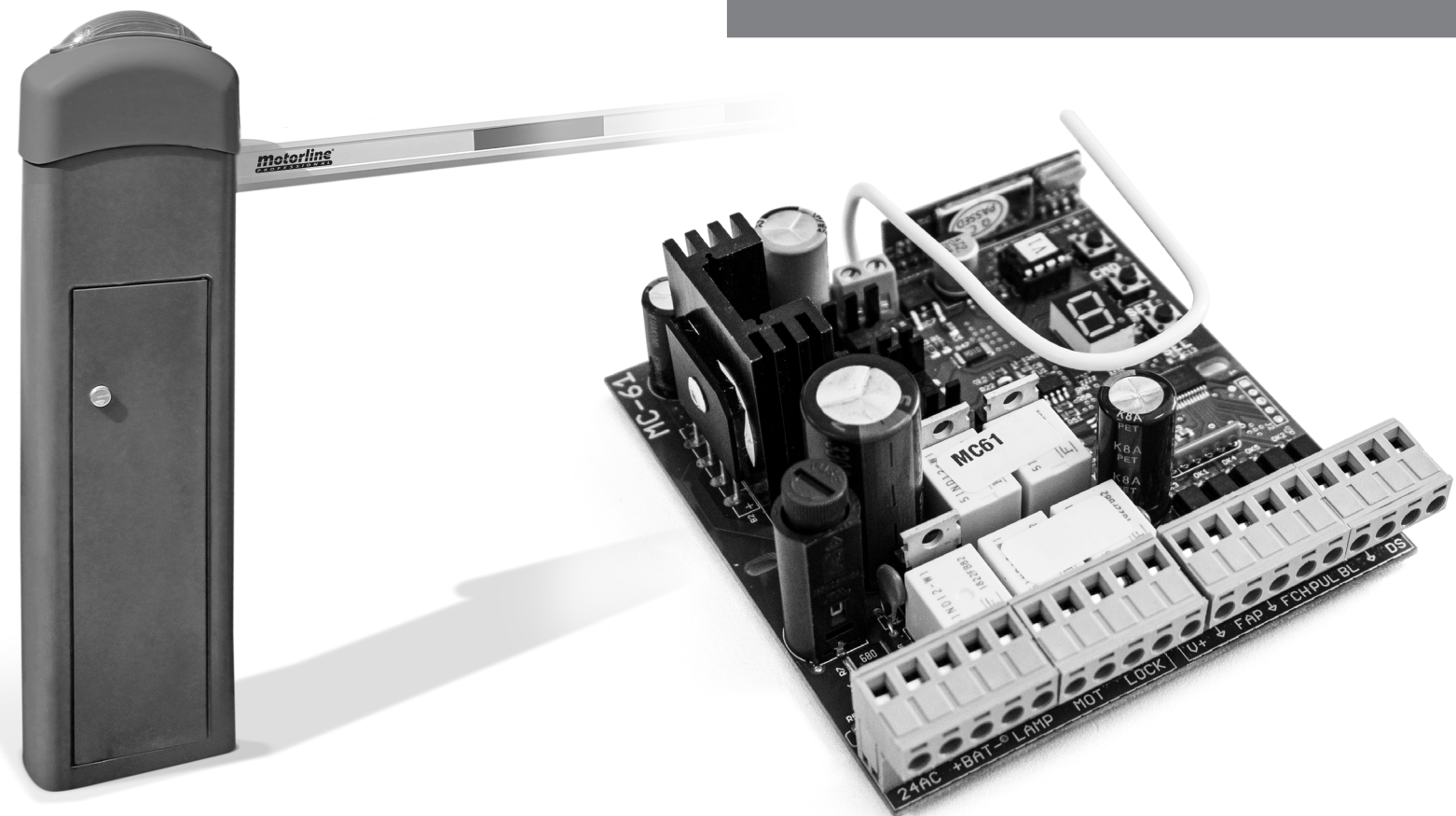




# MC61BR

## INSTALLER AND USER'S MANUAL








# 00. CONTENT

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# 01. SAFETY INSTRUCTIONS

## ATTENTION:

	This product is certified in accordance with European Community (EC) safety standards.
	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.
	(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 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. very important. 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.

## **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 central 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 the power supply cable. Please note that all the cables must enter the central 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.

