

CONTROL PANEL FOR 24 V GEARMOTORS



FA00044-EN



Official Partner



MILANO 2015

FEEDING THE PLANET
ENERGY FOR LIFE

INSTALLATION MANUAL

ZLJ14

EN English

IMPORTANT SAFETY INSTRUCTIONS WHEN INSTALLING
WARNING! IMPROPER INSTALLATION MAY RESULT IN SERIOUS DAMAGE, FOLLOW ALL INSTALLATION INSTRUCTIONS
THIS MANUAL IS EXCLUSIVELY INTENDED FOR PROFESSIONAL, SKILLED STAFF



LEGEND

- This symbol shows which parts to read carefully.
- This symbol shows which parts describe safety issues
- This symbol shows which parts to tell users about.

REFERENCE REGULATIONS

Came S.p.A. is certified for the: ISO 9001 quality and ISO 14001 environmental management systems.
 This product complies with the current regulations mentioned in the declaration of conformity.

DESCRIPTION

Multi-function control pane for one-swing-leaf gates, with graphic programming-and-alert-display plus self-diagnosing of safety devices.
 The functions on the input and output contacts, the time settings and user management, are set and viewed on the graphic display.
 All connections are quick-fuse protected.

Intended use

Control panel	Gearmotor
ZLJ14	AMICO - AXO - F4000 - FAST - FERNI - FROG - FROG J - MYTO

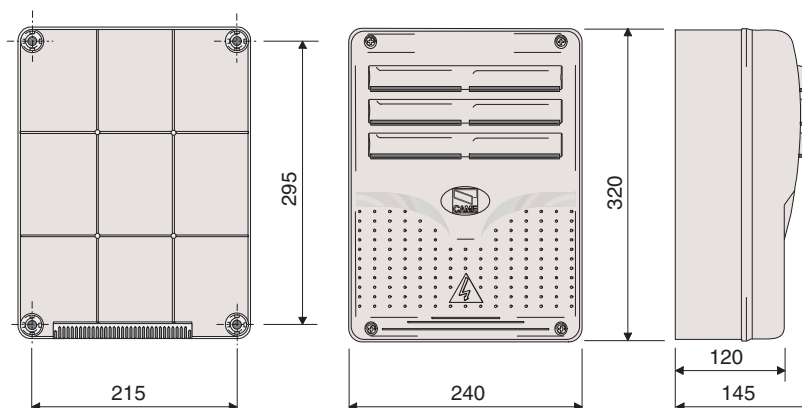
Any installation and/or use other than that specified in this manual is forbidden.

Technical data

Type	ZLJ14
Protection rating (IP)	54
Power supply (V - 50/60 Hz)	230 AC
Maximum power (W)	250
Maximum power of the 24 V (W) accessories	50
Stand-by consumption (W)	5
Operating temperature (°C)	-20 ÷ +55
Items	ABS
Insulation class	II

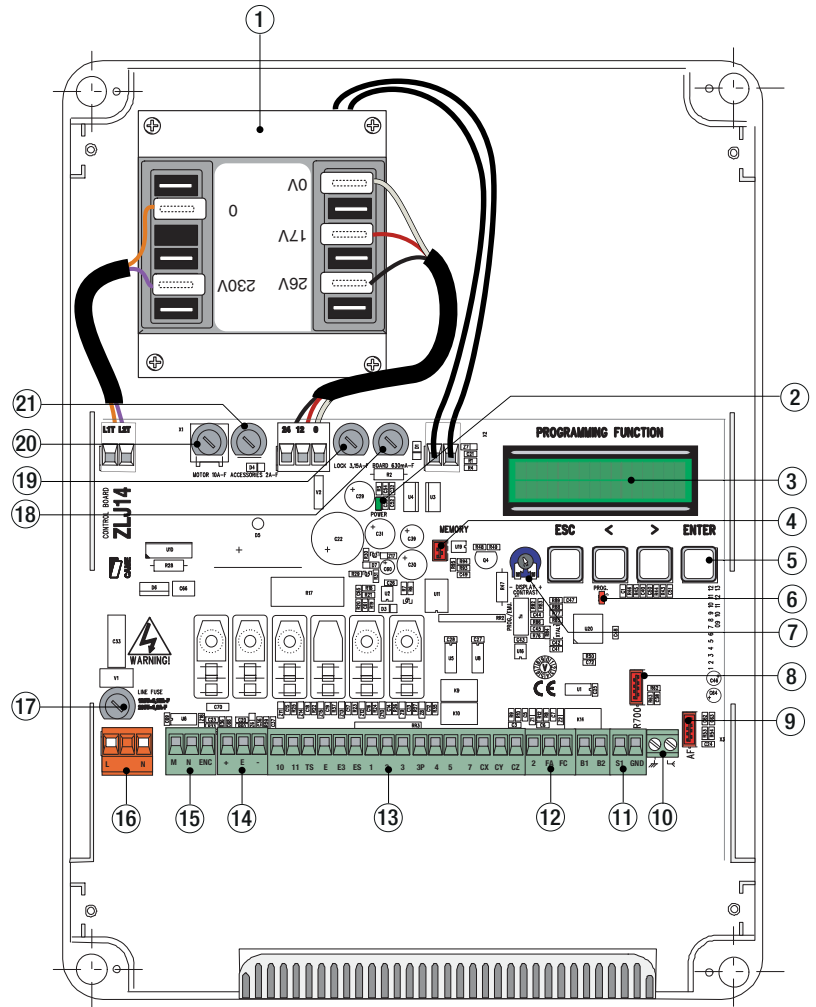
Fuses	ZLJ14
LINE-FUSE - Line	1.6 A-F
CONTROL BOARD - Card	630 mA-F
ACCESSORIES - Accessories	2 A-F
MOTOR 1 / MOTOR 2 - Motor	10 A - 250 V Ø 6.3x22 UFG632310 (Spare parts code 119RIR316)
E.LOCK - Electrolock	3.15 A-F

Dimensions (mm)



Description of parts

1. Transformer
2. Power supply on warning LED
3. Display
4. Memory roll board connector
5. Programming buttons
6. Programming warning LED
7. Display brightness adjusting trimmer
8. Connector for the R700 card
9. AF card connector
10. Antenna terminal
11. Terminals for transponder
12. Endstop terminals
13. Terminals for control and safety devices
14. Encoder terminals
15. Terminals for gearmotors
16. Power supply terminals
17. Line fuse
18. Control-board fuse
19. Electric-lock fuse
20. Motor fuse
21. Accessories fuse



GENERAL INSTRUCTIONS FOR INSTALLING

- ⚠ Only skilled, qualified staff must install this product.
- ⚠ Before working on the control panel, cut off the main current supply and, if present, remove any batteries.

Preliminary checks

- ⚠ Before installing the control panel it is necessary to:
 - make sure that the point where the control panel is fastened is protected from any impacts and that the anchoring surface is solid enough, and that proper tools are used (that is, screws, anchors, and so on);
 - make sure you have set up a suitable dual pole cut off device along the power supply that is compliant with the installation rules. It should completely cut off the power supply according to category III surcharge conditions (that is, with minimum contact openings of 3 mm);
 - ⚡ Make sure that any connections inside the container (ones that ensure continuity to the protection circuit) are fitted with additional insulation with respect to those of other electrical parts inside.

Tools and materials

Make sure you have all the tools and materials you will need for installing in total safety and in compliance with applicable regulations. The figure shows some of the equipment installers will need.



Cable types and minimum thicknesses

Connection	Cable type	Cable length 1 < 15 m	Cable length 15 < 30 m
230 V AC power-supply to control panel	H05RN-F	3G x 1.5 mm ²	3G x 2.5 mm ²
Encoder gearmotor power supply*	FROR CEI 20-22 CEI EN 50267-2-1	3 x 1.5 mm ²	3 x 2.5 mm ²
Power supply to gearmotor**		2 x 1.5 mm ²	2 x 2.5 mm ²
Flashing light		2 x 0.5 mm ²	
Photocell transmitters		2 x 0.5 mm ²	
Photocell receivers		4 x 0.5 mm ²	
Command and safety device		2 x 0.5 mm ²	
Endstop***		3 x 1.5 mm ²	
Antenna	the RG58 antenna	max 10 m	
Encoder****	2402C 22AWG	max 30 m	

* AXO ** FROG-A24, F4024, F1024, FROG-A24E, F7024E *** FROG-A24, F4024, F1024 **** FROG-A24E, F7024E, F4024E

If cable lengths differ from those specified in the table, establish the cable sections depending on the actual power draw of the connected devices and according to the provisions of regulation CEI EN 60204-1.

