

# ETHERMA DUO PLUS S2

Montage- und Gebrauchsanleitung
Assembly and operating instructions
Instructions de montage et d'utilisation
Montage- en bedieningsinstructies
Manuale di assemblaggio e impiego



# TABLE OF CONTENTS

1. INTRODUCTION	17
2. INSTALLATION INSTRUCTIONS	18
3. USING THE INTERNAL CONTROL	20
3.1. STARTING THE APPLIANCE WITH DIRECT CONTROL AT THE RADIATOR DISPLAY	20
Selecting the operating modes	20
Selecting Manual mode	21
Selecting automatic mode	21
Setting the date and time	21
Setting the daily programming	22
Copy function	
Display block function	23
4. CLEANING AND MAINTENANCE	24
5. TECHNICAL DATA	25
6. PRODUCT INFORMATION ACCORDING TO THE ECO DESIGN DIRECTIVE	26
7. FREQUENTLY ASKED QUESTIONS	27
8. NAMEPLATES	28
9 GENERAL GUARANTEE TERMS	29

#### 1. INTRODUCTION

Thank you for purchasing your Etherma DUO PLUS S2 heater.

The product purchased by you has been subjected to numerous tests to ensure maximum quality.

We hope that you will be fully satisfied with this product.

Please read through these installation instructions and instructions for use carefully before installing the heater.

- The guarantee for the heater does not cover any damage caused by disregard of the information in the instructions.
- These instructions must be kept and issued to each new owner if the product is passed on or sold.
- IMPORTANT SAFETY INSTRUCTION: When using electric heaters, basic precautions must always be noted and taken to reduce the risk of fires, electric shocks and injuries. Among other things, they include:
  - IMPORTANT If this heater is installed in a room with a bath or shower, it should be mounted so that switches and other controls cannot be touched by a person who is using the bath or shower.
  - This product should be installed by a qualified electrician or other qualified person and only in strict compliance with the current IEE wiring regulations and relevant building regulations.
  - The heater must be installed in compliance with these instructions.
  - The heater must be installed using the wall bracket supplied with the heater.
  - The heater should be set up in compliance with the distances given in these instructions.
- ATTENTION! THE SURFACE OF THIS HEATER CAN BE HOT: Brief contact with any part of the heater should not lead to injuries. However, old or frail people and small children should not be near the heater without supervision unless a suitable guard is provided.
- Not intended for use by children or people with limited physical, sensory or mental skills. The cleaning and maintenance may not be carried out by children without appropriate supervision.
- Use of these heaters is prohibited in all areas in which gas, explosives or flammable objects are present.

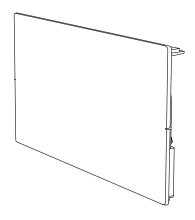
- Neither the connection cable nor any other object may come into contact with the hot surfaces of the appliance.
- Before connecting the heater, check that the supply voltage corresponds to the voltage stated on the heater.
- WARNING: To avoid overheating, the heat outlet slots at the top of the heater and the air inlet slots at the underside of the heater must NEVER be covered or obstructed in any way.
- Do NOT cover the heater. Do not place any fabrics or pieces of clothing on the heater and do not obstruct air circulation around the heater.
- Before carrying out repair work, this heater should be switched off at the disconnector. The appliance should also be switched off during the times of the year in which it is not needed for heating.
- The heater should not be mounted directly below a socket or in front of a socket.
- The appliance must be mounted so that switches and other controls cannot be touched by a person who is using a bath or shower.
- The installation must be carried out in compliance with the relevant electrical regulations.
- The heater is equipped with a power cable (3 x 1.50 mm<sup>2</sup>) with moulded plug for the electrical connection.
- The heater's supply circuit must include a two-pin disconnector with a contact gap of at least 3 mm.
- If the supply cable is damaged, it must be replaced by the manufacturer, their customer service or another qualified person.
- All models are equipped with an electrical disconnector. This is used to switch off the heater if it overheats for any reason. If the disconnector is triggered, switch off the heater and remove the cause of the overheating. The disconnector is reset automatically.
- Over time, the existence of smoke particles, dust and other contaminants in the air can cause discolouration of the walls and surfaces in the area surrounding the heater.

