ENERGOTECH

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CE

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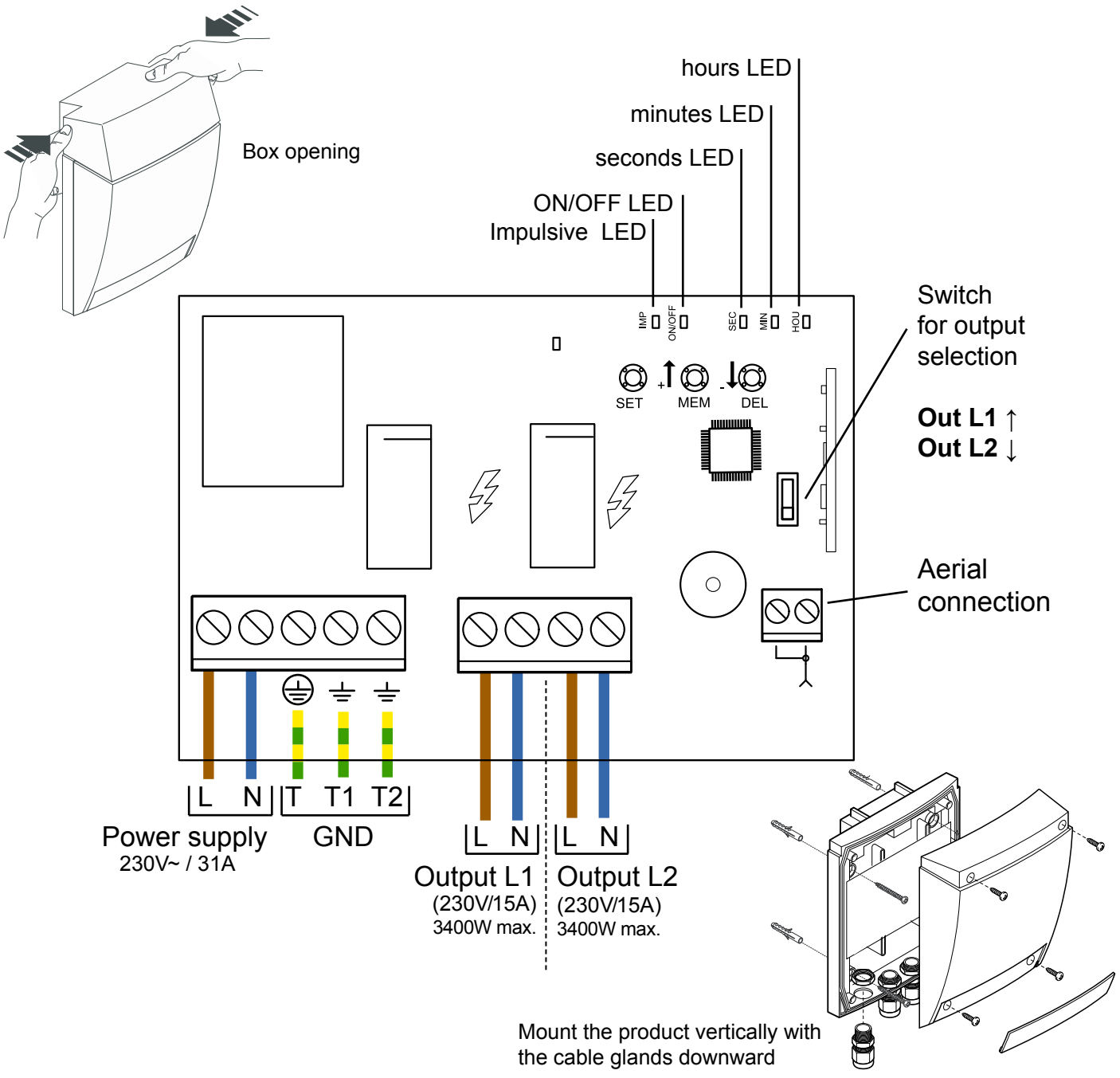
TECHNICAL MANUAL

