



EN MAINTENANCE MANUAL
FR NOTICE D'UTILISATION
NL HANDLEIDING
DE BEDIENUNGSANLEITUNG
PL INSTRUKCJA OBSŁUGI
FI ASENNUS JA KÄYTTÖOHJE

ADVANCED THERMOSTAT



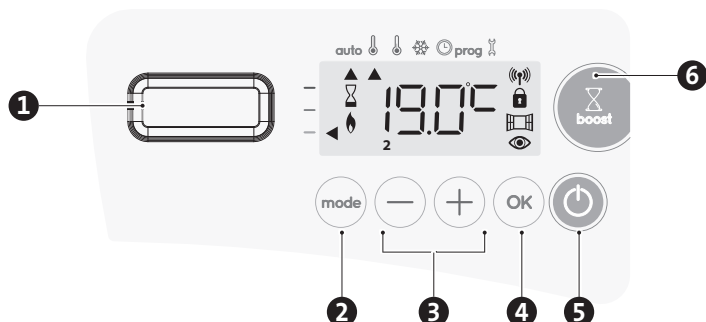
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OPERATION

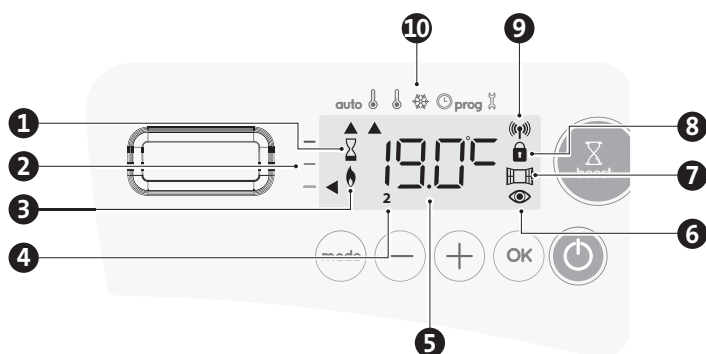
DIAGRAM

Buttons overview



- 1 Occupancy detector
- 2 Selecting operating modes
- 3 Plus and minus buttons, used to set temperatures, time, date and 2 programmes
- 4 Save settings
- 5 Button power on/standby mode
- 6 Boost

Indicators overview



- 1 Boost indicator light
- 2 Gauge consumption
- 3 Heating indicator
- 4 Days of the week (1=Monday ... 7= Sunday)
- 5 Setting temperature
- 6 Occupancy detection indicator
- 7 Open window detection indicator
- 8 Keypad locked
- 9 Radio transmission indicator
- 10 **Operation modes:**
 - auto Auto mode
 - ! Comfort mode
 - ! Eco mode
 - * Frost protection mode
 - ⌚ Time and date setting mode
 - prog Programming mode
 - 🔧 Settings

Important: In Auto, Comfort, Eco and Standby mode, backlight turns off automatically after 20 seconds if no buttons are pressed. It will be necessary to reactivate it by pressing one of the keypad buttons before making settings.

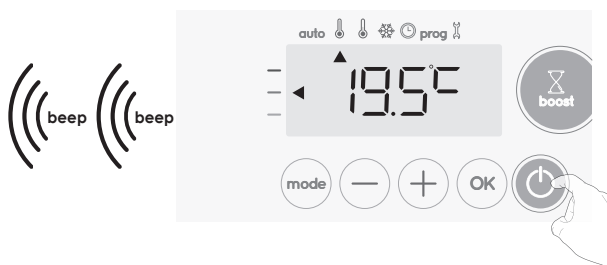


Before carrying out any setting procedures, ensure that the keypad is indeed unlocked (see page 6).

POWER ON/STANDBY MODE

Power on feature

Press the button to put the device in operation, in Auto mode.



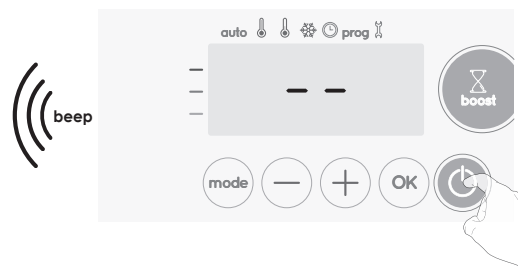
Help for the visually impaired: sound signals

The device makes 2 short beeps to notify that it is in operation, in Auto mode.

Standby mode

This function allows you to stop the heating in summer, for example.

Press the button to put the device in standby mode.



Help for the visually impaired: sound signals

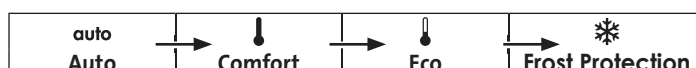
The device makes 1 short beep to notify that it is in standby mode.

SELECTING THE OPERATING MODE

The button allows you to adapt the operating schedule of your device to your needs, depending on the season, whether your home is occupied or not.

Press the button several times to select the required mode.

Mode sequence:



Mode overview

• auto Auto mode

In Automatic Mode, the device will automatically change from Comfort mode to Eco mode according to the established programme.

2 different cases depending on your set-up:

1 7 day and daily programme

Your device has been programmed and is executing Comfort and Eco mode orders in line with the settings and time periods you have selected (see "7 day and daily programme integrated" chapter page 7).

Display



Mode overview

Display

2 Programming by pilot wire

If you do not want to use the programming feature.

Orders sent by the pilot wire will only be applied **in Auto mode**, thus your device will automatically receive and apply the programmed orders sent by your power manager or your time switches (see Information about remote control by pilot wire page 10).

• Comfort mode

Non-stop Comfort mode. The device will operate 24 hours a day to achieve the temperature which has been set (e.g. 19°C). The Comfort mode temperature level can be set by the user (see Setting the comfort mode temperature page 6).



• Eco mode

Eco, which means the Comfort Mode temperature minus 3.5°C. This enables you to lower the temperature without having to reset the Comfort Mode temperature. Select this mode for shortterm absences (between 2 and 24h) and during the night.



• Frost protection mode

This mode enables you to protect your home against the effects of cold weather (frozen pipes, etc.), by maintaining a minimum temperature of 7°C in it at all times. Select this mode when you will be away from your home for a long time (more than 5 days).



Restoring factory settings See page 14,16 and 19.

BOOST FEATURE

Important: the Boost mode can be enabled at any time, whatever the current operating mode (Auto, Comfort, Eco or Frost protection).

To activate Boost mode, press , the desired temperature setting will be set at maximum for the time period you request. 60 minutes display will flash by default.

- First press = Boost.

During the first minute: the boost symbol and the heating indicator appear and the duration count flash.



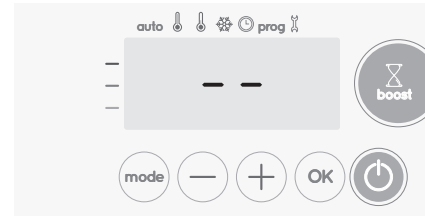
During the first minute, you can modify the Boost duration from 0 to the maximal authorised duration of the Boost, such as defined during the advanced settings (see page 13 for more details) by intervals of 5 minutes (or more quickly by push superior to 2 seconds) by pressing  and . This modification will be saved and effective for the next Boost.

After 1 minute, the Boost count begins and the time is running, minute by minute.

Comment: After 1 minute, you can modify temporarily the duration: it will be valid only for this active Boost and therefore non-recurring.

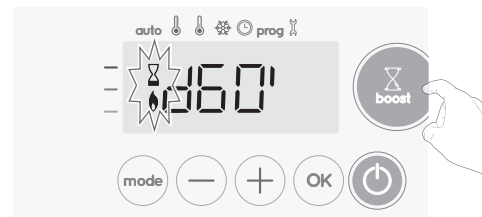
The Boost can stop for 2 different reasons:

- An order "Stop" has been sent by your energy manager through the pilot wire:



The device stops, -- appears. The cursor moves above **auto**. When the order Comfort will be sent, the device will be restarted until the count end.

- If the ambient temperature reaches the maximal Boost temperature during the count:



The device switches off but the Boost mode is always active : the count is always displayed, the Boost symbol and the heating indicator flash on the display. When the temperature drops under the maximal authorised temperature, the device will be restarted until the count ends.

- Second press = Boost cancellation.

The cursor moves above the previous active mode and the setting temperature appears.

GAUGE CONSUMPTION, ENERGY SAVINGS

FRANCE'S AGENCY FOR ENVIRONMENT AND ENERGY MANAGEMENT (ADEME) RECOMMENDS A COMFORT SETTING TEMPERATURE LOWER OR EQUAL TO 19°C.

In the device display, a selector indicates the energy consumption level by positioning it in front of the colour: red, orange or green. So, depending on the setting temperature, you can choose your level of energy usage. As the temperature setting increases, the consumption will be higher.

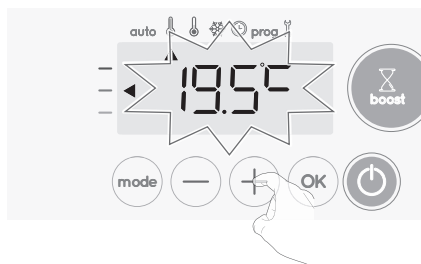
The gauge appears in Auto, Comfort, Eco and Frost protection modes and whatever the temperature level.