# 01. SAFETY INSTRUCTIONS

- 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 central (only at 24V motors)

## 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 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.

## SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



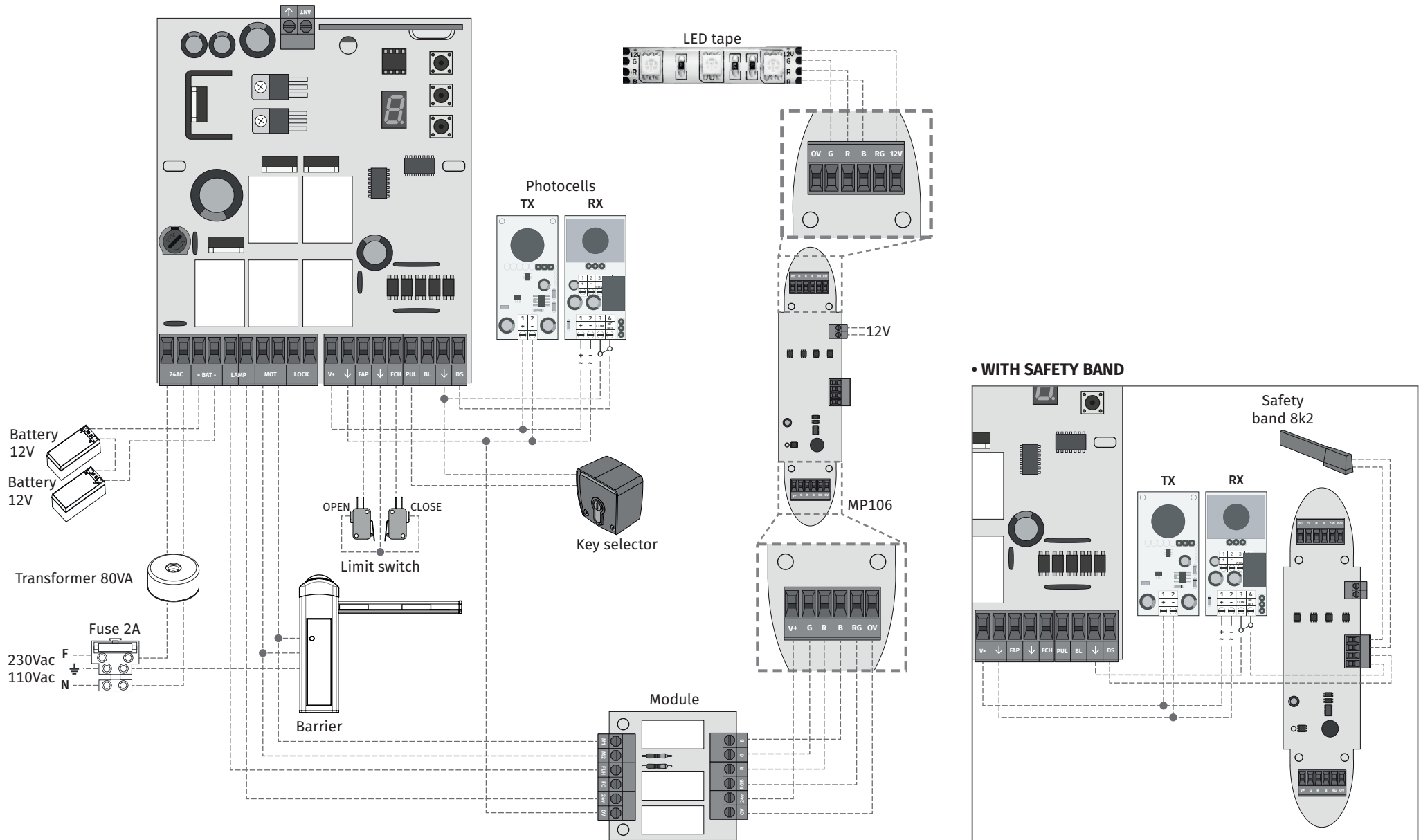
• Connectors information



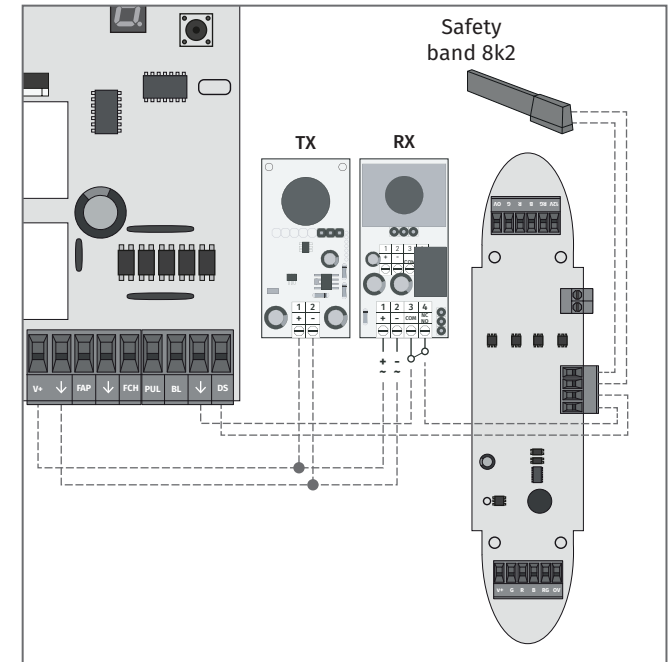
• Buttons information

# 02. CONNECTIONS SCHEME

## COMPONENTS CONNECTION TO THE CONTROL BOARD



### • WITH SAFETY BAND



## 03. CONTROL BOARD

### TECHNICAL SPECIFICATIONS

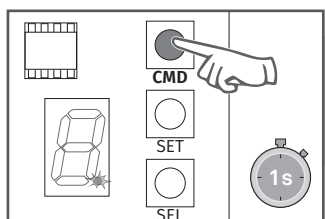
• Power supply	24V ac/dc
• Battery output	24Vdc - 7AH máx.
• Lamp output	24Vac - 3W máx.
• Motor output	24Vdc - 100W máx.
• Lock output	12Vdc - 10W máx.
• Auxiliary accessories output	24Vdc - 3W máx.
• Working temperature	-10°C a +55°C
• Incorporated Radio Receiver	433,92 Mhz
• Accepted codestype	Rolling Code
• Central dimensions	99x104,5 mm
• Fuse	8A

## 04. REMOTE CONTROLS

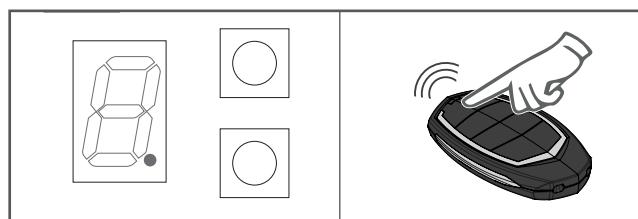
### PROGRAMMING/ERASE REMOTE CONTROLS

#### • Programming

The control board MC61 has the capacity to memorize 23 remote controls (Rolling Code).



1 • Press the **CMD** button 1 second and the display point will flash twice.

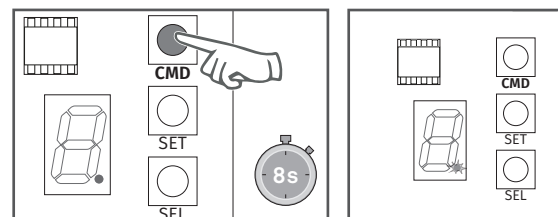


