

Sliding gate operator BX series

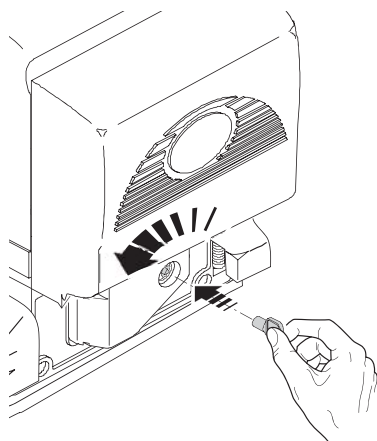
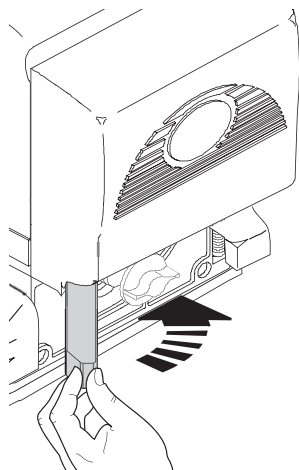
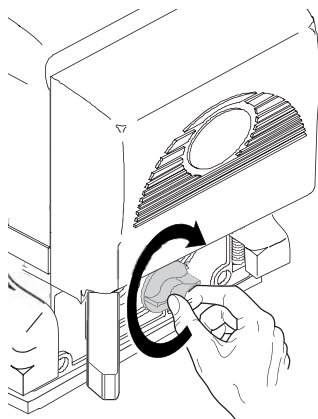
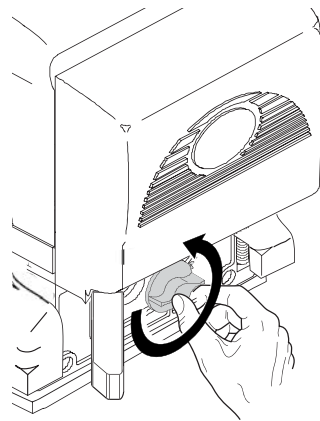
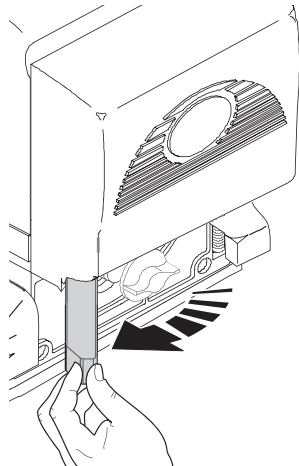
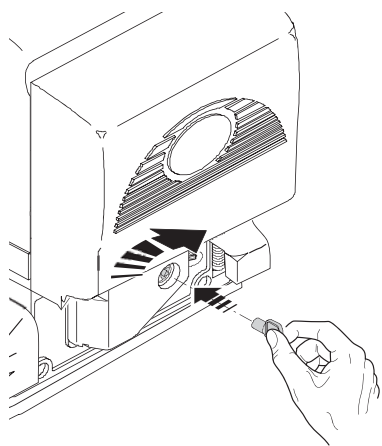
FA01137-EN



BX-10

INSTALLATION MANUAL

EN English








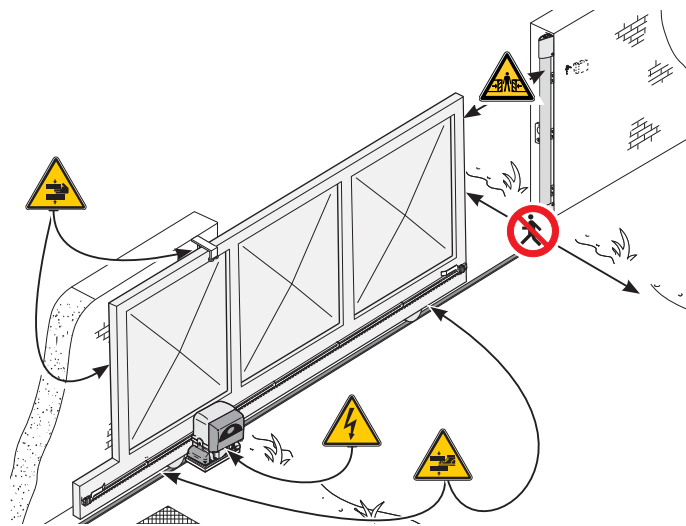
⚠ WARNING! Important safety instructions.

**Follow all of these instructions. Improper installation can cause serious bodily harm.
Before continuing, also read the general precautions for users.**

This product must only be used for its specifically intended purpose. Any other use may be hazardous. CAME s.p.A. Is not liable for any damage caused by improper, wrongful and unreasonable use. • This manual's product is defined by machinery directive 2006/42/ce as "partly-completed machinery". Partly-completed machinery is a set that almost constitutes a machine, but which, alone, cannot ensure a clearly defined application. Partly-completed machinery is only destined to be incorporated or assembled to other machinery or other partly-completed machinery or apparatuses to build machinery that is regulated by directive 2006/42/ce. The final installation must comply with european directive 2006/42/ce and european reference standards: en 13241-1, en 12453, en 12445 and en 12635 • given these considerations, all procedures stated in this manual must be exclusively performed by expert, qualified staff • the manufacturer declines any liability for using non-original products; which would result in warranty loss • keep this manual inside the technical folder along with the manuals of all the other devices used for your automation system • check that the operator's specified temperature range suits the locations where it will be installed • laying the cables, installation and testing must follow state-of-the-art procedures as dictated by regulations • if the power-supply cable is damaged, replace it immediately through the manufacturer or an authorized technical assistance center, or qualified staff, to prevent any risk • make sure the mains power supply is disconnected during all installation procedures • the operator cannot be used with gates fitted with pedestrian doors, unless its operation can be activated only when the pedestrian door is in safety position • make sure that people are not entrapped between the gate's moving and fixed parts due to the gate's movement • before installing the operator, check that the gate is in proper mechanical condition, that it is properly balanced and that it properly closes: if any of these conditions are not met, do not continue before having met all safety requirements • make sure the gate is stable and the carriage function properly and are well-greased, and that it opens and closes smoothly • the guide rail must be well-fastened to the ground, entirely above the surface and free of any impediments to the gate's movement. • The rails of the upper guide must not cause any friction • make sure that opening and closing limiters are fitted • make sure the operator is installed onto a sturdy surface that is protected from any collisions • make sure that mechanical stops are already installed. • If the operator is installed lower than 2.5 From the ground or from any other access level, fit protections and signs to prevent hazardous situations • do not fit the operator upside down or onto elements that could yield under its weight if necessary, add reinforcements to the fastening points • do not install door or gate leaves on tilted surfaces • check that no lawn watering devices spray the operator with water from the bottom up • any residual risks must be indicated clearly with proper signage affixed in visible areas. All of which must be explained to end users. • Suitably section off and demarcate the entire installation site to prevent unauthorized persons from entering the area, especially minors and children • fit cautionary signs, such as the gate plate, wherever needed and in plain sight • use proper protections to prevent mechanical hazards when people are loitering around the machinery's range of action, for example, to prevent finger crushing between the rack and pinion) • the electrical cables must run through the cable glands and must not touch any heated parts, such as the motor, transformer, 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 • all opening controls must be installed at least 1.85 M from the perimeter of the gate's working area, or where they cannot be reached from outside the gate • all switches in maintained-action mode must be positioned so that the moving gates leaves, the transit areas and vehicle thru-ways are completely visible, and yet the switches must be also away from any moving parts. • Unless the action is key operated, the control devices must be fitted at, at least, 1.5 M from the ground and unreachable by any unauthorized persons. • To pass the collision force test use a suitable sensitive safety-edge. Install it properly and adjust as needed. • Before handing over to users, check that the system is compliant with the 2006/42/ce uniformed machinery directive. • Make sure the settings on the operator are all suitable and that any safety and protection devices, and also the manual release, work properly. • Affix a permanent tag, that describes how to use the manual release mechanism, close to the mechanism. • Make sure to hand over to the end user, all operating manuals for the products that make up the final machinery.

- THE NEXT FIGURE SHOWS THE MAIN HAZARD POINTS FOR PEOPLE -

-  danger of high voltage;
-  Danger of crushing;
-  Danger of foot crushing;
-  Danger of hand entrapment;
-  Do not transit through during maneuvering.



Legend of symbols

This symbol tells you to read the section with particular care.

This symbol tells you that the sections concern safety issues.

This symbol tells you what to say to the end-users.

THE MEASUREMENTS, UNLESS OTHERWISE STATED, ARE IN MILLIMETERS.

Conditions of use

Intended use

The BX-10 operator is designed to power sliding gates in residential settings.



Do not install or use unless as otherwise shown in this manual.

Limitations to use

For intensive or condominium use: max gate weight 800 kg with max gate length 20 m.

Description

Operator

This product is engineered and manufactured by CAME S.p.A. in compliance with current safety standards.

The operator is made of a cast aluminium part inside of which operates the irreversible, electromechanical gearmotor and an ABS plastic lining which holds the electronic card and transformer

Technical features

BX-10 OPERATOR

Control panel power supply: 230V A.C. 50/60Hz

Operator power supply: 230V A.C.

Draw: 2.4A

Power: 300 W

Reduction ratio: 1/33

Thrust: 800 N

Max speed.: 10 m/min max.

Duty cycle: 30%

Protection rating: IP54

Insulation class: I

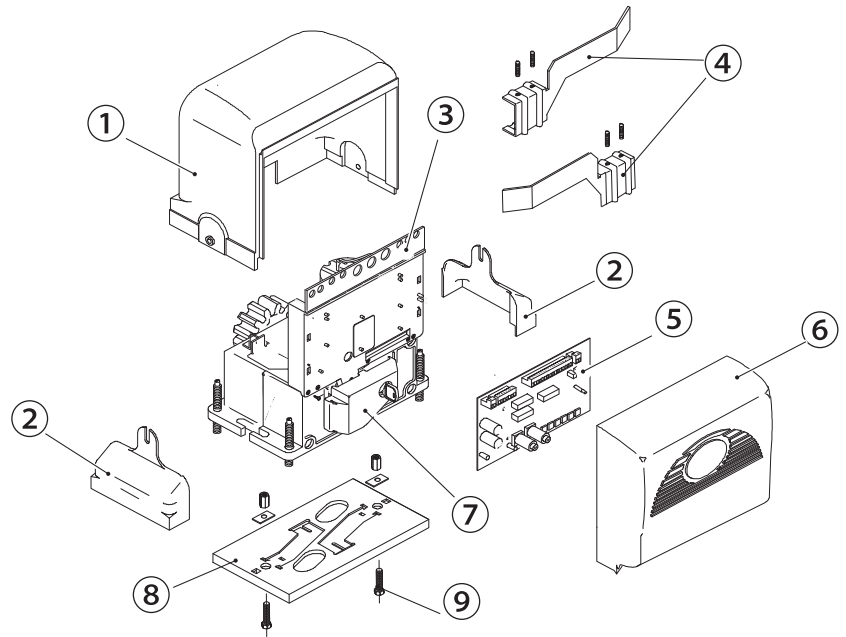
Motor's thermo-protection: 150°

Weight: 15 kg

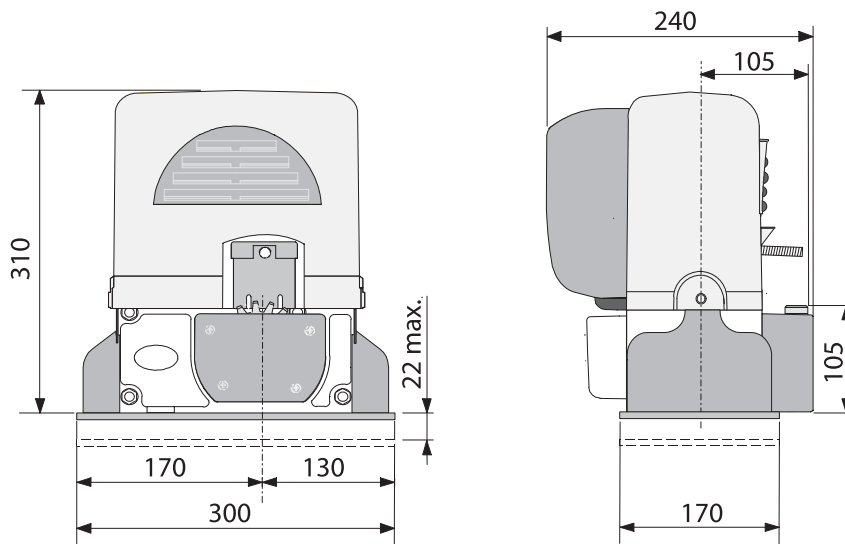


Description of parts


- 1 - Top cover
- 2 - Settings casing
- 3 - Control board support
- 4 - Endstop fins
- 5 - ZBX-10 electronic card
- 6 - Front cover to control panel
- 7 - Gearmotor release door
- 8 - Securing plate
- 9 - Securing bolt
- 10 - Securing screw plate
- 11 - Nut



Dimensions




Installation

 Installation must be carried out by expert qualified personnel and in full compliance with current regulations.

Preliminary checks

 Before installing, do the following:

- Make sure that the gate is stable, and that the castors are in good working order and properly greased.
- The ground rack must be well secured to the ground, entirely above the surface and free of any irregularities that may obstruct the gate's movement.
- The upper guide rails must not create any friction.
- Make sure that there is a closing and an opening endstops.
- Make sure that the operator is attached to a solid surface and protected from any impacts;
- Make sure you have a suitable omnipolar cut-off device with contacts more than 3 mm apart, and independent (sectioned off) power supply;
-  Check that any connections inside the container (that provide continuity to the safety circuit) are fitted with additional insulation compared to other internal live parts;
- Make sure you have suitable tubing and conduits for the electrical cables to pass through and be protected against mechanical damage.

Cable list and minimum thickness

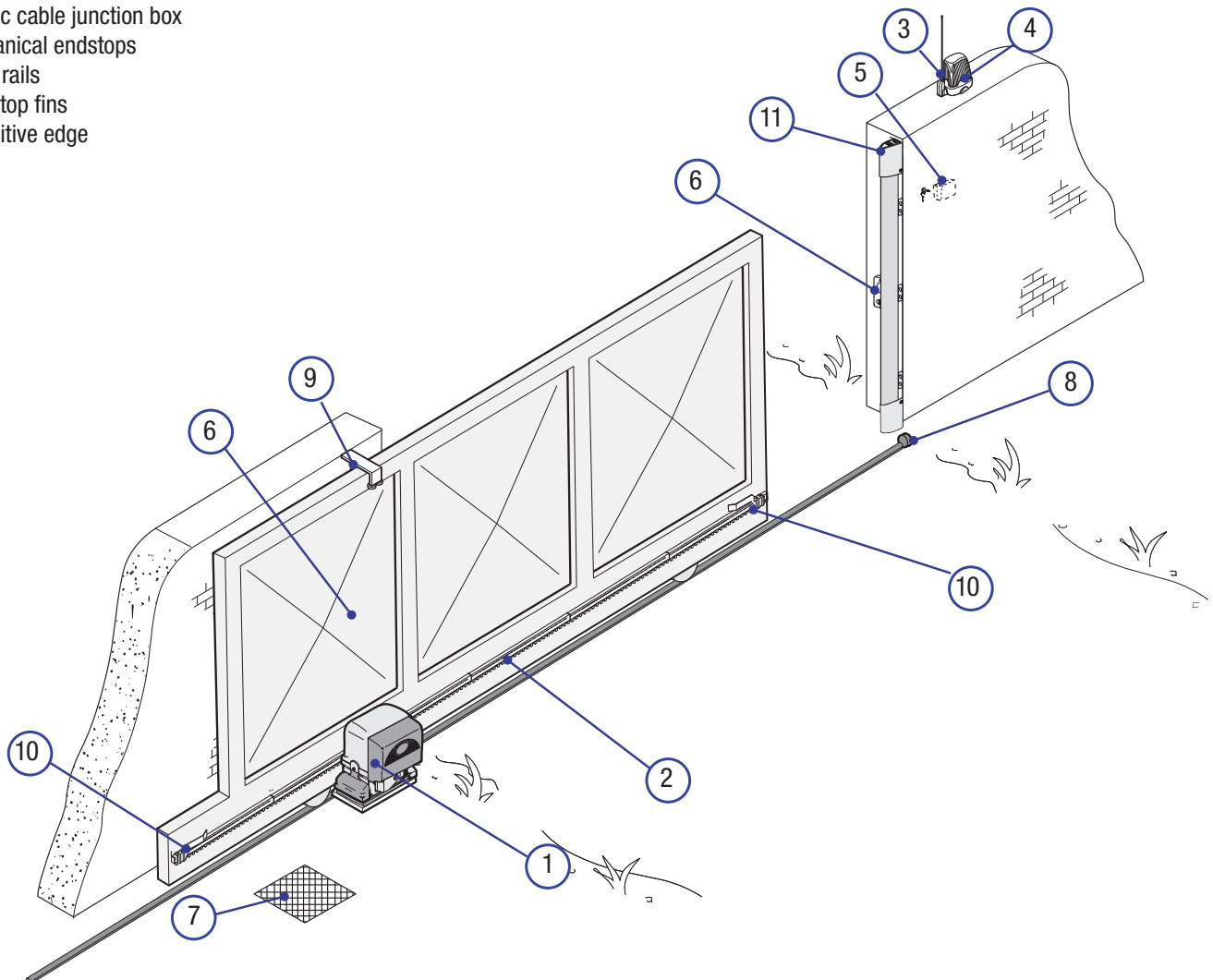
Connection	Type of cable	Length of cable 1 < 10 m	Length of cable 10 < 20 m	Length of cable 20 < 30 m
Control panel power supply 230V	FROR CEI 20-22 CEI EN 50267-2-1	3G x 1,5 mm ²	3G x 2,5 mm ²	3G x 4 mm ²
Flashing light		2 x 0,5 mm ²	2 x 1 mm ²	2 x 1,5 mm ²
Photocell transmitter		2 x 0,5 mm ²	2 x 0,5 mm ²	2 x 0,5 mm ²
Photocell receiver		4 x 0,5 mm ²	4 x 0,5 mm ²	4 x 0,5 mm ²
Accessories power supply		2 x 0,5 mm ²	2 x 0,5 mm ²	2 x 1 mm ²
Safety and control devices		2 x 0,5 mm ²	2 x 0,5 mm ²	2 x 0,5 mm ²
Antenna connection	RG58	max. 10 m		

N.B.: If the cable length differs from that specified in the table, then you must determine the proper cable diameter in the basis of the actual power draw by the connected devices and depending on the standards specified in CEI EN 60204-1.

For connections that require several, sequential loads, the sizes given on the table must be re-evaluated based on actual power draw and distances. When connecting products that are not specified in this manual, please follow the documentation provided with said products.

Standard installation

- 1) BX-10 assembly
- 2) Rack
- 3) Reception Antenna
- 4) Flashing light
- 5) Keyswitch selector
- 6) Safety photocells
- 7) Electric cable junction box
- 8) Mechanical endstops
- 9) Guide rails
- 10) Endstop fins
- 11) Sensitive edge



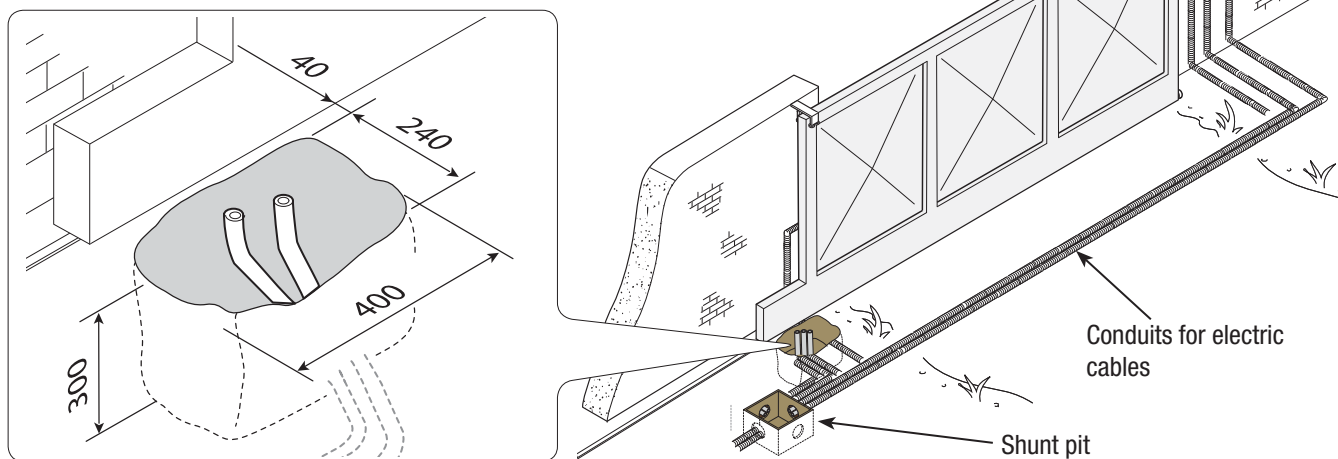
Securing the plate and installing the assembly

! The following applications are only examples, as the space for installing the ratiomotor and accessories varies according to obstructions. It is thus up to the system installer to select the most suitable solution.