Product code: ON/OFF

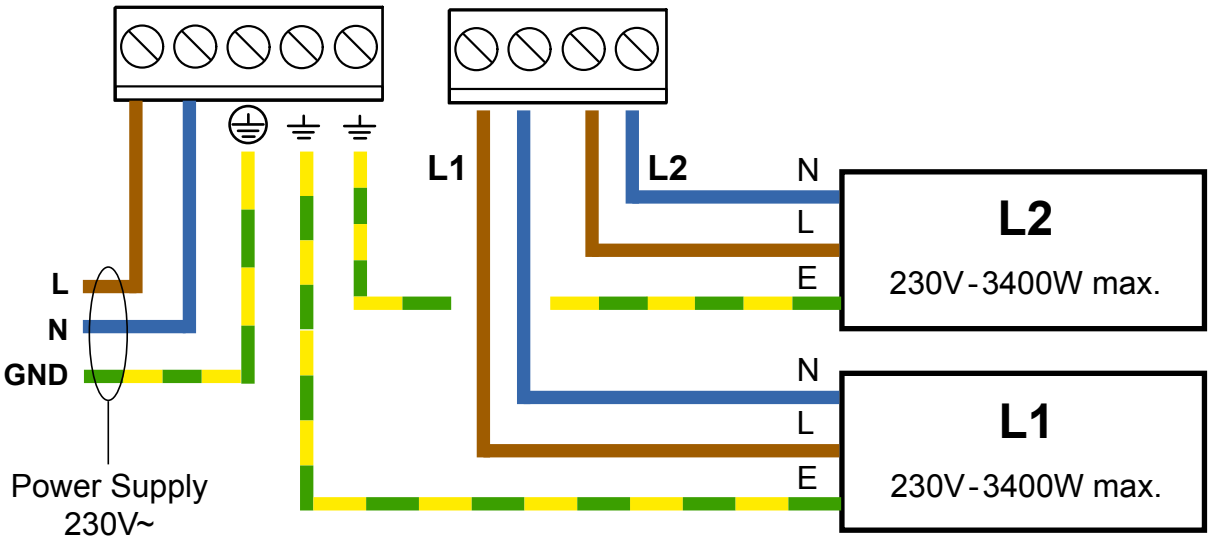
The device is a 2 channels radio receiver for the remote control of 230V loads up to a maximum resistive power of *3400W each output*. Programmable relay functions: impulsive, On/Off and timer controlled up to 8 hours, 59 minutes, 59 seconds.

Warning: the output are **NOT PROTECTED** against short-circuits or extra-currents which can damage the electronic board. The system must be configured considering the characteristics of the connected loads, in particular paying attention to in-rush current or similar. In case, evaluate and apply appropriate safety devices to the power line.

Product description



Typical wiring diagram



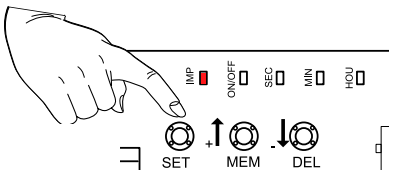
1 - Setting relay function (impulsive, on/off, timer)

Before starting select the output **L1** or **L2**, using the switch (see picture at page 1). The following configuration will be applied **only** to the selected output.

Warning: the receiver automatically saves the settings 5 seconds after the button release.

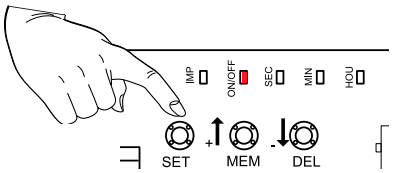
1.1 - IMPULSIVE function

Press once **SET** button and hold it down until the **IMP** led turns ON. Release the button and wait until the led turns off, to confirm the memorization of the data.



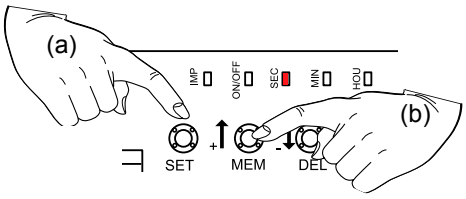
1.2 - ON/OFF function

Press twice **SET** button and hold it down the second time, until the **ON-OFF** led turns ON. Release the button and wait until the led turns off, to confirm the memorization of the data.

