



## **PANEL**

### **INTRODUCTION**


Congratulations for your purchase of our new generation Celsius heating panel. Tesi International Srl ensures quality and safety, other than power savings with the use of clean electricity. This chapter explains how to use your equipment and lists the included and optional accessories. This part of the manual provides useful information you will need to understand and better use your heating panel in its full potential.

Below are the illustrations explaining how to install and use our heating panels. Carefully use all instructions before use. This manual is for information purposes only. All information supplied herein is subject to modifications without previous notice. Tesi International Srl declines all responsibility for direct or indirect damage that may derive from the use of this manual.

### **FCC regulations**

Note: This equipment has been submitted to several tests and proved to be in accordance with the limits established for electrical appliances, based on chapter 15 of FCC regulations. The purpose of these limits is to provide suitable protection against any interference that may occur when the equipment is used in a domestic environment. Do not make any modifications to the equipment. Failure to follow these instructions may lead to the request to stop using the equipment.

### **Manufacturer's declaration of conformity (2004/108/ )**

This appliance (Model Celsius CP1/A/C//F/L) has been designed and manufactured in conformity with international standards, based on the prescriptions of the directive on low voltage of the European Community. All Celsius heating panels are provided with , certification IEC CEI EN 61000-6/1/2/3/4; CEI EN 61000-3/2/3/3/A1; CEI EN 61000-4/2/A1/A2/3/4/4EC/5/6/11. The panels are thus certified regarding fire: A1-A1FL-EN13501-1, UNI EN 13238/13943

### **ACCESSORIES INCLUDED**

Model CP1/A/C/CO/L/LO (civil/industrial heating):

2 wall plugs

1 central unit for temperature and consumption control

Model CP1/F (sauna):

2 wall plugs

1 central unit for temperature and consumption control

### **INSTALLATION**

#### **UNPACKAGING THE HEATING PANELS**

Remove all items from their packaging and make sure they correspond to the list provided in the previous chapter.

#### **Selecting the place and mode of installation**

Prior to installing the heating panels, select the most suitable position according to these instructions:

- Install the panel at the desired position. It should ideally be placed beneath windows, like a common radiator, avoiding, whenever possible, irradiation towards glass walls or panels.
- The panel must be installed at a height of 20/25 cm; irradiation occurs from the front, at a 30° angle.

- The power supply cables for the heating panels must be at least 1.5 mm<sup>2</sup>
- A safety thermal switch must be installed for every 5 panels.
- The heating panel must be protected against impact and vibrations.
- Keep the heating panel free from dust.
- To prevent damages to the heating panel, always use both hands to handle it.
- When assembling a wall-mounted model, make sure the wall is strong enough to sustain the weight of the panel.
- Do not cover the heating panel.
- Prior to assembly, make sure that the area around the heating panel contains no materials prone to fire or to suffering modifications at temperatures below 120° C. The operation temperature of the panel ranges from 60 to 100° C.
- The heating panel requires a variable amount of time to enter its regular regimen. This period of time varies according to the environmental conditions in which it is installed, as it must heat all the objects contained in the area, which will then heat the air. When assembled in particularly damp places, it is advisable to air the room for after 24 hours and repeat the operation until a humidity level of 35-50% is obtained. Once the desired temperature and humidity are reached, use the DOWN button on the central unit to reduce the temperature until the little dot is in the comfort position (medium flashing). Keep the central unit under surveillance for a few days.

## **TROUBLESHOOTING**

This chapter explains how to solve the most common problems that may occur with the heating panels.

### *Common problems*

#### **The heating panel does not switch on:**

- Make sure the power plug has been correctly inserted in the socket.
- Check that the power socket to which the panel is plugged is supplied with power.
- Make sure the diameter of the power cables is above 1.5 mm<sup>2</sup>.
- Make sure the little thermostat dot is on.
- Check that the panel has been plugged to a socket with the same voltage specified on the plate. Change the power source if necessary.