- Dig a pit to the side of the gate (see measurements from diagram).

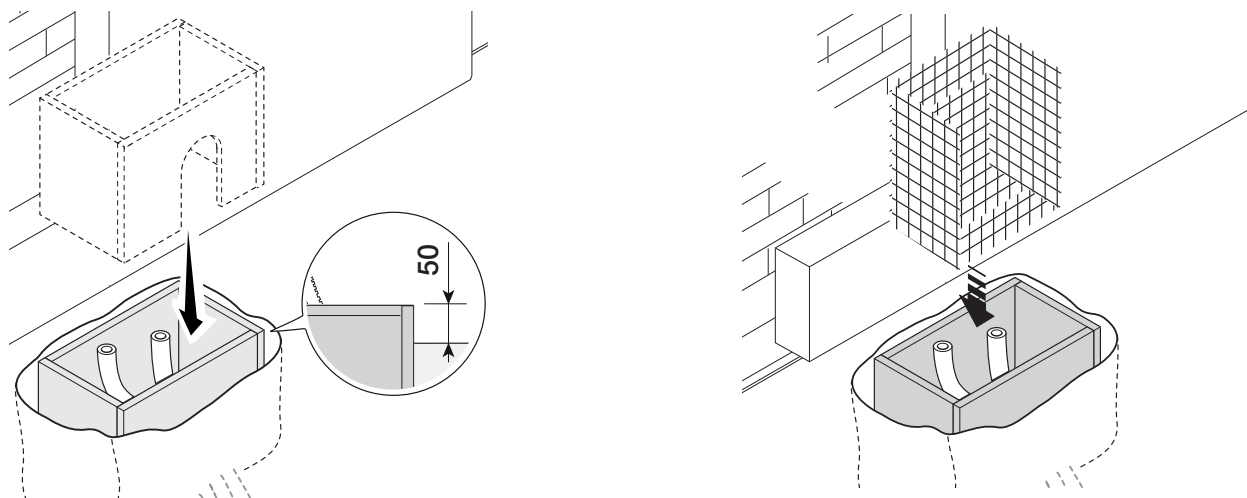
Prepare the corrugated tubes you will need when making connections coming from the shunt pit.

N.B. the number of tubes depends on the type of system and the accessories you will hook up.



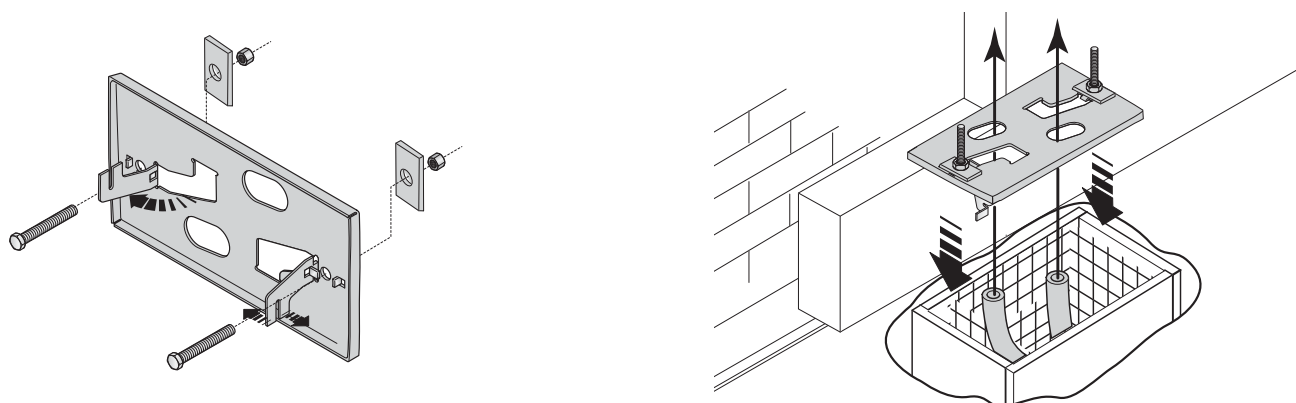
- Prepare a form box that is larger in size than the securing plate and insert it into the pit. The form box should jut 50mm above ground level.

Insert an iron grid inside the form box to reinforce the concrete.

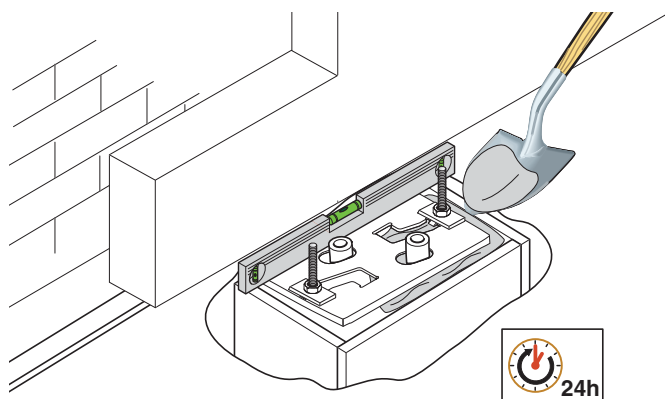
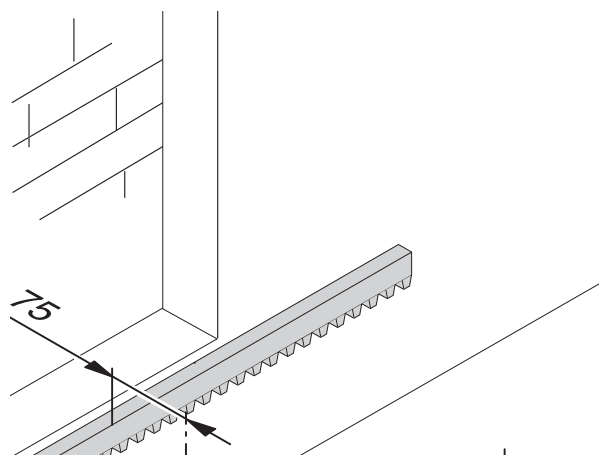


- Prepare the securing plate, insert the bolts into the holes and lock them using the supplied nuts and washers. Extract the preformed brackets using a screw driver or a set of pliers.

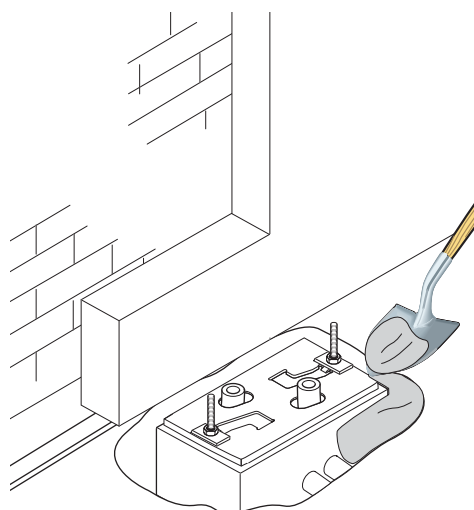
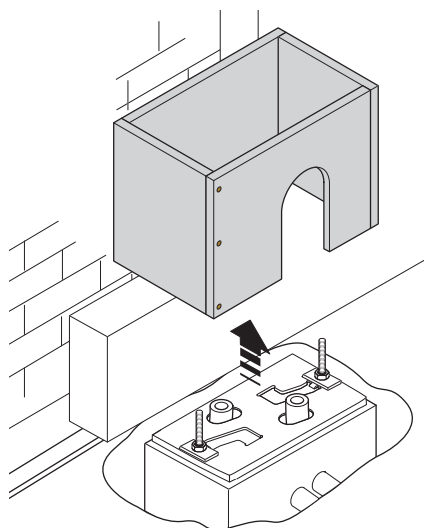
- Position the plate on top of the grid. Careful! The tubes need to pass through the opposite holes.



- To position the plate in relation to the rack please see the measurements on the diagram.
Fill the form box with cement and wait for at least 24 hours for it to solidify.

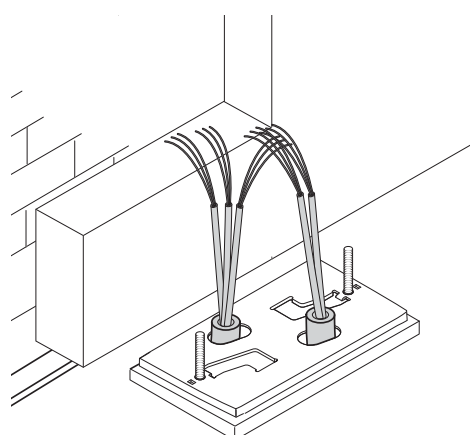
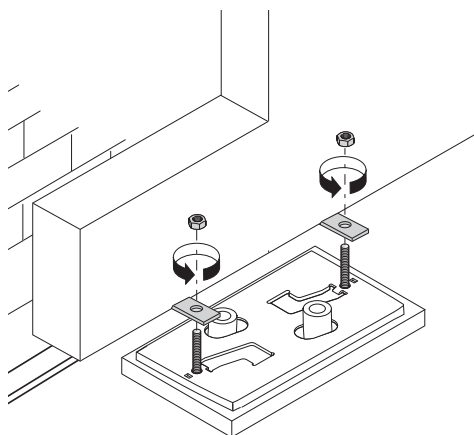


- Remove the form box, fill the pit around the cement block with soil.

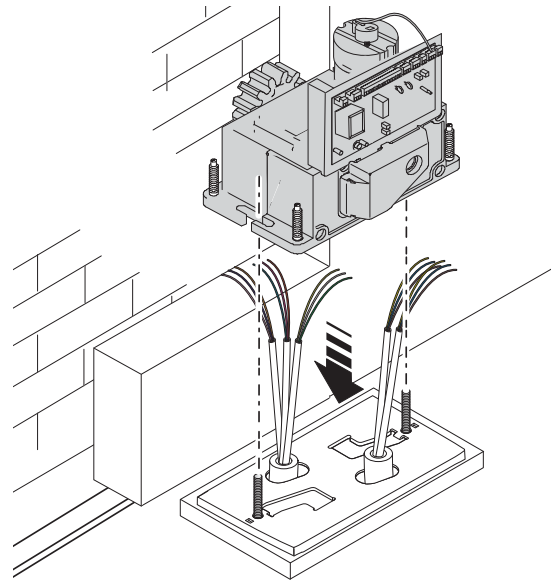
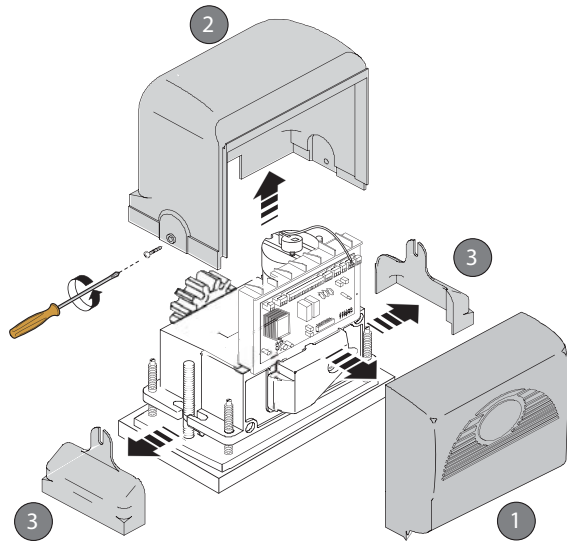


- Unbolt the nuts and washers from the bolts. The securing plate must be clean, perfectly aligned and with the bolt threads completely on the surface.

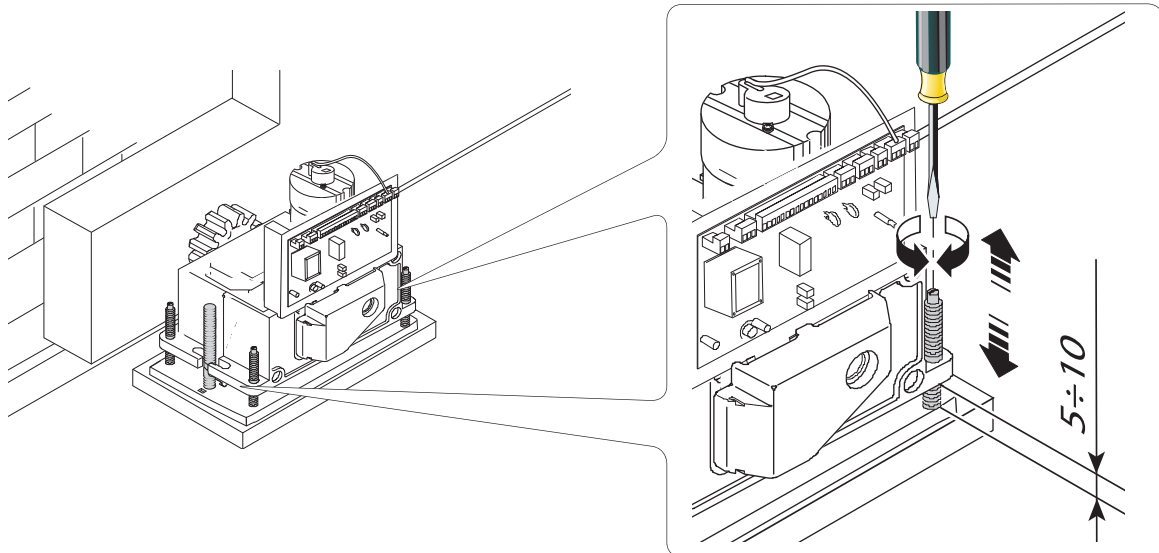
Insert the electric cables into the tubes until they exit about 400mm.



- Remove the cover from the gearmotor by loosening the side bolts, perforate the cable shafts using a screwdriver or a pair of scissors and position the gearmotor atop the plate. Careful! The electric cables must pass through the cable shafts.



- Lift the gearmotor from the securing plate by about 5 to 10mm by using the threaded steel-levelling feet to allow any later adjustments between the pinion and the rack.



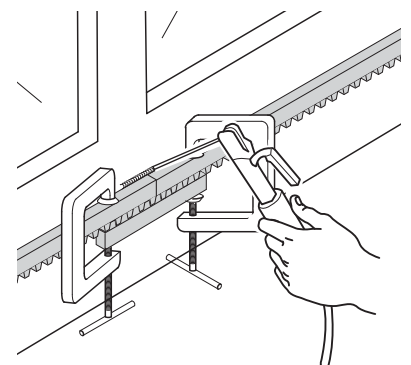
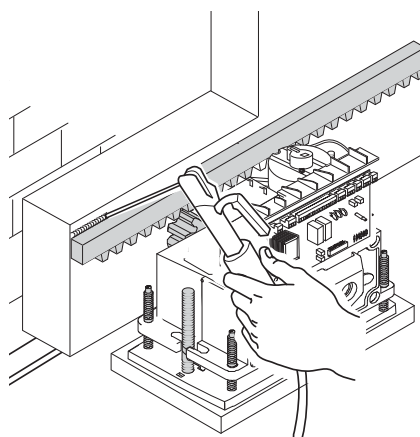
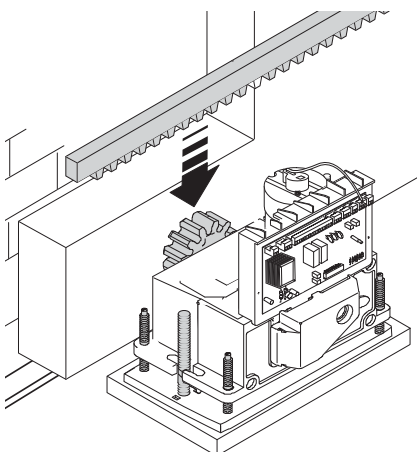
- The following illustrations for the securing the rack, are just examples of applications. It is up to the installer to choose the best solution.

Releasing the gearmotor (see paragraph on manual release). Rest the rack on the gearmotor pinion.

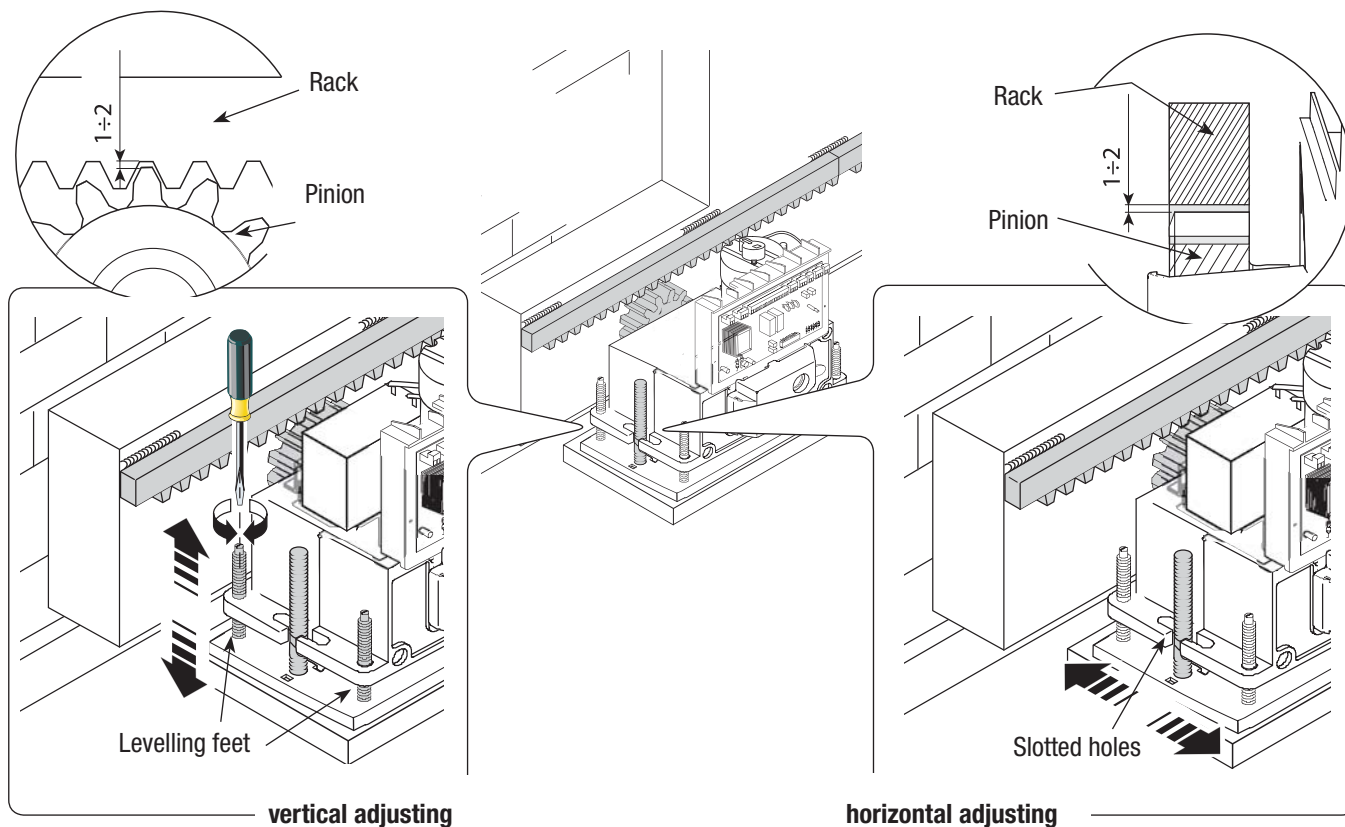
Weld or secure the rack to the gate along its entire length.

To assemble the rack modules, use an excess piece of rack and place it under the joining point, then block it using two C-clamps.

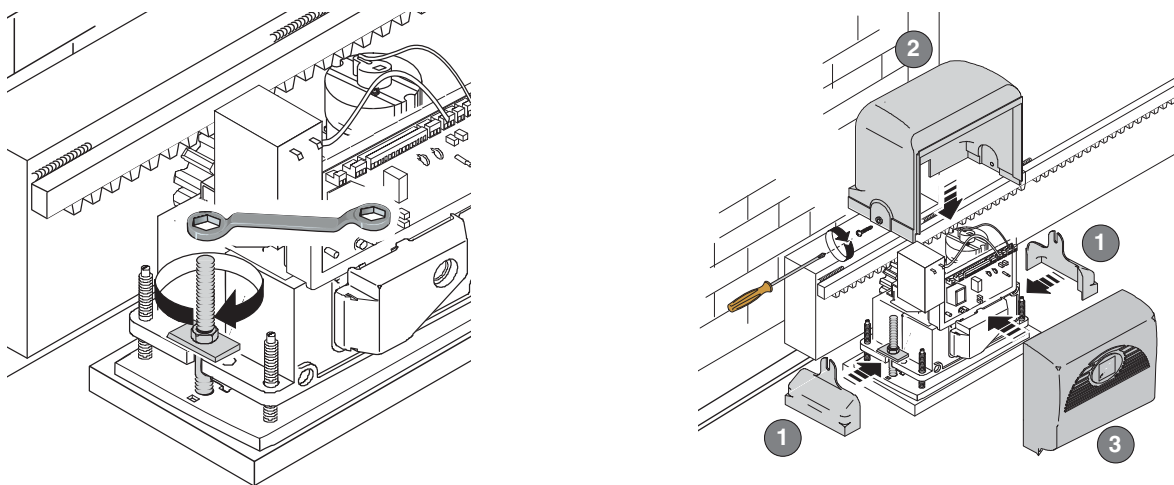
Note: if a rack is already in place, then just adjust the pinion-to-rack distance.