C - Red colour High Temperature level: it is advisable to significantly reduce the setting temperature.	Setting temperature > 22°C When the setting temperature is higher than 22°C	
B - Orange colour Average temperature level: it is advisable to slightly reduce the setting temperature.	19°C < Setting temperature ≤ 22°C When the setting temperature is higher than 19°C and lower or equal to 22°C	
A - Green colour Ideal temperature.	Setting temperature ≤ 19°C When the setting temperature is lower or equal to 19°C	

SETTING THE COMFORT MODE TEMPERATURE

You can access the Comfort temperature set up from the Auto and Comfort Mode. It is preset to 19°C.

Using $\ominus$ and $\oplus$ you can adjust the temperature from 7°C to 30°C by intervals of 0.5°C.



Note: you can limit the Comfort temperature, see page 13 for more details.

CONSUMPTION INDICATION ACCUMULATED IN KWH, ENERGY SAVINGS

It is possible to see the estimation of energy consumption in kWh since the last reset of the energy meter.

• Display of the estimated power consumption

To see this estimation, from Auto, Comfort, Eco or Frost protection mode, then press OK .

To exit the display mode of consumption: press any button, the device is automatically in the previous active mode.



• Resetting the energy meter

To reset the energy meter, from Auto, Comfort, Eco or Frost protection mode, then proceed as follows.

1- Press OK .

2- Press simultaneously $\ominus$ and $\oplus$ for more than 5 seconds.

To exit resetting the energy meter, press any button, the device is automatically in the previous active mode.

CHILD ANTI-TAMPER, KEYPAD LOCK/UNLOCK

• Keypad lock

To lock the keypad, press the $\ominus$ and $\oplus$ buttons and hold them down for 10 seconds. The padlock symbol $\mathbf{\overline{\text{A}}}$ appears on the display, the keypad is locked.



• Keypad unlock

To unlock the keypad, press the $\ominus$ and $\oplus$ buttons hold them down for 10 seconds again. The padlock symbol $\mathbf{\overline{\text{A}}}$ disappears from the display, keypad is unlocked.



When keypad is locked, only the key OK is active.

If the device is on Standby mode when the keypad is locked, you have to unlock it for the next heating on to access the setup.

7 DAY AND DAILY PROGRAMME INTEGRATED, ENERGY SAVINGS

AUTOMATIC PROGRAMMING WITH SELF-LEARNING PROCESS

• Overview

Auto-programming (Auto): After an initial learning period of one week, the device will analyze occupancy cycles to determine and implement a weekly programme adapted to your lifecycle alternating periods in comfort and periods in eco, the goal being to deliver the most efficient yet comfortable and user focused heating cycle. The products algorithm will perpetually learn and adapt to changes in your occupancy patterns, adapting week after week to optimize the heating programme to any changes in your evolving occupancy patterns.

• Operating

Upon the first activation of your device, the mode "auto-programme" is activated by default, in mode Auto. To deactivate and change the programme, see choice and affectation of programmes page 8.

The first week of operation is a learning week during which the device memorizes your habits and elaborates a program for the week.

It therefore defines a programme built up of periods of Comfort and Eco, independently for each day of the week.

During this learning week, the device will provisionally function in permanent "Comfort" mode.

Important: To ensure the auto-programming is optimized, please ensure the presence detection sensor is not interrupted by an external source, see important information concerning the presence detection system on page 9.



Example of display in Comfort period



Example of display in Eco period

• Application of the intelligent program

One week after switching on, the device will apply the new program for the next 7 days. Then week after week the device will continue to optimize the intelligent program "Auto", adjusting the Comfort and Eco periods to fit closely to your lifestyle.

When the product is in Frost protection mode or in standby mode for more than 24 hours, learning and optimization of the intelligent program stops: the device stores the previously recorded program from the last week before switching to the Frost protection or standby mode.

- Example 1: If the product is installed in mid-season or if its installation is anticipated on the construction site, it can be switched on in standby mode. When you select the Auto mode, the learning week will start automatically. The device will be in permanent comfort and will memorize your habits to apply the adapted program the following week.

- Example 2: You select frost protection mode before going on holiday. Upon your return, when you return to Auto mode, the unit will automatically apply the previously stored intelligent program from the last week before you left.

In the case of control by pilot wire coming from an energy manager for example, the pilot wire will take precedence over the AUTO program which results from the Self-learning algorithm.

7 DAY AND DAILY PROGRAMME

In this mode, you have the option of programming your device, by setting one of the five programmes on offer for each day of the week.

● Access to the programming mode

From Auto, Comfort, Eco or Frost protection mode, press  or 5 seconds to enter into the programming mode.

Schematic sequence of programming settings:



● Setting day and time

In this mode, you can set day and time to program your device in line with your needs.

- From Auto, Comfort, Eco or Frost protection mode, press  for 5 seconds.

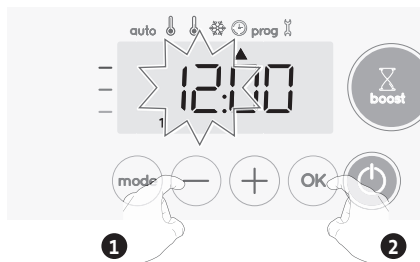
The cursor moves to the setting day and time mode.



- Select using  or . The two hour figures will flash.

The hours will scroll quickly, if you press the  or  and hold them.

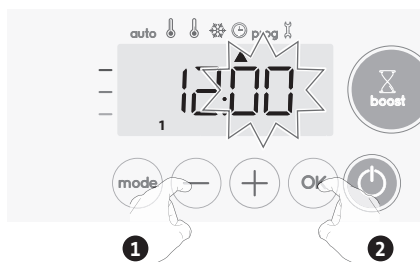
Save by pressing .



- The two minute figures will flash.

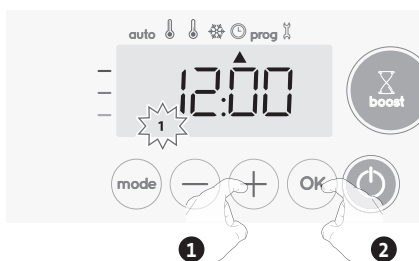
Select using  or .

Save by pressing .



- The cursor above the number 1 (which represents the Monday) will flash. Select the date using  or .

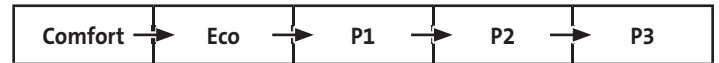
Save by pressing .



- To change and/or allocate programmes press . To exit the setting the time and day mode, press  3 times.

● Choices programmes

Schematic sequence of programmes:



The device is delivered by default with the self-learning mode enabled as described on page 7. If this programme suits your requirements, you have nothing more to do, the device, after the initial 7 day learning period will follow the autoprogramme which will continue to tailor itself to your occupancy cycles.

● Programmes overview

- Auto:** Auto-programming (See Automatic programming with self-learning process page 6).

- Comfort:** your device will operate in Comfort mode, 24 hours a day, as regards each day selected.

Note: You can set the Comfort mode temperature to the temperature you require (see the Setting the Comfort mode temperature section page 6).

- Eco:** The device will operate 24 hours a day in Eco mode.

Note: You can set the temperature-lowering parameters (see page 12).

- P1:** your device will operate in Comfort mode from 06:00 to 22:00 (and in Eco mode from 22:00 to 06:00).

- P2:** your device will operate in Comfort mode from 06:00 to 09:00 and from 16:00 to 22:00 (and in Eco mode from 09:00 to 16:00 and from 22:00 to 06:00).

- P3:** your device will operate in Comfort mode from 06:00 to 08:00, from 12:00 to 14:00 and from 18:00 to 23:00 (and in Eco mode from 23:00 to 06:00, from 08:00 to 12:00 and from 14:00 to 18:00).

● Potential modifications of programmes

If the default time schedules for the P1, P2 and P3 programmes does not suit your routines, you can change them.

Modifying the P1, P2 or P3 programmes.

If you modify the time schedules for the P1, P2 or P3 programmes, the schedules will be modified for all the days of the week for which P1, P2 or P3 had been set.

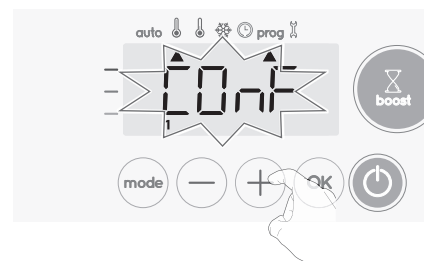
- If you just set the time and day, go to step 2.

From Auto, Comfort, Eco or Frost protection mode, press  for 5 seconds.

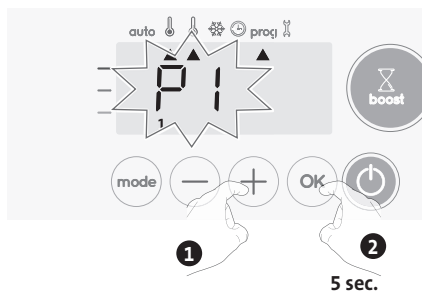
When the cursor moves above the setting time symbol , press  shortly.



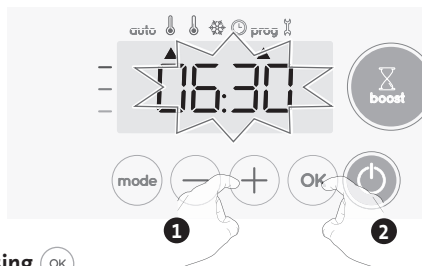
- Press  or . The cursor moves above prog.



