

Introduction

Control panel three-phase VERSUS range for installation on commercial and industrial doors and industrial loading docks.

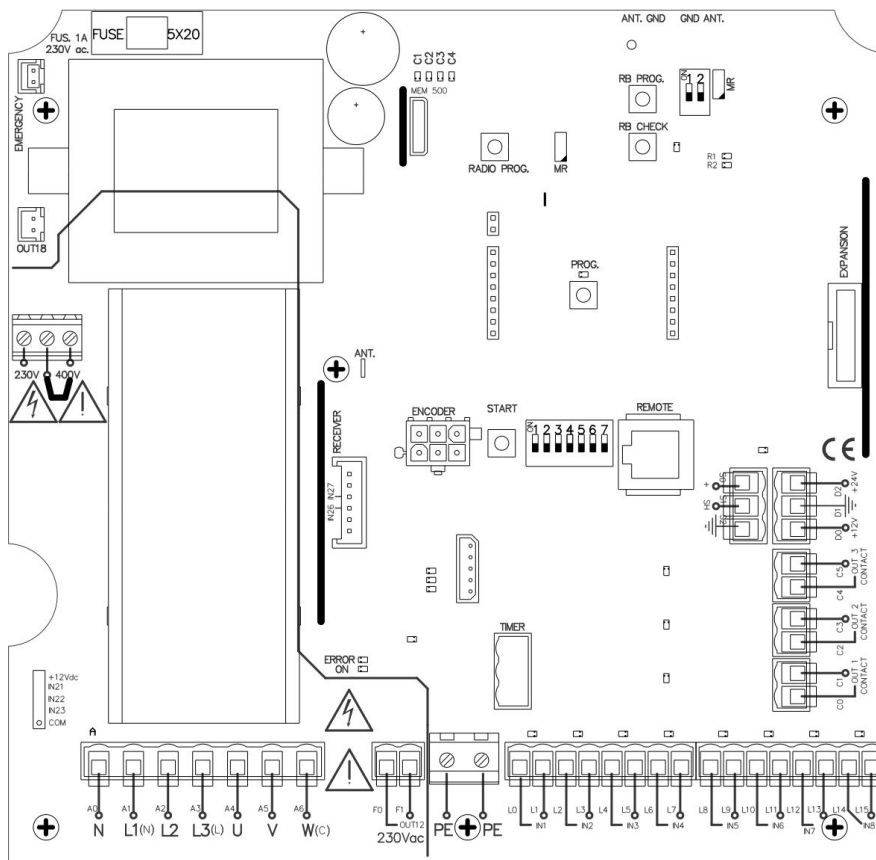
Technical data

Control panel

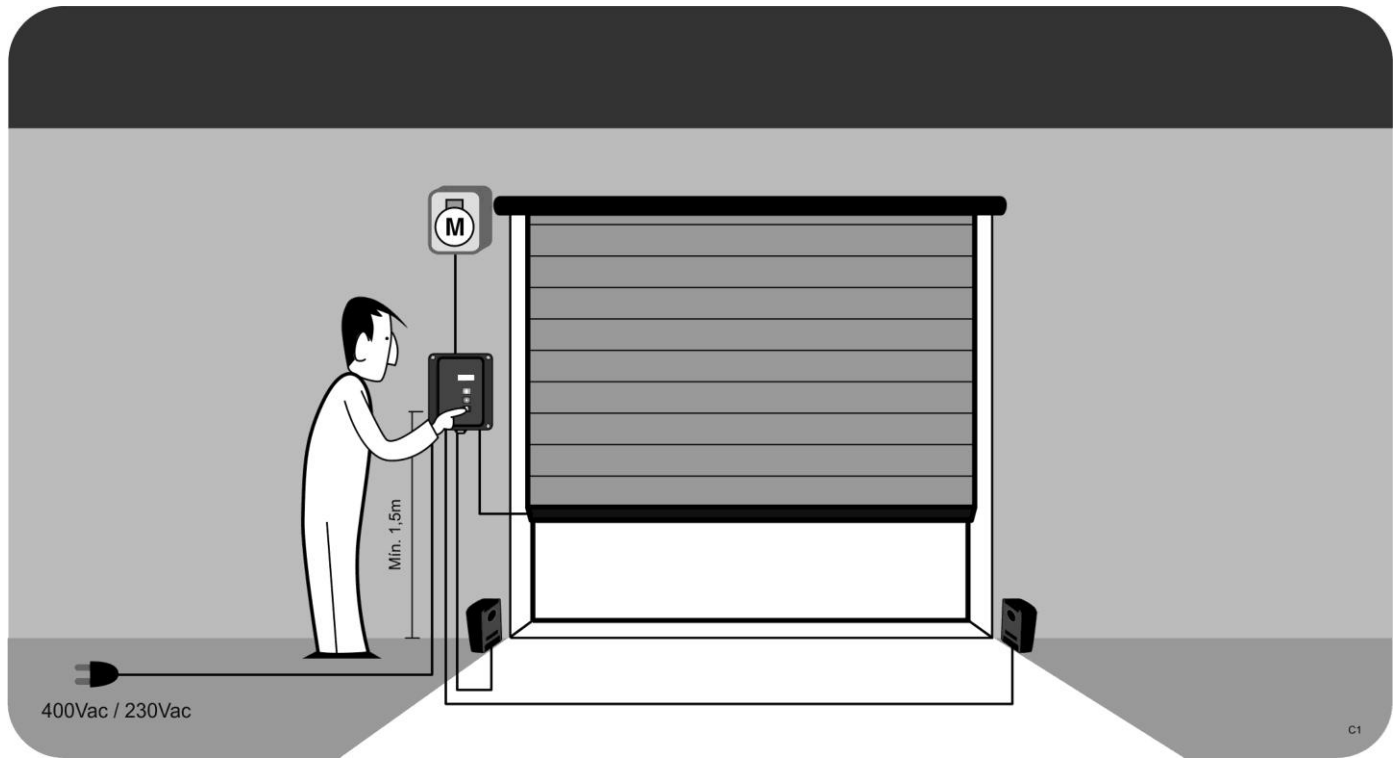
Frequency	868,35MHz
Codification	High security rolling code
Memory	27 codes (expandable to 500 codes with memory card)
Power supply	400Vac three phase / 230Vac
Maximum motor power	2,2kW / 1,1kW
Optional cards	V-DPLAY, V-XPAN, MEM500, V-LCD
12 and 24Vdc output	1 fix (250mA)
Free voltage outputs	3 outputs
230Vac output	Maximum 10A
Manoeuvre time	1 second – 6 minutes
Operating temperature	-20°C to +85°C
Watertighness	IP65
Size	180 x 152 x 88 mm

RSEC3 Receiver built-in (RS3 / RB3 systems supported)

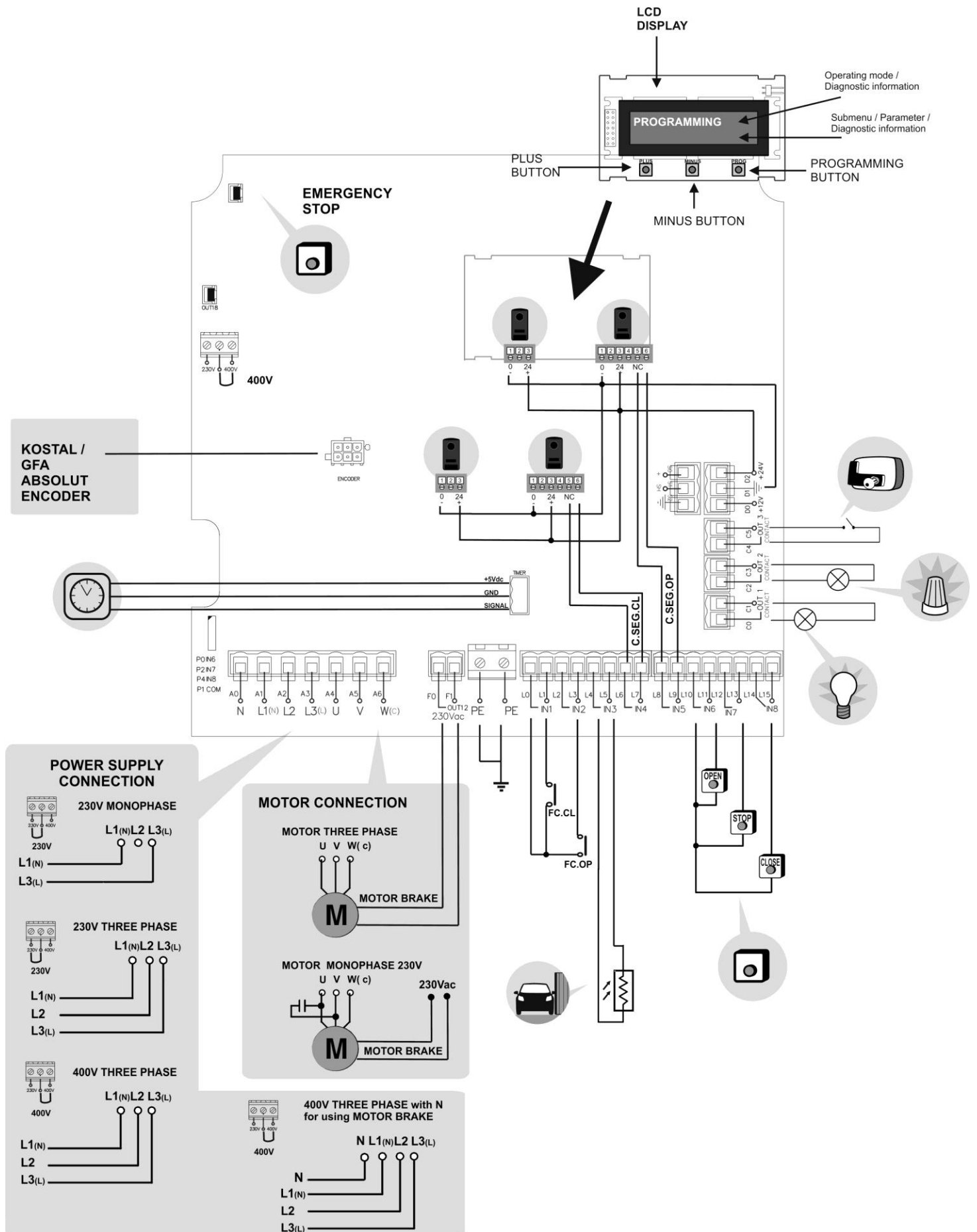
Frequency	Multifrequency system 868MHz auto-adjustable
Memory	RS3: 1 transmitter; RB3 : 6 transmitters
Radiated power	< 1mW
Coverage	50 meters



