MCP14

PORTUGAL

v1.1 REV. 07/2021

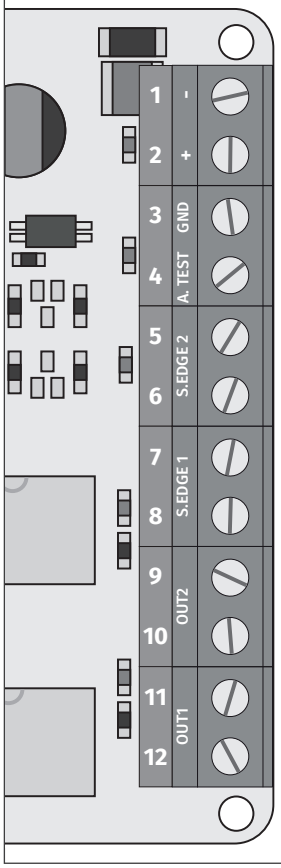
OPERATION/PROGRAMMING MANUAL

EN

The MPC14 is a controller for 8k2 resistive safety bands and optical safety bands. With its 2 channels, it ensures continuous supervision of the security system and locks it if necessary.

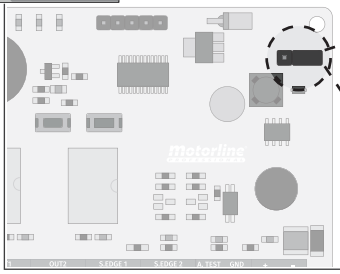
TECHNICAL CHARACTERISTICS	
• Power Supply	12-24 Vdc / 12-24Vac
• Relay	30VDC 1A / 125VAC 0.5A
• Number of channels	2
• 8k2 safety bands by channel	2
• OSE (optical safety bands) by channel	1
• IP	IP30
• Dimension	81 x 65 x 20 (mm)

INPUTS/OUTPUTS



	1 • + 2 • -	**12 – 24 Vdc / 12 – 24Vac Power supply**
INPUTS	3 • **GND** 4 • **A.TEST**	**Input for Auto Test** *> with the A.TEST terminal connected to the GND, the system works normally.* *> if not connected, the system will ignore any signal from the inputs. The outputs are disabled. When the signal is present, LED G lights up.* ***When not used, shunt the GND.***
	5 • 6 • **S.EDGE 2**	**Input for safety bands (input 6 - OSE signal - channel 2)** *> if using 8k2 security band, you must connect the respective terminals to the 5 and 6.* *> if using two bands you should connect them in parallel.* *> if using OSE you must connect the signal terminal to 6.*
	7 • 8 • **S.EDGE 1**	**Input for safety bands (input 8 - OSE signal - channel 1)** *> if using 8k2 security band you must connect the respective terminalsto the 7 and 8.* *> if using two bands you should connect them in parallel.* *> if using OSE you must connect the signal terminal to 8.*
CH2	9 • 10 • **OUT 2**	**NC relay contact output (channel 2)** *> output actives when:* *- a safety band is pressed on channel 2;* *- the board is in error;* *- don't have sign of inhibition.* **NOTE • If you use this channel, NC output must be connected to the control board.**
CH1	11 • 12 • **OUT 1**	**NC relay contact output (channel 1)** *> output actives when:* *- a safety band is pressed on channel 2;* *- the board is in error;* *- don't have sign of inhibition.* **NOTE • If you use this channel, NC output must be connected to the control board.**

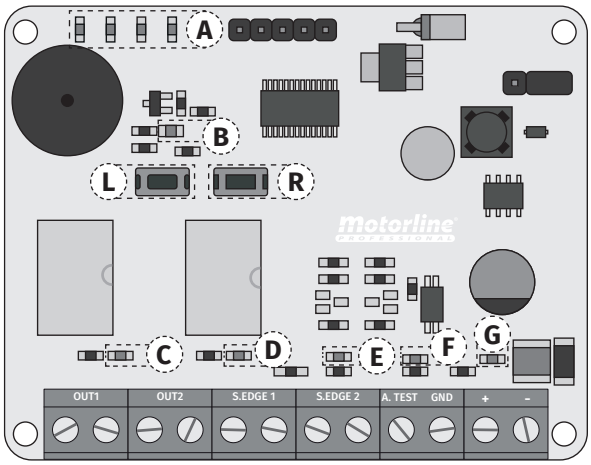
JUMPER - INHIBITION OF THE AUDIBLE SIGNAL



D • Buzzer ON
> With the jumper in the right position, the sound signal emitted by the buzzer is ON.

E • Buzzer OFF
> With the jumper in the left position, the sound signal emitted by the buzzer is OFF.

