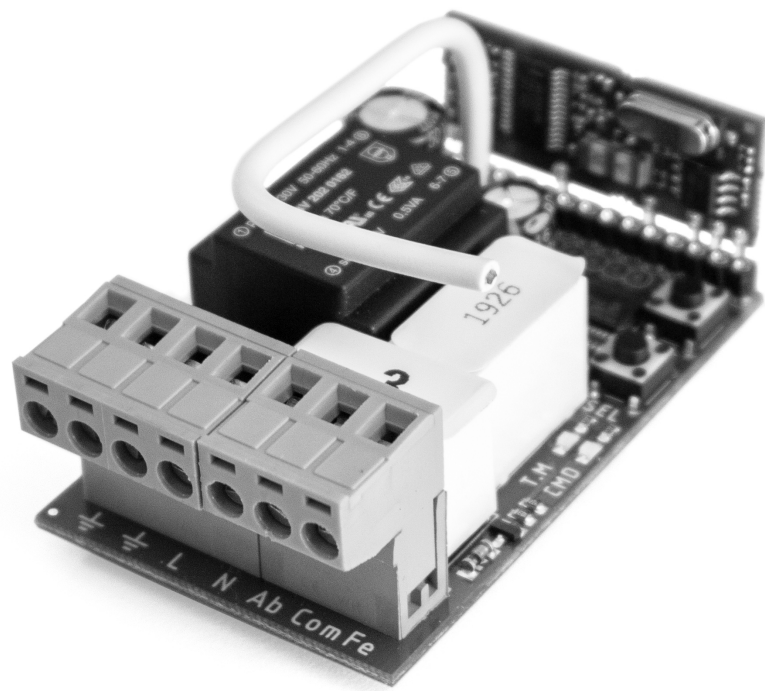




# MC7

## INSTALLER AND USER'S MANUAL








# 00. CONTENT

## INDEX

<b>01. SAFETY INSTRUCTIONS</b>	<b>1B</b>
<b>02. CONNECTIONS SCHEME</b>	
COMPONENTS CONNECTION	4A
<b>03. CONTROL BOARD</b>	
TECHNICAL SPECIFICATIONS	5A
<b>04. INICIAL OPERATING CONDITIONS</b>	5A
<b>05. CENTRALIZATION VIA RADIO</b>	
THROUGH REMOTE CONTROL	5A
<b>06. LED SIGNALING</b>	
SEL KEY	5B
SET KEY	5B
LED SIGNALING	5B
<b>07. PROGRAMMING</b>	
REMOTE CONTROL 1 OR 2 KEYS	5B
WIRELESS SENSOR - WITH ACCESS TO CONTROL BOARD	6A
CODE PGM	6B
REMOTE CONTROL - WITHOUT ACCESS TO CONTROL BOARD	6B
WIRELESS SENSOR - WITHOUT ACCESS TO CONTROL BOARD	6B
WORKING TIME	7A
TOTAL RESET	7B

# 01. SAFETY INSTRUCTIONS

	This product is certified in accordance with European Community (EC) safety standards.
<b>RoHS</b>	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment and with Delegated Directive (EU) 2015/863 from Commission.
	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	This marking indicates that batteries should not be discarded like other household waste at the end of their useful life. Batteries must be delivered to selective collection points for recycling.
	The different types of packaging (cardboard, plastic, etc.) must be subject to selective collection for recycling. Separate packaging and recycle it responsibly.
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

# 01. SAFETY INSTRUCTIONS

## **GENERAL WARNINGS**

- This manual contains very important safety and usage information. Read all instructions carefully before beginning the installation/usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.

- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.
- If the power cable is damaged, it must be replaced by the manufacturer, after-sales service or similarly qualified personnel to avoid danger.
- The device must be disconnected from the electrical network when removing the battery.
- Ensure that blocking is avoided between the actuated part and its fixed parts due to the opening movement of the actuated part.

## **WARNINGS FOR TECHNICIANS**

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The control board must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on

# 01. SAFETY INSTRUCTIONS

the power supply cable. Please note that all the cables must enter the control board from the bottom.

- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.
- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage safety with control board (only at 24V motors).
- Parts/products weighing more than 20 kg must be handled with special care due to the risk of injury. It is recommended to use suitable auxiliary systems for moving or lifting heavy objects.
- Pay special attention to the danger of falling objects or uncontrolled movement of doors/gates during the installation or operation of this product.

## WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety

conditions have been met.

- In the event of tripping of circuits breakers or fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

## RESPONSABILITY

- Supplier disclaims any liability if:
  - Product failure or deformation result from improper installation use or maintenance!
  - Safety norms are not followed in the installation, use and maintenance of the product.
  - Instructions in this manual are not followed.
  - Damaged is caused by unauthorized modifications
  - In these cases, the warranty is voided.

