INSTALLATION

Basic information

1 - °C blinks on the PROGRAMMING screen.
2 - Touch the blinking °C lightly to leave the PROGRAMMING screen.
3 - Functions are activated by touching the display lightly and by keeping the touch area pressed.

General description

The 950T wall-mounted touch screen chronothermostat makes it possible to set the temperature in your house in a very easy way.

It is equipped with a back-lit digital display which shows the detected temperature as well as the set temperature.

The 950T chronothermostat makes it possible to control heating and conditioning systems.

It avoids energy waste, because it activates heating and conditioning systems only when necessary.

Fig.1
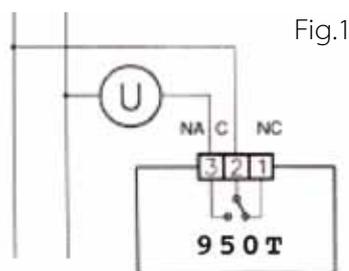
Connection to burners, wall-mounted boiler, conditioning systems and spring return zone valves.
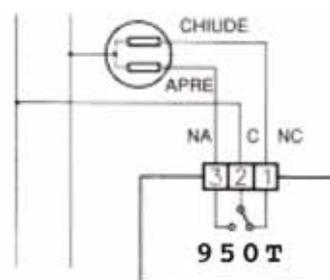
Connection to the zone valve.

Fig.2

Installation

950T can be installed directly on the 3 module built-in box or on the wall.

In both cases we recommend installing it at a height of 1.5 m from the floor, in dry places, away from air drafts and heat sources.

Installation on the 503 box

After carrying out the electrical connection fix the 950T chronothermostat directly onto the built-in box made up of 3 modules using the type A crews supplied (Fig. 3).

1 - Fix the BASE to the box 503 using the C screws (Fig.4).
2 - Fix the FRONT piece to the BASE using the A crews.
3 - Mount the lid on the FRONT PIECE by inserting the 4 hooks in the slots (Fig. 6).

ATTENTION: AVOID EXCESSIVE TIGHTENING SO AS NOT TO DEFORM THE FRONT PIECE.

Fig.3
Screws supplied

A B C

Fig.5

FRONT PIECE

"A" SCREWS

BASE

Fig.4

BASE

"C" SCREWS

BASKET

Fig.6

FRONT PIECE

LID
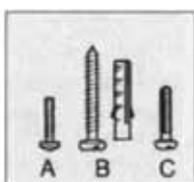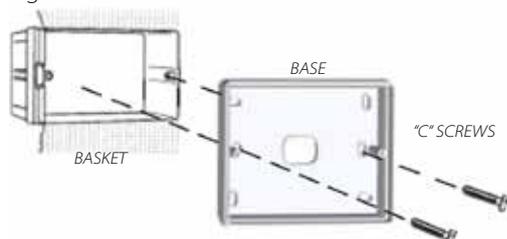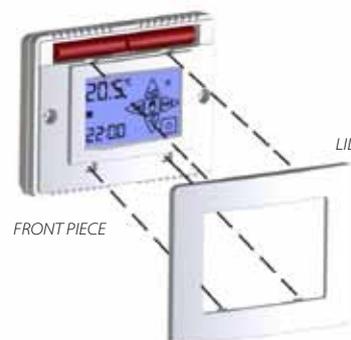
Wall installation

After fixing the BASE to the wall (Fig.7) using the supplied Fishers and screws (type B), connect the chronothermostat to the electric supply and fix it to the BASE using type "A" screws (Fig. 8). Finally mount the LID on the FRONT PIECE (Fig.9)

