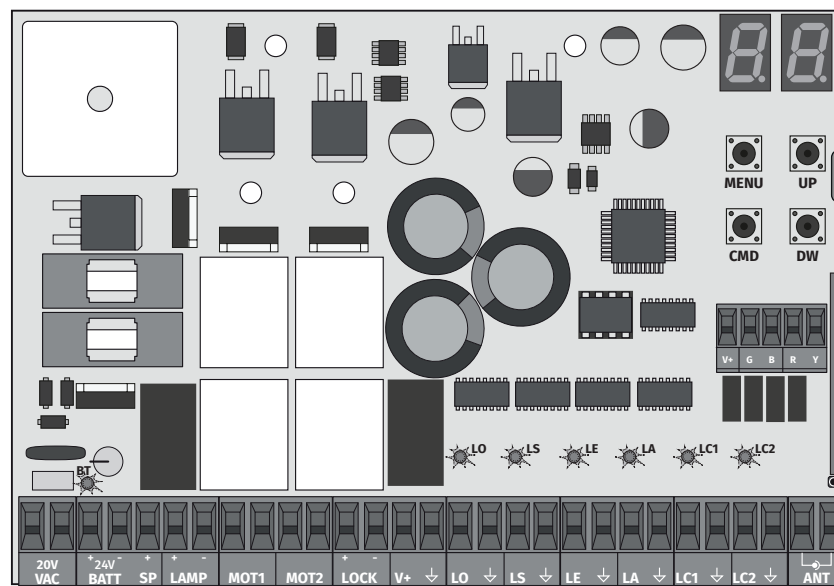




MC62

USER'S AND INSTALLER'S MANUAL



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Simplified EU Declaration of Conformity







The undersigned **MOTORLINE ELECTROCELOS, S.A.**, with registered office at **Travessa do Sobreiro, n.º 29, 4755-474 Rio Côvo (Santa Eugénia), Barcelos**, declares that the present type of radio equipment - **MC62 Control board** - ecomplies with the Directive 2014/53/EU.

The full text of the declaration of conformity is available at the following internet address:

<https://motorline.pt/certification/mc62>



01. SAFETY INSTRUCTIONS

	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 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

- 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

The MC62 is a control board with built-in radio control system, developed for the automation of 24V swing gates.

• Power Supply	20/24V AC
• Flashing light's output	24VDC 4W Max.
• RGB Flashing light's output	24Vdc 100mA Max.
• Motor's output	24Vdc 2 x 120W Max.
• Auxiliary accessories output	24V DC 8 W Max.
• Security and BT remote controls	24V DC
• Working temperature	-25°C to + 55°C
• Incorporated Radio Receptor	433,92 Mhz
• OP remote controls	12bits or Rolling Code
• Maximum Memory Capacity	100 (full opening) - 100 (pedestrian opening)
• Control Board Dimensions	150x100 mm

• CONNECTORS

VAC	01 • Power Supply Input - 20/24Vac 120W 02 • Power Supply Input - 20/24Vac 120W
BATT	01 • 24Vdc Input for Emergency Battery 02 • COM Input (Solar Panel or Emergency Battery) 03 • 24Vdc Input for Solar Panel
LAMP	01 • Flashing light's Output - 24Vdc 4W 02 • Flashing light's Output - 0V
MOT1	01 • Motor 1 Output - 24Vdc 120W 02 • Motor 1 Output - 24Vdc 120W
MOT2	01 • Motor 2 Output - 24Vdc 120W 02 • Motor 2 Output - 24Vdc 120W
LOCK	01 • ElectricLock Output - 12/24Vdc 12W 02 • ElectricLock Output - 0V
V+	01 • Accessories Output - 24Vdc 8W 02 • Accessories Output - 0V

02. CONTROL BOARD

CHARACTERISTICS

LO	01 • NO input for complete maneuver button 02 • Common
LS	01 • NO input for pedestrian maneuver button 02 • Common
LE	01 • NC input for external photocells 02 • Common
LA	01 • NC input for internal photocells 02 • Common
LC1	01 • NC input for anti-crushing photocells 02 • Common
LC2	01 • NC input for anti-crushing photocells 02 • Common
ANT	01 • Antenna 02 • GND
LINK	Type-C input for MCONNECT LINK connection

02. CONTROL BOARD

RECOMMENDATIONS PRIOR TO PROGRAMMING

To improve the knowledge about the operation of the control board, before setting up, pay particular attention to the following instructions.

