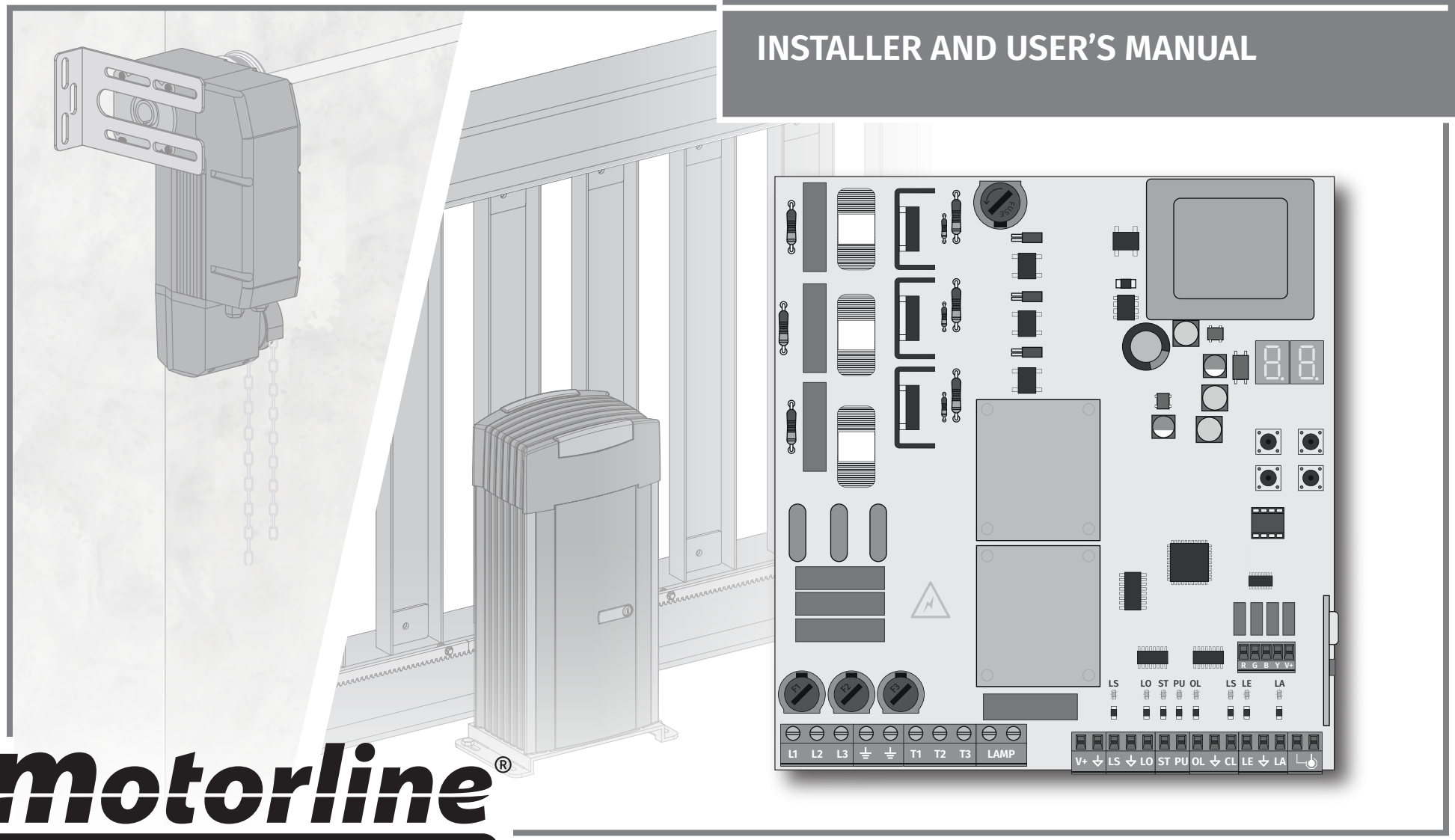
PORTUGAL

EN

MC410

INSTALLER AND USER'S MANUAL



Motorline® PROFESSIONAL

v2.2
REV. 11/2022

00. CONTENT

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01. SAFETY INSTRUCTIONS

ATTENTION:

CE	This product is certified in accordance with European Community (EC) safety standards.
RoHS	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 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 satefy 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 of 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.

SYMBOLS LEGEND:


- Important safety notices


- Potentiometer information


- Useful information


- Connectors information


- Programming information


- Buttons information

02. CONTROL BOARD

TECHNICAL SPECIFICATIONS

The **MC410** is a three-phase electronic control board (400V 3 phases) with a soft start and stop system, developed mainly to equip the engines STARK (sliding gates) and KVM115 (sectional gates) of the Motorline brand.
The soft start and stop functions enable more precise operation, thus saving all mechanical components of the gate and operator, as well as protection against exponential current increase when starting AC motors.
Soft stopping also reduces the likelihood that the doors will be blocked when closing, as well as reducing noise when closing the door.