- Open and close the gate manually and register the pinion-to-rack distance using the threaded steel-levelling feet (for vertical adjusting) and the slotted holes (horizontal adjusting). This prevents the weight of the gate from bearing on the operator.



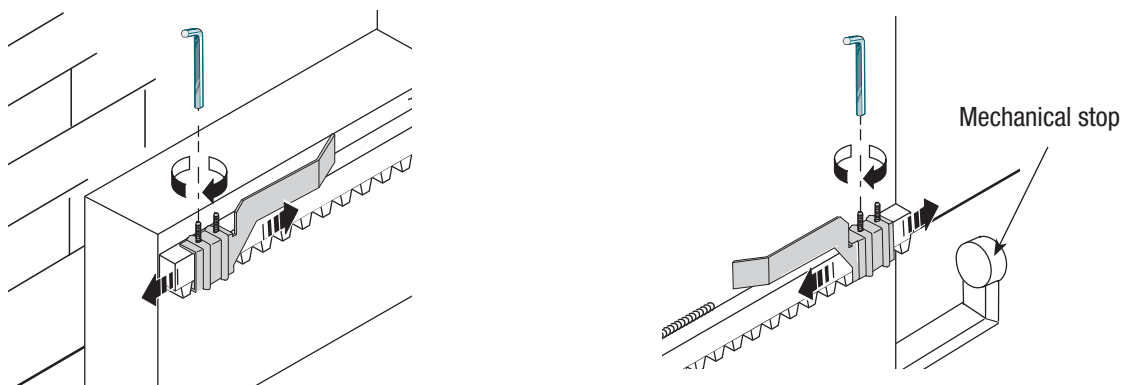
Once adjustments are finished, secure the assembly using the nuts and washers. Insert the cover after performing the adjustments and settings on the electronic card.



Mounting the endstop fins

Place the endstop fins onto the rack and secure them using a 3 mm Allen wrench. Their positioning limits the gate run.

Note: the gate should not slam against the mechanical stop, when opening or closing.



Control board

General description

Use 230V A.C. to power the electronic card using the L-N terminals, at a max 50/60Hz frequency.

Use 24V to power the command devices and accessories. Careful! The accessories cannot exceed 37W of overall power.

All connections are protected by quick-fuses – see table.

The input and output contact functions, the timing settings and users' management, are set and viewed on the display, which is run by software.

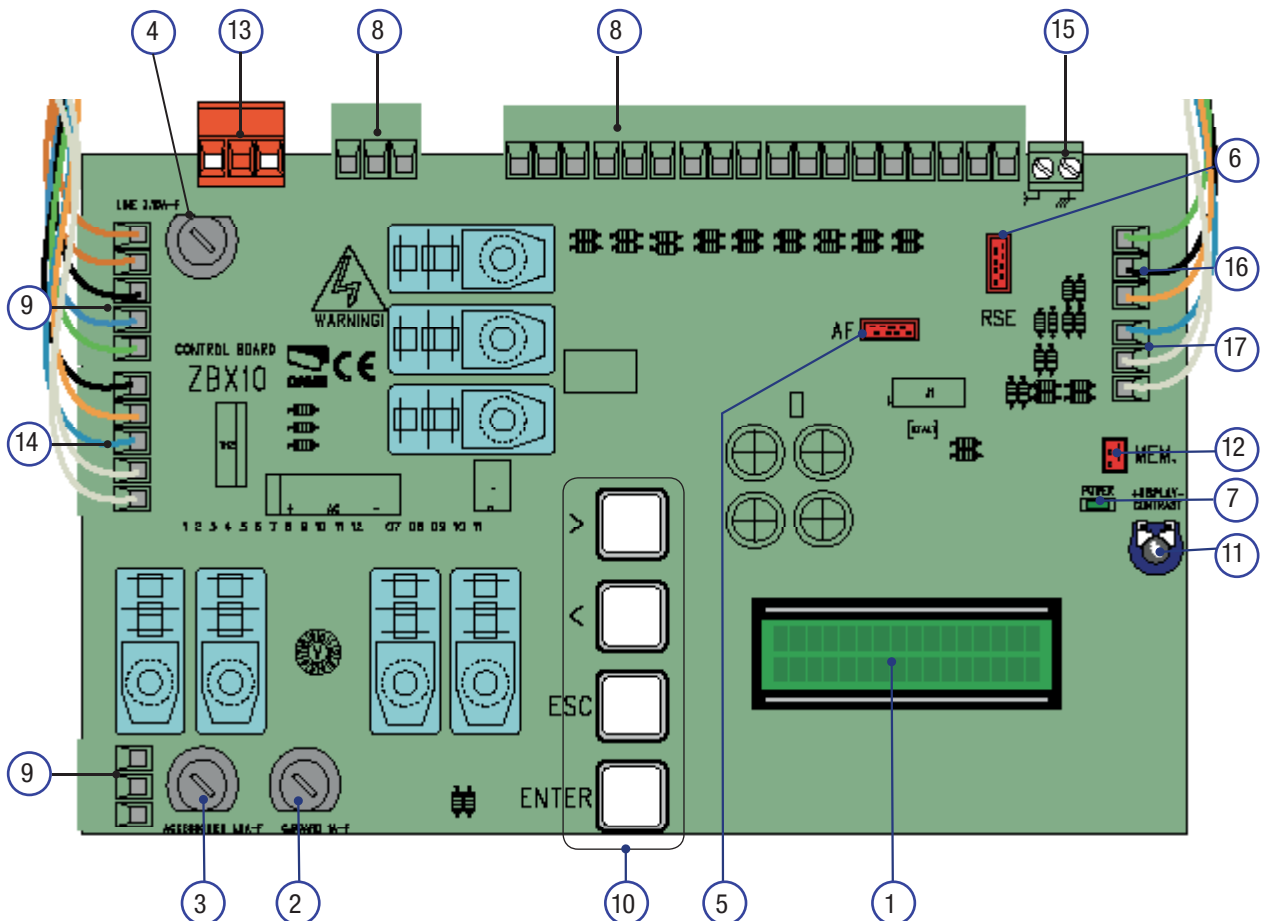
Warning! Before acting on the machinery, cut off the main power supply and disconnect any emergency batteries.

TECHNICAL INFORMATION	
Power supply	230V - 50/60 Hz
Maximum power allowed	300 W
Absorption at rest	110 mA
Maximum power for 24V accessories	37 W

FUSE TABLE ZBX-10	
To protect:	fuse:
Control board (line)	3.15A-F
Accessories	1.6A-F
Command devices	1A-F

Main components

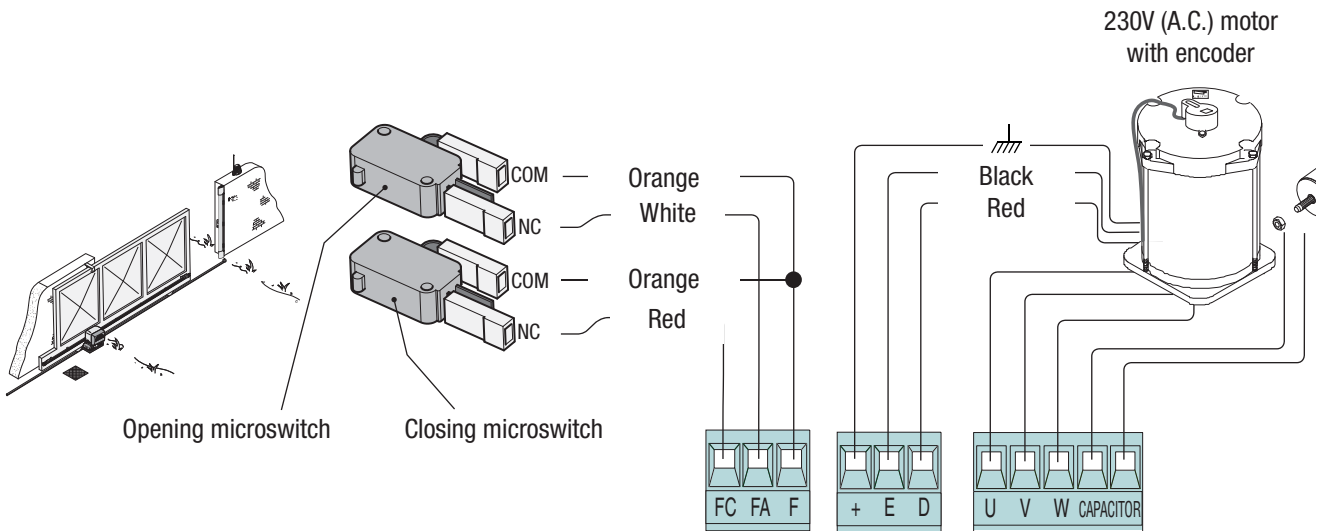
- | | |
|---|---|
| 1) Display | 10) Programming buttons |
| 2) Card fuse | 11) Display lighting adjustment trimmer |
| 3) Accessory fuse | 12) Memory roll board connector |
| 4) Line fuse | 13) Power supply terminals |
| 5) AF card coupling for remote control | 14) Motor terminals |
| 6) RSE card coupling for paired connections | 15) Antenna terminals |
| 7) 230V-power signalling LED | 16) Encoder terminals |
| 8) Connecting terminal board | 17) Endstop terminals |
| 9) Transformer-connecting terminal board | |



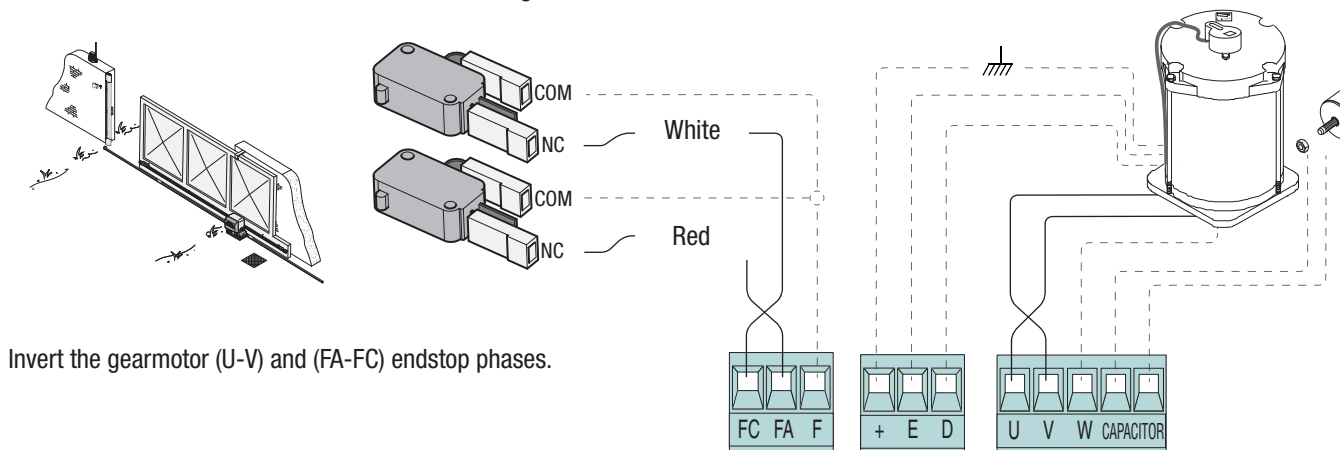
Electrical connections

Gearmotor, endstop and encoder

Description of the standard electrical connections for left-hand installations



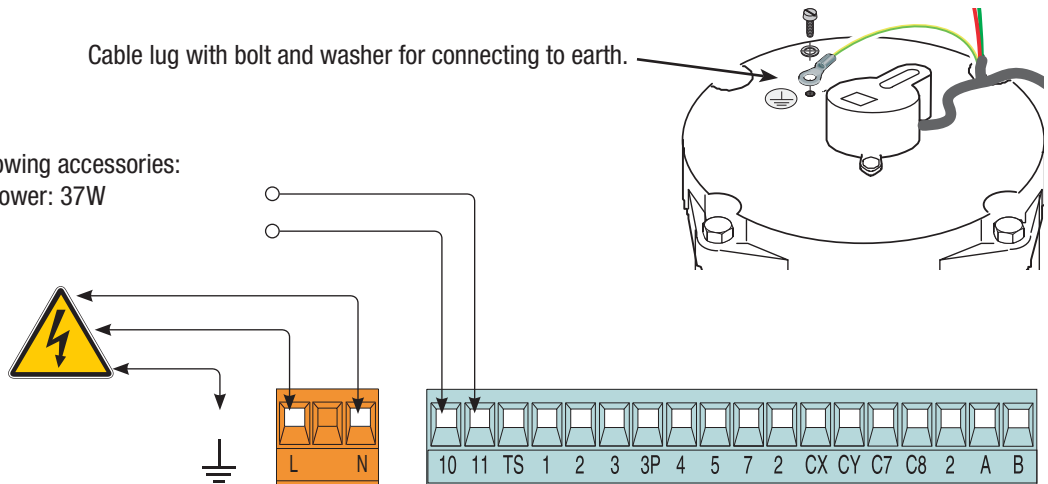
Modifications to the electrical connections for right-hand installations



Power supply for accessories

Terminals for powering the following accessories:
- 24V A.C. Maximum allowed power: 37W

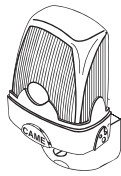
230V (A.C.) Power, 50/60Hz frequency



Warning devices

Movement flashing light

(Contact range: 230V – 25W max) - Flashes during the gate's opening and closing phases.



Cycle lamp: (contact rating: 230V – 60W max.)

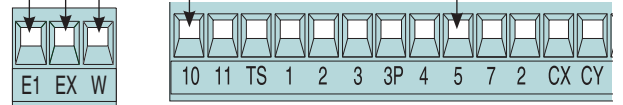
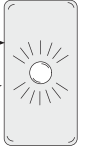
It lights up the driving area and stays on from the moment the gate begins to open until it is fully closed (including the automatic closing time). If automatic closing is not activated, the lamp stays on only during movement or for a set time of 5 minutes if used as a courtesy lamp.



Open-gate status light

(contact range: 24V – 3W max)

- Signal that gate is open; turns off when gate is closed.



Command and control devices

Stop button (N.C. contact) - Gate stop button. Excludes automatic closing.

For motion to resume, press the command button or the remote control button.

N.B.: if contact is unused, select OFF on the "FUNCTIONS" menu.

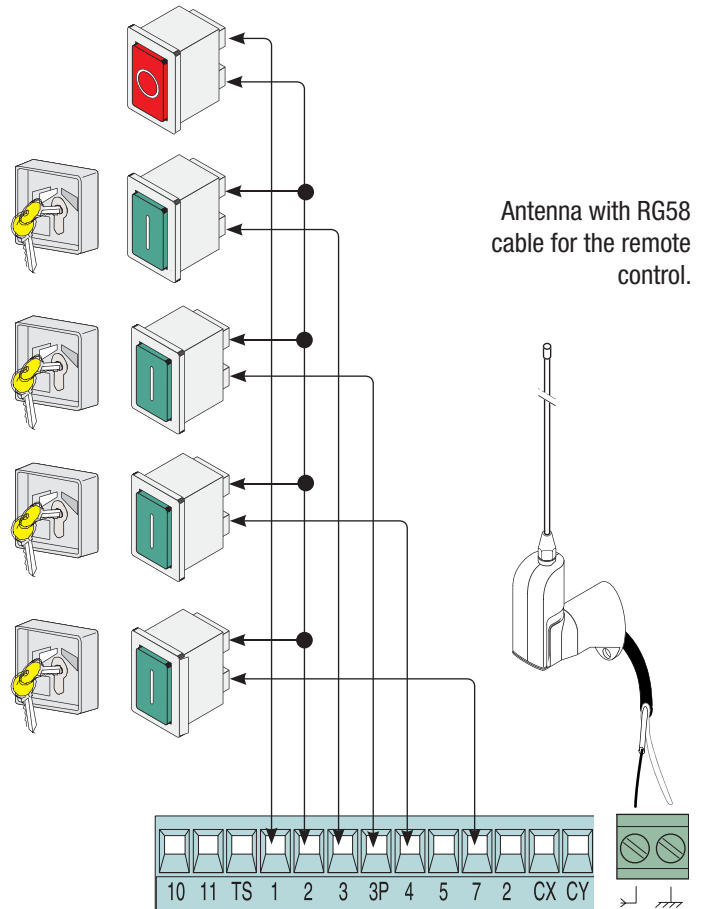
Key selector and/or opening button (N.O. contact) - Gate opening command.

Key selector and/or partial opening button (N.O. contact) - Partial gate opening for pedestrian access.

Key selector and/or closing button (N.O. contact) - Gate closing command.

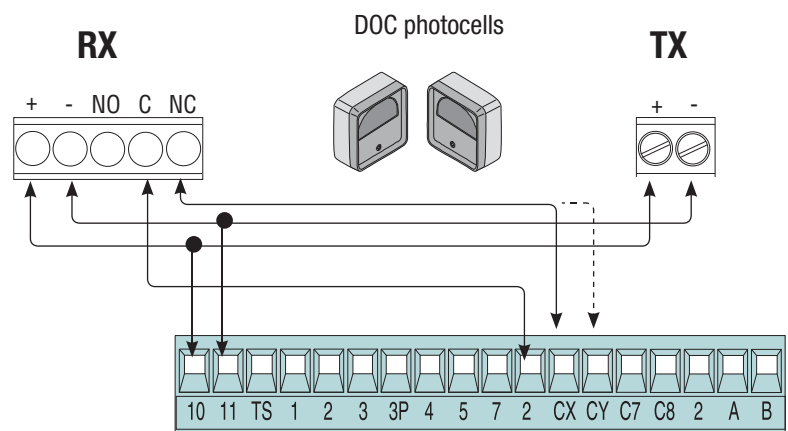
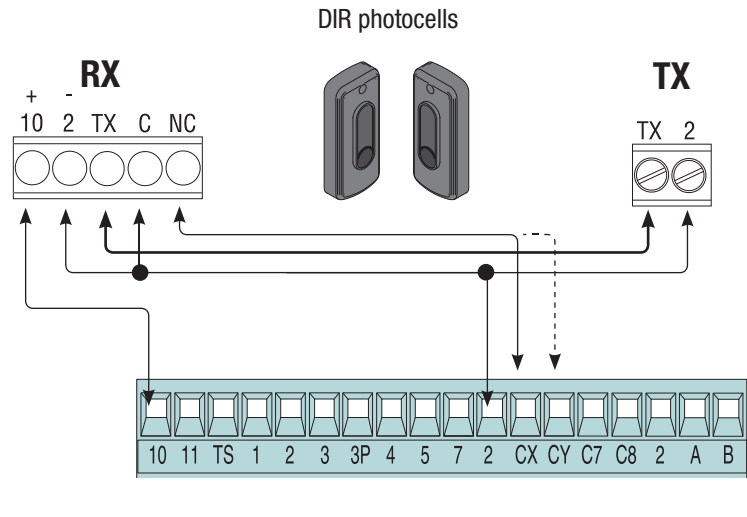
Key selector and/or commands button (N.O. contact)

Commands for opening and closing the gate – pressing the button or turning the key-switch, inverts the gate's movement or stops it depending on how it is set on the 2-7 command in the "FUNCTIONS" menu



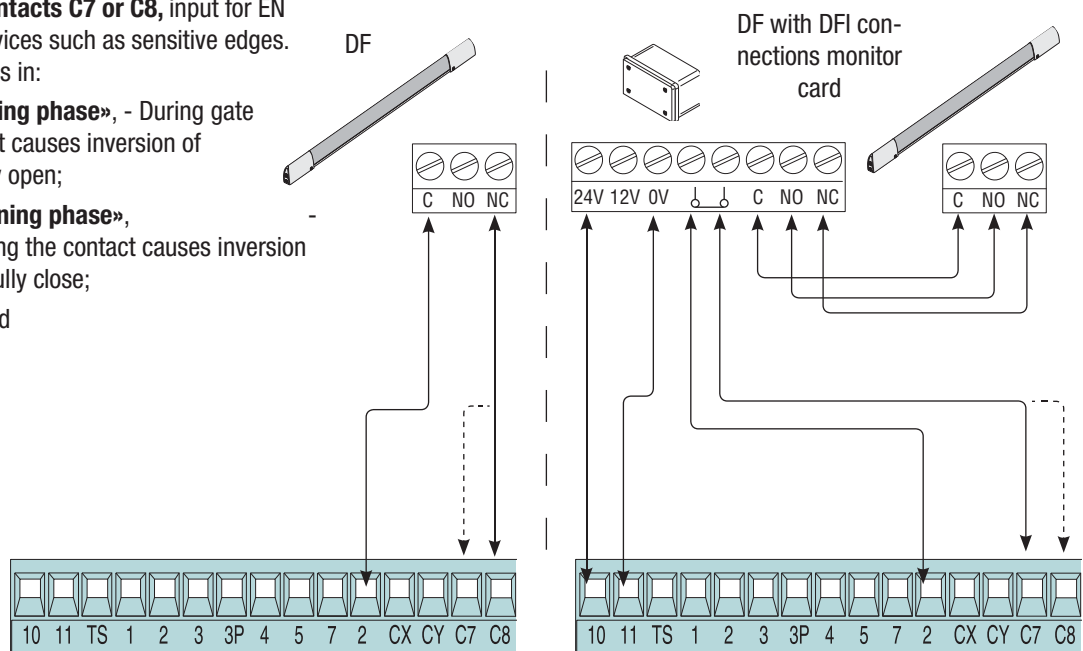
Configure either (N.C.) contacts CX or CY, input for safety devices such as photocells, that comply with EN 12978 standards. See CX or CY input functions in:

- **C1 «re-open during closing phase»**, When the gate leaf is closing, opening the contact triggers the inversion of the direction of movement until the gate leaf is fully open.
- **C2 «re-close during opening phase»**, When gate is opening, if the contact is opened it triggers an inversion of the direction until gate is fully closed;
- **C3 «partial stop»**, gate stops if moving and automatically shuts (if this functions has been selected);
- **C4 «stand-by Obstacle»**, Halts the moving gate leaves causing them to start moving again once obstacle is removed.
- Deactivated, if the contact is unused.



