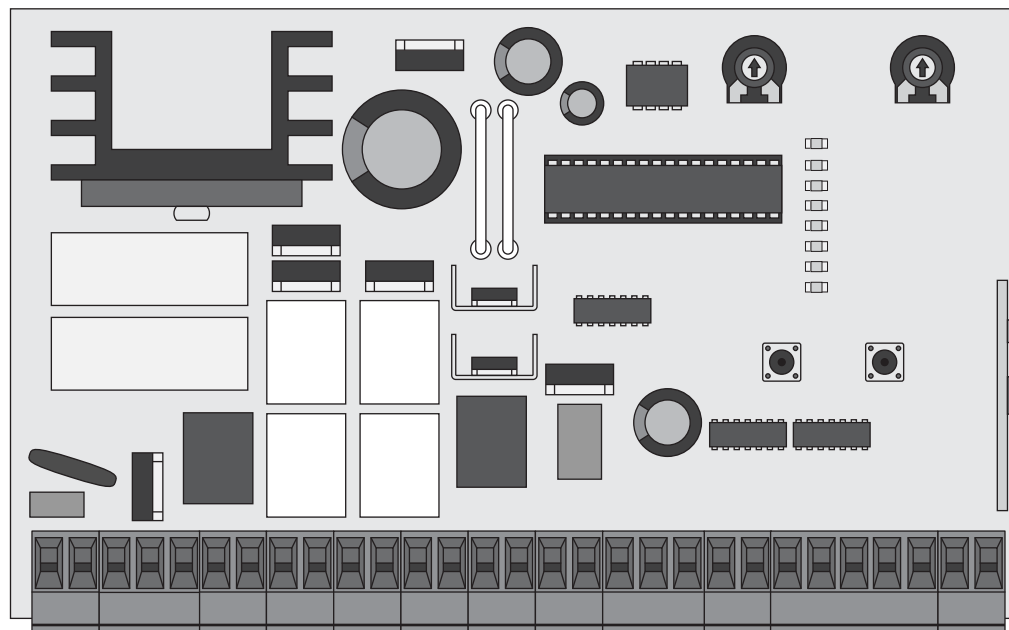




## USER'S AND INSTALLER'S MANUAL



## 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <br> | (Applicable in countries with recycling systems).<br>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

## 01. SAFETY INSTRUCTIONS

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 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 is 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. THE CONTROL BOARD

### TECHNICAL CHARACTERISTICS

The MC11 is a 24Vdc or 12Vdc electronic central unit for the automation of swing gates, sliding gates and bollards with radio receiver and built-in battery charger.

|                                       |                               |
|---------------------------------------|-------------------------------|
| • <b>Transformer supply</b>           | 110V/230Vac 50/60Hz 120W máx. |
| • <b>Control board supply</b>         | 20Vac 50/60Hz 120W máx.       |
| • <b>Intermittent output</b>          | 24Vdc 4W máx.                 |
| • <b>Emergency battery input</b>      | 24Vdc 7A/h máx.               |
| • <b>Engines Output</b>               | 24Vdc 2 x 50W máx.            |
| • <b>Electric Lock Output</b>         | 24Vdc 12W máx                 |
| • <b>Photocells supply</b>            | 24Vdc 3W máx.                 |
| • <b>Indication lamp output</b>       | 12Vdc 3W máx.                 |
| • <b>Working Temperature</b>          | -25°C to +55°C                |
| • <b>Radio receiver</b>               | Rolling Code, 433,92 Mhz      |
| • <b>Max TX Code in memory</b>        | 120 (CODE or CODE PED)        |
| • <b>Control board box dimensions</b> | 240 x 190 x 110mm             |
| • <b>Protection grade</b>             | IP56                          |

### CONNECTOR'S DESCRIPTION



|                        |                                   |                        |                                   |                           |                                 |                                     |                                                |                                                                                   |                              |                              |
|------------------------|-----------------------------------|------------------------|-----------------------------------|---------------------------|---------------------------------|-------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|------------------------------|
| 11                     | 10                                | 9                      | 8                                 | 7                         | 6                               | 5                                   | 4                                              | 3                                                                                 | 2                            | 1                            |
| MOT2                   | MOT2                              | MOT1                   | MOT1                              | LAMP                      | LAMP                            | BATT                                | BATT                                           | 12/20V                                                                            | 12/20V                       | 12/20V                       |
| → Output 0V to Motor 2 | → Output 24Vdc max 50W to Motor 2 | → Output 0V to Motor 1 | → Output 24Vdc max 50W to Motor 1 | → Output 0V to Flashlight | → Output 24Vdc 4W to Flashlight | → Input 24Vdc 3W max to Solar Panel | → Input 0V to Solar Panel or Emergency Battery | → Input 24Vdc 1,2/7Ah ou 12Vdc 1,2Ah (only motor TELICA) max to Emergency Battery | → Power Input 20Vdc 120W max | → Power Input 20Vdc 120W max |

**03+04 • Emergency battery:** In case of power failure, these batteries will supply power to the automation operation. The number of maneuvers depends on the installed battery and its condition.

**05 • Solar panel:** Device input to charge the emergency battery.

**06+07 • Flashing light:** Output for flashlight or courtesy. Its operation can be set in the CODE function of Extension Menu 2 (page 9B).