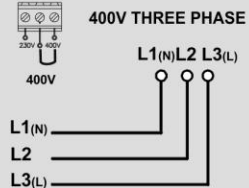
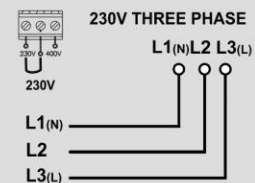
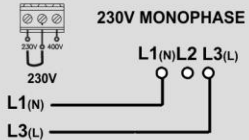
Connection



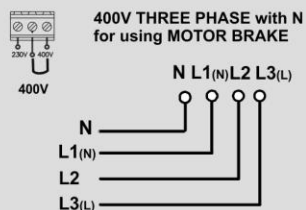
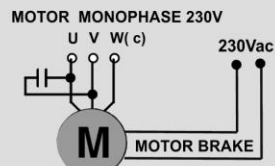
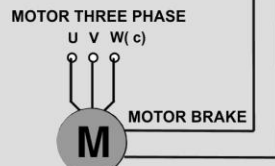
Connection



POWER SUPPLY CONNECTION



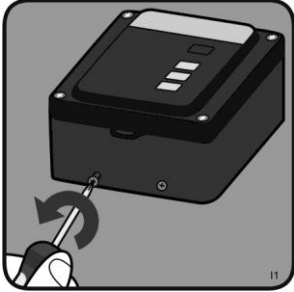
MOTOR CONNECTION



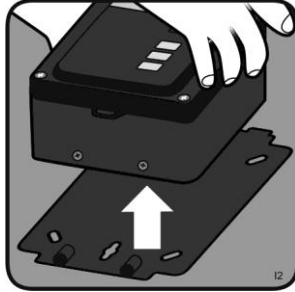
Starting up

Installation with support

UNSCREW



EXTRACT SUPPORT



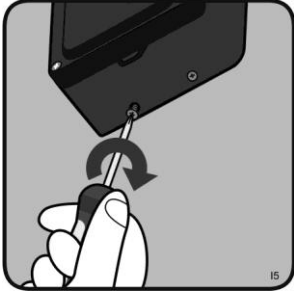
DRILL WALL



HANG CONTROL PANEL



SCREW

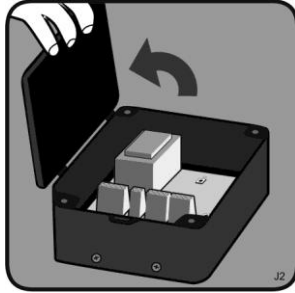


Installation without support

UNSCREW



OPEN TOP



DRILL WALL

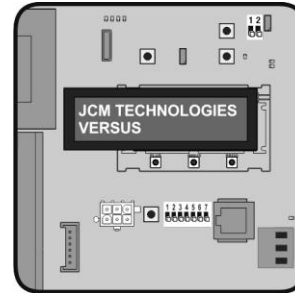


Door Positioning using the V-LCD

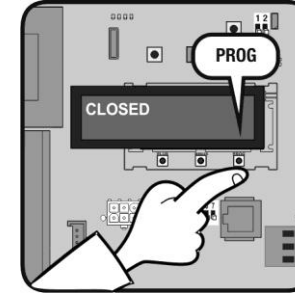
DOOR OPENED



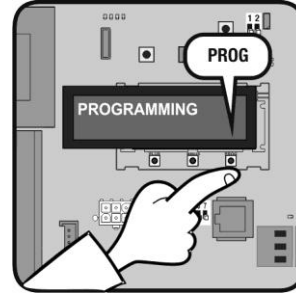
BEING ON STANDBY MODE



PRESS PROG BUTTON



PRESS START BUTTON



PRESS PLUS + MINUS 2s



PRESS ↓ BUTTON & KEPT TO CLOSE THE DOOR IN DM



DOOR CLOSES



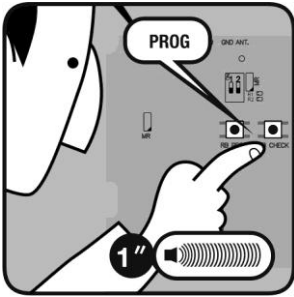
DOOR CLOSED



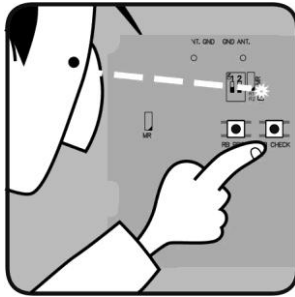
Starting up

Programming the safety transmitter

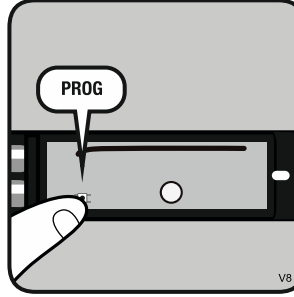
PRESS RPROG BUTTON



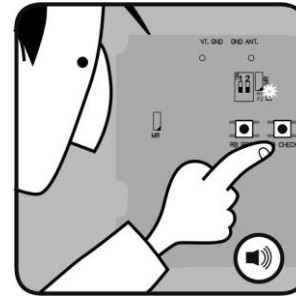
LED TURNS ON



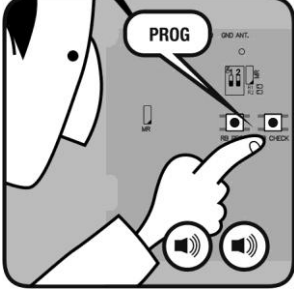
PRESS PROG TRANSMITTER



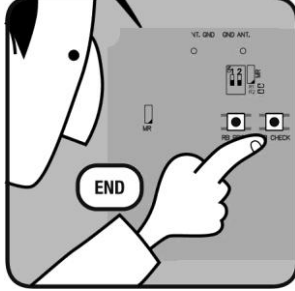
ONE BEEP & PROGRAMMED



PRESS RPROG BUTTON



LED TURNS OFF & END PROG



Starting up

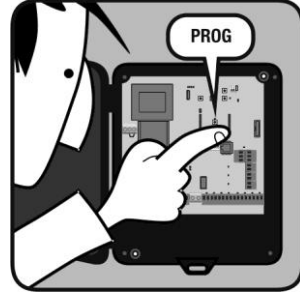
Programming is done through the PROG and START pushbuttons on motherboard or with the V-LCD.

