

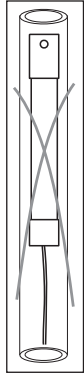
# THERMOMATIC EC HOME®

## Wireless room sensor – Installation and User Manual

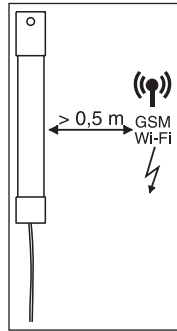
**NOTE!** This manual is primarily intended for installation and use of the wireless room sensor for Thermomatic EC Home. Other installations and functions are explained in the complete manual for EC Home.



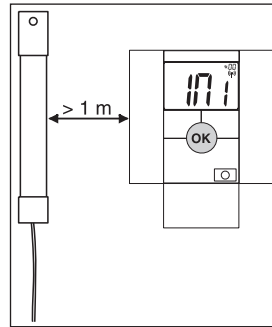
### Locating the antenna:



Antenna should not be placed on metallic objects or on metal pipes.

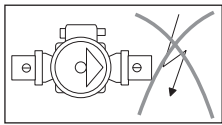


Antenna should not be located too close to other wireless units or power cables.

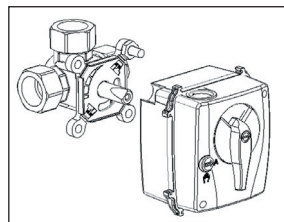


Antenna should not be located too close to the room unit during initiation.

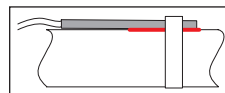
### Preparation:



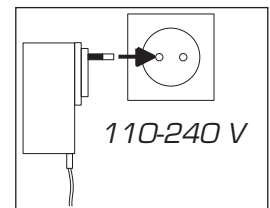
1. Turn off the pump



2. Fit the motor to the mixing valve

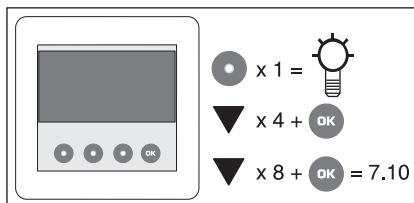


3. Fit the flow pipe sensor

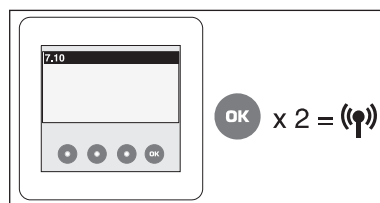


4. Plug in the power supply

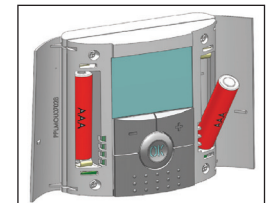
### Activation of radio communication:



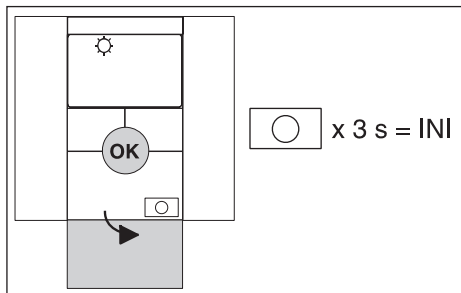
5. Browse to section 7.10 of the menu



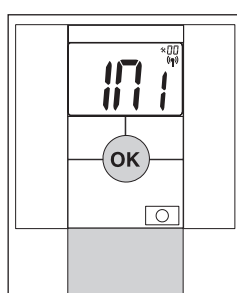
6. Click to start radio communication



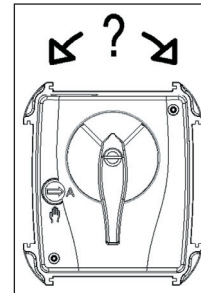
7. Remove the plastic strip one of the batteries



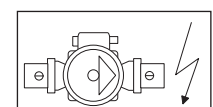
8. Open the cover and hold the edit button depressed in order to start the initiation



