

Green 503

WALL-MOUNTED TOUCH SCREEN CHRONOTHERMOSTAT



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 *Green 503* 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.

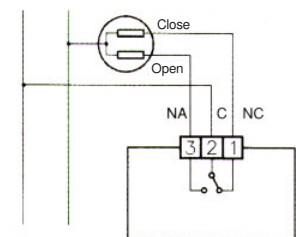
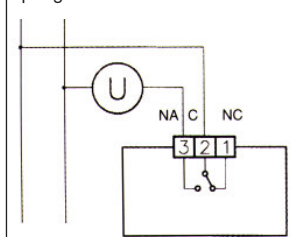
The *Green 503* chronothermostat makes it possible to control heating and conditioning systems.

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

ELECTRICAL CONNECTION

Connection to burners, wall-mounted boilers, conditioning systems and spring return zone valves.

Connectin to the zone valve:



INSTALLATION

Green 503 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 *Green 503* chronothermostat directly onto the built-in box made up of 3 modules using the type A screws 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 screws.
- 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.

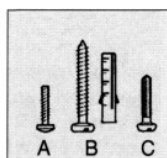


Fig.3 SCREWS SUPPLIED

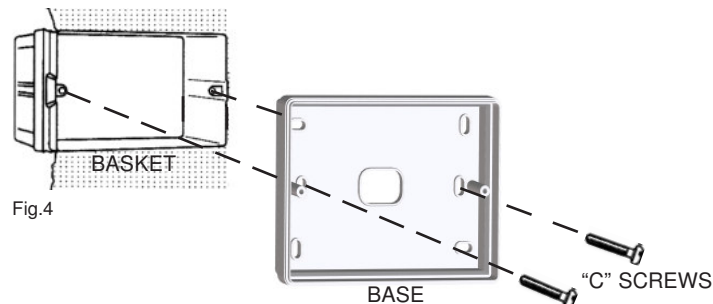


Fig.4

Fig.5

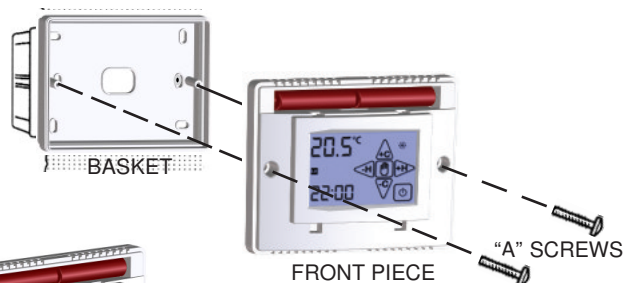
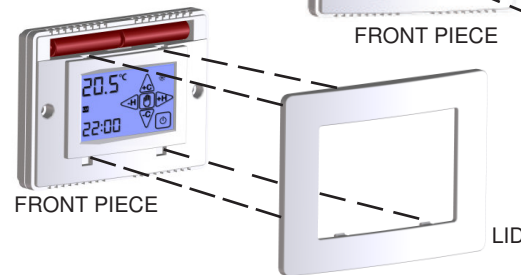


Fig.6



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

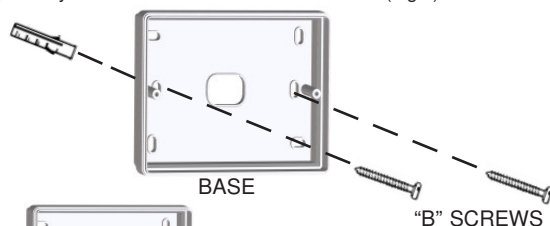


Fig.8

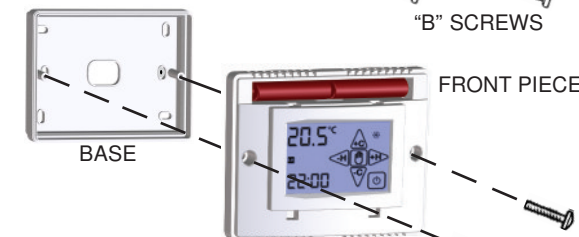
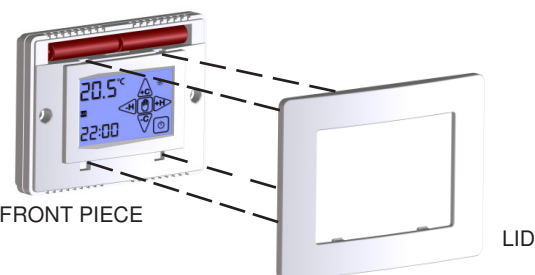


Fig.9



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

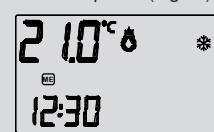


Fig.12

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

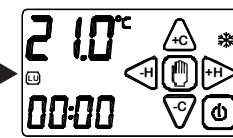


Fig.14

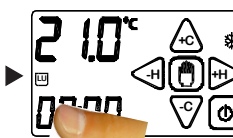


Fig.15

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

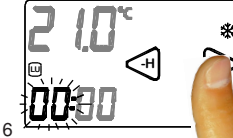


Fig.16

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



Fig.17

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



Fig.18

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



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.