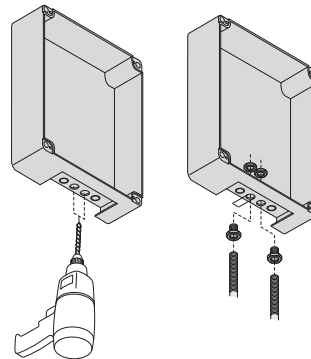
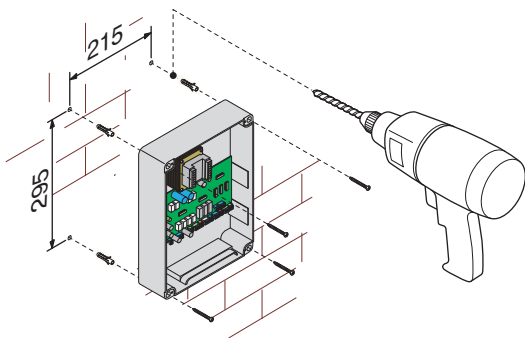
For multiple, sequential loads along the same line, the dimensions on the table need to be recalculated according to the actual power draw and distances. For connecting products that are not contemplated in this manual, see the literature accompanying said products

INSTALLATION

Fasten the control panel in a protected area using suitable screws, anchors and braces.

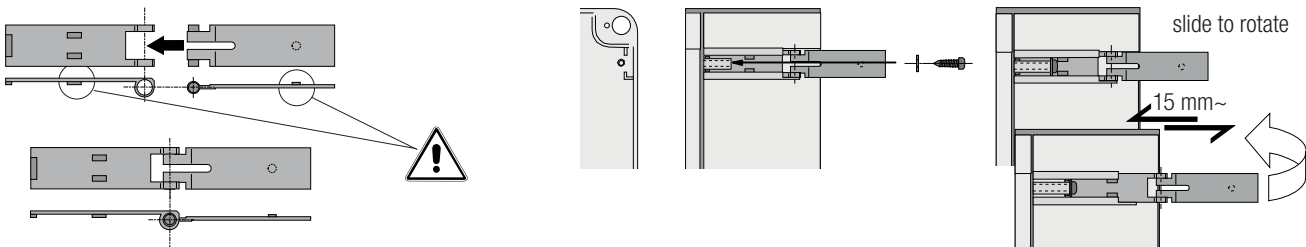
Drill through the pre-perforated holes and fit the cable gland with corrugated pipes for passing through the electric cables.

Pre-perforated hole diameter: 20 mm.



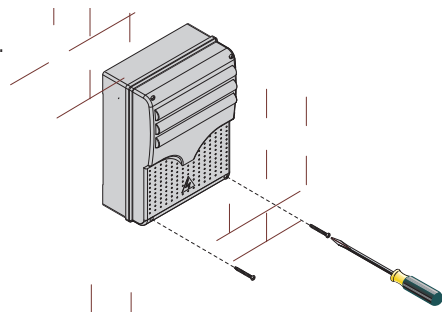
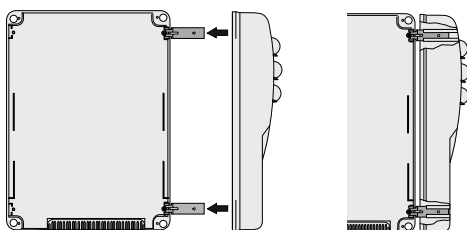
Assemble the pressure hinges.

Fit the hinges into the box (either on the right or left) and fasten them using the supplied screws and washers.



Snap the cover onto the hinges. Close it and secure it using the supplied screws.

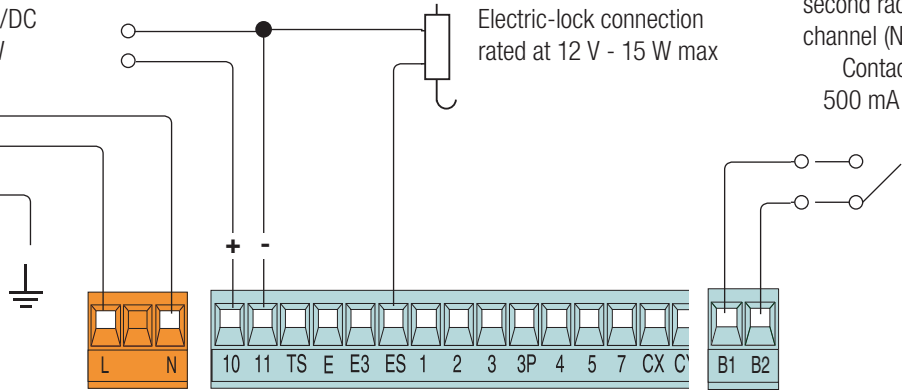
After performing the settings and adjustments, fasten the cover using the supplied screws.



Power supply to accessories

Terminals for powering the 24 V AC/DC accessories Maximum power: 50 W

230 V AC - 50/60 Hz

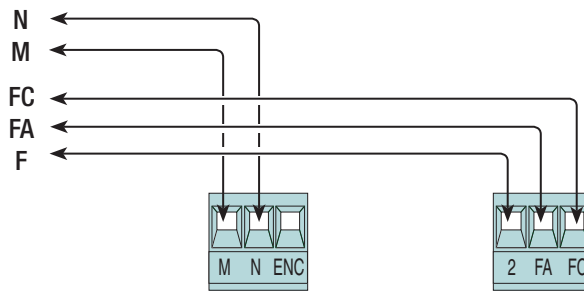


Electric-lock connection rated at 12 V - 15 W max

Possible output of the second radio-receiver channel (NO contact). Contact rated for: 500 mA - 24 V DC.

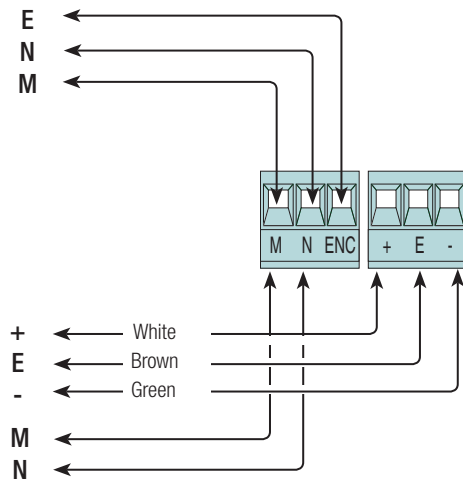
Connecting the gearmotors with endstops

24 V DC gearmotor



Connecting the encoder gearmotors

24 V DC gearmotor

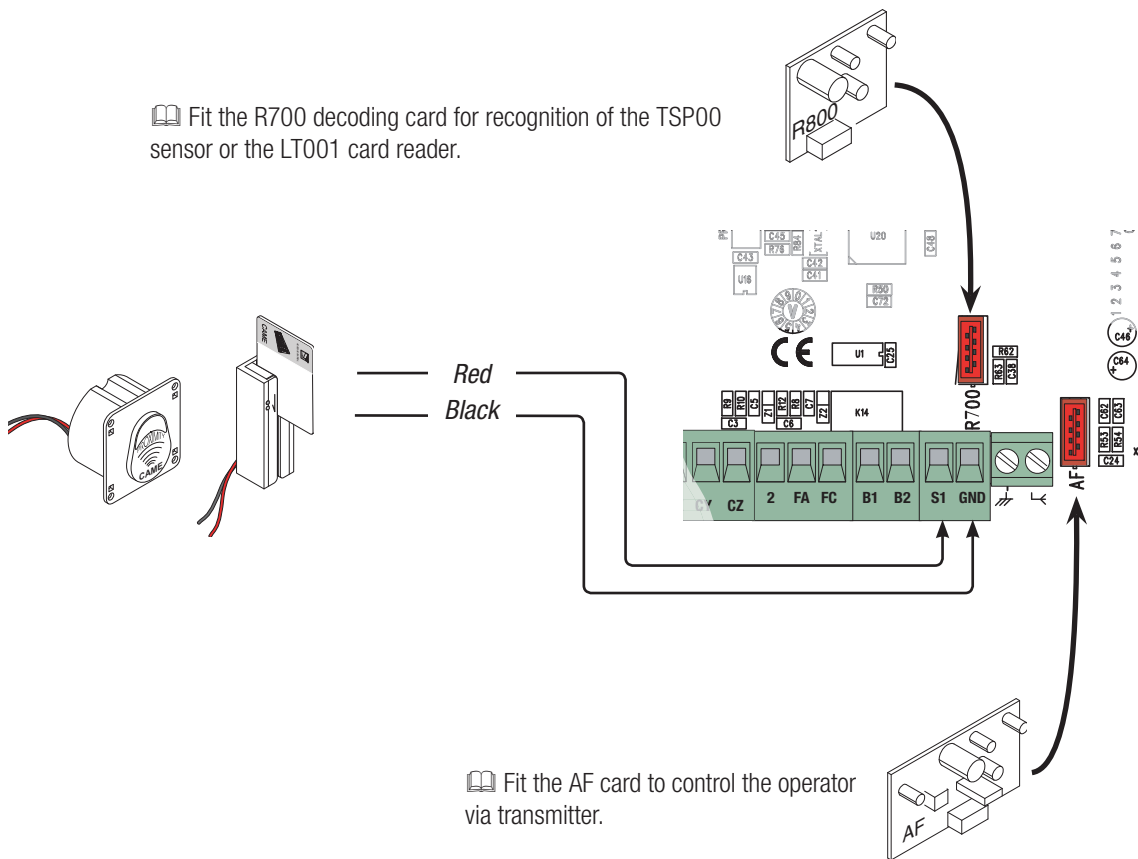


Command and control devices

⚠ Before fitting any snap-in cards (such as the AF or R700), YOU MUST CUT OFF THE POWER MAINS, and disconnect the power mains.