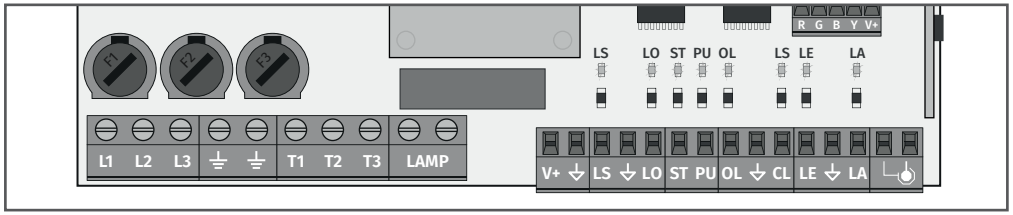
• Power Supply	400V 3~ ±10% (50Hz-60hz)
• Flashing light's output (NO)	230Vac (1000W máx)
• RGB Lightbulb's output	24Vdc (100mA máx)
• Motor's output	400Vac (1500W máx)
• Auxiliary accessories output	24Vdc (325mA máx)
• Working temperature	-25°C a +55°C
• Incorporated Radio Receptor	433,92 Mhz
• OP Transmitters	12bits or Rolling Code
• Maximum Memory Capacity	100 (full opening) 100 (pedestrian opening)
• Control board Dimensions	172 x 184 mm
• Fuse F1-F2-F3	T 8A 250V
• Fuse F4	T 63ma 250V retardo

LEDs

LEDs	**+24V** • LED On indicates that the line for V+ output is OK. **+5V** • LED On indicates that the line for 5V is OK. **LS** • LED On when the Pedestrian Pushbutton is pressed. **LO** • LED On when the Total Pushbutton is pressed. **ST** • LED On when the ST circuit is closed. **PU** • LED On when the Sequential Pushbutton is pressed. **FO** • LED On indicates limit switch opening in closed state. That is, it is not within limits. **FC** • LED On indicates limit switch Closing in closed state. In other words, it is not within the limits. **LE** • LED On when the ↓ **LE** circuit is closed. **LA** • LED On when the ↓ **LA** circuit is closed.