- 3- With $\ominus$ or $\oplus$, select P1.
P1 will flash. Press OK for 5 seconds to make changes.

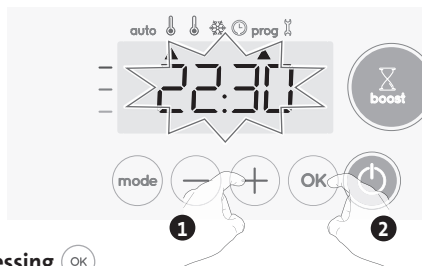


- 4- The P1 start time (which by default is 06:00) will flash.
Using $\ominus$ or $\oplus$, you can change this time, by increments of 30 minutes.



Save by pressing OK .

- 5- The P1 end time (which by default is 22:00) will flash. Using $\ominus$ or $\oplus$, you can change this time, by increments of 30 minutes.



Save by pressing OK .

- 6- Press mode to exit the programming Mode and return to Auto Mode.

Note: without action on the keys, it will return to Auto after a few minutes.

• Choices and allocation programmes

Prior information:
display area

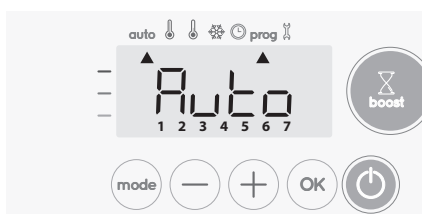


Correspondence days /numbers	
Monday	1
Tuesday	2
Wednesday	3
Thursday	4
Friday	5
Saturday	6
Sunday	7

- 1- If you just set the time and day, the cursor moves automatically under PROG.

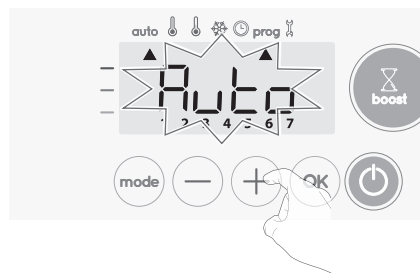
From Auto, Comfort, Eco or Frost protection mode, then press mode for 5 seconds. When the cursor positioned under the set time symbol ⌚ , press mode again.

The days of the week are all displayed. The default program Auto (Auto Program, see page 6) appears on the display.

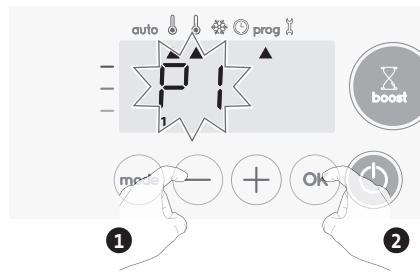


- 2- Press $\ominus$ or $\oplus$.

The programme set for day 1 (1= Monday, 2 = Tuesday, etc.) will flash.

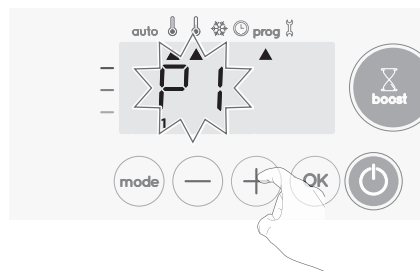


- 3- Chose the programme you want for this day with $\ominus$ or $\oplus$.
Save by pressing OK .



- 4- The programme assigned to the second day of the week (Tuesday) will flash.

Repeat the procedure described previously (in point 3) for each day of the week.



- 5- Once you have chosen a programme for each day, confirm your selection by pressing OK . The days of the week will successively scroll on display with the programmes that you set for them (P1, P2, P3, CONF or ECO).

To exit the Programming mode, press mode twice.

• Viewing the programmes that you have selected

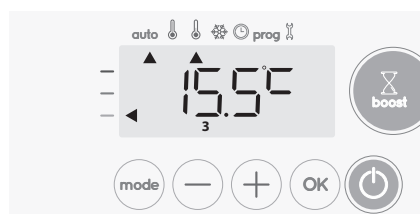
- From Auto, Comfort, Eco or Frost protection mode, press mode for 5 seconds. Press mode twice, the programme for each day of the week (Comfort, Eco, P1, P2 or P3) will scroll on display in front of you.
- To exit the programme viewing mode, press mode twice.

• Manual and temporary exemption from a running programme

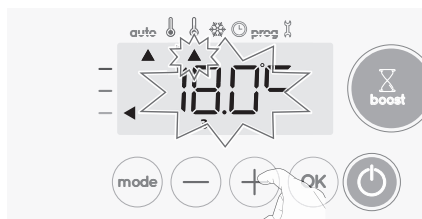
This function allows you to change the setting temperature temporarily until the next scheduled change in temperature or the transition to 0:00.

Example:

- 1- The device is in Auto mode, the running programme is Eco 15,5°C.



- 2- By pressing $\ominus$ or $\oplus$, you can change temporarily the desired temperature up to 18°C for example.



Note: The cursor corresponding to the operating mode, i.e Eco mode in our example, is blinking during the duration of the temporary derogation.

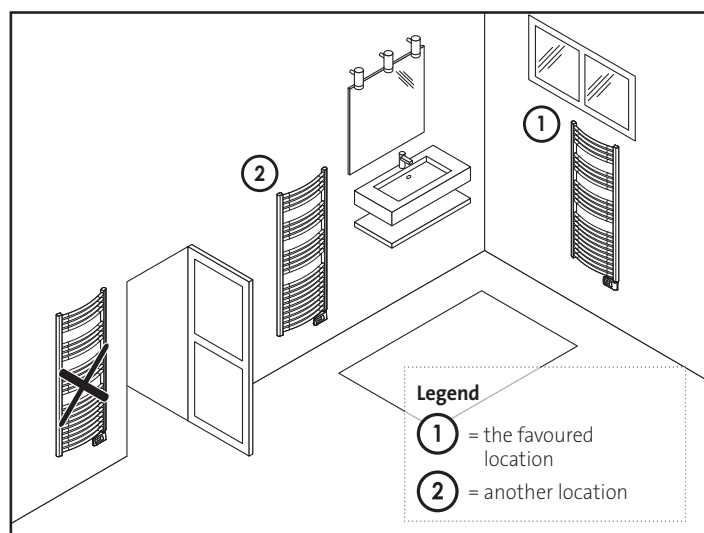
- 3- This change will be automatically cancelled at the next change of programme or transition to 0:00.



OPEN WINDOW DETECTION, ENERGY SAVINGS

• Important information about the open window detection

Important: the open window detection is sensitive to temperature variations. The device will react to the window openings in accordance with different parameters: temperature setting, rise and fall of temperature in the room, outside temperature, location of the device... If the device is located close to a front door, the detection may be disturbed by the air caused by opening door. If this is a problem, we recommend that you disable the automatic mode open window detection (see page 15). You can, however, use the manual activation (see below).



• Overview

Lowering temperature cycle by setting frost protection during ventilation of a room by opened window. You can access the open window detection from the Comfort, Eco and Auto modes. Two ways to enable the detector:

- **Automatic activation**, the lowering temperature cycle starts as soon as the device detects a temperature change.
- **Manual activation**, the cycle of lowering temperature starts by pressing a button.

• Automatic activation (factory settings)

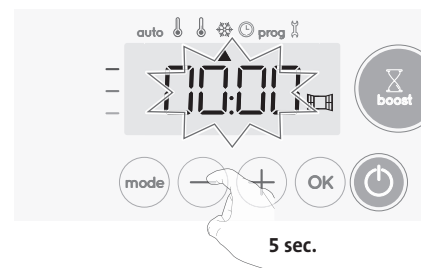
To disable this mode, see page 15.

The device detects a temperature fall. An opened window, a door to the outside, can cause this temperature fall.

Note: The difference between the air from the inside and the outside must cause a significant temperature fall to be perceptible by the device. This temperature drop detection triggers the change to Frost Protection mode.

• Manual activation

By pressing $\ominus$ for more than 5 seconds, the device will switch on Frost protection mode.



• Frost protection digital meter

When the device performs a lower temperature cycle due to opened window, a meter appears on the display to show the cycle time. The counter is automatically reset at the next time to Frost protection by opened window (automatic or manual activation).

• Stop the Frost protection mode

By pressing one button, you stop the Frost protection mode.

Note: if a temperature rise is detected, the device may return to the previous mode (active mode before the open window detection).

OCCUPANCY DETECTION, ENERGY SAVINGS

• Important information about the occupancy detection

The occupancy detector is sensitive to temperature variations and light. It is likely to be disturbed by the following items:

- Hot or cold sources such as forced air vents, lights, air conditioners.
- Reflective surfaces such as mirrors.
- Animal crossing in the detection area.
- Objects moving with the wind like curtains and plants.

Disable the occupancy detection if your device was installed near one of these.

To disable the occupancy detection, see page 15.

Note: the detection range varies depending on the ambient temperature.

• Overview

The device fits your lifestyle while keeping your power consumption under control.

With its front infrared sensor, the device smartly optimizes the management of heating : it detects movement in the room where it is installed

and in case of absence, automatically performs a progressive lowering of the setting temperature resulting in: energy savings. To ensure proper operation, do not block the sensor's field of view by any obstacle (curtains, furnitures...).