Fig.7

BASE

"B" SCREWS

FRONT PIECE

BASE

"A" SCREWS

Fig.8

LID

FRONT PIECE
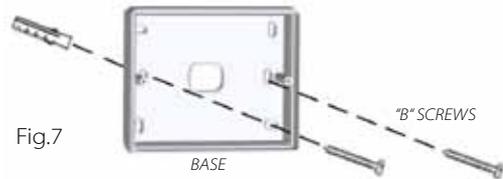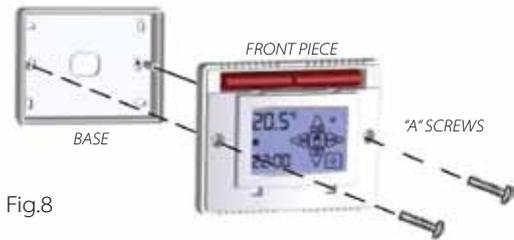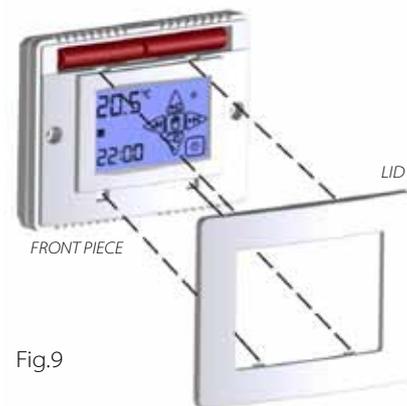
Fig.9

Power supply

Two standard 1.5 AAA Alkaline batteries supply power to the chronothermostat. They guarantee a period of operation of at least 2 years (in the STAND-BY mode).
Batteries can be inserted easily in the compartment under the LID by observing the polarity shown on the plastic part. (Fig.10).

Fig.10

Switching on / reset

After inserting the batteries and starting the RESET the chronothermostat carries out a control cycle by switching on all segments of the display and activating the load within a few seconds (Fig. 11).
After a few seconds the chronothermostat goes over to the STAND-BY ON phase (Fig.12).
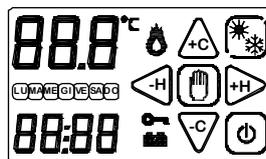
Fig.11

Fig.12

The RESET function is activated by pressing the following keys at the same time and or and.
Activate the SUMMER/WINTER key by keeping the corresponding touch area pressed until the following or is displayed, before going over to the RESET function.

Setting the day and the time

We recommend setting the day and the time only after setting the WEEKLY PROGRAM.

If the chronothermostat is in the **STANDY-BY ON** (Fig. 13) status, touch the display in order to access the **PROGRAMMING** screen (Fig. 14).

Press the **TIME** touch area and the **HOURS** will start blinking (Fig. 15).

Fig.13   Fig.14   Fig.15
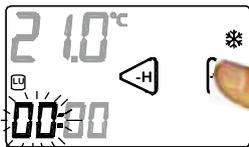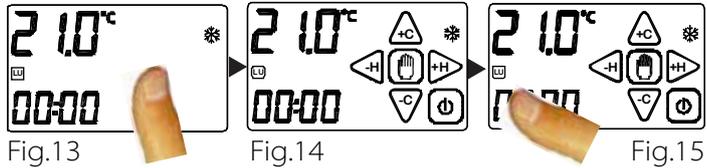
Fig.16

HOUR: use the keys ◁ ▷ to set the correct HOUR (Fig. 16)

Fig.17

MINUTES: Keep the touch area of the MINUTES pressed and set the minutes using the keys ◁ ▷ (Fig. 17).

Fig.18

DAY : Press the DAYS touch area and set the current DAY using the keys ◁ ▷ (Fig.18).
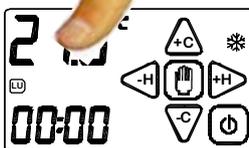
Fig.19

*At the end of the HOUR, MINUTE and DAY PROGRAMMING, confirm your settings by pressing the **TEMPERATURE** touch area. (Fig. 19).*

Weekly program

We recommend carrying out the weekly programming before setting day and time.

It is now possible to go from the STAND-BY ON (Fig.20) phase over to the PROGRAMMING phase (Fig.21) simply by touching the display.

Keep the △ or ▽ key pressed for about 2 seconds to have access to the WEEKLY PROGRAMMING.