Programming with PROG and START pushbuttons without absolute encoder

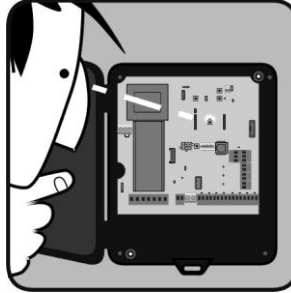
DOOR CLOSED



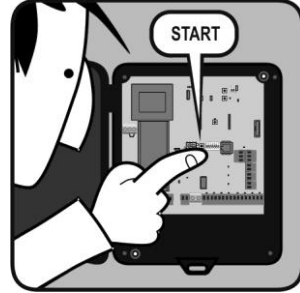
PRESS PROG PUSHBUTTON



LED TURNS ON



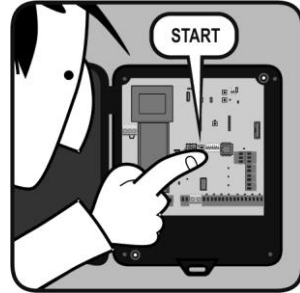
PRESS START PUSHBUTTON



DOOR OPENS



PRESS START PUSHBUTTON



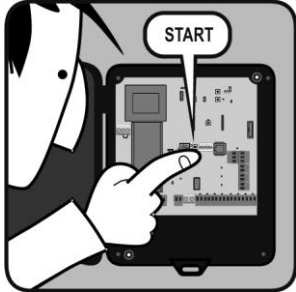
DOOR STOPS



AUTOCLOSE TIME



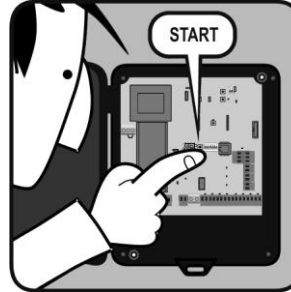
PRESS START PUSHBUTTON



DOOR CLOSES



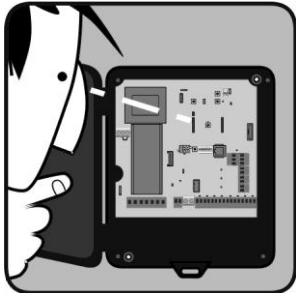
PRESS START PUSHBUTTON



DOOR STOPS



LED TURNS OFF



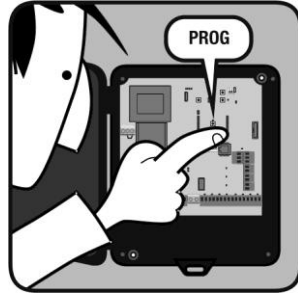
END PROGRAMMING



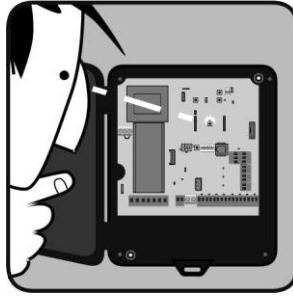
DOOR CLOSED



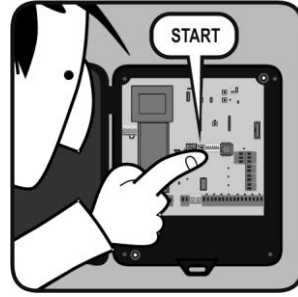
PRESS PROG PUSHBUTTON



LED TURNS ON



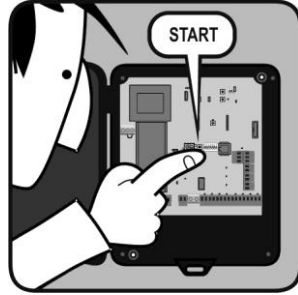
PRESS START PUSHBUTTON



DOOR OPENS



PRESS START PUSHBUTTON



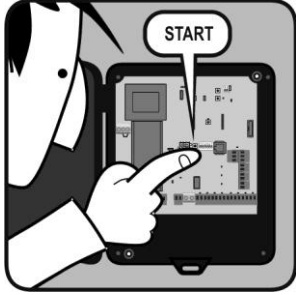
DOOR STOPS



AUTOCLOSE TIME



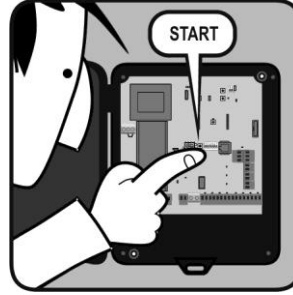
PRESS START PUSHBUTTON



DOOR CLOSES



PRESS START PUSHBUTTON



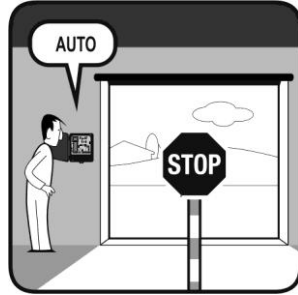
DOOR STOPS



DOOR OPENS AUTO



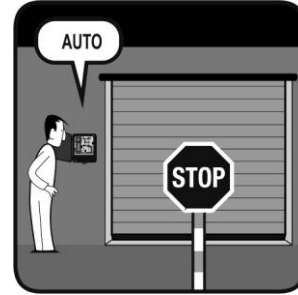
DOOR STOPS AUTO



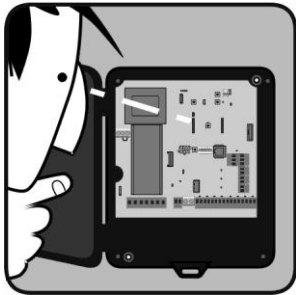
DOOR CLOSES AUTO



DOOR STOPS AUTO



LED TURNS OFF



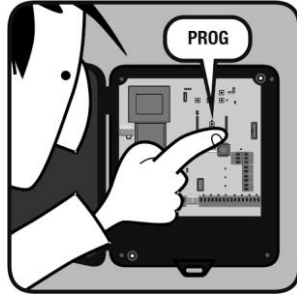
END PROGRAMMING



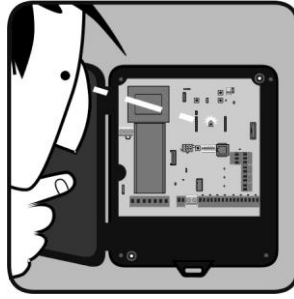
