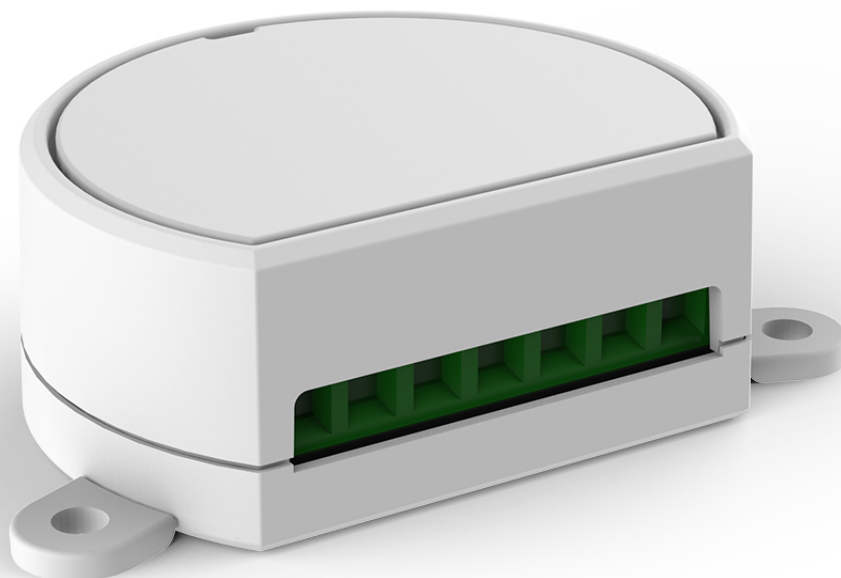


# MCU-M500

*The product is an electronic control unit with UP, DOWN and STOP functions for managing 230 V, max. 500 W motors via wire and/or radio*

NEXTA  
T E C H



---

## INDEX

### 1 - PRODUCT FEATURES

- 1.1 - TECHNICAL DATA
- 1.2 - DESCRIPTION

### 2 - ELECTRICAL CONNECTIONS

- 2.1 - CONNECTION DIAGRAM

### 3 - USE OF THE CONTROL UNIT

- 3.1 - USE VIA RADIO
- 3.2 - USE VIA WIRE

### 4 - CONTROL UNIT SETTINGS

- 4.1 - CONFIGURATION OF BUTTONS VIA WIRE
- 4.2 - CONFIGURATION OF MANOEUVRE TIMES

### 5 - RADIO PROGRAMMING

- 5.1 - RADIO PROGRAMMING MULTIFUNCTIONAL TRANSMITTERS
- 5.2 - RADIO PROGRAMMING OF GENERIC TRANSMITTERS
- 5.3 - DELETION OF TRANSMITTERS