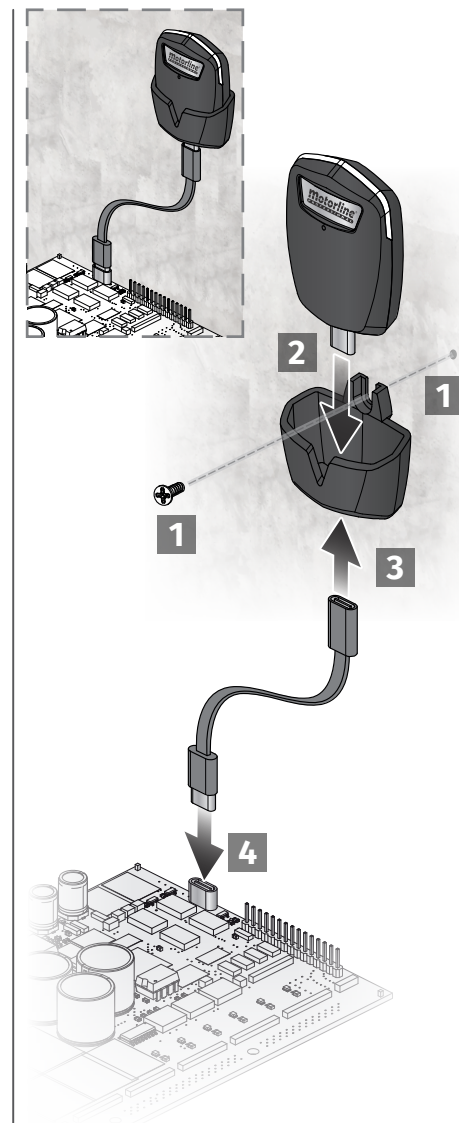
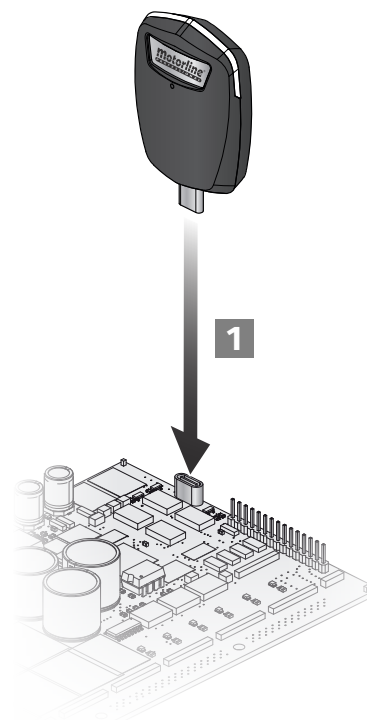
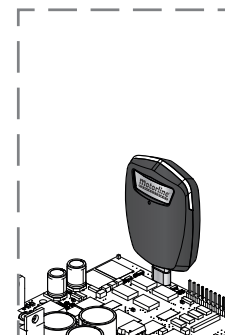
LEDs	LS • LED On when pedestrian opening is active. LO • LED On when full opening is active. LE • LED on when the photocell is active or the LE circuit is closed. LA • LED on when the photocell is active or the LA circuit is closed. LC1 • LED on when the circuit LC1 is closed (anti-crushing photocells). LC2 • LED on when the circuit LC2 is closed (anti-crushing photocells). BT • LED ON when the battery turned on backwards. VDD • LED ON when power is supplied to the microcontroller.
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03. INSTALLATION

INSTALLATION OF MCONNECT LINK (OPTIONAL)



Update the control board firmware if you don't already have the latest version.
Use the **MCONNECT LINK** to complete the update quickly and securely.





The installation process assumes that the gate already has mechanical or electrical limit switches installed. For more information read the motor's manual.

- 01 • Connect all accessories according to the connections diagram (page 17).
- 02 • Connect the control board to a 20V power supply
- 03 • Check if the gate movement is the same as shown on the display:

CL	OP	<p>If the display does not match the movement of the gate, switch off the control board from power supply and change the wires of Motor1 (0 and 0) and Motor2 (0 and 0).</p>
CLOSE	OPEN	

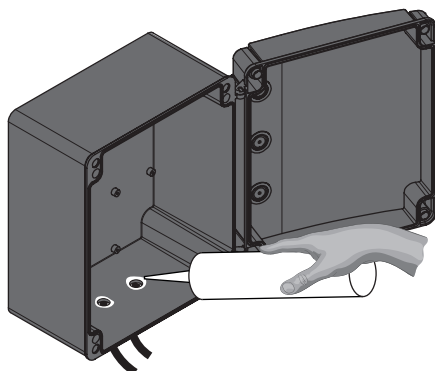
- 04 • Make a course programming - menu **P0** (page 9A).
- 05 • If necessary, adjust the deceleration time of the gate at opening and closing - menu **P1** (page 10A).
- 06 • Adjust the gate force and sensitivity - menu **P2** (page 10B).
- 07 • Re-program the course - menu **P0** (page 9B).
- 08 • Enable or disable the use of Photocells in menu **P5** and **P6** (page 11A and 11B).
- 09 • Program a remote control (page 7B).

The control board is now fully configured!

Check the pages of the menu programming if you want to configure other features of the Control board.



After completing the entire installation of the electrical panel, it is mandatory to seal with silicone all openings in the box (accesses, cable passages and slots) to prevent the entry of moisture and insects that could compromise the normal functioning of the electrical components.



SU	SP
Programming a remote control for full opening	Programming a remote control for pedestrian opening

	REMOTE CONTROL PROGRAMMING
	<p>01 • Press the cmd button for 1 sec.</p> <p>02 • Select the function where you want to program the remote controls (SU and SP) using ↓ ↑.</p> <p>03 • Press cmd once to confirm the function (SE or SP).</p> <p>04 • The first free position appears.</p> <p>05 • Press the remote control button you want to program. The display will blink and move to the next free location.</p>
	DELETE REMOTE CONTROLS
	<p>01 • Press the cmd button for 1 sec.</p> <p>02 • Select the function (SU or SP) using ↓ ↑.</p> <p>03 • Press cmd once to confirm the function (SU or SP).</p> <p>04 • Use ↓ ↑ to select the remote control location you want to delete.</p> <p>05 • Press cmd for 3sec. and the position is empty. The display will flash and the position will be available.</p>
	DELETE ALL THE REMOTE CONTROLS
	<p>01 • Press the cmd button for 5 sec.</p> <p>02 • The display will show dL, confirming that all remote controls have been deleted.</p>



- Whenever you store or delete a remote control, the display will flash and show the next position. You can add or delete remote controls without go back to point 01.
- If you do not press any button for 20 seconds the control board will return to standby.

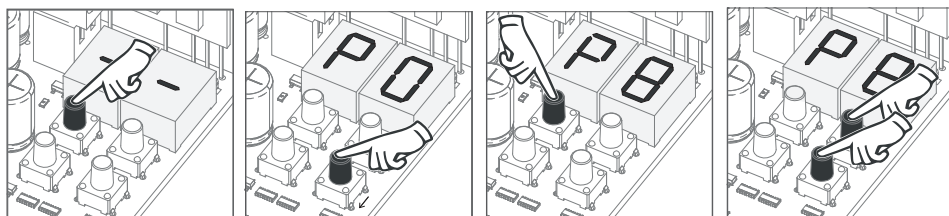


We can only go into programming with the gate electrically stumpled.