## 02. THE CONTROL BOARD

### CONNECTOR'S DESCRIPTION



|                                      |                                |                                          |                                         |               |                                    |                                    |                                    |                                       |               |                                     |                                     |                           |                                 |                                          |                                                |                               |                                      |
|--------------------------------------|--------------------------------|------------------------------------------|-----------------------------------------|---------------|------------------------------------|------------------------------------|------------------------------------|---------------------------------------|---------------|-------------------------------------|-------------------------------------|---------------------------|---------------------------------|------------------------------------------|------------------------------------------------|-------------------------------|--------------------------------------|
| 18                                   | 17                             | 16                                       | 15                                      | 14            | 13                                 | 12                                 | 11                                 | 10                                    | 9             | 8                                   | 7                                   | 6                         | 5                               | 4                                        | 3                                              | 2                             | 1                                    |
| FA2 FC2                              | FA1 FC1                        | DS                                       | BL                                      | PUL PED       | USPMA                              | USPMA                              | USPMA                              | USPMA                                 | USPMA         | USPMA                               | USPMA                               | USPMA                     | USPMA                           | USPMA                                    | USPMA                                          | USPMA                         | USPMA                                |
| → Entrada para pólo quente da Antena | → Entrada para massa da Antena | → NC input for anti-crushing photo-cells | → NC input for anti-crushing photocells | → Common line | → NC input for interior photocells | → NC input for external photocells | → NC input for external photocells | → NO input for emergency stop devices | → Common line | → NO input for Pedal Opening button | → NO input for Pedal Opening button | → Output 0V to Flashlight | → Output 12Vdc 3W to Flashlight | → Output 0V for Accessories power supply | → Output 24Vdc 3W for Accessories power supply | → Output 0V for Electric Lock | → Output 12V 24Vdc for Electric Lock |

**01+02 • Electric lock:** 24Vdc output with a maximum capacity of 12W.

**03+04 • Power supply Accessories:** Power supply Accessories: Output 24Vdc with maximum capacity of 3W.

**05+06 • Signal lamp:** Output 12Vdc with maximum capacity of 3W. The light blinks slowly when the gate is opening and blinks rapidly when the gate is closing.

**07+09 | 08+09 • Pushbutton:** NO input for gate activation buttons. The type of operation is defined in the CODE function of the Extension Menu 1.

**09+10 • STOP:** NC input for emergency stop devices.

| 11+14   12+14   13+14   15+14   16+14 • Photocell Circuit: | CLOSED GATE        | GATE IS OPENING                                                                                                               | OPENED GATE                                                                                                      | GATE IS CLOSING   |
|------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>11 + 14</b>                                             | Without influence  | Without influence                                                                                                             | Do not let it close.                                                                                             | Stop and reverse  |
| <b>12 + 14</b>                                             |                    |                                                                                                                               |                                                                                                                  |                   |
| <b>13 + 14</b>                                             | Do not let it open | Stops and stands still waiting for the photocells to be restored                                                              | Without influence                                                                                                | Without influence |
| <b>15 + 14</b>                                             | Do not let it open | Stops and relieves slightly. If the photocells are restored, the gate is stopped waiting for a new order to continue opening. | Do not let it close. If the photocells have been restored, the gate is stopped waiting for a new order to close. | Without influence |
| <b>16 + 14</b>                                             |                    |                                                                                                                               |                                                                                                                  |                   |

## 02. THE CONTROL BOARD

### PROGRAMMING PRE-RECOMENDATIONS

#### • PROGRAMMING THE CONTROL BOARD - BUTTONS SEL/SET



**SEL button:** It makes the selection of the function to change. The selection is identified by the flashing of the LED corresponding to the selected function at that time. Pressing the SEL button repeatedly will cycle through the various functions to be programmed. The selection remains active for 10 seconds, after these time the control board returns to original status (no active selection).

**SET button:** Makes programming the selected function through the **SEL** button.



The SET button may be substituted by a remote control from the latter is programmed.

#### • POWER AND SPEED OF MOTORS - VR1



**FORZA VELOCITA:** The control board has a trimmer VR1 to adjust the force and speed of the motors controlled by the microprocessor. The adjustment can be effected between 50% and 100% the power. At each start-up movement, the control board applies the maximum power during 2 seconds, even when it is made regulating force to a value than not the maximum.



When you adjust the trimmer VR1 has to remake course programming, as they could varied the times of maneuvering and deceleration.

#### • SENSITIVITY - VR2



**SENSIBILITA:** This potentiometer allows the adjustment of the sensitivity required for the detection of obstacles, controlled by the microprocessor. The regulation can be for a time between 0.1 seconds and a maximum of 3 seconds.

## 03. PROGRAMMING

### ESSENTIAL INSTALLATION STEPS

- 01 • Connect all accessories according to the wiring diagram (page 12).
- 02 • Connect the control board to a 20Vac power supply.
- 03 • In the **EXTENSION MENU 1**, check that the slowdown is on / off and set it as you wish.
- 04 • Program the automatic course - **MAIN MENU** (page 5B).
- 05 • Program a command (page 6A).