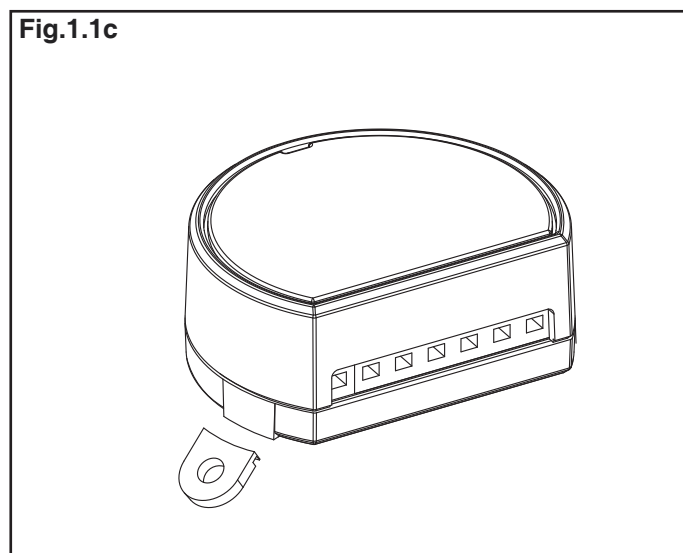
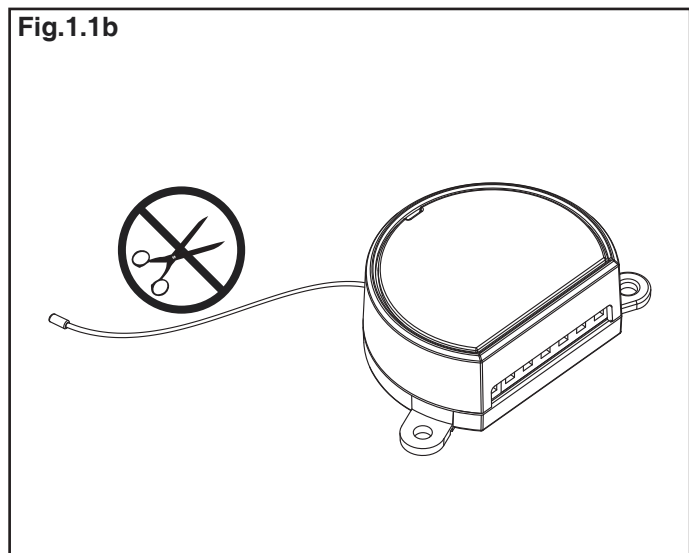
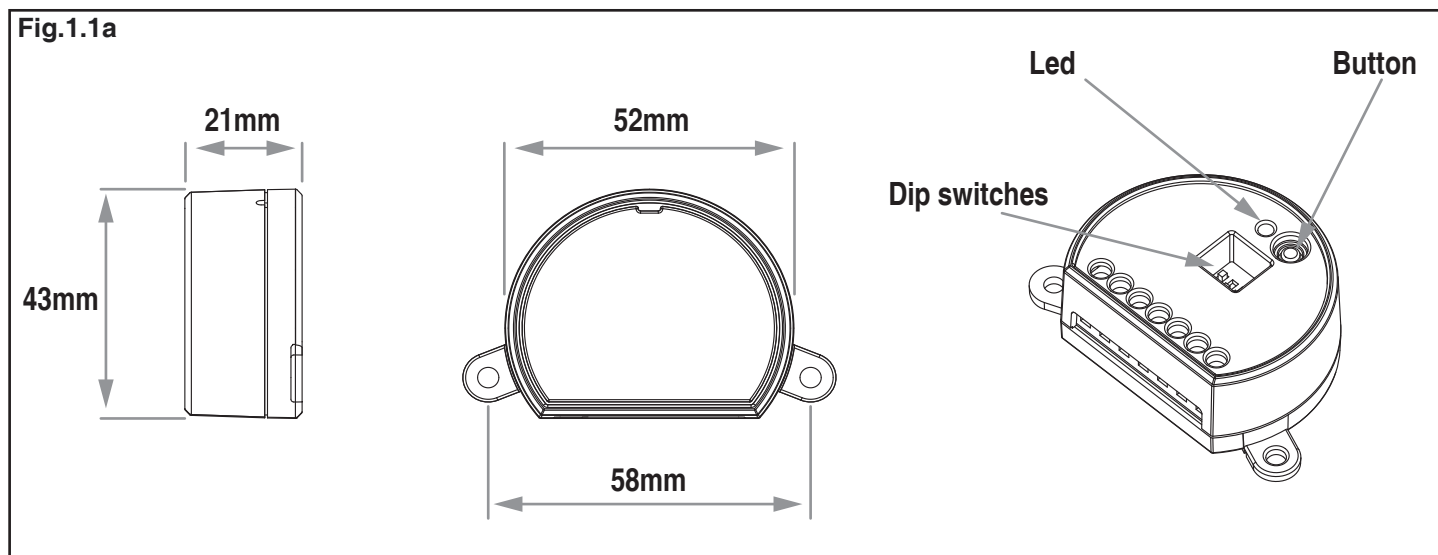
# WARNINGS

- Installation must be carried out only by qualified technicians in compliance with the electrical and safety standards in force.
- All connections must be made with the power turned off.
- Use suitable cables.
- Do not cut through the aerial (see figure 1.1b)
- A suitably sized disconnection device must be set up on the electric power line that supplies the product.
- Disposal of waste materials must fully respect local standards.