Lowering the temperature during unoccupied periods

Unoccupied periods*	Value of lowering setting temperature*
20 minutes	Comfort -1°C
40 minutes	Comfort -1,5°C
1 hour	Comfort -2°C
72 hours	Frost protection

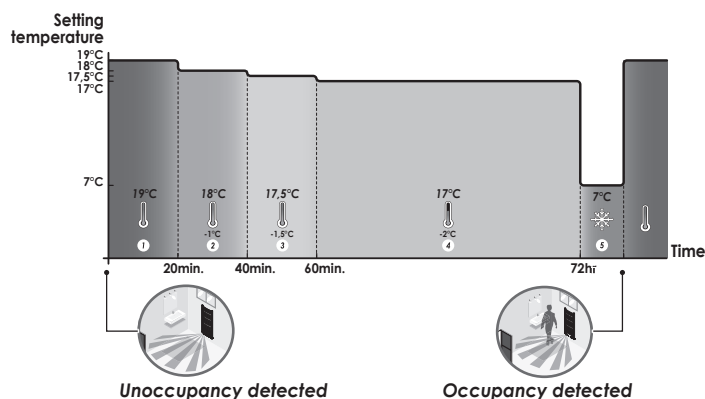
* Unchangeable factory settings

Note: when presence is detected in the room, the device automatically returns to the initial mode.

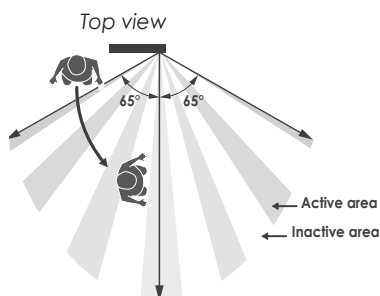
Remarks:

By default, when the sensor is enabled and detects movement in the room, the display lights up for a few seconds then switches off. To change the backlight see page 12, backlight setting.

• Operation

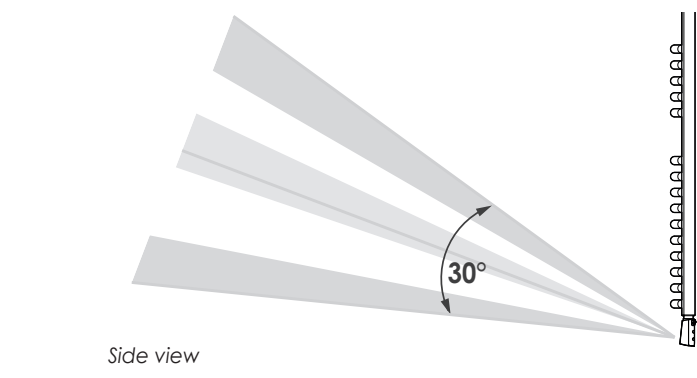


• Divisions of the detection zone



Detection zone, for a temperature of 19°C.

The detection zone is divided into active and inactive areas. A person that crosses the area will be detected by the infrared sensor.



INFORMATION ABOUT REMOTE CONTROL BY PILOT WIRE

• Overview

Your device can be controlled by a central control unit through a pilot wire, in which case the different operating modes will be remotely enabled by the programmer.

You can only control the device by pilot wire in the Auto mode. In the other modes, the orders transmitted by the pilot wire will not be executed.

In general, a pilot wire control system makes it possible to impose externally a lowering of the temperature setpoint, combined with the internal programming and the occupancy detection.

If several lowering requests appear simultaneously, priority is given to the lowest temperature setpoint, thus maximizing savings (see information on priorities for different modes on page 11).

When a signal is sent from the pilot wire, the self learning optimization function is suspended.

Below the different views of the display for each order sent by pilot wire:



Pilot wire = Comfort



Pilot wire = Eco
Comfort - 3,5°C



Pilot wire = Eco - 1
Comfort - 1°C



Pilot wire = Eco - 2
Comfort - 2°C



Pilot wire = Frost
protection



Pilot wire = Stop
(Standby mode)



Pilot wire = Boost

• Load shedding

In case of over consumption, an energy power manager or a disconnecter doesn't trigger a trip of the general circuit-breaker (example: simultaneous operating of your various household appliances and others).

This allows you to reduce the energy power subscribed and therefore optimize your subscription with your energy provider.

IMHOTE creation controllers are designed to operate with **pilot wire load shedding systems**.

Orders sent by the pilot wire are executed by the device's electronic controller which will apply the setpoint corresponding to the order sent. The "Stop" order corresponds to the load shedding. When this order is received, the device switches to "standby" and then returns to the initial operating mode.



Important: Do not use load shedding by a power fail. Unlike pilot shedding, this type of shedding results in a series of sudden and frequent power cuts, which cause premature wear of the device or even deterioration not covered by the manufacturer's warranty.

• Exemption to an order coming from a pilot wire external programmer

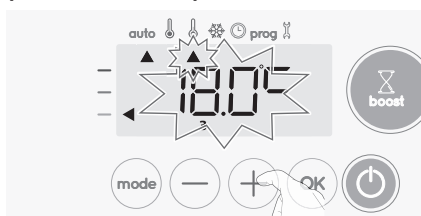
This feature allows you to modify temporarily the setting temperature until the next order sent by the central control unit or the transition to 00:00.

Example:

- 1- The device is in Auto mode. The central control unit sent an Eco order 15,5°C.

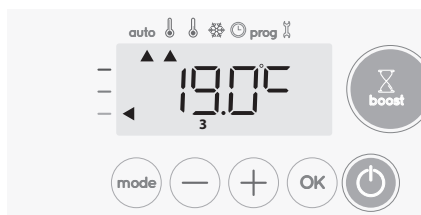


- 2- By pressing **-** or **+**, you can change temporarily the desired temperature up to 18°C for example.



Note: The cursor corresponding to the operating mode, i.e Eco mode in our example, is blinking during the duration of the temporary derogation.

- 3- This modification will be automatically cancelled at the next order sent by the central control unit or the transition to 00:00.



INFORMATION ABOUT PRIORITIES BETWEEN THE DIFFERENT MODES

• Principe

In **Comfort, Eco and Frost protection modes**, only orders of the occupancy sensor and those of the open window sensor will be considered.

In **Auto mode**, the device can receive different orders coming from :

- 7 day and daily programming integrated (Comfort or Eco orders);
- 6-order pilot wire if connected to central control unit;
- Open window detector;
- Occupancy detector.

In general, it is the lowest received order which prevails except when the pilot wire is connected to an energy management system, in this case the orders of the pilot wire take priority.

If an occupancy absence of more than 72 hours is detected, switching to frost protection takes precedence unless a load shedding order is present on the pilot wire.

Special case of self-programming where the temperature level in the room is decided according to the learning of the lifestyle and the optimization mode selected (Opti Comfort or Opti Eco):

- During the programmed passage in period Eco, if a presence is detected in the room, it will be taken into account and the appliance automatically switches to Comfort mode
- During the programmed passage to the Comfort mode period, the absence detection system is temporarily suspended (30 minutes).

In case of programmed Boost, the Boost activation will take precedence over others orders received except when the standby (stop) order is present on the pilot wire, the device will switch off and the Boost will be not activated.

• Examples

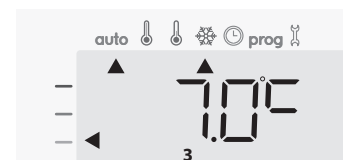
- | | |
|-----------------------------|-----------|
| 7 day and daily programming | = Comfort |
| + Pilot wire 6 orders | = Eco |

= Eco



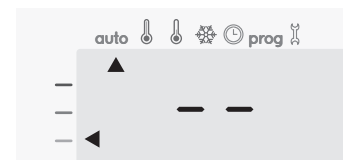
- | | |
|-----------------------------|--------------------|
| 7 day and daily programming | = Comfort |
| + Pilot wire 6 orders | = Eco |
| + Occupancy detector | = Frost protection |

= Frost protection



- | | |
|-----------------------------|-----------------------|
| 7 day and daily programming | = Eco |
| + Pilot wire 6 orders | = Stop (standby mode) |
| + Occupancy detector | = Eco |
| + Open window detector | = Frost protection |

= Standby mode



OPTIONAL: REMOTELY MANAGEMENT BY RF REMOTE CONTROL

• Overview

Your device can be managed by a wireless RF remote control.

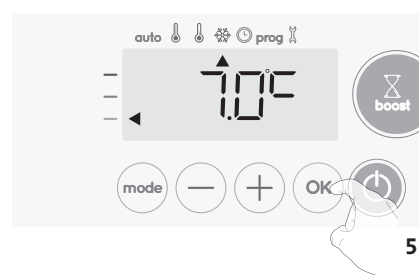
Only the RF pairing procedures to operate on the controller are described in this instructions manual.

For installing and using the remote control, refer to its instructions manual.

• RF pairing between the remote control and the blower

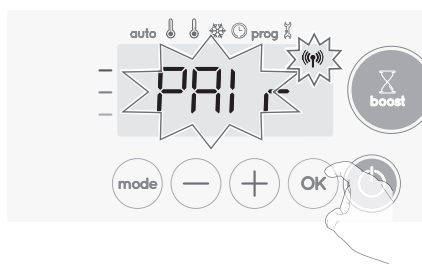
The remote control and the blower are not bonded together at the factory, then proceed as follow:

- 1- From Frost protection mode, press **OK** for 5 seconds.