## 03. PROGRAMMING

### MAIN MENU

The MAIN MENU contains the main functions for automation programming, with direct access via the SEL key.

| MAIN MENU      |                                  |                                 |
|----------------|----------------------------------|---------------------------------|
| LED            | LED OFF                          | LED ON                          |
| • TIPO MOT.    | Linear consumption (recommended) | Variable consumption            |
| • AUTO PGM     | Programming Auto = OFF           | Programming Auto = ON           |
| • CODE         | No programmed commands           | Programmed command(s)           |
| • CODE PED.    | No programmed commands           | Programmed command(s)           |
| • T. MOT.      | Working Time = 30sec             | Programmed Working Time         |
| • T. MOT. PED. | Pedestrian Work Time = 10sec     | Programmed Pedestrian Work Time |
| • T. PAUSA     | Automatic Close = OFF            | Automatic Close = ON            |
| • T. RIT. ANTE | Leaf Delay = OFF                 | Programmed time                 |

#### • TIPO MOT. | LINEAR OR VARIABLE ACTUATION



The motors with linear actuation do not have variations in the consumption, whereas, the motors with variable action have different peaks of consumption. You can select 1 of the 2 engine types.

**Factory setting:** Linear Consumption



Variable consumption



Linear consumption



- 01 • Press **SEL** button the times necessary until the **TIPO MOT. LED** starts to flash.
- 02 • Press the **SET** button for 1 second.
- 03 • The **TIPO MOT. LED** lights indicating that the motor with variable consumption is selected and the LED off indicates that the motor with linear consumption is selected.

#### • AUTO PGM | AUTOMATIC PROGRAMMING (NOT RECOMMENDED FOR NON-COURSE ENGINES)



**Program the working time:**

- 01 • Unlock the automatism, and place the leaves of the gate halfway. Lock again the automatic controls.
- 02 • Press **SEL** button the times necessary until the **AUTO PGM LED** starts to flash.
- 03 • Press the **SET** key continuously, without leaving until the end of the process.
- 04 • The engine 2 will close until it reaches the stop.



If the motor is moving in the opposite direction, turn the power switch off, replace the motor wires, and then turn it back on.

- 05 • The engine 1 will close until it reaches the stop.
- 06 • The door will reopen and close (engine 1 and engine 2).
- 07 • When you reach the end of the course, press **SET** again to end the opening. **AUTO PGM**

## 03. PROGRAMMING

### MAIN MENU

stops blinking.

**NOTE** • The control panel automatically sets a 15% slowdown of the total stroke, both at the end of the opening and at the end.



Instead of using the SET button of the control board, you can use a transmitter that is already programmed.

#### • CODE | PROGRAMMING OF COMMANDS FOR TOTAL OPENING



The control board accepts only Dip-Switch or Rolling Code MOTORLINE transmitters, and has a maximum capacity of 120. When trying to program the 121<sup>o</sup> transmitter, all the programming LEDs will flash simultaneously to indicate that the memory is full.



Command programmed



Without commands programmed



#### To program new transmitters:

- 01 • Press **SEL** button the times necessary until the **CODE LED** starts to flash.
- 02 • Press once the transmitter's button you want to program for 1 second.
- 03 • The **CODE LED** lights up permanently, indicating the successful of the programming.



If the **CODE LED** starts blinking fast, it means that the control board has not accepted the programming of the command or that it is already stored in memory.

#### To delete all configured transmitters:

- 01 • Press the **SEL** button once, and the **CODE LED** will begin to flash.
- 02 • Press the **SET** key until the **CODE LED** turn off.
- 03 • The **CODE LED** turns off and all transmitters have been deleted.

#### • CODE PED. | PEDESTRIAN OPERATION



The control board allows to start only one motor in order to permit pedestrian passage. With this function, pressing the transmitter, will only open the door with the motor 1.



Command programmed



Without commands programmed



#### To program new transmitters to pedestrian mode:

- 01 • Press **SEL** button the times necessary until the **CODE PED LED** starts to flash.
- 02 • Press the transmitter's button that you want to program during 1 second.
- 03 • The **CODE PED LED** is lit indicating that the command has been programmed.

#### To delete all configured transmitters:

- 01 • Press **SEL** button the times necessary until the **CODE PED LED** starts to flash.
- 02 • Press the **SET** key until the **CODE PED LED** turn off.
- 03 • The **CODE LED PED** turns off signaling that all the commands have been cleared.

## 03. PROGRAMMING

### MAIN MENU

#### • T. MOT. | PROG. WORKING AND DECELERATION TIME (RECOMMENDED FOR ENGINES WITH END OF COURSE)



This function allows manual programming of working time and deceleration. Use it only if you can not perform the desired function with the AUTO PGM. The maximum working time is 4 minutes.

**NOTE** • To carry out this programming, the motors must have a mechanical stop. If you have made an automatic course program (AUTO PGM function), the control panel will override this programming and take the programmed course manually.

**Factory setting:** Working Time = 30sec



With working time



No working time



#### Programming motor's time and slowdown (closed gate):

- 01 • Press **SEL** button the times necessary until the **T.MOT. LED** starts to flash.
- 02 • Press the **SET** button for 1 second, so that the Motor 1 start opening.



If any of the motors do not start the opening, turn the power switch off, replace the wires of the motor (s), and then turn it back on.

- 03 • Press the **SET** button for 1 second, when the gate is at the desired point to start deceleration.
- 04 • Press again **SET** button when you want to establish the opening limit-switch. At this time, T. MOT. LED will quickly flash and automatically the motor 2 will start the opening maneuver.
- 05 • Press the **SET** button for 1 second, when the gate is at the desired point to start deceleration.
- 06 • Press again **SET** button when you want to establish the opening limit-switch.
- 07 • The **T. MOT.LED** will quickly flash indicating that programming for closing can be performed and automatically the motor 2 starts the closing maneuver. Repeat the process to program the closing.