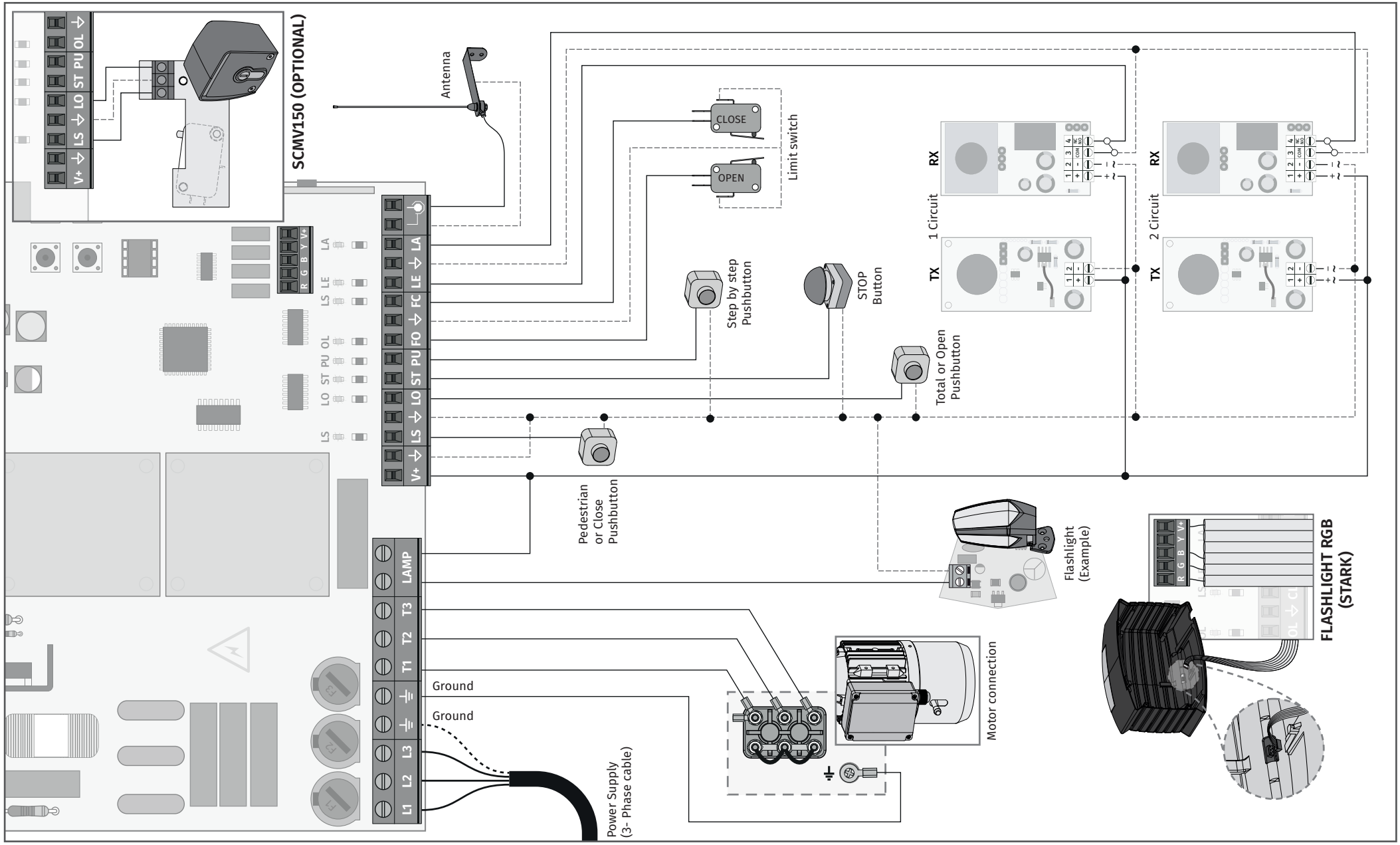
02. CONTROL BOARD

CONNECTORS

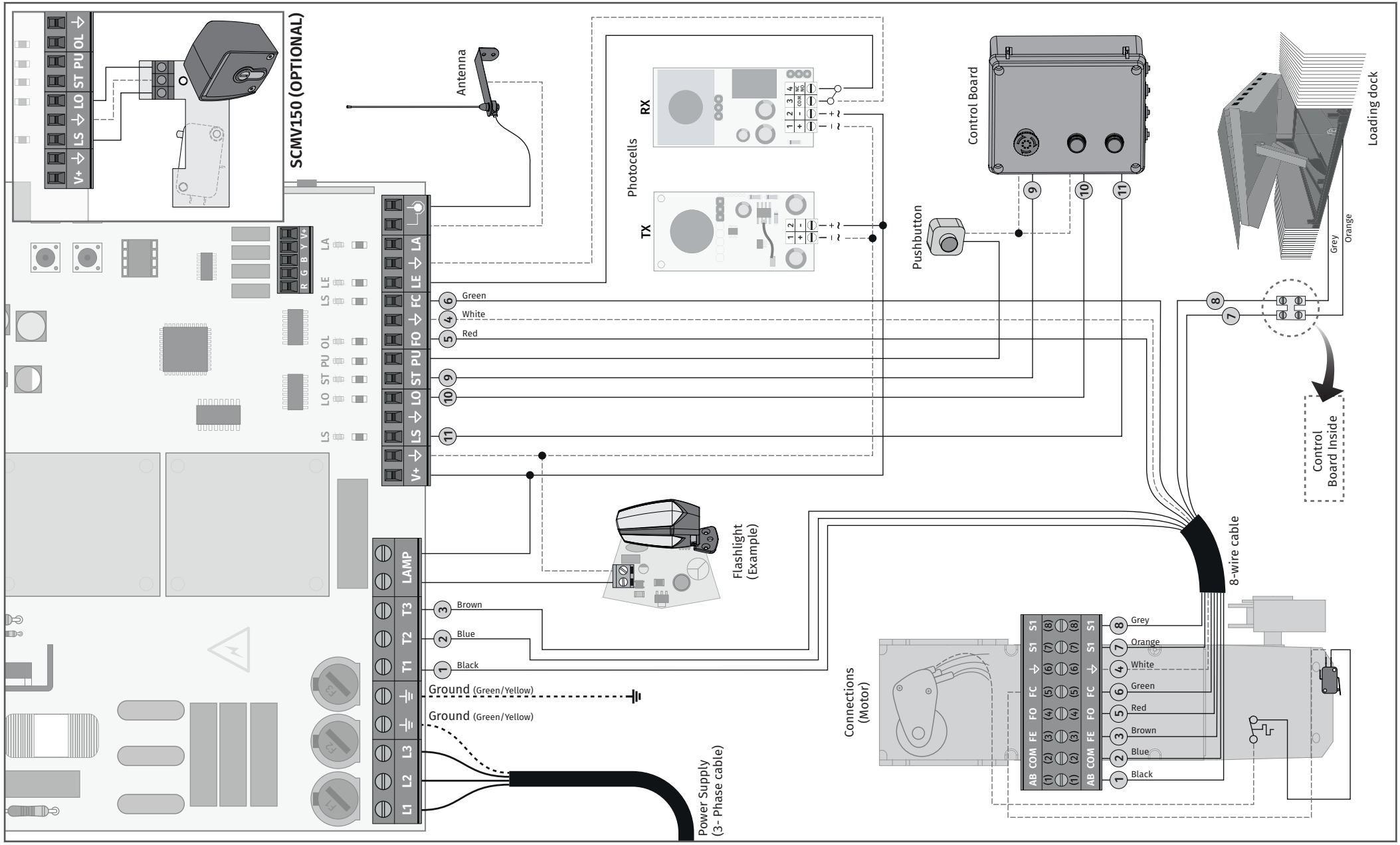


CN1	**01 (L1)** • Input Phase 1 - 400V **02 (L2)** • Input Phase 2 - 400V **03 (L3)** • Input Phase 3 - 400V	**Power Supply 400Vac**
CN1	**04 (Ground)** • Grounding connection **05 (Ground)** • Grounding connection	**Motor and power ground connection**
CN1	**06 (T1)** • Motor Output Phase 1 - 1500W máx. **07 (T2)** • Motor Output Phase 2 - 1500W máx. **08 (T3)** • Motor Output Phase 3 - 1500W máx.	**Power Supply 110/230Vac**
CN1	**09 (LAMP1)** • Flashing light Output - 1000W **10 (LAMP2)** • Flashing light Output - 1000W	**Courtesy light or Flashing light:** This output allows the connection of a courtesy light or a Flashing light.
CN2	**11 (V+)** • Power supply 24Vdc 325mA max. **12 (GND)** • Power supply 24Vdc 325mA max.	**24Vdc Auxiliary Power Supply**
CN2	**13 (LS)** • Full Pulsing Input (NA) **14 (GND)** • Common **15 (LO)** • Pedestrian Pulsing Input (NA)	**Pushbuttons:** This circuit allows the connection of pushbuttons for full or pedestrian opening
CN2	**16 (ST)** • Button STOP Input (NC) **17 (PU)** • Sequential Pushbutton (NA)	**ST:** This circuit allows the connection of a button stop. Its operation depending on the P6 configuration (check page 11B).
CN2	**18 (FO)** • Opening limit-switch (NC) **19 (GND)** • Common **20 (FC)** • Closing limit-switch (NC)	**Limit switches: 03 and 04:** The control unit requires the connection of limit switches when opening and closing (both in NC). The activation of any of the limit switches causes the movement to stop immediately. The activation of the limit switches is visible on the display by OP (opening limit switch activated) and CL (closing limit switch activated), as well as on the OL and CL leds.
CN2	**21 (LE)** • Photocells 1 (NC) **22 (GND)** • Common **23 (CL)** • Photocells 2 (NC)	**Safety circuits:** This circuit allows the connection of photocells. Its operation depending on the configuration of the P5 and P6 menus (check page 11B).
CN2	**24 (GND)** • Common **25 (ANT)** • Antenna	

