



Dyna with energy consumption gauge

Our most versatile thermostat for electric heated towel rails.

Dyna is a digital electronic smart device which is great for temperature control in heated tower rails. It can be used in conjunction with a wide range of heating elements that can be easily connected to the device.

The 5-button on-board keypad allows the user to access a wide variety of functions, and the large round back-lit display constantly shows all the information concerning the functioning of the thermostat through pleasantly placed icons.

The functions of the device (COMFORT, NIGHT, ANTIFREEZE, BOOST and CHRONO) also include a PILOT-WIRE mode, in case of such input arrangement. CHRONO mode offers a separate programmable time schedule for each day of the week.

Advanced settings are available, such as keypad lock, to prevent young children from using it, and open window detection, which is useful when it comes to saving energy. When the thermostat is not in use, the display constantly shows all the basic information, guaranteeing an elegant unique look no matter what part of the house it is installed in. All this in such a small and compact design.

The IR module allows even more convenience through an optional customised handy remote control that makes living more comfortable.

Directive compliance checklist

- **Ecodesign requirement for energy-related products, 2009/125/EC (<0.5W no load power)**

- EN 55014-2:1997 + A1:2001 + IS1:2007 + A2:2008

=> Cat. 2

- EN 55014-1:2006 + A1:2009 + A2:2011

- EN 61000-3-2:2014

- EN 61000-3-3:2011

- EN 62233:2008



The seasonal space heating energy efficiency of electric fixed local space heaters **η_s for the Dyna is 39%** [Official Journal of The European Union, L 193/76, 21.7.2015]



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Safety instructions

A damaged power cable MUST be replaced by the manufacturer, the manufacturer's customer service or qualified personnel to prevent potentially hazardous situations. Do not attempt any repair yourself.

WARNING!

Power cords that are damaged, broken, modified, trapped under heavy objects, pulled hard or bent severely can cause electric shock and fire hazards! Please observe all warnings contained in this user's guide.

- The controller can be used to regulate the room temperature in conjunction with an electrical heating element in stationary and electrical radiators. Any other use is contrary to its intended purpose and therefore is considered a risk for the user

Always ensure that power is disconnected before working on the heating element.

- Connect the temperature controller only to electrical heating elements suitable to be connected to it
- Ensure that the output of the heating element is approved for the available radiator size.

The use of a heating element with a greater output:

✎ does not increase the effective output of the radiator

✎ can cause early depletion of the heating element

✎ could damage your radiator

- Ensure that the output of the heating element does not exceed the output of the controller (see type plate)

- When installed in rooms with bath or shower facilities observe the protection zones (in the UK according to IEE Wiring Regulations). In addition, observe all the local regulations

- The device must be protected by a 30mA residual-current device (RCD)

- Only operate the device with the approved voltage (see specs on the element)

- If a device is connected directly to the fixed electrical installations, install a disconnecter in accordance with the local regulation for mains disconnection

Conditions of use

- Remember to store and transport the towel warmers only in the provided protective packaging

- Make sure the towel rail body has no leaks or bubbles of air inside

- You must leave some distance from any power outlets

- The whole appliance should not come in contact with water

- Connect the thermostat only to a heating element suitable to work with such kind of device

- Check that the voltage is the same as specified in the technical specifications



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Installation

These steps should only be performed by a professional technician/installer.

Caution
Risk of electric shock!

Please read these instructions carefully before using the device.

- This device has been designed to be used exclusively in conjunction with heated towel rails
- This thermostat is used to heat up the liquid contained inside of a heated towel rail in combination with a heating element. Every other use is prohibited
 - Before use, check that the mains voltage is the same as the one indicated on the thermostat (see technical specifications)
- Only use heating elements appropriate for the type of heated towel rail used
- Unplug the device before cleaning or maintenance
- In case you notice any kind of damage to the power cord, switch off the device and do not attempt any repair. Damaged power cables can be replaced only by the manufacturer or at an authorized service center. Failure to comply with the above may compromise the safety of the system and invalidate your warranty
- Store and transport the electric towel warmers in its protective packaging
- Replacement of the heating element can only be performed from authorized personnel
- Cleaning and maintenance must not be carried out by unsupervised children.