#### Programming motor's time without slowdown (closed gate):

To make the programming without slowdown, leave the gate reach the opening limit switch and press **TWICE** (quickly) the **SET** button. The LED T. MOT. will flash quickly and the motor starts the closing maneuver. When the gate reaches the closing limit switch again, click SET twice to finish programming.



Instead of using the central's **SET** button during programming, you can use the key of a remote control that is already programmed.

## 03. PROGRAMMING

### MAIN MENU

#### • T. MOT. PED | PROGRAMMING PEDESTRIAN WORKING TIME



To activate the pedestrian function, the control board allows to be just activated the operation of motor 1. The maximum working time is 4 minutes.

**NOTE** • To perform this programming is necessary that the motors have limit-switches or stoppers.

**Factory setting:** Pedestrian Work Time = 10sec



Function ON



Function OFF



#### Programming pedestrian working time with deceleration (gates closed):

- 01 • Press **SEL** button as often as necessary until the **T. MOT. PED. LED** starts to flash.
- 02 • Press the **SET** button for 1 second, so that the Motor 1 starts to open.



If any of the motors do not start the opening, turn the power switch off, replace the wires of the motor (s), and then turn it back on.

- 03 • Press the **SET** button for 1 second, when the gate is the desired point to start deceleration.
- 04 • Press again **SET** button when you want to establish the opening limit-switch. At this time, **T. MOT. PED. LED** will quickly flashing and automatically the motor 1 starts closing maneuver.

- 05 • Press the **SET** button when the gate is at the desired point to start deceleration.
- 06 • Press again **SET** button when you want to establish the closing limit-switch.

#### Programming pedestrian working time without deceleration (gates closed):

To make a program without slowdown, press **TWICE** the **SET** button when you want to set the opening's end.

**T. MOT. PED LED** will flash quickly and the motor starts the closing maneuver.

When the gate reaches the closing limit switch, click **SET** twice again to finish programming.



Instead of using the central's **SET** button during programming, you can use the key of a remote control that is already programmed.

#### • T. PAUSA | PROGRAMMING PAUSE TIME FOR AUTOMATIC CLOSING (MAX 4 MIN)



This function allows you to set the time that the gate remains open after the end of the opening maneuver. After this time, the control board automatically initiates the closing.

**Factory setting:** Automatic Close = OFF



With automatic closing



Without automatic closing

## 03. PROGRAMMING

### MAIN MENU



#### Program time:

- 01 • Press **SEL** button the times necessary until the **T. PAUSA LED** starts to flash.
- 02 • Press the **SET** button for 1 second.
- 03 • Wait the desired time for pause time. (Eg 30 seconds)
- 04 • Press **SET** button again.
- 05 • **T. PAUSA LED** stays lit and the pause time is set.



#### Delete programming:

- 01 • Press **SEL** button the times necessary until the **T. PAUSA LED** starts to flash.
- 02 • Double-press the **SET** button within 2 sec.
- 03 • The **T. PAUSA LED** turns off and the function stays disabled.



Instead of using the central's **SET** button during programming, you can use the key of a remote control that is already programmed.

#### • T. RIT. ANTE | PROGRAMMING THE DOOR DELAY IN CLOSURE (15 SECONDS MAX.)



This function can delay up to 15 seconds the start of the closing motor 1 in relation to the motor 2.

In the aperture, the difference between the start of motor 1 and motor 2 is always 2 seconds, since **T. RIT. ANTE** is programmed.

**Factory setting:** Leaf Delay = OFF



Memorized delay



Without delay



#### Set closing delay:

- 01 • Press the **SEL** button as often as necessary until the **T. RIT. ANTE LED** starts flashing.
- 02 • Press the **SET** button for 1 second.
- 03 • Wait for the desired delay time, and press the **SET** key for 1 second. Therefore, on closing, the delay time will be stipulated by the option while the opening is fixed in 2 seconds.
- 04 • The **T. RIT. ANTE LED** will light up, signaling the success of the operation.

#### Delete programming:

- 01 • Press the **SEL** button until the **T. RIT. ANTE LED** will flashing.
- 02 • Press the **SET** button twice in less than 2 seconds.
- 03 • The **T. RIT. ANTE LED** will off, signaling the success of the operation.

## 03. PROGRAMMING

### EXTENDED MENU 1

The control panel has an EXTENSIVE MENU 1, with more functions for programming.  
To access the options of extended menu 1 follow these instructions:

- 01 • Press continuously the **SET** button for 5 seconds and the **T.PAUSA LED** and **T. RIT. ANTE LED** will flash alternately.
- 02 • You have 30 seconds to select functions from the extended menu 1 (using the **SEL** and **SET** button), and that after this time the control board returns to main menu.

#### EXTENDED MENU 1

| LED            | LED OFF                           | LED ON                           |
|----------------|-----------------------------------|----------------------------------|
| • TIPO MOT.    | Inhibition Commands Opening = OFF | Inhibition Commands Opening = ON |
| • AUTO PGM     | Electric brake = OFF              | Electric brake = ON              |
| • CODE         | Automatic Operation               | Step by Step Operation           |
| • CODE PED.    | Opening push = OFF                | Opening push = ON                |
| • T. MOT.      | Closing push = OFF                | Closing push = ON                |
| • T. MOT. PED. | Follow Me = OFF                   | Follow Me = ON                   |
| • T. PAUSA     | Alternative intermittence ON/OFF  |                                  |
| • T. RIT. ANTE | Alternative intermittence ON/OFF  |                                  |

#### • TIPO MOT. | TRANSMITTER INHIBITION DURING THE OPENING AND PAUSE TIME (IF INSERTED)



With this function activated, the control panel will reject all command signals during opening and pause time of the operator. It is important that the function is activated when a magnetic turn is installed, as the control panel will ignore.