In the WEEKLY PROGRAMMING you can set the temperature of every HOUR of the day and of every day of the WEEK.

By touching △ or ▽ you increase or decrease the TEMPERATURE by 0.1°C.

By keeping △ or ▽ pressed, the temperature will vary by 0.5°C.

Touch ◁ or ▷ to copy the temperature set in the preceding or in the following half hour.

By keeping ◁ or ▷ pressed, you will copy the temperature set in the preceding or in the following hour. (Fig.24)

Touch the touch area of the TEMPERATURE to go over to the PROGRAMMING of the next day.

Fig.20   Fig.21

TEMPERATURE INCREASE

HOUR INCREASE

HOUR DECREASE

TEMPERATURE DECREASE

2 sec.
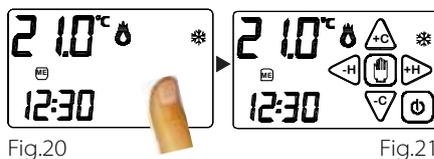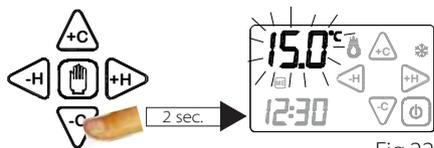
Fig.22
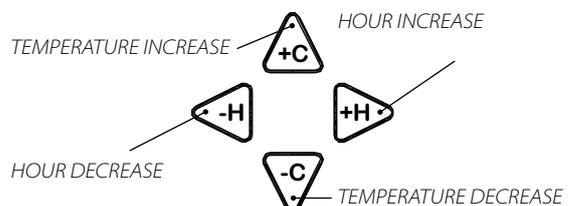
Fig.23
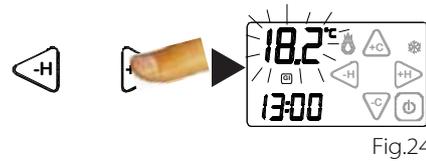
Fig.24

Visualization program

The ◁-H or +H▷ keys (Fig.25) make it possible to easily explore he daily program from 0:00 to 23:00 of the same day. The °C simbol will blink dring exploration (Fig. 26).
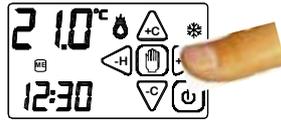
Fig.25
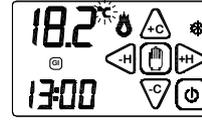
Fig.26

Copy function

The COPY FUNCTION makes it possible to copy the program set for a certain day into the other days of the week.
The COPY function can be activated by keeping the key ⚠ pressed for about 2 seconds (until °C blinks) and then by pressing the HOUR TOUCH area. (Fig.27)

It will be visualized the Day that is to be copied - Example: Monday (LU).

Using ◁ or ▷ you can scroll the days of the week and confirm the DAY to be copied by touching COPY.

LU is displayed in a permanent way and the following DAY TUE blinks **MA** .

By pressing COPY repeatedly, the day will be copied for the rest of the week. (Fig.29)
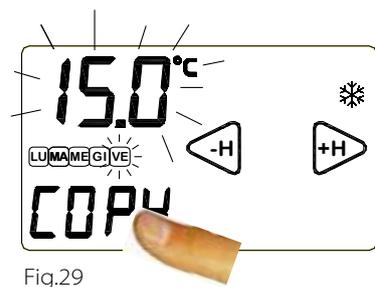
Touch ▷ to move to **DO** which will start blinking. (Fig.30)

Confirm that you want to copy the MONDAY PROGRAM onto SUNDAY by touching COPY. (Fig.31)
At the end, touch the temperature touch area at any time in order to leave the COPY function. You will then go back to the STAND-BY ON phase.

Fig.27

Fig.28

Fig.29

Fig.30

Fig.31

Fig.32   Fig.33   Fig.34

Manual function

Touch the display to activate it.