The functions of the control board are divided into 2 areas:

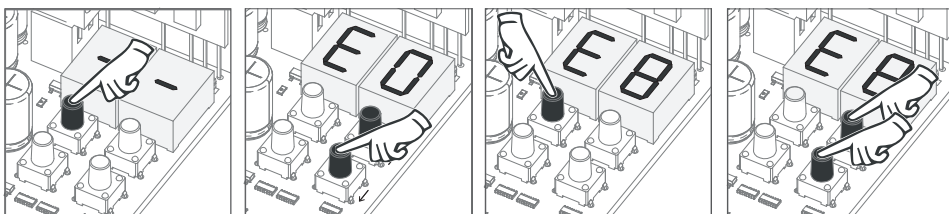
- Main Menus "P"
- Extra Menus "E"

P MENU



- To access the P menu press the MENU button for 2 sec.
- Use ↓ ↑ to navigate through the menus.
- Press MENU when you want to confirm access to a menu.
- Press ↓ ↑ simultaneously to exit programming.

E MENU



- To access the E menu press the MENU button for 10 sec.
- Use ↓ ↑ to navigate through the menus.
- Press MENU when you want to confirm access to a menu.
- Press ↓ ↑ simultaneously to exit programming.

MENU	FUNCTION	MIN.	MAX.	STATE	FACTORY VALUE	PAGE.
P0	Course Programming	-	-	Manual Programming	-	9B
				1 motor		
				2 motors		
				00 Disable Solar Kit Apolo 01 Activate Solar Kit Apolo		
P1	Deceleration time adjustment	0s	25s	00 Disable Chainlift 01 Activate Chainlift (sensitivity 9 strength 5)	00	10A
				dR Opening deceleration dF Closing deceleration bR Opening deceleration bF Closing deceleration		
P2	Force and sensitivity adjustment	0	9	01 Active Leaf 2	05	10B
P3	Pedestrian Course time	0s	99s	F0 Force adjustment F5 Sensivity adjustment F7 Slowdown sensitivity adjustment	10s	10B
P4	Pause time and Gates delay	0s	99s	RF Full pause time adjustment RP Pedestrian pause time adjustment	0s	11A
		0s	25s	RC Gate delay in closing RO Gate delay in opening	2s	
P5	Photocells 1 programming	-	-	LE 00 Disables photocells 01 Activate photocells	00	11A
				HC 00 Photocells in opening 01 Photocells in closing	01	
				HL 00 Invert 01 Stop 02 Invert 2 sec. and Stop	00	
				LC 00 Disables anti-crushing photocells LC1 01 Activates anti-crushing photocells LC1	00	
				SC 00 Deactivates photocell test 01 Activates photocell test	00	
P6	Photocells 2 programming	-	-	LR 00 Disables photocells 01 Activate photocells	00	11B
				HC 00 In opening 01 In closing 02 In opening and closing	00	
				HE 00 Invert 01 Stop 02 Invert 2 sec. and Stop 03 Invert at close/stop 2sec at opening 04 Stops when closing and reverses when the obstacle comes out. / Stops at the opening and continues when the obstacle comes out	01	
				LC 00 Disables anti-crushing photocells LC2 01 Activates anti-crushing photocells LC2	00	
				SC 00 Deactivates photocell test 01 Activates photocell test	00	
P7	Operating logic	-	-	00 Automatic mode functioning 01 Step by step mode functioning 02 Condominium mode functioning	01	11B
P8	Flashing lamp	-	-	00 Flashing (opening and closing) 01 Step by step mode 02 Courtesy light	00	12A
P9	Remote programming	-	-	00 Distance PGM OFF 01 Distance PGM ON	00	12B

03. INSTALLATION

FUNCTIONS MENU "E"

Menu	Function	Min.	Max.	State		Factory Value	Page
E0	Human Presence	-	-	HP 00	Desactivates human presence	00	12A
				01	Activates human presence		
				PL 00	Disables push buttons mode	00	
				01	Activates push buttons mode		
E5				00	Disables input for emergency stop devices	00	
				01	Enables input for emergency stop (NC) devices		
E1	Soft start	-	-	00	Deactivates Soft start	00	12B
E2	Courtesy light time / Pre-Flashing lamp	0	99	EE	Courtesy light time adjustment	00	12B
				PP	Adjustment of Pre-Flashing lamp time		
E3	Follow me	-	-	00	Desactivates follow me	00	13A
				01	Activates Follow me (fully open)		
				02	Activates Follow me (in opening or fully open position)		
E4	Course time adjustment	1m	4m	00	Opening course time (minutes)	00	13A
		0s	59s	05	Opening course time (seconds)	10s	
		1m	4m	00	Closing course time (minutes)	00	
		0s	59s	05	Closing course time (seconds)	10s	
		1m	4m	00	Opening course time (minutes)	00	
		0s	59s	05	Opening course time (seconds)	10s	
		1m	4m	00	Closing course time (minutes)	00	
		0s	59s	05	Closing course time (seconds)	10s	
E5	Brake/Lock/ Strokes	-	-	EB 00	Disables electronic brake	00	13B
				01	Active electronic brake		
				EL 00	Activates electric lock on opening	00	
				01	Activates electric lock whenever moving		
				PO 00	Disables opening push	00	
01	Active opening push						
	PC 00	Disables closing push	00				
01	Active closing push						
	PR 00	Motor lock on closing disabled	00				
01	Motor lock on closing activated						
	E6	Deceleration Speed	0	9	50	Deceleration Speed adjustment	05
E7	Manuevers counter	-	-	Shows the number of maneuvers		-	14A
E8	Reset - Restore factory settings	-	-	00	Deactivated	00	14B
E9	RGB Output	-	-	00	Continued output	00	14B
				01	Intermittent output		

04. PROGRAMMING "P"

P0 COURSE PROGRAMMING

PA	PO	SO
Course Manual Programming This menu allows you to manually set the course of the leaf/leaves.	Number of Motors Allows you to define the number of motors connected to the control board	Solar kit This menu allows activating the solar Kit Apolo mode and its connection with the control board. The RGB Y output changes the operating mode so that it is activated only when the gate is closed, telling the Kit to turn off the power supply. With this menu active, the control board will recognize that it is closed and will open at its normal speed, when given the order.
Default value (NA)	Default value (02)	Default value (00)