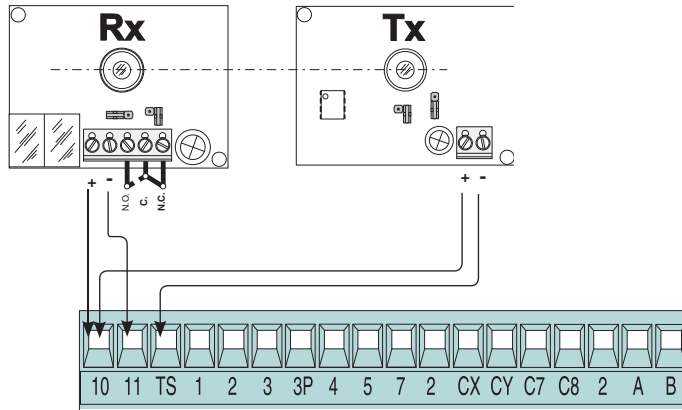
Configure either (N.C.) contacts C7 or C8, input for EN 12978 compliant safety devices such as sensitive edges. See C7 or C8 input functions in:

- **C7 «re-open during closing phase»**, - During gate closing, opening the contact causes inversion of movement until gate is fully open;
- **C8 «re-close during opening phase»**, During gate opening, opening the contact causes inversion of movement until gate is fully close;
- OFF, is the contact is unused

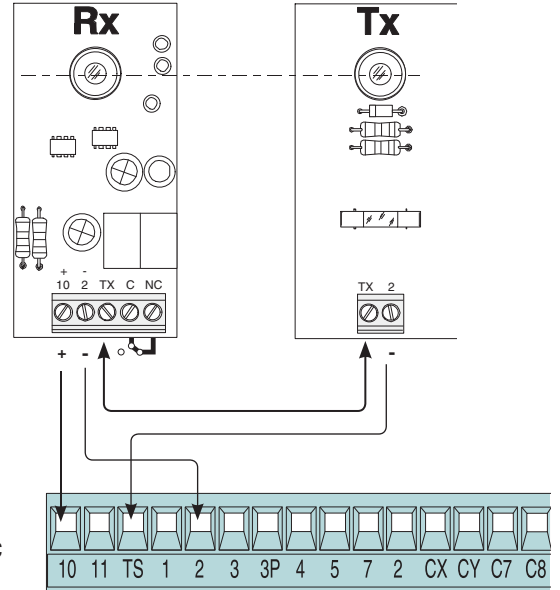


Electrical connection to operate the photocells' safety test

(DOC)



(DIR)

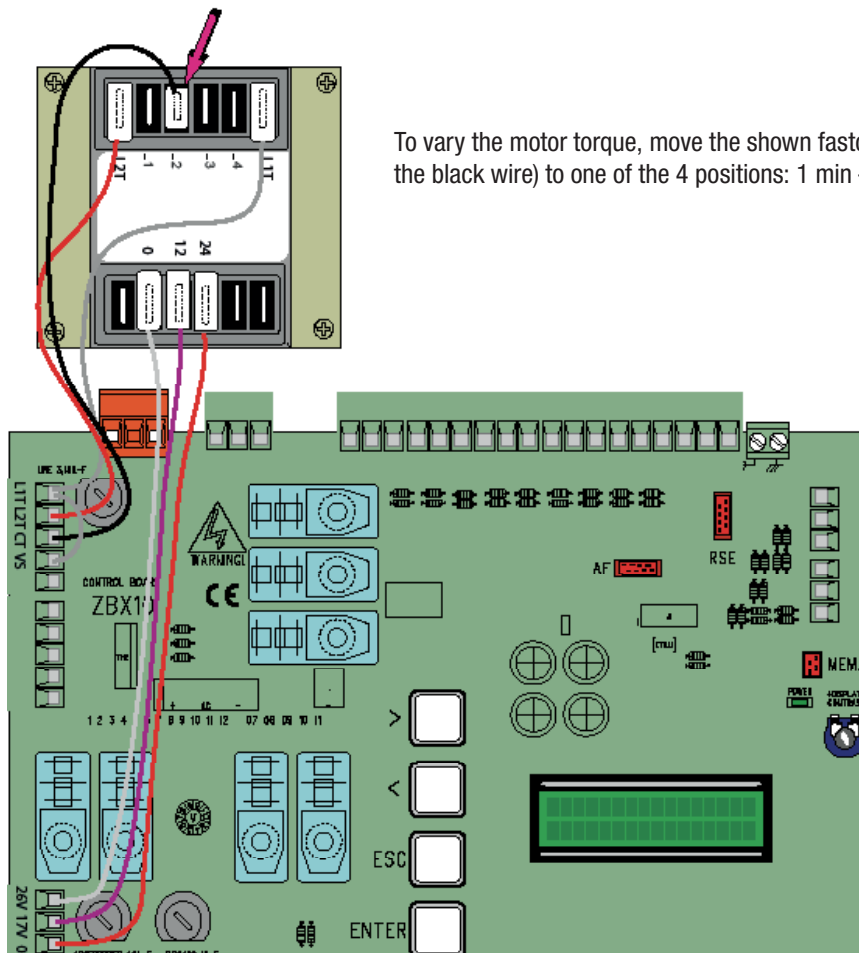


At each open/close command, the card check the photocells' efficiency. Any problems with the photocells will cause the (PROG) Led to flash on the electronic card, which cancels any commands from the radio transmitter or push-button.

Electrical connection to operate the photocells' safety test:

- The transmitter and receiver, must be connected as shown in the diagram;
- from the functions menu, select "safety tests" and select either CX or CY input/s to activate the test.

Motor torque limiter



To vary the motor torque, move the shown faston (the one with the black wire) to one of the 4 positions: 1 min – 4 max.

Programming

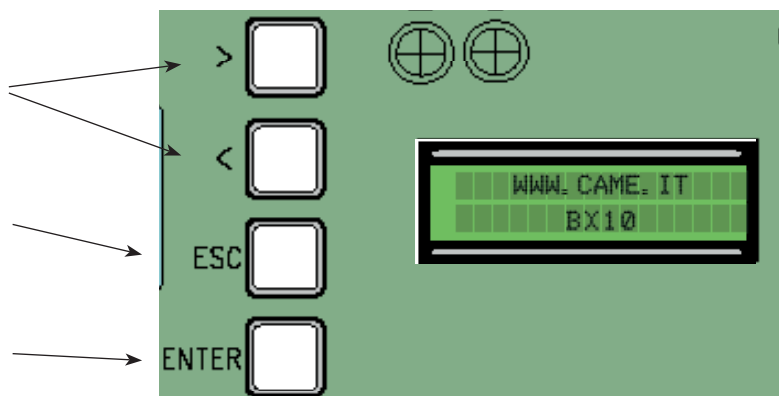
Description of display commands

The <> keys are for:
 - shifting from one menu item to another
 - increase or decrease values

The ESC key is for:
 - exiting the menu
 - cancelling modifications

The ENTER key is for:
 - entering the menu
 - confirming and memorising set values

the <...> symbols on the display are for:
 - pointing out the currently, selected item



Browsing the menu

ENTER

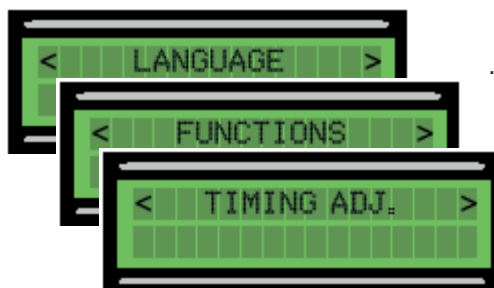
To enter the menu, keep the ENTER key pressed for at least one second.



>

<

To select a menu item, mode using the greater than-lesser than keys...



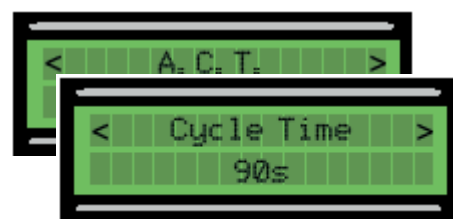
...then press ENTER

ENTER

>

<

also use the greater than-lesser than keys for the "sub-menus"...



ENTER



If the <> are on the TIME function, you may modify the value.

>

<

To increase or reduce values, use the greater than-lesser than keys...



...then press ENTER to confirm...

ENTER

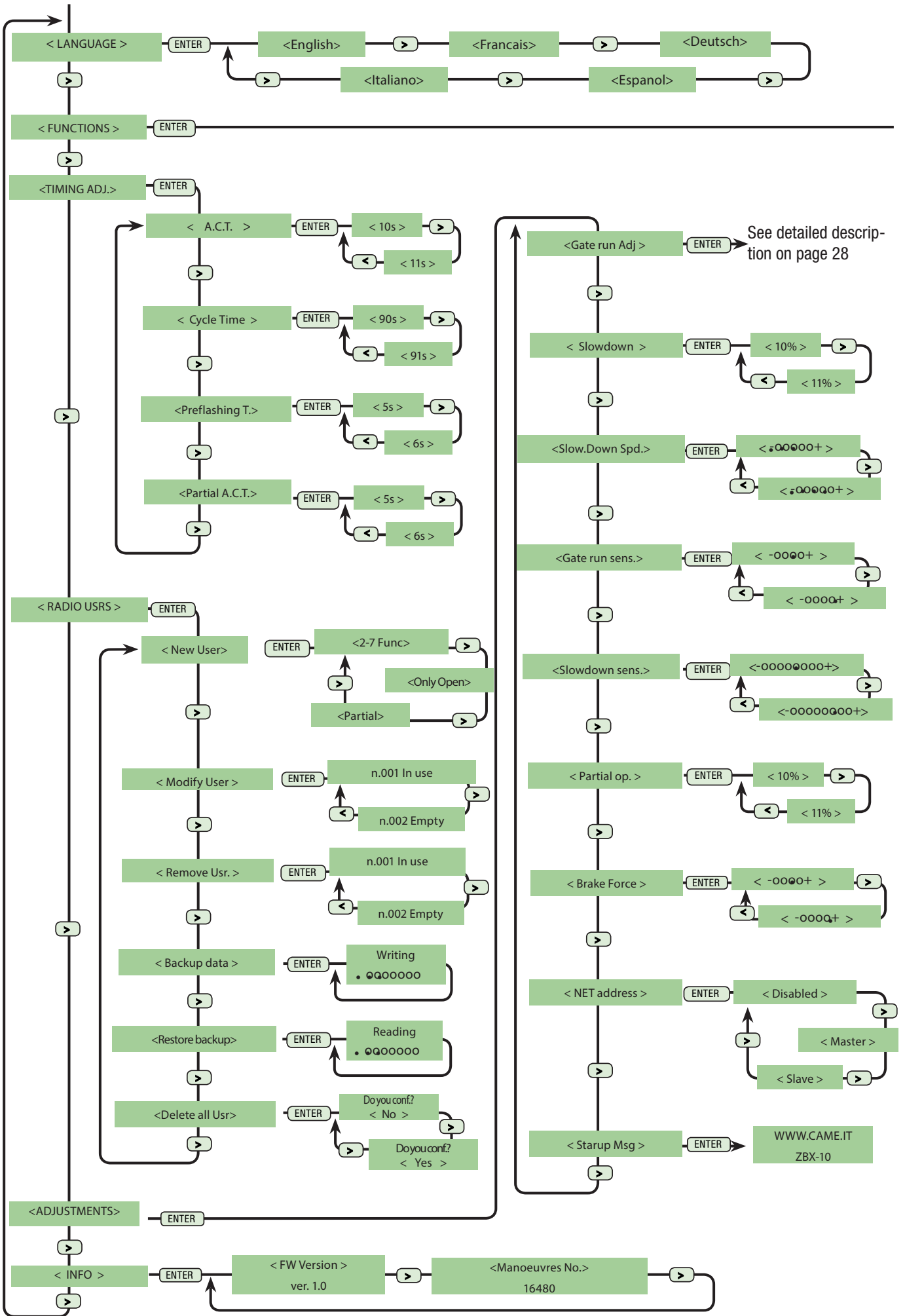
...to exit the menu, wait 30 seconds, or press ESC, until start screen is displayed.

ESC

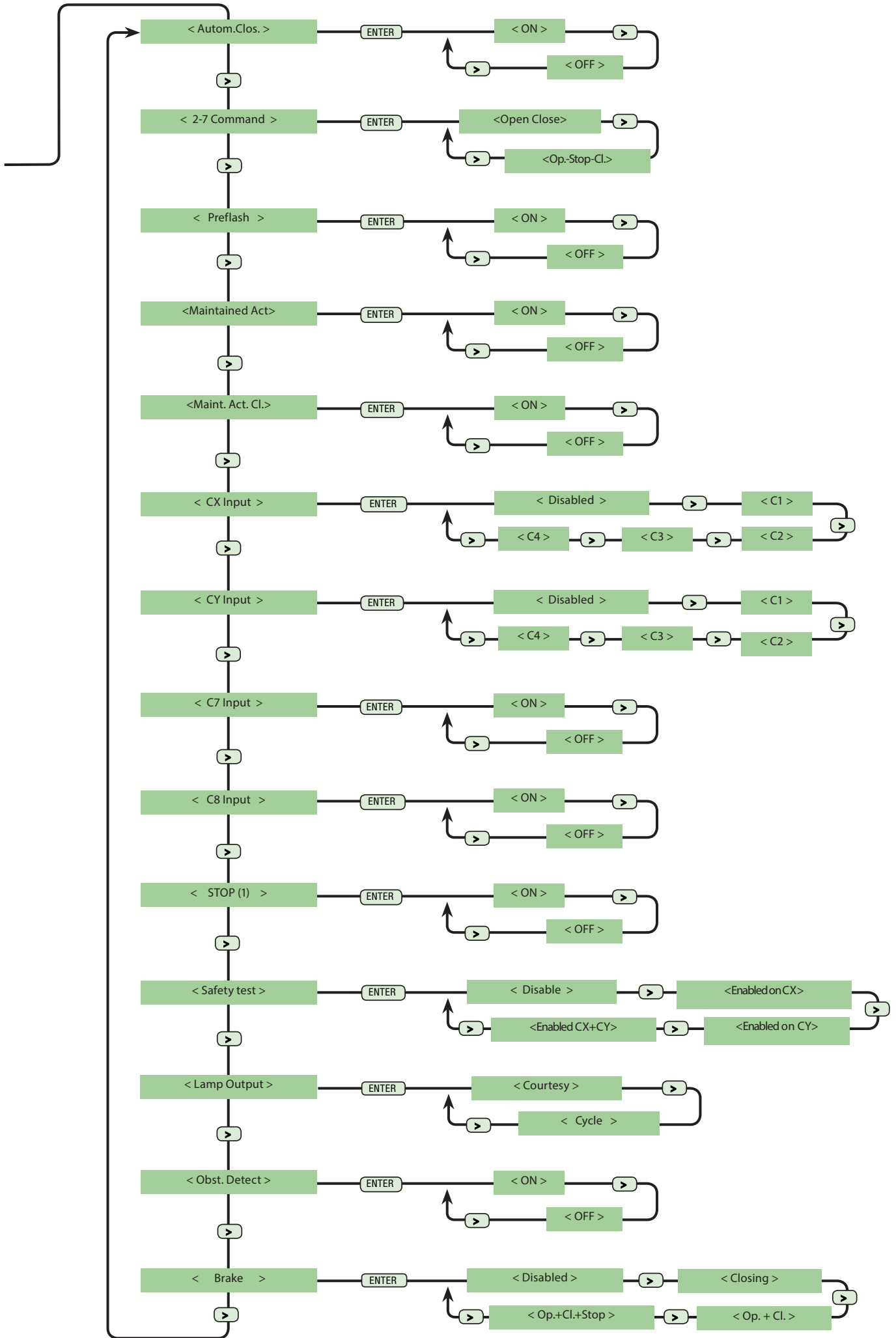


N.B.: when the menu is active, the system cannot be used.

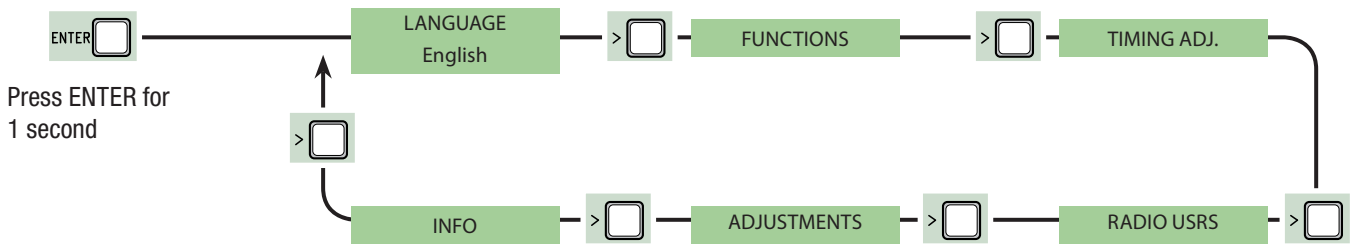
Menu structure



See detailed description on page 28

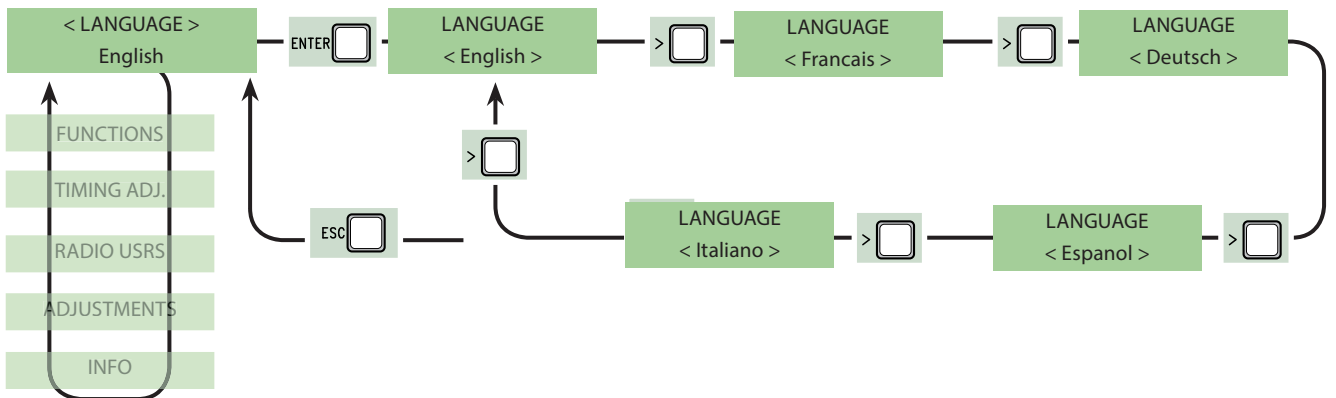


Main menu



Language menu

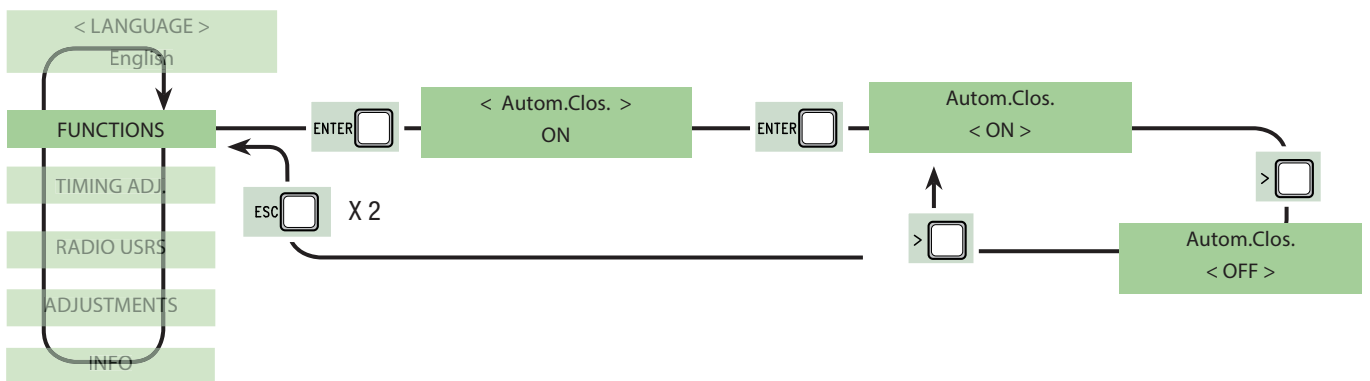
Select language: selects among the languages displayed.