Keep the key (Fig. 32) pressed for about 2 seconds to go over to the MANUAL mode (Fig.33). 950T will behave like a simple room thermostat.

By keeping ▲ or ▽ pressed, the temperature will vary by to 0.5°C.

After a few seconds without carrying out any operation or by simply touching the TEMPERATURE touch area, you will go over to the MANUAL interface. (Fig.34).

To leave the manual programming mode, keep the key pressed for about 2 seconds.

Manual function timer

This function makes it possible for the 950T chronothermostat to work in the MANUAL mode for a certain time interval by keeping the temperature set in the MANUAL program.

At the end of the set time interval, the chronothermostat will return to the WEEKLY PROGRAM.

In the MANUAL mode keep the HOUR touch area pressed for two seconds (Fig.35).

The HOUR and the key will start blinking. (Fig.36)

Press the ◁ or ▷ keys order to set the time interval during which the chronothermostat must work in the MANUAL mode.

Press the MINUTES touch area in order to set the minutes. The maximum time interval is 99 hours and 59 minutes.

By touching the key after setting the time interval, the timer will start counting. The residual time will be displayed and the symbol will blink..

In the example shown in Fig.37 the chronothermostat will remain in the MANUAL mode for 8 hours.

To interrupt the timer counting, touch the key after enabling the display by simply touching it.

Fig.35   Fig.36   Fig.37
TIMER

Remote contact

When the 950T chronothermostat is switched off (OFF), it can be controlled by a remote control device connected to the REMOTE terminal box (Fig.38).

The chronothermostat will then be switched on (ON) or off (OFF) according to the REMOTE command and to the status of the chronothermostat itself. The statuses are reported in the table shown below (Fig. 39).

950T chronothermostat ON: If the 950T chronothermostat is OFF and the REMOTE control goes from OFF over to ON, the 950T will be ON.

950T chronothermostat OFF: If the 950T is ON and the REMOTE control goes from ON over to OFF, the 950T will be OFF.

950T chronothermostat ON: If the 950T goes from OFF over to ON and the REMOTE control is OFF, the 950T will be ON.

950T chronothermostat OFF: If the 950T goes from ON over to OFF and the REMOTE control is OFF, the 950T will be OFF.

950T chronothermostat ON: If the 950T goes from ON over to OFF and the REMOTE control is ON, the 950T will keep its ON position.

950T chronothermostat OFF: If the 950T and the REMOTE system are in any status and the REMOTE system goes first over to ON and then over to OFF, the 950T will be OFF.

(N.B. This procedure is recommended when the user does not remember the status of his/her 950T chronothermostat and wants to switch it off by REMOTE control).

NA C NC   RELE'

Fig.38

REMOTE

950T	REMOTE	950T Final status
OFF	OFF > ON	ON
ON	ON > OFF	OFF
OFF > ON	OFF	ON
ON > OFF	OFF	OFF
ON > OFF	ON	ON
ON/OFF	ON/OFF > ON > OFF	OFF

Fig.39

Summer/Winter

The SUMMER/WINTER function makes it possible to set the chronothermostat to two operation modes:

SUMMER MODE ☀ : This is used to control cooling appliances.

WINTER MODE ❄ : This is used to control heating appliances.

The seasonal operation mode can be changed by enabling the related key. This can be done by keeping the corresponding area in the PROGRAMMING interface pressed. (Fig. 40)

Then touch the key to change the OPERATION MODE (Fig. 41).

Fig.40   Fig.41
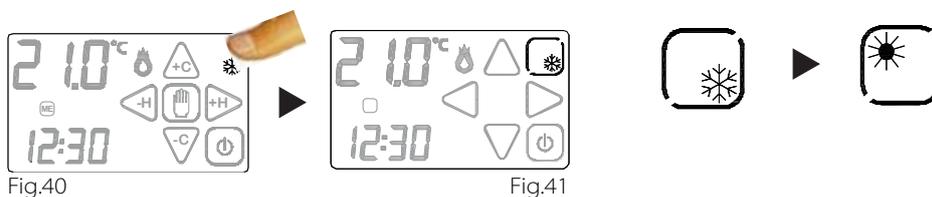
ON/OFF

Simply touch the display to activate it.