## **MOTORLINE ELECTROCELOS SA.**

Travessa do Sobreiro, nº29  
4755-474 Rio Côvo (Santa Eugénia)  
Barcelos, Portugal

## SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



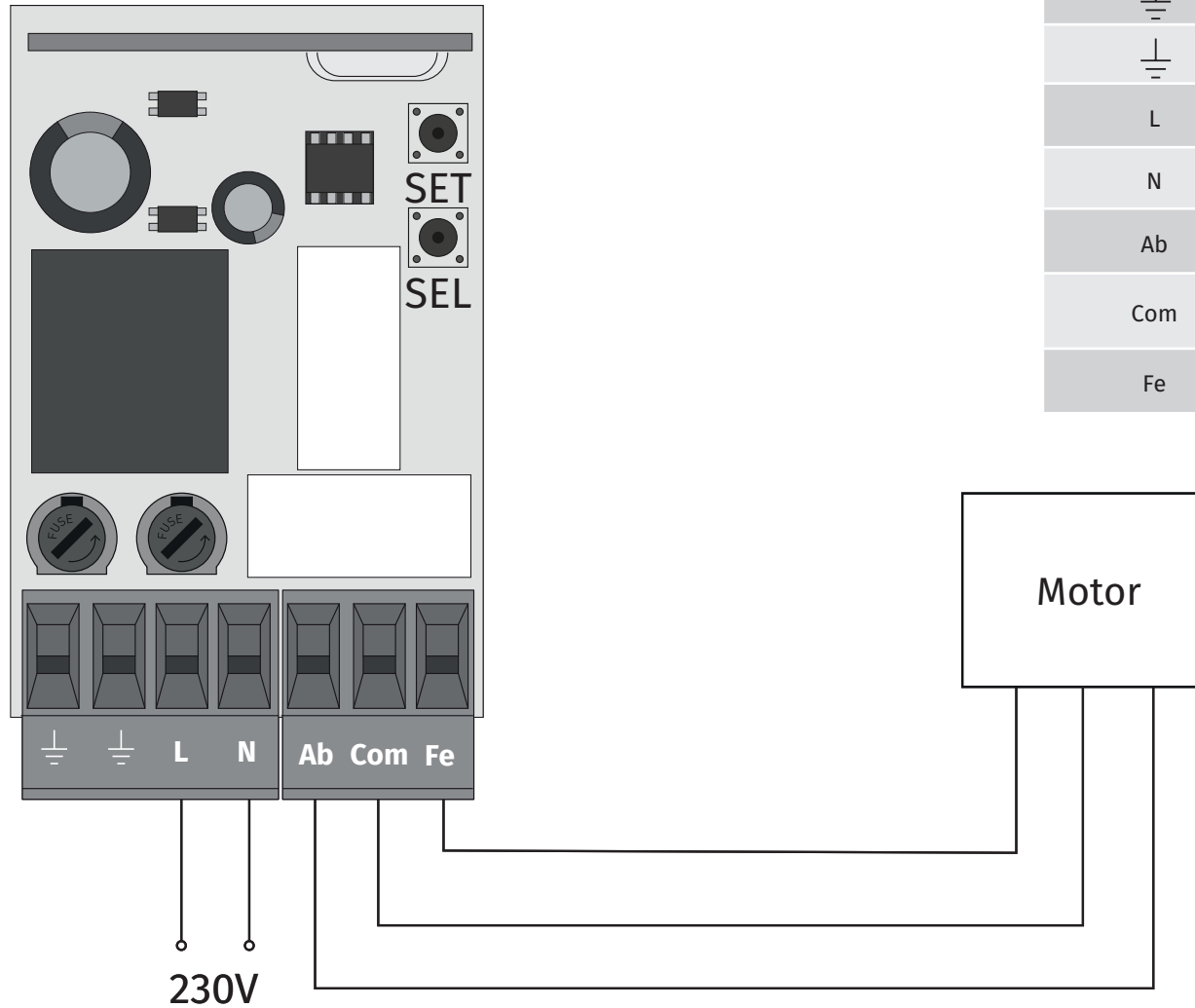
• Connectors information



• Buttons information

## 02. CONNECTIONS SCHEME

### COMPONENTS CONNECTION



Marcas	Descrição de função
	Input connection Earth
	Input connection Earth
L	Input line 230 V (FASE)
N	Input line 230 V (NEUTRAL)
Ab	Output motor Descent / Opening
Com	Output motor Common
Fe	Output motor Rise / Closing

## 03. CONTROL BOARD

### TECHNICAL SPECIFICATIONS

The **MC7** is a control board for a maximum motor 500W 230V: WIWEATHER sensor compatible and works as a cinema kit - when you turn on the projector the screen automatically drops down.