2 • Press a button of your choice from the remote control to program and the display point will flash twice. Remote control will be memorized after 10 seconds.

## 04. REMOTE CONTROLS

### PROGRAMMING/ERASE REMOTE CONTROLS

#### • Erase remote controls



Press **CMD** for 8 seconds (during this time the LED display point will stay ON). After this time, LED display point will flash twice and all codes have been deleted from memory.

## 05. FUNCTIONS

### FUNCTION'S BOARD

The control board **MC61BR** has a menu that allows access to all automatic configurations.

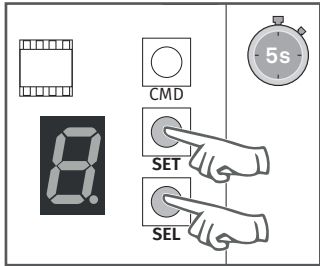
MENU	FUNCTION	MÁX. MIN. PROGRAMABLE	STATE	FACTORY VALUE	PAGE
F.	Automation sensibility programming	min. 9 max. 1		5	6A
P.	Opening and closing course programming		U Opening indicator d Closing indicator		6B
C.	Enable/disable photocells		0 Disable 1 Enable	0	7A
A.	Programming automatic closing	min. 10s max. 90s	0 Disable	0	7B
L.	Enable/disable condominium function		0 Disable 1 Enable	0	8A
E.	Enable/disable STOP		0 Disable 1 Enable	1	8B
H.	Increase or decrease deceleration	min. 1s max. 4s	0 Disable	2	9A
b.	Enable/disable Follow Me		0 Disable 1 Enable	0	9B

## 05. FUNCTIONS

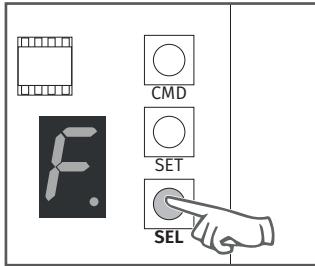
### AUTOMATION SENSIBILITY PROGRAMMING

This menu allows to set the level of sensibility that you want in the motor operation.