9. INI will light for some seconds – Ready!



10. Choose the motor's direction of rotation (menu 7.1)

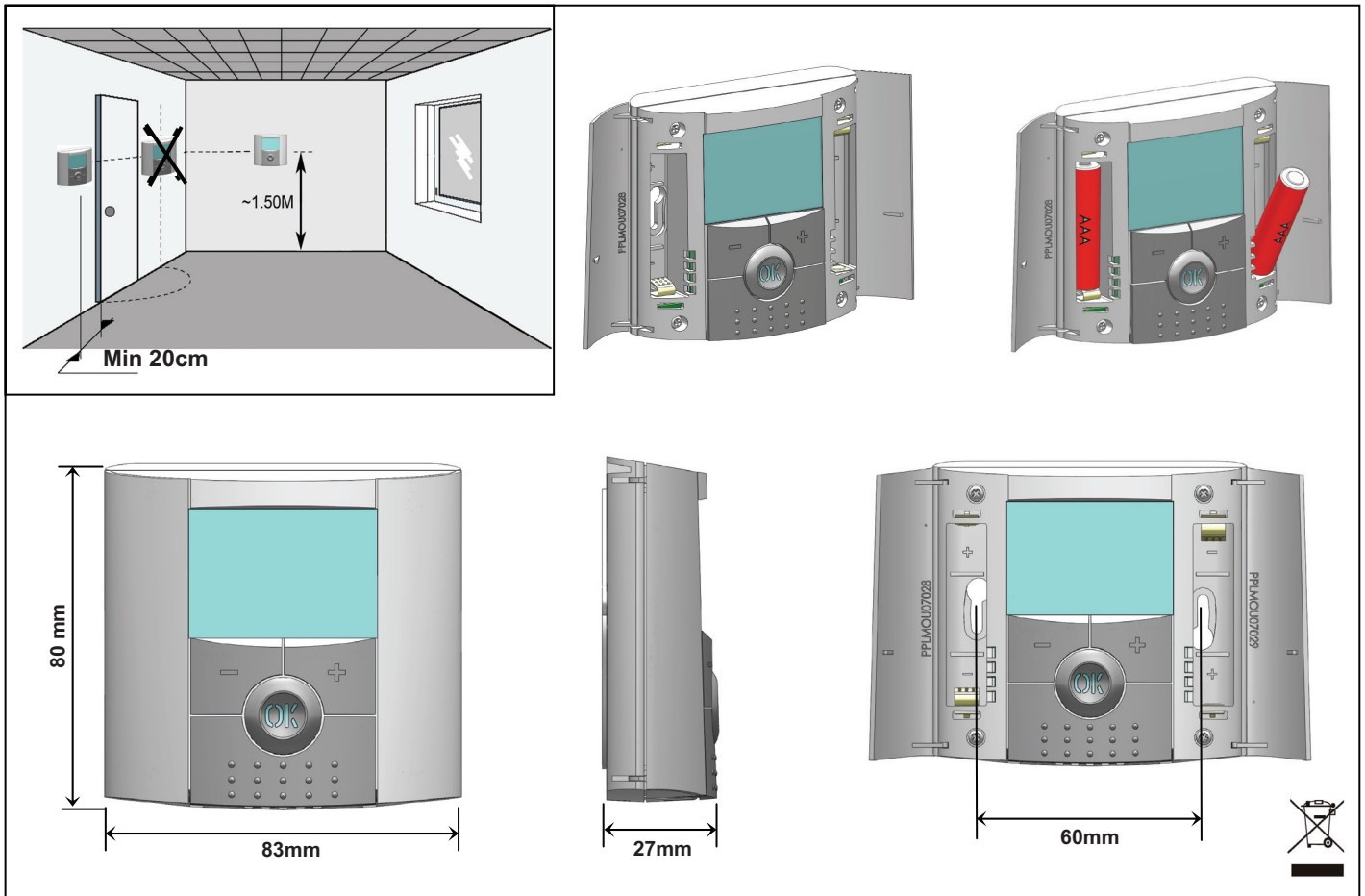


11. Start the pump

# THERMOMATIC®

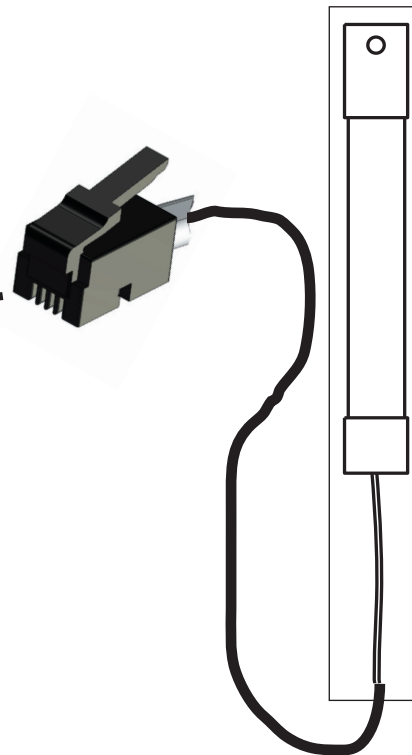
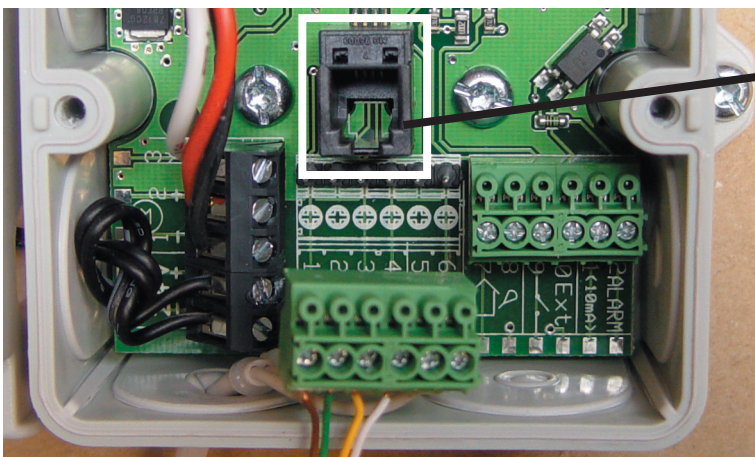
## Termoventiler AB

## Installation and locating the room sensor:



*NOTE! We recommend that you install the room sensor using the enclosed screws and plugs, as incorrect positioning of the sensor may jeopardize heating comfort.*

