

## ENGLISH

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B

### TECHNICAL SPECIFICATIONS

Supply voltage:	230 V~ 50-60 Hz
Device Absorption:	2,5 VA max
Type of action, disconnection and appliance:	1/B/Electronic
Type of Output:	1 relay with unipolar changeover contact NC/NO/COM, voltage-free 5(2) A / 250 V~
Wire section at terminals:	min. 1 mm <sup>2</sup> ÷ max. 2.5 mm <sup>2</sup>
Reception frequency (carrier):	868.35 MHz
Maximum signal capacity in free air:	120 m
Maximum signal capacity in the presence of walls:	30 m (according to the chap. 1.1 and to the chap. 1.4)
Signal reception mode:	antenna internal to the receiver
Type of insulation:	Class II <input type="checkbox"/>
Protection degree:	IP30 / wall-mounted
Pollution:	normal
Operating temperature limits:	-20 °C ÷ +70 °C
Storage temperature limits:	-25 °C ÷ +85 °C
Reference standards (R&TTE DIRECTIVE 1999/5/CE):	LVD EN 60 730-1    EMC EN 301 489-3    RADIO EN 300 220-3

### PERFORMANCE DATA

- Coupling transmitters in self-learning mode, facilitated by luminous and audio signals.
- It is possible to erase a transmitter coupling to the zone even in the event of transmitter failure.
- Manually forcing the state of the output to test the system (5 minutes, resettable).
- "RESET" command to erase temporary data in memory and deactivate commands.
- Permanent modifiable memory for transmitter couplings.
- Luminous signals indicating malfunctions due to the absence of transmission or an almost dead battery.
- Highly reliable communications thanks to the **double transmission of data**.
- Lighted and/or audio signal, on 3 levels, of the TEST signal to verify the presence and capacity of the signal (VMETER)

# 1 - INSTRUCTIONS FOR THE INSTALLER

## 1.1 - INSTRUCTIONS AND REQUIREMENTS FOR INSTALLING THE RECEIVER

Install the receiver at a height that allows the antenna to stick up above any nearby metal container (boiler, expansion tanks, metal cabinets); avoid positioning the antenna near cables and electrical panels (fig. 1.i - fig. 2.i)

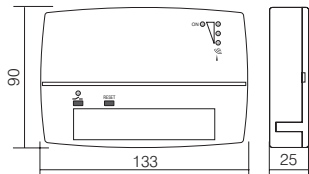


**Cabinets, walls and slabs containing metal can limit the operation of the product. This system is incompatible with radio products working on the same frequency (868,35 MH) using permanent emission mode.**

**Important:** installation and electrical connections of devices and appliances must be carried out by skilled people and in compliance with current regulations. The manufacturer declines any liability in connection with the use of products subject to special environmental and/or installation standards. Examples given in the manual are purely indicative.

**Instructions relative to the structure of realizable systems and the assignment of areas to individual timer-thermostats or thermostats are shown in the technical documentation for the transmitter devices (chronothermostats and/or thermostats).**

### DIMENSIONS



### INSTALLATION EXAMPLE

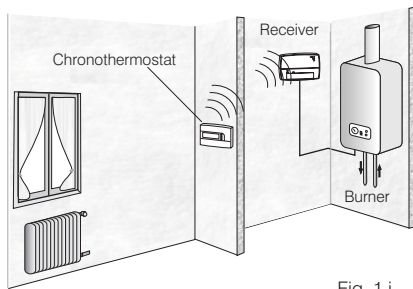


Fig. 1.i

### INSTALLATION

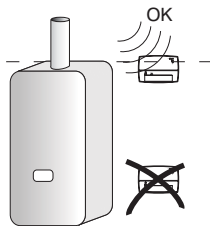


Fig. 2.i

## 1.2 - INSTALLING THE BASE ON THE WALL

### Installing the device: INDEPENDENT - FIXED

**ATTENTION: INSTALLATION MUST BE PERFORMED AFTER SECTIONING THE MAINS SUPPLY - 230 V~.**

**For installation, it is necessary to separate the front part, complete with electronic card, from the base.**

- First on one side and then on the other, insert a screwdriver in the slots located on the sides of the product, exerting light pressure on the locking catch, then, with a small forward rotation of the screwdriver (as shown in figure 3.i), lift the front.
- Remove the front from the base (the resistance to removal is due to the coupling pin on the terminal strip) fig. 4.i.

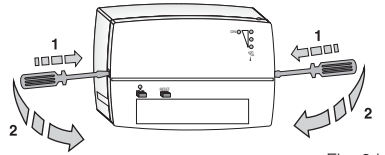


Fig. 3.i

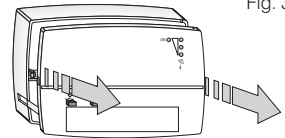


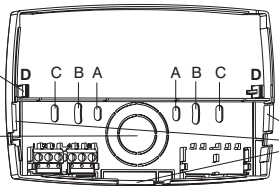
Fig. 4.i

From the base, remove the parts prepared for the passage of the connection wires shown in fig. 5.i.

