of the thermostat to their initial state, as well as unpairs the thermostat with all the paired receivers.

1. Open the ADVANCED SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the FS symbol.

3. Hold down the MIDDLE button for 10 seconds.

4. Now only the FS in the center should flash on the screen.

5. Wait for the thermostat to restart.

6. Successful restore to FACTORY SETTINGS.

Overview of Factory reset on the thermostat

For a factory reset of individual receivers it is necessary to go to each one of the paired receivers. Hold the on/off button until the red light is on. The red led will indicate that the receiver is in the factory reset proces which would take up to 30 sec. After the reset the red led starts blinking and indicating that the receiver is in its factory state which would take ~5 sec until the SP mode turns on which will be indicated by blinking green light.

Season settings (heating/cooling)

1. Open the ADVANCED SETTINGS display.

2. Navigate with the RIGHT and LEFT button to the SE option.

Season setting

3. Press the MIDDLE button for 5 seconds to enter the settings.

Season setting

4. Use the LEFT and RIGHT buttons to select the desired operating mode.

5. Press the MIDDLE button for 5 seconds to confirm the selected mode

Calibration settings

Sensor calibration is an adjustment performed on a sensor to make that thermostat as accurate as possible.

1. Open the ADVANCED SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the CA symbol.

Symbol CA starts to blink

3. Hold down the MIDDLE button for 10 seconds to enter.

Overview of Calibration setting

4. Use the LEFT and RIGHT buttons to select the desired value and hold the MIDDLE button for confirmation.

5. Once again hold the MIDDLE button to go to main screen (Successfully saved CALIBRATION setting).

Hysteresis settings

Hysteresis is the value for which the current temperature must be lower than the set temperature in order to switch the heating on.

1. Open the ADVANCED SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the HS symbol.

Symbol HS starts to blink

3. Hold down the MIDDLE button for 10 seconds to enter.

Overview of Hysteresis setting

4. Use the LEFT and RIGHT buttons to select the desired value and hold the MIDDLE button for confirmation.

5. Once again hold the MIDDLE button to go to main screen (Successfully saved HYSTERESIS setting).

Window open detection

Window open detection is a feature that detects whether your window is open. It can only be detected when the heater is turned on. If opened window has been detected the heater will automatically be turned off for next 10 minutes, unless you apply some change to any of your general settings which will temporarily disable window open detection for the next 30 minutes. Also after 10 minutes have passed since the opened window has been detected, this will also temporarily disable window open detection for the next 30 minutes. Window open detection can be enabled or disabled via thermostat at any given time.

1. Open the ADVANCED SETTINGS display.

2. Navigate with the RIGHT and LEFT button until you reach the "Od" symbol.

Symbol "Od" starts to blink

3. Hold down the MIDDLE button for 10 seconds to enter.

4. Use the LEFT and RIGHT buttons to select the desired mode (ON or OF) and hold the MIDDLE button for confirmation.

Symbol "ON"

Symbol "OF"

5. Once again hold the MIDDLE button to go to main screen (Successfully saved WINDOW OPEN DETECTION setting).

Description of receiver working modes

ON mode

The receiver is turned on regardless of the set value on the thermostat.

OFF mode

The receiver is turned off regardless of the set value of the thermostat.

AUTO mode

The receiver follows the default commands on the thermostat.

SYSTEM OFF mode

This operating mode automatically switches receiver to AUTO mode, and switches it to the off state.

Operating via receiver

• When the receiver is in normal operation mode (AUTO MODE), by clicking on the ON/OFF button, the receiver turns off and goes to OFF MODE.

• If we want to turn AUTO MODE on the receiver, to change the state from OFF MODE, it is necessary to click twice on the ON/OFF button.

• If the receiver is in ON MODE, it is necessary to press the ON/OFF button once to change the state to OFF MODE, and then press the ON/OFF button again to change the state to AUTO MODE.

• When the thermostat is in SYSTEM OFF mode, by pressing the ON/OFF button on the receiver, we exit from OFF MODE to enter MANUAL MODE. (SYSTEM OFF mode is a mode whose state changes apply to all receivers that are connected to that thermostat)

• If we want to start SmartPairing mode via the receiver, we need to hold the ON/OFF button until the green color appears on the receiver and then release the button.