BUTTONS AND LEDs

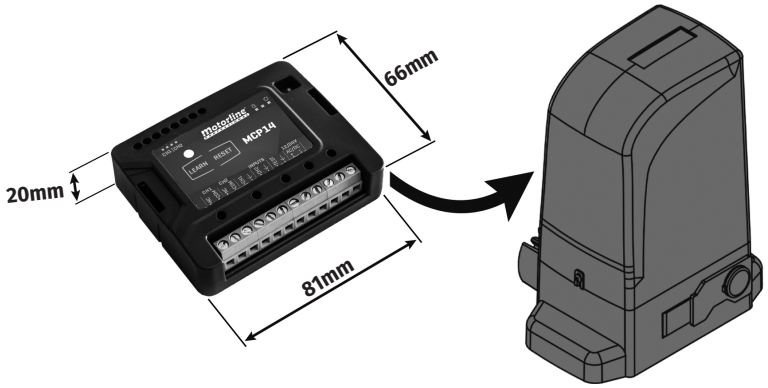


Buttons	**LEARN** > *program installed security devices.* **RESET** > *eliminate all installed devices.*

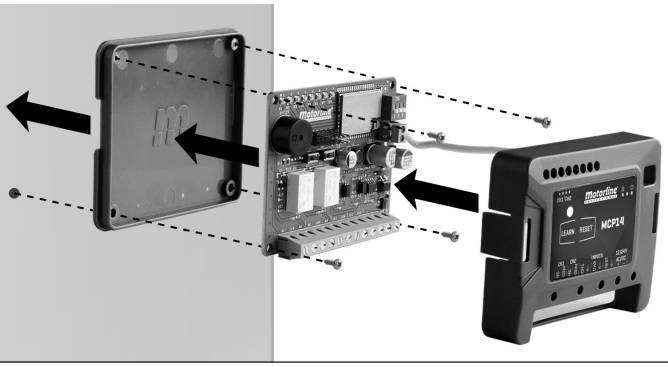
LEDs	Ⓐ **NUMBER OF SAFETY DEVICES CONNECTED** *> each LED corresponds to 1 safety device connected* Ⓑ **POWER SUPPLY/SYSTEM STATUS** *> Green - normal operation* *> Steady red - system not inhibited* *> Flashing red - operating or programming error* Ⓒ **RELAY 1 STATUS** *> The LED lights when relay 1 is activated* Ⓓ **RELAY 2 STATUS** *> The LED lights when relay 2 is activated* Ⓔ **DETECTION OF SAFETY DEVICE (1) ACTIVE** *> LED ON indicates that safety input 1 has detected an active safety device* Ⓕ **DETECTION OF SAFETY DEVICE (2) ACTIVE** *> LED ON indicates that safety input 2 has detected an active safety device* Ⓖ **SYSTEM INHIBITION** *> LED ON indicates system inhibition*

PRODUCT INSTALLATION

APPLICATION INSIDE THE MOTOR:
> Insert the device into the motor cover, to facilitate connections to the control board and to avoid infiltration of moisture.



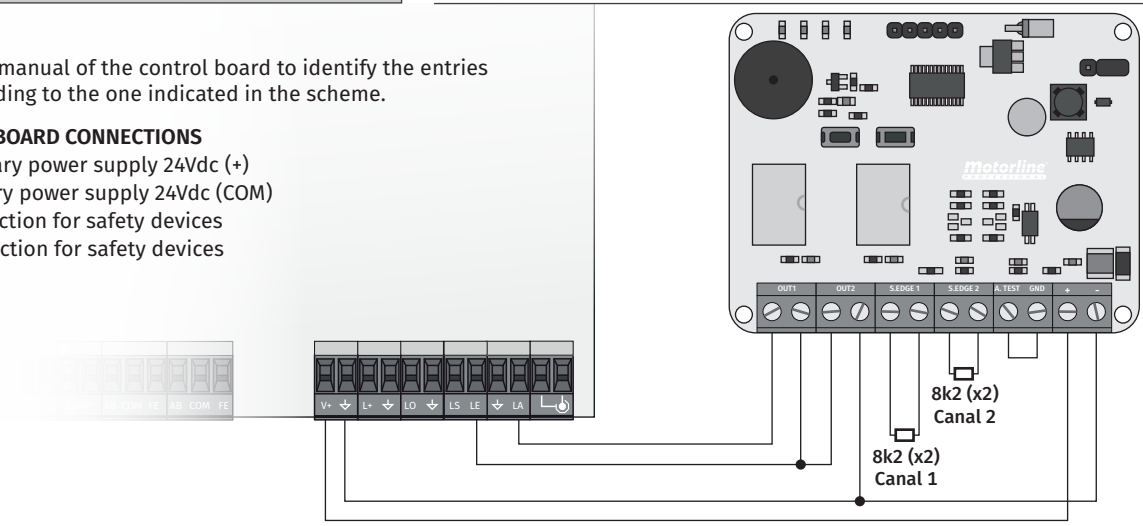
INSTALLATION:
> The device can be applied in other locations.
Secure with 2 screws.