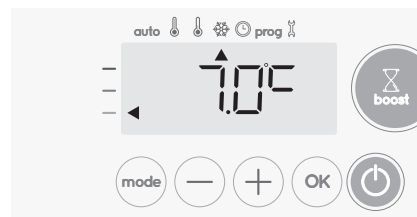


5 sec.

- 2- **The blower is in pairing mode.**
Then proceed to the remote control pairing (refer to its installing and using instruction manual).



The  symbol disappear from the display, the remote control and the blower are not associated.



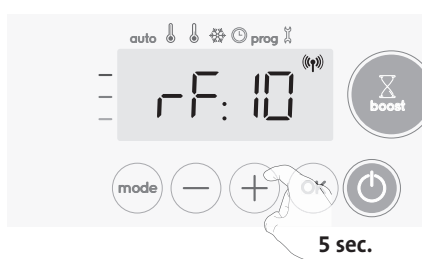
- 3- **When both blower and remote control are linked, the  symbol appears and is constantly displayed. The blower returns automatically to the frost protection mode.**



• Check the RF signal strength

You can check at any time the RF transmission performance between the blower and the remote control.

To view the RF reception level, from Frost protection mode, press  for 5 seconds. Then the level appears on the display.



1 = Low RF transmission level:

To improve the RF transmission performance between the 2 devices and ensure the remotely management is optimized:

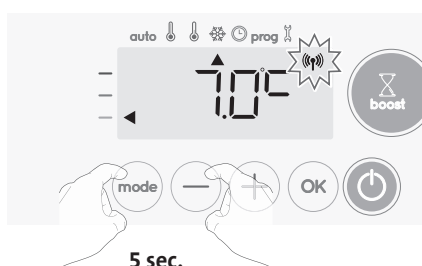
- Please ensure the RF transmission is not interrupted, move the remote control.
- Move the remote control closer to the blower.

10 = High RF transmission level, the location of the remote control is optimized.

• RF pairing cancellation

You can cancel at any time the RF transmission between the blower and the remote control.

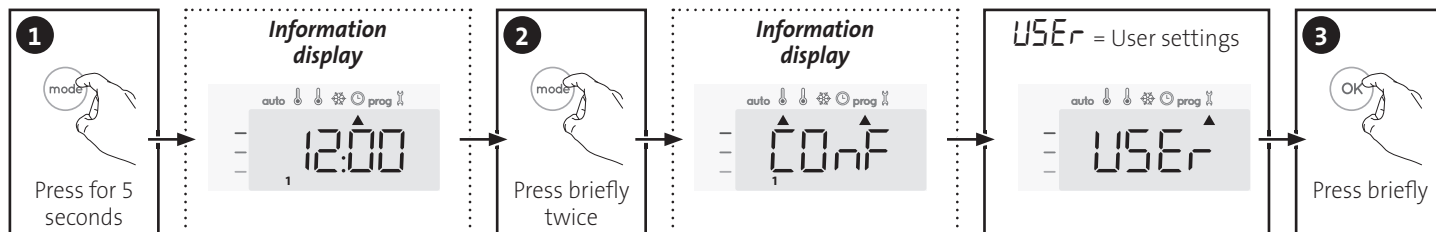
From Frost protection mode press simultaneously on  and  for 5 seconds.



USER SETTINGS

ACCESS

You access to user settings in 3 steps:
From Auto, Comfort, Eco or Frost protection mode :



Setting sequence:

Backlighting → Eco mode temperature lowering-level → Frost protection temperature → Comfort setting temperature limit → Maximal Boost duration → Maximum ambient temperature → Temperature unit

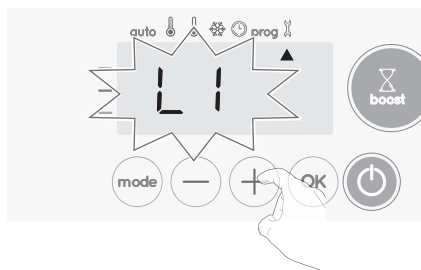
BACKLIGHT SETTING

1- Three modes can be set:

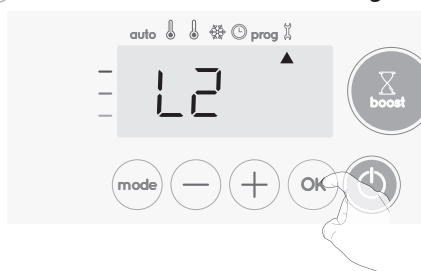
- L1 = Temporary backlighting: Backlight of the display when a button is pressed or during occupancy detection.
- L2 = Non-stop backlighting: Backlight of the display all the time.
- L3 = Temporary backlighting: Backlight of the display when a button is pressed.

L3 mode is the default setting.

Press $\ominus$ or $\oplus$ to choose the setting you require.

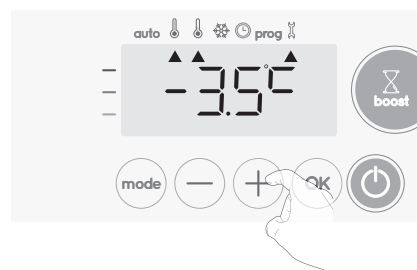


2- Press OK to save and move to the next setting.

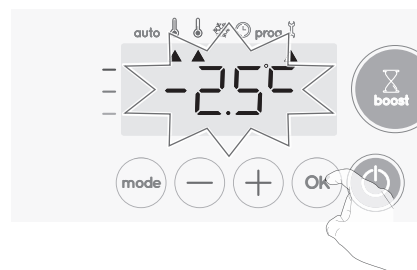


To exit the user settings, press mode twice.

3- Press $\ominus$ or $\oplus$ to obtain the temperature level you require.



4- Press OK to save and move to the next setting.

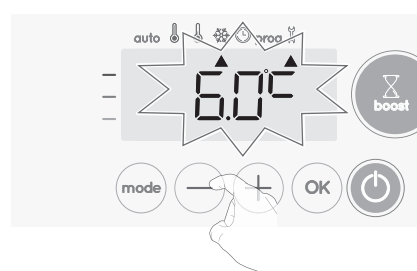


To exit the user settings, press mode twice.

SETTING THE FROST PROTECTION TEMPERATURE

Your device is preset at 7°C. You can adjust the Frost protection temperature from 5°C to 15°C, by intervals of 0.5°C.

5- Press $\ominus$ or $\oplus$ to obtain the temperature you require.



6- Press OK to save and move to the next setting. To exit the user settings, press mode twice.

SETTING THE ECO MODE TEMPERATURE LOWERING-LEVEL

The drop in temperature is set at -3.5°C compared to the set temperature of the Comfort mode. You can adjust the lowered level from -1°C to -8°C, by intervals of 0.5°C.

Important: whatever the lowering level set, the Eco setting temperature will never exceed 19°C.

COMFORT SETPOINT TEMPERATURE LIMIT

You can limit the setting temperature range by introducing a maximum and / or minimum setting, preventing unintentional changes in temperature.

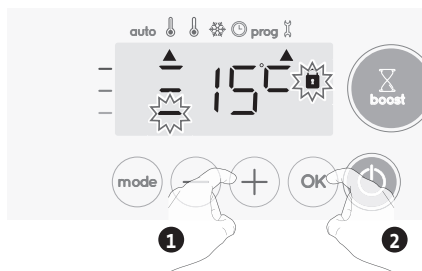
• Low temperature limit

Locking of the setting range using a minimum temperature stop, preventing the temperature from being set below that temperature.

The minimum setting is preset to 7°C. You can adjust from 7°C to 15°C by intervals of 1°C.

- 7- To change the minimum temperature setting, press $\ominus$ or $\oplus$ then save by pressing OK .

If you do not want to change it, press OK : the device changes auto-



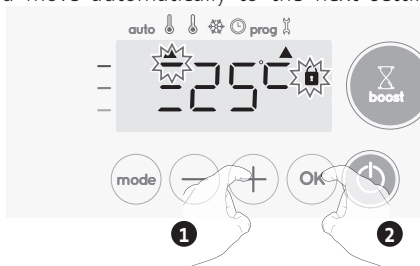
atically to set the maximum setting. To exit the user settings, press mode twice.

• High temperature limit

Locking of the setting range using a maximum temperature increase, preventing the temperature from being set above that temperature.

The maximum setting is preset to 30°C. You can adjust from 19°C to 30°C by intervals of 1°C.

- 8- To change the maximum temperature setting, press $\ominus$ or $\oplus$. To save and move automatically to the next setting, press OK .



To exit the user settings, press mode twice.

SETTING OF THE MAXIMUM DURATION OF AUTHORISED BOOST

The maximum duration of Boost is preset at 60 minutes. You can adjust it from 30 to 90 minutes by intervals of 30 minutes.

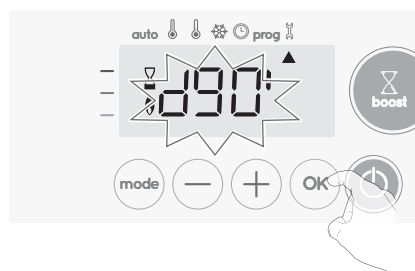
- 9- The Boost symbol and the heating indicator appears on the display and the preset duration of 60 minutes flash.



- 10- Press $\ominus$ or $\oplus$ to display the desired duration.



- 11- To save and move automatically to the next setting, press OK .