## Connecting the antenna to the CC:



# 1. Presentation


This room sensor is only designed for use with Thermomatic EC Home (ver. 121001 or later).

- Anti-frost function
- Holiday (Timer) / Booster function
- Keeps settings during battery replacement
- 2 x AAA batteries give up to 2 years' operation

## 1.1 The function of the buttons

Move/browse to the left (<-) 

Move/browse to the right (->) 



Escape + browse (↶) 

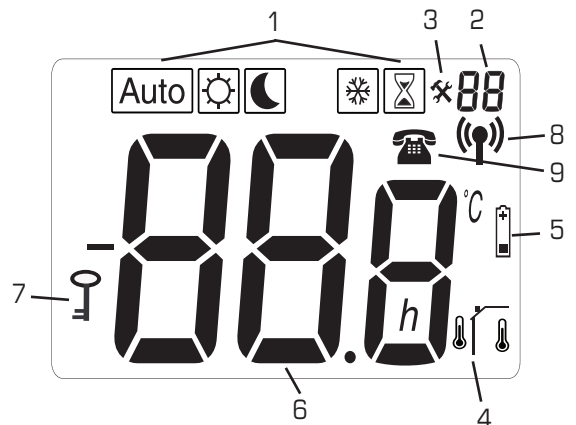
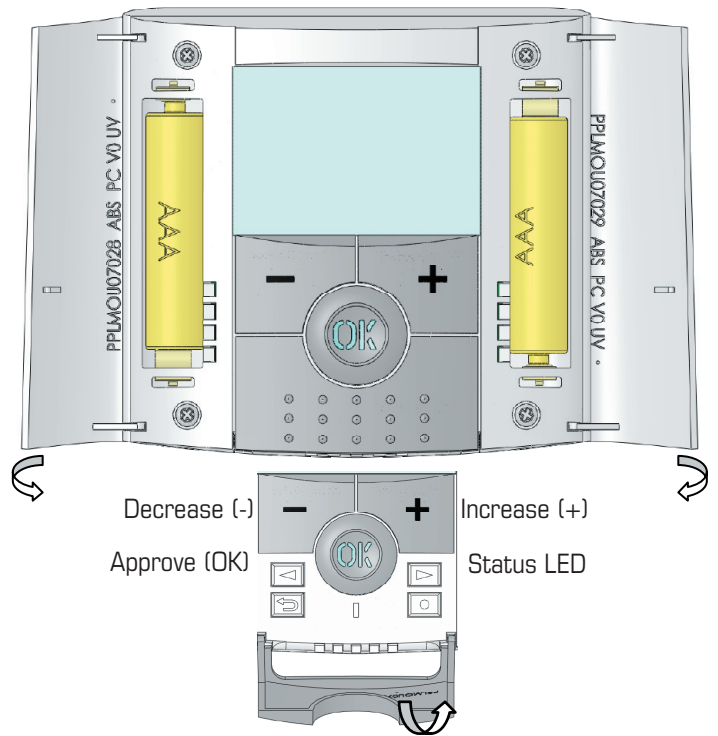
Edit (used for tool menu)(●) 