DOOR CLOSED / OPENED



PRESS PROG BUTTON



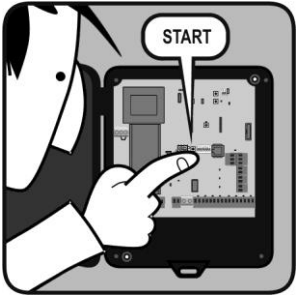
LED TURNS ON



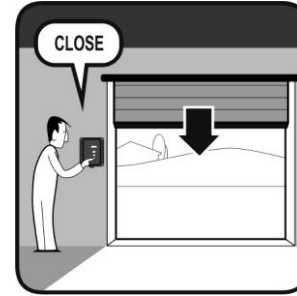
PRESS OPEN TO SEARCH UPPER LIMIT



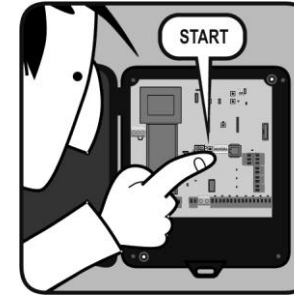
PRESS START TO SET



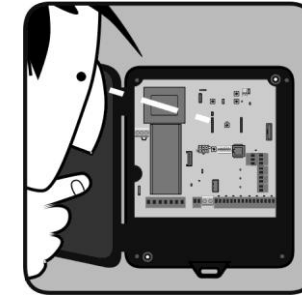
PRESS CLOSE TO SEARCH LOWER LIMIT



PRESS START TO SET



LED TURNS OFF



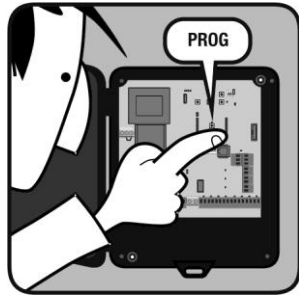
END PROGRAMMING



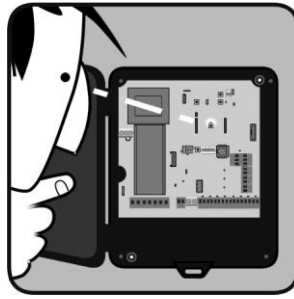
DOOR CLOSED / OPENED



PRESS PROG BUTTON



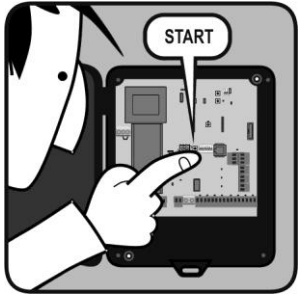
LED TURNS ON



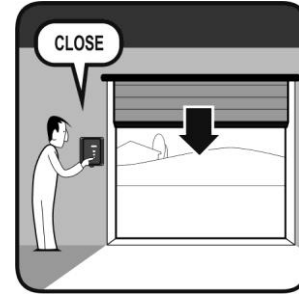
PRESS OPEN TO SEARCH UPPER LIMIT



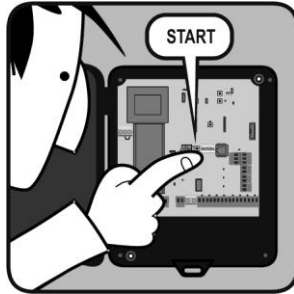
PRESS START TO SET



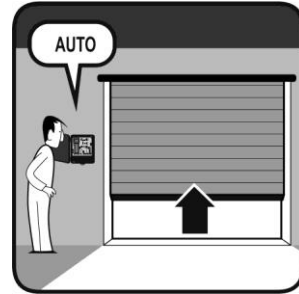
PRESS CLOSE TO SEARCH LOWER LIMIT



PRESS START TO SET



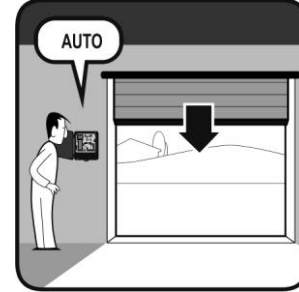
DOOR OPENS AUTO



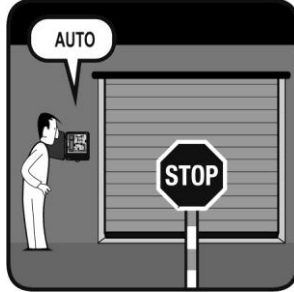
DOOR STOPS AUTO



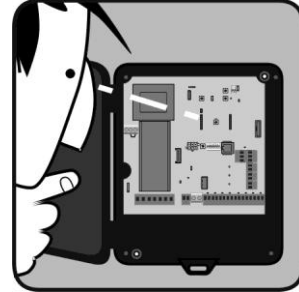
DOOR CLOSES AUTO



DOOR STOPS AUTO



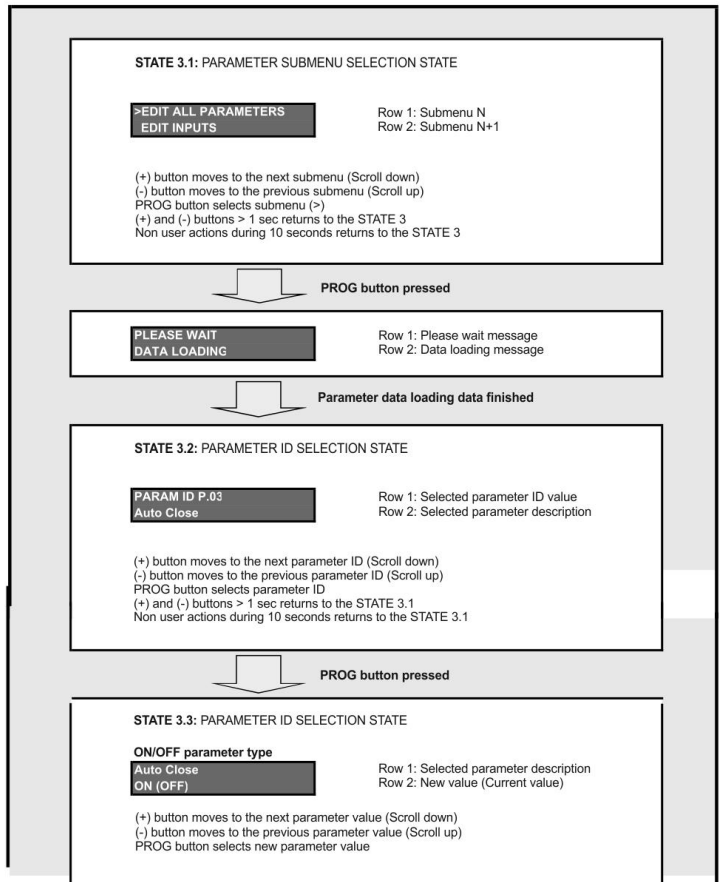
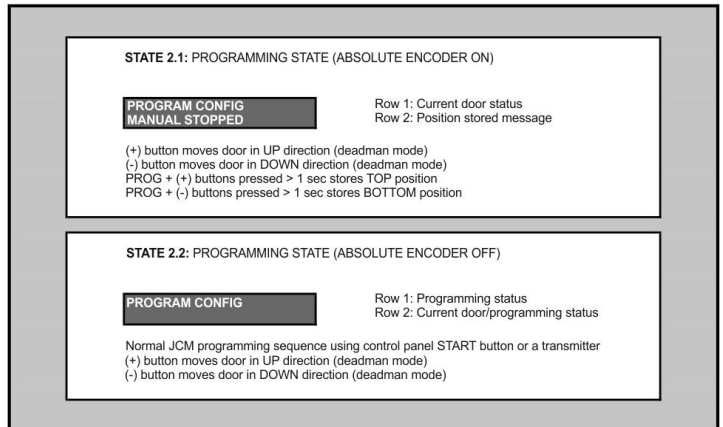
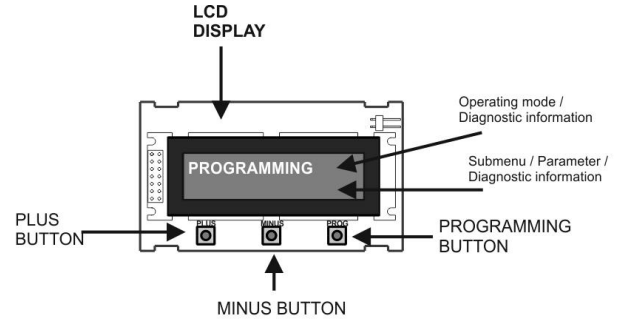
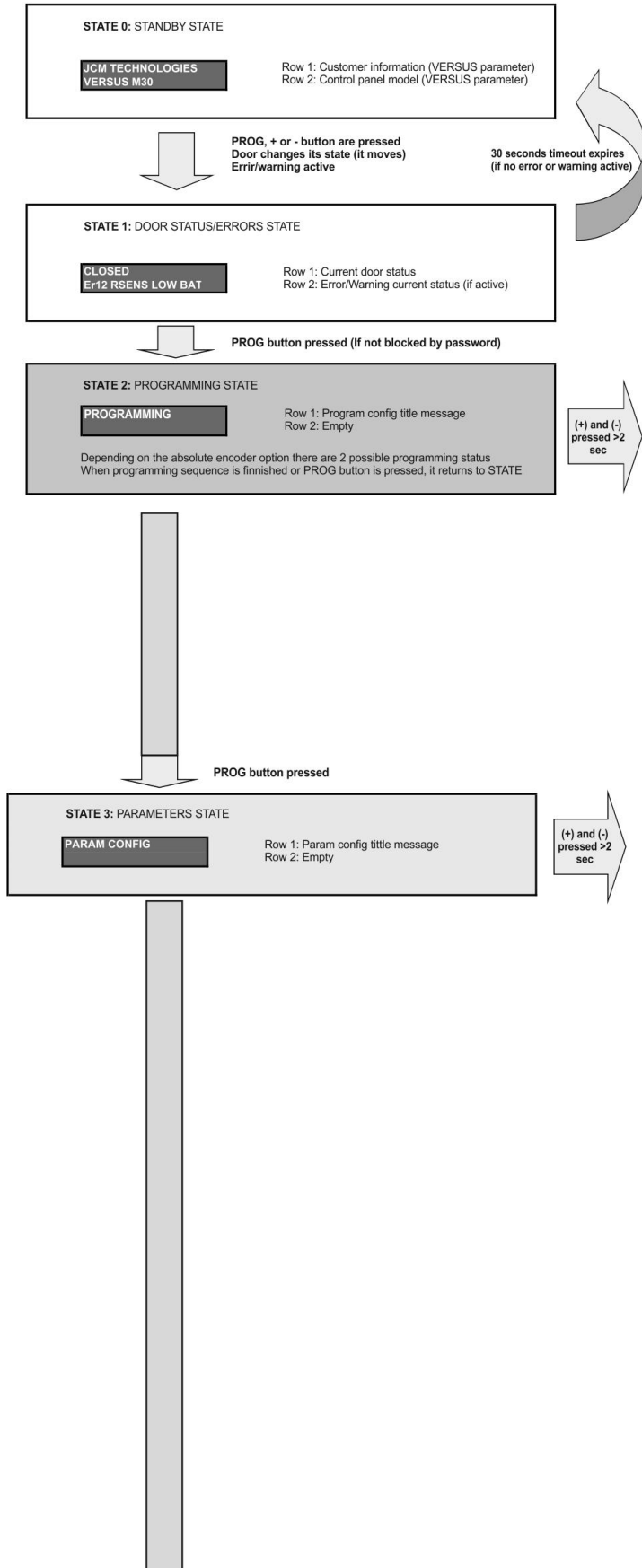
LED TURNS OFF

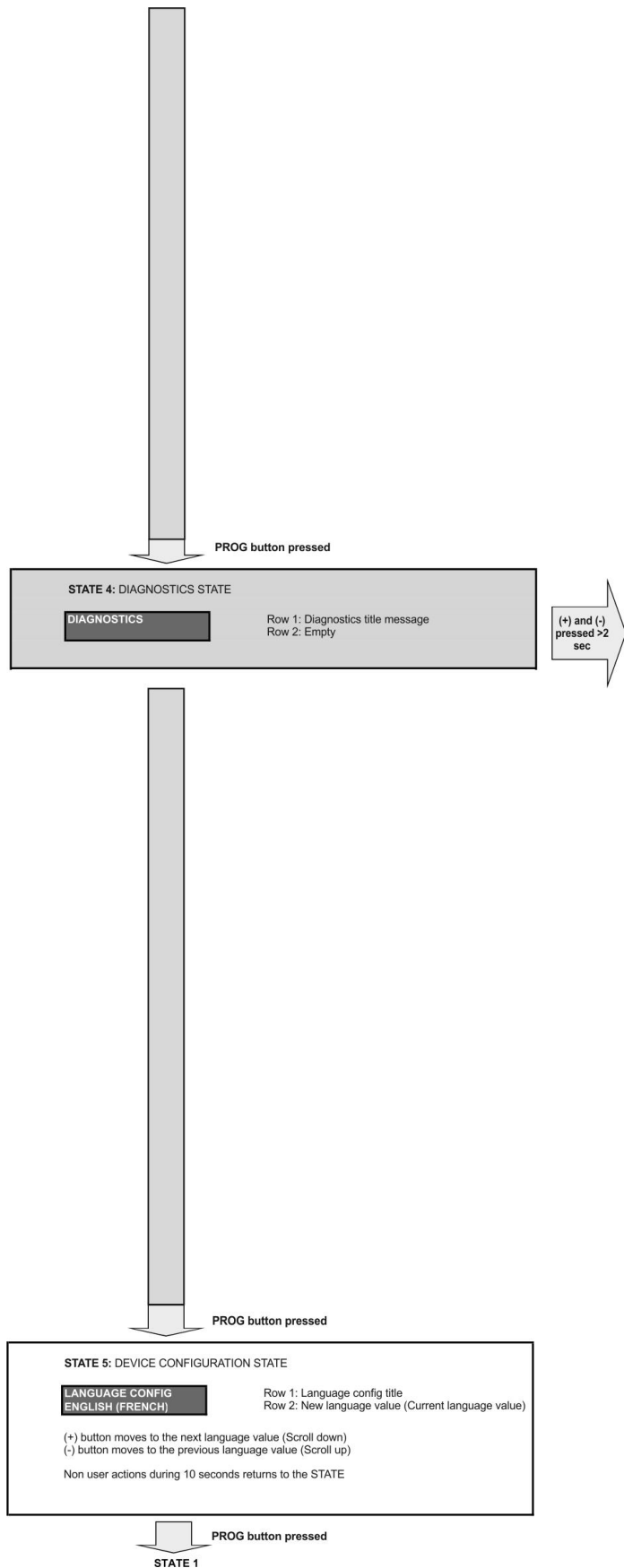


END PROGRAMMING



V-LCD menu





INPUT/OUTPUT/SWITCH parameter type
 IN 1
 *AUTOTEST SEC. CL.
 Row 1: Selected parameter description
 Row 2: New value (*means current value selected)