#### **The heating panel does not heat the room in which it is installed:**

- Make sure a sufficient number of panels have been installed for the volume of the room.
- Check that the house is properly insulated.
- Check the room for heat dispersion.
- Wait for the cycle, as described in the paragraph "*Selecting the place and mode of installation*".
- Make sure the heating panel is not covered.

### **Advice:**

If following the instructions in the Troubleshooting section still does not solve the problem, contact any of the branches of Tesi International Srl in Italy.

Thank you for choosing our products.

## **CENTRAL UNIT**

## **DESCRIPTION OF THE BUTTONS:**

To access the menus and submenus, please refer to the relative paragraphs

|              |  |
|--------------|--|
| <b>UP</b>    | = increase<br>Menu: block  |
| <b>DOWN</b>  | = decrease<br>Menu: block<br>Submenu: <ul style="list-style-type: none"><li>• maximum power</li></ul>  |
| <b>ENTER</b> | = confirm<br>menu: personalized program<br>Submenu: <ul style="list-style-type: none"><li>• probe calibration</li><li>• clock setting</li><li>• day week</li></ul> |

## **DESCRIPTION OF THE FUNCTIONS AND GENERAL CONSIDERATIONS:**

By pressing **UP** and **DOWN** at the same time it is possible to change the preset values. Press **UP** and **DOWN** simultaneously to unlock this function.

The display of the central unit shows a flashing dot. The intensity of the flashing corresponds to the absorbed power. The dot may be lighted, off or flashing in one of 6 different manners:

fixed light = 100% maximum power

very fast flashing = 50%

fast flashing = 25%

medium flashing = 12.5%

medium-slow flashing = 6.25%

slow flashing = 3.15%

very slow flashing = 1.56%

off = 0%

Note: When the panel is simply maintaining room temperature, it will work between 12.5 and 50% of its maximum power.

After 4 minutes the display goes off automatically in order to increase power savings. Press any key to light it up again.

Note: From the panel there comes out a probe that may be positioned according to need. Make sure it does not touch the wall or the panel.

The central panel can be used remotely or using domotics.

## **PROBE CALIBRATION SUBMENU – CLOCK AND DAY PROGRAMMING**

This operation must be carried out at least 48 hours before the switching on of the panel, with the power dot light on (not flashing), to allow the central unit to stabilize.

Note: Probe calibration is optional. It is however advised NOT to repeat this operation periodically.

- Unplug and then plug the probe again, while keeping the **ENTER** button pressed until the display shows **C** and the temperature detected in the room.
- Release the **ENTER** key.
- Set the temperature 2 degrees below the actual temperature detected in the middle of the room, using the **UP** and **DOWN** buttons.

- Press **ENTER** to confirm.

Note: If you do not wish to calibrate the probe, press **ENTER** to confirm and move on to clock setting.

### **Clock setting:**

The display will show **H** (H = hour); set the current hour with **UP** and **DOWN**, then press **ENTER**. The display will show **M** (minutes); set the current minutes with **UP** and **DOWN**, then press **ENTER**. Now select the current day of the week using the **UP** and **DOWN** buttons and press **ENTER** again. **Clock setting is concluded.** (MON=monday, TUE=tuesday, WED=wednesday, THU=thursday, FRY=friday, SAT=saturday, SUN= sunday)

Note: Probe calibration may be useful when the product is installed near particularly cold or hot areas.

Example: When the panel is installed on a cold wall that faces the outside, the actual temperature detected near the wall may be different from the temperature detected in the middle of the room. With this calibration it is possible to alter the detection settings established by the factory, adapting them to personal environmental needs.

### **MANUAL PROGRAMMING**

- Plug the product on.
- Leave the central unit on without touching it for 15 seconds until the software loads. The UAA letters will disappear from the display, which will show **t** and a number.
- Set the desired temperature (e.g. 20° C). Use the **UP** and **DOWN** keys to increase or decrease the temperature.

**Manual programming is concluded.**

Note: After the **t** the display will show a dot, which, as previously described, indicates the absorbed power.

