

## INSTALLATION

### Installation

The 950S chronothermostat is a daily and weekly electronic chronothermostat that permits the programming of the temperature of your home every hour of the day, every day of the week.

950S is equipped with a backlight display and a graphic visualisation of the programmed temperature that can be modified by simple and functional commands that facilitate the programming.

950S avoids wasting energy by activating the heating or air-conditioning system only when needed.

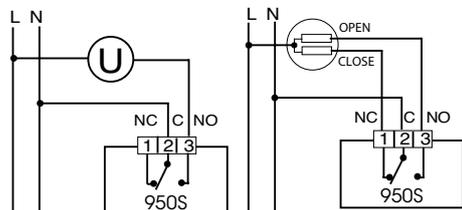


Fig.1

Connection to burner, wall-mounted boiler, air conditioning system, spring-return zone valve.

Connection to zone valve.

950S can be directly installed on a 3 module recess box or on the wall. In either cases, it is advisable to position it at a height of 1,5 meters from the wall, in a dry place, away from draughts and heat sources.

### INSTALLATION ONTO PATTRESS BOX 503

After connecting the wiring, fix the BASE PLATE (with the slots of the FLAP at the bottom) directly onto the three-gang pattress box utilizing the type "A" screws supplied (Fig. 2).

Lift the BATTERY COVER and fix the CHRONOTHERMOSTAT UNIT to the BASE PLATE utilizing the type "B" screws (Fig. 3).

Complete the installation by lowering the BATTERY COVER.

Fig.2

Screw and plugs supplied

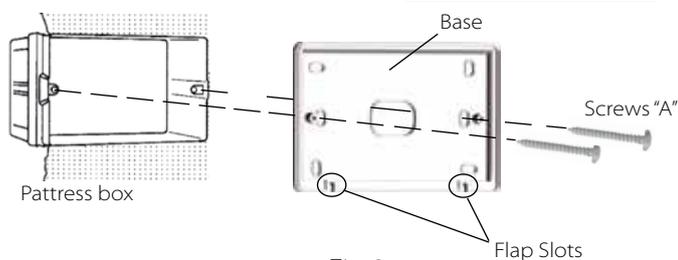
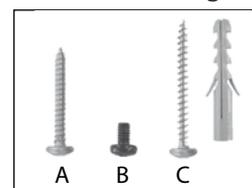
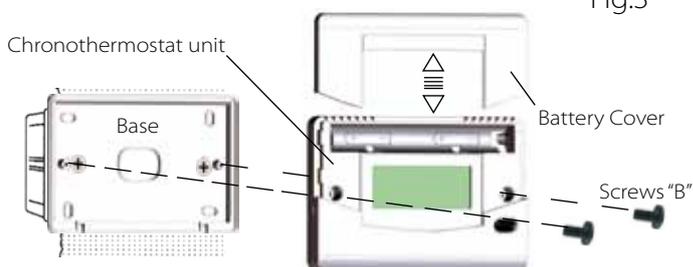
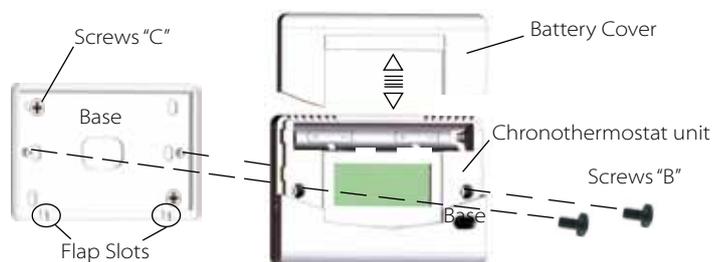


Fig.3



### WALL INSTALLATION

After fixing the BASE PLATE (with the slots of the FLAP at the bottom) to the wall using the wall plugs and supplied type "C" screws, electrically connect the chronothermostat and fix it to the BASE PLATE using the type "B" screws. Complete the installation by lowering the BATTERY COVER.



### Power supply

950S is powered by two AA 1.5V alkaline batteries that ensure the chronothermostat operates for at least two years.