📖 Fit the R700 decoding card for recognition of the TSP00 sensor or the LT001 card reader.

Transponder or card reader



📖 Fit the AF card to control the operator via transmitter.

Stop button (NC contact). For stopping the gate leaves while excluding automatic closing. To resume movement press the control button or use another control device.

📖 If unused, select **[Disabled]** from the **[Total Stop]** in the **[FUNCTIONS]**.

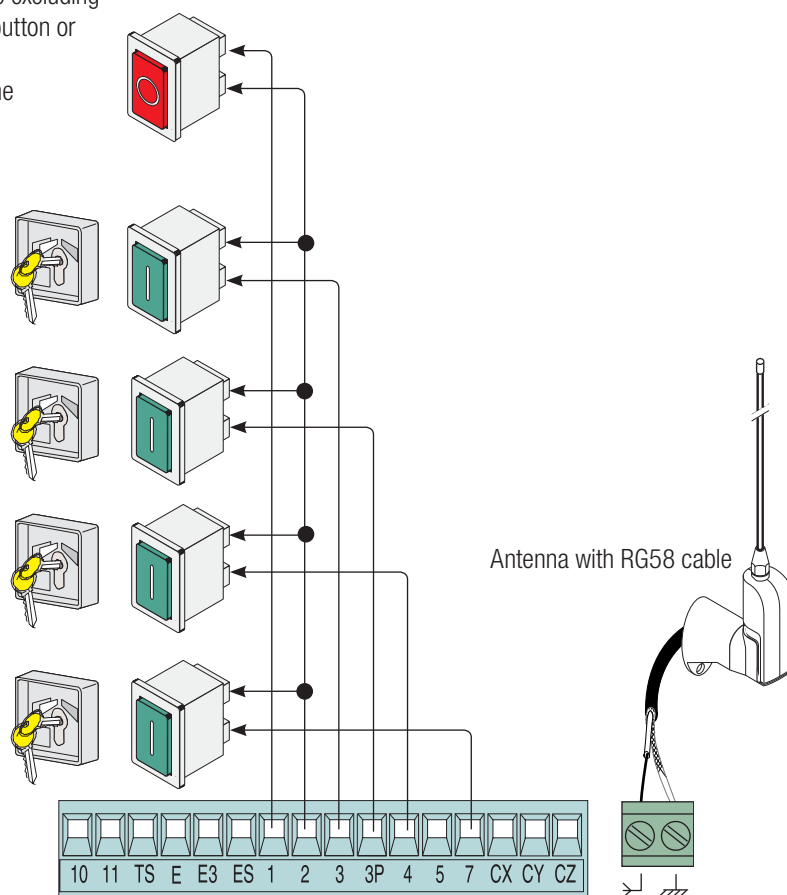
OPEN ONLY function from control device with NO contact.

PARTIAL OPENING feature from command device (NO contact).

See the **[Partial open]** function, for opening **times** in the **[SET TIMES]** menu.

ONLY CLOSE function from control device (NO contact).

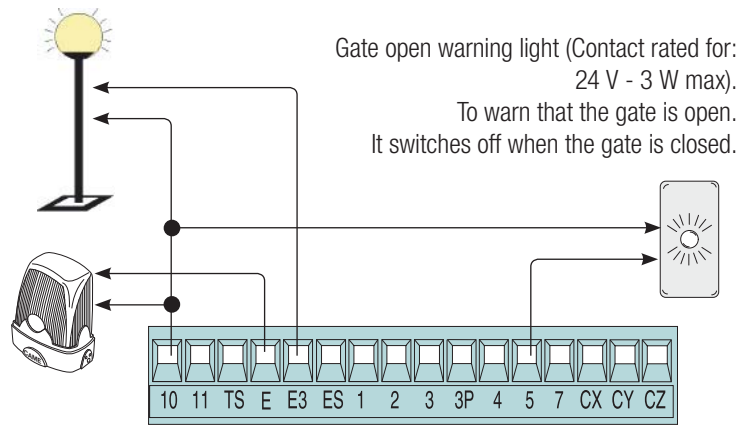
OPEN-STOP-CLOSE-STOP sequential function / OPEN-CLOSE-INVERT step-step from a control device (NO contact).
See the **[2-7 command]** in the **[FUNCTIONS]**.



Signaling devices

Courtesy light (contact rated for: 24 V - 25 W max).
Auxiliary connection of an outdoor light which can be positioned where you like, to increase lighting in the driveway/parking area. It stays on for a settable time.
See the **[Courtesy Time]** function in the **[SET TIMES]** menu.

Flashing light or cycle light (contact rated for: 24 V - 25 W max).
Flashing light: it flashes during the gate's opening and closing phases.
Cycle light: it stays on from the moment the leaf starts opening until it again closes completely (including the automatic-closing time)
See the **[Light E]** in the **[FUNCTIONS]**.



Safety devices

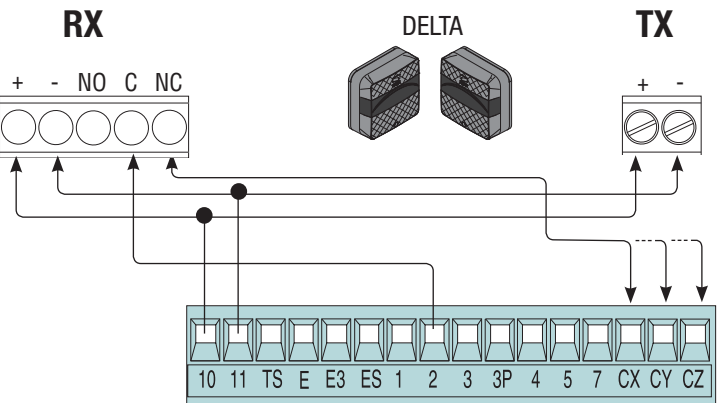
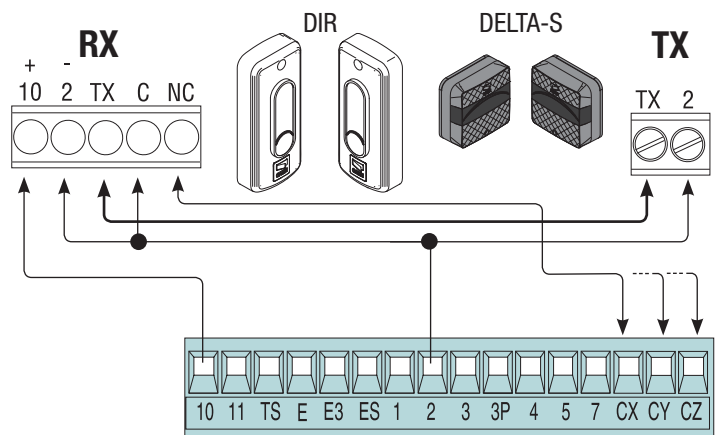
Photocells

Configure contact CX, CY or CZ (NC), input for EN 12978 safety devices like photocells.

See **[CX input]**, **[CY input]** or **[CZ input]**.

- C1 reopening during closing. When the leaf is closing, opening the contact causes the leaf to invert its direction of movement until it is completely open;
- C2 closing during opening. When the leaf is opening, opening the contact causes the leaf to invert its direction of movement until it is completely closed;
- C3 partial stop. Leaf stops, if it is moving, and sets up for automatic closing (if the automatic closing function has been activated);
- C4 obstruction wait. Leaf stops, if it is moving, and starts back again once the obstruction is removed.

If unused, contacts CX, CY and CZ should be disabled during programming.