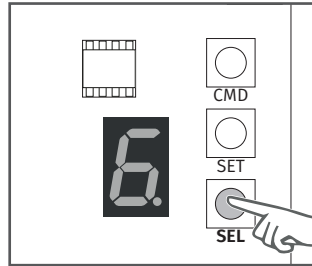
**Maximum sensibility - 1 | Minimum sensibility - 9**



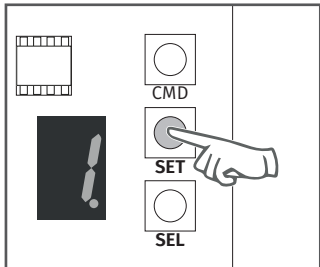
1 • Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



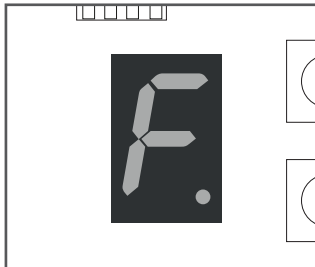
2 • The display will show **F**. Press **SET** button to access the submenu.



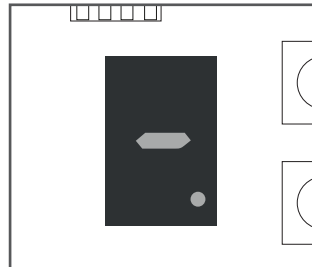
3 • The display will show a value between 1 and 9, indicating the currently configured level. Use **SEL** button to choose desired option.



4 • Press the **SET** button once to save this option.



5 • The display will show **F** and the configuration is successfully done.



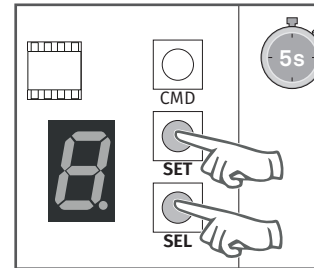
6 • To exit the programming mode wait 10 sec. until (-) appears.

## 05. FUNCTIONS

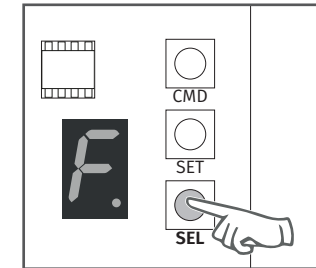
### OPENING AND CLOSING COURSE PROGRAMMING

To make the opening and closing course programming, the mechanical limit switches must always be in tune.

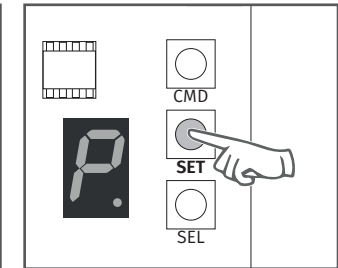
- 1º Unlock the motor;
- 2º Manually, put the gate in closing position and adjust the closing limit switch;
- 3º Manually, put the gate at the opening position you want and adjust the opening limit switch.



1 • Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



2 • The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **P**.

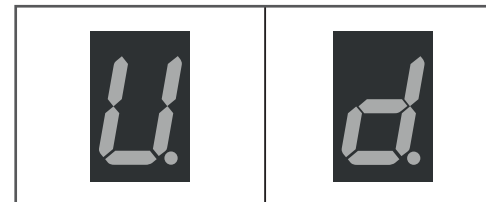


3 • Press the **SET** button to start the course recognition.

- 4 • If the door is open, it will close until it reaches the closing limit switch.
- 5 • It will open slowly for 5 seconds to detect the force during deceleration.
- 6 • It will close slowly to detect the force during deceleration.
- 7 • It will open at normal speed until it reaches the opening limit switch.
- 8 • It will close immediately, stopping only when it reaches the closing limit switch.
- 9 • Programming completed.



During the course recognition, display shows **P**.



Opening indicator

Closing indicator

When you start the opening display shows **U**.  
When you start the closing display shows **d**.

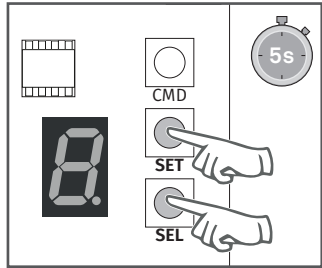


## 05. FUNCTIONS

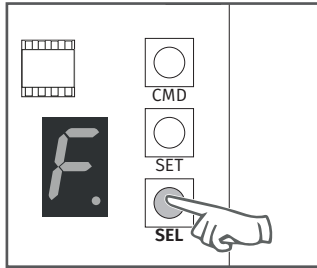
### ENABLE/DISABLE SAFETY PHOTOCELLS

When photocells enabled, if any obstacle interrupt them (if the door is closing), the door will reverse the direction.

