



# **INSTALLATION MANUAL AND INSTRUCTIONS FOR USE**

#### INDEX

Α.	INTRODUCTION.	1
•	OPERATING MODES.	.1
•	OTHER FEATURES.	.2
٠	WARNING RISK OF ELECTRIC SHOCK!	.2
В.	INSTALLATION GUIDE.	2
C.	RECYCLING.	2
D.	INSTALLATION WITH PILOT THREAD	2
E.	DESCRIPTION OF THE CONTROL.	3
F.	OPERATION OF THE CONTROL	4
٠	ON / STAND-BY	.4
٠	"COMFORT" Y "NIGTH" MODES	.4
G.	EQUIPMENT OPERATION.	4
•	COMFORT MODE	.4
٠	NIGHT MODE.	.4
•	ANTI-FREZE MODE	.4
•	TIMER MODE 2 H.	.5
•	PILOT THREAD MODE (ONLY FOR PRODUCT VERSIONS EQUIPPED WITH THIS MODE)	.5
•	PROGRAMMING MODE	.5
Н.	LOKING KEY.	6
I.	OPEN WINDOWS FUNTION.	6
J.	NOTES	6
K.	INSTALLATION	6
•	VERY IMPORTANT	6
•	FIXING TO THE WALL.	6
L.	WARRANTY	.7

## A. INTRODUCTION

Towel rails incorporate a digital chronothermostat for automation and control. By means of an external sensor it is able to maintain the ambient temperature in the desired value. This control has a modern and simple design, suitable for all types of environments.

It is easy to install and is available in various colors.

The control is a certified product and complies with the following regulations:

- Eco-design Directive for Energy-using Products, 2005/32/EC (<0,5W).
- EN 62233:2008
- EN 55014-1:2006 + A1:2009 + A2:2011
- EN 61000-3-2:2014
- EN 61000-3-3:201

#### • **OPERATING MODES**

Seven modes of operation: Comfort, Night, Anti-ice, Pilot Wire, Programming, 2-Hour Timer and Stand-by.

- "Comfort" mode: the electronic control maintains the temperature at the value selected for this mode.
- "Night" mode: the electronic control keeps the temperature below the "Comfort" temperature selected for this mode.
- "Frost-protection" mode: the electronic control keeps the temperature above 7 ° C.
- "Pilot Wire" mode: the operations of the device are controlled by an external signal received from the central "Pilot Wire" system (only for installations with this centralized system).
- "2h Timer" mode: the electronic control keeps the heating element on for a period of 2 hours regardless of the set temperature. At the end of the 2 hour period the device returns to the previous operating mode. For safety reasons, during the two hours of this time period, the ambient temperature is automatically controlled to not exceed 32 ° C
- "Program" mode: the electronic control operates according to a daily / weekly program. The program is defined by the user.
- Stand-by mode: the electrical resistance does not work and all the lights are off, however the device is still
  operative.

# • OTHER FEATURES

- LCD screen showing the set temperature, time, mode of operation, etc.
- The user can configure the daily / weekly program to suit their lifestyle.
- Open windows function: this function allows the detection of a windows opening when detecting a sudden decrease in temperature in the room. In this case, the heating element is deactivated for a maximum of 30 minutes or until the increase in room temperature reveals that the window has been closed.

# • WARNING RISK OF ELECTRIC SHOCK

- Disconnect power before proceeding with installation.
- Keep this instruction sheet carefully and read it carefully before using the equipment.
- The thermostat and timing control has been designed for exclusive use in a towel rail.
- Do not use in a towel rail for the drying of garments of synthetic or acrylic composition. This appliance is only for the drying of textiles washed in water. You should check before placing towels or other type of garment, to ensure it is able to withstand high temperatures. The towel rail can reach up to 95 ° C.
- Before using, check that the line voltage is the same as specified (see technical specifications).
- Disconnect power before cleaning or servicing the product.
- In case of damage to the power cable, switch off the device and do not force it
- Damaged power cables can be replaced only by the authorized service manufacturer or service center.
- Failure to comply with the above rules could result in accidents and invalidate the warranty.
- Transport the towel rail only in its packaging.
- Element manipulation and control can only be done by the product manufacturer.
- Children under 8 years of age and persons with physical, sensory or mental impairment may only use the device under supervision. Children should not play with the device.
- Cleaning and maintenance intended to be carried out by the user should never be carried out by unsupervised children.
- Never use chemical cleaners to clean and maintain the towel rail. Use only a dry cloth or a cloth moistened with water.
- Do not use the product before it is fully and correctly installed.
- The towel rail must be installed so that the lowest part is at least 60 cm from the floor.