DIRECTION OF DISPLAY ROTATION	COURSE PROGRAMMING OF TWO MOTORS
00	Normal rotation - leaf 1 starts opening (normal speed) Slow rotation - leaf 1 goes into opening slowdown (slowdown speed)
01	Normal rotation - leaf 1 stops and leaf 2 starts opening (normal speed) Slow rotation - leaf 2 goes into opening slowdown (slowdown speed)
02	Normal rotation - leaf 2 stops and starts closing (normal speed) Slow rotation - leaf 2 goes into closing speed (slowdown speed)
03	Normal rotation - leaf 2 stops and leaf 1 starts opening (normal speed) Slow rotation - leaf 1 goes into closing slowdown (slowdown speed)
COURSE PROGRAMMING OF ONE MOTOR (PEDESTRIAN)	
00	Normal rotation - leaf starts opening (normal speed) Slow rotation - the leaf goes into opening slowdown (slowdown speed)
01	Normal rotation - the leaf stops and starts closing (normal speed)
02	Slow rotation - the leaf goes into closing slowdown (slowdown speed)

Manual programming:

- 01 • Press MENU for 2 sec. until **P0** appears.
- 02 • Press MENU once until **PA** appears.
- 03 • Press MENU (or remote control) to start programming the opening time.

2 MOTORS (PA = 02)	1 MOTOR (PEDESTRIAN) (PA = 01)
04 • Press MENU to start slowdown. 05 • Press MENU to stop leaf 1 (leaf 2 starts opening automatically). 06 • Press MENU to start slowdown. 07 • Press MENU to finish opening and start closing leaf 2. 08 • Press MENU to start slowdown. 09 • Press MENU to stop leaf 2 (leaf 1 starts closing automatically). 10 • Press MENU to start slowdown. 11 • Press MENU to finish closing leaf 1.	04 • Press MENU to start the opening slowdown of the leaf. 05 • Press MENU to stop the leaf and start programming the closing time. 06 • Press MENU to start the closing slowdown of the leaf. 07 • Press MENU once to display PA , leaf 1 stops. 08 • Use UP and DW to display PA to exit programming mode. 09 • Use UP and DW to stay in Standby.

Display will show **00** signaling that leaves are closed.



You can use the remote instead of the MENU button. Whenever a leaf touches a stop, wait 1 second before clicking on the MENU.

04. PROGRAMMING "P"

P0 COURSE PROGRAMMING

P0-P0 - Number of motors:

- 01 • Press MENU for 2 sec. until P0 appears.
- 02 • Press MENU once until P1 appears.
- 03 • Use UP until P2 appears.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

P0-S0 - Solar kit:

- 01 • Press MENU for 2 sec. until P0 appears.
- 02 • Press MENU once until P1 appears.
- 03 • Use UP until S0 appears.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to store the new value.

P0-CH - Chainlift:

- 01 • Press MENU for 2 sec. until P0 appears.
- 02 • Press MENU once until P1 appears.
- 03 • Use UP until CH appears.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.



When active(1) the obstacle detection sensitivity is automatically set to 9 and the force to 5

04. PROGRAMMING "P"

P1 DECELERATION TIME ADJUSTMENT

This menu allows to set the deceleration time of each leaf at opening and closing.

PA

Slowing down on opening leaf 1

It allows to define the time that the gate will act with slowdown in the opening.

PB

Slowing down on closing leaf 1

It allows to define the time that the gate will act with slowdown in the closing.

PA

Slowing down on opening leaf 2

It allows to define the time that the gate will act with slowdown in the opening.

PB

Slowing down on closing leaf 2

It allows to define the time that the gate will act with slowdown in the closing.

min. 0s max. 25s Default value (03)

- 01 • Press MENU for 2 sec. until it appears P0.
- 02 • Use UP until appears P1.
- 03 • Press Menu will appear PA. Use UP or DW to navigate the parameters.
- 04 • Press MENU to edit the chosen parameter value.
- 05 • The factory set time appears. Use UP and DW to change the value.
- 06 • Press MENU to save the new value.
- 07 • Press MENU again.
- 08 • Use UP and DW to display PB to exit programming mode.
- 09 • Use UP and DW to stay in Standby.

04. PROGRAMMING "P"

P2 FORCE AND SENSITIVITY ADJUSTMENT



A very low value in this parameter may cause the motor to not have enough torque to move the gate and the effort error occurs (a1 or a2)

F0

Force adjustment

Allows you to set the force that is injected into the motor when it moves at normal speed.

min. 1 max. 9 Default value (05)

F5

Sensitivity adjustment

Allows to adjust the sensitivity of the motor in the presence of obstacles. The higher the sensitivity, the less effort it will take to detect any obstacle and reverse direction.

min. 1 max. 9 Default value (05)

FP

Slowdown sensitivity adjustment

Allows to adjust the sensitivity of the motor in the presence of obstacles. The higher the sensitivity, the less effort it will take to detect any obstacle and reverse direction.

min. 1 max. 9 Default value (05)

- 01 • Press MENU for 2 sec. until it appears P0.
- 02 • Use UP until appears P2.
- 03 • Press Menu will appear F0. Use UP or DW to navigate the parameters.
- 04 • Press MENU to edit the chosen parameter value.
- 05 • The factory set time appears. Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

04. PROGRAMMING "P"

P3 PEDESTRIAN COURSE TIME

The pedestrian mode allows the gate to be opened for the passage of people, without it needing to open in its entirety. In this function you can schedule the time you want the gate to open.








For pedestrian mode to work, it is necessary that the minimum work is 1 second, and 0 disables the pedestrian.

min. 0s max. 99s Default value (10 seconds)

- 01 • Press MENU for 2 sec. until it appears P0.
- 02 • Use UP until appears P3.
- 03 • Press MENU. The factory set time appears.
- 04 • Use UP and DW to change the value.
- 05 • Press MENU to save the new value.