#### 2. INSTALLATION INSTRUCTIONS

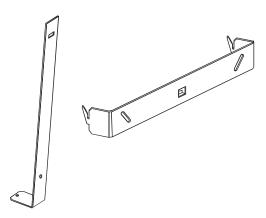
# The scope of delivery includes the following components:

- An Etherma DUO PLUS S2 heater.
- A wall mounting kit (wall brackets, wall anchors and screws) for easy installation.

#### Scope of delivery:



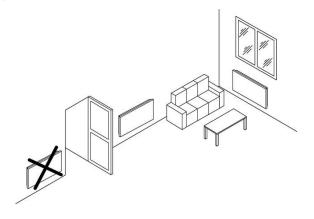
#### 1 x Etherma DUO PLUS S2 heater



1 x mounting kit (T-shape) with screws and wall anchors.

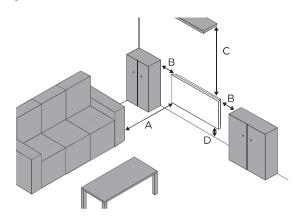
When you have decided where to install the heater, open the packaging and remove the appliance and the mounting kit.

The first possibility is under the window on an external wall.



They can also be attached to any other wall, if sufficient space is available to maintain the following distances.

These recommended distances are required to achieve the optimum performance of the heater and to accelerate heating of the room.

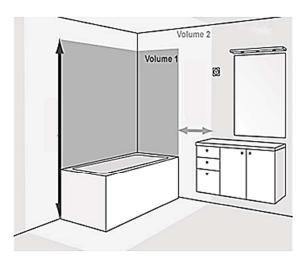


- A = 50 cm
- C = 25 cm
- B = 10 cm
- D = 25 cm



When installing an Etherma DUO PLUS S2-heater in a bathroom, the instructions below must be followed.

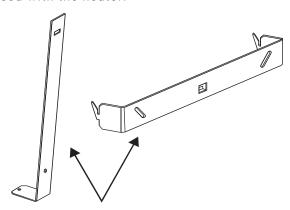
NEVER install an Etherma DUO PLUS S2:



- within protection zone 1.
- within protection zone 2, if the user can reach it from the shower or bath.
- under a wall socket the wall socket must be behind, next to or under the heater.

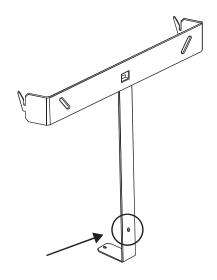
## 2. INSTALLATION INSTRUCTIONS

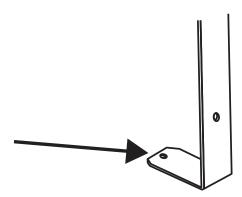
A mounting kit with the required accessories is enclosed with the heater.



These two parts must be assembled before mounting on the wall. Please note the hole in the bottom part.

The bottom part of the heater must also be screwed onto this vertical bracket.

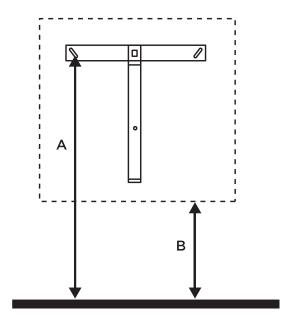




The wall anchors supplied with the mounting kit cannot be used in gypsum board walls (drywalls). Special wall anchors must be used for this type or wall.

Fix the heater on the wall as described below:

DESCRIPTION	[mm]
Dimension A, flat 100 x 50 horizontal	550
Dimension B	250



Etherma DUO PLUS S2 radiators can be controlled directly using the controls on its own display.

The appliance has a three-step switch:



**POSITION 0:** The heating is switched off.

POSITION I: The heater is switched on. The display switches on and operates as described

in section 3.1.

POSITION II: The heater is in Slave mode. The display

remains switched off and the heating follows the commands of an external thermostat installed in the room. A thermostat, which controls the commands of the heater, must always be installed in Slave mode. The whole of section 3 of these operating and installation instructions does not apply in Slave

mode

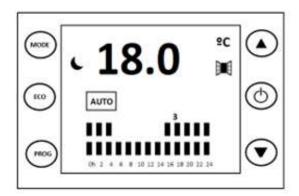
# 3.1. STARTING THE APPLIANCE WITH DIRECT CONTROL AT THE RADIATOR DISPLAY

You can operate the Etherma DUO PLUS S2 radiator directly via the control display.