## 1.2 Display & LED



Green flashing for OK: Approval required

1. Operational mode (active mode displayed).
2. Displays selected control setting or active tool menu.  
r = Room sensor, ro = Room sensor with outdoor sensor  
or = Outdoor sensor with room sensor, o = Outdoor sensor, C = Supply sensor (Constant)
3. The icon are displayed when the Tools menu is active and at start-up.
4. The icon that lights shows which relevant temperatures is shown on the display (Room  or outdoor ).  
When displaying the set point, none of the icons light).
5. Battery icon. Flashes when the battery voltage is low.
6. Set or read temperature, and remaining time (if Timer setting is on)
7. Button lock indicator.
8. RF indicator. Lights during transmission.
9. External contact (remote control) activated (in Connection Centre).



## 2. Settings and menu display



- Open the lower cover for access to the navigation buttons (<-) or (->).

- You can now press these buttons to show the row with various operational modes.

Move the cursor to the desired operational mode and press (OK) to set the mode. See below for explanation of the various modes.

### What is displayed and settings' options:

In order to browse the values use the Escape button 

All set values, apart from Timer, can also be set from the Control Panel.

When only using room sensor (mode r) or room sensor + outdoor sensor (mode ro), you can set the desired room temperature (set point) for Day, Night/Moon or Timer. The display shows the set point, the room temperature, and outdoor temperature if appropriate.

When using room sensor with outdoor sensor as the priority (mode or) the set room temperature acts only as a maximum limit. The display shows the maximum value, the room temperature, and outdoor temperature.

When only using an outdoor sensor (mode o), no normal temperature settings can be made for the room sensor. If you want to reduce you can set it using the Night/Moon temperature. It is, however, still possible to select operational modes (apart from Timer), and you can see the actual indoor and outdoor temperature. All curve settings are made from the Control Panel.

When using only the supply sensor (mode C), you can set the desired supply temperature. You can also see the relevant room temperature. Potential reduction of the supply temperature can be set using the Night/Moon temperature.

### 2.1 "Day" temperature

In this mode, the set "Day" temperature is kept all of the time. The factory settings are 20°C for "r" and "ro", 30°C for "or" and 60° for "C". By pressing (-) or (+), the temperature will begin to flash and the setting may be changed. Save by pressing (OK).

### 2.2 "Night/Moon" temperature

In this mode, the set "Night/Moon" temperature is kept all of the time. The factory settings are 16°C for "r" and "ro", 0°C for "or", "o" and "C". By pressing (-) or (+), the temperature will begin to flash and the setting may be changed. Save by pressing (OK).

### 2.3 Anti-frost mode

This is used if you want to shut down the heating, but still have a minimum permitted supply temperature to prevent the system freezing, e.g. while you are on holiday. The anti-frost temperature is fixed at 10°C.

### 2.4 Timer mode

Get started guide for settings:




The timer mode means that you can change the temperature at certain times. This is not available for modes "o" or "C".

- You can first set the temperature using (-) or (+). Press (OK) to start the function (preset value is 24°C).


- The next step is to set how many hours "H" (if less than 24 hours) the timer will be active, and then the number of days "d" (up to 45 days) using (-) or (+). Press (OK) to approve.

 - The icon starts to flash. This symbol is also shown in the CP\*. Browse using  to see the set point and remaining time.

 The room sensor reverts to the previous operational mode after having been in Timer mode. If you want to stop the Timer function before the end of the period, change to the desired operational mode using (<-) or (->), and then (OK) to save.

### 2.5 Auto mode

In this mode, EC Home automatically switches between Day and Night temperatures, according to the time settings on the Control Panel. **The following temperature settings apply when the Auto mode is activated:**



Select the temperature to be changed using . A single press on (-) or (+) will make the set point to be changed or read start to flash, and this setting can be changed using (-) or (+). The value is saved when you press (OK). The room sensor automatically reverts to the main menu after a couple of seconds.