### **CUSTOMIZED PROGRAMMING**

**SIX PROGRAMS, WITH THE POSSIBILITY TO SET THE FOLLOWING PARAMETERS:**

- Switch-on time
- Switch-off time
- Temperatures
- Days of the week

**CAUTION: READ THE PARAGRAPH BELOW PRIOR TO PROCEEDING WITH THE CUSTOMIZED PROGRAMMING**

In order to avoid mistakes, use the scheme below, or write down on a piece of paper the switch-on and switch-off times (be careful not to overlap the different times) and the desired temperature for the day in question. Avoid leaving any period of time without programming. Set lower temperatures for the times of the day in which no heating is desired. The time required to warm up a room is about 2 hours; it takes the same amount of time to cool down the same room. Therefore, if you wish to have the room warmed from 12 to 4 p.m., for instance, set the switch-on time at 10 a.m. and the switch-off time at 2 p.m., with temperature C21, and temperature C15 from 2 p.m. to 10 a.m.

FOR THE CUSTOMIZABLE PROGRAMMING PROCEED AS FOLLOWS:

- Plug the appliance on.
- Leave the central unit on without touching it for 15 seconds until the software loads. The UAA letters will disappear from the display, which will show **t** and two numbers.

We suggest setting a temperature warm enough to keep the room from freezing, for instance, T06, or warm, for example, T21. This setting will apply to all the non-programmed periods and days.

- Keep the **ENTER** key pressed for a few seconds. The display will show **Or1**, which corresponds to the first program. Press **ENTER** again; the display will show (**A- -**), which corresponds to **SWITCH-ON**; set the switch-on time using the **UP** and **DOWN** buttons, then press **ENTER** to confirm. The display will show (**S** value), which corresponds to **SWITCH-OFF**; set the desired switch-off time and press **ENTER** to confirm. The display will now show (**C** value), which corresponds to the temperature; use the **UP** and **DOWN** keys to set the desired temperature for the programmed interval of time and press **ENTER** to confirm.

Continue with the programming of the next 5 blocks of time and temperature (if you do not wish to set other periods of time, leave value A--; S--). When the 6<sup>th</sup> programming step is concluded, the display will show the current day of the week, with a small dot between the second and the third letters:

(dot lighted up = the panel is on/lighted dot off = panel in manual programming)

MO.N = (Monday), TU.E = (Tuesday), WE.D = (Wednesday), TH.U = (Thursday), FR.Y = (Friday), SA.T = (Saturday), SU.N = (Sunday).

If you wish to repeat a preset program every day, the dot after the second letter must remain on for every day of the week. If you wish one day of the week not to use the preset program, the dot on that day must remain off.

Press **DOWN** to switch the dot off or **UP** to light it up and then **ENTER** to confirm, for each day of the week. When the 7 days are accounted for, the display will show the temperature of the current program. **Programming is concluded.**

It is now no longer possible to manually modify the programming, as the customized programming has been set. The display will show the temperature of the current program.

Leave the dot off for the day for which you do not want the customized programming; it will then be possible to intervene manually (see manual programming).

EXAMPLE: If I wish the heating to be off on Sundays because I am not normally home on those days, I must switch off the SU.N dot. If I do happen to be home on a Sunday, I can raise the temperature manually, and then reset it for no-freeze or heating when I leave.

To restore the original settings or to change the no-freeze or heating temperature, follow the instructions for the customizable programming, inserting two dashes after the letters A and S (e.g. A--, S--).

## SCHEME

### NO-FREEZE TEMPERATURE

| PRESET | CUSTOMIZED EXAMPLE | VS PROGRAMMING |
|--------|--------------------|----------------|
| t20    | t06                | t____          |

### TIME SETTING

| PRESET            | CUSTOMIZED EXAMPLE   | VS PROGRAMMING |
|-------------------|----------------------|----------------|
| Or1= program 1    | Or1                  | Or 1           |
| A- - = on         | A 00 = time: 00:00   | A_____         |
| S- - = off        | S 06 = time: 06 a.m. | S_____         |
| C20 = temperature | C16 = 16 C°          | C_____         |