## 1 PRODUCT FEATURES

### 1.1 TECHNICAL DATA

Power supply	From the grid 120-240 Vac
Outputs	1 motor powered from the grid: 230V max 500W, 110V max 250W
Number of programmable transmitters	100
Radio frequency	433.920MHz ISM
Protection rating	IP20
Operating temperature	-20 +55 °C
Dimensions	52x43x21 mm



## 1.2 DESCRIPTION

The product is a control unit to control electrical motors powered from the grid with power of max. 500 W (230 V) or max. 250 W (110 V).

Ideal for activating motorised awnings, shutters and blinds with settable Up-Down-Stop, step and manual modes. The ISM (industrial, scientific and medical) radio frequency band guarantees a long range, even through walls and ceilings.

Simple programming with dip-switches, reduced dimensions with breakable tabs (fig. 1.1c) for fixing with screws (fig. 1.2a) or for insertion into connection boxes up to 55 mm in diameter.

Fig.1.2a

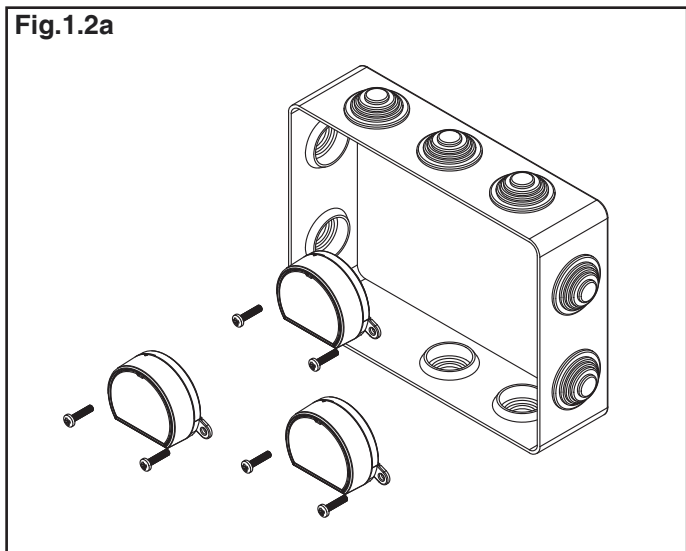


Fig.1.2b

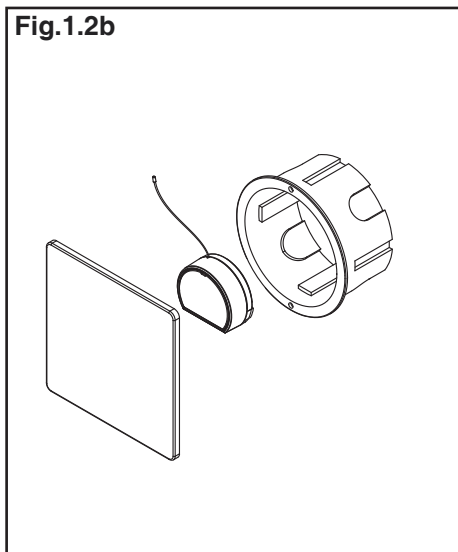


Fig.1.2c

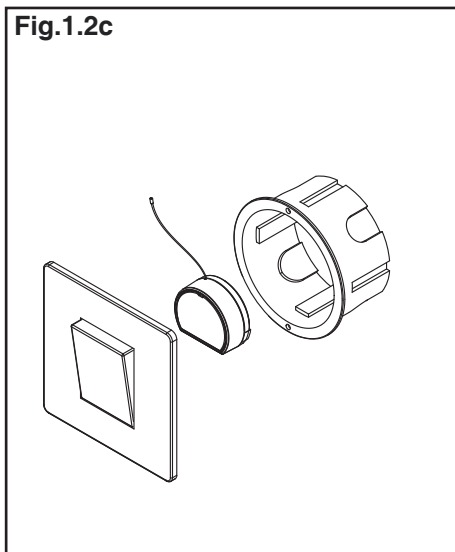


Fig.1.2d

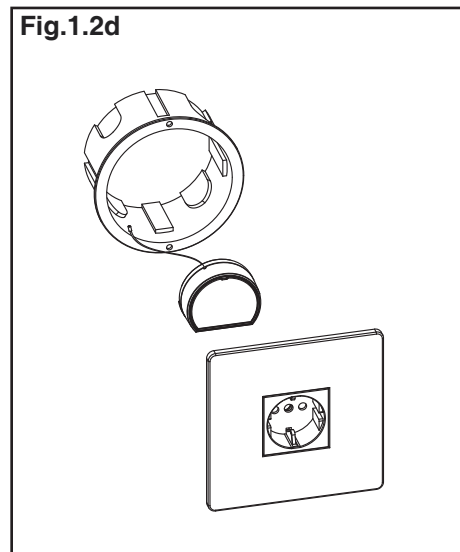
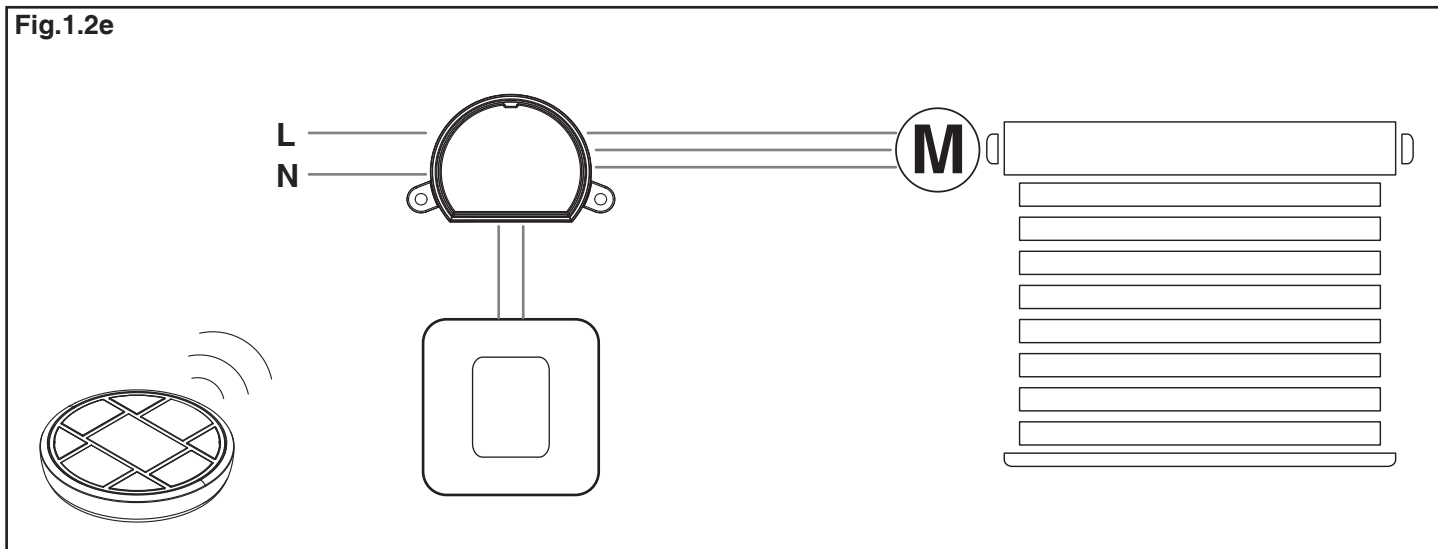