# B. INSTALATION GUIDE.

- Make sure the radiator is not leaking.
- Ensure the towel rail will not be placed directly above an electrical outlet.
- Avoid jets of water by hitting the equipment.
- Make sure that the mains voltage is the same as stated in the technical specification.
- When installing in a room with a bath or shower, observe the "protection zones" indicated in the RBT (in the UK according to the IEE cable guidelines). In addition, you must comply with all local safety regulations.
- The device must be protected by a 30 mA differential circuit breaker
- For models other than those with a plug, it is necessary to install a suitable omnipolar switch to ensure complete disconnection if necessary
- WARNING! Do not turn the device more than 30° in both directions.
- When setting up the equipment correctly, the control must always be in the lower position, it is strictly forbidden to place the thermostat in the upper position (see figure)
- Connect the energy cable.

# C. RECYCLING.

This product can not be treated as normal household waste.

The purpose of recycling is to preserve the environment and reduce the consumption of natural resources.

This symbol indicates the obligation to take the product to an appropriate waste collection point, in order to comply with Directives 2002/96 / EC (WEEE - WEEE).

# X

# D. INSTALLATION WITH PILOT THREAD.

The centralized control unit "Pilot Wire" can remotely control a towel rail in "Pilot Wire" mode.

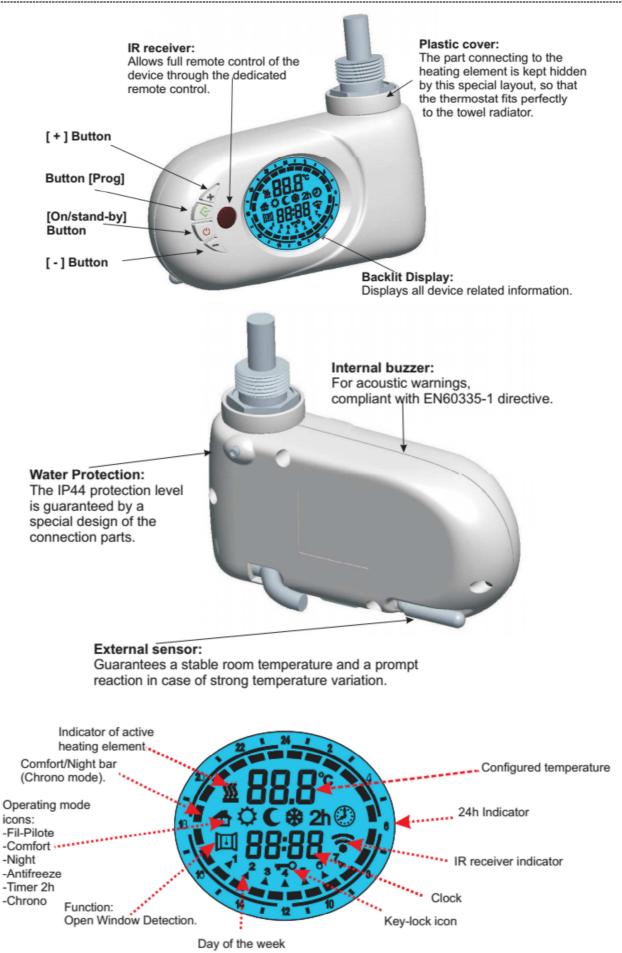
The brown wire is the line cable (L), the gray wire is the neutral (N) and the black wire is used for signal reception. Never connect the black wire to ground.

The equipment without possibility of connection "Pilot Wire" can not be controlled remotely. The brown wire is the line (L), the blue wire is the neutral (N) and the yellow-green wire must be grounded.





# E. DESCRIPTION OF THE CONTROL.

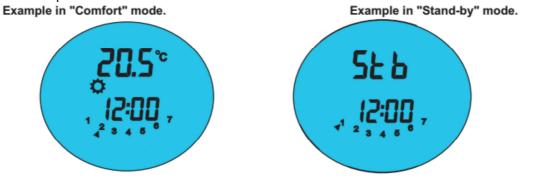


# F. OPERATION OF THE CONTROL.

# • ON/STAND-BY.

Press the "ON / STAND-BY" key to switch on the device or to enter Stand-by mode. When activated, the bottom of the display shows the current time, while the set operating mode and the desired temperature are shown at the top. When in Stand-by mode, the time, day of the week and the message "Stb" are indicated.

Note: When the device enters Stand-by mode it emits two beep with a duration of 0.5 s. When the device is activated it emits a beep of 1 s duration.



#### • "COMFORT" AND "NIGHT" MODES..

Two different temperature levels can be set:

• "Comfort" temperature: is the temperature used for the "Timer", "Comfort" and "Pilot Wire"

• "Night" Temperature: is the temperature used for "Night" and "Timer" modes.