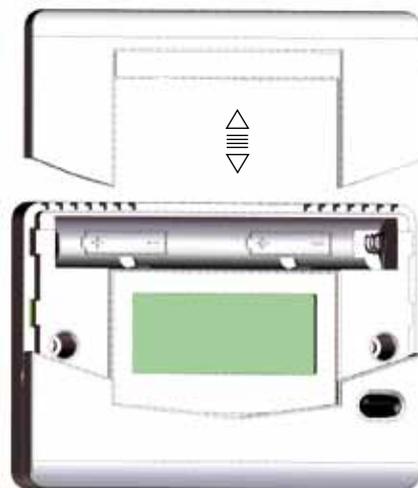
To insert the batteries, slide out the BATTERY COVER and position the batteries in the correct polarity direction as indicated inside the compartment (Fig. 4).

905S is equipped with two battery warning discharge levels. When the first level is superseded the symbol **BAT** appears (  ) whilst the chronothermostat continues to function correctly.

On reaching the second level, the chronothermostat completely blocks its functions of thermoregulation whilst the display shows the hour, day and the flashing symbol of the discharged battery (  ).

Whilst substituting the batteries, the data remains memorized for 30 seconds in the absence of power.

Fig.4



### Initialisation

As soon as **950S** is fed power it carries out a control cycle switching on all segments of the display and activating the charge for a few seconds.

If the initialization might prejudice the correct functioning of the charge, power up the chronothermostat before carrying out the electrical connections.

### Functioning and programming

A fundamental part of the chronothermostat is the backlight graphic display that shows a diagram of 24 columns representing the 24 hours of the day and the height of each column indicates the programmed temperature for that hour.

The segment at the top on the right (A in Fig.5), in correspondence to the overprinted writing indicates the day to which the programme refers. The programmed temperature (B in Fig.5) is visualised at the top on the right whilst programming and is identified by the day flashing and the symbol "C" indicating the °C. During normal functioning, the hour or the ambient temperature are alternately visualised by pressing the °C/h key (Fig.5).

A standard utilization diagram is shown once the **950S** chronothermostat is powered on; the clock starts at 00.00 of Monday (LU).

To modify the programme, move to the desired day using the **DAY** key (Fig.5) and adjust the daily graphic utilizing the four central keys designed in the shape of a cross. The **+h** and **-h** keys (Fig.5) shift the cursor horizontally along the HOUR axis, whilst the **+°C** and **-°C** keys (Fig.5) adjust the set temperature.

**The weekly temperature programme can be modified at any moment by utilising the four central keys designed in the shape of a cross (+h, -h, +°C and -°C) and the DAY key.**

The minimum increase/decrease of the set temperature using the **+°C** and **-°C** keys is **0.1°C**. Keeping **+°C** or **-°C** key pressed the increase/decrease becomes **0.2°C**.

After programming the first day, the following days can be programmed in two different ways:

- Pressing the **DAY** key (F in Fig.5), the following day is visualized displaying the memorized programme (if the previous programmed day does not exist, the standard graphic is visualized) that can be modified as previously described.

- Copying the day previously programmed into the successive day using the **COPY** function.

## DIGITAL ELECTRONIC ROOM CHRONOTHERMOSTAT

### Copy key

To copy the programme of the day that was previously programmed in other days, press the COPY key for two seconds.

The word COPY appears on the display and the cursor of the day in which the programme is to be copied flashes.

Using the **+h** or **-h** key scroll the days of the week and to confirm the DAY in which to copy the programme press the COPY key.

To exit from the COPY function, wait a few seconds without pressing any key. Having finished programming the whole week, update the hour and the day by pressing the SET key using a pointed object (Fig. 5).

### Set key

The HOUR, MINUTES and DAY can be updated using the SET key (G in Fig.5).

Pressing the SET key, the HOUR starts flashing.

The current HOUR is adjusted the using the **+°C** and **-°C** keys.

Pressing the **+h** key, the programming sequence shifts to the MINUTES which starts to flash.

The MINUTES are adjusted using the **+°C** and **-°C** keys.

Pressing the **+h** key, the programming sequence shifts to the DAY which starts to flash.

The DAY is adjusted using the **+°C** and **-°C** keys.