(+) button moves to the next parameter value (Scroll down)
 (-) button moves to the previous parameter value (Scroll up)
 PROG button selects new parameter value

NUMERICAL 8 bit long parameter type
 Autoclose time
 _025 (0030)
 Row 1: Selected parameter description
 Row 2: New value (Current value)

(+) button selects digit
 (-) button changes selected digit value
 PROG button selects new parameter value
 Note: If maximum or minimum value reached «!» symbol is displayed on the right

NUMERICAL 16, 24 and 32 bit long parameter type
 Autoclose time
 **_00000001000
 Row 1: Selected parameter description
 Row 2: New value (*means current value selected)

(+) button selects digit
 (-) button changes selected digit value
 PROG button selects new parameter value
 Note: If maximum or minimum value reached «!» symbol is displayed on the right

(+) and (-) buttons > 1 sec returns to the STATE 3.2
 Non user actions during 10 seconds returns to the STATE 3.2

STATE 4.1: DIAGNOSTICS SUBMENU SELECTION STATE
 >CHECK INPUTS
 CHECK OUTPUTS
 Row 1: Submenu N
 Row 2: Submenu N+1

(+) button moves to the next submenu (Scroll down)
 (-) button moves to the previous submenu (Scroll up)
 PROG button selects submenu (>)
 Non user actions during 10 seconds returns to the STATE 4

PROG button pressed

PLEASE WAIT
 DATA LOADING
 Row 1: Please wait message
 Row 2: Data loading message

Parameter data loading data finished

STATE 4.2: CHECKED ID SELECTION STATE
 SELECT INPUT
 IN1
 Row 1: Select input/output/switch message
 Row 2: Checked ID

(+) button moves to the next checked ID (Scroll down)
 (-) button moves to the previous checked ID (Scroll up)
 PROG button selects checked ID
 (+) and (-) buttons > 1 sec returns to the STATE 4.1
 Non user actions during 10 seconds returns to the STATE 4.1

PROG button pressed

STATE 4.3: CHECK ID STATE
 IN1
 ACTIVE
 Row 1: Checked ID description toggle ID value
 Row 2: Checked ID current status

(+) and (-) buttons > 1 sec returns to the STATE 4.2
 Non user actions during 10 seconds returns to the STATE 4.2

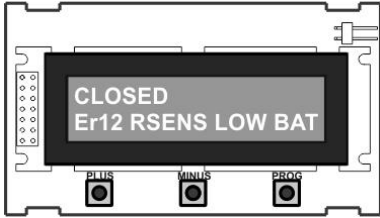
Being on standby mode, press PROG button to select the operation mode. Every time you press PROG button, you will pass from one mode to the next.

The operation modes are detailed below.

Door status mode

The first line indicates the status of the door (CLOSED, OPENING, OPENED, CLOSING)

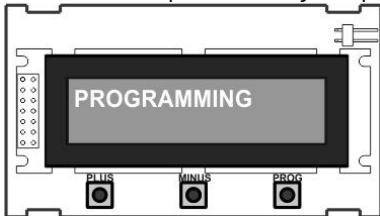
The second line indicates the number of error, if there has been one.



Programming mode

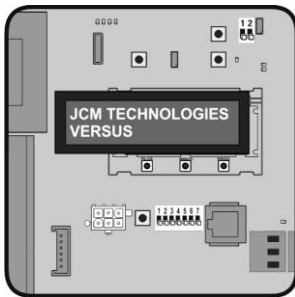
It allows programming the maneuver of the door.

There are two possible ways of programming the maneuver (with absolute encoder or without it).