Plug the power cable with plug into the socket. Set the switch, at the top right-hand side of the appliance, to position I.

#### Display control - description

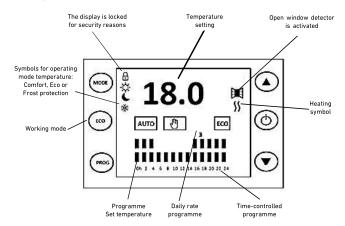
In the right and left part of the screen frame you can see six main buttons, which you can activate by pressing them.



 On/Off is used to switch the appliance on and off and to confirm certain operations.

- Use "MODE" to switch between Automatic and Manual mode. When you press the button, you can see these modes change from are to on the screen.
- You can use the arrow buttons ▲ ▼ to increase or reduce various values such as temperature, time, etc.
- "ECO" lowers the currently set temperature, in Manual mode, by 3° C. This is useful for short absences or as a setpoint temperature during the night.
- Use "PROG" to go directly to the program settings.

# Description of the symbols and general information that you can find on the screen:



#### Selecting the operating modes

ETHERMA heaters have two operating modes.

To change the operating mode, please press the "MODE" button on the top left-hand side of the thermostat panel. Make sure that the thermostat is switched on.

If you press the "MODE" button, you can see two options on the screen:

# Auto mode Auto

The set temperature changes automatically depending on predefined settings based on 3 temperatures (Comfort, Eco and Frost protection). The bars on the screen indicate how the temperature is programmed per hour and per day.

#### Manual 🕙

In this mode, the user selects the setpoint temperature, which does not change unless the user changes it.

## Selecting Manual mode

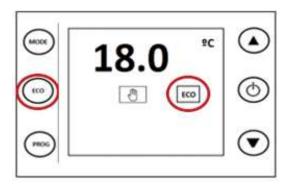
Press the "MODE" button to switch from Automatic are to Manual mode.

Please select Manual, this symbol then appears on the screen.



Use the arrow buttons  $\blacktriangle \nabla$  to set the required temperature.

In Manual mode, you can activate Economy mode by pressing the ECO button.



In "ECO" mode, the temperature set in Manual mode is lowered by 3°C. This is a good option for short absences or as the setpoint temperature during the night.

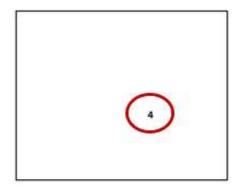
You can also increase or reduce the Eco temperature by pressing the up or down arrow buttons.

# Selecting automatic mode

Please press the MODE button to select automatic mode  $\fbox{\sc Automatic}$ 

# Setting the date and time

Press the "PROG" button. The weekday flashes on the screen. In this example, number 4 flashes which means that the fourth day of the week is displayed on the screen.

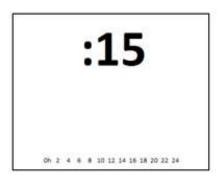


Press the arrow buttons  $\blacktriangle \nabla$  to switch between the digits and select the current weekday. Press the  $\circlearrowleft$  button to confirm.



As soon as you confirm the weekday, the hour digits flash

To set the current hour, press the up or down arrow buttons  $\blacktriangle \nabla$  and confirm with the  $\circlearrowleft$  button.



The minute digits now flash.

To set the current minutes, press the up or down arrow buttons  $\blacktriangle \nabla$  and confirm with the  $\circlearrowleft$  button.

The weekly and daily programming then follows next. Press the MODE button if you want to skip the programming.

#### Setting the daily programming

You can choose between three temperature options for each hour:

# Comfort temperature ❖

Sun symbol on the screen. It is selected as the required room temperature.

# Energy-saving temperature (

Moon symbol on the screen. It is used at night or for short absences. It is always  $3^{\circ}\text{C}$  below the comfort temperature.

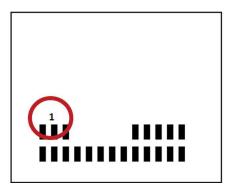
# Frost protection \*

Ice symbol on the screen. It is the standby temperature that prevents the room temperature from falling below  $5^{\circ}\text{C}.$ 

After setting the date and time, you can continue with the programming. If the date and time have already been set and you have decided to exit the programming now, follow these steps again:

Press the "MODE" button. The weekday flashes on the screen. Press the  $^{\circlearrowleft}$  button to confirm. The hour digits flash. Press the  $^{\circlearrowleft}$  button to confirm. Then the minute digits flash. Press the  $^{\circlearrowleft}$  button to confirm.