Functions menu

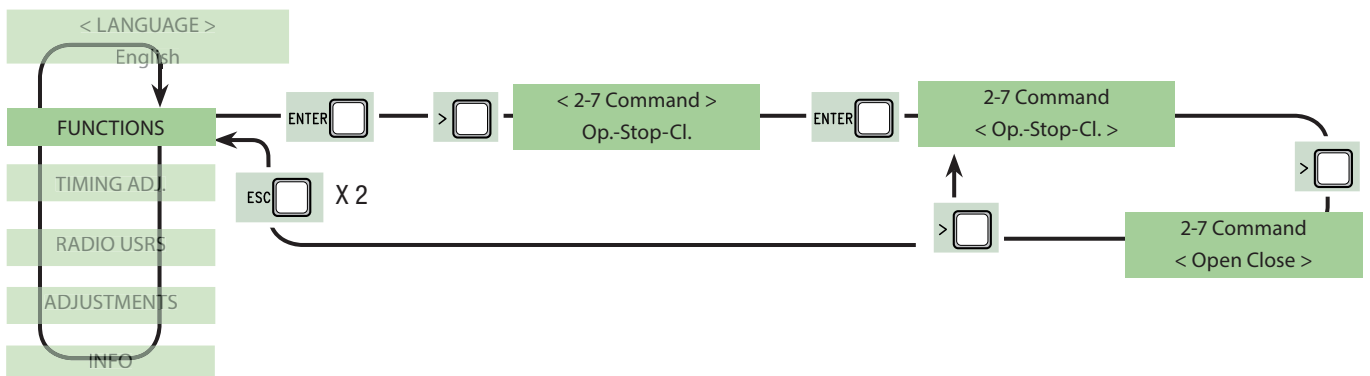
Automatic Closing: activates or deactivates the automatic closing function.

The automatic closing timer activates at each opening endpoint. The predetermined time may be adjusted, and is in any case dependent on any safety devices that may activate; and it does not activate after a total safety “stop” or during a power outage.

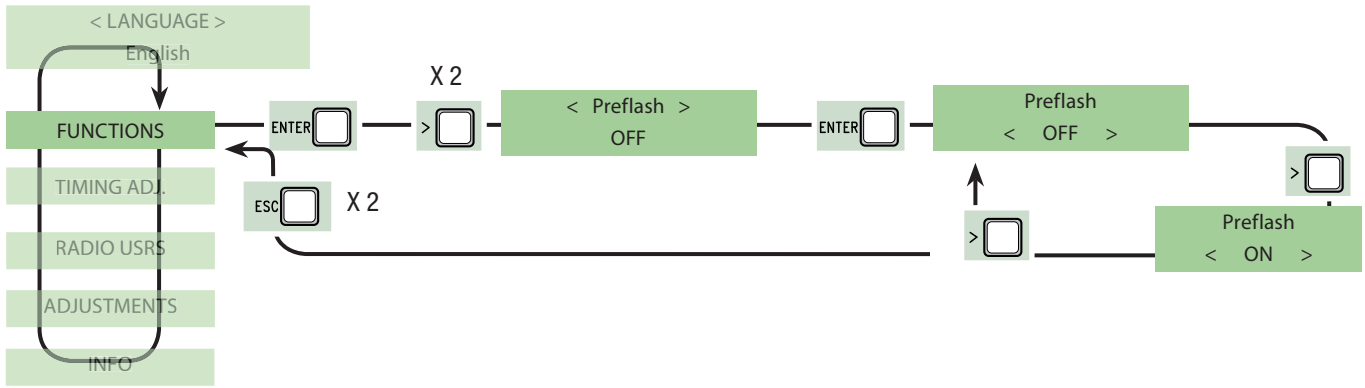


2-7 Command: sets the sequential command.

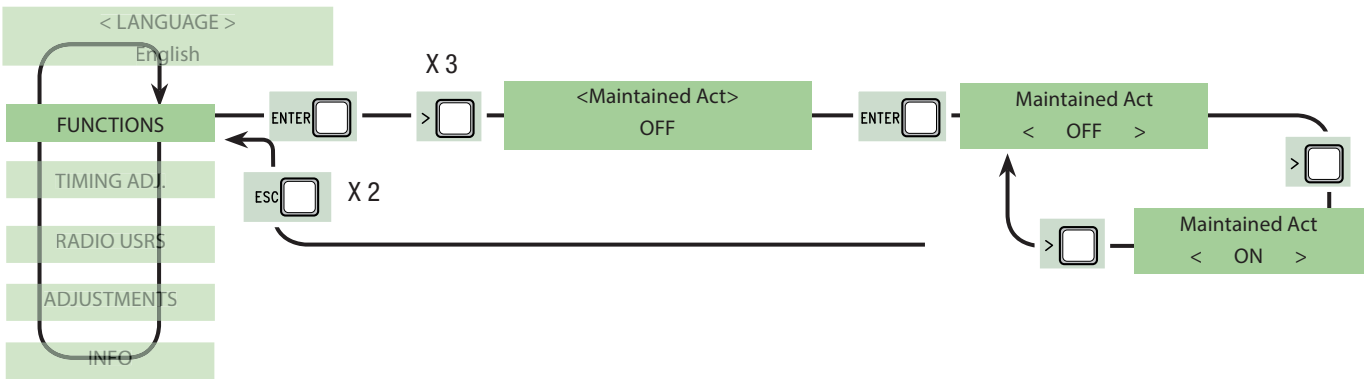
“Open-close” or “open-stop-close-stop” function with button [2-7] and radio transmitter (when radio-frequency card is inserted)



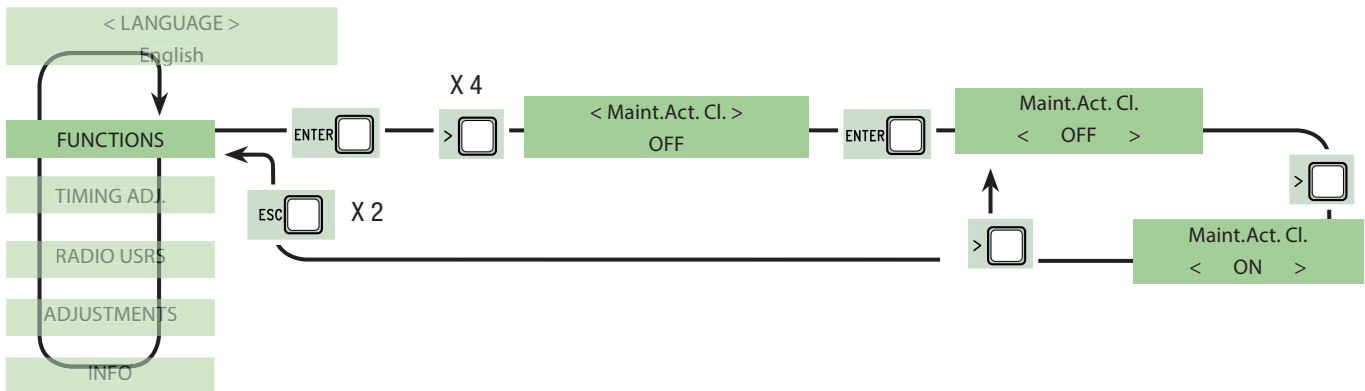
Pre-flashing: after an opening or closing command, the flashing light, connected to W-E1, starts flashing before the gate begins its run (to set the time, see “Pre-flashing timing” from the Adjust Timings menu)



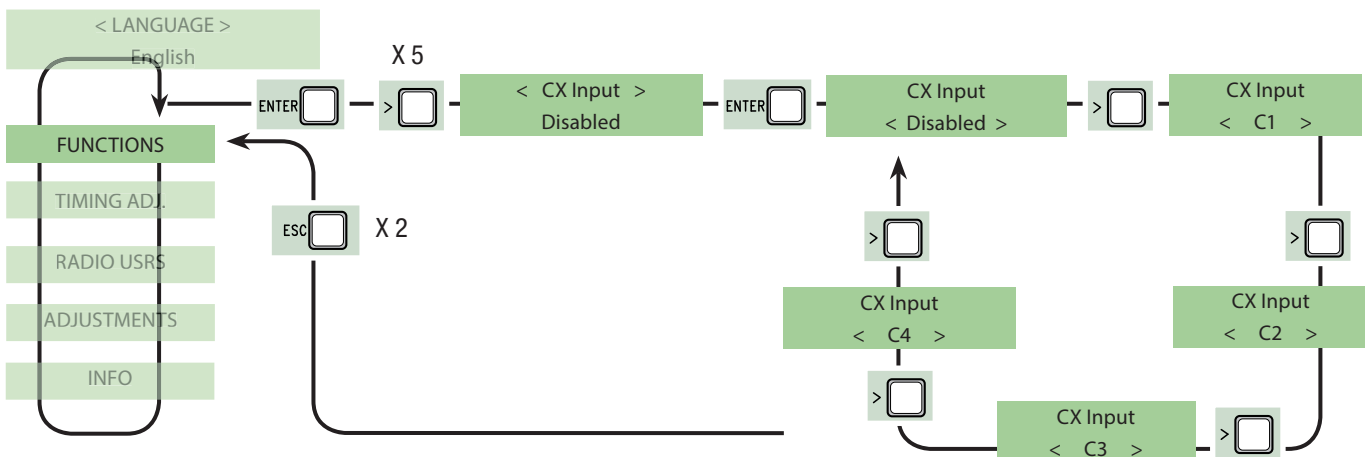
Maintained action: The gate works by keeping the button pressed (button 2-3 for opening, button 2-4 for closing, or if set to the “On Closing” function, only with button 2-4).



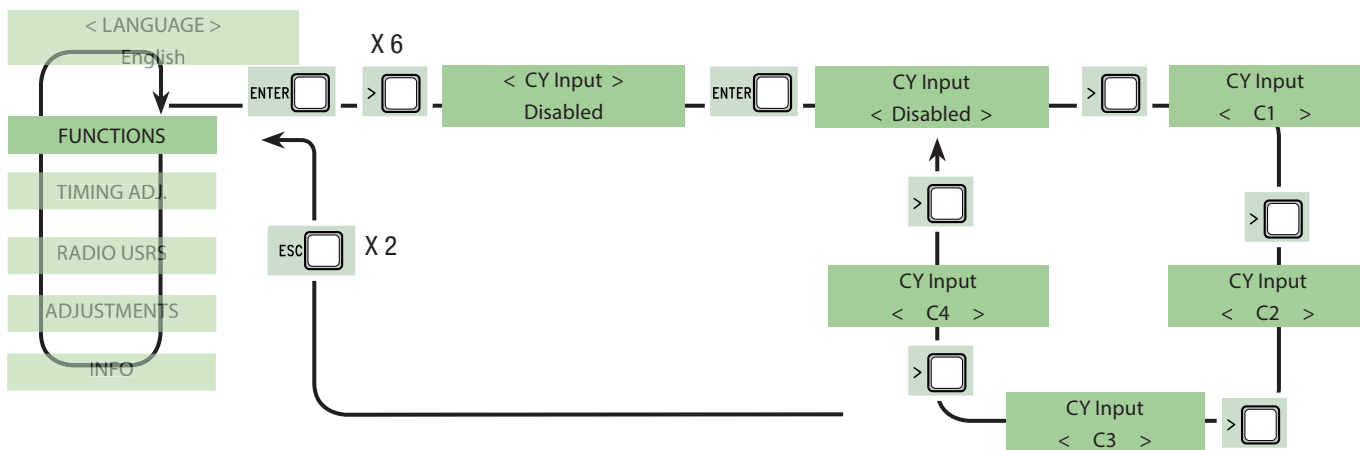
Closing maintained action: the gate closes by keeping the button pressed (only for the 2-4 closing button).



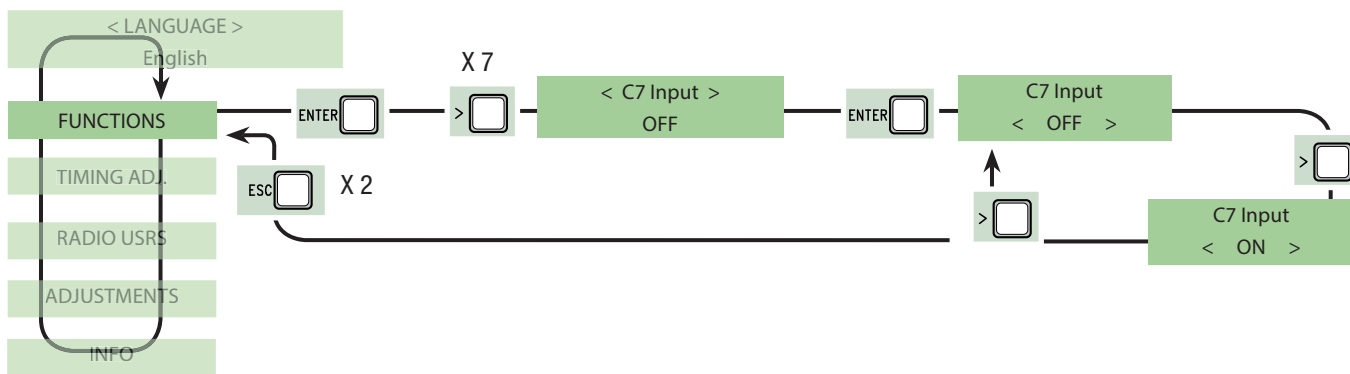
CX input: N.C. safety contact input, lets you pair up the following functions: C1 (re-opening during closing), C2 (re-closing during opening), C3 (partial stop), C4 (obstacle stall), or, deactivated



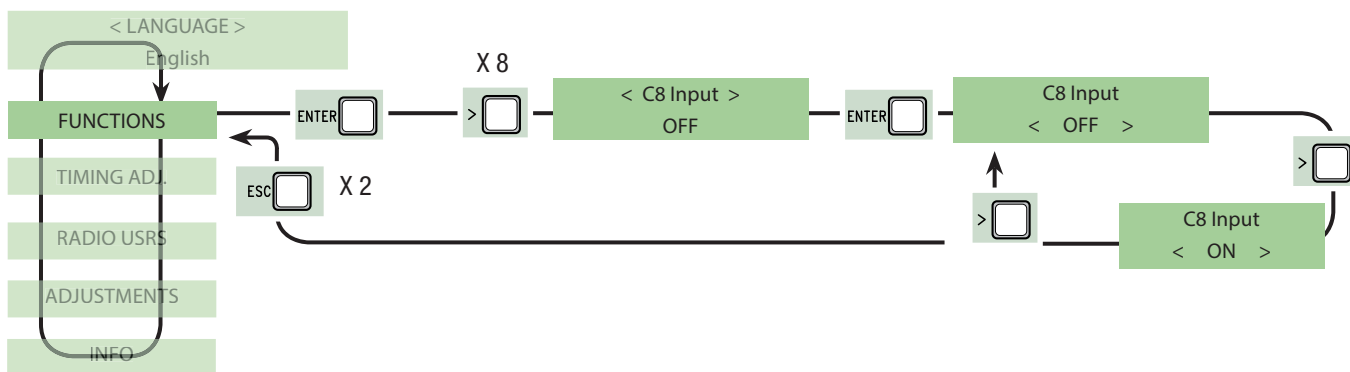
CY input: N.C. safety contact input, lets you pair up the following functions: C1 (re-opening during closing), C2 (re-closing during opening), C3 (partial stop), C4 (obstacle stall), or, deactivated



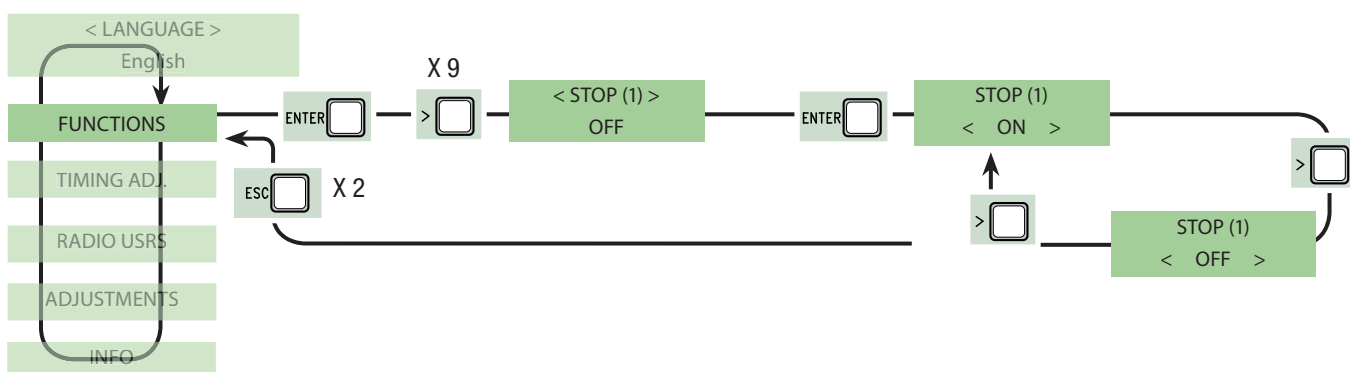
C7 input: N.C. safety contact input (re-opening when closing). This input is for EN 12978-compliant safety devices, like sensitive edges. When the gate is closing, the open contact triggers an inversion in the gate's movement until it is fully opened.



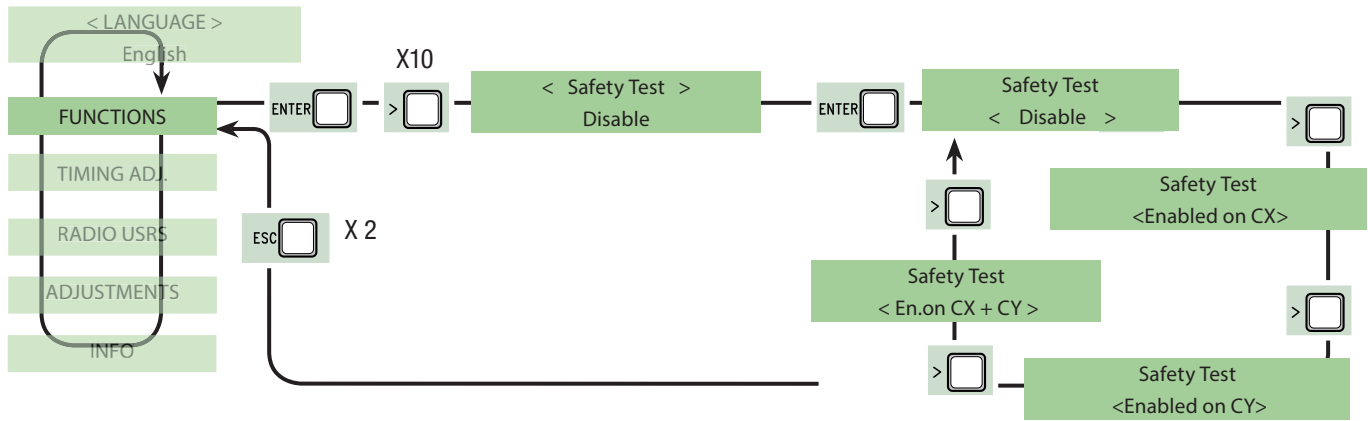
C8 input: N.C. safety contact input (re-closing during opening). This input is for EN 12978-compliant safety devices, like sensitive edges. When the gate is opening, the open contact triggers an inversion in the gate's movement until it is fully closed.



STOP (1): this function stops the gate and consequently excludes any automatic closing cycle; for movement to resume, you need to use the keypad or transmitter. Insert safety device on [1-2]; is unused, select "OFF" and confirm with ENTER.