To exit the user settings, press mode twice.

SETTING OF THE MAXIMUM AMBIENT TEMPERATURE FOR THE AUTOMATIC STOP OF THE BOOST

When the Boost is enabled, the device has to heat the room until the temperature limit: the maximum ambient temperature.

When it is reached, the Boost stops automatically.

It is preset at 39°C, you can adjust it from 25°C to 39°C by intervals of 1°C.

The Boost symbol and the heating indicator appear on the display and the maximum temperature flashes.

- 12- You can set the Boost maximum temperature by pressing $\ominus$ or $\oplus$ from 25°C to 39°C by intervals of 1°C.

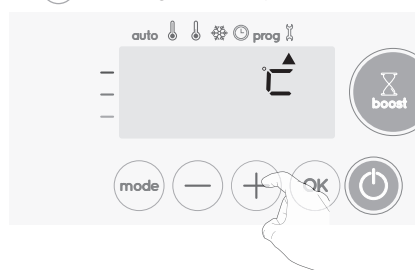


- 13- To save and move automatically to the next setting, press OK . To exit the user settings, press mode twice.

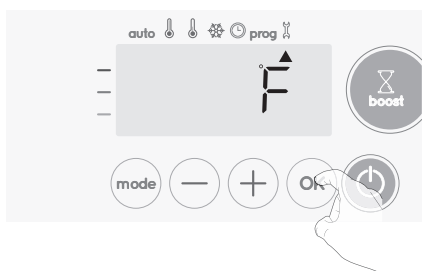
SETTING THE TEMPERATURE UNIT

The pre-set temperature unit is degrees Celsius.

- 14- Press $\ominus$ or $\oplus$ to change the temperature unit.



15- To save and move automatically to the next setting, press **OK**.

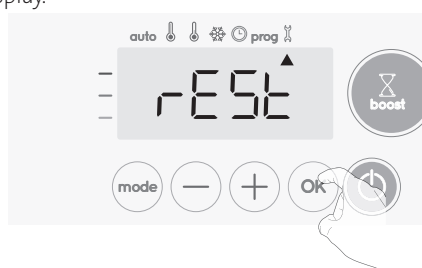


To exit the user settings, press **mode** twice.

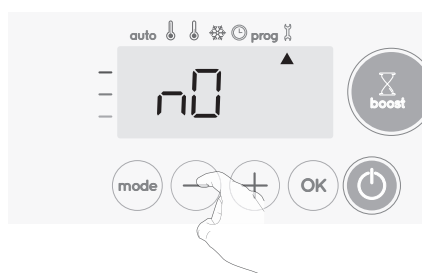
RESTORING FACTORY SETTINGS

In order to come back to factory settings, proceed in the following order:

1- From the setting of the temperature unit, press **OK**. **rest** appears on the display.



2- **NO** appears. Press **-** or **+** to select **YES**.



yes = Factory settings reset
NO = Factory settings not reset

3- Press the key **OK** for 5 seconds. The device returns to its initial configuration and goes back automatically to the home display of the user settings.



The following factory values will be effective:

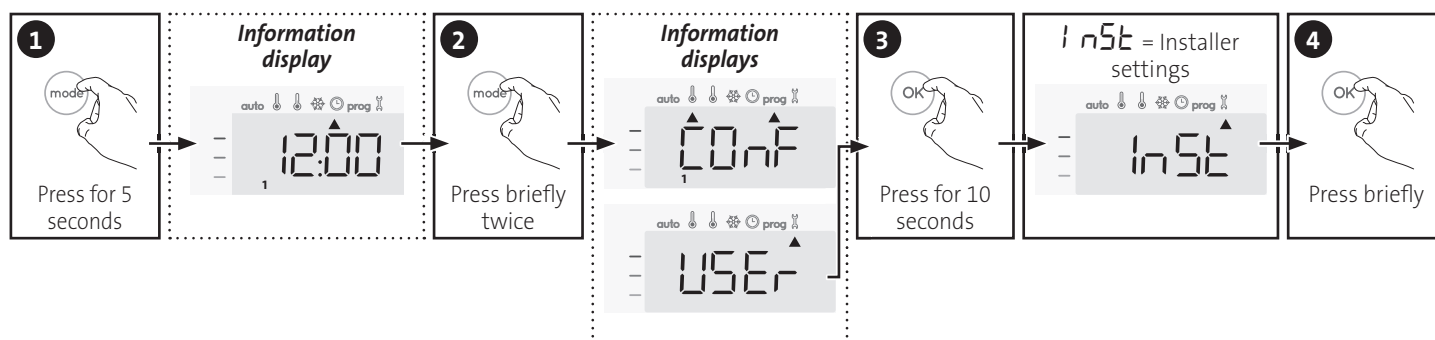
Parameters	Factory settings
Operating	
Comfort setting temperature	19°C
Boost duration	60 min.
Keypad lock	Disabled
User settings	
Backlighting	L3
Eco mode temperature lowering-level	-3,5°C
Frost protection temperature	7°C
Minimum set of Comfort setting temperature	7°C
Maximum set of Comfort setting temperature	30°C
Maximal Boost duration	60 min.
Maximum ambient temperature for the automatic stop of the Boost	39°C
Temperature unit	°C

Press **mode** to exit the user settings.

INSTALLER SETTINGS

ACCESS

You access to installer settings in 4 steps:
 From Auto, Comfort, Eco or Frost protection mode :



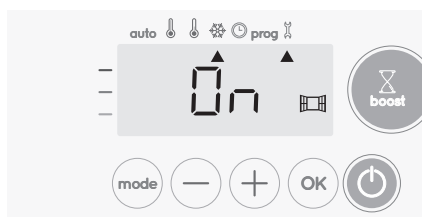
Setting sequence:

Configuration of detection modes → Dual optimization feature → PIN code lock → Restoring factory settings

CONFIGURATION OF DETECTION MODES

● Open window detection, activation/ deactivation of the Auto mode

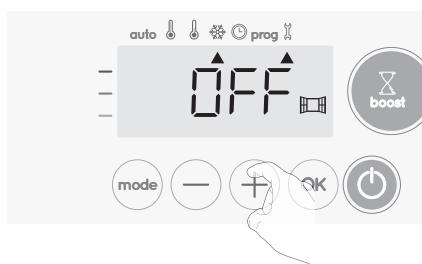
The automatic mode enabled is the default setting.



1- Press **-** or **+**.

On = automatic mode enabled.

OFF = automatic mode disabled.



2- To save and move automatically to the next setting, press **OK**.
To exit the user settings, press **mode** 3 times.

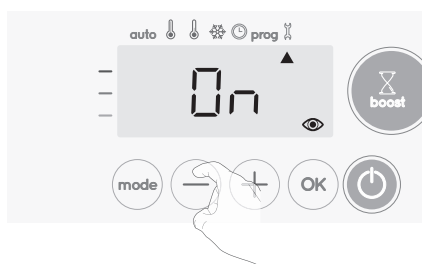
● Occupancy detection, activation/deactivation

1- The occupancy detection enabled is the default setting.

2- Press **-** or **+**.

On = occupancy detection enabled.

OFF = occupancy detection disabled.



3- To save and move automatically to the next setting, press **OK**. To exit the user settings, press **mode** 3 times.

DUAL OPTIMIZATION FEATURE

● Overview

- **Dual function optimization, priority to comfort or energy savings, the choice is yours:** Depending on various parameters: room inertia, ambient temperature, desired temperature, the device calculates and optimizes the programming for each heating period whether set to Comfort or Savings (Eco):

- In **OPTI ECO mode (efficiency priority)**, the devices inbuilt algorithms will calculate the best compromise in order to guarantee maximum energy savings throughout the programmed increase and decrease phases.

In this mode, a slight drop in the temperature level at the beginning and end of the comfort period is allowed to maximize energy savings.

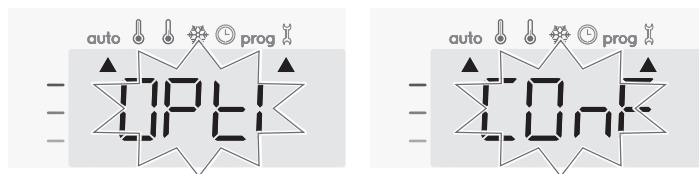
- In **OPTI COMFORT mode (priority to comfort)**, the device intelligence

calculates the best compromise in order to guarantee maximum comfort during the programmed increase and decrease phases. In OPTI COMFORT mode, the priority is given to anticipating and maintaining the comfort temperature during periods of detected occupancy.

● Optimization choice

The **OPTI COMFORT** mode is activated by default.

The word **OPTI** will appear briefly on the display then it will alternate with the set mode **CONF**, **ECO** or **OFF**.

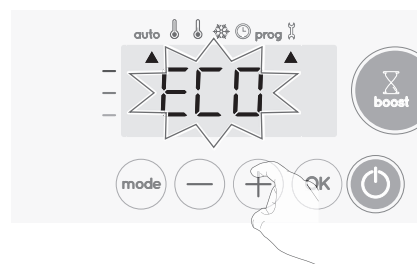


1- Press **-** or **+**.

CONF = Optimisation feature activated for OPTI COMFORT mode, priority to comfort.

ECO = Optimisation feature activated for OPTI ECO mode, priority to energy efficiency.

OFF = Optimisation feature disactivated.