**Factory setting:** Inhibition Commands Opening = OFF



Inhibition enabled



Inhibit disabled



#### Enable / Disable transmitter inhibition:

- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button as often as necessary until the **TIPO MOT. LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **TIPO MOT. LED** will turn on/off, signaling the success of the operation.

#### • AUTO PGM | ELECTRIC BRAKE



With this function active, when the automatism finishes a maneuver (reaching the limit switch), the control board briefly reverses the motor's power supply to stop it immediately (eg. gates with inclination).

**Factory setting:** Electric brake = OFF



Function ON



Function OFF

## 03. PROGRAMMING

### EXTENDED MENU 1



- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button the times necessary until the **AUTO PGM LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **AUTO PGM LED** will turn on/off, signaling the success of the operation..

#### • CODE | STEP BY STEP / AUTOMATIC FUNCTIONING



#### Automatic Mode Functioning (LED CODE OFF):

- The first impulse transmitter/pushbutton triggers the opening of the gate.
- The second impulse (after gate fully opens) triggers the closing of the gate.
- If you press the command during opening or closing maneuvers, the gate inverts the direction until the new direction is completed.

#### Step by Step Mode Functioning (LED CODE ON):

For each order you send from a remote control/push button, the control board will have a behave like: open-stop-close-stop-open - (...). The control board is supplied by the manufacturer with the step by step active.

**Note** • If **T. PAUSA** is active (lit) and stops the gate during opening, it will be stopped until the pause time has elapsed, to close automatically. If you stop during closing, it will only re-open when you receive a new order.

**Factory setting:** Automatic Operation



Step By Step



Automatic



#### To change the operating mode:

- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button as often as necessary until the **CODE LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **CODE LED** will turn on/off, signaling the success of the operation.

#### • CODE PED. | OPENING PUSH



With this function enabled, the control unit provides more power at the initial opening time, so that the motor can overcome the lock and open normally.

**Factory setting:** Opening push = OFF



Function ON



Function OFF



#### Activate Opening push with maximum force:

- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button as often as necessary until the **CODE PED LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **CODE PED LED** will turn on/off, signaling the success of the operation.

## 03. PROGRAMMING

### EXTENDED MENU 1



#### Activate Opening Push with the force set on the potentiometer:

- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button as often as necessary until the **CODE PED LED** starts to flash.
- 03 • Press the **SEL** button until the **CODE PED LED** flashes quickly.
- 04 • Press the **SET** key (1 second) to activate / deactivate the function.
- 05 • **CODE PED LED** will turn on/off, signaling the success of the operation.

### • T. MOT. | CLOSING PUSH



With the closing push function, the control board case is programmed with deceleration, will add 1 second acting at full motor power, so that the gate can overcome the lock.

**Factory setting:** Closing push = OFF



Function ON



Function OFF



#### Activate Closing Push with maximum force:

- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button as often as necessary until the **T. MOT. LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **T. MOT. LED** will turn on/off, signaling the success of the operation.

#### To activate the Closing Push with the force set on the trimmer VR1:

- 01 • Enter the Extended Menu 1.
- 02 • Press **SEL** button as often as necessary until the **T. MOT. LED** starts to flash.
- 03 • Press the **SEL** button until the **T. MOT LED** flashes quickly.
- 04 • Press **SET** to activate.
- 05 • **T. MOT. LED** will turn on/off, signaling the success of the operation.

### • T. MOT. PED. | FOLLOW ME



With this function enabled, the control panel will automatically close 5 seconds after the photocells detect the passage of some user/object.

**NOTE:** To use this function, you must activate the Pause Time in the Main Menu.

**Factory setting:** Follow Me = OFF



Function ON



Function OFF



#### Set follow me:

- 01 • Enter the Extended Menu 1.
  - 02 • Press **SEL** button the times necessary until the **T. MOT. PED. LED** starts to flash.
  - 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- The **T. MOT. PED LED** will turn on/off, signaling the success of the operation.

## 03. PROGRAMMING

### EXTENDED MENU 2

The control panel has an EXTENSIVE MENU 2, with more functions for programming. To access the extended menu 2 options proceed as follows:

- 01 • Enter the extended menu 1 (see page 8A).
- 02 • Press continuously the **SET** button for 5 seconds and the **T. PAUSA** and **T. RIT. ANTE LEDs** will flash **simultaneously**.
- 03 • You have 30 seconds to select functions from the extended menu 2 (using the **SEL** and **SET** button), and after this time the control board returns to the main menu.

#### EXTENDED MENU 2

| LED                   | LED OFF                              | LED ON                              |
|-----------------------|--------------------------------------|-------------------------------------|
| • <b>TIPO MOT.</b>    | PGM from distance = OFF              | PGM from distance = ON              |
| • <b>AUTO PGM</b>     | DS Photocell test = OFF              | DS Photocell test = ON              |
| • <b>CODE</b>         | Pre-Intermitt. and Court Light = OFF | Pre-Intermitt. and Court Light = ON |
| • <b>CODE PED.</b>    | Pause time light = OFF               | Light Time Pause = ON               |
| • <b>T. MOT.</b>      | PUL = Total   PED = Pedestrian       | PUL = Total   PED = Aux cell        |
| • <b>T. MOT. PED.</b> | PUL = Total   PED = Pedestrian       | PUL = Open   PED = Close            |
| • <b>T. PAUSA</b>     | Simultaneous ON/OFF flashing         |                                     |
| • <b>T. RIT. ANTE</b> | Simultaneous ON/OFF flashing         |                                     |

### • TIPO MOT. | PROGRAMMING TRANSMITTERS AT DISTANCE



This function allows you to program new transmitters without access directly to the control board, by using another already programmed transmitter to open the memory.