CONNECTION SCHEME FOR 8K2 DEVICES

Check the manual of the control board to identify the entries corresponding to the one indicated in the scheme.

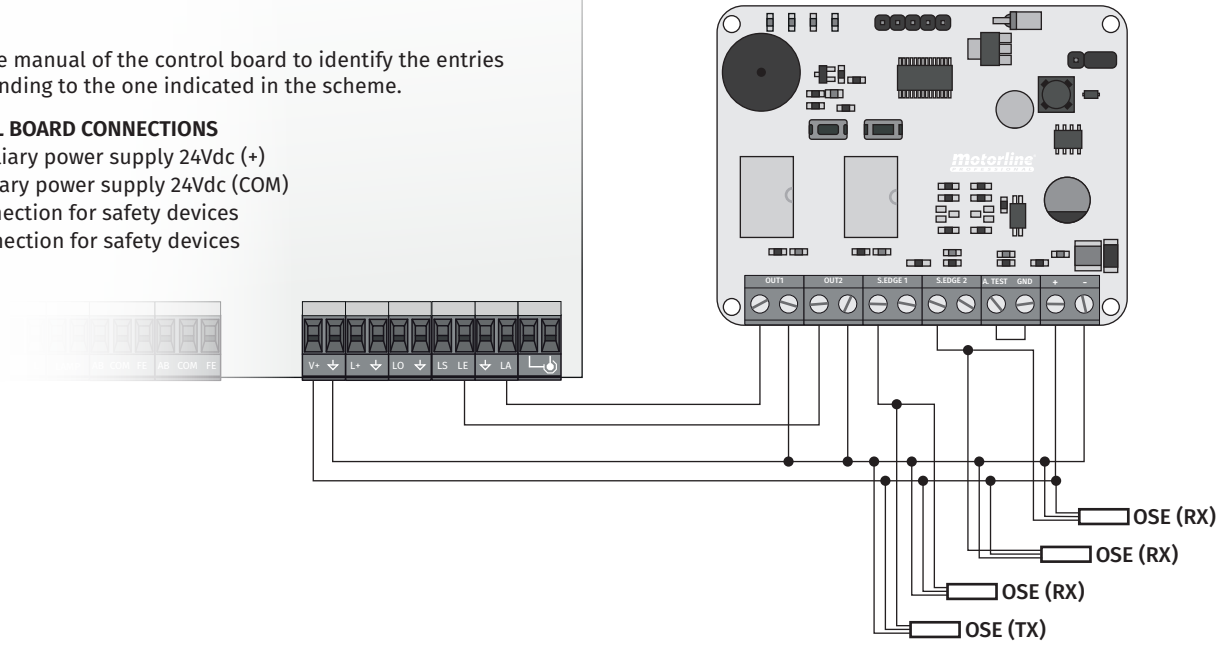
CONTROL BOARD CONNECTIONS
V+ • Auxiliary power supply 24Vdc (+)
⏚ • Auxiliary power supply 24Vdc (COM)
LE • Connection for safety devices
LA • Connection for safety devices



CONNECTION SCHEME FOR OSE DEVICES

Check the manual of the control board to identify the entries corresponding to the one indicated in the scheme.

CONTROL BOARD CONNECTIONS
V+ • Auxiliary power supply 24Vdc (+)
⏚ • Auxiliary power supply 24Vdc (COM)
LE • Connection for safety devices
LA • Connection for safety devices



PROGRAMMING

Before programming, make sure that all connections between the safety/OSE bands and the control board are correct and that no safety device is being pressed, if they are wrong, the control board will not work correctly.

SAFETY BAND PROGRAMMING:
1 • Press the **LEARN** button (L) with one click.
2 • The buzzer will emit 1 beep, confirming the success of the operation.
3 • LEDs Ⓐ will light up according to the number of safety devices detected with the programming.
The 1st and 2nd LEDs are related to channel 1, the 3rd and 4th to channel 2.

PROGRAMMING OPTICAL SECURITY BAND (OSE):
1 • Press the **LEARN** button (L) for 2 seconds.
2 • The buzzer will emit 3 beeps, confirming the success of the operation.
3 • LEDs Ⓐ will light up according to the number of optical safety devices detected with the programming.
The 1st LED is related to channel 1, the 3rd to channel 2.

NOTE • In case of a programming error, the LED flashes with a audible signal emitted by the buzzer.
To make a new programming, press the RESET button to clear the programming error. The system will return to the normal state and will be able to make a new programmation.

After programming, if the number of connected devices is different from the number of detected devices, the MPC14 will go into error, with the LED flashing, with an audible signal emitted by the buzzer and the outputs are active. This situation can occur, for example, when one of the safety bands has a cut cable.