	230V
• Power supply	230Vac 50/60Hz
• Motor output	500W máx
• Compatible radio commanders	12 Bits ou Rolling Code
• Number of radio commands for memorize	29 Códigos
• Working temperature	-20°C ~ 55°C
• Radio receiver	433,92 Mhz

## 04. INITIAL OPERATING CONDITIONS

The control board **MC7** can work connected with one sensor Sun / Rain / Wind wireless.

## 05. CENTRALIZATION VIA RADIO

### THROUGH REMOTE CONTROL

The centralization of two or more control boards via radio allows simultaneous movement of ascending or descending of more awnings.

The centralization is carried out by entering the same codes keys from a remote control to all boards or to a group at a maximum distance of 5 meters from the point of command, in order to get the general or partial motion of more automations.

For a satisfactory radio centralization, you must choose carefully the location of installation. The scope is not only connected with the technical characteristics of the device, but may vary depending on the radioelectric conditions of the location.

## 06. LED SIGNALING

### SEL KEY

Selects the type of function to be memorized, the choice is indicated by the flashing of the LED. Pressing the button more times, it is possible to position yourself in the desired function. The flashing LED indicates that the selection is active, but the duration is 15 seconds. At the end of this period, the control board returns to its normal status.

### SET KEY

Performs programming of the chosen function with the SEL key.

### LED SIGNALING

- **LED on:** option memorized.
- **LED off:** option not memorized.
- **Intermittent LED:** option selected.

LED	OFF	ON
CODE	No code	Programmed code
T. MOT	Working Time 30 seconds	Working Time Programmed

**CODE:** Programming the remote control to operate the awning and the wireless Wind Sensor

**T.MOT:** Programming the Working Time/ motor

## 07. PROGRAMMING

### REMOTE CONTROL 1 OR 2 KEYS

The programming of the transmission codes of the remote control is performed as following:

**01** • Press the SEL button and LED CMD will blink.

**02** • Send the first code closing selected with the desired remote control. The LED CMD will flash rapidly

**03** • Send the second code opening to be memorized, the LED CMD will remain ON and programming is finished.

If the second code is not sent within 30 seconds, the board exits the programming phase, and choose functing, only one button on the remote control to work step by step open/stop/close.

## 07. PROGRAMMING

### WIRELESS SENSOR - WITH ACCESS TO CONTROL BOARD

If you want to memorize a wireless sensor, follow these steps:

- 01** • Power the sensor.
- 02** • Open the memory of the control board MC7 and position with the SEL button flashing LED CDM.
- 03** • After opening the memory of control board, has 30 seconds to send the order of sensor to control board. Position to LED CODE with the SEL button of sensor and will flashing.
- 04** • Immediately press the SET button of sensor so that it emits a rapid flashing of the LED CODE.
- 05** • With the SEL button sensor must now select the functions you want to leave assets in sensor the sun/ wind / rain. Press SEL repeatedly until the desired function LED flashes. With the LED flashing, press the SET button for more than second until it is fixed LED lit active function.

To disable any function, repeat point but press the SET button at least second and the LED goes out, leaving the function disabled.

To test the sensor should follow the next instructions:

- 01** • With the SEL button position the LED TEST will begin to flash this. Press the SET button for more than second and the LED stays on.
- 02** • **TEST RAIN SENSOR** Pass a wet finger over the sensor until the awning begins to close the awning will close during 5 seconds.
- 03** • **TEST WIND SENSOR** Turn the propeller. The awning will close for 5 seconds.
- 04** • **TEST SUN SENSOR** Turn VR clockwise + and the awning will open for 5 seconds. Turn the VR anticlockwise and the awning will close for 5 seconds.

If the awning perform the indicated operations successfully, the sensor is programmed and the test finished.



Return to deactivate the LED TEST that in case of emergency, close the awning in its entirety. If the LED TEST stay on, the awning only will close during 5 seconds. When the awning close by order of sensor, we can see what the order is to be sent, checking that the LED of the sensor is on within the monitor.

**For more information** on how to adjust the wind speed, sensitivity and illuminance sensor, read the manual of sensor Wiweather.

**To reset the sensor, simultaneously press the SEL and SET buttons of sensor for 2 seconds. LEDs light on and all the sensor back to the factory programming.**

## 07. PROGRAMMING

### CODE PGM

The control unit is supplied by the manufacturer with PGM function active.

For disable press the SET button continuously for 5 seconds and then there is the alternating flashing of the LED T. MOT, now has 30 seconds to activate or deactivate the PGM. With the SEL button position the flashing of the LED CODE and the SET button to enable or disable the PGM function. After 30 seconds, the control board returns to the main menu.