Fig.20



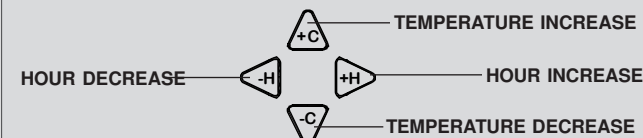
Fig.21

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



Fig.22

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.



Fig.23

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)



Fig.24

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

VISUALIZATION PROGRAM

The or keys (Fig.25) make it possible to easily explore the daily program from 0:00 to 23:00 of the same day. The °C symbol will blink during exploration (Fig. 26).

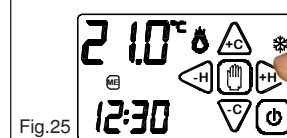


Fig.25

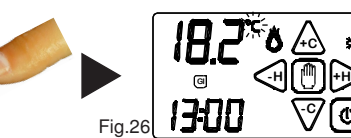


Fig.26

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)



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**.

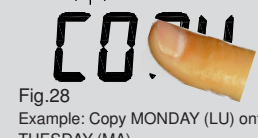


Fig.28

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)



Fig.29

Touch to move to **DO** which will start blinking. (Fig.30)

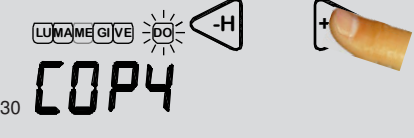


Fig.30

Confirm that you want to copy the **MONDAY PROGRAM** onto **SUNDAY** by touching **COPY**. (Fig.31)



Fig.31



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). The *Green 503* will behave like a simple room thermostat.

By keeping or pressed, the temperature will vary by 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).



Fig.32



Fig.33

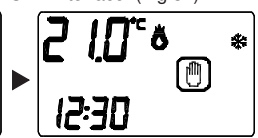


Fig.34

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

GUARANTEE CERTIFICATE

TO BE FILLED IN AND SENT BACK IN THE CASE OF FAILURE

DEVICE: T-Touch 503 chronothermostat

Serial number (s.n.) _____

DEALER

Stamp: _____ Date of purchase: _____

USER

Surname and name _____

Address _____ n° _____

City _____

Telephone _____

MANUAL FUNCTION TIMER

This function makes it possible for the *Green 503* 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 **ON/OFF** key will start blinking. (Fig.36)

Press the **MINUTES** touch area in 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 **ON/OFF** key after setting the time interval, the timer will start counting. The residual time will be displayed and the **ON/OFF** 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 **ON/OFF** key after enabling the display by simply touching it.



Fig.35

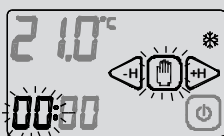


Fig.36

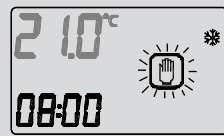


Fig.37- Conteggio TIMER

REMOTE CONTACT

When the *Green 503* 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).



Fig.38

STATUSES OF THE *Green 503*

<i>Green 503</i>	REMOTE	<i>Green 503 Final status</i>
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

Green 503 chronothermostat **ON**:

If the *Green 503* chronothermostat is OFF and the REMOTE control goes from OFF over to ON, the *Green 503* will be ON.

Green 503 chronothermostat **OFF**:

If the *Green 503* is ON and the REMOTE control goes from ON over to OFF, the *Green 503* will be OFF.

Green 503 chronothermostat **ON**:

If the *Green 503* goes from OFF over to ON and the REMOTE control is OFF, the *Green 503* will be ON.

Green 503 chronothermostat **OFF**:

If the *Green 503* goes from ON over to OFF and the REMOTE control is OFF, the *Green 503* will be OFF.

Green 503 chronothermostat **ON**:

If the *Green 503* goes from ON over to OFF and the REMOTE control is ON, the *Green 503* will keep its ON position.

Green 503 chronothermostat **OFF**:

If the *Green 503* and the REMOTE system are in any status and the REMOTE system goes first over to ON and then over to OFF, the *Green 503* will be OFF.

(N.B. This procedure is recommended when the user does not remember the status of his/her *Green 503* chronothermostat and wants to switch it off by REMOTE control).

GENERAL GUARANTEE CONDITIONS

THIS IS THE ONLY DOCUMENT WHICH ENTITLES REPAIR WORK TO BE CARRIED OUT ON THE PRODUCT UNDER GUARANTEE

- This product is GUARANTEED for 24 months after the purchase date.
- The GUARANTEE does not apply to damage resulting from tampering and incorrect and improper use and installation.
- The GUARANTEE must be duly filled in, in order to be valid.
- In the case of defects covered by the GUARANTEE, the producer will repair or replace the product free of charge.