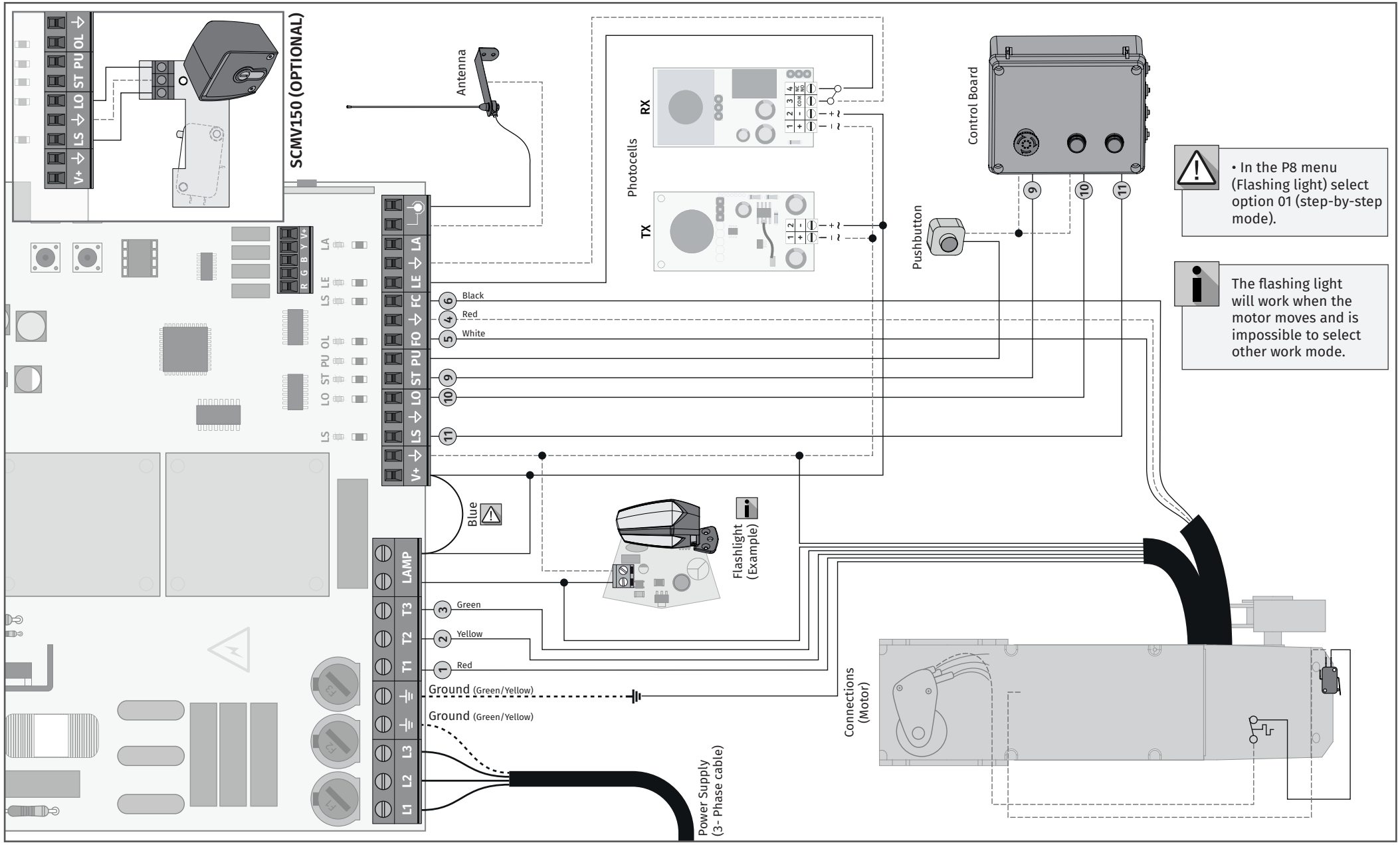
INSTALLATION MAP (STARK)



INSTALLATION MAP (KVM115)



INSTALLATION MAP (KVM2020)



03. INSTALLATION

BASE INSTALLATION PROCESS

O processo de instalação, assume que o portão já tem as chapas de fim de curso instaladas. Para mais informações consulte o manual do motor.

01 • Make connections for all accessories according to the wiring diagram (page 5A).
02 • Connect the control board to a 400V 3 ~ phase power supply (terminals L1, L2, L3)

03 • Check that the movement of the gate matches the one shown on the display:

CL	OP
CLOSING	OPENING

In case the display does not match the movement of the gate, disconnect the control panel from the power supply and change the wires T1 and T2 and check if it is correct with OP and CL.

04 • Check the limit switches so that the **CL LED** goes out when the closing limit switch is activated and the **OP LED** goes out when the opening limit switch is activated.
05 • Make an automatic or semi-automatic programming of the course - menu **[P0]** (page 10A).
06 • If necessary, adjust the gate slowing time at the opening and in the closing - menu **[P1]** (page 10A).
07 • Adjust the force - menu **[P2]** (page 10A).
08 • Enable or disable the use of photocells in the **[P5]** menu (page 11B).
09 • Enable or disable the use of photocells 2 in the **[P6]** menu (page 11B)
10 • Program a command (page 8B).

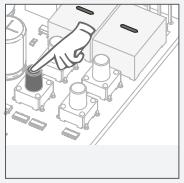
The control board is now fully configured!
Check the pages of the menu programming if you want to configure other features of the Control board.

04. PROGRAMMING

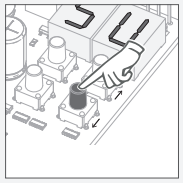
PROGRAMMING AND DELETE TRANSMITTERS

SU	TRANSMITTER PROGRAMMING FOR TOTAL OPENING
SP	TRANSMITTER PROGRAMMING FOR PEDESTRIAN OPENING.