Available versions: type of connections

The Dyna is compatible with the following types of electrical connections:

- 1 schuko/EU/Swiss/British plug (class I or class II) for direct connection
- 3 wires for class I models: phase (brown), neutral (blue), ground (green-yellow)
- 2 wires for class II models: phase (brown), neutral (blue)
- 3 wires for class II models with pilot-wire: phase (brown), neutral (grey), pilot-wire (black)

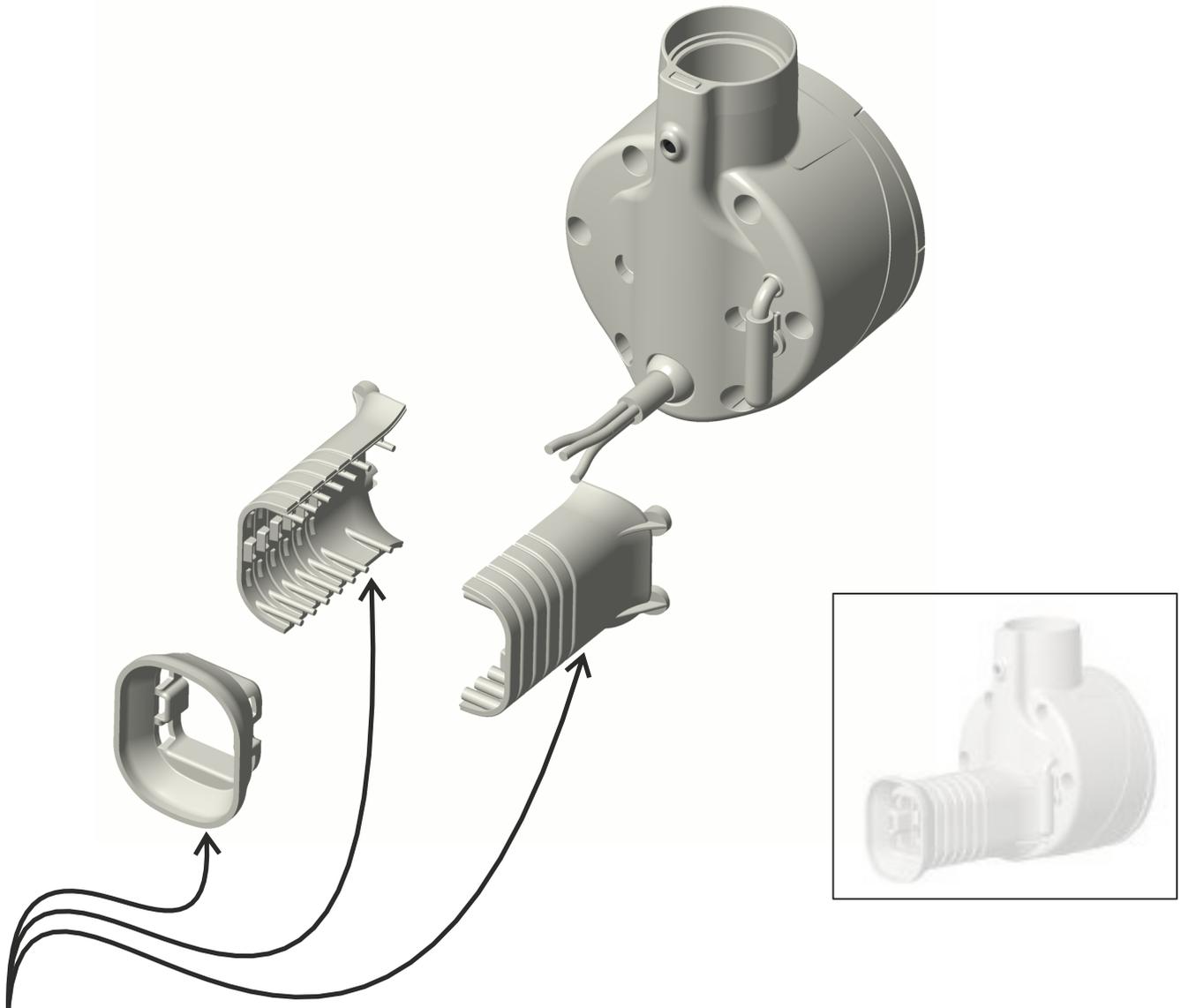
Cleaning

- Disconnect the device from the power supply before cleaning
- Clean the product with a soft microfibre cloth dampened with a small amount of water
- Do not use a flammable liquid (e.g. benzene, thinners) or a cleaning agent



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Cables cover



These small pieces of plastic are a genius way to hide cables in your room and permanently improve the organization of your home. This accessory can be used to hide the cables that run from the device to the wall. It can be purchased separately as an accessory. Simply snap the 3 pieces together and feed the wires through the assembled pieces. The body of the tube can even be cut according to your personal needs.