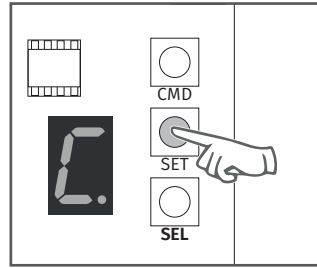
**0 - Disable | 1 - Enable**



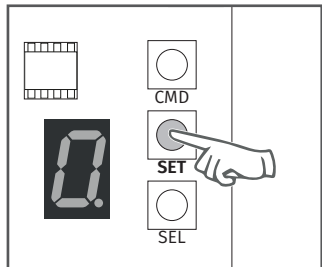
**1 •** Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



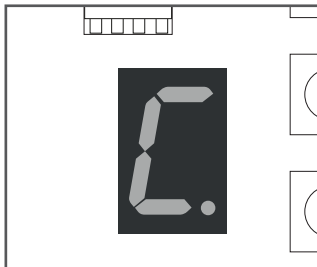
**2 •** The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **C**.



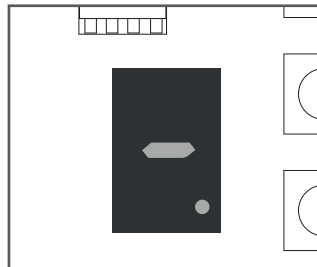
**3 •** Press the **SET** button to access the submenu.



**4 •** The display will show **0** (disabled), **1** (enable). Use the **SEL** key to select the desired option and press **SET** to confirm.



**5 •** The display shows **C** and the configuration is successful.



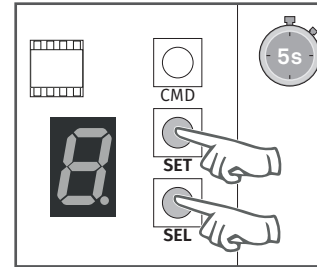
**6 •** To exit the programming mode wait 10 sec. until (-) appears.

## 05. FUNCTIONS

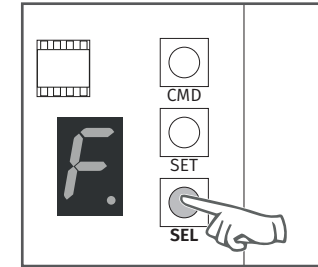
### PROGRAMMING AUTOMATIC CLOSING

Option 0 disables the automatic closing, and the gate will close only if it receives an order from a configured device.

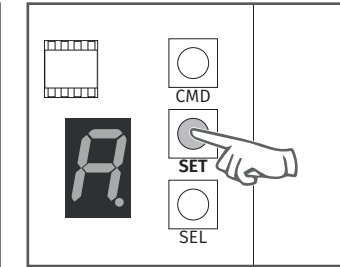
Any option between 1 and 9, multiplied by 5, sets the automatic closing time, the minimum is 5 seconds (number 1) and the maximum is 45 seconds (number 9).



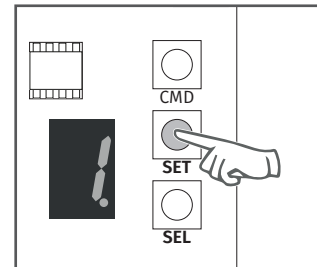
**1 •** Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



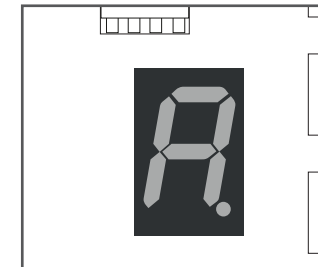
**2 •** The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **A**.



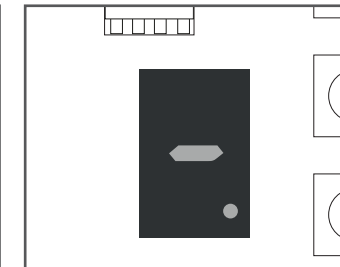
**3 •** Press the **SET** button to access the submenu.



**4 •** Use the **SEL** button to put on the desired option. Press the **SET** button once to save this option.



**5 •** The display will show **A** and the configuration was successful.



**6 •** To exit the programming mode wait 10 sec. until (-) appears.



## 05. FUNCTIONS

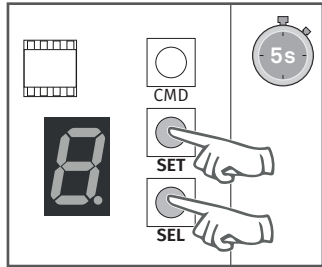
### ENABLE/DISABLE CONDOMINIUM FUNCTION

#### 0-Disabled

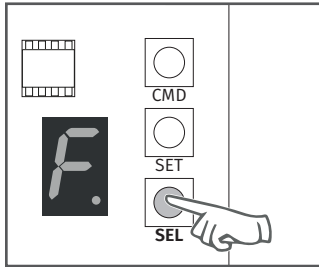
- If you send an order to the gate completely open, it will close.
  - If pressing during the closure, the gate reverses direction (it will open).
- When disabled, you can control the opening or closing of the gate whenever you want, and their behavior is: open-stop-close-stop-open-stop - (...) for each time you press a remote control key.