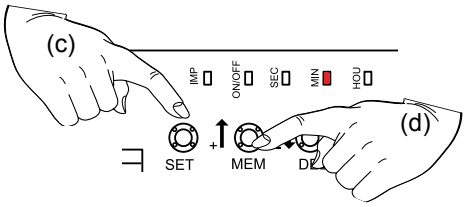


1.3 - TIMER function

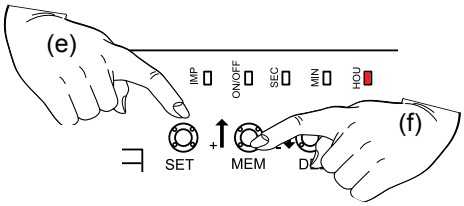
1- Setting the seconds (1 to 59)
(a) Press 3 times **SET** button and hold it down the last time, until the **SEC** led turns ON. (b) Adjust the seconds increasing with **MEM** button or decreasing with **DEL** button. Each press corresponds to a unit increased or decreased. Wait for exit the procedure saving the data or proceed with the next setting.



2- Setting the minutes (1 to 59)
(c) Press the **SET** button another time (within five seconds) and hold it down until the **MIN** led turns ON. (d) Adjust the minutes increasing with **MEM** button or decreasing with **DEL** button. Each press corresponds to a unit increased or decreased. Wait for exit the procedure saving the data or proceed with the next setting.



3- Setting the hours (1 to 8)
(e) Press the **SET** button another time (within five seconds) and hold it down until the **HOU** led turns ON. (f) Adjust the hours increasing with **MEM** button or decreasing with **DEL** button. Each press corresponds to a unit increased or decreased. Wait for exit the procedure saving the data.

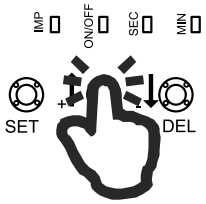


Note: *once reached the maximum or minimum limit, the led will turn off and the value will no longer be increased or decreased.*

2 - Transmitters memorization

Before starting select the output **L1** or **L2**, using the switch (see picture at page 1). The following memorization/ deletion will be applied only to the selected output. Anyway it's possible to associate a single or double channel to both of the output, repating the procedure.

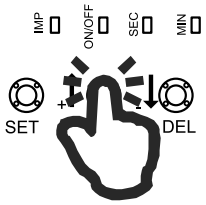
2.1 - Memorization of a single channel



1- Press once **MEM** button and hold it down; the buzzer will make a beep then sound continuously.

2- During the sound press the button to memorize; the memorization is indicated by the intermittent sound of the buzzer.

2.2 - Memorization of a double channel (CH1-2, CH3-4, CH6-7) with ON/OFF function

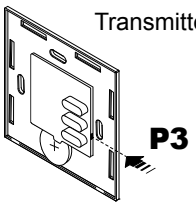


1- Press **two times MEM** button and hold it down the second time; the buzzer will make two beeps then sound continuously.

2- During the sound press the button to memorize; the memorization is indicated by the intermittent sound of the buzzer.

Note: *in case of commanding an output with TIMER function, it's possible to stop the counter before the set time using buttons CH2, CH4 or CH7.*

2.3 - To copy a function of a transmitter to a new transmitter



1- Press the button **P3** located inside the already **memorized transmitter**. The enabled receiver sound continuously.

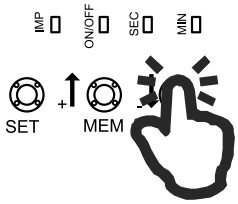
Transmitter in the memory

2- Within 5 seconds press a button of the **memorized transmitter** from which the function has to be copied. The buzzer will interrupt the sound for 1 sec. then start again for 5 seconds.

New transmitter

3- During the sound press the button of the **new transmitter** to memorize; the memorization is indicated by the intermittent sound of the buzzer.

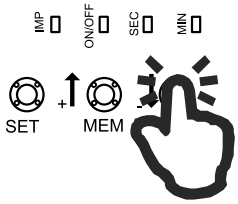
3.1 - To delete a single/double channel



1- Press **once** the button **DEL** and hold it down; the buzzer will make a beep then sound intermittently and slowly.

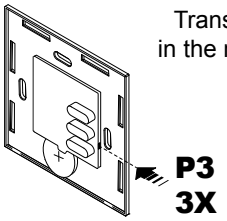
2- During the sound press the button to delete; the deletion is indicated by the continuous sound of the buzzer.