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Keypad



PLEASE NOTE

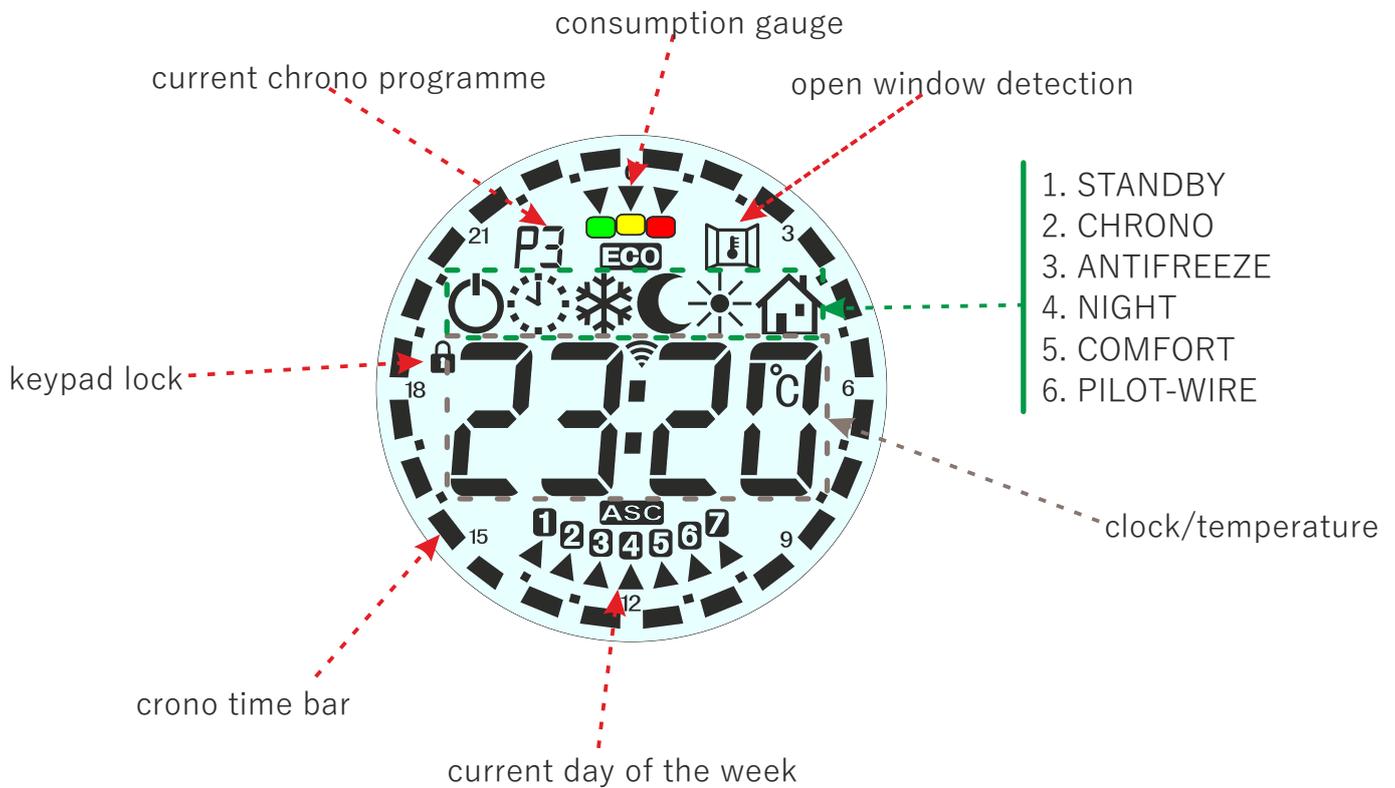
In case of a power outage or accidental disconnection from the mains, the thermostat will store the operating status it was in before the cut for at least 2 hours. If it remains off grid for longer, you will not lose your settings, but time and date will have to be set manually again. If the thermostat was in CHRONO mode and loses its settings, it will restart from the COMFORT mode.