**Factory setting:** PGM à distância = OFF



Function ON



Function OFF



#### Enable/Disable function:

- 01 • Enter the Extended Menu 2.
- 02 • Press **SEL** button the times necessary until the **TIPO MOT. LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **TIPO MOT. LED** will turn on/off, signaling the success of the operation.

#### Programming transmitter at distance:

- 01 • Press the key of a previously stored command for 10 seconds.
- 02 • The **TIPO MOT. LED** of the Main Menu will flash.
- 03 • Press the new transmitter key for 1 second, to program it.
- 04 • The flashlight will flash confirming the success of the operation.

## 03. PROGRAMMING

### EXTENDED MENU 2

#### • AUTO PGM | PHOTOCELL TEST (DS CONNECTION)



With this function, you can test the connection of photocells. With the function on, whenever you receive an opening order, there is a momentary interruption in powering the photocells and a pulse is sent to test the connection. If it does not work in this way, there is a problem in the connection between the photocells and the control panel.

**Factory setting:** DS Photocell test = OFF



Function ON



Function OFF



- 01 • Enter the Extended Menu 2.
- 02 • Press **SEL** button the times necessary until the **AUTO PGM LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **AUTO PGM LED** will turn on/off, signaling the success of the operation.



If you do not connect photocells to the DS input, you must make a shunt between COM and DS (09 and 11) and this Photocell Test must be deactivated.

#### • CODE | PRE-INTERMITTENCE / COURTESY LIGHT



**Pre-blinking operation:** The Blinking LAMP output is activated 3 seconds before the automatism starts any movement.

**Courtesy Light Operation:** The Intermittent LAMP output is activated whenever it receives an opening order, and remains active for 3 minutes.

**Factory setting:** Pre-Intermitt. and Court Light = OFF



Function ON



Function OFF



**Enable Pre-fire (LED on):**

- 01 • Enter the Extended Menu 2.
- 02 • Press **SEL** button the times necessary until the **CODE LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.

**Turn on the Courtesy Light (LED lit):**

- 01 • Enter the Extended Menu 2.
- 02 • Press **SEL** button the times necessary until the **CODE LED** starts to flash.
- 03 • Press the **SEL** button one more time and the **CODE LED** will flash rapidly.
- 04 • Press the **SET** key (1 second) to activate / deactivate the function.

## 03. PROGRAMMING

### EXTENDED MENU 2

#### • CODE PED | FLASHLIGHT PAUSED



With this option enabled, whenever the engine is in standby time the 24V output for firefly will remain on.

**Factory setting:** Pause time light = OFF



Function ON



Function OFF



- 01 • Enter the Extended Menu 2.
- 02 • Press the **SEL** button until the **T. PAUSA LED** and the **LED CODE PED**. before flashing.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **CODE PED LED** will turn on/off, signaling the success of the operation.

#### • T. MOT. | FUNC. PED = PEDESTRIAN OPENING OR AUX PHOTOCELL



When enabled, this function changes the operation of the PED input for auxiliary photocell use. The **LED T. MOT** lit indicates that the auxiliary input for photocells is selected, the **LED** off indicates that the PED / DS input is being selected (this circuit becomes a N.C. circuit).

**Factory setting:** PUL = Total | PED = Pedestrian



Function ON



Function OFF



- 01 • Enter the Extended Menu 2.
- 02 • Press **SEL** button the times necessary until the **LED T. MOT** starts to flash.
- 03 • If you want to set this input with the AUX1 Cell, press the **SET** key once to activate. If you want to set this input as the AUX2 cell, press the **SEL** key again to the **T. MOT LED** blink rapidly, and then press **SET** once to activate.
- 04 • **T. MOT LED** will turn on/off, signaling the success of the operation.

#### • T. MOT. PED. | FUNC. PULL AND PED = TOTAL/PEDESTRIAN OR OPEN/CLOSE



When activated, this function changes the operation of the **PUL** input for the release button and the PED input for the release button.

The **T. MOT. PED** on indicates that the **PUL** function is set for opening and **PED** for closing. The **LED** off indicates that it is factory set.

**PUL = Open, PED = Close (LED light) / PUL = PUL and PED = PED (LED off)**

**Factory setting:** PUL = Total | PED = Pedestrian



Function ON



Function OFF



- 01 • Enter the Extended Menu 2.
- 02 • Press **SEL** button the times necessary until the **T. MOT. PED. LED** starts to flash.
- 03 • Press the **SET** key (1 second) to activate / deactivate the function.
- 04 • **T. MOT PED LED** will turn on/off, signaling the success of the operation.

## 03. PROGRAMMING

### EXTENDED MENU 3



Extensive menu 3 allows you to set the speed of the motor slowdown.