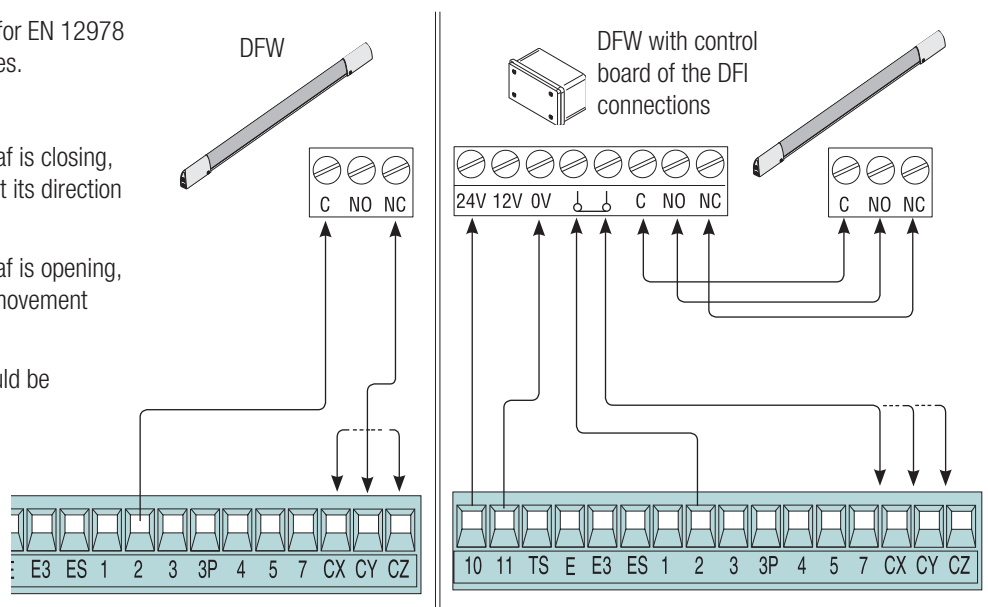
Sensitive Safety Edges

Configure contact CX, CY or CZ (NC), input for EN 12978 safety devices such as sensitive safety-edges.

See **[CX input]**, **[CY input]** or **[CZ input]**.

- C7 reopening during closing. When the leaf is closing, opening the contact causes the leaf to invert its direction of movement until it is completely open;
- C8 reclosing during opening. When the leaf is opening, opening the contact, causes it to invert its movement until it is completely closed.

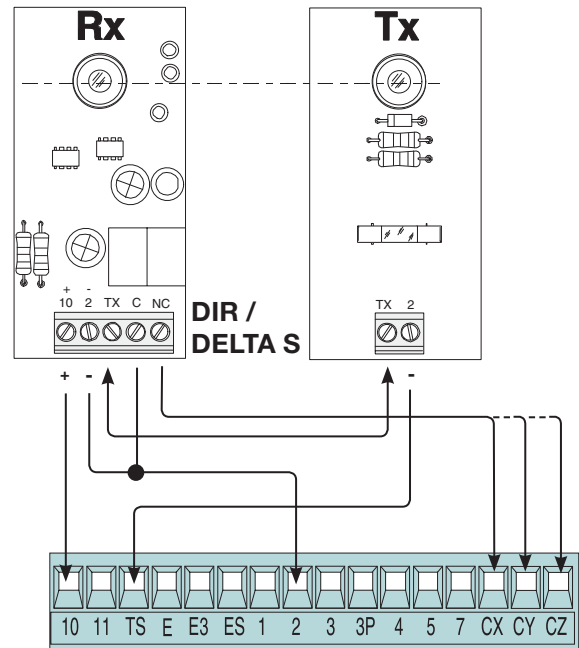
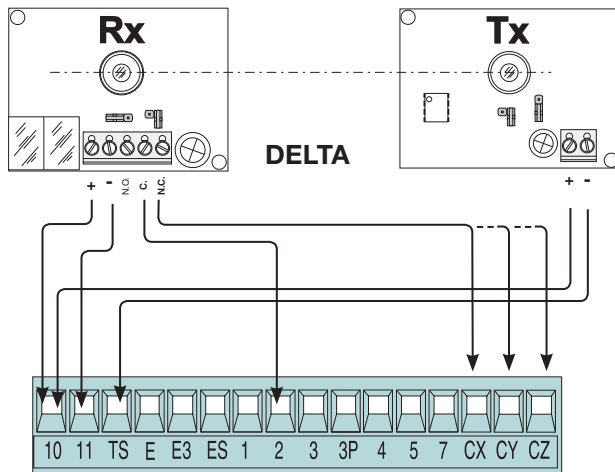
If unused, contacts CX, CY and CZ should be disabled during programming.



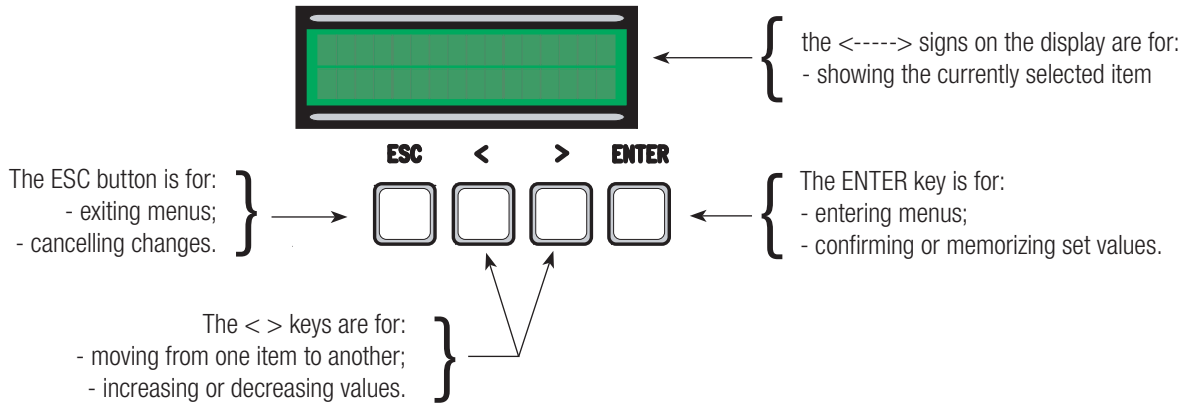
Connecting the safety devices (i.e. the safety test)

At each opening or closing command, the card checks the efficiency of the safety devices, such as photocells). Any anomalies will inhibit all commands.

Select from the **[Safety Test]** which of inputs CX, CY or CZ to turn on.

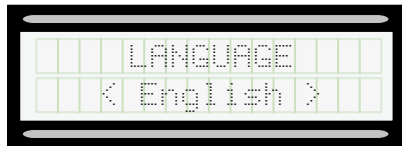


Description of programming commands



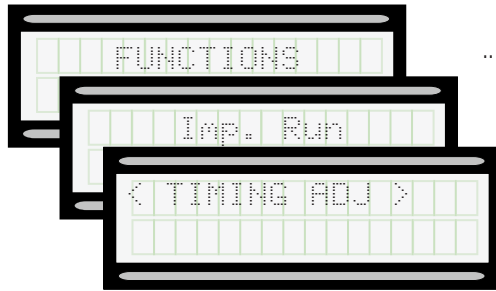
ENTER

To enter the menu, keep the ENTER button pressed for at least one second.



< >

To select menu items, use the arrow keys ...

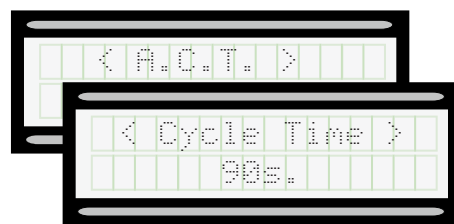


.. then press ENTER

ENTER

< >

also for the submenus, use the arrow keys to select ...



.. then press ENTER

ENTER



If the < > arrows are set to the **[Cycle time]**, you may edit their value.

< >

To increase or reduce the value use the arrows...

... the press ENTER to confirm ...



ENTER

... to exit the menu wait 30 seconds, or press ESC, until the start up screen appears.