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Display





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THERMOSTAT MANUAL

1. ON/STAND-BY

Press the **[on/standby]** key to turn on the device or to activate the stand-by mode.

When in stand-by the display shows the corresponding icon together with the time and the day of the week.

NOTE: When the device enters standby mode it emits 2 beeps. When the device is being turned on it emits 1 beep.



2. OPERATIVE MODES

Press the **[mode]** key to select the operative mode of the device among the ones available. The corresponding icon on the display indicates the active operating mode.

STANDBY	PILOT-WIRE	COMFORT	NIGHT	ANTIFREEZE	BOOST	CHRONO

A. COMFORT MODE

In this mode, room temperature is maintained close to the desired set point by intelligently activating the heating element. Use this mode in order to manually heat up the room up to the desired temperature.

- To activate this mode, press the **[mode]** key repeatedly until the COMFORT mode icon appears on the display
- To input the desired temperature, use the **[+]** and **[-]** keys and temperature will adjust accordingly

B. NIGHT MODE

This mode keeps the temperature close to the temperature set by the user. Use this mode in order to manually heat up the room up to the desired temperature.

Since the NIGHT mode temperature is always lower than the COMFORT temperature, we recommend using this mode in order to save energy during the night, or when the room stays empty for 2 hours or longer.

- To enter this mode, press the **[mode]** key repeatedly until the NIGHT mode icon appears on the display
- To input the desired temperature, use the **[+]** and **[-]** keys and temperature will adjust accordingly

PLEASE NOTE

NIGHT temperature must always be lower than the COMFORT temperature, and when setting the two, priority is always given to the COMFORT temperature. This means that if you try setting a COMFORT temperature lower than the NIGHT temperature already set, you will also change the NIGHT temperature itself to the same value. On the other hand, the device will not let you setting a NIGHT temperature higher than the COMFORT temperature: NIGHT temperature will always be at least 0.5°C lower.



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C. PILOT WIRE , ONLY FOR TOWEL WARMERS ON WHICH THIS WIRE IS PRESENT.

Only in devices where this mode is present

In PILOT-WIRE mode, the appliance is controlled through a signal from a dedicated control unit that sets the operative mode for all connected thermostats. The only input needed from the user in this mode is the desired COMFORT temperature, which is set by pressing the **[+]** and **[-]** keys.

In this mode, 6 different signals can be detected, which correspond to the same number of operating modes:

1. **Standby**: keeps the heating element powered off, but the thermostat is maintained switched on
2. **Comfort**: the COMFORT temperature set by the user is maintained constant in the room by intelligently switching the heating element on and off
3. **ECO**: maintains a temperature which is always 3.5°C lower than COMFORT temperature
4. **Anti-freeze**: always keeps the room temperature higher than 7°C to avoid freezing
5. **Comfort-1**: maintains room temperature 1°C lower than COMFORT temperature
6. **Comfort-2**: maintains room temperature 2°C lower than COMFORT temperature

How do I activate PILOT WIRE mode?

- Press the **[mode]** key until the PILOT-WIRE icon appears on the display
- Set the desired temperature with the **[+]** and **[-]** keys and temperature will adjust accordingly

PLEASE NOTE

If a PILOT-WIRE cable is not detected, the default operating mode is the COMFORT mode.

D. CHRONO MODE

Switching between COMFORT and NIGHT mode is automatically managed every day of the week according to the preset time schedule. This mode can be activated simply selecting this mode by pressing the **[mode]** key until the CHRONO mode icon appears on the display.

There are 4 different programmes you can choose from and the first 3 are preset. To switch among the 4 programmes, press the **[chrono]** button while in CHRONO mode. You can find out how to programme the P4 week time programme in the following page.

E. ANTI-FREEZE MODE

In this mode, room temperature is always kept above 7°C to prevent freezing.

To activate this mode, press the **[mode]** key until the ANTI-FREEZE icon appears on your display.

F. BOOST 2H

In this mode maximum power is supplied to the heating element for 120 minutes, independently from the ambient temperature. For safety reasons the ambient temperature can never exceed 32°C, so a safety control mechanism will prevent that. When the time is over, the control will go back to the operating mode that was previously set before entering boost mode.