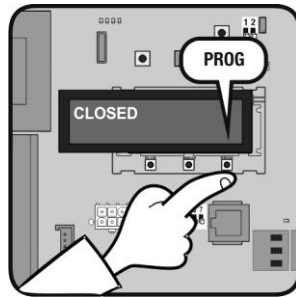


Example 1: Programming sequence with absolute encoder

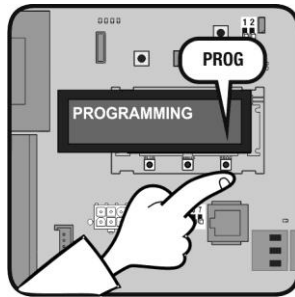
BEING ON STANDBY MODE



PRESS PROG BUTTON



PRESS PROG BUTTON



PRESS PLUS + MINUS 2s



PRESS ↑ BUTTON & KEPT TO OPEN DOOR



PRESS PLUS + PROG TO STORE OPENING POSITION



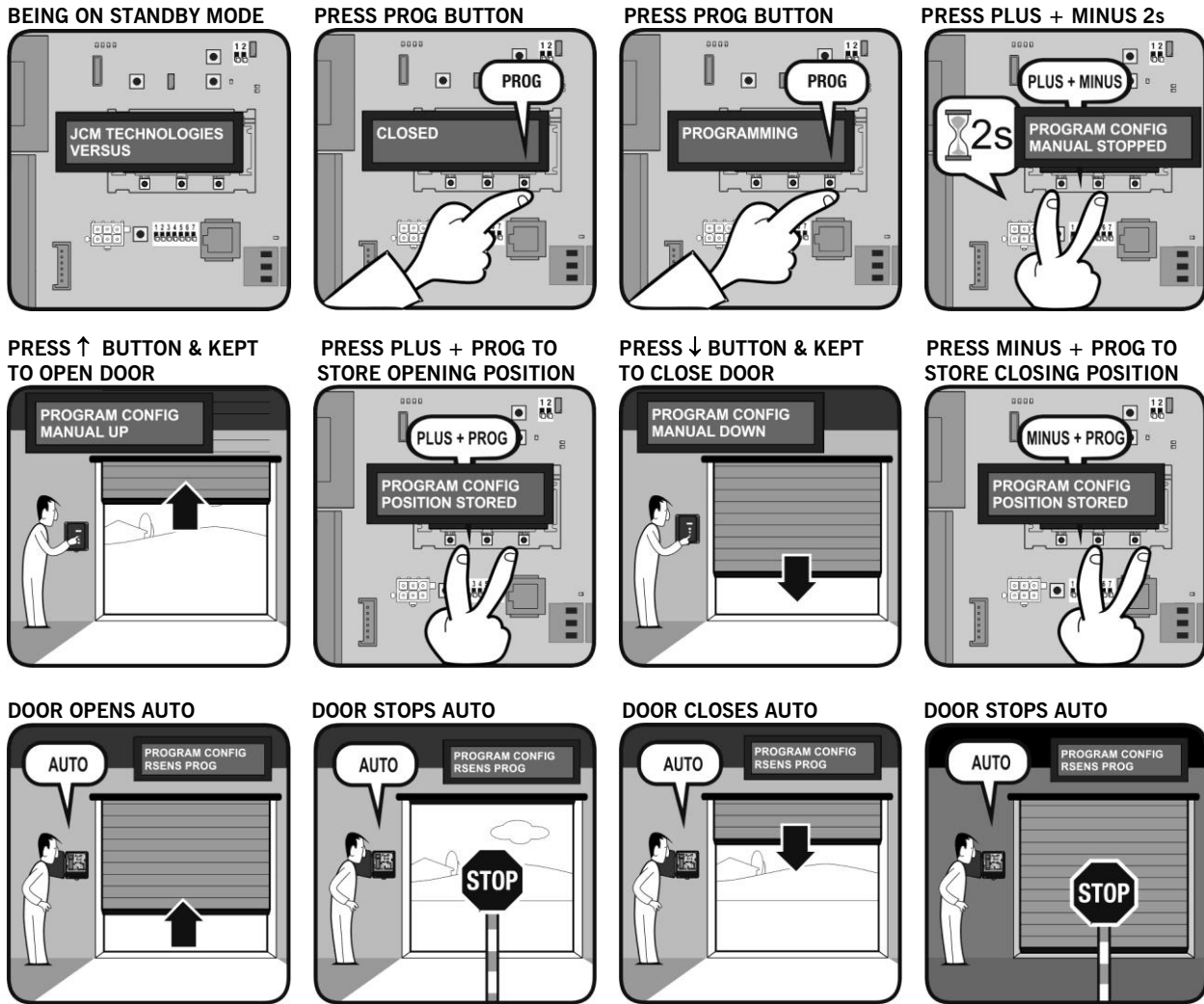
PRESS ↓ BUTTON & KEPT TO CLOSE DOOR



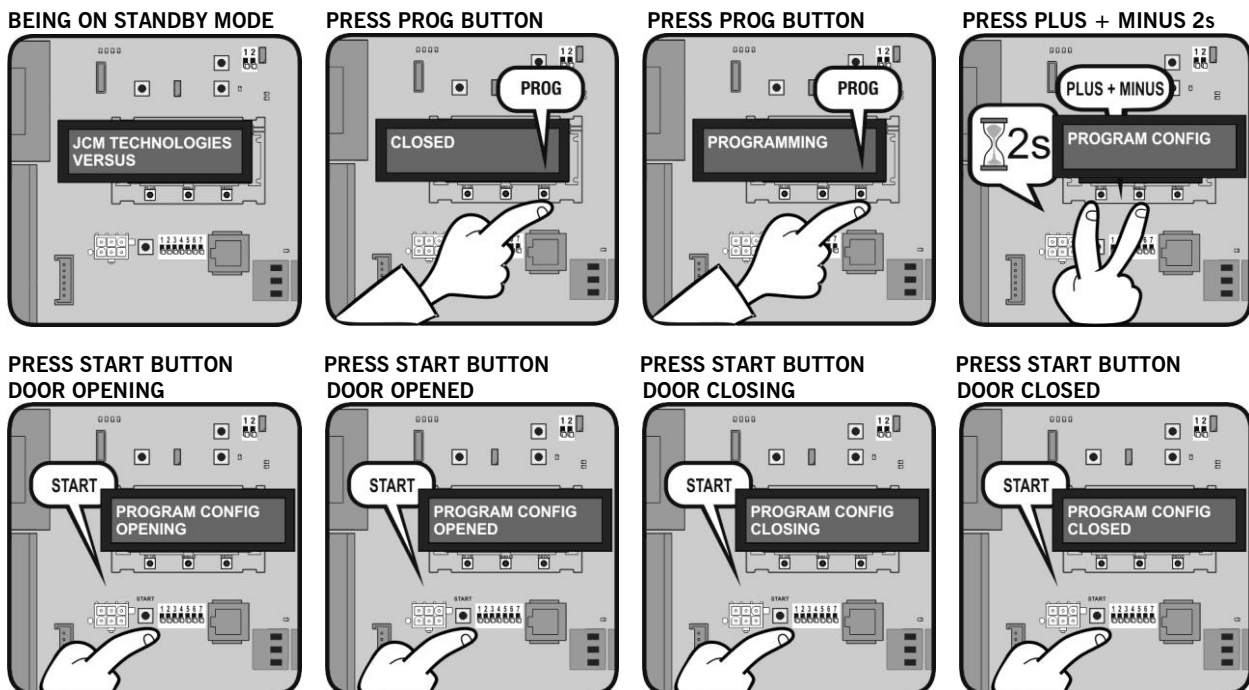
PRESS MINUS + PROG TO STORE CLOSING POSITION



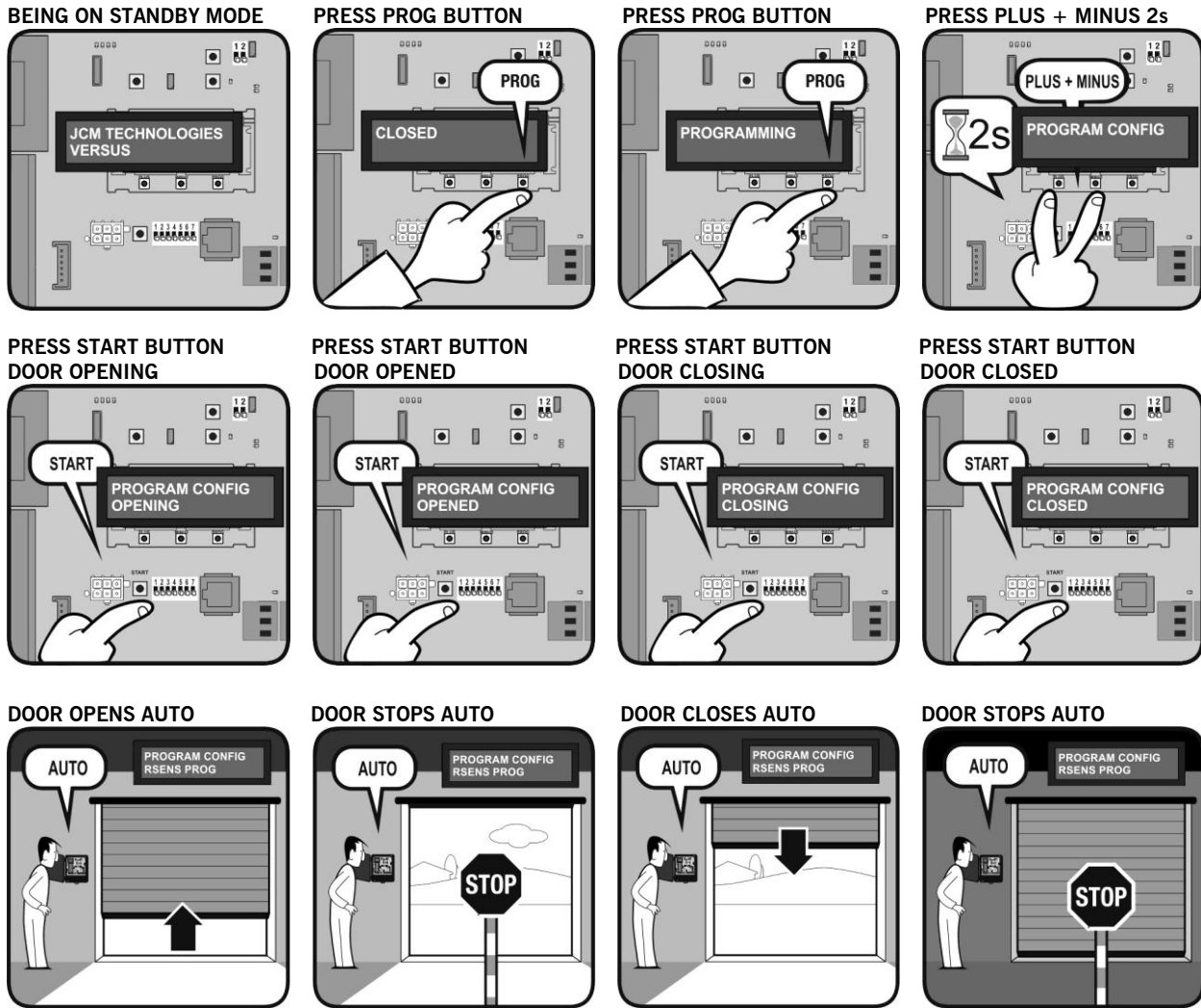
Example 2: Programming sequence with absolute encoder & RSENS



Example 3: Programming sequence without absolute encoder

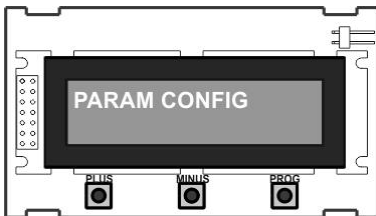


Example 4: Programming sequence without absolute encoder & RSENS

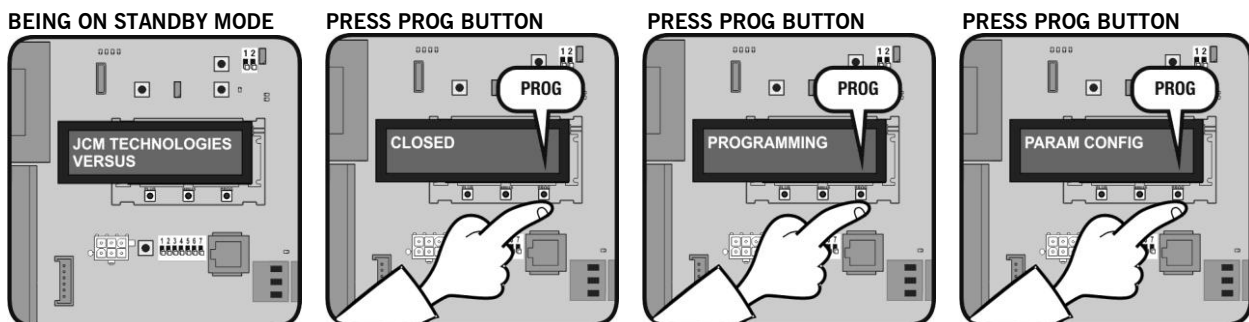


Param config mode

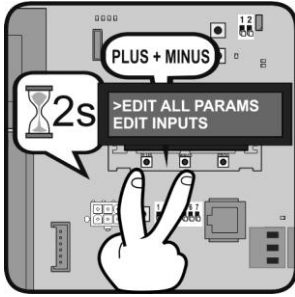
It allows editing all the parameters of the control panel and changing them.