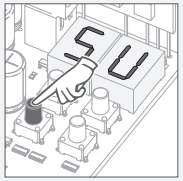
• PROGRAMMING TRANSMITTERS



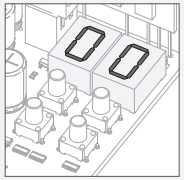
01 • Press the cmd button for 3 sec.



02 • Select **[SU]** use **UP** or **DW**.



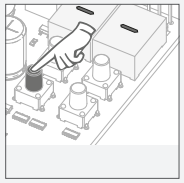
03 • Press cmd once to confirm.



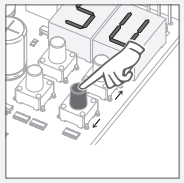
04 • The first free position appears.

05 • Press the command button you want to program. The display will blink and move to the next free location.

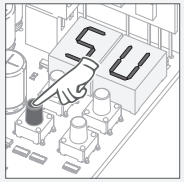
• ERASE TRANSMITTERS



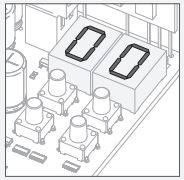
01 • Press the cmd button for 3 sec.



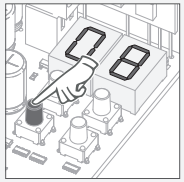
02 • Select **[SU]** use **UP** or **DW**.



03 • Press cmd once to confirm.



04 • Use **UP** or **DW** to select the transmitter location you want to delete.



05 • Press cmd for 3 sec and the location will be empty.
The display will blink and the position will be free.

• ERASE ALL THE TRANSMITTERS

01 • Press the cmd button for 10 sec.

02 • The display will show **[SU]**.

03 • **[SU]** will flash.

04 • **[LU]** flashes, confirming that all commands have been deleted.

• If you do not press any key for 10 sec. the control board will return to standby.

05. FUNCTIONS

MENUS P

MENU	FUNCTION	MÁX. MIN. PROGRAMÁVEIS	STATE	FACTORY VALUE OL	FACTORY VALUE SE
P0	Programação do curso	-	AU Prog. automatic SA Prog. semi automatic	-	-
P1	Deceleration time adjustment	min. 0s max. 45s	dA Slowing down at opening dF Slowing down on closing		
P2	Force adjustment	min. 0 max. 9	FO Force adjustment	06	06
P3	Pedestrian Course time	min. 0s max. 99s	Time adjustment in pedestrian course	10	10
P4	Pause time	min. 0s max. 99s	AF Adjusting the pause time total opening AP Adjusting the pause time pedestrian opening	10	10
P5	Photocell Circuit 1 (activation and management of the operating mode)	min. 0 max. 1	LE 00 Disables 01 Ative	00	00
		min. 0 max. 1	HC 00 In Opening 01 In Closing	00	00
		min. 0 max. 2	HL 00 Invert 01 Stop 02 Invert 2 sec. and Stop	00	00
P6	Photocell Circuit 2 (activation and management of the operating mode)	min. 0 máx. 1	LA 00 Disables 01 Ative	00	00
		min. 0 máx. 1	HC 00 In Opening 01 n Closing	01	01
		min. 0 max. 2	HL 00 Invert 01 Stop 02 Invert 2 sec. and Stop	01	01
		min. 0 max. 1	HE 00 Disables the ST emergency button 01 Activates the ST emergency button	00	01
P7	Operating logic	min. 0 max. 2	00 Automatic mode function 01 Step by step mode function 02 Condominium mode function	00	01
P8	Flashing light	min. 0 max. 2	00 Flashing (opening and closing) 01 Step by step mode function 02 Courtesy light	00	00
P9	Remote programming	min. 0 max. 1	00 Distance PGM OFF 01 Distance PGM ON	00	9B

05. FUNCTIONS

MENUS E

MENU	FUNCTION	MAX. MIN. PROGRAMMABLE	STATE	FACTORY VALUE OL	FACTORY VALUE SE
E0	Present Man	min. 0 max. 1	HP 00 Deactivates present man 01 Activates present man 02 Activates present man - Close PL 00 Disables push buttons mode 01 Activates push buttons mode	00	00
E1	Soft start	min. 0 max. 4	00 Desactivates Soft start 01 Activates Soft start	03	03
E2	Courtesy light time	min. 0m max. 99m	Courtesy light time adjustment (min)	03	03
E3	Follow me	-	00 Desactivates follow me 01 Activates follow me (Open gate)	00	00
E5	Electronic brake	min. 0 max. 9	Adjusting the electric brake power	00	00
E6	Deceleration Speed	min. 0 max. 9	Deceleration Speed adjustment	06	06
E7	Manuevers counter	-	Shows the number of maneuvers	-	-
E8	Reset - Select version	min. 0 max. 2	01 Reset - Sliding Motor 02 Reset - Sectional Motor	00	00
E9	RGB Output	-	00 Continued output 01 Intermittent output	01	01
	TRANSMITTER				
SU	Transmitter programming for total opening.				6B
SF	Transmitter programming for pedestrian opening.				6B

- **We can only enter programming with the gate stopped (electrically).**
- To access the P MENU press the **MENU** for 3 sec.
- To access the E MENU press the **MENU** for 10 sec.
- Use **UP** or **DW** to navigate through the menus
- Press **MENU** when you want to confirm access to a menu.
- Press **UP** or **DW** simultaneously to exit programming

P0 | AUTOMATIC PROGRAMMING

AU

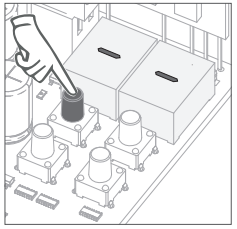
This menu allows automatic programming of the engine and slowdown.