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3. GENERAL SETTINGS

OPEN WINDOW DETECTION & ASC FUNCTIONS

The open window detection function allows the device to detect if any windows of the room are being opened, and in this case turns the heating element off for 30 minutes. This setting will be triggered if a sudden drop in temperature of at least 1.5°C is detected. The function will be deactivated if a rise in temperature of at least 1.5 °C is detected, and heating will restart as normal. After 30 minutes in this mode, the device returns to the previously set mode anyway.

- When the function is activated, the open window detection icon blinks on the display
- When the device detects the open window the symbol remains on
- When the function is switched off the symbol disappears

The ASC function works in CHRONO mode. It slightly anticipates the switch-on time before schedule in order to increase comfort and at the same time reducing overall power consumption. This innovative function is particularly useful if getting to the set temperature on time is important, for example for bathrooms in the morning when waking up.

In order to access the ECO & OPEN WINDOW DETECTION function settings menu, press the **[chrono]** key for at least 3 seconds. Then, scroll through the menu with the **[+]** key until **Fun** (Function) appears on display. Press the **[mode]** key.

You can now choose to activate or not the OPEN WINDOW DETECTION function with the **[+]** and **[-]** keys respectively. Press **[mode]** to confirm your selection. Now you have to choose to activate or not the ASC function with the **[+]** and **[-]** keys respectively. Press **[mode]** to confirm.

HOUR AND DATE SETTING

In order to set the correct date and time, press the **[chrono]** key for at least 3 seconds to access the settings menu when in standby mode. Then, scroll through the menu with the **[+]** key until **teD** (time & date) appears on display. Press the **[mode]** key to start.

- Select the day of the week with the **[+]** or **[-]** keys and confirm with the **[mode]** key
- Now, set the hour with the **[+]** and **[-]** keys and then confirm with the **[mode]** key
- Now, set the minutes with the **[+]** and **[-]** keys and then confirm with the **[mode]** key



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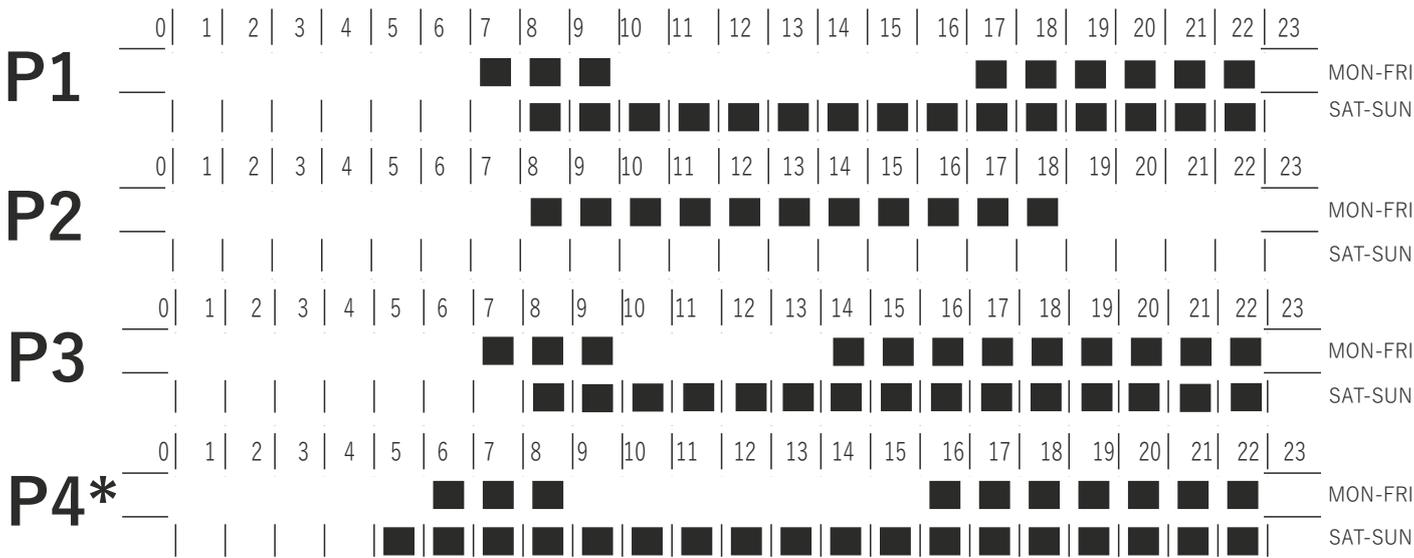
3. GENERAL SETTINGS