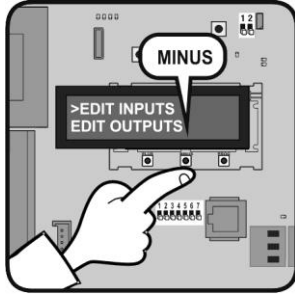
Example 1: EDIT INPUTS



PRESS PLUS + MINUS 2s TO ENTER MENU



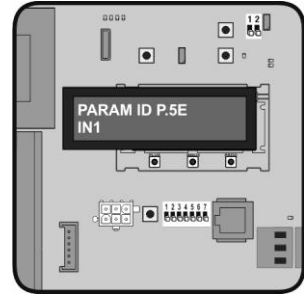
PRESS MINUS BUTTON TO GO DOWN THE MENU



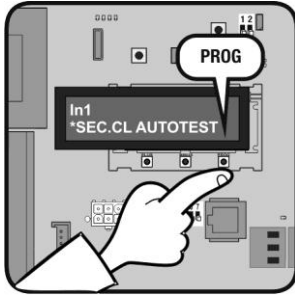
PRESS PROG BUTTON TO SELECT THE ">" OPTION



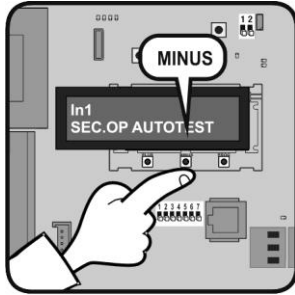
WAIT



PRESS PROG BUTTON



PRESS MINUS BUTTON TO GO DOWN THE MENU

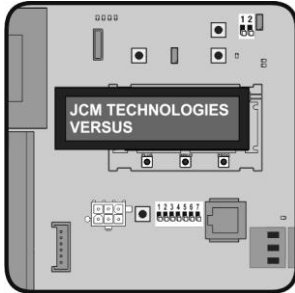


PRESS PROG BUTTON TO SELECT THE DESIRED OPTION

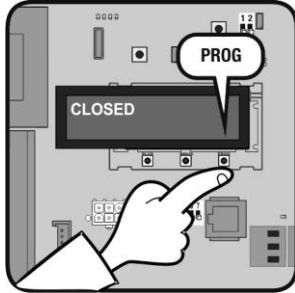


Example 2: EDIT NUMERICALS

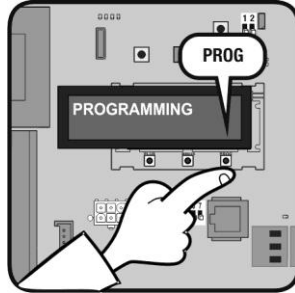
BEING ON STANDBY MODE



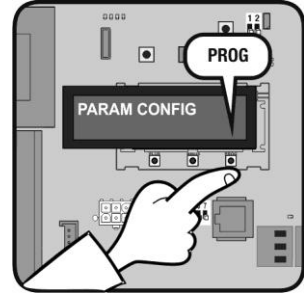
PRESS PROG BUTTON



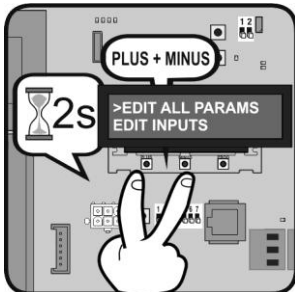
PRESS PROG BUTTON



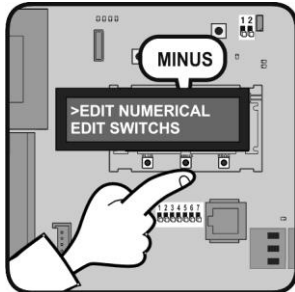
PRESS PROG BUTTON



PRESS PLUS + MINUS 2s TO ENTER MENU



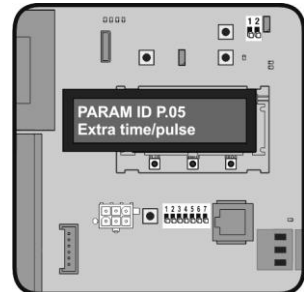
PRESS MINUS BUTTON TO GO DOWN THE MENU



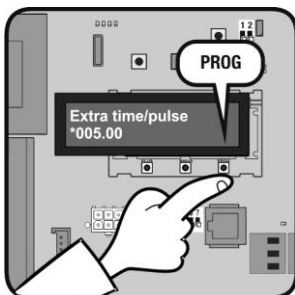
PRESS PROG BUTTON TO SELECT THE ">" OPTION



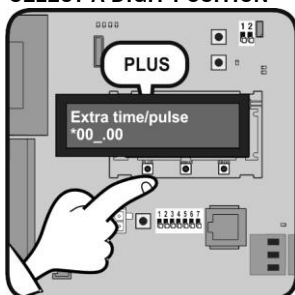
WAIT



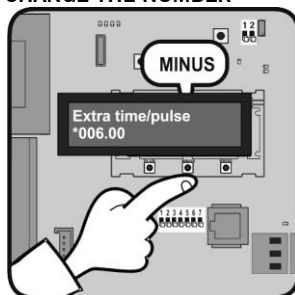
PRESS PROG BUTTON



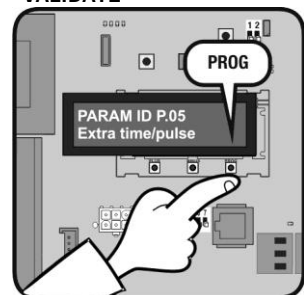
PRESS PLUS BUTTON TO SELECT A DIGIT POSITION



PRESS MINUS BUTTON TO CHANGE THE NUMBER

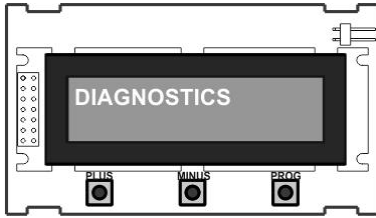


PRESS PROG BUTTON TO VALIDATE



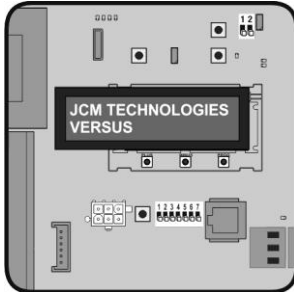
Diagnostics mode

It allows checking all the parameters of the control panel.

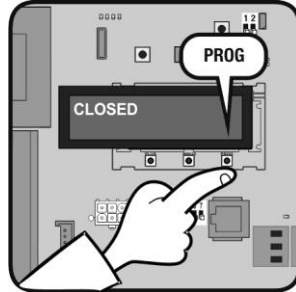


Example

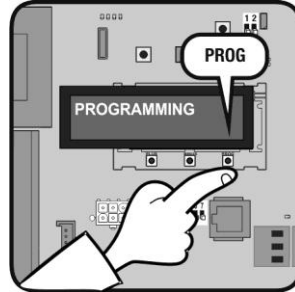
BEING ON STANDBY MODE



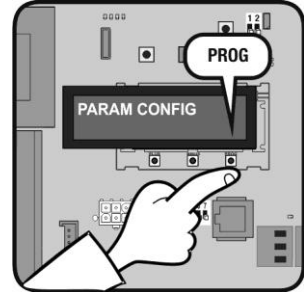
PRESS PROG BUTTON



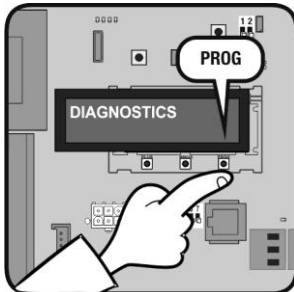
PRESS PROG BUTTON



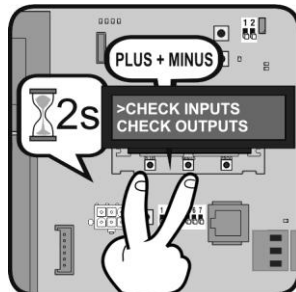
PRESS PROG BUTTON



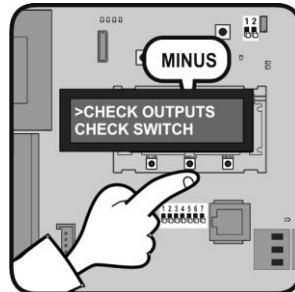
PRESS PROG BUTTON



PRESS PLUS + MINUS 2s TO ENTER MENU



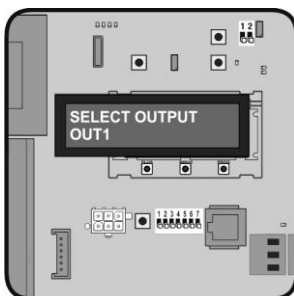
PRESS MINUS BUTTON TO GO DOWN THE MENU



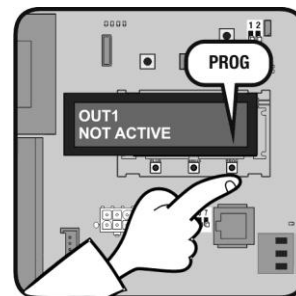
PRESS PROG BUTTON TO SELECT THE ">" OPTION



WAIT



PRESS PROG BUTTON

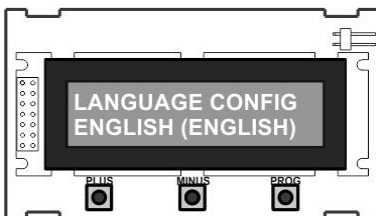


WAIT TO SEE THE FUNCTION THAT HAS THIS OUTPUT



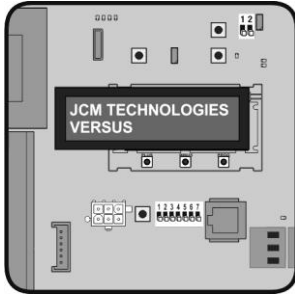
Language config mode

It allows changing the language of the V-LCD. There are three available languages in each control panel, different languages depending on the customization.