04. PROGRAMMING "P"

P.4 PAUSE TIME AND GATES DELAY

RF	RP	RE	RO
Closing time adjustment Allows adjustment of the pause time for automatic closing.	Pedestrian closing pause time adjustment Allows you to set the pause time at the pedestrian opening.	Gate delay in closing Allows you to set the delay time for closing leaf 1 relative to leaf 2.	Gate delay in opening Allows you to set the delay time for opening leaf 1 relative to leaf 2.
 min. 0s max. 99s Default value (00)	 min. 0s max. 99s Default value (00)	 min. 0s max. 25s Default value (02)	 min. 0s max. 25s Default value (02)
 When the values are at zero, there is no automatic closing.			
01 • Press MENU for 2 sec. until it appears P.4. 02 • Use UP until appears P.4. 03 • Press Menu will appear RF. Use UP or DW to navigate the parameters. 04 • Press MENU to edit the chosen parameter value. 05 • The factory set time appears. Use UP and DW to change the value. 06 • Press MENU to save the new value.			

04. PROGRAMMING "P"

P.5 PHOTOCELLS 1 PROGRAMMING

Allows to program LE security behavior (photocell 2).		
LE	00 (disables photocells) 01 (activates photocells) Enable or disable security entry.	Default value (00)
HE	00 (opening photocells) 01 (closing photocells) This menu can only be changed when the LE menu is active. Allows you to define whether this security will act when opening or closing the gate.	Default value (01)
HL	00 (the gate is reversed) 01 (gate stops and resumes 5 sec after security is disabled) 02 (gate reverses for 2 sec. and stop) Allows you to set the behavior that the gate will have when this security is activated.	Default value (00)
LL	00 (disables photocells) 01 (activates photocells) Allows you to activate or deactivate the LC1 input (anti-crushing photocell 1).	Default value (00)
SL	00 (Deactivates photocell test) 01 (Activates photocell tests) Allows you to activate or deactivate the photocell test.	Default value (00)
01 • Press MENU for 2 sec. until it appears P.5. 02 • Use UP until appears P.5. 03 • Press Menu will appear LE. Use UP or DW to navigate the parameters. 04 • Press MENU to edit the chosen parameter value. 05 • The factory set time appears. Use UP and DW to change the value. 06 • Press MENU to save the new value.		

04. PROGRAMMING "P"

P.6 PHOTOCELLS 2 PROGRAMMING

Allows to program LA security behavior (photocell 2).		
LA	00 (disables photocells) 01 (activates photocells) Enable or disable security entry.	Default value (00)
HA	00 (opening photocells) 01 (closing photocells) 02 (In opening - Stops when the photocells are interrupted and resumes opening when they are released; In closing: Stops and reopens as soon as the photocells are released) This menu can only be changed when the LA menu is active. Allows you to define whether this security will act on the opening or closing of the gate.	Default value (01)
HL	00 (the gate is reversed) 01 (gate stops and resumes 5 sec after security is disabled) 02 (gate reverses for 2 sec. and stop) 03 (the gate reverses at the closing, stops and reverses 2 sec. at the opening) 04 (When closing, it stops until the obstacle comes out, as soon as it comes out the gate reverses. When opening, it stops until the obstacle comes out, as soon as it comes out the gate continues to open) Allows to set the behavior that the gate will have when this security is activated.	Default value (00)
LL	00 (desativa fotocélulas) 01 (ativa fotocélulas) Permite ativar ou desativar a entrada LC2 (fotocélula anti-esmagamento 2)	Default value (00)
SL	00 (Deactivates photocell test) 01 (Activates photocell tests) Allows you to activate or deactivate the photocell test.	Default value (00)
*Note: If you activate parameter 02 in P6 → HC, the P6 → HL menu no longer functions.		
01 • Press MENU for 2 sec. until it appears P.6. 02 • Use UP until appears P.6. 03 • Press MENU will appear LA. Use UP or DW to navigate the parameters. 04 • Press MENU to edit the chosen parameter value. 05 • The factory set time appears. Use UP and DW to change the value. 06 • Press MENU to save the new value.		

04. PROGRAMMING "P"

P.7 OPERATING LOGIC

This menu allows to set the operating logic of the automation		
00	01	02
Automatic Mode Whenever there is an order the movement is reversed.	Step by step mode 1st impulse - OPEN 2nd impulse - STOP 3rd impulse - CLOSE 4th impulse - STOP If it is fully open and timed, it closes.	Condominium Mode Does not respond to orders during opening and pause time.
Default value (01)		

04. PROGRAMMING "P"

P7 OPERATING LOGIC

- 01 • Press MENU for 2 sec. until it appears *P0*.
- 02 • Use UP until appears *P7*.
- 03 • Press Menu will appear *00*.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

04. PROGRAMMING "P"

P8 FLASHING LAMP

This menu allows to set the operation mode of the flashing lamp (LAMP).

00	01	02
Intermittent The firefly flashes when opening and closing and stays on during the pause time	It remains on when opening and closing and off when paused.	It remains on during the opening and closing movements and off during the pause time and the light will remain on for the time set in menu E2.
Default value (00)		

- 01 • Press MENU for 2 sec. until it appears *P0*.
- 02 • Use UP until appears *P8*.
- 03 • Press Menu will appear *00*.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

04. PROGRAMMING "P"

P9 REMOTE PROGRAMMING

00	01
Distance PGM OFF	Distance PGM ON
This menu allows to enable or disable the programming of new remote controls without directly accessing the control board, using a previously stored remote controls (memorize remote controls page 7B).	
Default value (00)	

04. PROGRAMMING "P"

P9 REMOTE PROGRAMMING

- 01 • Press MENU for 2 sec. until it appears *P0*.
- 02 • Use UP until appears *P9*.
- 03 • Press Menu will appear *00*.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

Remote Programming Operation (PGM ON):



- Press the buttons indicated in the image simultaneously for 10 seconds and the flashing lamp will flash (the 1st free position appears in the display).
- Each time you store 1 remote control, the control board will exit remote programming. If you want to memorize more remote controls, you will always have to repeat the process of pressing the remote control buttons simultaneously for 10 seconds for each new remote control.