ESC

Meaning of the menu items abbreviations

[Travel sens]	Gate Run Sensibility
[Partial open]	Partial Opening
[Maint Action]	Maintained Action
[Auto Close]	Automatic Closing
[Config]	Configuration
[Assoc Function]	Associated Function
[Set Travel]	Set gate-leaf Travel
[Open Acce]	Opening Soft-Stop as a percentage
[CloseAcce]	Closing Soft-Stop as a percentage
[Opn Slw Dwn]	Opening Slow Down as a percentage
[Cls Slw Dwn]	Closing Slow Down as a percentage
[Change Code]	Mod. name
[Start message]	Starting message
[Soft Start]	Slowed-down Start
[Enc Slow Down]	Opening and closing slow-downs with ENCODER
[Obstruc Detct]	Obstruction Detection
[Delete user]	Remove User
[Amper. Sens.]	Amperometric Sensitivity
[Travel sens]	Travel Sensitivity
[Slw Dwn sens]	Sensitivity of Slow Downs
[Closing thrust]	Closing thrust
[Ram jolt time]	Ram-jolt Time
[Preflash time]	Preflashing Time
[Slow downtime]	Slow-down Time
[Lock time]	Lock Time
[ACT]	Automatic Closing Time
[PartialACT]	Partial Automatic Closing Time
[Slow dwn speed]	Slow-down Speed
[Travel rate %]	Gate-leaf Travel Speed

Menu map

[LANGUAGE]		Default
	[Italiano] / [English] / [Français] / [Deutsch] / [Español] / [Portugues euro]/[Portugues bras]	English
[FUNCTIONS]		Default
[Auto Close]	[Disabled] / [Enabled]	[Enabled]
[Maint Action]	[Disabled] / [Enabled] / [Closing]	[Disabled]
[Obstruc Detct]	[Disabled] / [Enabled]	[Disabled]
[Safety Test]	[Disabled] / [CX] / [CY] / [CZ] / [CX+CY] / [CX+CZ] / [CY+CZ] / [CX+CY+CZ]	[Disabled]
[Preflashing]	[Disabled] / [Enabled]	[Disabled]
[Ram Jolt]	[Disabled] / [Closing] / [Opening] / [Open-Close]	[Disabled]
[Total Stop]	[Disabled] / [Enabled]	[Enabled]
[CX input]	[Disabled] / [C1] / [C2] / [C2] / [C4] / [C7] / [C8]	[C1]
[CY input]	[Disabled] / [C1] / [C2] / [C2] / [C4] / [C7] / [C8]	[C3]
[CZ input]	[Disabled] / [C1] / [C2] / [C2] / [C4] / [C7] / [C8]	[C2]
[Closing thrust]	[Disabled] / [Enabled]	[Disabled]
[Lock]	[Disabled] / [Closing] / [Opening] / [Open-Close]	[Closing]
[LockType]	[Pulsed] / [Continuous]	[Pulsed]
[Config]	[Time Lmt Swtch] / [End Stop] / [Slow Down] / [Op LS-CI SI Dn] / [ENCODER]	[ENCODER]
[End Stop]	[N.C. / N.O.]	[N.C.]
[2-7 command]	[Open-Close] / [Opn Stp Clse]	[Open-Close]
[Light E]	[Flashing light] / [Courtesy] / [Cycle]	[Flashing light]
[B1-B2 output]	[Bistable] / [Monostable]	[Monostable]
[IMP. TRAVEL]		Default
[Motor type]	[FROG-F4024E] / [FROG J] / [FROG-FL] / [AMICO] / [MYT0] / [AXO] / [FAST] / [FERNI]	[FROG-F4024E]
[Travel rate %]	[20%] ⇒ [100%]	[100%]
[Slow dwn speed]	[5%] ⇒ [80%]	[50%]
[Soft Start]	[Enabled] / [Disabled]	[Disabled]
[Amper. Sens.]*	[Enabled] / [Disabled]	[Enabled]
[Travel sens]*		
[Slow downtime]**	[0 s] ⇒ [30 s]	[20 s]

*This function does not appear if [ENCODER] from the [Config].

**This function only appears if [Slow Down] or [Op LS-CI SI Dn] from the [Config].

[ENCODER]		Default
[Sensibility]	[Enabled] / [Disabled]	[Enabled]
[Travel sens]		[-●○○○○○○○○○○○○○+]
[Slw Dwnsens]		[-●○○○○○○○○○○○○○+]
[Enc Slow Down]	[ON] / [OFF]	[ON]
[Opn Slw Dwn]	[1%] ⇔ [40%]	[10%]
[Cls SlwDwn]	[1%] ⇔ [40%]	[10%]
[CClose Accel]	[1%] ⇔ [15%]	[15%]
[OpenAccel]	[1%] ⇔ [15%]	[15%]
[Travel calibr]	[Confirm? (No)] / [Confirm? (Yes)]	

SET TIMES		Default
[ACT]	[0 s] ⇔ [300 s]	[10 s]
[PartialACT]	[0 s] ⇔ [300 s]	[10 s]
[Cycle time]	[10 s] ⇔ [150 s]	[90 s]
[Preflash time]	[1 s] ⇔ [60 s]	[5 s]
[Lock time]	[1 s] ⇔ [5 s]	[2 s]
[Ram jolt time]	[1 s] ⇔ [3 s]	[1 s]
[Partial open]	[5 s] ⇔ [60 s]	[10 s]
[Courtesy Time]	[1 s] ⇔ [300 s]	[300 s]

[USERS]	
[Add User] (250 max)	
[Change Name]	
[Change Code]	
[Assoc Function]	[2-7] / [Open] / [B1-B2] / [2-3P] / [Disabled];
[Delete user]	
[Delete ALL]	[Confirm? (No)] / [Confirm? (Yes)]
[Save memory]	[Confirm? (No)] / [Confirm? (Yes)]
[Load memory]	[Confirm? (No)] / [Confirm? (Yes)]

[INFO]
[Version] / [No. of travels] / [Start message] / [Reset system]

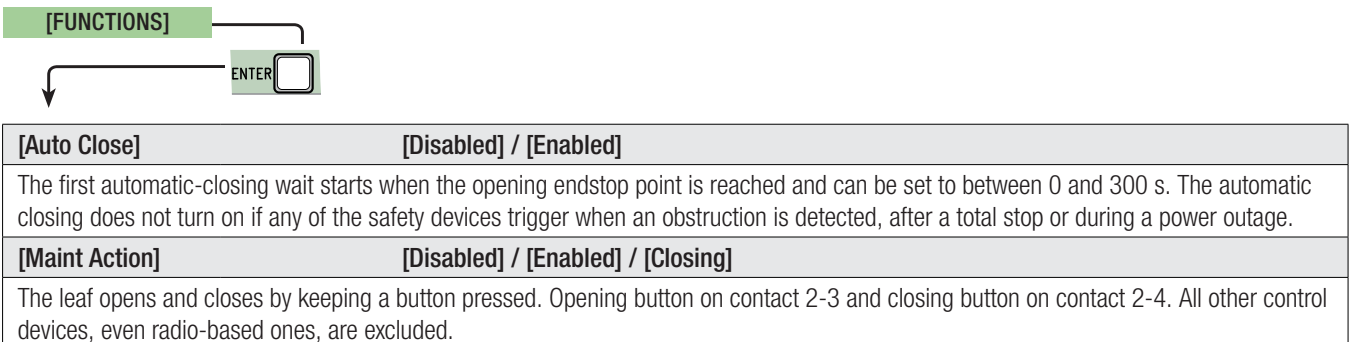
[MOTORS TEST]
[OPEN =>]


IMPORTANT! Start programming by performing the first function, that is, [MOTOR TYPE], [TOTAL STOP] and [TRAVEL CALIBR].