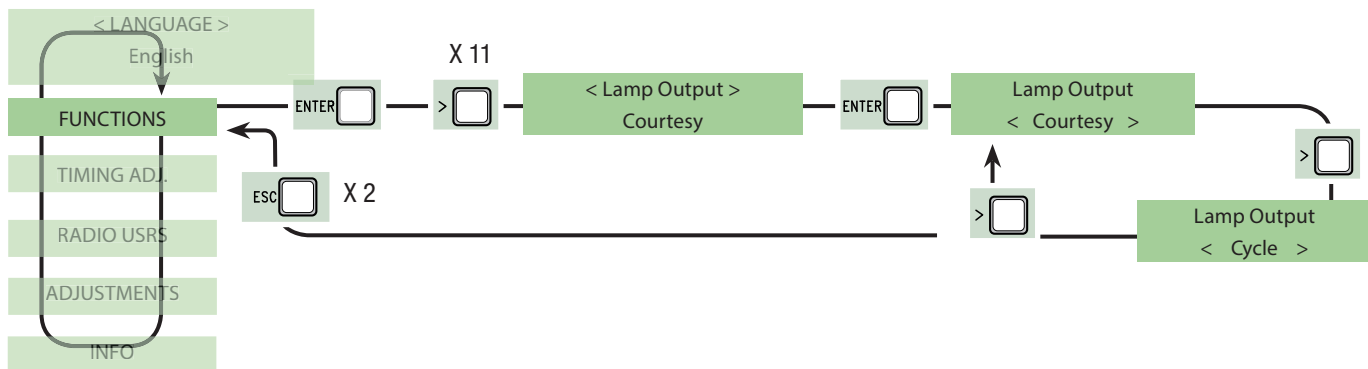


Safety test: Allows the card to check the efficiency of any safety devices (i.e. photocells) after every opening or closing command.

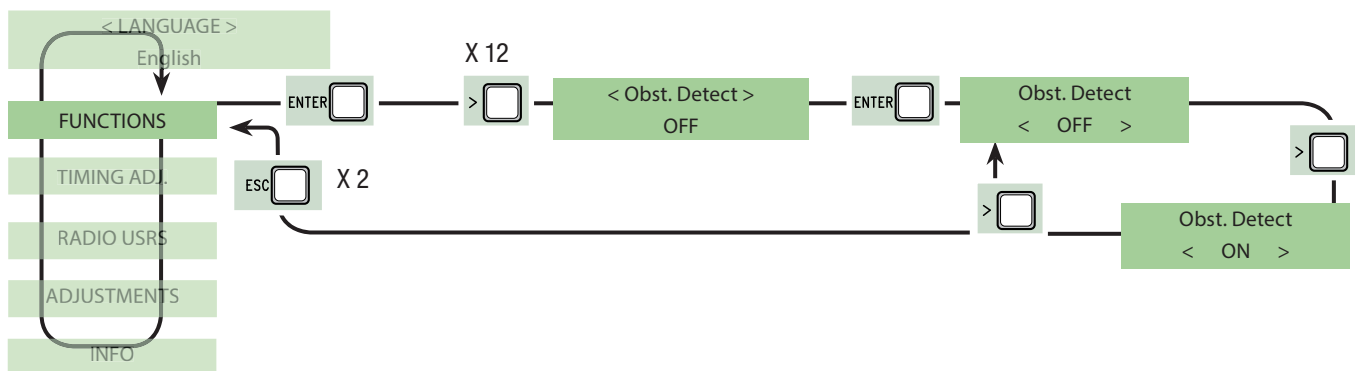


Lamp output: to configure the lamp connected to EX-W:

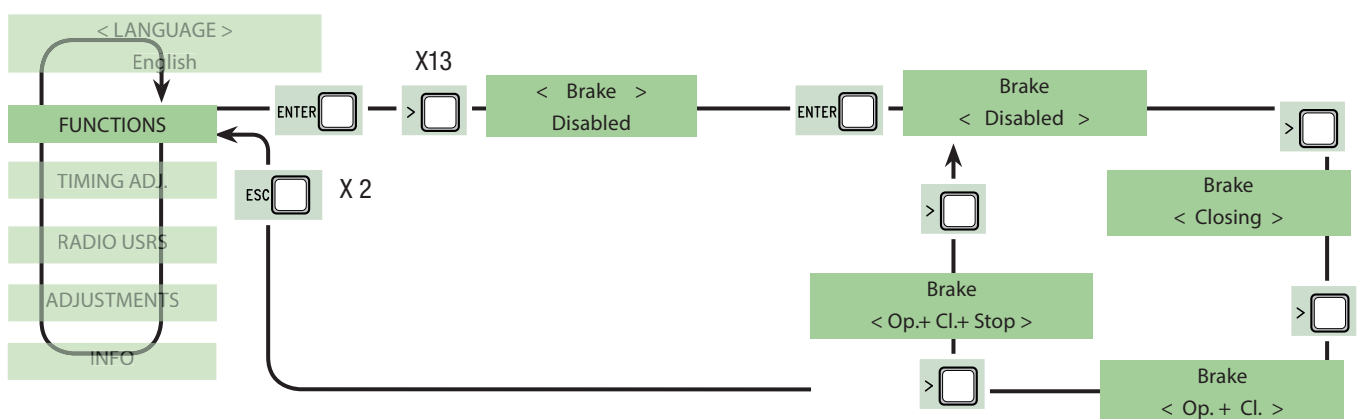
- cycle: outdoor lamp, which can be positioned at leisure, for better illumination in the parking/driveway area. It stays on from the moment the gate leaf begins to open, until it is fully closed (including automatic closing time). In case the automatic closing function is not inserted, it stays on only during gate movement.
- courtesy: outdoor lamp, which can be positioned at leisure, for better illumination in the parking/driveway area. It stays on for a set time of 5 minutes.



Obstacle detected - When motor is stopped (gate closed or after a total stop command) it prevents any movement if safety devices, such as photocells, detect any obstacles.



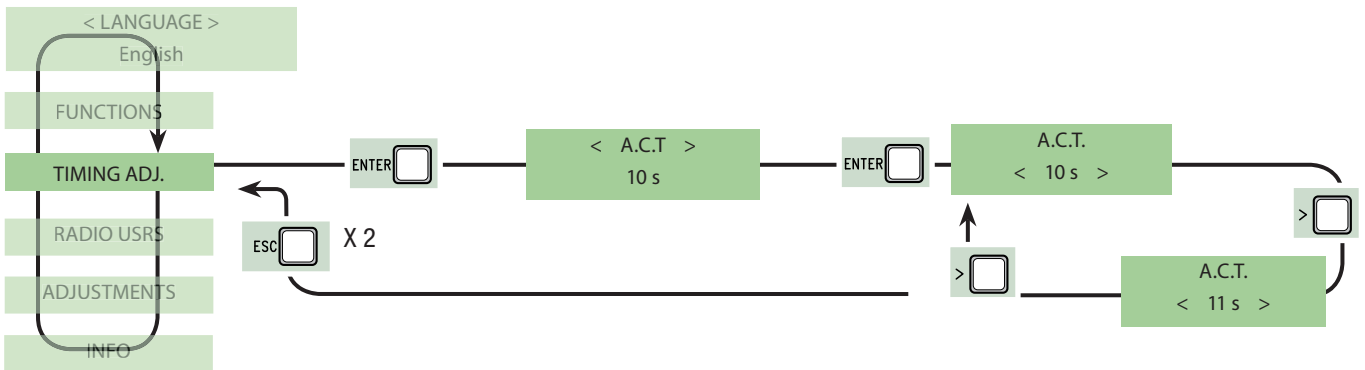
Brake: brake force on the gate during inverted gate-runs and endstops (the force may be adjusted, see "Brake force" – Calibration menu).



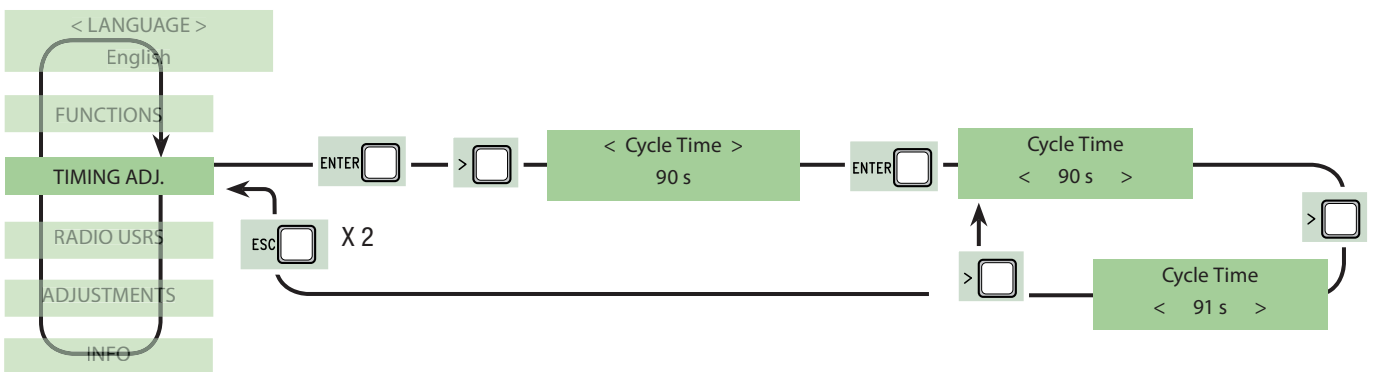
Time setting menu

Automatic closing: to set the waiting time when gate is in the open position.

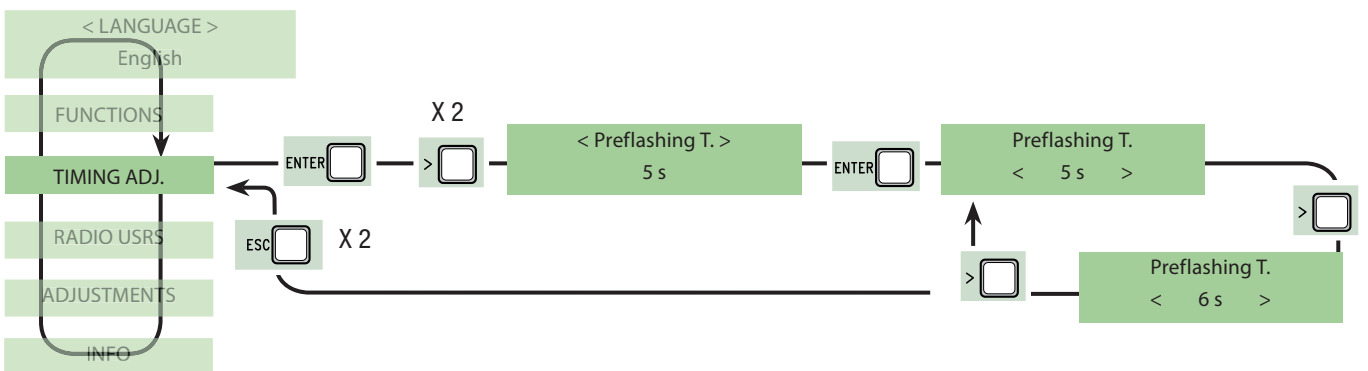
Once this time is elapsed, the gate closes automatically. The waiting time can be set to between 0" and 120".



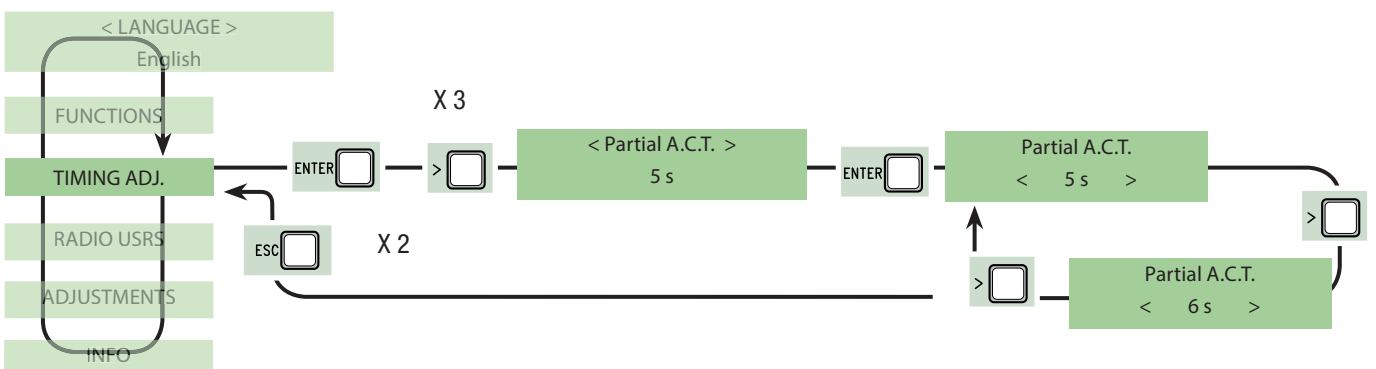
Working time: the motor's working time during opening or closing; from 10" to 120".



Pre-flashing time: after an opening or closing command is given, the flasher connected to "W-E1), flashes for between 1" and 10", before the gate begins to move.

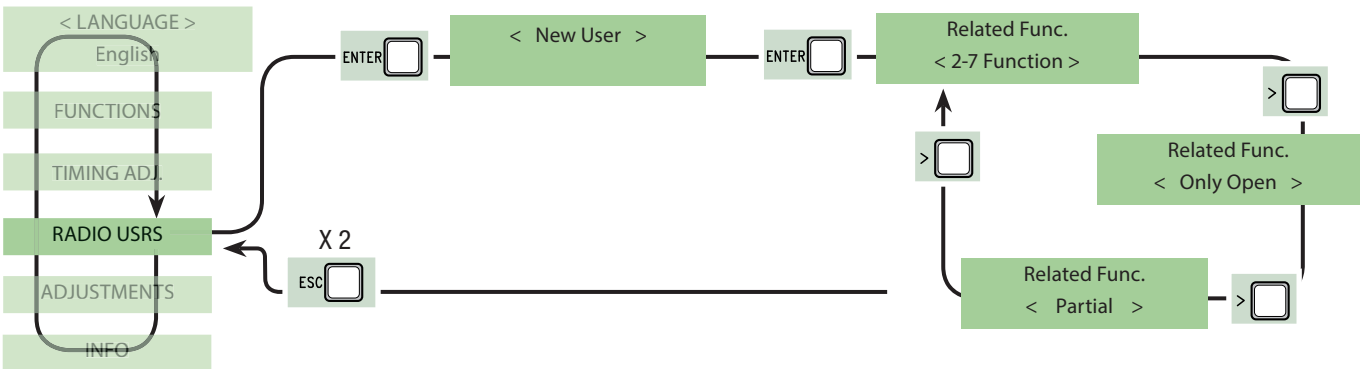


Automatic partial closing: gate leaf's waiting time, after a partial opening command is given. The waiting time can be set to between 0" and 120".

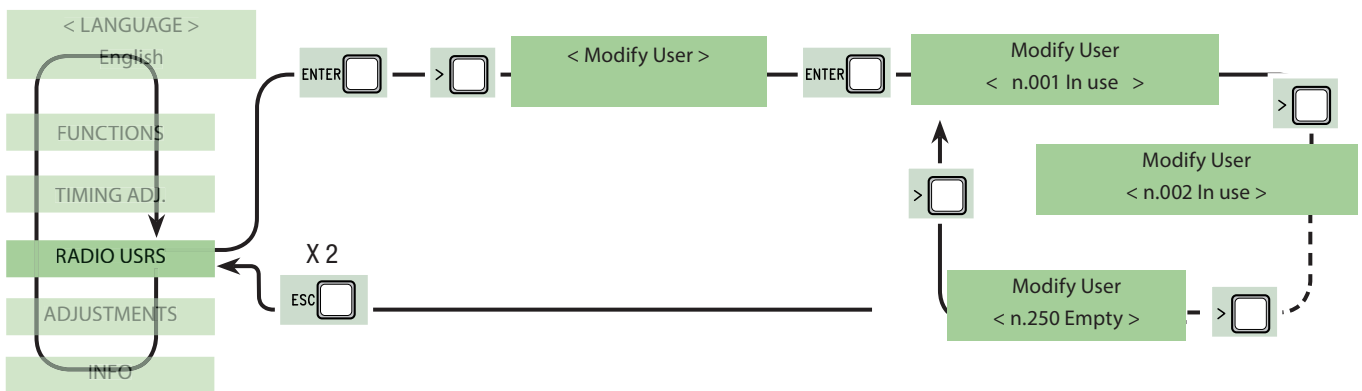


Users Radio Menu

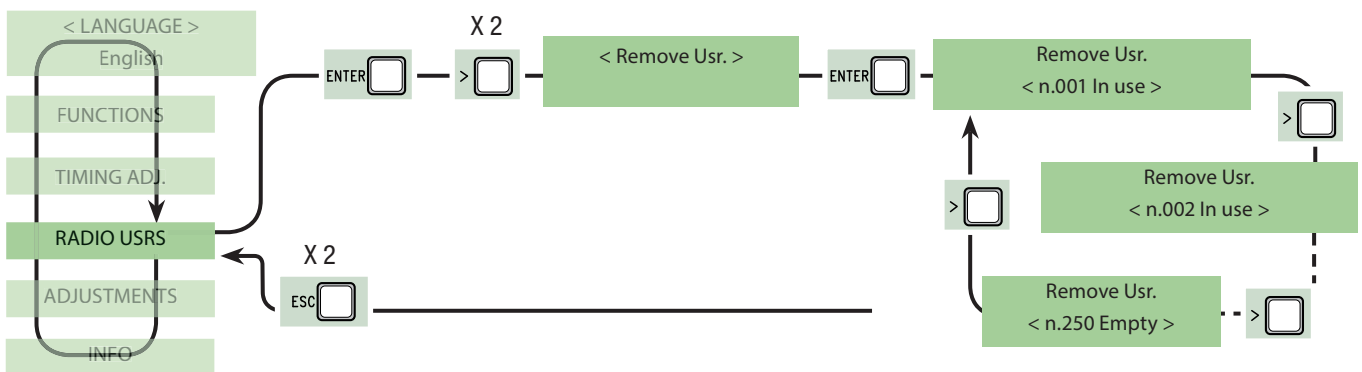
New user: to create a new user and assigned function (see detailed function on page 27).
The user will be assigned a number (max. 250 users) with a function.



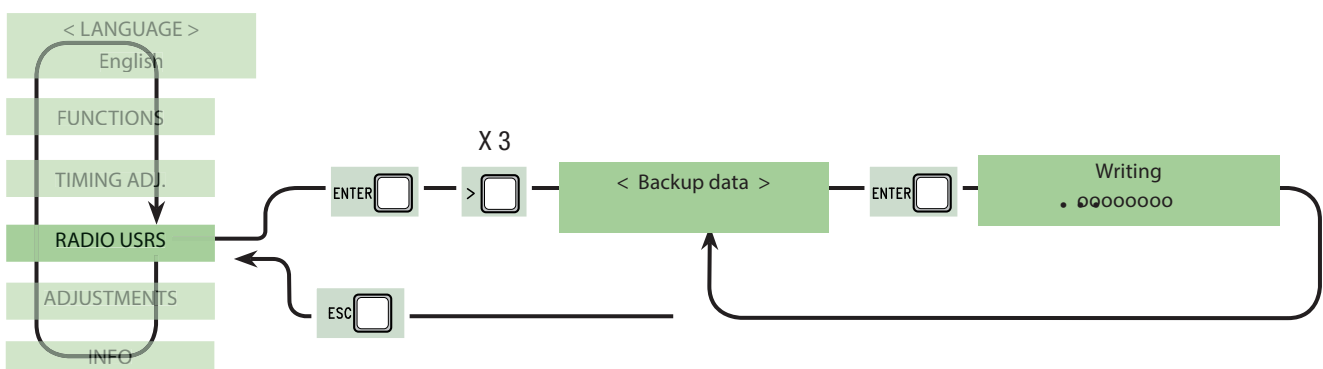
Modify User: to modify a user's assigned function (see detailed function on page 28)



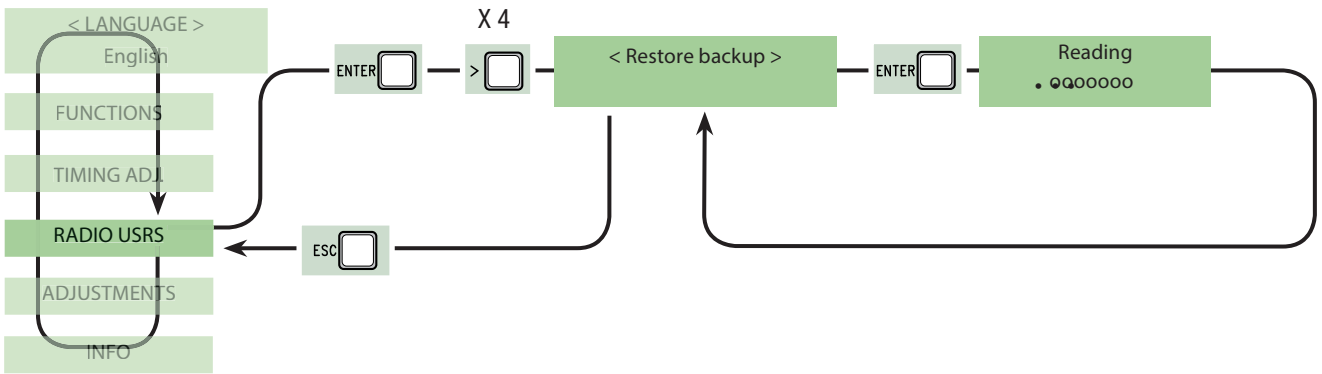
Remove user: to remove an existing user. Confirm the use you wish to remove with the ENTER key.