The first day of the week now appears on the screen.



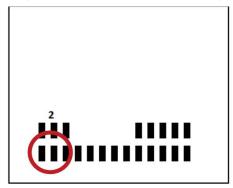
To program the daily program, confirm with the  $\circ$  button.

To switch to another day, press the arrow buttons rianlge ilde ilde

The programming begins at zero hours.

You can use the arrow buttons ▲ ▼ to choose between Comfort temperature • (two bars), Eco temperature • (one bar) or Frost protection (no bar). Confirm with the 🖒 button.

Repeat the operation for all 24 hours of the day.



After confirming the last hour of the day, the display switches to the next weekday automatically.

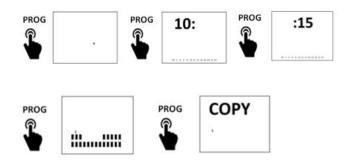
When the programming is completed, confirm by pressing the  $\bigcirc$  button and exit the program by pressing the "MODE" button.

# Copy function

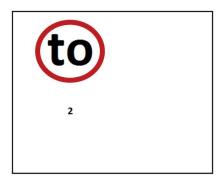
Use this function to copy a previously programmed day.

Start at zero, switch on the thermostat and press PROG several times until the word "COPY" appears on the screen.

The following images show the order of the views on the display:



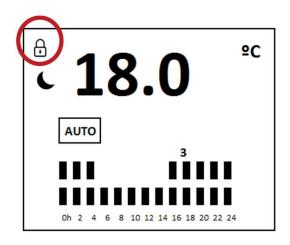
As soon as "COPY" is displayed on the screen, press the arrow keys  $\blacktriangle \nabla$  to select the required daily programming and press  $\circlearrowleft$  to confirm.



After confirming, the word "to" appears on the screen. Press the arrow buttons  $\blacktriangle \nabla$  to select the day into which you want to copy the daily program. When you are ready, press the  $\circlearrowleft$  button to confirm.

## Display block function

This function is useful to avoid accidental interventions at the thermostat or to limit its use.



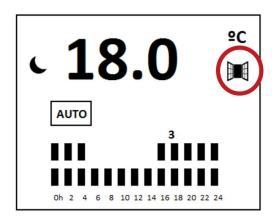
To block the thermostat, simultaneously press the "MODE" button and the up arrow ▲ until the lock symbol appears on the screen.

Repeat the procedure to unblock the thermostat.

## Open window function

The appliance has a built-in sensor, which identifies any sudden temperature drop that can occur.

This function is activated if the temperature in the room falls by 3 °C within 5 minutes. The function remains active until the temperature stabilises itself.



If this function is activated, a small window symbol appears on the screen.

#### 4. CLEANING AND MAINTENANCE

- The heater does not require any special maintenance and ensures comfortable heat for a long time. Use a dry, soft cloth to remove dust from the heater, only when the appliance is switched off and cold.
- At the beginning of the heating season, use a vacuum cleaner to remove the dust that has accumulated in the internal heating element while the heater was switched off for a lengthy time during warmer weather.
- Do not use cleaning solvents or abrasives.

- After the heating season, use the switch on the righthand side of the appliance to switch off the heater.
- This convector storage heater has been manufactured using a quality assurance system and environmentallyfriendly production processes.
- Disposal: Please take the heater to a recognised disposal point so that all reusable materials can be properly recycled.

# 5. TECHNICAL DATA

Etherma DUO PLUS S2				
Power: (W)	1500		2000	
Dimensions: (mm)	500 (H) x 1000 (W) x 105 (D)			
Weight: (kg)	22			
Voltage	230 V ~AC	Class:	II	
Frequency:	50 Hz	IP rating:	24	
Ceramic component:	DUAL KHERR			
External housing:	Coated steel sheet			
Thermostat	Temperature range from 5 to 30 °C			
Safety thermostat	Bimetal, automatic, nominal temperature: 90 ±5 °C, Reset temperature: 65 ±10 °C			