Language menu

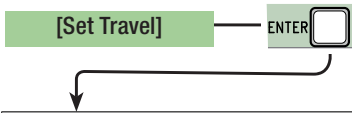


Functions menu



[Obstruc Detct]	[Disabled] / [Enabled]
With the leaf closed, open or after a total stop, the operator remains idle if the safety devices, like photocells or sensitive safety-edges) detect and obstruction.	
[Safety Test]	[Disabled] / [CX] / [CY] / [CZ] / [CX+CY] / [CX+CZ] / [CY+CZ] / [CX+CY+CZ]
After every opening or closing command, the board will check whether the photocells are working properly.	
[Preflashing]	[Disabled] / [Enabled]
After an opening or closing command, the flashing light connected to 10-E, flashes before the maneuver starts. To set the time, see [Preflash time] in the SET TIMES menu.	
[Ram Jolt]	[Disabled] / [Closing] / [Opening] / [Open-Close]
Before each opening and closing, the gate-leaf gives a final thrust to assist the electric-lock release. To adjust the thrust time, select [Ram jolt time] in the SET TIMES menu.	
[Total Stop]	[Enabled] / [Disabled]
NC input - Leaf stop while excluding any automatic closing; to resume movement, use the control device. The safety device is inserted into [1-2].	
[CX input]	[Disabled] / [C1] / [C2] / [C3] / [C4] / [C7] / [C8]
NC input – Can associate: C1 = reopening during closing by photocells, C2 = reclosing during opening by photocells, C3 = partial stop, C4 = obstruction wait, C7 = reopening during closing by sensitive safety-edges, C8 = reclosing during opening by sensitive safety-edges.	
[CY input]	[Disabled] / [C1] / [C2] / [C3] / [C4] / [C7] / [C8]
NC input – Can associate: C1 = reopening during closing by photocells, C2 = reclosing during opening by photocells, C3 = partial stop, C4 = obstruction wait, C7 = reopening during closing by sensitive safety-edges, C8 = reclosing during opening by sensitive safety-edges.	
[CZ input]	[Disabled] / [C1] / [C2] / [C3] / [C4] / [C7] / [C8]
NC input – Can associate: C1 = reopening during closing by photocells, C2 = reclosing during opening by photocells, C3 = partial stop, C4 = obstruction wait, C7 = reopening during closing by sensitive safety-edges, C8 = reclosing during opening by sensitive safety-edges.	
[Closing thrust]	[Disabled] / [Enabled]
At each closing endstop, the operator thrusts the final closing of the leaf for a few seconds.	
[Lock]	[Disabled] / [Closing] / [Opening] / [Open-Close]
Set the electric lock to lock the leaves, by choosing among one of the available choices.	
[Lock Type]	[Pulsed] / [Continuous]
Setting the type of electric lock: - impulse electric lock - it activates for a few seconds when the gate is either open or closed. The activation time is adjusted by the [Lock time] function - continuous electric lock - it activates during the entire opening or closing maneuver.	
[Config]	[Slow Down] / [Op LS-CI SI Dn] / [ENCODER] / [Time Lmt Swtch] / [End Stop]
Configuring the opening and closing slow-downs	
[Slow Down]*	➔ opening and closing slow-downs.
[Lsop-Clos. Slw]*	➔ opening endstop and closing slow-down.
[ENCODER]	➔ slow-down management, obstruction detection and sensitivity.
[Time Lmt Swtch]	➔ timed endstop.
[End Stop]	➔ opening and closing endstop.
*slowdowns configurable with the [Slow down time] in the [Set Travel]	
[End Stop]	[N.C] / [N.O]
Configuring the endstops as normally opened or closed contacts.  This function only appears if option is selected between [End Stop] , [Lsop-Clos. Slw] or [Slow Down] from the [Config] function.	
[2-7 command]	[Open-Close] / [Opn Stp Clse]
Configuration contact 2-7 in step-step (open-close) or sequential (open-stop-close-stop).	
[Light E]	[Cycle] / [Flashing light]
Configuring the light connected to 10-E: - cycle: freely positionable outdoor light for increasing lighting in the driveway/parking area. It stays lit from the moment that the gate leaf starts opening until it is completely closed (including the automatic closing time). In case the automatic closing is off, it stays on only during the gate-leaves' movement. - flashing: to alert when the moving leaf is either closing or opening.	
[B1-B2 output]	[Monostable] / [Bistable]
Configuring contact B1-B2 in Monostable or Bistable mode (switch).	

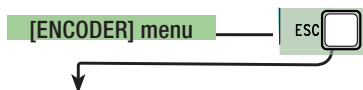
Gate run setting menu



[Motor type]	[FROG-F4024E] / [FROG-J] / [FROG-FL] / [AMICO] / [MYTO] / [AXO] / [FAST] / [FERNI] / [ATI]
Setting the type of operator installed in the system.	
[Travel rate %]	[50%] ⇌ [100%]
Adjusting the maneuvering speed, calculated as a percentage.	
[Slow dwn speed]	[10%] ⇌ [50%]
Adjusting the slow-down speed, calculated as a percentage.	
[Soft Start]	[Disabled] / [Enabled]
After each opening and closing command, the leaves start at slowed down speed for a few seconds.	
[Amper. Sens.]	[Disabled] / [Enabled]
Obstruction detection sensibility. This function does not appear if [Encoder] is set in the [Config] function. When an obstruction is met the function intervenes in the following way: <ul style="list-style-type: none"> - [Time Lmt Swtch] it stops the gate leaves during a maneuver; - [End Stop] it inverts the gate leaves during a maneuver; - [Slow Down] it inverts the gate leaf movement during a maneuver and stop the movement during a slow down. - [Lsop-Clos. Slw] it inverts the gate leaves during a maneuver and stops them only during the closing slow-down. When the function is disabled, it stops the gate leaves when the maximum voltage threshold is exceeded.	
[Travel sens]	[-●●●●●●○○○○○+]
Adjusting the Amperometric sensibility. You need to turn on the [Amper. Sens.] in the [Set Travel] .	
[Slow down time]	[OFF] ⇌ [30 s]
Slow-down time of the gate leaves before every endstop. The time can be set to between zero and 30 s. This function only appears if the [Slow Down] or [Lsop-Clos. Slw] from the [Config] function.	

ENCODER menu

The **[ENCODER]** menu appears only when the **[Config]** in the **[FUNCTIONS]** menu.



[Sensitivity]	[Enabled] / [Disabled]
Obstruction detection sensibility.	
[Travel sens]	[-●○○○○○○○○○○○+]
Obstruction detection sensibility during gate run (both opening and closing). You need to turn on the [Sensitivity] in the [ENCODER] menu.	
[Slw Dwn sens]	[-●○○○○○○○○○○○+]
Obstruction detection sensibility during slow-down (both opening and closing). You need to turn on the [Sensitivity] in the [ENCODER] menu.	
[Enc Slow Down]	[ON] / [OFF]
Activating the opening and closing slow-down starting points.	
[Opn Slw Dwn]	[1%] ⇌ [40%]
Adjusting the starting slow-down point before the opening endstop. The starting slow-down point is calculated as a percentage (from 1% to 40% of the complete leaf-travel). This function only appears if the [Enc Slow Down] in the [ENCODER] menu.	
[Cls Slw Dwn]	[1%] ⇌ [40%]
Adjusting the starting slow-down point before the closing endstop. The starting slow-down point is calculated as a percentage (from 1% to 40% of the complete leaf-travel). This function only appears if the [Enc Slow Down] in the [ENCODER] menu.	
[Close Accel]	[1%] ⇌ [15%]
Adjusting the soft-spot starting point calculated as a percentage (from 1% to 15% of the complete travel) before the closing endstop point.	

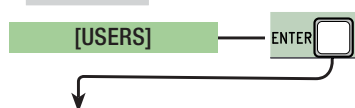
[Open Accel]	[1%] ⇔ [15%]
Adjusting the soft-spot starting point as a percentage (from 1% to 15% of the complete travel) before the opening endstop point.	
[Travel calibr]	
Automatic calibration of the gate-leaf run (see the TRAVEL CALIBRATION paragraph)	

Time settings menu



[ACT]	[0 s] ⇔ [300 s]
The first automatic-closing wait starts when the opening endstop point is reached and can be set to between 0 and 300 s. The automatic closing does not turn on if any of the safety devices trigger when an obstruction is detected, after a total stop or during a power outage.	
[Partial ACT]	[0 s] ⇔ [300 s]
Leaf waiting-time when open, after a partial close command. Once this time elapses, a closing maneuver is automatically performed. The waiting time can be set to between 0 and 300 seconds.	
[Cycle time]	[10 s] ⇔ [150 s]
Gearmotor working time during opening and closing. The working time can be set to between 10 and 150 seconds.	
[Preflash time]	[1 s] ⇔ [60 s]
After an opening or closing command, the flashing light connected on 10-E, flashes between one and sixty seconds before starting the maneuver.	
[Lock time]	[1 s] ⇔ [5 s]
Intervention time for the electrolock to release after each opening command. The intervention time can be adjusted to between one second and five seconds.	
[Ram jolt time]	[1 s] ⇔ [3 s]
The closing and opening jolt thrust-time of the gearmotors after each command. The thrust time can be set to between one and three seconds.	
[Partial open]	[5 s] ⇔ [60 s]
Leaf opening time. The time can set between 5 s and 60 s.	
[Courtesy Time]	[60 s] ⇔ [300 s]
Supplementary light. It stays on for the time needed during the gate's opening or closing maneuvers. contact output [10-E3]. It is adjustable between 60 s and 300 s.	

Users Menu



[Add User]
Entering up to 250 users and associating to each one a function of choice among those included. The entering must be done via transmitter or other control device (see ENTERING NEW USERS).
[Change Name]
To change the number or name of users
[Change Code]
To modify the command code that is associated to a user.
[Assoc Function]
[2-7] ➔ Step-step command (open-close) or sequential command (open-stop-close-stop)
[Open] ➔ Open only command
[2-3P] ➔ Pedestrian or partial opening
[B1-B2] ➔ Contact B1-B2 output
[Delete user]
To remove a user. Confirm removal with ENTER.
[Delete ALL]
To remove all users. Confirm removal with ENTER.

[Save memory]

To save system users and settings in memory roll. Confirm saving with ENTER.

[Load memory]

For uploading the data saved in the memory roll onto the electronic board.

 If the boards feature different versions, you may only upload the users.

Info menu



[Version]

View software version.

[No. of travels]

View the number of completed maneuvers.

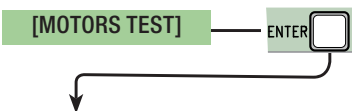
[Start message]

View opening message. To edit the text, press ENTER. Use ENTER to move the cursor forward, ESC for moving the cursor backward and < > to select the letter of figure. Confirm text by pressing the ENTER key for some seconds.

[Reset system]

To restore the initial settings. Press ENTER to confirm the Reset.