PROGRAMMING P4 IN CHRONO MODE

- Enter standby mode first and then press the [chrono] button for at least 3 seconds
- Press the [+] button until you see Pro9 on display
- You will start by programming the Monday plan. Press the [+] button to specify COMFORT temperature for that hour of the day and [-] for NIGHT temperature for that hour of the day. Complete your choice for each one of the 24 hours until you are satisfied with your plan. Then press [mode] to confirm
- Now you have to repeat the operation for each day of the week and then confirm again with the [mode] button
- Repeat this procedure up until Sunday. Then press the [mode] button for the last time. A double buzz will confirm your week plan

These are the preset default programmes.

A black box means COMFORT [+], a WHITE box means NIGHT [-].



PLEASE NOTE

In case of a temperature sensor anomaly or malfunction, ALL will be displayed. Please contact customer service.



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.OTHER FEATURES

- Keypad lock

You can lock the keys to prevent accidental changes. Press the **[mode]** button for at least 3 seconds in order to lock or unlock the keypad. This function works in any mode, including while the device is in STANDBY mode.

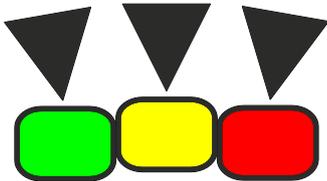
If you try pressing any button while the keypad is locked, the keylock icon will blink. Please disable keylock first in order to restore normal functioning.

Please note

As a safety feature, you can always turn off the device by pressing the **[on/off]** key, even when the keypad is locked.

- Consumption gauge

This useful feature shows the current electricity consumption level depending on the set temperature. The three coloured icons on the display (green, yellow and red) correspond to low, medium and high consumption respectively.





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Operational modes	COMFORT, NIGHT, ANTIFREEZE, PILOT-WIRE, 2-HOUR BOOST, CHRONO
Functions	Open window detection, keypad lock, ASC, consumption gauge
Power supply	230V AC - 50Hz - up to 1500W
Insulation class	CLASS I, CLASS II
IP class	IP24
Available colours	white, matte black
Settable temperature range	7° C - 32° C
Warranty	2 years
Conformity	CE
Operating ambient temperature	-10° C - +40° C
Size	71mm x 97.5 mm x 47 mm



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RAEE guideline 2012/19/CE concerning electric and electronic equipment.

This appliance is NOT ordinary domestic waste. When it is no longer needed, it must be disposed of through an appropriate recollection centre to be recycled together with its packaging. In case of replacement, it can be sent back to your distributor.

Correct handling of the product at the end of its life cycle will allow us to preserve the environment and limit the consumption of natural resources. This symbol, applied on the product, states the obligation to consign it to a special recollection centre to be disposed of in accordance to existing legislation.



At any time, the manufacturer reserves the right to make all the changes necessary to improve its products without notice.



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The **Gala** is a digital electronic smart device which is great for temperature control in electric heated towel rails and electric radiators. It can be used in conjunction with all TONON Evolution heaters that come with an IR module, **such as the Dyna**, which allows perfect real time mirroring between the device and the remote control.

The 7-button on-board keypad allows the user to access all functions available in your existing device, and the large back-lit display constantly shows all the information concerning the functioning of the heater through pleasantly placed icons.

The functions packed in the device (COMFORT, NIGHT, ANTI FREEZE and CHRONO) also include a PILOT WIRE mode, in case of such input arrangement. CHRONO mode offers a separate programmable time schedule for each day of the week. The two-hour boost function quickly heats up the room.

Advanced settings are available, such as keypad lock, to prevent young children from using it, while ECO and the open window detection function are very useful when it comes to saving energy. When the control is not in use, the display constantly shows all the basic information, guaranteeing an elegant unique look no matter what part of the house it is used in.

All this in such a small and ergonomic design.

The Gala makes living more comfortable, because all members of the family can get access to and control **every Dyna**. Two infrared transmitters, one at the top and one at the bottom of the remote, also allow on-wall installation.

Gala is available as an accessory **for your Dyna**.

Directive compliance checklist

- Ecodesign requirement for energy-related products, 2009/125/EC (<0.5W no load power)
- 2015/863/EU (RoHS III)