- Pass the connection wires through the opening you have made.
- Attach the base to the wall (or built-in box), with 2 screws using the pairs of holes (A-A, B-B, C-C) provided (fig. 5.i).
- Make the electrical connections to the terminals located on the base as shown in the next chapter.

D = Catches for locking the front to the base

Removable area for the passage of wires (Installation with built-in box)



Removable areas for installation with trunking system.

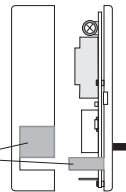


Fig. 5.i

### 1.3 - ELECTRICAL CONNECTIONS

#### SWITCH MAINS SUPPLY 230 V~ OFF

With reference to figures 6.i, 7.i and 8.i:

#### Make the connection to the mains supply

terminal **1** = NEUTRAL

terminal **2** = LINE

#### Make the connections to the device to be controlled

(Such as: a burner, pump, or 2 or 3-wire motorized solenoid valve, servomotor)

Terminal **3** = line, available for controlling the load

terminal **4** = contact normally closed

terminal **5** = contact normally open

terminal **6** = common



#### NOTES AND INSTRUCTIONS FOR THE INSTALLER

- Also pay careful attention to the instructions for the device being controlled.
- In the presence of loads with absorption higher than the data on the product rating plate, interpose a power relay or a suitably dimensioned contactor. In the presence of highly inductive loads we recommend connecting an RC filter in parallel with the load.
- When making the electrical connections, in the case of a wall installation without built-in box, pay particular attention that the cabling is properly placed and does not interfere with the correct closing of the front on the base.
- In the case of installing the receiver on a metal wall, use double insulated cables for the electrical connections.

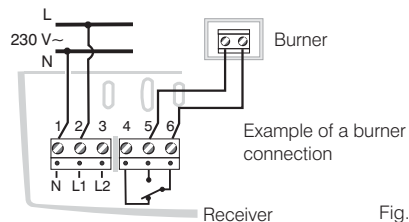


Fig. 6.i

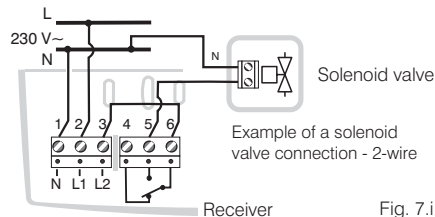


Fig. 7.i

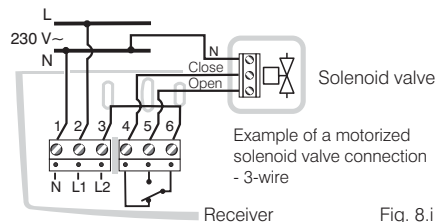


Fig. 8.i

## 1.4 - ATTACHING THE FRONT WITH CARD TO THE BASE

- Reinsert the front part with card on the base being careful to correctly insert the pins connecting the card to the terminals.
- Push the front on to the base using both hands as shown in figure 9.i , until the catches click and lock the front to the base.

**Power the receiver and attempt to operate it and couple the transmitter, as shown in chapter 2 “PUTTING INTO OPERATION AND USE.”**

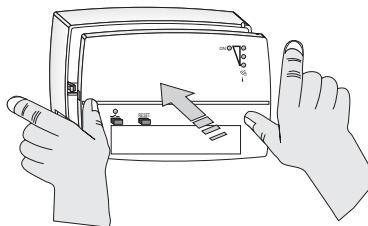


Fig. 9.i

**ATTENTION:** IN THE EVENT THAT, DUE TO ENVIRONMENTAL CONDITIONS, YOU DETECT AN EXCESSIVELY LOW RADIO SIGNAL, WE RECOMMEND MOVING THE ANTENNA OUTSIDE THE RECEIVER AND POSITION IT VERTICALLY.

With reference to the installation procedure (chapter 1.2):

### ● SWITCH MAINS SUPPLY 230 V~ OFF

- Open the receiver
- Move the antenna wire from its seat (upper inside part of the front) and rotate it vertically
- Pass the wire through the small semi-hole provided for the purpose (fig. 10.i)
- Carefully reclose the receiver (fig. 9.i - fig. 10.i).