2- To save and move automatically to the next setting, press **OK**. To exit the user settings, press **mode** 3 times.

PIN CODE LOCK

● Overview

Your heating device is protected by a safety code against nonauthorised use. The PIN code (Personal Identity Number) is a customisable 4 numbers code. When enabled, it prevents access to the following settings:

- Selecting the Comfort mode : The access to the Comfort mode is forbidden, only the Auto, Eco and Frost protection modes are available.
- Minimum and maximum Limits of the setting temperature range (the Comfort temperature modification is forbidden out of the authorised setting range).
- Programming mode.
- Open window detection settings.
- Occupancy detection settings.
- Optimization choice.
- Setting the Eco mode temperature lowering-level.
- Setting the Frost protection temperature.

3 important steps are needed for the first use of the PIN code lock:

1 - PIN code initialisation, enter the preset PIN code (0000) to access to the feature.

2 - Activation of the PIN Code to lock settings which will be protected by the PIN code.

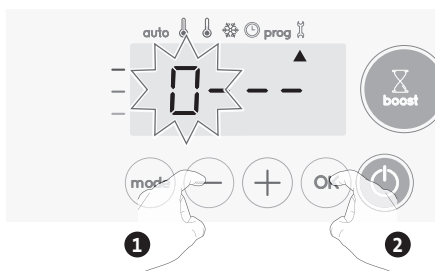
3 - Customizing the PIN code, replace 0000 by the customized code

● PIN code initialisation

By default, the PIN code is not enabled. OFF appears on the display.

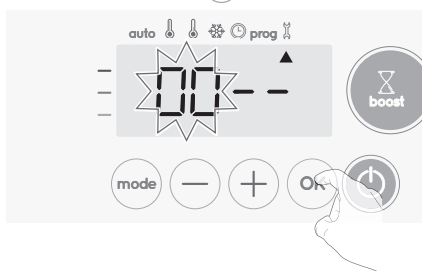
1- By default registered PIN code is 0000.

Press **-** or **+** to select 0. It is blinking. Save by pressing **OK**.



2- For others numbers, select 0 by press **OK**.

When 0000 appears, press on **OK** again to save and exit.



The PIN code is initialized, the next setting automatically appears: PIN Code activation.

● Activation/deactivation of the PIN Code

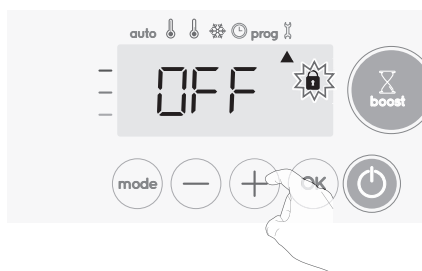
1- OFF appears on the display.

Press **-** or **+** to enable PIN code.

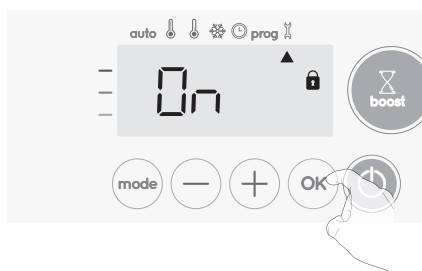
On appears on the display.

On = PIN code enabled

OFF = PIN code disabled



2- Press **OK** to save and return to the home installer settings display.



The PIN code is enabled. Any modification of reserved settings listed in "Overview" is now impossible.

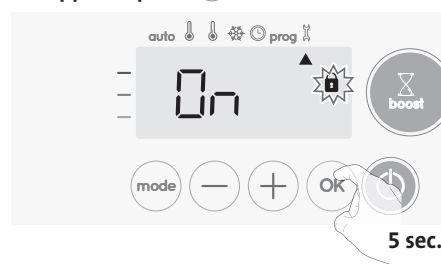
● Customizing the PIN code

If you have just activated the PIN code, follow the stages described below.

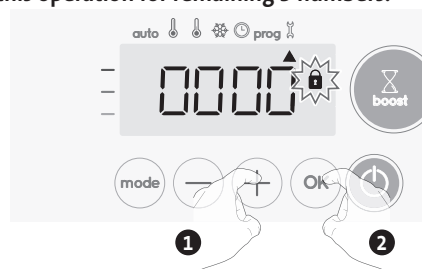
Alternatively, you must copy the steps 1 and 2 of the initialisation process as well as the steps 1 and 2 of the activation process before personalising the PIN code.

Please remember that the personalisation of the PIN code can only be set once the initialisation and activation of the PIN code has been completed.

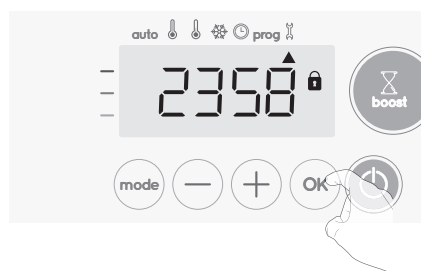
1- When On appears, press **OK** for at least 5 seconds.



2- The 0000 code appears and the first number blinks. Press **-** or **+** to select the first desired number then press **OK** to save and exit. Repeat this operation for remaining 3 numbers.



3- Press **OK** to confirm. The new code is now saved.



4- Press again on **OK** to exit setting PIN code mode and go back to the home display of the installer settings.

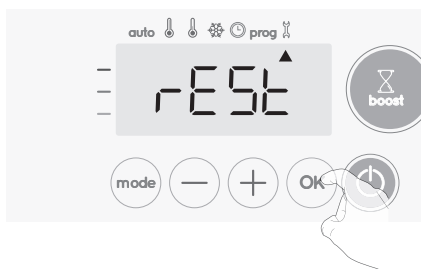


To exit the Installer settings, press **mode** twice.

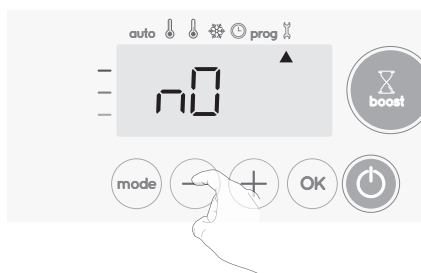
RESTORING FACTORY SETTINGS

If the PIN code protection is disabled, the user and installer settings are re-initialized:

1- From the PIN code setting, press **OK**. rest appears briefly on the display.



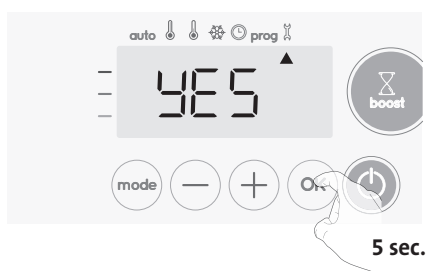
2- NO appears. Press $\ominus$ or $\oplus$ to select YES.



yes = Factory settings reset

NO = Factory settings not reset

3- Press the key $\odot$ for 5 seconds. The device returns to its initial configuration and goes back automatically to the home display of the installer settings.



The following factory values will be effective:

Settings	Factory settings
Operation	
Comfort setting temperature	19°C
Boost duration	60 min.

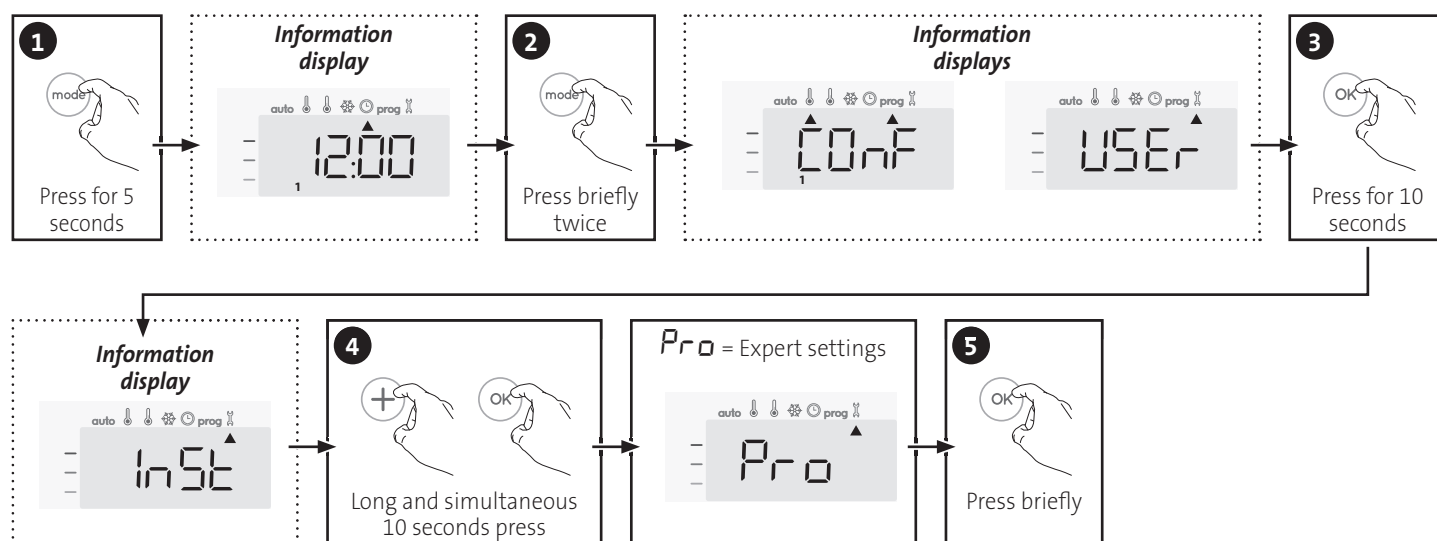
Settings	Factory settings
Keypad lock	Disabled
User settings	
Backlighting	L3
Eco mode temperature lowering-level	-3,5°C
Frost protection temperature	7°C
Minimum set of Comfort setting temperature	7°C
Maximum set of Comfort setting temperature	30°C
Maximal Boost duration	60 min.
Maximum ambient temperature for the automatic stop of the Boost	39°C
Temperature unit	°C
Installer settings	
Automatic open window detection	Enabled
Occupancy detection	Enabled
Dual optimization feature	Opti comfort
PIN code protection	Disabled
Value of the PIN code	0000

To exit the installer settings, press $\odot$ twice.