Note • This mode requires the use of limit switches.

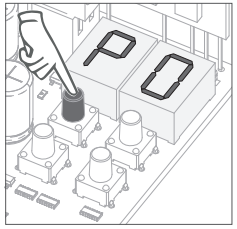
During automatic programming, the engine performs the following maneuvers:
1 • Slowly close the gate until it reaches the closing limit switch
2 • Opens slowly for approximately 10 seconds
3 • Close slowly until closing limit switch is reached
4 • Opens gate at normal speed until reaching the opening limit switch
5 • Close the gate at normal speed until it reaches the closing limit switch

⚠

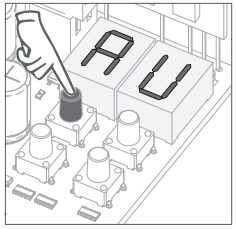
Steps 2 and 3 are only performed if **[P2-Fd]** is set to a value equal to or greater than 1.
If **[P2-Fd]** is set to 0 (zero), you will only do steps 1, 4 and 5.



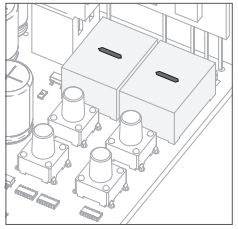
01 • Press **MENU** for 3 seconds.



02 • Appears **[P0]**. Press **MENU** for 1 second.



03 • Appears **[AU]**. Press **MENU** for 1 second to start automatic programming.



04 • When programming is complete, the display returns to the initial state **[--]**.

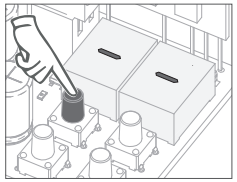
P0 | SEMI-AUTOMATIC PROGRAMMING

MA

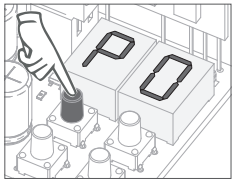
This menu allows you to program the engine's working time in a semi-automatic way, allowing you to manually define the moment when the slowdowns start.
In this way, we automatically set the value of Menu [P1] as well as reducing the inertia of the door when it reaches the limit switches in programming.

⚠

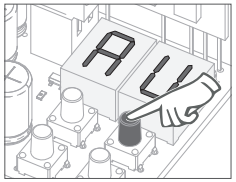
If you do not press MENU at any time, a automatic programming without Relanty during the course.



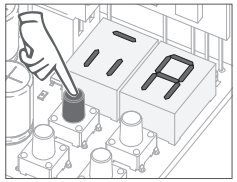
01 • Press **MENU** for 3 seconds.



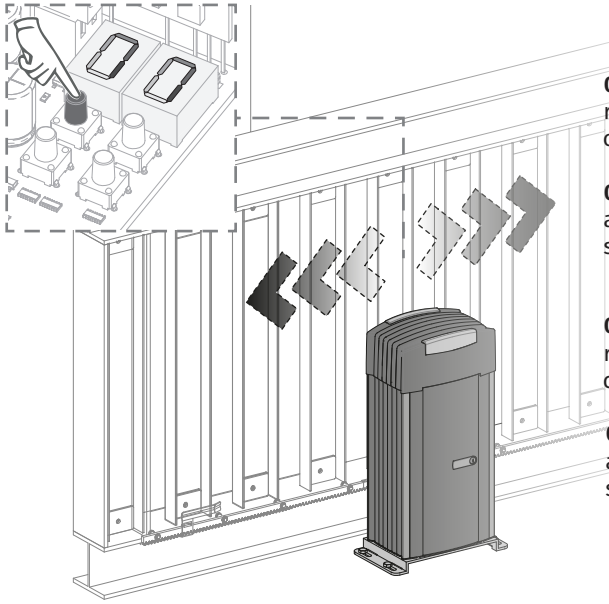
02 • Appears **[P0]**. Press **MENU** for 1 second.



03 • Appears **[AU]**. Press **UP** 1 time to show MA.



04 • When **[MA]** appears, press **MENU** for 1 second.
The engine will initiate a slow door close.



05 • When the closing limit switch is reached or pressing the remote, it will open automatically.

06 • Press **MENU** or another controller as the command, when you want to start the slowdown at the opening.

07 • When the closing limit switch is reached or pressing the remote, it will close automatically.

08 • Press **MENU** or another controller as the command, when you want to start the slowdown at the closing.

P1 - P2 - P3 - P4

P1 TIME ADJUSTMENT

This menu allows you to define the slowdown time for each sheet when opening and closing.
Note • Whenever there is a reversal of the direction of travel, the preset deceleration time is increased by 2 sec. up to a maximum of 25 sec.

DEFAULT VALUE	MIN VALUE	MAX VALUE
03	00	45

01 • Press **MENU** until it appears **[dA]**.
02 • Use **UP** or **DW** to navigate the parameters **[dA]** and **[dF]**.
03 • Press **MENU** to edit the value.
04 • Use **UP** and **DW** to change the value.
05 • Press **MENU** for 2sec. to save the new value.

P2 FORCE ADJUSTMENT

This menu allows you to define the force that is injected into the engine when it moves at normal speed.

DEFAULT VALUE	MIN VALUE	MAX VALUE
06	00	09

01 • Press **MENU** until it appears **[F0]**.
02 • Press **MENU** to edit the value.
03 • Use **UP** and **DW** to change the value.
04 • Press **MENU** for 2sec. to save the new value.

P3 PEDESTRIAN COURSE TIME

This menu allows you to set the pedestrian travel time.