05. PROGRAMMING "E"

E0 HUMAN PRESENCE

HP	PL	LS									
00 (disables human presence) Whenever an order is sent to the LO input and the motor performs a complete maneuver. Human presence 01 (active human presence) The motor only works if you keep the LS button pressed. With the human presence active the RF remote controls do not work.	00 (disables pushbutton mode) 01 (active pushbutton mode) <table border="1"> <thead> <tr> <th></th><th>LS</th><th>LO</th></tr> </thead> <tbody> <tr> <td>01 ON</td><td>Full closing</td><td>Full opening</td></tr> <tr> <td>00 OFF</td><td>Pedestrian maneuvers</td><td>Total maneuvers</td></tr> </tbody> </table>		LS	LO	01 ON	Full closing	Full opening	00 OFF	Pedestrian maneuvers	Total maneuvers	Allows you to define how the LS input works. 00 (disables input to emergency stop device) 01 (input for emergency stop devices) If you have the LS submenu in 01 (active) and the PL submenu in 01 (active), the error appears 8L.
	LS	LO									
01 ON	Full closing	Full opening									
00 OFF	Pedestrian maneuvers	Total maneuvers									
Default value (00)											

- 01 • Press MENU for 10 sec. until it appears *E0*.
- 02 • Press MENU until it appears *HP*. Use UP or DW to navigate the parameters.
- 03 • Press MENU to edit the chosen parameter value.
- 04 • The factory set time appears. Use UP and DW to change the value.
- 05 • Press MENU to save the new value.

05. PROGRAMMING "E"

E1 SOFT START

00 function disabled
01 function activated

This menu allows activate/disable soft start.
With the soft start function activated, at each start of movement, the control board will control the start of the motor, gradually increasing in the first second of operation.

Default value (00)

- 01 • Press MENU for 10 sec. until it appears **E0**.
- 02 • Use UP until appear **E1**.
- 03 • Press Menu will appear **00**.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

05. PROGRAMMING "E"

E2 COURTESY LIGHT TIME / PRE-FLASHING LAMP

EE

Allows to adjust the courtesy light time. The courtesy light is activated for the set time when the gate is in the closed, open and standing position.

The E2 menu will only be available in the case if the courtesy light function is activated in the P8 menu option 2 (see page 12A)

Default value (00)

- 01 • Press MENU for 10 sec. until it appears **E0**.
- 02 • Use UP until appears.
- 03 • Press Menu will appear.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

PP

This menu allows you to define the time (from 1 to 99 seconds) that the flashing lamp remains active before the start of each maneuver.

05. PROGRAMMING "E"

E3 FOLLOW ME

00 function disabled
01 function activated after opening
02 function activated on opening

Allows you to activate the Follow me option. With this option activated, the control board, when in the open position or in opening, gives a closing order of 5 sec. after the safety device detects the passage of an object / user.

Default value (00)

- 01 • Press MENU for 10 sec. until it appears **E0**.
- 02 • Use UP until appears **E3**.
- 03 • Press MENU. The factory set time appears.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

05. PROGRAMMING "E"

E4 COURSE TIME ADJUSTMENT

It allows to adjust the working time for the opening and closing courses of the two leafs.

Leaf 1

E7	E5	E7	E5
Opening course time (minutes)	Opening course time (seconds)	Closing course time (minutes)	Closing course time (seconds)
Default value (00)	Default value (10)	Default value (00)	Default value (10)

Leaf 2

E7	E5	E7	E5
Opening course time (minutes)	Opening course time (seconds)	Closing course time (minutes)	Closing course time (seconds)
Default value (00)	Default value (10)	Default value (00)	Default value (10)

- 01 • Press MENU for 10 sec. until it appears **E0**.
- 02 • Use UP until appears **E4**.
- 03 • Press MENU will appear **E7**. Use UP or DW to navigate the parameters.
- 04 • Press MENU to edit the chosen parameter value.
- 05 • The factory set time appears. Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

05. PROGRAMMING "E"

E5 BRAKE/LOCK/PUSH

Allows to program gate behavior

E6	00 (disables electronic brake) 01 (activates electronic brake) Allows you to activate the electronic brake.	Default value (00)
E8	00 (active lock on opening 2 sec.) 01 (activates lock whenever in motion) Allows you to select the lock's operating mode. The default value is 0 (2 second pulse on opening). Note: If you select option 2, you must take into account the maximum current value provided by the control board.	Default value (00)
P8	00 (disable opening push) 01 (active opening push) Allows you to activate the opening stroke (ram).	Default value (00)
P2	00 (disables closing push) 01 (active closing push) Allows you to activate the closing push.	Default value (00)
P2	00 (deshabilita el bloqueo del motor al cierre) 01 (activa el bloqueo del motor al cerrar) Permite activar el bloqueo de los motores en posición cerrada. Sirve principalmente para motores hidráulicos.	Default value (00)

- 01 • Press MENU for 10 sec. until it appears **E0**.
- 02 • Use UP until appears **E5**.
- 03 • Press MENU will appear **E6**. Use UP or DW to navigate the parameters.
- 04 • Press MENU to edit the chosen parameter value.
- 05 • The factory set time appears. Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

05. PROGRAMMING "E"

E6 DECELERATION SPEED

This menu allows you to adjust the deceleration speed.
The higher the level, the faster the deceleration.

min. **0** max. **9**
Default value (05)

- 01 • Press MENU for 10 sec. until it appears **E0**.
- 02 • Use UP until appears **E6**.
- 03 • Press MENU will appear **5d**.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

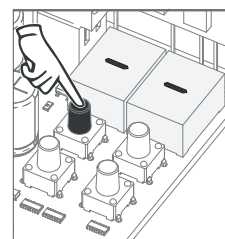
05. PROGRAMMING "E"

E7 MANUEVERS COUNTER

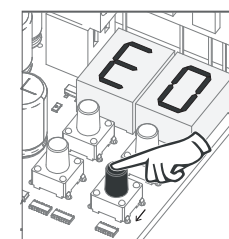
This menu allows you to view the number of maneuvers were performed by the control board.
(complete maneuver means opening and closing).