You can set the desired "Comfort" temperature in "Comfort" mode by pressing the [+] and [-] buttons. The configurable temperature range is 7  $^{\circ}$  C to 32  $^{\circ}$  C.

You can set the desired "Night" temperature in "Night" mode by pressing the [+] and [-] buttons. The configurable temperature range is 7 ° C to 31.5 ° C.

IMPORTANT! The "Night" temperature should be lower than the "Comfort" temperature. For this reason the "Night" temperature can be set to a value between 7 ° C and the setting for "Comfort" minus 0.5 ° C. The "Comfort" temperature can be set in the range of 32 ° C and the "Night" temperature + 0.5 ° C.

# G. EQUIPMENT OPERATION.

Press the [Prog] button to select the desired mode of operation. An icon on the display indicates which operating mode is selected, according to the following table:



## • COMFORT MODE.

The "Comfort" mode keeps the temperature stable at a selected value. Select this mode for normal operation of the equipment.

To configure this operating mode:

- Press the [Prog] button until the "Comfort" mode is displayed.
- Select the desired temperatura (Comfort) using [+] y [-] buttons, wait until the display shows the temperatura flash.

#### • NIGHT MODE.

The "Night" mode sets a temperature value below the "Comfort" temperature value. It is suggested to establish this mode of operation during the night or when the room is not occupied more than 2 hours.

- Press the [Prog] button until "Night" mode is displayed.
- Select the desired temperature (Night) using [+] and [-] buttons, wait until the display stops blinking.

#### • ANTI-FREEZE/FROST-PROTECTION MODE.

In the "Anti-freeze" mode the temperature is set to 7 ° C. The device activates the heating element when the ambient temperature falls below 7 ° C. It is recommended to set this mode of operation when the room is not occupied for several days.

# INSTALLATION MANUAL AND INSTRUCTIONS FOR USE

## • Press the [Prog] button until "Anti-ice" mode is displayed.

#### TIMER MODE 2 H.

This mode can be used to quickly warm the room or to accelerate drying of the towel.

- Press the [Prog] button until the "Timer 2h" icon is displayed. The towel rail is activated for 2 hours, to a
  maximum temperature of 32 ° C.
- This mode will turn off automatically after a period of 2 hours and the device returns to the previously set mode.
- The user can switch to another operating mode at any time simply by pressing [Prog].

#### • PILOT THREAD MODE (ONLY FOR PRODUCT VERSIONS EQUIPPED WITH THIS MODE).

In this mode, the device is driven by a central control system that sets the mode of operation for all devices connected to it.

The device works with the most advanced system and six commands, being able to perform the following functions:

- Stand-by: Turn off the towel rail,
- Comfort: maintains the "Comfort"
- Eco: keeps the temperature 3.5 ° C below the "Comfort".
- Anti-ice: maintains temperature at 7 ° C
- Eco-1: maintains the temperature 1 ° C below the "Comfort" temperature.
- Eco-2: keeps the temperature 2 ° C below the "Comfort" temperature.

#### • THE USER CAN SET THE DESIRED TEMPERATURE ON THE DEVICE.

- Press the button until the "Pilot Wire" icon appears.
- Set the desired temperature with the [+] and [-] buttons, wait until the displayed temperature stops blinking.

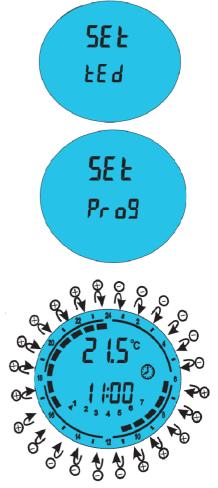
#### • **PROGRAMING MODE**

In this operating mode the user is allowed to set different temperature values (Comfort and Night) for each hour and every day of the week. The "Comfort" and "Night" temperatures and related time intervals can be programmed as follows:

To activate this function, press the [Prog] button until the "Programming" icon appears.

Set the day of the week and time.

- Enter Stand-by mode and press the [-] button for at least 3 seconds.
- At the top of the screen the message "Set" is displayed.
- To set the day and time, press the [+] button until the "tEd" message appears at the bottom of the screen (see picture on the right).
- Press the [Prog] button to enter edit mode.
- An arrow flashes indicating the currently selected day.
- Press the [+] and [-] buttons to select the correct day.
- Press the [Prog] button to confirm the selected day.
- Following the above steps, the procedure for selecting the time starts and the display shows the current time.
- Use the [+] and [-] buttons to set the correct time.
- Confirm the selected value by pressing the [Prog] button.
- The same procedure used to change the time is used to change the minutes.
- Confirm the selected value by pressing the [Prog] button.
- At the end of this procedure, the thermostat will return to Standby mode.
- Configure the program.
  - Enter Stand-by mode and press the [-] button for at least 3 seconds.
  - "Set" is displayed at the top of the screen.
  - To set the day and time press the [+] button until "Prog" appears at the top of the screen (see figure on the right).
  - Press the [Prog] button to enter edit mode.