EXPERT SETTINGS

ACCESS

You access to expert settings in 5 steps.
From Auto, Comfort, Eco or Frost protection mode :



Setting sequence:

Ambient temperature sensor adjustment → Setting the power → Restoring factory settings

AMBIENT TEMPERATURE SENSOR ADJUSTEMENT

● Overview

Important: This operation is reserved for professional installers only; any wrong changes would result in control anomalies.

In which case if the temperature measured (measured by reliable thermometer) is different by at least 1°C or 2°C compared to the setting temperature of the radiator.

The calibration adjusts the temperature measured by the ambient temperature sensor to compensate for a deviation from + 5°C to - 5°C by intervals of 0.1°C.

● Ambient temperature sensor adjustment

1- If the room temperature difference is negative, example :

Setting temperature (what you want) = 20°C.

Ambient temperature (what you read on a reliable thermometer) = 18°C.

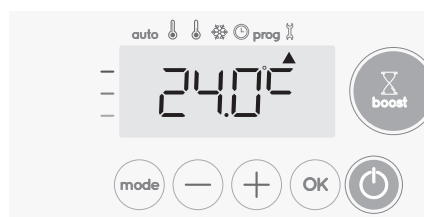
Difference measured = -2°C.

Important: Before carrying out the calibration it is recommended to wait for 4h after the setting temperature modification to insure that the ambient temperature is stabilized.

To correct, then proceed as follows :

Sensor temperature = 24°C

(The measured temperature may be different due to the location of the thermostat in the room).



Decrease the temperature measured by the ambient temperature sensor by 2°C by pressing $\ominus$.

In our example the measured temperature by the sensor goes from 24°C to 22°C.



2- If the room temperature difference is positive, example :

Setting temperature (what you want) = 19°C.

Ambient temperature (what you read on a reliable thermometer) = 21°C.

Difference measured = +2 °C.

To correct, then proceed as follows :

Sensor temperature= 21°C.

(The measured temperature may be different due to the location of the thermostat in the room).



Increase the temperature measured by the ambient temperature sensor by 2°C by pressing $\oplus$.

In our example the measured temperature by the sensor goes from 21°C to 23°C.

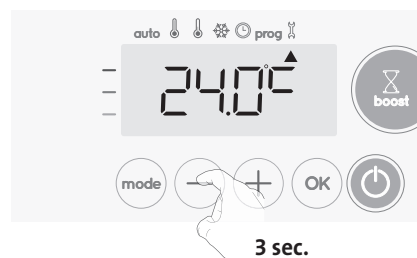


To validate, save the new value and exit the mode, press OK . To exit the Expert settings, press mode 3 times.

● The reset to zero of the sensor calibration

To put the value of the correction to "0", do the following :

1- When the temperature measured by the sensor appears, press $\ominus$ or $\oplus$ for at least 3 seconds.



2- To save and move automatically to the next setting press OK . To exit the Expert settings, press mode 3 times.

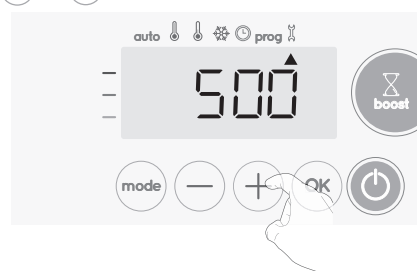


Important: These changes should be performed by a qualified staff, it should be performed in production or on site during the first installation.

SETTING THE POWER

To have a controller adapted to the towel rails and estimate the energy consumed, it is essential to set the power of the device.

1- Pre set value: 500W. Select a value between 500W and 1500W by pressing $\ominus$ or $\oplus$.



2- To save and move automatically to the next setting press OK .

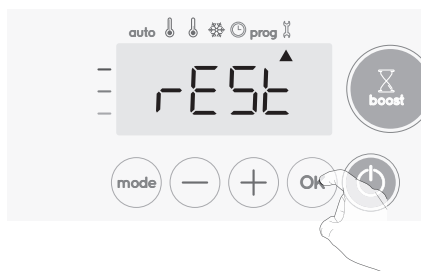


3- To save the Expert settings, press mode 3 times.

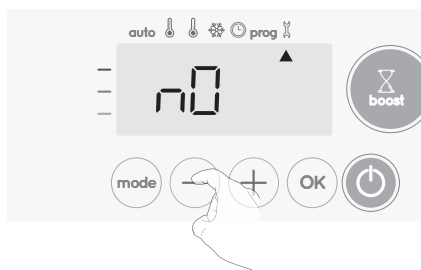
RESTORING FACTORY SETTINGS

If the PIN code protection is disabled, the user, installer and expert settings are re-initialized:

- 1- From the Power setting setting, press . rest appears on the display.

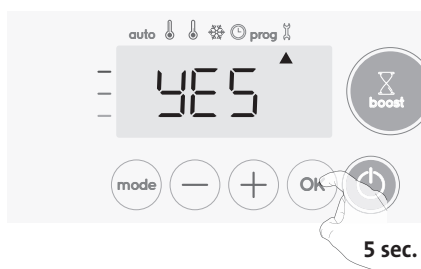


- 2- NO appears. Press or to select YES.



yes = Factory settings reset
NO = Factory settings not reset

- 3- Press the key for 5 seconds. The device returns to its initial configuration and goes back automatically to the Auto mode.



The following factory values will be effective:

Settings	Factory settings
Operating	
Comfort setting temperature	19°C
Boost duration	60 min.
Keypad lock	Disabled
User settings	
Backlighting	L3
Eco mode temperature lowering-level	-3,5°C
Frost protection temperature	7°C
Minimum set of Comfort setting temperature	7°C
Maximum set of Comfort setting temperature	30°C
Maximal Boost duration	60 min.
Maximum ambient temperature for the automatic stop of the Boost	39°C
Temperature unit	°C
Installer settings	
Automatic open window detection	Enabled

Settings	Factory settings
Occupancy detection	Enabled
Dual optimization feature	Opti comfort
PIN code protection	Disabled
Value of the PIN code	0000
Experts settings	
Power	500W

To exit the Expert settings, press 3 times.

TECHNICAL SPECIFICATIONS

General specifications:

- Operating voltage: 230V +/-10% 50Hz.
- Maximum power of 1500W, resistive load.
- Power supply cable: 800mm, 3 Conductors.
- Radio frequency: 2,4035 Ghz / 2,4055 Ghz / 2,4075 Ghz.
- Maximum RF power transmitted: <1mW.
- Standby consumption : <0.5W.
- Electronic PID (Proportional Integral Derivative) control, triggered by a triac.

Environnement:

- IP44 (control panel horizontal oriented after installation).
- Important:** The IP (protection rating) is obtained following horizontal fitting of the towel heater radiator in line with best industry practices, and respecting all the technical constraints. After horizontal installation on the towel heater/radiator, the control panel must be properly tightened (tightening torque: 0.5 Nm) and fitted with the original o-ring (supplied). The post-fitting IP rating will have to be confirmed by means of a test carried out in an accredited laboratory in accordance with applicable standards.
- Operating temperature: 0°C to +50°C.
- Comfort desired temperature can be set anywhere between +7°C and +30°C approximately.
- Storage temperature: -20°C to +70°C.
- Class II, after installation under the responsibility of the integrator (according to EN60335-1).
- NTC (negative temperature coefficient) electronic temperature sensor.

Packaging:

- Packing unit: box contains fifty items.
- Individual packing: bubblewrap packing bag.

Manufactured by: IMHOTEP création (contact@imhotepcreation.com)

Compliance declaration: we hereby declare under our sole responsibility that the products described in these instructions comply with the provisions of Directives and harmonized standards listed below:

- RED 2014/53/EU:
Article 3.1a (Safety): EN60335-1/ EN60335-2-30/ EN60335-2-43/ EN62333;
 - Article 3.1b (EMC): ETSI EN301489-1 / ETSI EN301489-3;
 - Article 3.2 (RF): ETSI EN 300440;
 - ERP 2009/125/CE;
 - Regulation 2015/1188/UE;
 - ROHS 2011/65/EU: EN50581
- and are manufactured using processes which are certified ISO 9001 V2008.



The symbol affixed on the product indicates that you must dispose of it at the end of its useful life at a special recycling point, in accordance with European Directive WEEE 2012/19/EU. If you are replacing it, you can also return it to the retailer from which you buy the replacement equipment. Thus, it is not ordinary household waste. Recycling products enables us to protect the environment and to use less natural resources.