Factory setting: Level 3



#### Access Extension Menu 3:

**01** • Access the extended menu 1 (page 8A).

**02** • Access the extended menu 2 (page 9B).

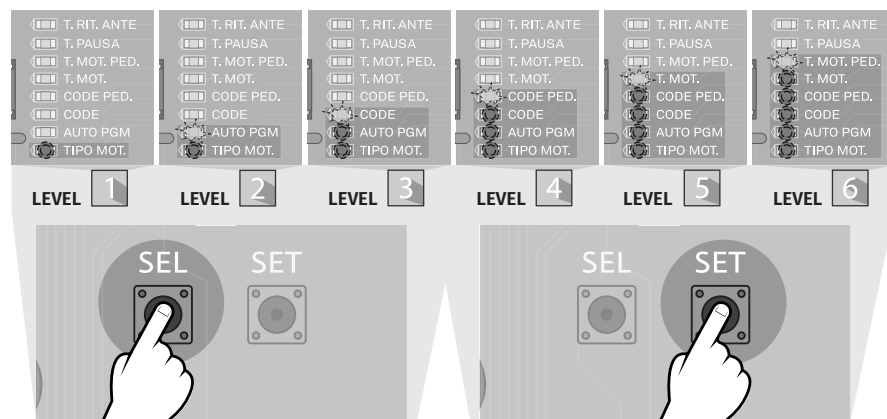
**03** • Press **SET** continuously for 5 seconds and the **T. PAUSA** and **T. RIT ANTE LED** will flash alternately. They then blink simultaneously and have 30 seconds to set the speed.

#### Change speed level:

In the images you can identify the LEDs that light up and flash on each level:

**LIGHT UP**

**BLINK**



Use the **SEL** key to toggle between the 6 levels.

Example: if you select level 3, the **TIPO MOT LED** will and **AUTO PGM** will light up and the **CODE LED** will flash.

Use the **SET** key to confirm the level you want.

The LEDs of the selected level will remain on for 30 seconds.

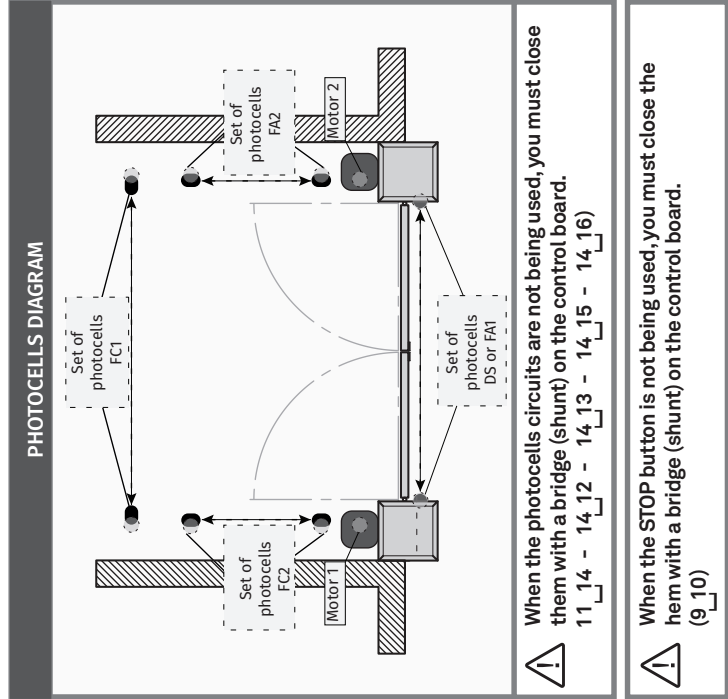
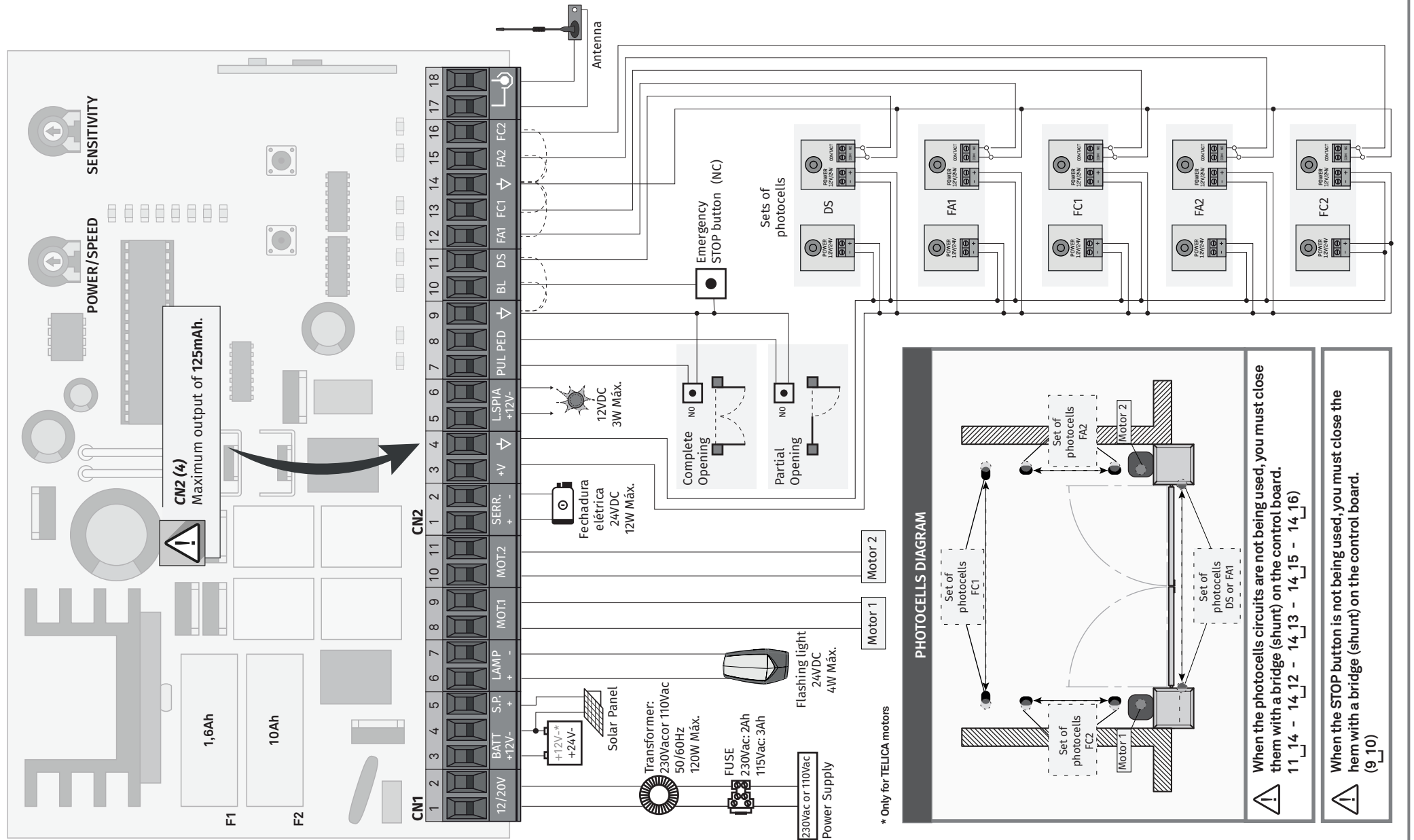
### RESET OF CONTROL BOARD