#### 1 - Enabled

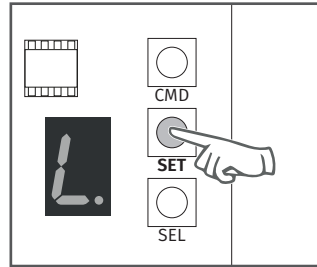
- This function makes the control board ignore all the orders sent by configured devices during the course of opening and during the pause time.
- Pressing the remote control during the opening, the order is declined and the gate continues to open.
- When activated the condominium function is activated the closing time in 10 seconds.



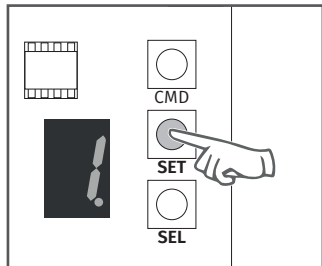
1 • Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



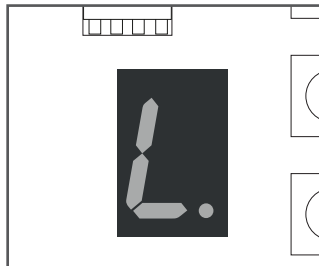
2 • The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **L**.



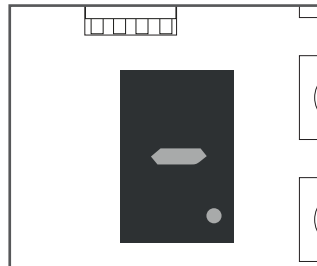
3 • Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 1, which identifies the option in which the control board is currently configured. Use the **SEL** button to put on the desired option. Press the **SET** button once to save this option.



5 • The display will show **L** and the configuration was successful.



6 • To exit the programming mode wait 10 sec. until (-) appears.

## 05. FUNCTIONS

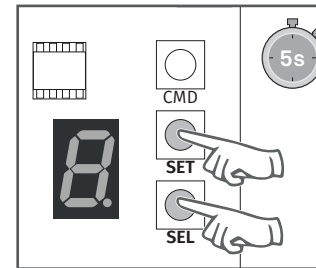
### ENABLE/DISABLE STOP

- When this function is activated, the control board will only work if STOP contact is closed. If the barrier is open, the control board reject any opening or closing order.

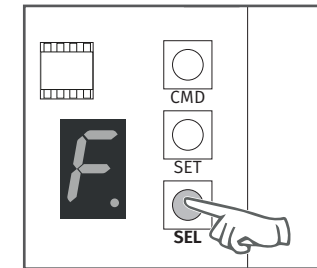
#### 0 - Disable | 1 - Enable



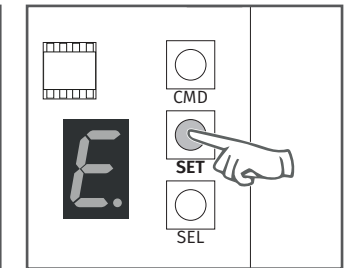
For this function, you must have installed a safety device N.C at the barrier.



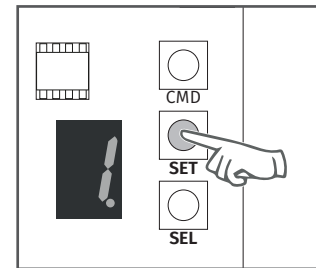
1 • Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



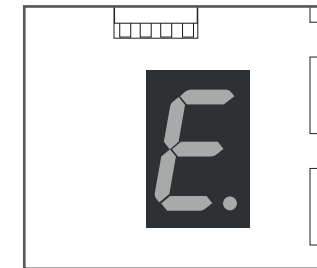
2 • The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **E**.



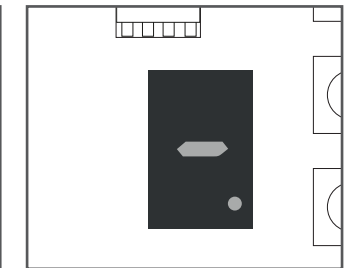
3 • Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 1, which identifies the option in which the control board is currently configured. Use the **SEL** button to put on the desired option. Press the **SET** button once to save this option.



5 • The display will show **E** and the configuration was successful.



6 • To exit the programming mode wait 10 sec. until (-) appears.

## 05. FUNCTIONS

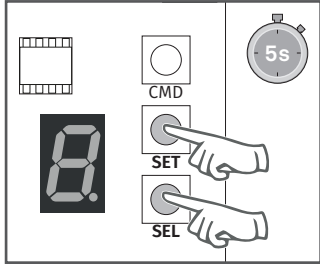
### INCREASE OR DECREASE DECELERATION

The deceleration reduce the motor speed in the final part of the course (opening or closing).