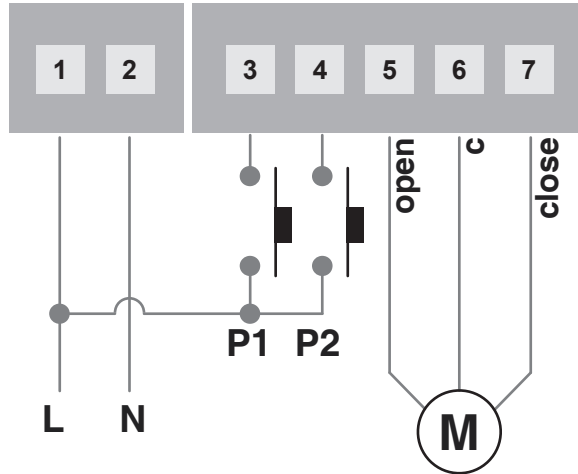
Fig.1.2e



## 2 ELECTRICAL CONNECTIONS

**WARNING:** It is possible to connect multiple buttons to the same input with parallel connection.

**Fig.2.1**



**WARNING:**

- The control unit is set up to control motors with internal end limit regulation.
  - Buttons must be used for control via wire
  - Multiple buttons or loads can be connected by using parallel cabling.
  - If the condenser is not connected internally to the motor (typical of tubular motors), it is connected between the phases (terminals 4 and 6). Refer to the motor manual
  - It is important to respect the opening and closing phase of the motor to make the commands of the transmitter and the wired inputs in mode 2 synchronise (see paragraph 4.1).
- If the opening phase is not shown in the motor, carry out a test to check which wire it corresponds to.

---

## 3 USE OF THE CONTROL UNIT

### 3.1 USE VIA RADIO

To control the motor via radio you must have compatible transmitters and therefore must carry out the association procedure; see paragraph 5.

The transmitter's command modes depend on the model used. If the transmitter is of a generic type, its operation depends on the way it is programmed (see paragraph 5, table 5.3a).

If the transmitter is multifunctional, refer to the transmitter manual, to the paragraph entitled "commands sent by the transmitter", bearing in mind that it is an "up-down-stop" device.

---

### 3.2 USE VIA WIRE

The device is set up to be able to accept commands via wire from buttons in terminals 3 and 4. Should you wish to control the load only via radio, it is not necessary to connect these devices for the control unit to work properly.

**Default operation (Key P1 = Key P2):**

DIP4 ON, step: with each press the motor will carry out an opening movement, a stop, a closing movement, a stop, in sequence.

DIP4 OFF, manual operation: the motor will carry out its manoeuvres only with the key pressed down. In sequence the motor will carry out an opening manoeuvre (when the key is released it will carry out a stop) and a closing manoeuvre (when the key is released it will carry out a stop).

The behaviour of these two inputs can be modified with the procedure shown in paragraph.

## 4 CONTROL UNIT SETTINGS

### 4.1 CONFIGURATION OF BUTTONS VIA WIRE

Default: mode 1

This procedure lets you select the function of inputs "P1" (terminal 3) and "P2" (terminal 4). **WARNING:** the connected devices must be buttons.



#### PROCEDURE:

- 1- Position DIPs 1, 2 and 3 to OFF-ON-OFF.
- 2- Press the button on the receiver for a short time. The LED comes on and stays on.
- 3- Press the button on the receiver for a short time, count the number of flashes emitted by the LED:  
6 flashes = MODE 1 (P1=P2= Open/stop/close/stop)  
3 flashes = Mode 2 (P1= Open/stop P2= Close/stop)

**WARNING: to change the setting, repeat the procedure from point 1; the control unit will alternate between 3 and 6 flashes.**

#### CONTROL MODES:

DIP4 ON = pulse operation (an action of the motor corresponds to each short press of the key).