**NOTE!** All time settings are made from menu 4 on the **\*Control Panel**. You will find this described in the full manual for EC Home.


### 3. Special functions

#### 3.1 Locking buttons


Used to prevent changes to settings, e.g. in a child's room or public area.

- In order to activate the lock, first press and hold the Escape button (  ) while at the same time pressing the Edit button (  )
-  The icon will be shown on the display.
- Repeat the procedure to unlock the buttons.

#### 3.2 Information

This function allows you to see all actual temperatures, and the set values by pressing repeatedly on the Escape button (  ). You can also see time remaining when the Timer mode is activated.

### 4. Tools menu

The room sensor has a tools menu for other settings. In order to access this menu, press and hold the Edit button (  ) for 3 sec. The menu is activated and the first sub-menu is displayed:



The first menu displayed is the initiation mode. You can select the parameters to be changed using the navigation buttons (<-) or (>-). When you have selected a parameter, you can edit the value using the (OK) button, or begin to change the value using (-) or (+). The value flashes for a few seconds or until (OK) is pressed. In order to save the change you must press (OK).

**In order to leave the tools menu, browse to « End » and press (OK).**

#### 4.1 Basic values and other settings

##### 00 INI: Radio configuration

Sends the radio link signal to pair the room sensor with the Control Panel/antenna. Only used at first initiation.

##### 04 HG: Room sensor calibration

Get started guide for settings:  x 3 s INI ► no +/- °C ?  YES ► ► ► 

**NOTE!** The heat inertia of a house means that it may take as long as 24 hours before the right temperature is achieved.

Place a thermometer by the side of the room sensor (around 1.5 m above the floor) and read off the temperature after one hour.

When you enter the calibration menu, "no" is displayed when no calibration has taken place. Use the (-) or (+) button to set the temperature to the same as shown on the thermometer. Then press (OK) to accept.

"Yes" should now be displayed and the new value is saved in the memory.

If you need to remove a calibration, press on (-) or (+) when you are in this menu to erase the calibrated value.

##### 07 Clr: Factory settings

Press and hold the (OK) button for 3 seconds to reset. Settable temperatures and parameters are returned to the factory settings. NOTE! Ensure that you have everything you need to be able to start again before you use this function.

##### 08 Program version

##### 09 End: Exit the Tools menu

Press (OK) to exit the menu and return to the operational mode.

## 5. Troubleshooting and Solutions

### Room sensor does not start

Battery problems

- Check that the plastic tab has been removed from the batteries.
- Check that the batteries have been inserted correctly.
- Check that the batteries are OK.


### Battery voltage too low



- icon is shown (Battery)

- Change the batteries.

### The room sensor appears to work correctly, but the heating does not work

- Check that the room sensor icon  is lit steadily on the Control Panel display.
- If the icon is not lit: Check the antenna connection.
- If the above is OK, try to change the batteries in the room sensor.
- Contact your installer.

### RF communication does not work

Check the following items:

- The antenna must not be placed nearer than 50 cm to other electrical or wireless units, e.g. GSM or WiFi.
- Antenna should not be placed on metallic objects or too close to metal pipes. Try moving antenna to a new position.

### The room sensor appears to work correctly, but the temperature in the room does not agree with my thermometer

- Try to calibrate the room sensor (see Tools menu 04).
- Contact your installer/retailer to check whether control needs adjustment/adaptation to your heating system.

## 6. Technical specifications

Surrounding environment:

Working temperature: 0°C - 40°C

Transport and storage temperature: -10°C to +50°C

Electrical safety class: IP30

Range: Approx. 30 m (in buildings)

Precision: 0.1°C

Settings range: Day, Night/Moon, Timer 5°C – 30°C in 0.1°C steps

Supply temperature 5°C – 90°C in 1°C steps

Power supply: Battery (lifetime ~2 years), 2 AAA LRO3 1.5V Alkaline (or equivalent)

Sensor type: NTC, 10 kOhm at 25°C

Radio frequency: 868 MHz, <10mW

**The room sensor has been designed in accordance with the following standards or other standardising documentation:**

EN 60730-1 : 2003, EN 61000-6-1 : 2002, EN 61000-6-3 : 2004, EN 61000-4-2 : 2001, EN300220-1/2, EN301489-1/3, R&TTE 1999/5/EC, Low voltage 2006/95/CE, EMC 2004/108/CE