- You can now define a time interval for each day of the week.
- The procedure starts with day 1. The desired sequence can be set with the [+] and [-] buttons for each hour of the day, it is possible to assign the "Comfort" temperature mode (full bar indicator) by pressing [+] or the "Night" temperature (without bar) by pressing the [-] button (see previous image).
- Press [Prog] to confirm the setting entered for day 1 and repeat the same procedure for the remaining 6 days of the week.

#### H. LOCKING KEY

You can lock the device buttons to prevent accidental or unwanted modification of the settings. Press the [Prog] button for 3 seconds to lock all buttons except the ON / STAN-BY button. This is done by activating the keyboard lock icon on the screen.

To unlock, press the [Prog] button again for 3 seconds. The keyboard lock icon disappears on the screen.

#### I. OPEN WINDOWS FUNCTION.

Allows the detection of an open window if a sudden drop in temperature is detected in the room. In such a case, the device deactivates the resistance for 30 minutes maximum or until an increase in room temperature reveals that the window has been closed.

To activate this function:

- Enter Stand-by mode.
- Press the [+] button for 3 seconds.
- Press the [+] button to turn the function on or off.
- Press the [Prog] button to return to the "Stand-by" mode.

When this function is activated, the "Window Open" icon lights up on the screen. When the device detects that the window is potentially open, the "Open Window" icon will start blinking. When the function is disabled the "Open Window" icon does not light up on the screen.

The device may fail to detect an open window eg if the thermostat is located in an isolated area of the room and away from drafts or if the thermostat is placed near an external heat source or if the variation of the temperature in the room is too slow.

## J. NOTES.

When the "Active resistance" symbol is lit, it indicates that the towel rail is heating up.

The manufacturer reserves the right to make changes to the product described in this manual, at any time and without prior notice.

In case of loss of power, the configuration of the "Programming" mode (day of the week, hour, daily program for the current week) is stored in the memory for a few minutes, after which the configuration can be lost.

#### K. INSTALLATION.

#### • VERY IMPORTANT.

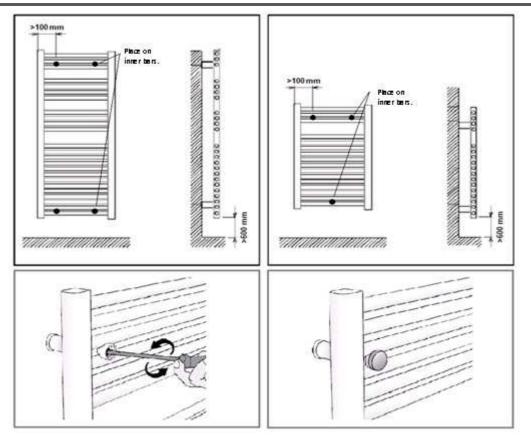
- Read the instructions and manual before installing the equipment.
- Observe the warnings carefully.
- Install the equipment in a place where air can circulate.
- It is advisable to assemble it by qualified personnel

#### FIXING TO THE WALL.

Place the electric towel rail against the wall in the desired position. Using a pencil, mark around the support tubes their position on the wall. Make sure there is no wiring in the wall where you will drill. The position of the supports is indicated in the figure below:

- Drill the holes in the tile /wall to the required depth. Important: Holes must be drilled correctly aligned and suitable to the diameter of the block and the length of the wall anchors.
- Insert the fixing lugs into the holes using a screwdriver. Repeat the procedure for each fixing bracket.
- Fit the electric radiator after fixing the plugs in the desired location, then tighten the brackets with the anchor bolts.

#### **INSTALLATION MANUAL AND INSTRUCTIONS FOR USE**



## L. WARRANTY.

The company offers a technical guarantee for the period of 2 years. For this guarantee to be valid you must present the original invoice, delivery note or purchase receipt. Prerequisites:

- The guarantee only covers manufacturing defects and/or any problem occurring from such defects. All problems arising from installing and undersized heater (not enough heat, improper installation, etc) are not covered by this guarantee.
- This heater is for domestic & light commercial use only, installation in any other environment voids this guarantee
- Electrorad UK Limited reserves the right to decide whether to repair or replace any defective part or to replace the entire heater.
- All costs arising from any damage caused by incorrect usage, transport, electrical supply are not covered by this guarantee, nor is any malicious damage.

This guarantee does provide compensation for incidental or consequential damage or injuries.



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