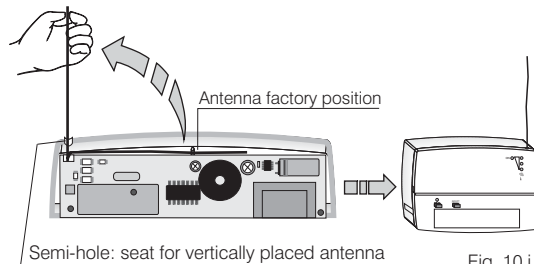
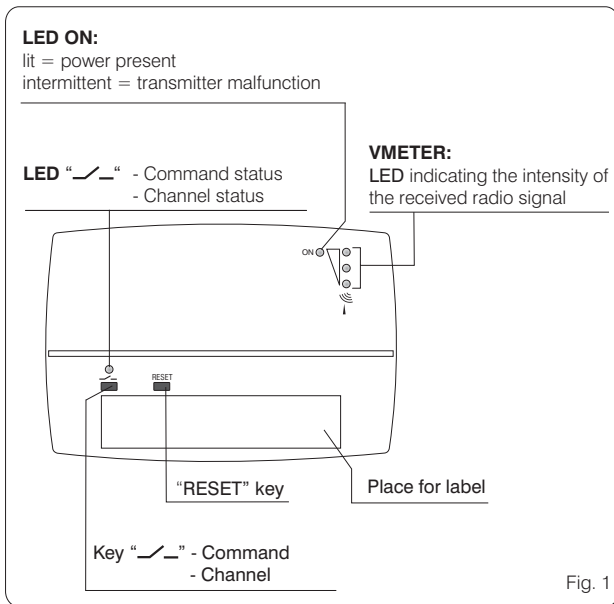


Fig. 10.i

## 2 - PUTTING INTO OPERATION AND USE

### 2.1 - SIGNAL AND COMMAND LEGEND



LED	Appearance of the lighted signals
	Fixed off
	Intermittent (t on = t off) every second
	1 prolonged impulse
	Fixed on

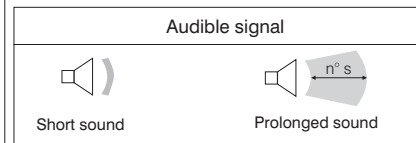


Fig. 2


## 2.2 - NEW DEVICE


When turned on, the receiver has only the **ON LED** lit.

N.B.: there may be a weak lighted signal on the **lower LED** of the **VMETER**, due to the presence of radio interference.

## 2.3 - TEMPORARILY FORCING THE STATE OF THE CONTROL OUTPUT (for example, to test the system)

### A) TRANSMITTER NOT YET COUPLED OR NOT ACTIVE

- Hold down the “” **key** until there is a brief audible signal, then release it: the control is activated and the corresponding **LED** is steady on (fig.3).

The control will remain activated for 5 minutes, at the end of which, an audible signal will continue for **5 seconds** to alert the operator of its imminent deactivation (fig.4): if you wish to keep it active, press the “” **key** again while the audible signal is sounding; otherwise, when the signal ceases, the control will be deactivated.

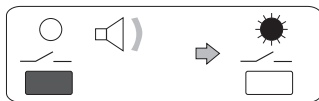


Fig. 3

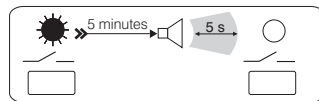


Fig. 4

### Canceling the temporary forcing of the control


- Briefly press the “**Reset**” **key**; when released the temporary forced control is cancelled (fig.5).

N.B.: Before performing this operation, consult chapter 2.9 “**Reset**”



Fig. 5

### B) TRANSMITTER COUPLED AND HEAT REGULATION ACTIVE

The above-indicated operations can also be performed, using the same methods, during normal heat regulation operation; in this case, the temporary forced control will cause the transmitter to be excluded and the reversal of the command status: if active, it will be deactivated and vice versa. During the forced state, the “” **key** is not functional.

## 2.4 - COUPLING TO A TRANSMITTER

**Activate the “Test” state on the transmitter to be coupled**, as explained in the chapter “Coupling to the receiver” in the transmitter manual.

### A) - FIRST COUPLING TO A TRANSMITTER ON THE RECEIVER

The LED “—/—” is off (receiver not coupled)

- Hold the “—/—” key pressed until you hear a single audible signal; then let go: **the LED will flash** (fig.6).

The transmitter is coupled to the receiver.

**Deactivate “Test” mode ON THE TRANSMITTER**, as explained in the specific chapter of the transmitter manual.

**ATTENTION:** if the “—/—” LED is flashing at the beginning of the operation it means that the transmitter in “Test” mode has already been coupled to the receiver. To confirm the coupling: deactivate “Test” mode on the transmitter.

To cancel the coupling: hold down the “—/—” key until you hear a single beep; then release it; **the LED is off** (fig.7). Deactivate “Test” mode on the TRANSMITTER.

### B) - SUBSEQUENT TRANSMITTER COUPLINGS (such as: replacing the transmitter)

#### ON THE RECEIVER

The “—/—” LED is steady on (receiver already coupled to another transmitter)

- Hold the “—/—” key pressed until you hear a single beep; then release it: **the LED is flashing** (fig. 8).