Motors Test menu



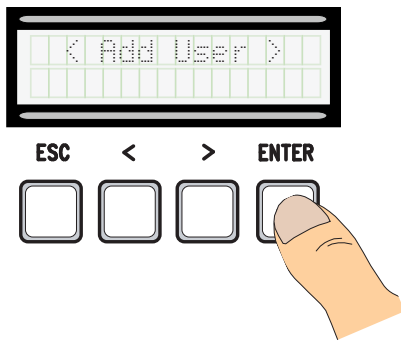
[OPEN =>]

For checking the proper rotation direction of the gearmotors.

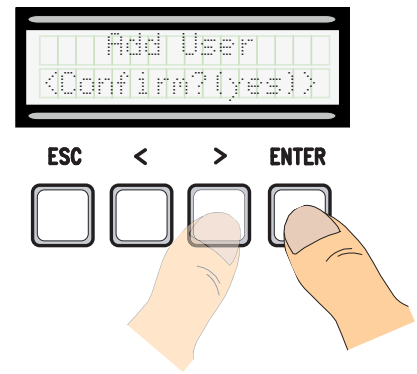
Keep the < key pressed for some seconds and check that the leaf actually opens. If the rotation direction is wrong, invert the motor's phases.

Entering a new user

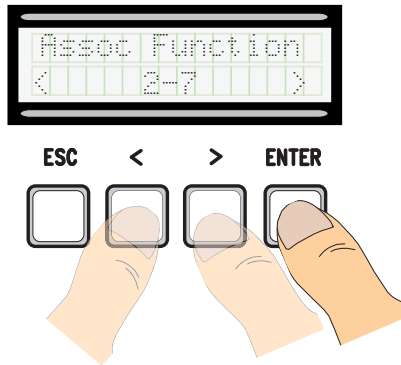
1. From the [USERS], select [Add User]. Press ENTER to confirm.



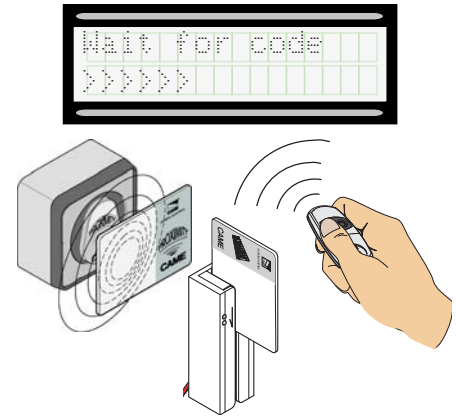
2. Select [Confirm? (Yes)] and press ENTER to confirm.



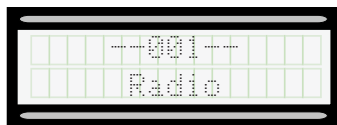
3. Select the function to associate to users. Press ENTER to confirm...



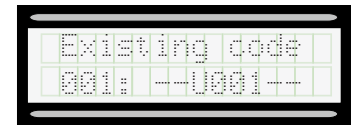
4. ... a code to enter will be requested. Send the code from the transmitter, with the swipe card or transponder.



5. Once the code is entered, the user number will appear with the memorized number ...

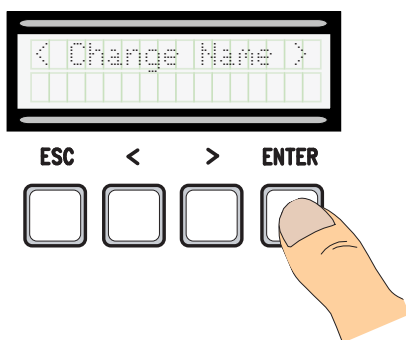


6. ... or, if the code is already entered, then [Existing code].

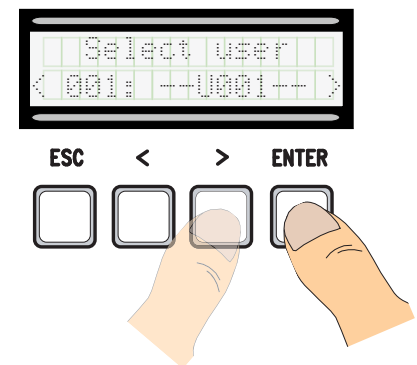


Modify user name

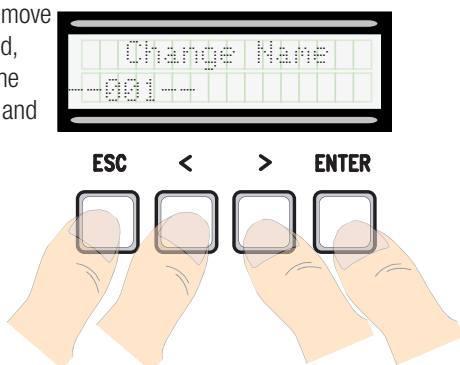
1. From the [USERS], select [Change Name]. Press ENTER to confirm



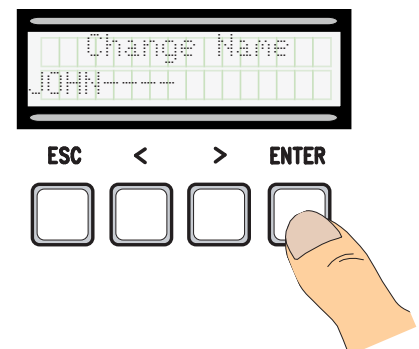
2. Select the user number or name to edit and press ENTER to confirm.



3. Use ENTER to move the cursor forward, ESC for moving the cursor backward and <> to select the letter of figure.

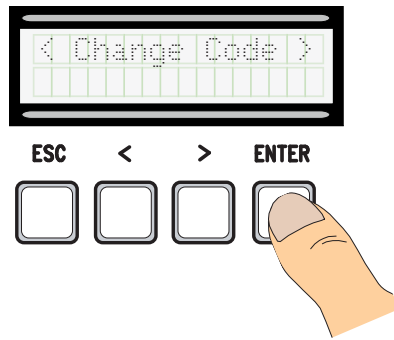


4. Press ENTER for a few seconds to confirm the text.

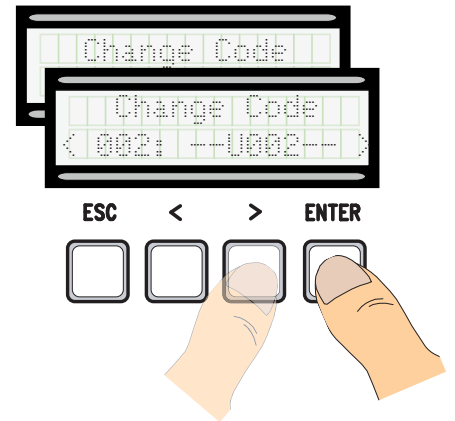


Modify code

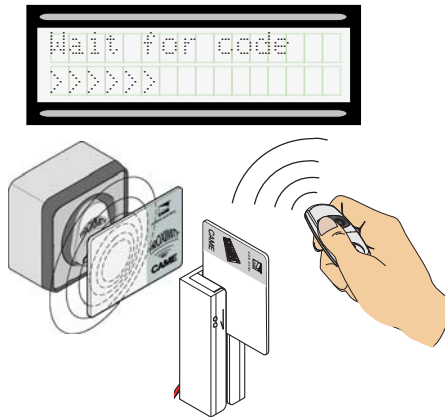
1. From the [USERS], select [Change Code]. Press ENTER to confirm



2. Select the user name of which you want to edit the code and press ENTER to confirm.



3. ... a code to enter will be requested. Send the code from the transmitter, with the swipe card or transponder.



4. ... once the code is entered, the user number and type of memorized command will appear...