To restore factory settings, press **SEL** and **SET** keys at the same time until all LEDs light up. When the keys are released they will go off, the operation will be completed.

# 04. CONNECTION SCHEME

## COMPONENT'S CONNECTION TO THE CONTROL BOARD



\* Only for TELICA motors

## 05. TROUBLESHOOTING

### INSTRUCTIONS FOR FINAL CONSUMERS/TECHNICIANS

| Anomaly                              | Procedure                                                                                                                                                                                    | Behavior                              | Procedure II                                                                                                                                                                                                                                                                               | Discovering the origin of the problem                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Motor doesn't work                 | • Make sure you have 110/230V power supply connected to automation and if it is working properly.                                                                                            | • Still not working                   | • Consult a qualified <b>MOTORLINE</b> technician.                                                                                                                                                                                                                                         | <ol style="list-style-type: none"> <li>1 • Open control board and check if it has 110/230V power supply;</li> <li>2 • Check the control board input fuses;</li> <li>3 • Disconnect the motors from the control board and test them connected directly to a 12 / 24V battery to find out if it is malfunctioning.</li> <li>4 • If the motor works, the problem is on the control board. Pull it out and send it to the <b>MOTORLINE</b> technical services for diagnosis;</li> <li>5 • If the motor doesn't work, remove it from installation site and send to the <b>MOTORLINE</b> technical services for diagnosis.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| • Motor doesn't move but makes noise | • Unlock motor and move the roller by hand to check for mechanical problems.                                                                                                                 | • Encountered problems?               | • Consult an experienced 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 <b>MOTORLINE</b> technician.                                                                                                                                                                                                                                         | <ol style="list-style-type: none"> <li>1 • If the motor works, the problem is on the control board. Pull it out and send it to the technical services for diagnosis;</li> <li>2 • If the motor doesn't work, remove it from installation site and send to the technical services for diagnosis.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • Motor opens but doesn't close      | • Unlock motor 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. | <ol style="list-style-type: none"> <li>1 • Check if there is any obstacle in front of the photocells;</li> <li>2 • Check if any of the control devices are stucked and sending permanent signal to control board;</li> <li>3 • Consult a qualified <b>MOTORLINE</b> technician.</li> </ol> | <p>All control boards <b>MOTORLINE</b> 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.</p> <p>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.</p> <p><b>A) SECURITY SYSTEMS:</b></p> <ol style="list-style-type: none"> <li>1 • Close the photocell circuit with shunt or disable the PHOTO function.</li> <li>2 • Check that the system is functional.</li> <li>3 • Replace it with a functional device, and check if the automation function correctly with all other devices. If you find another one defective, follow the same steps until you find all the problems.</li> </ol> <p><b>B) START SYSTEMS:</b></p> <ol style="list-style-type: none"> <li>1 • Disconnect all wires connected to the connector (PULL and PED).</li> <li>2 • If the LED turned OFF, try reconnecting one device at a time until you find the defective device.</li> </ol> <p><b>NOTE:</b><br/>In case procedures described in sections A) and B) don't result, remove control board and send to the technical services for diagnosis.</p> |
| • Motor doesn't make complete route  | Unlock motor and move gate by hand to check for mechanical problems on the gate.                                                                                                             | • Encountered problems?               | • Consult an experienced 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 <b>MOTORLINE</b> technician.                                                                                                                                                                                                                                         | <ol style="list-style-type: none"> <li>1 • If the motor doesn't work, remove it from installation site and send to our <b>MOTORLINE</b> technical services for diagnosis.</li> <li>2 • 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 sufficient time for opening and closing with appropriate force.</li> <li>3 • If this doesn't work, remove control unit and send it to <b>MOTORLINE</b> technical services services.</li> </ol> <p><b>NOTA:</b><br/>Setting force of the controller should be sufficient 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.).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                  |