The new transmitter (in “Test” mode) is coupled to the receiver.

**Deactivate “Test” mode ON THE TRANSMITTER**, as explained in the specific chapter of the transmitter manual.

**ATTENTION:** the coupling status is stored in permanent memory and is not erased by the **Reset** command or by a power failure.

**N.B.:** test mode on the transmitter automatically terminates 3 minutes from activation.

Fig. 6

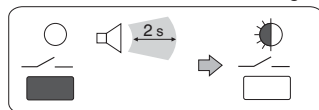


Fig. 7

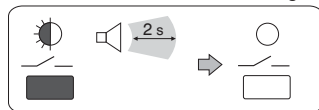
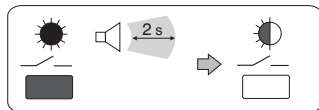


Fig. 8





## 2.5 - CHECKING THE INTENSITY OF THE RECEIVED SIGNAL - VMETER

### ON THE TRANSMITTER

●Activate the “**check the intensity of the radio signal mode**”, as explained in the specific chapter of the transmitter manual.

### ON THE RECEIVER

- The intermittent “**—**” **LED** indicates the coupling condition of the transmitter.
- The **3 LEDs on the VMETER**, together with the **audible signal**, indicate the intensity of the radio signal received, as illustrated in the figures to the side.

**N.B.:** Verification mode on the transmitter automatically terminates 3 minutes after activation.

If you wish to interrupt the verification, deactivate “**Verify**” mode **on the transmitter**, as explained in the instruction manual.

**ATTENTION:** even in “**normal operation**” it is possible to check the intensity of the last radio signal received (the last signal is always stored):

- Press the “**—**” **key** for about 2 seconds, then let go: the **LEDs on the VMETER** will show the intensity of the last signal received for 5 seconds.

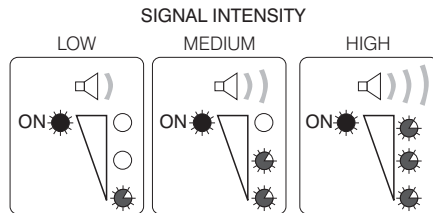


Fig. 9

## 2.6 - NORMAL OPERATION

The transmitter controls heat regulation and sends commands and control signals to the receiver, which implements them on the burner or solenoid valve. **The operational safety of the control is assured by the double sending of commands, a short time apart, and by an effective self-diagnostic system.**

●**ON LED** lit

●“**—**” **LED:** lit with command activated, off with command deactivated

●**VMETER LED:** brief lighting of 1, 2 or all the **LEDs** at each radio signal received.

In the event the transmitter is set to **OFF** (system excluded), the receiver deactivates the load and remains in this state until it receives a new instruction from the transmitter.

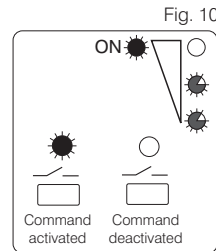


Fig. 10

## 2.7 - SIGNALING A TRANSMITTER MALFUNCTION

The receiver reports two types of transmitter anomalies:

- **Failure to receive a radio signal for more than 30 minutes**
- **Transmitter battery almost dead**

In both cases, the signal is given by the intermittent, **simultaneous lighting of the ON and channel LEDs**.

**ATTENTION:** in the case of the lack of a radio signal, the control of the load is also deactivated (Burner control deactivated).

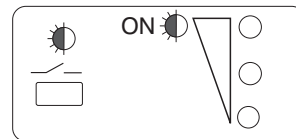


Fig. 11

## 2.8 - DELETING A TRANSMITTER COUPLING (even in a state of malfunction) FROM THE RECEIVER

It is possible to delete a transmitter coupling even if it is not able to transmit the Test signal.

- Press and hold the "—/—" **key** until the end of the sequence of beeps shown in the figure; then release it. The transmitter coupling is erased from the memory of the receiver and the channel is free.

**ATTENTION:** in the event the key is released before the beginning of the long beep, the operation is automatically cancelled and the command output is set to "Temporary Forced" (see paragraph 2.3).

Press "**RESET**" **Key** to return to normal operation.

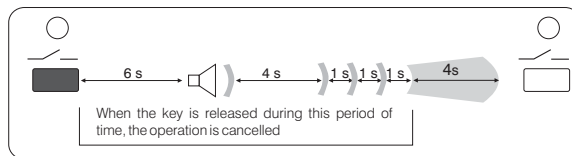


Fig. 12

Fig. 13

## 2.9 - RESET

The **RESET** command on the receiver cancels all the data stored in the device except for the transmitter coupling.

- Briefly press the **RESET key**: when it is released, **all the LEDs** will light together with a **beep** and the **ON LED** will be steady lit.