From this moment the **950S** chronothermostat starts its normal functioning, indicating each upload inserted (heating or air-conditioning) by the lighting up of the flame symbol on the display (Fig. 5).

### Manual functioning

Pressing the AUT/MAN key (Fig.5) the chronothermostat goes into manual mode by closing the graphic display (which remains memorized) and lighting up the hand symbol (Fig. 5).

Now the **950S** chronothermostat behaves like a normal ambience thermostat where the adjustment of the temperature is made by using the **+°C** and **-°C** keys (O and P in Fig.5).

The set temperature read on the display remains as long as the chronothermostat is in manual mode (press the AUT/MAN key to pass to automatic mode).

### Off key

The chronothermostat is switched off by pressing the  key (R in Fig.5) for two seconds.

The **950S** will deactivate the functions relative to the set programmes, which anyway remain memorized, and will alternately visualize the word OFF with the current hour and the detected temperature.

To visualize the HOUR instead of the temperature, press the **°C/h key**.

When the chronothermostat is switched off, the ANTI-FREEZE FUNCTION remains active. If the ambient temperature detected drops below **7°C** ( $7°C - 0.2°C = 6.8°C$ ), the device activates the heating system to keep the water circulating to stop ice forming in the tubes.

### Reset function

If it becomes necessary to cancel the set programme (e.g., after a programming test), simultaneously press the AUT/MAN and COPY keys (T and H in Fig.5) for approximately two seconds.

The **950S** chronothermostat restarts the initialisation procedure described previously.

### Segment indicating the day

**LU** = Monday

**MA** = Tuesday

**ME** = Wednesday

**GI** = Thursday

**VE** = Friday

**SA** = Saturday

**DO** = Sunday

### Indicators



*WINTER function mode indication*



*SUMMER function mode indication*



*MANUAL function mode indication*

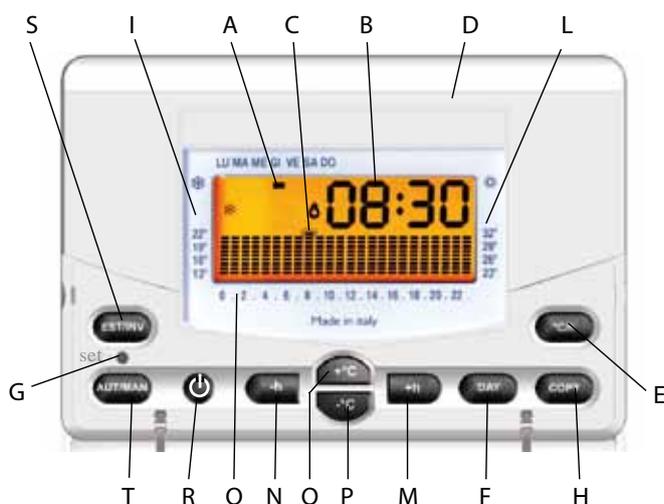


*DISCHARGED battery indicator*



*Relay contact closed indicator*

Fig.5



POS.	DESCRIPTION
A	Segment indicating the current day or the programmed day, whilst programming.
B	Numerical display indicating the current hour or the ambient temperature alternately made visible by pressing the E key. Whilst programming, it indicates the set temperature.
C	Flashing segment that indicates the external temperature or, whilst programming, the set temperature.
D	Battery cover.
E	Key that permits the alternate visualisation of the current hour and the ambient temperature. It also permits the user to exit from the setting programme.
F	Key for scrolling the days whilst programming.
G	Recessed key for adjusting the HOUR, MINUTES and DAY.
H	Key for copying the programme of the day visualised to another day of the week.
I	Temperature scale for functioning in WINTER mode (INV).
L	Temperature scale for functioning in SUMMER mode (EST).
M	Key for increasing the HOURS whilst programming.
N	Key for decreasing the HOURS whilst programming.
O	Key for increasing the temperature whilst programming.
P	Key for decreasing the temperature whilst programming.
Q	Daily hour scale.
R	ON/OFF key.
S	Key for selecting the WINTER (INV) programme or SUMMER (EST) programme.
T	Key for selecting the automatic (AUT) programme or manual (MAN) programme