DIP4 OFF = manual operation (the movements of the motor occur only with the key pressed down, when it is released the control unit carries out a stop).

---

### 4.2 CONFIGURATION OF MANOEUVRE TIMES

Default: 60 seconds

This procedure is used to set the opening and closing manoeuvre time (maximum time that can be set 3 minutes).



#### PROCEDURE:

- 1- Position DIPs 1, 2 and 3 to OFF-OFF-OFF.
- 2- Press the button on the receiver for a short time. The LED comes on and stays on.
- 3- Press the button on the receiver for a short time
- 4- The LED flashes: each flash represents a second of manoeuvring
- 5- Press the button for a short time during the flashing corresponding to the desired manoeuvre time.

# 5 - RADIO PROGRAMMING

## 5.1 RADIO PROGRAMMING OF MULTIFUNCTIONAL TRANSMITTERS

This procedure lets you programme only compatible multifunctional transmitters; see table 5.1. The transmitter's command modes depend on the model used. Refer to the transmitter manual, to the paragraph entitled "commands sent by the transmitter", bearing in mind that it is a "motor" device.



### PROCEDURE:

- 1- Position DIPs 1, 2 and 3 to ON-ON-ON.
- 2- Press the button on the receiver for a short time. The LED comes on and stays on.
- 3- Make a transmission with the remote control to be saved (see transmitter manual, the paragraph entitled "transmitter programming"). The LED on the receiver flashes 3 times to signal that it has been received.
- 4- The control unit listens for 30 seconds (to immediately exit the procedure press the button on the receiver).

Tab. 5.1

COMPATIBLE TRANSMITTERS
<i>HB70-8L, HB70-8LP</i>
<i>HB70-20D, HB70-8LP,</i>
<i>HB80-30D, HB80-2L</i>
<i>HB80-4L, HB80-30RGBW</i>
<i>HB90-12</i>

## 5.2 RADIO PROGRAMMING OF GENERIC TRANSMITTERS

This procedure lets you programme only compatible generic transmitters; see table 5.2a. The transmitter's command modes depend on the function associated with the key (see table 5.3b).

Tab. 5.2a

COMPATIBLE TRANSMITTERS
<i>MCU-TX4</i>
<i>HB-6G</i>

### PROCEDURE:

- 1- Position DIPs 1, 2 and 3 according to the function you want to associate with the remote control key (see table 5.3b at the side).
- 2- Press the button on the receiver for a short time. The LED comes on and stays on.
- 3- Make a transmission with the remote control to be saved (see transmitter manual, the paragraph entitled "transmitter programming"). The LED on the receiver flashes 3 times to signal that it has been received.
- 4- The control unit listens for 30 seconds (to immediately exit the procedure press the button).

Tab. 5.2b

DIP1	DIP2	DIP3	DIP4	Function associated with the key
On	On	Off	-	UP/STOP/DOWN/STOP
Off	On	On	-	UP
On	Off	On	-	DOWN
Off	Off	On	-	STOP

## 5.3 DELETION OF TRANSMITTERS

These procedures let you delete from the memory transmitters that have already been programmed.

### DELETION OF SINGLE TRANSMITTER:

- 1- Hold the receiver button down for 8 seconds. The LED begins to flash.
- 2- Make a transmission with the transmitter that you want to delete. The LED flashes quickly and turns off.

### DELETION OF ALL THE SAVED TRANSMITTERS:

- 1- Hold the receiver button down for 8 seconds. The LED begins to flash.
- 2- Press the button on the receiver for a short time. The LED starts flashing quickly and turns off.





MNLMCU-M500ENV1.0

**Nexta Tech**

company brand of Team srl  
via G.Oberdan 90, 33074  
Fontanafredda (PN) - Italy  
Ph. +39 0434 998682  
Email: [info@nexta-tech.com](mailto:info@nexta-tech.com)  
Web: [www.nexta-tech.com](http://www.nexta-tech.com)