• If we want to start a FACTORY RESET via the receiver, it is necessary to hold the ON/OFF button until the red color appears on the receiver, and after that the receiver returns to the factory settings. After that, receiver enters SmartPairing mode to reconnect with thermostat.
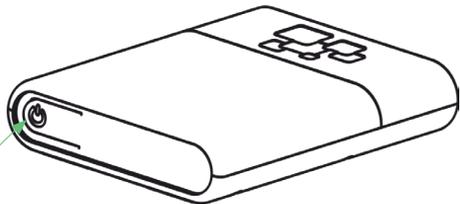
Receiver ON/OFF/AUTO Button (RGB light signal indicators)

• RED - Heating request is active
• GREEN - Device is turned on but there is no heating request
• BLINKING YELLOW - There is no communication between the thermostat and the receiver
• BLINKING GREEN - Receiver is in pairing mode

Maintenance

Battery replacement

If the battery symbol appears on the screen, change the batteries:

1. Remove the thermostat from the thermostat mount.

2. Replace the batteries with two Alkaline AA 1.5V batteries.

3. Place the thermostat on the thermostat mount.

4. Set TIME by following the manual: SETTING THE TIME.

The thermostat is ready to continue operating. All set programs and advanced options have been preserved.
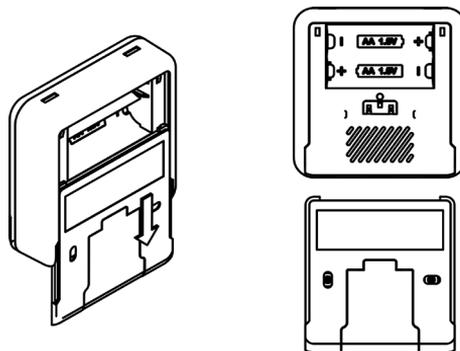
Interference detection and correction

Condition: The room thermostat display is off.

• Make sure the thermostat is on.

• Check that the room thermostat batteries are properly inserted into the battery compartment.

• Check the correct polarity of the batteries.

• Make sure the batteries are not empty.

Condition: The thermostat cannot establish communication with the receiver.

• Turn the thermostat off/on by putting batteries out/in.

• Press the MIDDLE button on the thermostat for a refresh.

Condition: The receiver activated the heating request, but the heating system did not activate.

• Check that all other conditions for activating the heating are fulfilled.

• Check that the receiver is properly attached to the panel.

• Make sure the receiver is properly connected to the heating system.

Handling and maintenance

The device is designed to operate reliably for many years with appropriate handling. Here are some tips to handle it properly:

1. Before using the product, read the manual carefully.

2. Do not expose the product to direct sunlight, extreme cold and humidity, and sudden changes in temperature. This lowers the measurement accuracy.

3. Do not place the product in a place subject to vibration or shocks - it may cause damage.

4. Do not expose the product to excessive pressure, shocks, dust, high temperature or humidity - this can cause degradation of product functionality, reduced energy endurance, batteries damage and deformation of plastic parts.

5. Do not expose the product to rain or moisture, dripping or splashing water.

6. Do not place any open flames on the device, such as a lit candle, etc.

7. Do not place the device in places where there is insufficient air-flow.

8. Do not place any objects in the vents of the unit.

9. Do not touch the internal power openings of the device - they may be damaged and thus automatically void the warranty. Only a qualified person should operate the device.

10. Use a slightly damp cloth to clean it. Do not use thinners or cleaners - they could scratch the plastic parts and damage the power lines.

11. Do not immerse the product in water or other liquids.

12. In case of damage or malfunction of the device, do not make any repairs yourself. Have your device repaired at the shop where you bought it.

13. This product is not intended for use by persons (including children) with limited physical, sensory or intellectual abilities or persons without experience and / or knowledge, unless they are under the supervision of a person in charge of their safety or have been instructed by that person to use the product. Children should be supervised to ensure that they do not play with the device.

Do not dispose the device or batteries at the end of their lifetime as unsorted municipal waste; use waste collection centers. By properly disposing the waste, you will avoid a negative impact on human health and the environment. Recycling contributes to the protection of natural resources. More information about recycling this product will be provided by the municipality, your household waste disposal organization, or the point of sale where you purchased the product.

⚠ NOTE: The contents of this manual are subject to change without notice - due to limited printing, the displayed symbols may be slightly different from the on-screen display - the contents of this manual may not be copied without prior consent.

Innentech GmbH declares that IT 201 (thermostat + receiver) meets the essential requirements and other relevant provisions of Directive 2014/53/EU. The device can be used freely in the EU.

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