LED	OFF	ON
CODE	PGM distance = ON	PGM distance = OFF
T. MOT	Intermittent ON/OFF	

### REMOTE CONTROL - WITHOUT ACCESS TO CONTROL BOARD

The control board allows the programming of another remote control, without intervening directly on the control panel SEL key, performing a remote operation. Programming a code for a remote control is as follows:

- 01** • Press and hold the opening channel of a previously stored radio remote control for longer than 10 seconds.
- 02** • At the same time the control panel enters programming mode. Press for 3 seconds the closing channel of the new command..
- 03** • Press the opening channel for another 3 seconds.

The motor will signal reception of the control with an opening for 1 sec and closing for 1 sec. The command is now programmed. If you want the same button to open and close memorize only the first button and wait 30 sec to exit remote programming.

### WIRELESS SENSOR - WITHOUT ACCESS TO CONTROL BOARD

Programming the wireless sensor without access to control board is carried out as follows:

- 01** • Press continuously, for a longer time than seconds, the opening channel of a previously stored remote control.
- 02** • With the sensor SEL, position the LED CODE will begin to flash this, and immediately press for more than 3 seconds the sensor SET button to this issue a quick flashing of the LED CODE.

At this point you are informed of the success of programming signaled by opening and closing for 1 sec of awning.



**The control board allows memorize only Sensor Wireless. Programming a new Wireless Sensor annuls definitely the previously memorized code.**

## 07. PROGRAMMING

### WIRELESS SENSOR - WITHOUT ACCESS TO CONTROL BOARD



In case of poor of communication between the Wireless Sensor and control board MC7, after 30 minutes activates automatically ascent / closing the awning. If poor of communication continues, other remote controls makes that the control board to keep in a state of security not allowing the opening of the awning when receive opening order opens a little bit and returns to the point of closed.

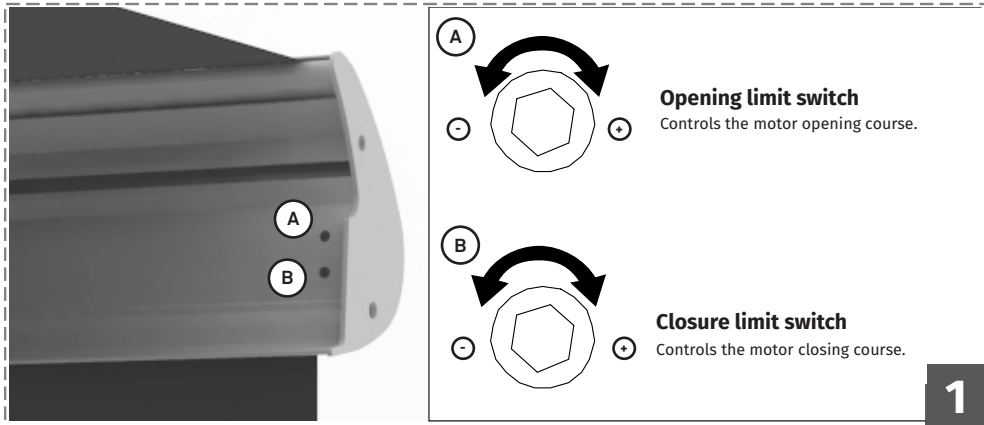
### WORKING TIME

The control board is supplied with LED T.MOT. OFF means that the motor time is 3 minutes. With LED T.MOT. OFF and the radio control programmed can move the awning in the direction of opening / closing to make tuning of limit switch (**follow directions in the drawing**). After the limit switch be fully tuned, set the working / motor time.

**The programming the time of the motor must be performed during the closing of the awning.**

Motor time programming with limit switch 2-way opening/closing carried out as follows:

- 01 • With open awning and the two limit switches regulated opening/closing, the SEL .button, position the LED T.MOT flashing
- 02 • Hold down the SET button until the awning close and the motor stops by limit switch.
- 03 • Wait another 7 seconds and release the SET button and the LED T.MOT will light, **the motor time will be programmed.**



In this example, the motor is installed on the left. If the motor is installed on the right, position reverses.(opening goes to B and closure goes to A)

## 07. PROGRAMMING

### TOTAL RESET

The cancellation of all codes memorized for the functioning of awning remote controls and Wireless Sensor, proceed as follows:

- 01 • Press the SEL button, LED CODE will flash.
- 02 • Press the SET button for less than second, LED CODE turns off and the procedure ends.

**If necessary restore the control board to the initial factory settings,, press the SEL and SET button at the same time for 5 sec and the indicator LEDs will be off confirming the successful operation.**