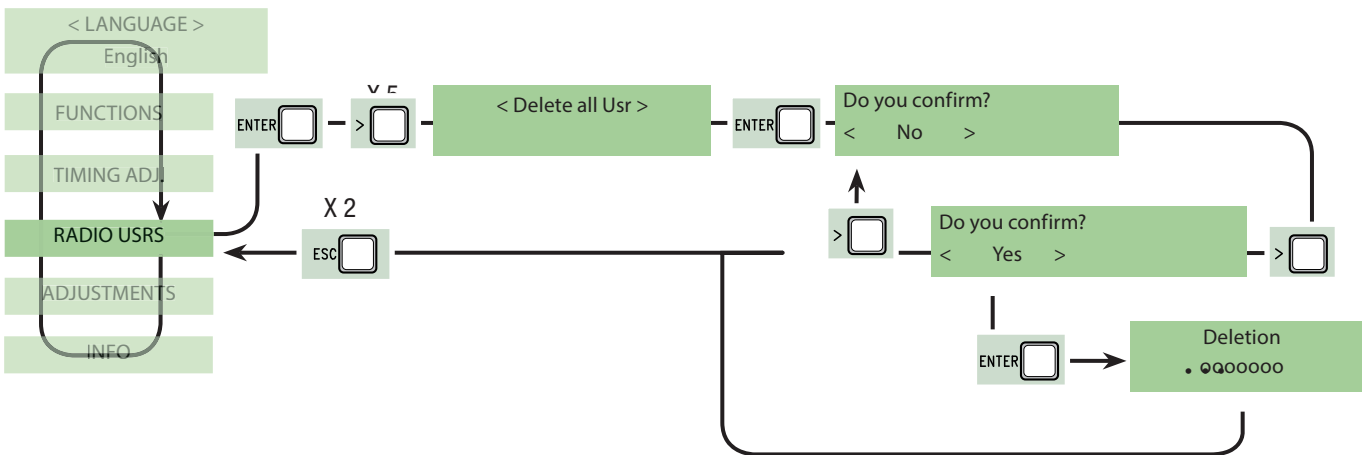
Save memory: to save the users in the memory roll. Confirm saving of users on the memory roll with ENTER.



Load memory: to load the data saved on the memory roll onto card

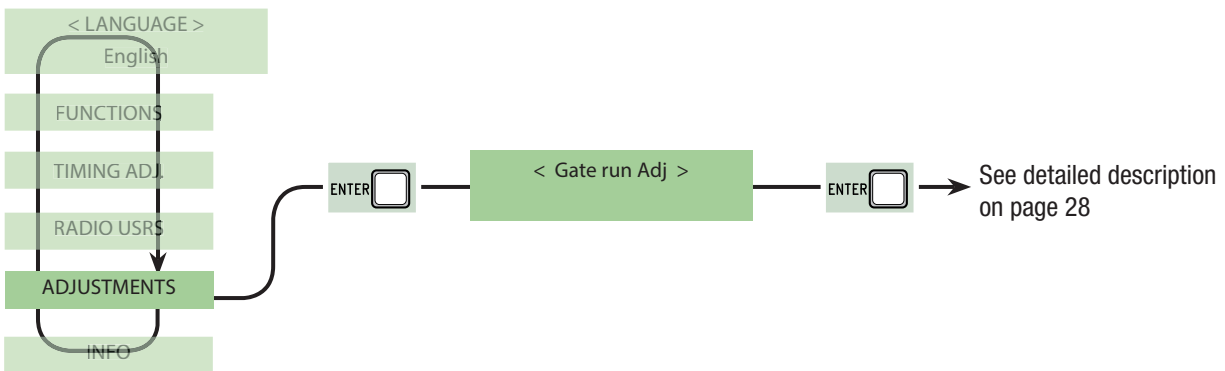


Cancel all: to cancel all registered users. Confirm cancellation of all users with ENTER.

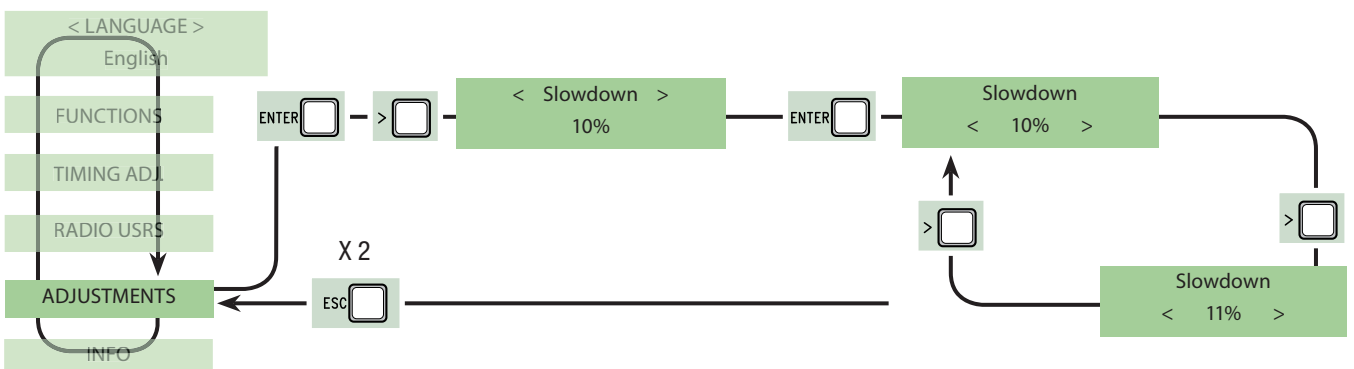


Calibration Menu

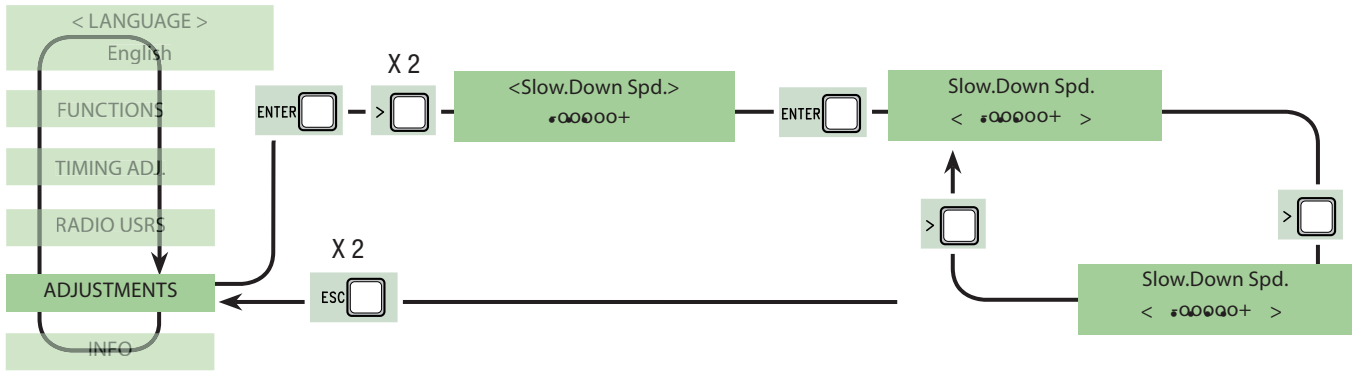
Gate-run calibration: to calibrate the opening and closing gate-run.



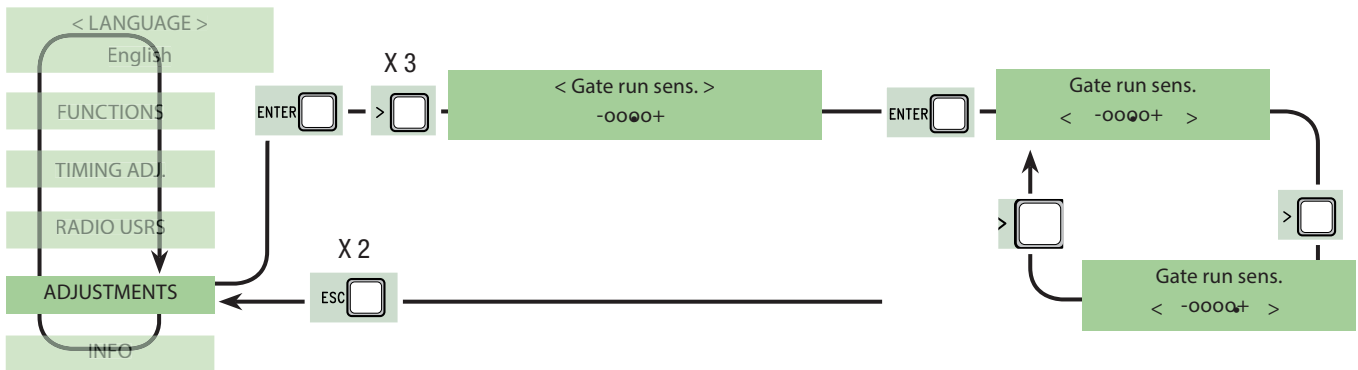
Deceleration: to adjust the deceleration's starting point before the endstop, both when opening and closing. The deceleration is calculated in percentage terms (from 0% to 40%).



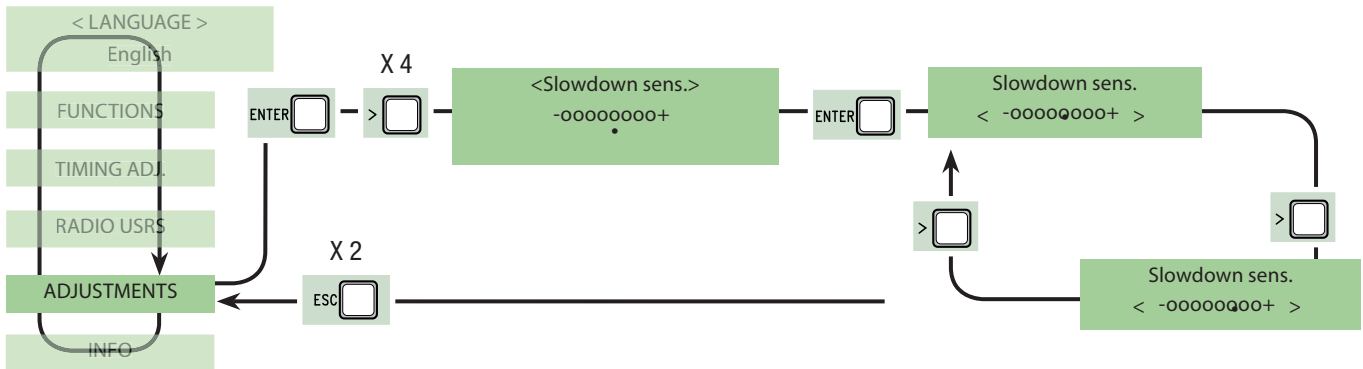
Deceleration speed: to adjust the deceleration speed when opening and closing.



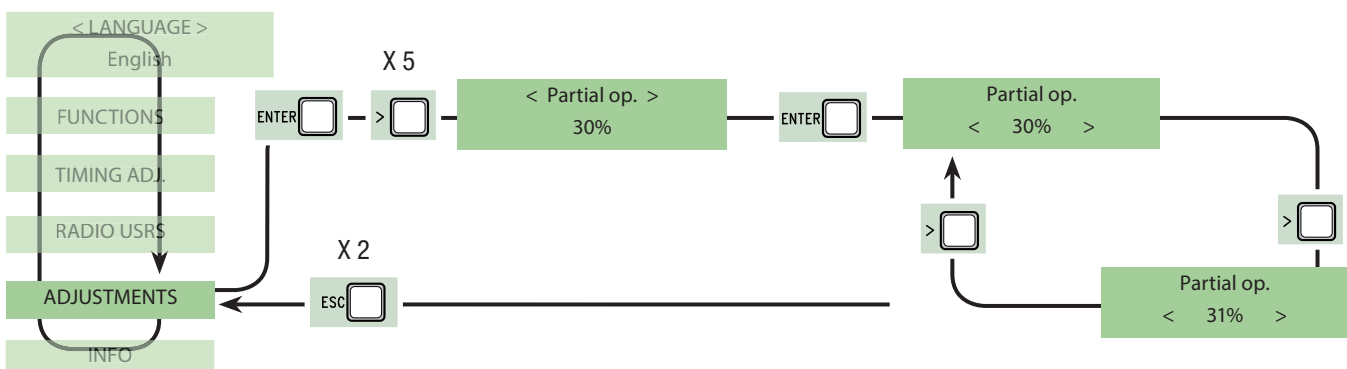
Gate-run sensitivity: to calibrate the amperometric sensitivity that controls the force generated by the motor during movement; if the force exceeds the calibrated level, the system intervenes by reversing the direction of movement.



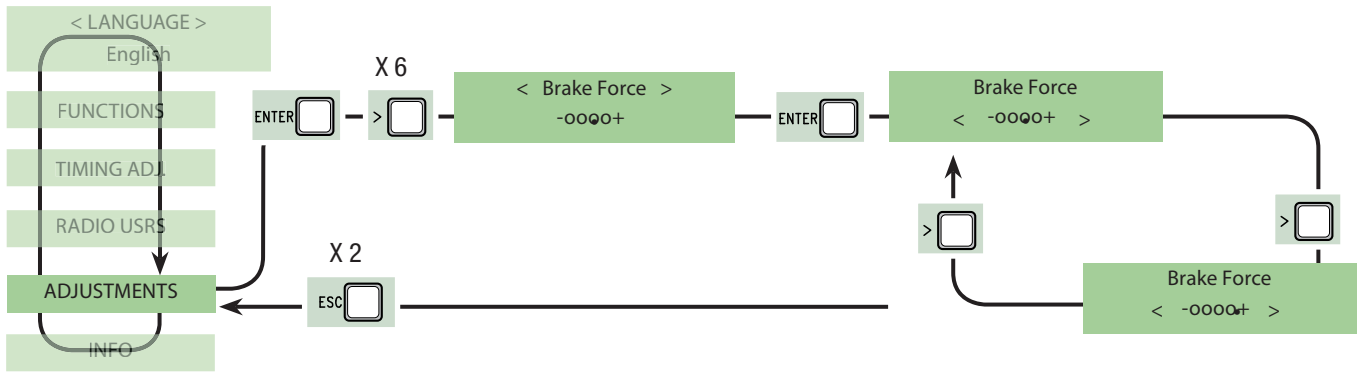
Deceleration sensitivity: to calibrate the amperometric sensitivity that control the force generated by the motor during decelerations; if the force exceeds the calibrated level, the system intervenes by reversing the direction of movement



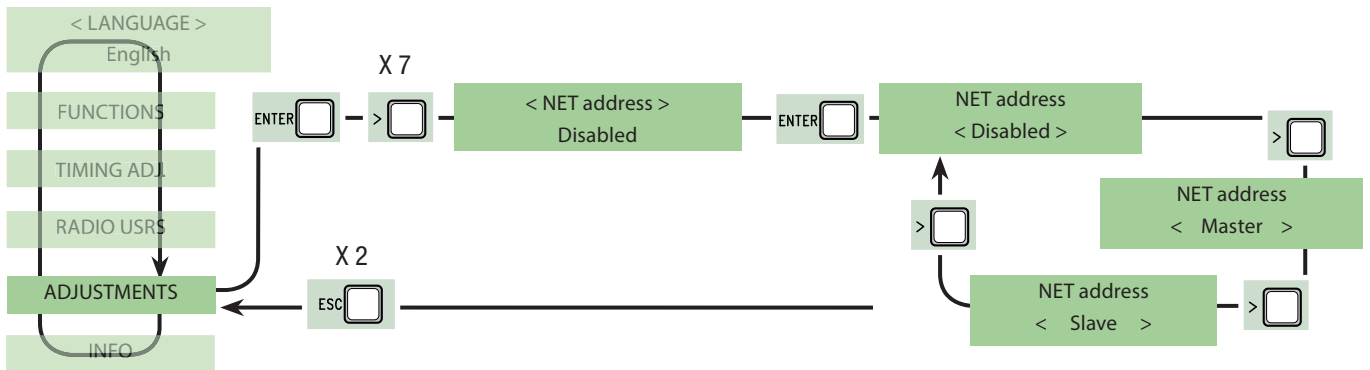
Partial opening: to calibrate the percentage of the gate's opening width (from 10% to 80%) for the entire gate-run.



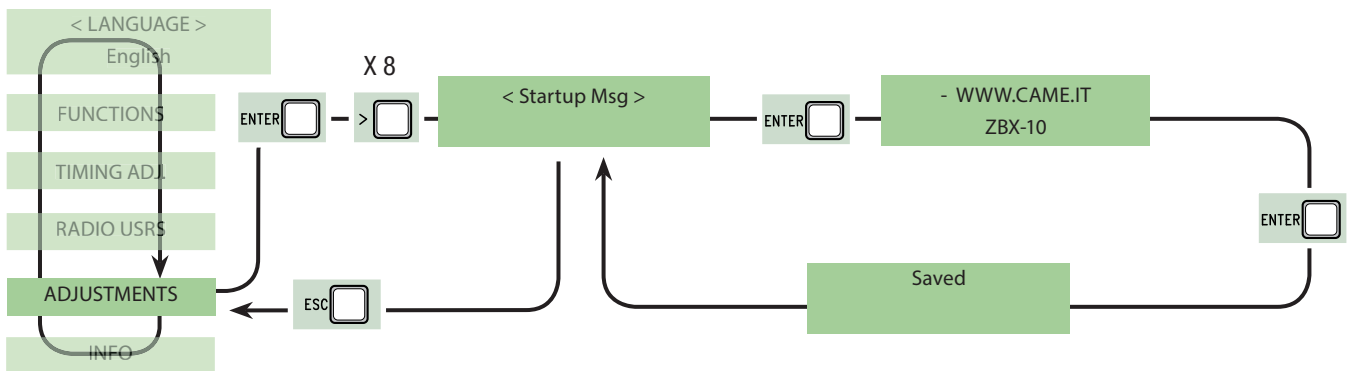
Brake force: to calibrate the braking force on the gate during run-inversions and at endstops.



Web address: to define the master card or slave in paired connections (see detailed function on page 29).



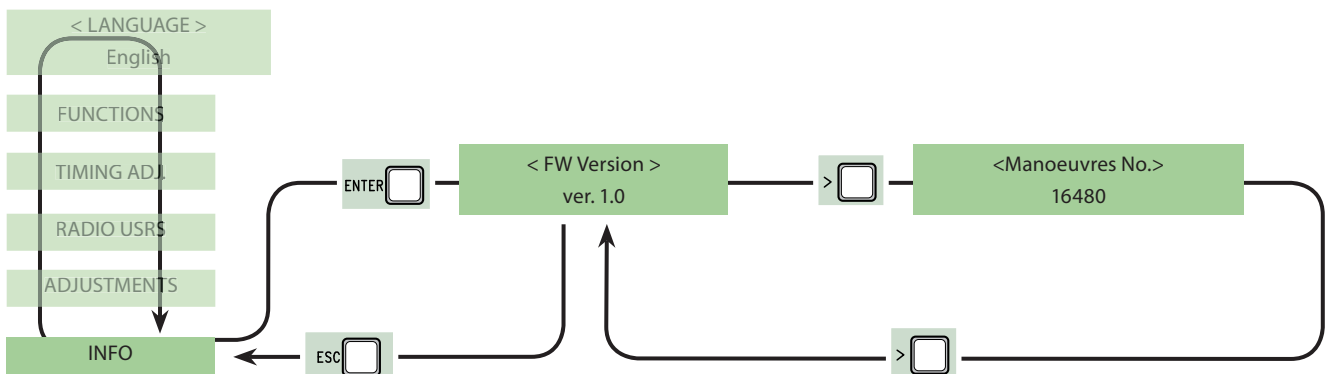
Initial message: shows the starting message. Confirm with ENTER to modify the text. Use the ENTER key to shift the cursor forwards, ESC to shift it backwards and < > to select the letter or number. Confirm the text by pressing ENTER for a few seconds.