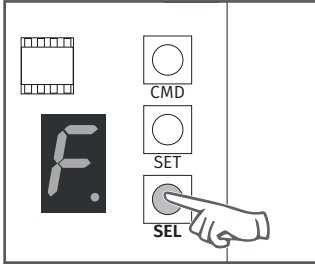
**Without deceleration - select the value 0**

**Minimum deceleration - 1 second**

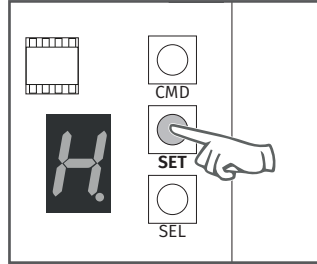
**Maximum deceleration - 9 seconds**



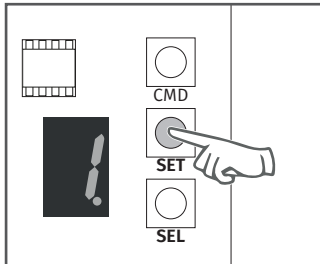
1 • Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



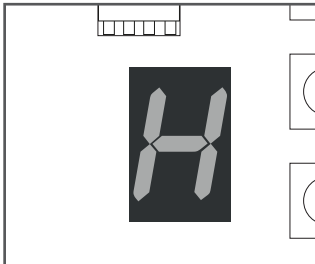
2 • The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **H**.



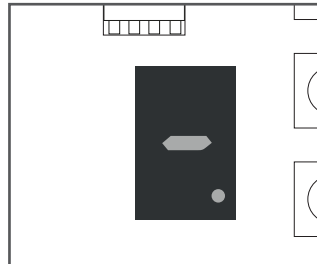
3 • Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 4. Use the **SEL** button to put on the desired option. Press the **SET** button once to save this option.



5 • The display will show **H** and the configuration was successful.



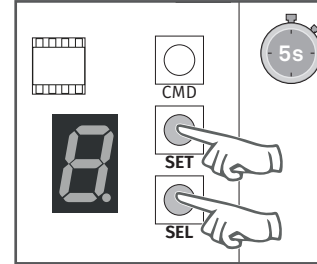
6 • To exit the programming mode wait 10 sec. until (-) appears.

## 05. FUNCTIONS

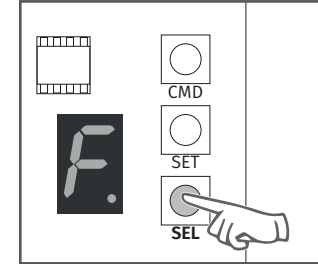
### ENABLE/DISABLE FOLLOW ME

With the "Follow Me" function activated, whenever the photocells detect the passage of a user/obstacle, the control board triggers the closing maneuver 3 seconds later.

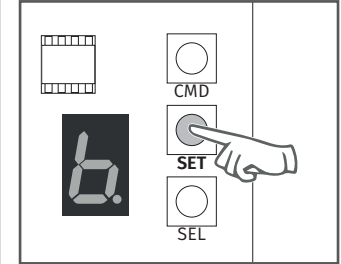
**0 - Disable | 1 - Enable**



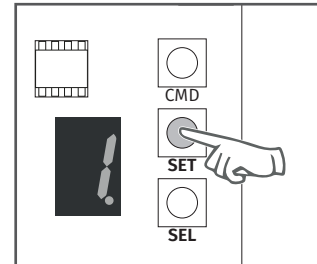
1 • Press the **SEL** and **SET** buttons simultaneously for 5 sec. to access the programming menu.



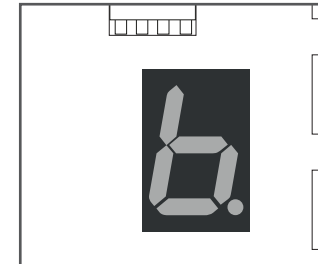
2 • The display will show **F**. Press the **SEL** button as many times as necessary until the display shows **b**.



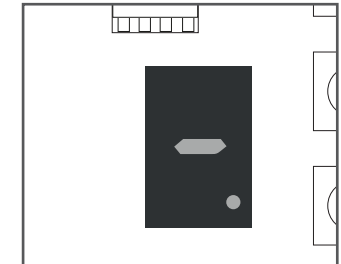
3 • Press the **SET** button to access the submenu.



4 • The display will show the value 0 or 1, which identifies the option in which the control board is currently configured. Use the **SEL** button to put on the desired option. Press **SET** to save the option.



5 • The display will show **b** and the configuration was successful.



6 • To exit the programming mode wait 10 sec. until (-) appears.