⚠ Resetting the control board does not clear the maneuver count.

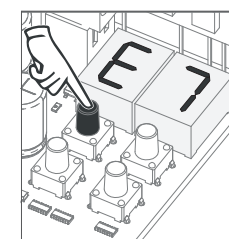
Example: 13456 maneuvers
01- Hundred thousand / 34- Thousands / 56- Dozens



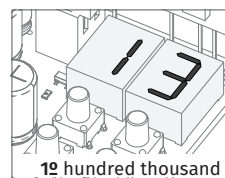
01 • Press MENU for 10 seconds.



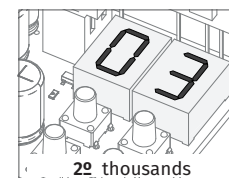
02 • E0 appears.
Press UP until appears E7.



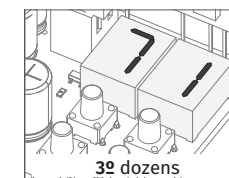
03 • Press MENU.



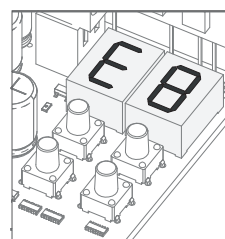
04 • The maneuvers count is displayed in the following order (example: 130 371)



display flashes



display flashes



05 • E8 appears.

05. PROGRAMMING "E"

E8 RESET - RESET FACTORY VALUES

When resetting, all factory values will be reset.

The memorized remote controls and the maneuver counter will always have the memorized data.

- 01 • Press MENU for 10 sec. until it appears *E0*.
- 02 • Use UP until appears *E8*.
- 03 • Press MENU will appear *00*.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

05. PROGRAMMING "E"

E9 RGB OUTPUT

00

Continuous light

01

Flashing light

Default value (00)

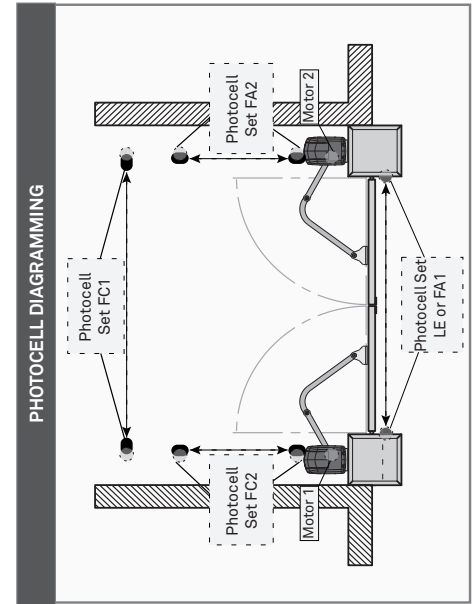
- 01 • Press MENU for 10 sec. until it appears *E0*.
- 02 • Use UP until appears *E9*.
- 03 • Press MENU will appear *00*.
- 04 • Press MENU to edit the value.
- 05 • Use UP and DW to change the value.
- 06 • Press MENU to save the new value.