DEFAULT VALUE	MIN VALUE	MAX VALUE
10	00	99

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

P4 PAUSE TIME

AF Allows to set the pause time at total opening.

AP Allows to set the pause time at the pedestrian opening.

DEFAULT VALUE	MIN VALUE	MAX VALUE
10	00	99

01 • Press **MENU** until it appears **[AF].**
02 • Use **UP** or **DW** to navigate the parameters.
03 • Press **MENU** to edit the value.
04 • Use **UP** and **DW** to change the value.
05 • Press **MENU** for 2sec. to save the new value.

P5 - P6

P5 PHOTOCELLS 1 PROGRAMMING

This menu allows you to program the LE safety behavior (photocell 1).

LE Enable or disable photocells

HC Define whether this security will act when opening or closing the gate.
(00 - acts on closing / 01 - acts on opening)

HL Define the behavior that the gate will have when this security is activated.
00 When safety is activated, the direction of movement of the gate is reversed
01 When the security is activated, the movement of the gate stops.
02 When security is activated, the movement of the gate reverses for 2 sec. is for. The movement is not resumed automatically.

LE DEFAULT VALUE	LE OFF	LE ON
00	00	01
HC DEFAULT VALUE	**HC CLOSE**	**HC OPEN**
00	00	01
HL DEFAULT VALUE	**FUNCTIONS HL**	
00	00 | 01 | 02	

01 • Press **MENU** until it appears **[LE]**.
02 • Use **UP** or **DW** to navigate the parameters.
03 • Press **MENU** to edit the value.
04 • Use **UP** and **DW** to change the value.
05 • Press **MENU** for 2sec. to save the new value.

P6 PHOTOCELLS 2 PROGRAMMING

This menu allows you to program the LA safety behavior (photocell 2).

LA Enable or disable photocells 2.

HC Define whether this security will act when opening or closing the gate.
(00 - acts on closing / 01 - acts on opening)

HL Define the behavior that the gate will have when this security is activated.
00 When safety is activated, the direction of movement of the gate is reversed
01 When the security is activated, the movement of the gate stops.
02 When security is activated, the movement of the gate reverses for 2 sec. is for. The movement is not resumed automatically.

HE Enable or disable the Stop push button function

LA DEFAULT VALUE	LA OFF	LA ON
00	00	01
HC DEFAULT VALUE	**HC OFF**	**HC ON**
01	00	01
HL DEFAULT VALUE	**FUNCTIONS HL**	
02	00 | 01 | 02	
HE DEFAULT VALUE	**HE OFF**	**HE ON**
00	00	01

01 • Press **MENU** until it appears **[LA]**.
02 • Use **UP** or **DW** to navigate the parameters.
03 • Press **MENU** to edit the value.
04 • Use **UP** and **DW** to change the value.
05 • Press **MENU** for 2sec. to save the new value.

P7- P8 - P9

P7 OPERATING LOGIC

This menu allows to set the operating logic of the automation
00 Automatic Mode - Whenever there is an order, the movement is reversed.
01 Step-by-step mode - Logic opens / stops / closes / stops.

Note • Stopping movement during closing disables automatic closing.
02 Condominium mode - Does not respond to orders during opening and pause time.

DEFAULT VALUE	AUTOMATIC	STEP BY STEP	CONDOMINIUM
00	00	01	02

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

P8 FLASHING LIGHT

This menu allows you to define the mode of operation of the firefly (LAMP).
The default value is 0 (flashing).
00 Flashing (opening and closing) - In the 2-second intermittent opening, in the 1-second intermittent closing. At pause time it remains on.
01 Step by step mode - In the opening and closing movement, the firefly is permanently on. When stopped it remains off.
02 In the opening and closing movement the firefly is permanently on. When in pause time it remains on.
When stopped or closed, the time defined in E2 remains on.

DEFAULT VALUE	FLASHING	STEP BY STEP	FLASHING/STOP
00	00	01	02

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

P9 REMOTE PROGRAMMING

This menu allows you to enable/disable remote programming.

DEFAULT VALUE	PGM À DISTÂNCIA OFF	PGM À DISTÂNCIA ON
00	00	01

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

Remote Programming Operation (PGM ON):

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

E0 - E1 - E2

E0 PRESENT MAN

HP	00	Deactivates present man
	01	Ascent and descent in Present Man
	02	Automatic ascent, descent in Present Man

FACTORY VALUE: 00

		LS Button	LO Button
PL	01 ACTIVATED	Total Closing	Total Opening
	00 DEACTIVATED	Pedestrian maneuvers	Total maneuvers

FACTORY VALUE: 00

01 • Press **MENU** until it appears **[HP]** .
02 • Use **UP** or **DW** to navigate the parameters.
03 • Press **MENU** to edit the value.
04 • Use **UP** and **DW** to change the value.
05 • Press **MENU** for 2sec. to save the new value.

E1 SOFT START

This menu allows you to activate the soft start.
The higher the selected value, the longer the soft start duration.
The maximum value is 4.

DEFAULT VALUE	MIN VALUE	MAX VALUE
03	00	04

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

E2 COURTESY LIGHT TIME

This menu allows you to adjust the courtesy light time for the closed, open and stopped gate.
The maximum time is 99 minutes.
Note • This parameter is only activated if option 2 is selected in P8.

DEFAULT VALUE	MIN VALUE	MAX VALUE
03	00	99

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

E3 - E5 - E6 - E7

E3 FOLLOW ME

00 Disabled
01 The control board, when in the open position, gives a closing order of 5 sec. after the safety device detects the passage of an object / user
02 The control panel, when in the open or in the open position, gives a closing order of 5 sec. after the safety device detects the passage of an object / user.