# 06. TROUBLESHOOTING

## INSTRUCTIONS FOR FINAL CONSUMERS/TECHNICIANS

Anomaly	Procedure	Behavior	Procedure II	Discovering the origin of the problem
• Barrier doesn't work	• Make sure you have 230V power supply connected to automation and if the fusible working properly.	• Still not working	• Consult a qualified technician.	<ol style="list-style-type: none"> <li>1 • Remove the barrier top cover;</li> <li>2 • Measure the 24V output of the transformer to detect the fault location;</li> </ol> <p><b>A) Has 24V:</b></p> <ol style="list-style-type: none"> <li>1 • Verify the control board supplies of the barrier to detect if the fault is in the motor or in the control board. Replace the damaged component or send it to the services for diagnosis and repair.</li> </ol> <p><b>B) Has not 24V:</b></p> <ol style="list-style-type: none"> <li>1 • Verify the 230V input of the transformer. If have 230V the problem is in the transformer. If haven't 230V, the problem should be in the fusible, electric cables or in the power supply. Verify all the systems.</li> </ol>
	• Verify the STOP	• Still not working	• Consult a qualified technician.	<ol style="list-style-type: none"> <li>1 • Take a start in remote control to open and verify the behavior of the LEDs;</li> <li>2 • Check the LED signs and the limit switches connections. If everything is corrected and there is no micro acted, the LEDs have to be on. Check all the photocells circuit connections to the barrier;</li> <li>3 • In the E menu, make sure the STOP is enabled (page 7B). If enabled and the circuit is not closed, the barrier will not work.</li> </ol>
• Barrier doesn't move but makes noise	• Unlock the barrier and move by hand to check for mechanical problems.	• The barrier is stuck?	• Consult an experienced barrier expert.	<ol style="list-style-type: none"> <li>1 • Check all motion axis and associated motion systems related with the barrier, to find out what is the problem. Also check that the springs are in good condition and can support the barrier.</li> </ol>
		• The barrier moves easily?	• Consult a qualified technician	<ol style="list-style-type: none"> <li>1 • Turn off the barrier from control board and test it on directly to a 24V battery to find out if it is damaged;</li> <li>2 • If the barrier runs, the problem is in the control board. Remove it and send it to the technical services for diagnosis;</li> <li>3 • If the barrier does not work, remove it and send to the technical services for diagnosis.</li> </ol>
• Barrier opens but doesn't close	<ol style="list-style-type: none"> <li>1 • Check if there is any obstacle in front of the photocells;</li> <li>2 • Make sure if the photocells are working. Put your hand in front and check that the relay makes the same noise.</li> <li>3 • Check if any of the control devices of the barrier are jammed and sending permanent signal to control unit;</li> </ol>	• Barrier opened but didn't close again.	• Consult a qualified technician	<ol style="list-style-type: none"> <li>1 • Verify if the display is connected to confirm the existence of power supply;</li> <li>2 • Verify if the photocells are powered in control board output;</li> <li>3 • Access the menu on the display and disable the photocells and the STOP;</li> <li>4 • Check limit switch connections. If the 2 LEDs are turned off, it means that the barrier can not operate because have the limit switches actuated.</li> <li>5 • Try to close;</li> </ol> <p><b>A) Closed:</b></p> <ol style="list-style-type: none"> <li>1 • Problem is in one of these two systems. Activate the photocells and check that the barrier closes. If close, problem will be in the STOP. Active tin the menu and try to close the barrier to be sure.</li> </ol> <p><b>B) Doesn't closed:</b></p> <ol style="list-style-type: none"> <li>1 • Problem is in the barrier or in the control board. Give an order to the barrier close while measuring the control board power output to the barrier. If you have 24V, the control board is working and the problem is in the barrier.</li> <li>2 • If it has not current, the problem is in the control board.</li> </ol>
• Barrier doesn't make complete route	• Unlock the barrier and move by hand to check for mechanical problems.	• Encountered problems?	• Consult an experienced barrier expert.	<ol style="list-style-type: none"> <li>1 • Check all motion axis and associated motion systems related with the barrier, to find out what is the problem. Also check that the springs are in good condition and can support the gate.</li> </ol>
		• The barrier moves easily?	• Consult a qualified technician	<ol style="list-style-type: none"> <li>1 • Verify if the tests to the barrier were well made;</li> <li>2 • Change the strength of F menu until the barrier move the gate without changing the direction;</li> <li>3 • This adjustment should be made to in case the barrier find an obstacle do an inversion;</li> <li>4 • If even at maximum power level (F9) is still the problem, test the barrier directly connected to a 24V battery to see if it has the power to open / close the barrier completely;</li> <li>5 • Change the strength in the F menu until the barrier move the without changing the direction;</li> </ol>