SERVICE NOT COVERED BY THE GUARANTEE:

Repair work after the expiry of the GUARANTEE will be charged according to the parts replaced and to the cost of labour.



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)



Fig.40



Fig.41

Then touch the key to change the **OPERATION MODE** (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 (ON/OFF) by touching the display (Fig.43).

Keep the ON/OFF key pressed for about 2 seconds (Fig. 39) to switch the chronothermostat on (Fig. 40).

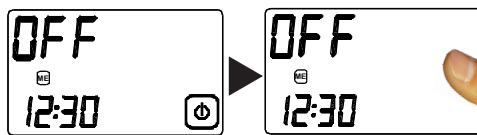


Fig.42



Fig.43

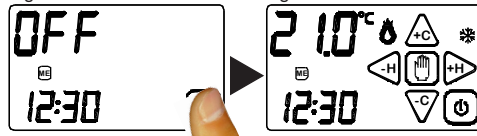


Fig.44

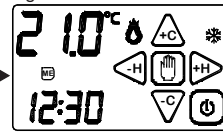


Fig.45



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.



Fig.46



Fig.47

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



Fig.48



TEMPERATURE DIFFERENTIAL

The **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 SEMI-DIFFERENTIAL

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

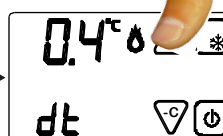


Fig.50



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).

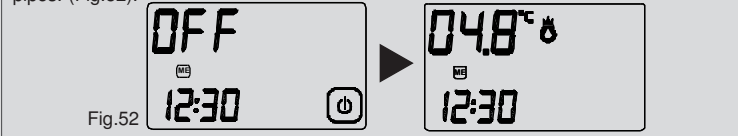


Fig.52



Fig.53



RUN DOWN BATTERY

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).



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 *Green 503*.



Fig.54

MEASURED TEMPERATURE

-EXIT FUNCTION/PROGRAM (TOUCH)

-SETTING THE TEMPERATURE DIFFERENTIAL (PRESSED)

HOUR/MINUTES DECREASE

(Only TOUCH or PRESSED)

DAY of the WEEK

-ENABLING THE COPY OF THE DAIL PROGRAM (TOUCH)

HOUR of the DAY

-ENABLING THE COPY OF THE DAIL PROGRAM (TOUCH)

-COPY DAILY PROGRAM (TOUCH)

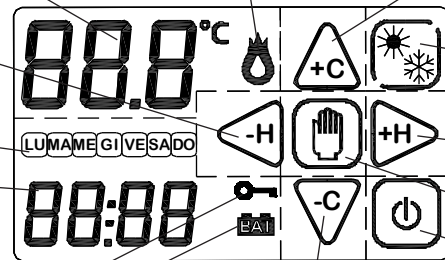
BLOCKING/UNBLOCKING FUNCTION

-ACCESS TO WEEKLY PROGRAMMING (PRESSED)

-SLOW TEMPERATURE DECREASE (TOUCH)

-FAST TEMPERATURE DECREASE (PRESSED)

HEATING/CONDITIONING SYSTEM OPERATING



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.

TECHNICAL CHARACTERISTICS

- Power supply: 2 1.5V AAA alkaline batteries
- Battery life (Stand-by): over 18 months.
- Automatic control of the run down status of the batteries with 2 intervention thresholds.
- Replacement of batteries without loss of data if the replacement is carried out within 2 minutes.
- Adjustment range: From 5 to 30°C in the **WINTER** program (❄️), From 15 to 35°C in the **SUMMER** program (☀️).
- Adjustment step: 0,1 °C in the **WINTER** program (❄️), 0,2 °C in the **SUMMER** program (☀️).
- Temperature differential adjustable from 0.2 to 2°C (intervention interval from ± 0.1 °C to ± 1°C).
- Possibility of programming an temperature within the adjustment ranges at any time of the day for all days of the week.
- Contact capacity: 230Vac - 5A (resistive load).
- Installation: wall-mounted or mounted on a box with three modules.
- Colours available: white or dark grey
- Weight: 120g including batteries.
- Dimensions: 114 x 83 x 23.5mm

- LUnedi = MONDAY
- MARtedi = TUESDAY
- MERcoledì = WEDNESDAY
- Glovedì = THURSDAY
- VEnerdi = FRIDAY
- SABato = SATURDAY
- DOmenica = SUNDAY

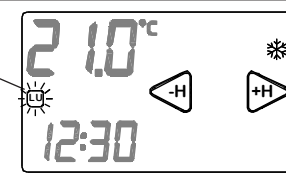


Fig.55



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