DEFAULT VALUE	MIN VALUE	MAX VALUE
00	00	02

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

E5 BRAKE/LOCK/PUSH

E6 Activate the electronic brake.
This menu can be programmed between the values 0 and 9, where 0 means the softstart is off and 9 means more brake time.
Note • The higher the set value, the greater the engine heating.

DEFAULT VALUE	MIN VALUE	MAX VALUE
00	00	09

01 • Press **MENU** until it appears **[00]**.
02 • Use **UP** or **DW** to navigate the parameters.
03 • Press **MENU** to edit the value.
04 • Use **UP** and **DW** to change the value.
05 • Press **MENU** for 2sec. to save the new value.

E6 DECELERATION SPEED

This menu allows you to adjust the deceleration speed.

DEFAULT VALUE	MIN VALUE	MAX VALUE
06	00	09

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

E7 MANUEVERS COUNTER

This menu allows you to view the number of maneuvers performed.

01 • Press **MENU** to view.

E8 - E9

E8 RESET – SELECT VERSION

This menu allows you to reset the factory values for the two existing versions:
01 Reset Sectional Doors to factory settings
02 Reset Sliding Gates to factory settings

DEFAULT VALUE	RESET (SECTIONAL)	RESET (SLIDING)
00	01	02

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value to **[01]** or **[02]**.
03 • Press **MENU** for 2sec. to save the new value.

E9 RGB OUTPUT

This menu allows you to set the operation mode of RGB outputs.

DEFAULT VALUE	CONTINUOUS OUTPUT	INTERMITTENT OUTPUT
01	00	01

01 • Press **MENU** to edit the value.
02 • Use **UP** and **DW** to change the value.
03 • Press **MENU** for 2sec. to save the new value.

05. FUNCTIONS

INDICAÇÕES DO DISPLAY

AA	IN STOP POSITION, FULLY OPEN
--	IN STOP POSITION, MIDDLE POSITION
__	IN STOP POSITION, FULLY CLOSED
LO	TOTAL OPENING BUTTON PRESSED
LS	PEDESTRIAN OPENING BUTTON PRESSED
OP	CONTROL BOARD RUNNING OPENING COURSE
CL	CONTROL BOARD RUNNING CLOSING COURSE
FO	END OF OPENING COURSE TIME
FC	END OF CLOSING COURSE TIME
dL	ALL TRASMITTERS DELETED
00 01 02	TRANSMITTER ADDED IN THE INDICATED POSITION
LE	OBSTRUCTED PHOTOCELL
LA	OBSTRUCTED PHOTOCELL 2
AF	IN PAUSE TIME
AP	IN PEDESTRIAN PAUSE TIME
SE	EMERGENCY BUTTON PRESSED
LF	NO LIMIT-SWITCHES INSTALL
ErL1	PHASE 1 OR MOTOR FAILURE
ErL2	PHASE 2 OR MOTOR FAILURE
ErL3	PHASE 3 OR MOTOR FAILURE

06. COMPONENTS TEST

ERL ERRORS

If the display shows the error **ERL1, 2, 3** it means that one of the input phases is missing or that the motor connections are incorrect.
Check all connections and try again.
To remove errors from the display you just need to click on any button on the control panel or in charge.

NOTES:
• This control board was developed only to work with Motorline motors, however if you want to work with motors from other manufacturers make sure that this motor is in star configuration and that it is a 400V motor that does not exceed 1500W.

07. TROUBLESHOOTING

FINAL CONSUMERS INSTRUCTIONS AND SPECIALIZED INSTALLERS

Anomaly	Procedure	Behavior	Procedure II	Discovering the origin of the problem
• Motor doesn't work.	• Make sure you have power supply connected to control board and if it is working properly.	• Still not working.	• Consult a qualified MOTORLINE technician.	1 • Open control box and check if it has 230V power supply; 2 • Check input fuses; 3 • Disconnect motors from control board and test them by connecting directly to power supply in order to find out if they have problems (see page 11B). 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 MOTORLINE 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.	• Is the gate stuck?	• Consult a qualified gates technician.	1 • Check all motion axis and associated motion systems related with the gate and automatisme (rails, pulleys, bolts, hinges, etc) to find out what is the problem.
		• The gate moves easily?	• Consult a qualified MOTORLINE technician.	1 • Check capacitors, testing operator with new capacitor; 2 • If capacitors are not the problem, disconnect motors from control board and it them by connecting directly to power supply in order to find out if it has problems (see page 11B). 3 • f the motors work, the problem is from control board. Pull it out and send it to our MOTORLINE technical services for diagnosis; 4 • 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(s) and move the roller 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 **MOTORLINE** have LEDs that easily allow to conclude which devices are with anomalies. All safety devices LEDs (Le) in normal situations remain On. All "START" circuits LEDs in normal situations remain Off. If LEDs devices are not all On, there is some security systems malfunction (photocells, safety edges). If "START" circuits LEDs are turn (Op and Cl), 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 in question). If the automated system starts working normally check for the problematic device. 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. 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 automatisme (rails, pulleys, bolts, hinges, etc) to find out what is the problem.
		• The gate moves easily?	• Consult a qualified MOTORLINE technician.	1 • Check capacitors, testing with new capacitors; 2 • If capacitors are not the problem, disconnect motor from control board and test it by connecting directly to power supply in order to find out if it is broken; 3 • If the motor(s) doesn't work, remove it from installation site and send to our MOTORLINE technical services for diagnosis. 4 • If motor work well and move gate at full force during the entire course, the problem is from controller. Set force using trimmer on the board. Make a new working time programming, giving suffient time for opening and closing with appropriate force (consult control board manual). 5 • If this doesn't work, remove control board and send it to MOTORLINE technical services. **NOTE:** Setting force of the controller should be suficiente to make the gate open and close 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.).