3.2 - To delete all the transmitters



Press **twice** the button DEL and hold it down the second time for **10 seconds**. The buzzer will sound intermittently; at the end the buzzer will sound continuously indicating that the memory has been cancelled.

3.3 - To delete a single/double channel using the transmitter



1- Press **three times** the button **P3** located inside the transmitter. The buzzer will sound intermittently and slowly.

Transmitter in the memory

2- During the sound press the button to delete; the deletion is indicated by the continuous sound of the buzzer.

Warnings

IMPORTANT! READ CAREFULLY THIS INSTRUCTIONS BEFORE INSTALLING AND COMMISSIONING THE PRODUCT. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

PRODUCT INSTALLATION

The product at issue must be installed, commissioned and maintained only by licensed and authorised people, respecting the laws concerning the electrical installations. Not conforming installations, wrong adjustments or product alterations may cause fire, electric shock, or personal injuries. The manufacturer is not responsible for any damage due to wrong installation or improper use.

MOUNTING LOCATION AND MODALITY

The product must be mounted applying the following indications carefully: **it must be** fixed on surfaces which cannot be damaged by the high temperature; **it must be** placed in a well ventilated location; it cannot be hermetically closed; **it must be** fixed vertically, with cable glands downward; connection cables **must be** protected against any accidental impacts, using proper pipes; **do not cover** the product; **do not** use or store flammable materials close to the product.

ELECTRICAL CONNECTIONS

All the connections must be rated for a single-phase 230Vac power supply, with the relative Earth connection.
For the disconnection from the power line, use an all-pole switch with contacts having a dimension of at least 3,5mm.
Arrange **all the necessary safety devices** and use only materials complying with the standard of electrical installations.
Signal and power voltage wiring (230Vac) must be separated one from the other. The cable must have a section properly rated according to the load connected and a nominal temperature range (T) up to 90°C. The following table reports (roughly) the resistance values and the maximum current of a copper wire, according to its length:

Section (mm²)	R (ohm/Km)	Max. current (A)
1	19.5	5
1.5	13.3	10
2.5	7.98	16
4	4.95	26
6	3.30	32

The protective device (In=32A) must protect the building from overcurrents and short circuits. A readily accessible disconnect device shall be incorporated in the building installation wiring.
Attention: If any cable is damaged, it must be immediately replaced by a qualified person in order to avoid any hazard.

SAFETY INFORMATION

This appliance is not intended for use by people (including children) with reduced physical, sensory or mental capabilities, or not properly informed about the product's characteristics or the possible hazards it can cause. Children should be carefully supervised when they are in the area of the product. Do not touch the electronic board with wet hands, any metallic or flammable objects. Do not operate in the high voltage area of the electronic board, when it is supplied. Use the product only in combination with devices which can guarantee a safe extended time functioning. The radio signal reception of the device could be disturbed by the presence of electrical disturbances being transmitted by other appliances working on the same frequency or if the product is somehow shielded by metal parts.

PRODUCT DISPOSAL

The manufacturer declares that the type of radio equipment is compliant with Directive 2014/53/EU. Information to users under art. 14 of the 2012/19/EU Directive of the European Parliament and Council of 4 July 2012 on waste electrical and electronic equipment (WEEE). The crossed bin symbol on the equipment, or its packaging, indicates that the product must be collected separately from other waste at the end of its useful life and not with mixed urban waste. Please contact your municipality, or local authority, for all information regarding the waste sorting systems available in the area. The retailer is obliged to collect the old equipment free-of-charge when the customer buys a new equivalent equipment. This is to encourage correct recycling/disposal. Appropriate waste sorting for the subsequent recycling, treatment and disposal in an environmentally way of the disused equipment avoids negative effects on the environment or human health and favours the re-use or recycling of the equipment's materials.

Technical specifications

- **Power supply:** 230V~ / 31A
- **Relay output with cos φ = 1:** 230V~ / 15A
- **Max. output for each relay:** 3400W
- **Operating temperature range:** -20°C...+50°C
- **Reception frequency:** 868.3 MHz
- **Box size:** 205 x 145 x 85 mm
- **Protection class:** IP54

- The maximum number of transmitters that can be memorized is 42

The manufacturer reserves the right for changing technical data and features without prior notice.