# 6. PRODUCT INFORMATION ACCORDING TO THE ECO DESIGN DIRECTIVE

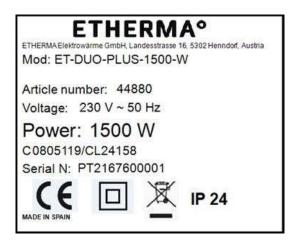
Contact details ETHERMA Elektrowärme GmbH, Landesstraße 16, 5302 Henndorf, Austria					
Model identifier(s): ET-DUO-PLUS-S2-1500-W, ET-DUO-PLUS-S2-2000-W					
Description	Symbol	Value	Unit	Description	Unit
Heat output				Type of heat output/room temperature control (select one)	
Nominal heat output	Pnom	1,5 / 2.0	kW	single stage heat output, no room temperature control	no
Minimum heat output (indicative)	Pmin	1,5 / 2,0	kW	two or more manual stages, no room temperature control	no
Maximum continuous heat output	Pmax,c	1,5 / 2,0	kW	with mechanic thermostat room temperature control	no
Power consumption				With electronic room temperature control	no
In off mode	Po	0	W	electronic room control plus day timer	no
In standby mode	Psm	0,46	W	electronic room control plus week timer	yes
In idle mode	Pidle	0,46	W	Other control options (multiple selections possible)	
In network standby	Pnsm	0,46	W	room temperature control, with	no
Standby mode with display of information or status				room temperature control, with open window detection	yes
Seasonal space heating				distance control option	no
energy efficiency in	ηs,on	48,42	%	adaptive start control	no
active mode				working time limitation	no
				black bulb sensor	no
				self-learning functionality	no
				control accuracy (CA)	no

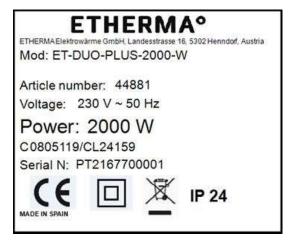
# 7. FREQUENTLY ASKED QUESTIONS

PROBLEM	LIKELY CAUSE	SOLUTION		
The appliance does not heat up	The appliance is in energy-sav- ing mode	The appliance releases heat into the room due to thermal inertia; if you need more heat, increase the appliance temperature.		
The room does not reach the required temperature	Incorrect setting of the setpoint temperature	Check the set temperature on the display to make sure that it corresponds to the required temperature.		
	Incorrect sizing	The performance/heating output is insufficient for the place in which it was installed.		
	Excessive height	Make sure that the system is installed at the recommended height or increase the set temperature to compensate for the probe display.		
	Input and output grids are covered	Do not place anything on the cooler and do not install it in a hole in the partition wall.		
The radiator does not work	Set the temperature below the room temperature	Increase the set temperature of the radiator until it is 1 degree above the room temperature.		
		Make sure that the automatic limiter in the system is not switched off. If it is moved down, move it back up again.		
	Control panel switch and protection moved down	Make sure that the installation is correct and that independent cables with a cable crosssection of 2.5 mm <sup>2</sup> and a maximum power of 3500 W are available for the heating system.		
	Switch is switched off	Set the switch to position I.		
	Program is switched off	Check whether the set program is the selected one or set the required program.		
The radiator dirties the walls	Radiator attached at a very low height	The minimum height from the floor to the bottom of the radiator must be at least 25 cm.		
	Dust accumulation in the bottom grille	Use a vacuum cleaner to remove the dust. The dust should be removed with a vacuum cleaner at the beginning of each heating period.		
	Type of painting on the wall	Paints with a high rutile content will likely become darker.		
Blocked buttons	The control buttons do not respond	Simultaneously press the MODE and ▲ buttons for 3 seconds.		

#### 8. NAMEPLATES

Type-specific data is given on the nameplate.





#### 9. GENERAL GUARANTEE TERMS

Dear Customer.

Please note our general terms and conditions of business. In the event of guarantee cases, the national legal claims apply, which you must make directly against your dealer/supplier.

IMPORTANT: Waste electrical and electronic equipment often contains many valuable materials. They can also contain harmful substances, which were necessary for their function and your safety. These can harm the environment if placed in the residual waste or if treated wrongly. Please help to protect our environment! Therefore, never throw your end-of-life appliance into the residual waste bin. Dispose of your end-of-life appliance according to the relevant local regulations. Dispose of packing materials, subsequent replacement parts and appliance parts properly.

The cardboard packaging can be recycled.

Do not throw away the electrical appliance in the household waste, take it to your local recycling depot.