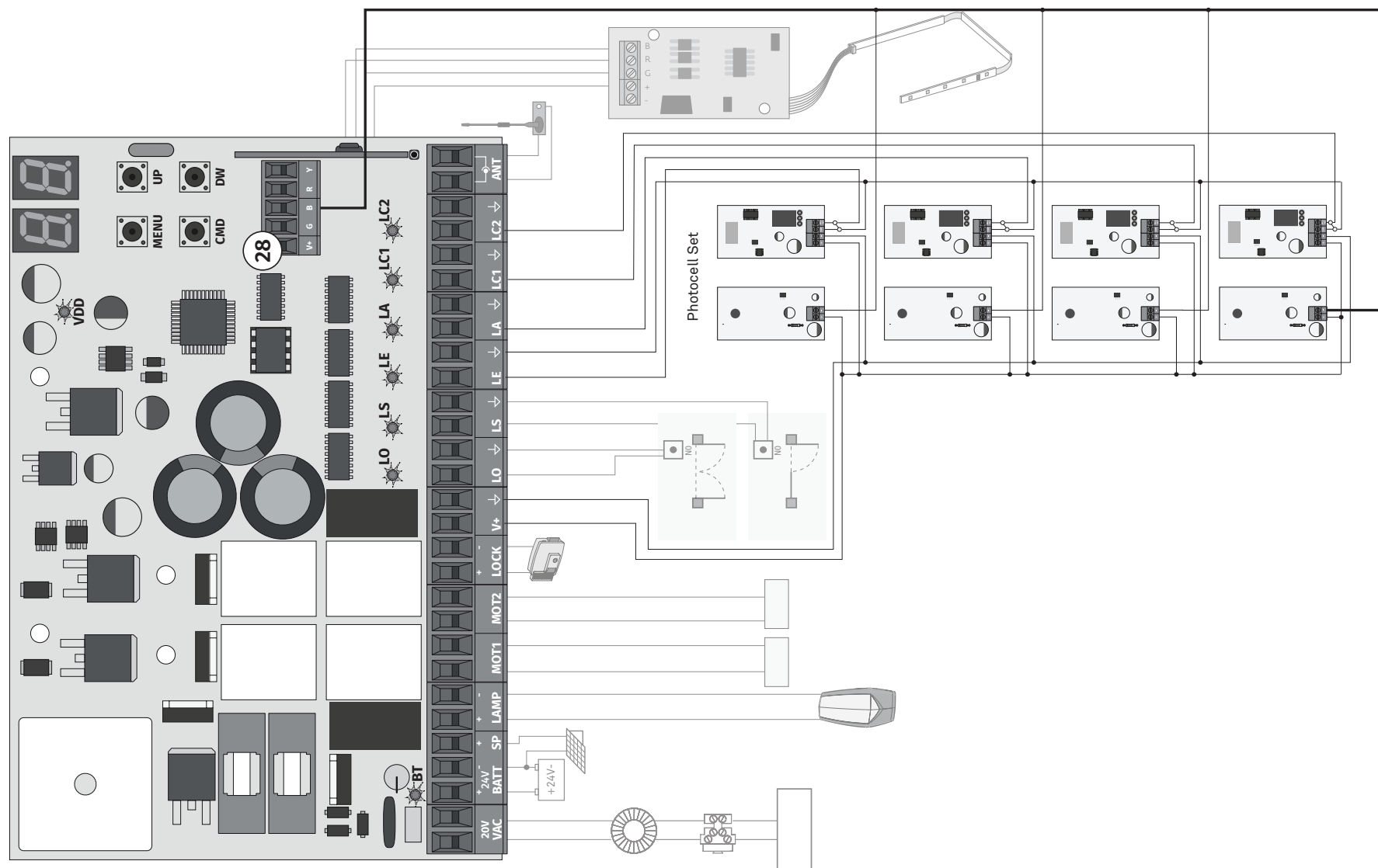
06. DISPLAY

DISPLAY INDICATIONS

MENU	DESCRIPTION
<i>00</i>	In the stopped position, fully open
<i>01</i>	In the stopped position, intermediate position
<i>02</i>	In the stopped position, fully closed
<i>03</i>	Full opening button pressed
<i>04</i>	Pedestrian opening button pressed
<i>05</i>	Control board performs the opening course
<i>06</i>	Control board performs the closing course
<i>07</i>	End of opening course time
<i>08</i>	End of opening course time
<i>09</i>	Full memory
<i>10</i>	All remote controls erased
<i>00 01 02</i>	Remote control triggered from the indicated position
<i>11</i>	Obstructed photocell
<i>12</i>	Obstructed photocell
<i>13</i>	In pause time
<i>14</i>	In time of pedestrian pause
<i>15</i>	Motor 1 overcurrent detection
<i>16</i>	Motor 2 overcurrent detection
<i>17</i>	Emergency stop circuit opened. Check that the security button is correctly connected.
<i>18</i>	Control in Pre-Flashing lamp
<i>19</i>	Photocell test failed

Anomaly	Procedure	Behavior	Procedure II	Discovering the origin of the problem
• Motor doesn't work.	• Make sure you have power supply 230/110V connected to control board and if it is working properly.	• Still not working.	• Consult a qualified technician MOTORLINE.	1 • Open control board and check if it has 230/110V power supply; 2 • Check input fuses; 3 • Disconnect motors from control board and test them by connecting directly to a 12/24V battery in order to find out if they have problems. 4 • If the motors work, the problem is on the control board. Pull it out and send it to our MOTORLINE technical services for diagnosis; 5 • If the motors don't work, remove them from installation site and send to our technical services for diagnosis.
• Motor doesn't move but makes noise.	• Unlock motor and move the gate by hand to check for mechanical problems on the movement.	• Encountered problems?	• Consult a qualified gates technician.	1 • Check all motion axis and associated motion systems related with the gate and automation (rails, pulleys, bolts, hinges, etc) to find out what is the problem.
		• The gate moves easily?	• Consult a qualified MOTORLINE technician.	1 • If the motors work, the problem is on the control board. Pull it out and send it to our MOTORLINE technical services for diagnosis; 2 • If the motors don't work, remove them from installation site and send to our MOTORLINE technical services for diagnosis.
• Motors open but doesn't close.	• Unlock motor and move the gate by hand to closed position. Block the motor again and turn off power supply for 5 seconds. Reconnect it and send order to open gate using remote control.	• Gate opened but didn't close again.	1 • Check if there is any obstacle in front of the photocells; 2 • Check if any of the control devices (Key Selector, Pushbutton, Video Intercom, etc.) are stucked and sending permanent signal to control board; 3 • Consult a qualified MOTORLINE technician.	All control boards have LEDs that easily allow to conclude which devices are with anomalies. All safety devices LEDs (DS) in normal situations remain On. All "START" LEDs in normal situations remain Off. If LEDs devices are not all On, there is some security systems malfunction (photocells, safety edges). If "START" LEDs are on, there is a control device sending permanent signal. A) SECURITY SYSTEMS: 1 • Close with a shunt all safety systems on the control board (check manual of the control board). If the automated system starts working normally check which device is problematic. 2 • Remove one shunt at a time until you find the malfunction device. 3 • Replace it for a functional device and check if the motor works correctly with all the other devices. If you find another one defective, follow the same steps until you find all the problems. B) START SYSTEMS: 1 • Disconnect all wires connected to the START connector (LO and LE). 2 • If the LED turned OFF, try reconnecting one device at a time until you find the defective device. NOTE: In case procedures described in sections A) and B) don't result, remove control board and send to our MOTORLINE technical services for diagnosis.
• Motor doesn't make complete course.	• Unlock motor and move gate by hand to check for mechanical problems on the gate.	• Encountered problems?	• Consult an experienced gates expert.	1 • Check all motion axis and associated motion systems related with the gate and automation (rails, pulleys, bolts, hinges, etc) to find out what is the problem.
		• The gate moves easily?	• Consult a qualified technician MOTORLINE.	1 • If the motors don't work, remove them from installation site and send to our MOTORLINE technical services for diagnosis. 2 • If motor work well and move gate at full force during the entire course, the problem is on the control board. Make a new working time programming, giving enough time for opening and closing with appropriate force (consult control board manual). 3 • If this doesn't work, remove control board and send it to MOTORLINE technical services. NOTE: Setting force of the control board should be enough to open and close the gate without stopping, but should stop and invert with a little effort from a person. In case of safety systems failure, the gate shall never cause physical damaged to obstacles (vehicles, people, etc.).





When the photocell test is active, the negative power supply to the photocells must be supplied by **connector 28 (B)**.