Keep the ON/OFF key pressed for about 2 seconds to switch the device ON/OFF (Fig.55).

The device will go over to the switching off phase and it will disable the activation of the system. In the STAND-BY OFF phase it will display only the TIME and the detected temperature (Fig.42).

To switch on the chronothermostat you must enable the switching on key by touching the display (Fig.43).

Keep the key pressed for about 2 seconds (Fig. 44) to switch the chronothermostat on (Fig. 45).

Fig.42   Fig.43

Fig.44   Fig.45
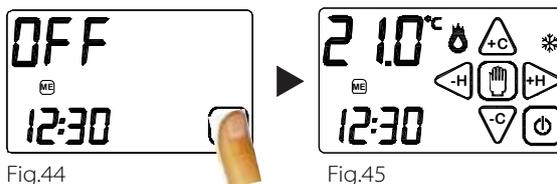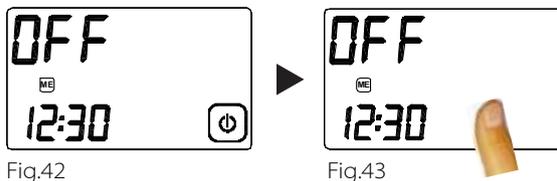
Blocking function

Simply touch the display to activate it.

The chronothermostat can be blocked in the STAND-BY ON phase by keeping the keys △ and ▽ pressed for about two seconds.

When the ⚿ icon (Fig. 47) is displayed, release the keys. The chronothermostat will go over to the blocking phase. Keep the ⚿ icon pressed for about 4 seconds (Fig. 48) to unblock the chronothermostat.

Make sure that this does not blink

Fig.46   Fig.47   Fig.48

Unblock
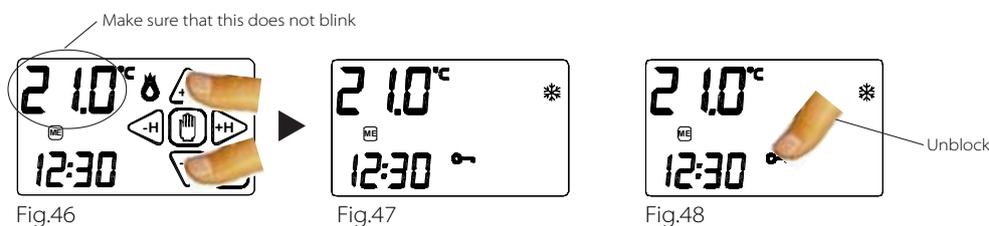
Temperature differential **dt**

IThe TEMPERATURE DIFFERENTIAL is the intervention interval of the chronothermostat based on the SET TEMPERATURE to be reached (Fig. 21).

It can be greater or less according to the variability index of the room temperature (size of the room and influence of the external environment).

In the WINTER program (❄), the chronothermostat activates the heating system when the following temperature is detected in the room:
SET TEMPERATURE - TEMPERATURE SEMI-DIFFERENTIAL

The heating system is switched off when the following temperature is detected in the room:
SET TEMPERATURE + TEMPERATURE DIFFERENTIAL

Vice-versa, in the SUMMER program (☀), the cooling and/or conditioning system is activated when the following temperature is detected in the room:
SET TEMPERATURE + TEMPERATURE

The cooling and/or conditioning system is switched off when the detected temperature is as follows:
SET TEMPERATURE – TEMPERATURE DIFFERENTIAL

The pre-set TEMPERATURE DIFFERENTIAL in the chronothermostat is 0.4 °C for the WINTER program (❄) and 0.8°C for the SUMMER program (☀).
This means, for example, the following:

Program: WINTER (❄)
SET TEMPERATURE: 20.0°C
TEMPERATURE DIFFERENTIAL: 0.4°C

DETECTED TEMPERATURE:
20.0 - 0.2 °C = 19.8 °C HEATING SYSTEM ON

DETECTED TEMPERATURE:
20.0 + 0.2 °C = 20.2 °C HEATING SYSTEM OFF

Lightly press SET TEMPERATURE on the display (Fig. 49) and keep it pressed for about 3 seconds to change the TEMPERATURE DIFFERENTIAL (d.t.) during the PROGRAMMING phase (Fig. 50).