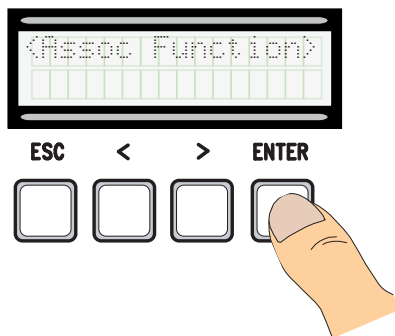


5. Select [Confirm? (Yes)] and press ENTER to confirm.

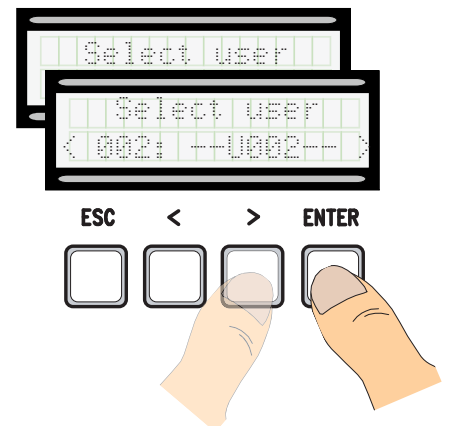


Function related to the user

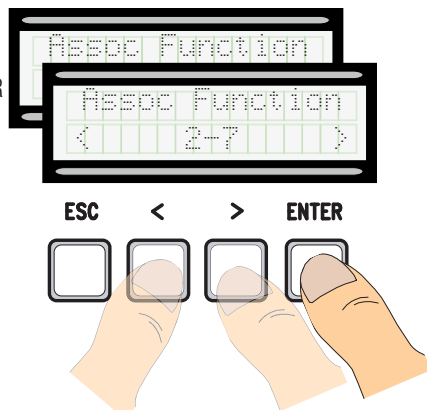
1. From the [USERS], select [Assoc Function]. Press ENTER to confirm



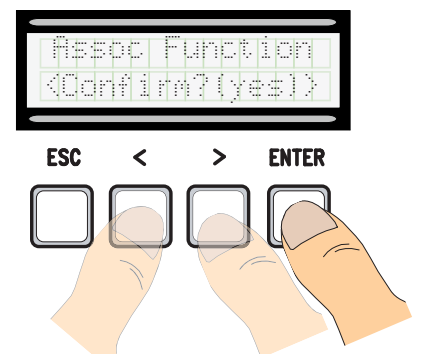
2. Select the user name for which you want to change the function and press ENTER to confirm.



3. Select the new function to relate to the user. Press ENTER to confirm.



4. Select [Confirm? (Yes)] and press ENTER to confirm.



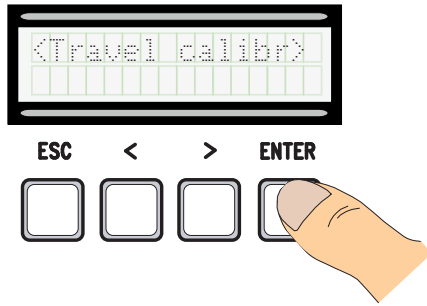
Travel calibration

⚠ Before calibrating the gate run, check that the maneuvering area is free from any obstruction and that there are both opening and closing mechanical stops.

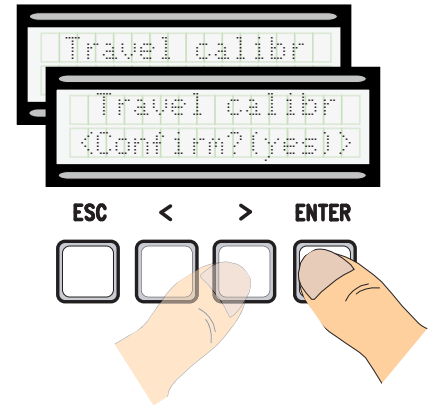
⚠ The mechanical end-stops are obligatory.

Important! During the calibration, all safety devices will be disabled except for the PARTIAL STOP one.

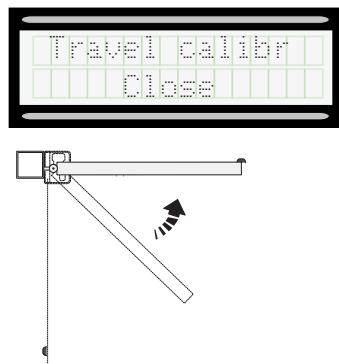
1. From the [ENCODER] menu, select [Travel calibr]. Press ENTER to confirm



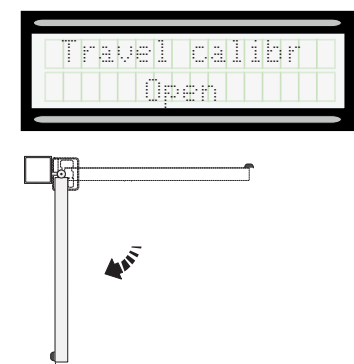
2. Select [Confirm? (Yes)] and press ENTER to confirm.



3. The gate-leaf will close until the final strike-point ...



4. ... then, the gate-leaf, will open until the final strike-point.



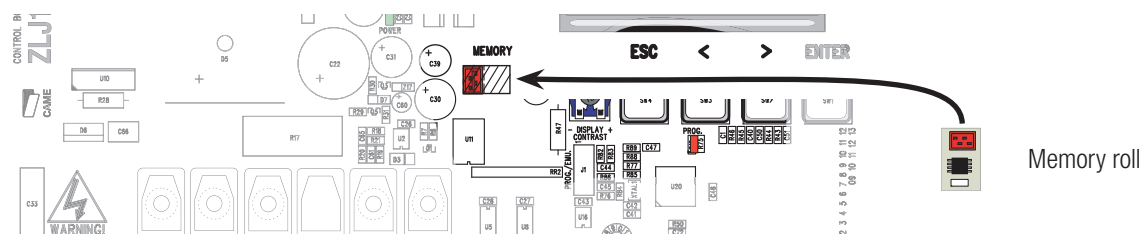
5. Once the procedure is over, the display will show [Travel calibr OK] for a few seconds.



Memory Roll Card

For memorizing user and system configuration data, then using them on another control board.

📖 After memorizing the data, it is best to remove the Memory Roll card while the control board is in operation.



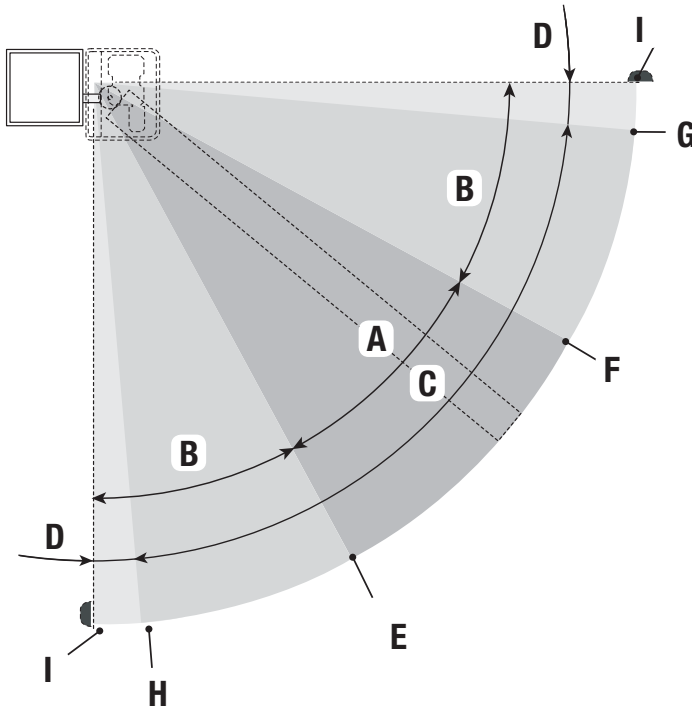
ERROR MESSAGE

📖 Error messages appear on the display.

[Encoder - ERROR], [Error!]	Broken encoder or wrong connection.
[Safety Test - ERROR]	Safety devices malfunctioning.
[End Stop - ERROR]	Malfunctioning endstop contacts
[Cycle time - ERROR]	Insufficient working time
[Safety - STOP], [C1], [C3], [C4], [C7] or [C8]	Malfunctioning safety devices or wrong connection

DIAGRAM OF THE SLOW-DOWN AND FINAL APPROACH POINTS AND FOR THE ENCODER DEVICE

The run area and slow down and approach points are tested according to the parameters set forth by Technical Standards EN 12455 and EN 12453 for compliance with the impact forces generated by the running leaves.



- A = Normal speed
- B* = Slowed-down speed
- C = Encoder intervention zone with movement inversion
- D = Encoder intervention zone with movement stopped
- E = Opening slow-down starting point [OP. SlwDwn%]
- F = Closing slow-down starting point [CL. SlwDwn%]
- G** = Closing soft-stop starting point [Acc. CL%]
- H = Opening soft-stop starting point [Acc. OP%]
- I = Final strike-point

* Minimum 600 mm from the strike plate.

** Set the final approach percentage for the function [Acc. CL%] and [Acc. OP%] from the [ENCODER] menu so as to obtain a distance of between 1 and 50 mm maximum from the final strike plate point.

DISMANTLING AND DISPOSAL

Always make sure you comply with local laws before dismantling and disposing of the product. The packaging materials (cardboard, plastic, and so on) should be disposed of as solid urban waste, and simply separated from other waste for recycling.

Whereas other components (control boards, batteries, transmitters, and so on) may contain hazardous pollutants. These must therefore be disposed of by authorized, certified professional services.

DO NOT DISPOSE OF IN NATURE!

DECLARATION OF CONFORMITY

Declaration CE - Came S.p.A. declares that this device conforms to the essential, pertinent requirements provided by directives 2004/108/EC and 2006/42/CE.

An original copy of the declaration of conformity is available on request.

English - Manual code: **FA00044-EN v. 1** - 03/2016 - © Came S.p.A.
The data and information in this manual may be changed at any time and without notice.

CAME
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