---

|                   |      |        |
|-------------------|------|--------|
| Or 2 = program 2  | Or 2 | Or 2   |
| A- - = on         | A 06 | A_____ |
| S- - = off        | S 10 | S_____ |
| C20 = temperature | C21  | C_____ |

---

|                  |      |      |
|------------------|------|------|
| Or 3 = program 3 | Or 3 | Or 3 |
|------------------|------|------|

|                    |      |        |
|--------------------|------|--------|
| A- - = on          | A 10 | A_____ |
| S- - = off         | S 12 | S_____ |
| C 20 = temperature | C 15 | C_____ |

---

|                    |      |        |
|--------------------|------|--------|
| Or 4 = program 4   | Or4  | Or 4   |
| A- - = on          | A 12 | A_____ |
| S- - = off         | S 16 | S_____ |
| C 20 = temperature | C 22 | C_____ |

---

|                    |      |        |
|--------------------|------|--------|
| Or 5 = program 5   | Or 5 | Or 5   |
| A- - = on          | A 16 | A_____ |
| S- - = off         | S 00 | S_____ |
| C 20 = temperature | C 17 | C_____ |

---

|                    |       |        |
|--------------------|-------|--------|
| Or 6 = program 6   | Or 6  | Or 6   |
| A- - = on          | A - - | A_____ |
| S- - = off         | S - - | S_____ |
| C 20 = temperature | C 20  | C_____ |

---

**DAYS OF THE WEEK**

|      |      |       |
|------|------|-------|
| MO.N | MO.N | MO__N |
| TU.E | TU.E | TU__E |
| WE.D | WE.D | WE__D |
| TH.U | TH.U | TH__U |
| FR.Y | FR.Y | FR__Y |
| SA.T | SA.T | SA__T |
| SU.N | SU.N | SU__N |

**MANEUVER TO BE PERFORMED BY QUALIFIED PERSONNEL ONLY**

It is also possible to calibrate the power of the panel: plug the appliance on and press the **DOWN** key at the same time, until the display shows **P (POWER, in a scale from 0 to 40)** followed by a value. Set the power and press **ENTER (ALWAYS USE AN AMPEROMETER FOR THIS OPERATION)**.

Note: The panels were designed for different uses. Each different use requires a different power regulation; therefore, as this maneuver may compromise the function and the safety of the panel when performed by unauthorized personnel, it will annul all warranty terms and release the manufacturer from all liabilities.

The central unit can be used remotely or using domotics. Within the unit there is a two-pole green connector: by using a relay to short-circuit this connector, its output is inhibited, while leaving all programs and functions intact.

**WARRANTY**

**TESTING CERTIFICATE**

**Warranty extension +10 years**

**YES**

**NO**

**Contract no. ....**

This warranty is valid for 5 (five) years from the date the product is delivered by the retailer or by TESI INTERNATIONAL S.R.L. to the final user (the first buyer), as long as this sheet, stamped and dated by the retailer, is filled in all its parts and mailed to TESI INTERNATIONAL S.R.L. within 10 (ten) days after the date of delivery. This warranty is valid solely with regards to the first buyer. The warranty covers the replacement or repair of any panels that fail to work exclusively due to manufacturing or material defects. The warranty does not cover any of the situations listed below, which will therefore be regularly invoiced should they take place:

- A-** Defects caused by user neglect or misuse or by the use of products not in conformity with the instructions supplied in the user manual by Tesi International s.r.l.;
- B-** Damages occurred during transportation or due to the tampering by unauthorized personnel;
- C-** Defects or failure to function due to the lack of power or to power surges in the line;
- D-** Glass parts, linings, finishing, decorations.

The replacement of any defective part does not result in warranty extension or renewal. The defective and/or replaced parts must be shipped back to Tesi International s.r.l., carriage paid. Installation and assistance under warranty are to be paid for and provided by the retailer from which the product was purchased. Only should the retailer fail to do this may the buyer contact the manufacturer reporting on this fact.

All shipping and/or transportation costs, as well as any travel expenses for personnel required to provide services covered by the warranty are to be paid by the final user.