The writing "dt" will be shown on the display and the digits below will refer to the temperature differential currently set in connection with the related program (Fig. 50).
It is therefore possible to set the temperature differential within a range of 0.2°C÷2.0°C by pressing the following keys ▲ and ▼ (Fig. 51).

Fig.49

Fig.50
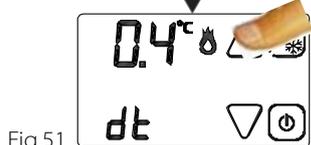
Fig.51

Frost protection function

The FROST PROTECTION FUNCTION remains on when the chronothermostat is switched off. If the detected temperature falls below 7 °C (7°C - 0.2°C=6.8°C), the device activates a system which keeps water circulating and prevents it from freezing inside the pipes. (Fig.52).
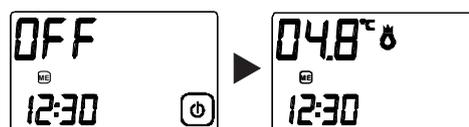
Fig.52

Run down battery 🔋BAT

The chronothermostat detects two thresholds relating to battery run down.

When the FIRST THRESHOLD is reached, the BATTERY RUN DOWN symbol appears. In this case the functions of the device remain unaltered (Fig. 53).

When the SECOND THRESHOLD is reached, the chronothermostat is switched off, the operation of the system is disabled and the symbol BATTERY RUN DOWN blinks (Fig. 54). In this case replacement of the batteries is necessary to restore operation of the 950T.

Fig.53

Fig.54

Correct use and maintenance

- The whole programming interface is shown on the front display.

We recommend switching off and then on the chronothermostat in order to re-align the status of the relay.

- During use and while programming you must press the display only lightly and in the specific area referring to a specific function.

To make touching easier, use a thin, non-metallic tool.

If you do not have a PDA stylus, you can use, for example, the back of a pencil, the plastic cap of a pen, a tooth-pick or a cotton swab.

- Use a soft cloth and no detergents to clean the display. Press only lightly on the display and, if possible, clean while the chronothermostat is in the BLOCKED 🔑 status.

MEASURED TEMPERATURE
- Exit function / program (TOUCH)
- Setting the diff. temperature (PRESSED)

HEATING / CONDITIONING SYSTEM OPERATING

SET TEMPERATURE INCREASE AND TEMPERATURE DIFFERENTIAL INCREASE.
- Access to weekly programming (PRESSED)
- Slow temperature increase (TOUCH)
- Fast temperature increase (PRESSED)

HOUR/MINUTES DECREASE
(Only TOUCH or PRESSED)

DAY of the WEEK

HOUR of the DAY
- Enable the copy of the daily program (PRESSED)
- Copy daily program (TOUCH)

SUMMER/WINTER PROGRAM
- Enable season change (PRESSED)
- Season change (TOUCH)

HOUR/MINUTES INCREASE
(Only TOUCH or PRESSED)

MANUAL MODE
- Inlet/outlet manual program (PRESSED)

BLOCKING/UNBLOCKING FUNCTION

BATTERY RUN DOWN SIGNAL

SET TEMPERATURE DECREASE AND TEMPERATURE DIFFERENTIAL DECREASE.
- Access to weekly programming (PRESSED)
- Slow temperature decrease (TOUCH)
- Fast temperature decrease (PRESSED)

ON/OFF
- On/off (PRESSED)

Fig.55

ART 950T