Info Menu

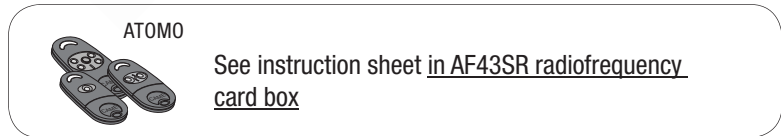
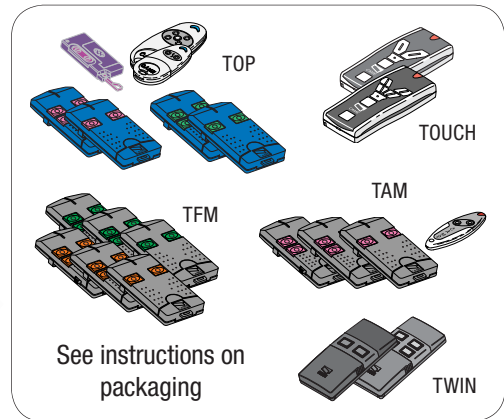
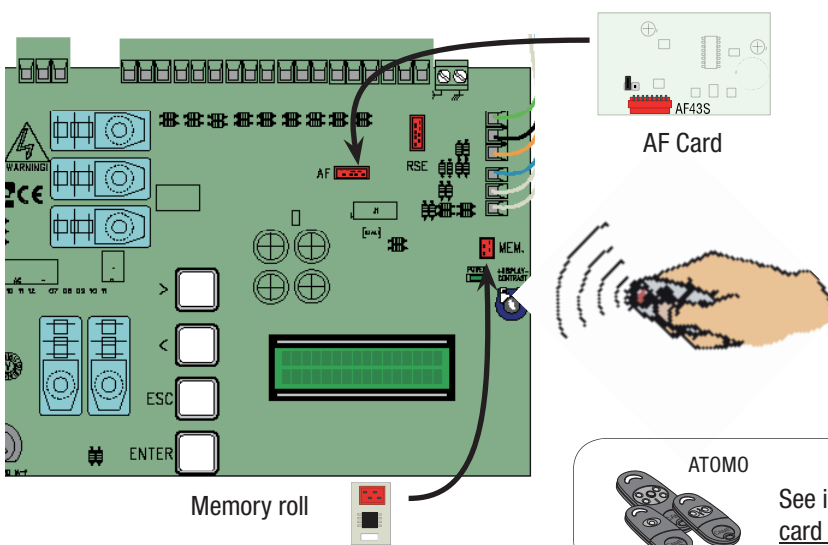
Fw Version: shows software version.

Number of Gate-runs: shows the number of gate-runs performed by the gate.

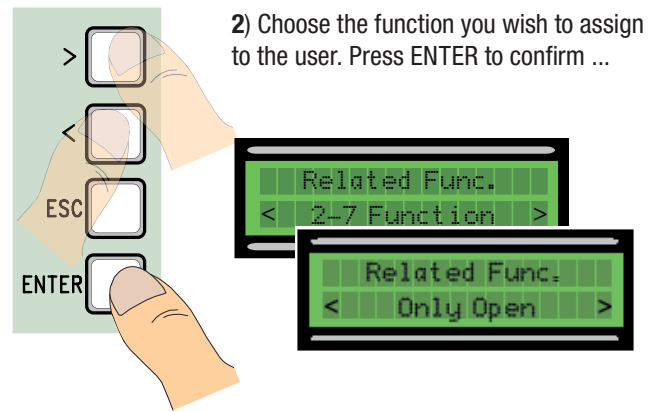
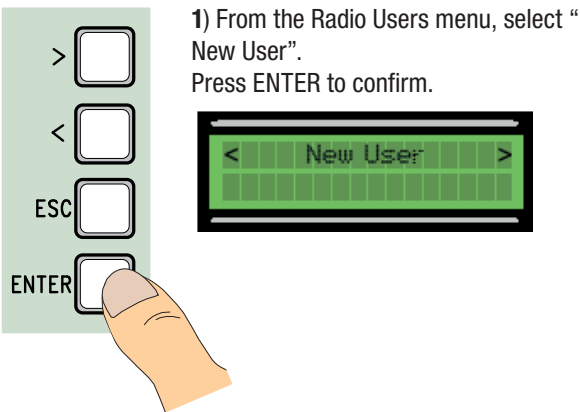


Decoding card

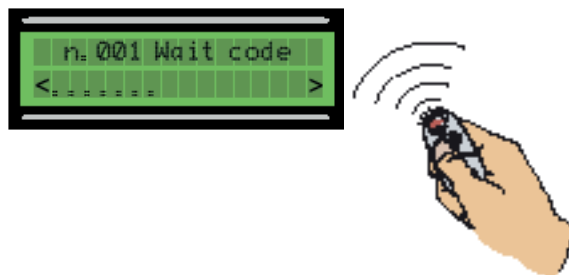
Insert the AF radio card which command the operator and insert, modify or remove any users using the transmitter. Insert the memory roll to save and upload the registered users onto another card.



Inputting users



3) ...you will be prompted to input a code. Send the code using the transmitter button...



4) ...once the code is inputted, the read out will say "Saved"...



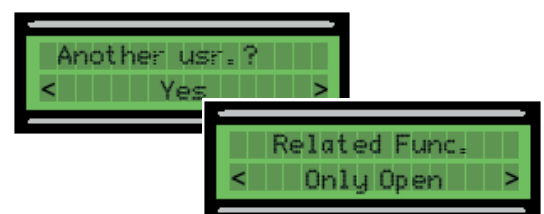
...or "existing" (if the code has already been inputted).



5) ...then you will be asked whether you wish to input a new code or not. By selecting and confirming "No", the user input procedure will be terminated.

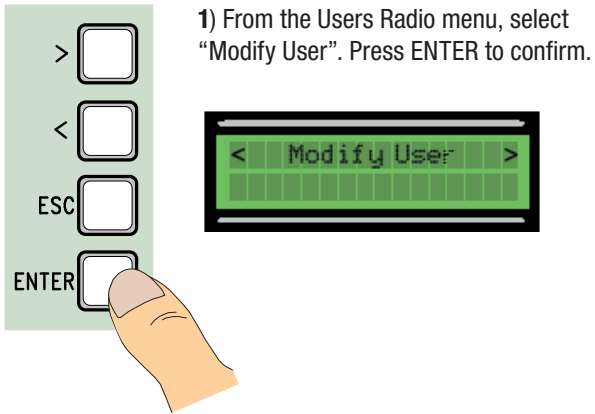


6)by selecting and confirming "Yes", you will begin again from point 2.



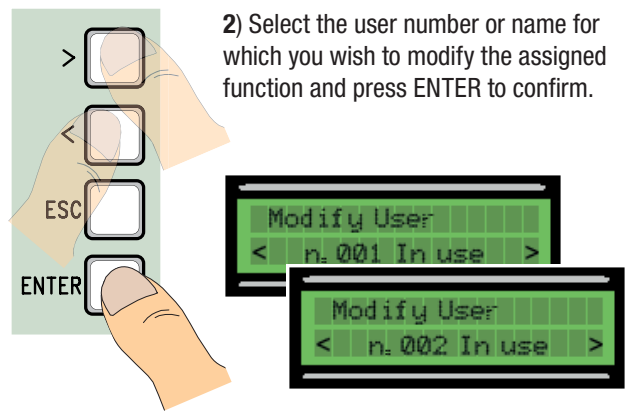
Modifying user (modifying the function)

1) From the Users Radio menu, select "Modify User". Press ENTER to confirm.



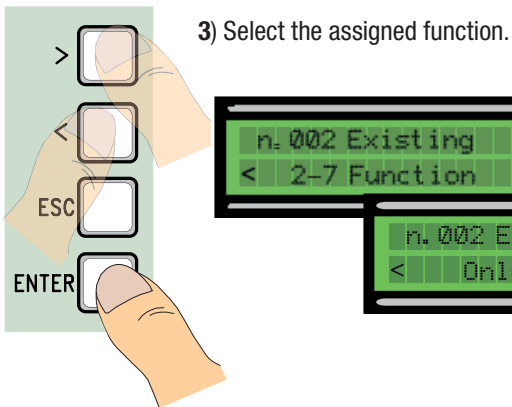
The control panel has four buttons: >, <, ESC, and ENTER. The display shows a menu with '< Modify User >' selected.

2) Select the user number or name for which you wish to modify the assigned function and press ENTER to confirm.



The control panel has four buttons: >, <, ESC, and ENTER. The display shows 'Modify User' and '< n. 001 In use >'.

3) Select the assigned function.



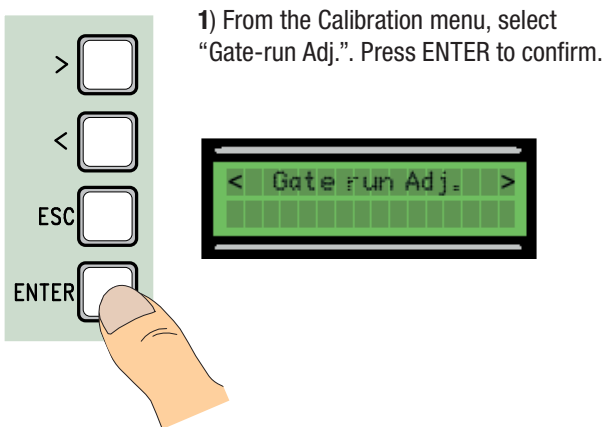
The control panel has four buttons: >, <, ESC, and ENTER. The display shows 'n. 002 Existing' and '< 2-7 Function >'.

4) ...once you have selected the function to assign, you will get the "Modify User" readout...



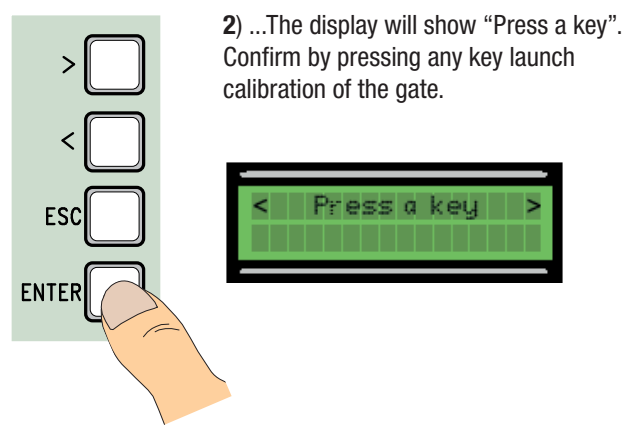
Gate-run calibration

1) From the Calibration menu, select "Gate-run Adj.". Press ENTER to confirm.



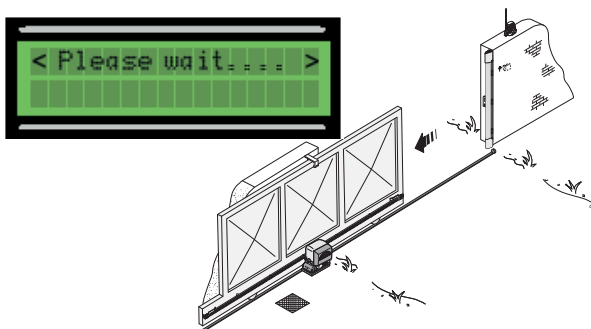
The control panel has four buttons: >, <, ESC, and ENTER. The display shows '< Gate run Adj. >'.

2) ...The display will show "Press a key". Confirm by pressing any key launch calibration of the gate.

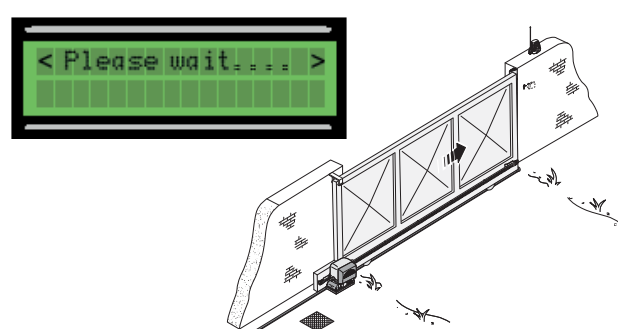


The control panel has four buttons: >, <, ESC, and ENTER. The display shows '< Press a key >'.

3) The gate will open to its full extent ...



... and then close to its full extent.



Net address

The “NET address” function is set when connecting two paired operators.

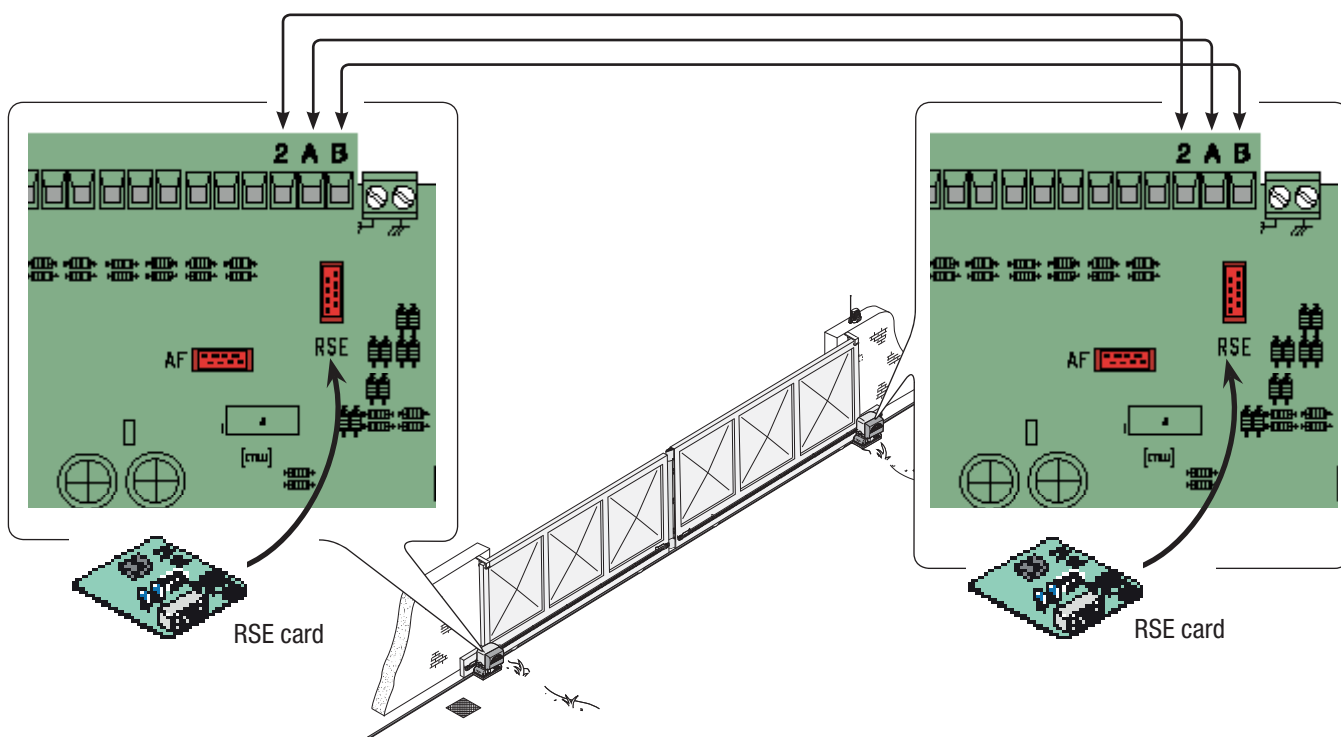
Connect the two cards using the (2-A-B) terminals and insert the RSE cards into both.

On the “MASTER” card you have selected, make all of the required electrical connections and set the functions and adjustments (see specific paragraphs).

If the system is fitted with sensitive edges on both gate leaves, carry out the electrical connections on (C7/C8) also for the “SLAVE” card.

In the event that the “Maintained action” function is activated, set it to (ON) on both of the cards and deactivate (OFF) the “Automatic Closing” function on both.

If you wish to activate the “Automatic Closing” function, select is on both of the cards.




1) On the Master card.
From the Calibration Menu, select “NET address” and press ENTER.

2) Select “Master” and press ENTER to confirm the calibration.

3) Select “Slave” for another card.

Maintenance

Periodic maintenance

 Periodic maintenance to be carried out by the end-user is as follows: wipe clean the glass surface of the photocells; check that the safety devices work properly; remove any obstructions.

We suggest checking the state of lubrication and tightness of the anchoring screws on the operator.

-To check the efficiency of the safety devices, move an object in front of the photocells when gate is closing. If the operator inverts the motion or stops, the photocells are working properly.

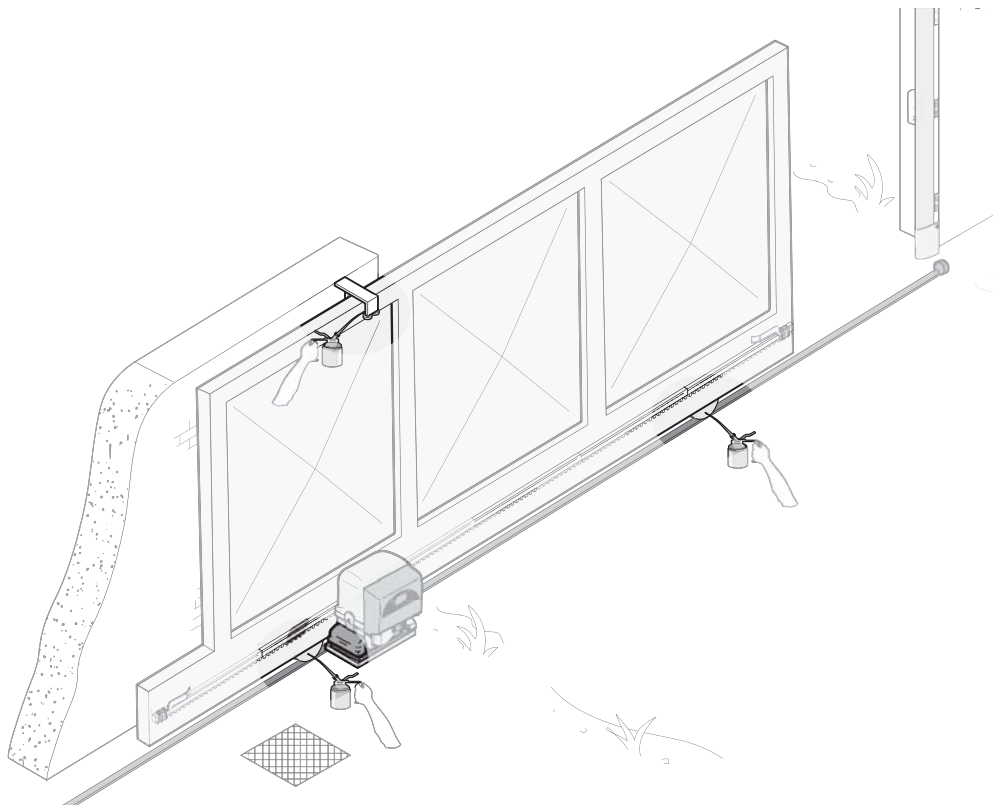
This is the only maintenance procedure to be carried out with the power source connected.

-Before performing any maintenance procedures, cut off the main power, to prevent possible accidents due to gate movement.

-To clean the photocells use a water dampened cloth. Do not use solvents or other chemical products which may ruin the devices.

-In the event of any strange vibrations or squeaking, lubricate the joints with grease, as shown in the diagram.

-Make sure there are no plants within the photocell's beam, and that the gate motion is free of any obstacles.




Trouble shooting

MALFUNCTIONS	POSSIBLE CAUSES	CHECK AND REMEDIES
The gate will not open nor close	<ul style="list-style-type: none"> • There is no power • The gearmotor is in release mode • The transmitter's batteries are run down • The transmitter is broken • The stop button is either stuck or broken • The opening/closing button or the key selector are stuck • Photocells in partial stop mode 	<ul style="list-style-type: none"> • Check that the power is up • Lock the gearmotor • Replace batteries • Call assistance • Call assistance • Call assistance • Call assistance
The gate opens but will not close	<ul style="list-style-type: none"> • The photocells are engaged • Sensitive edge triggered 	<ul style="list-style-type: none"> • Check that photocells are clean and in good working order • Call assistance
The gate closes but will not open	<ul style="list-style-type: none"> • Sensitive edge triggered 	<ul style="list-style-type: none"> • Call assistance
The flasher does not work	<ul style="list-style-type: none"> • The bulb is burnt 	<ul style="list-style-type: none"> • Call assistance

Periodic maintenance log for end-user (every 6 months)

Date	Notes	Signature

Extra-ordinary maintenance

 The following table serves to note down any extraordinary maintenance, repairs or improvements performed by specialised firms.
 N.B.: Any extraordinary maintenance must be performed by specialised technicians.

Extra-ordinary maintenance log

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	
Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	
Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature

Job performed _____

 -

Demolition and disposal

☞ **CAME S.p.A.** implements an EN ISO 14001 certified and compliant Environmental Management System at its plants, to ensure environmental protection.

Please continue our efforts to protect the environment, something that CAME considers to be one of the foundations in developing its business and market strategies, simply by observing brief recommendations as regards disposal:

DISPOSAL OF PACKAGING

Packaging components (cardboard, plastic etc.) can be disposed of together with normal household waste without any difficulty, by simply separating the different types of waste and recycling them.

Before proceeding, it is always advisable to check specific regulations in force in the place of installation.

DISPOSE OF PROPERLY!

DISPOSAL OF THE PRODUCT

Our products are made with different materials. Most of them (aluminium, plastic, iron, electrical cables) can be disposed of together with normal household waste. They can be recycled if collected, sorted and sent to authorised centres.

Other components (circuit boards, remote control batteries etc.), on the other hand, may contain pollutants.

They should therefore be removed and handed over to companies authorised to recover and recycle them.

Before proceeding, it is always advisable to check specific regulations in force in the place of disposal.

DISPOSE OF PROPERLY!

Reference regulations

The product complies to the reference regulations in effect.

The contents of this manual may change, at any time, and without notice.



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