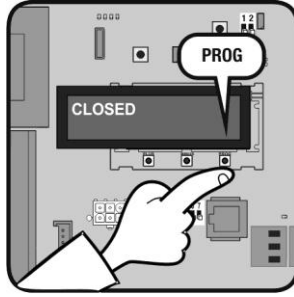


Example

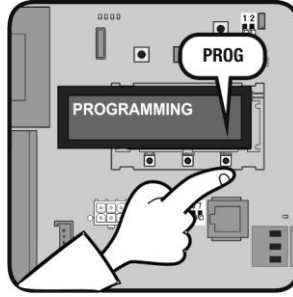
BEING ON STANDBY MODE



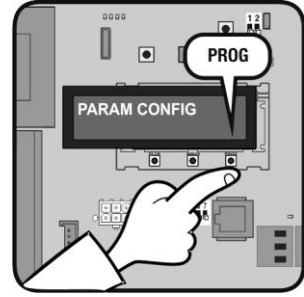
PRESS PROG BUTTON



PRESS PROG BUTTON



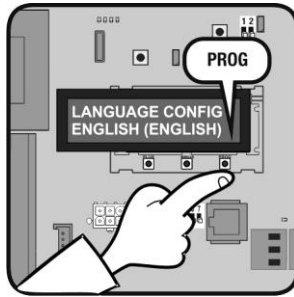
PRESS PROG BUTTON



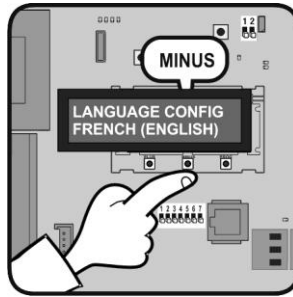
PRESS PROG BUTTON



PRESS PROG BUTTON



PRESS MINUS BUTTON TO GO DOWN THE MENU

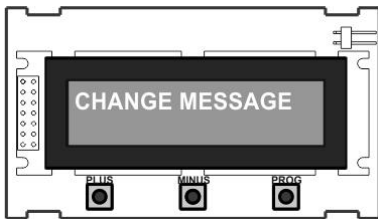


PRESS PLUS + MINUS TO SELECT THE DESIRED OPTION



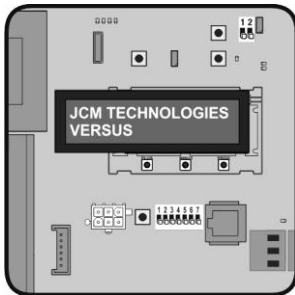
Change message mode

It allows changing the initial message of the V-LCD.

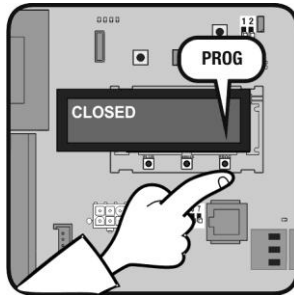


Example

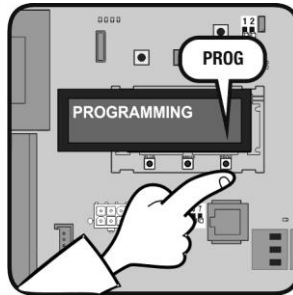
BEING ON STANDBY MODE



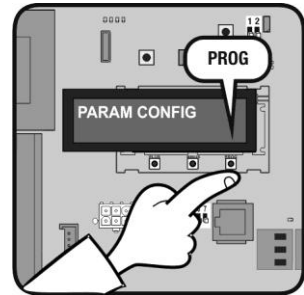
PRESS PROG BUTTON



PRESS PROG BUTTON



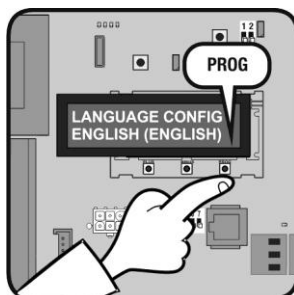
PRESS PROG BUTTON



PRESS PROG BUTTON



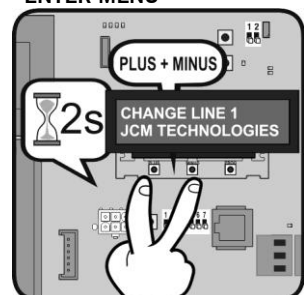
PRESS PROG BUTTON



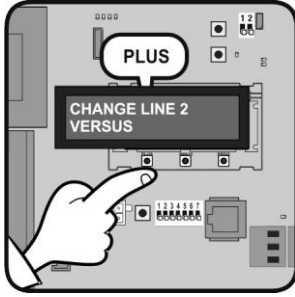
PRESS PROG BUTTON



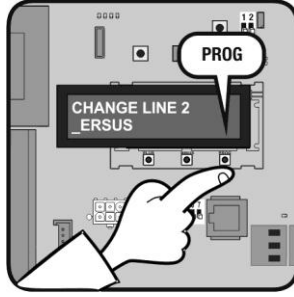
PRESS PLUS + MINUS 2s TO ENTER MENU



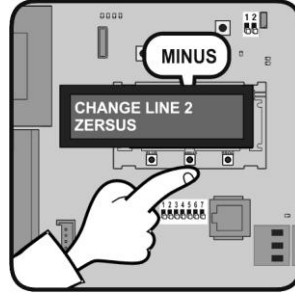
PRESS PLUS BUTTON TO CHANGE LINE 2



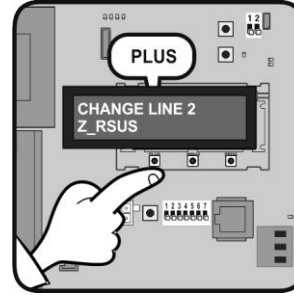
PRESS PROG BUTTON TO SELECT THE LETTER



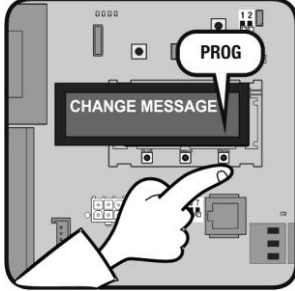
PRESS MINUS BUTTON TO CHANGE THE LETTER



PRESS PLUS BUTTON TO CHANGE POSITION



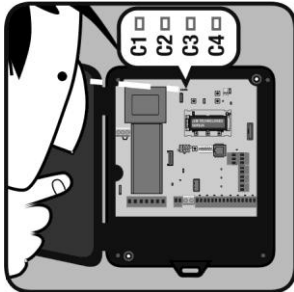
PRESS PROG BUTTON TO VALIDATE



Radio programming

Radio programming (C1-Start)

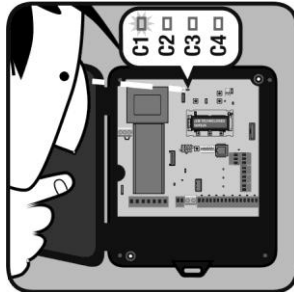
OPEN TOP



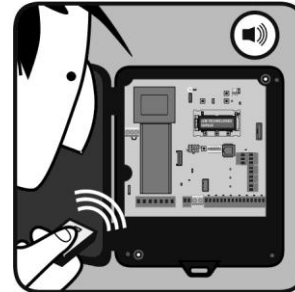
PRESS RPROG BUTTON



LED C1 TURNS ON



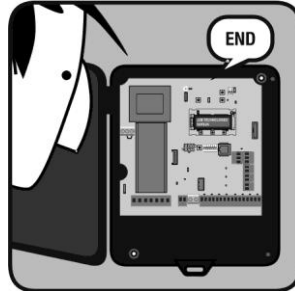
PRESS TRANSMITTER



PRESS RPROG BUTTON



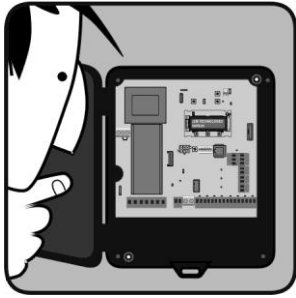
LED TURNS OFF



Maintenance

Reset of transmitters codes

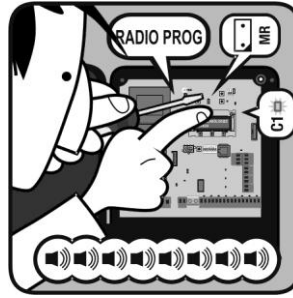
OPEN TOP



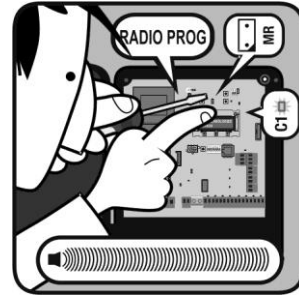
PRESS AND HOLD RPROG



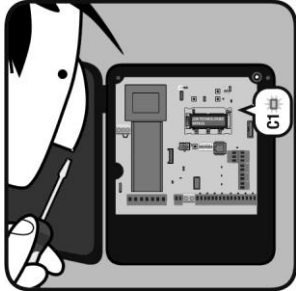
BRIDGE MR



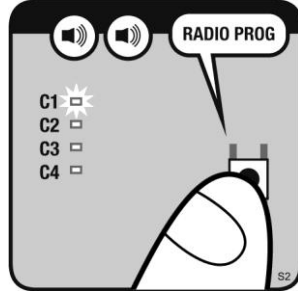
SEVERAL BEEPS



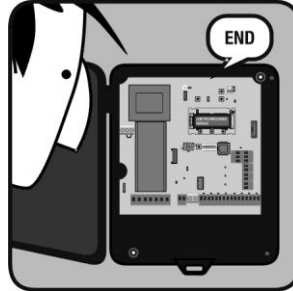
END RESET



PRESS RPROG PUSHBUTTON

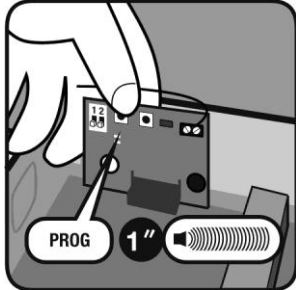


LED TURNS OFF

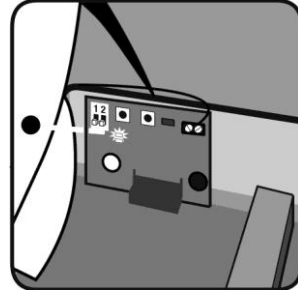


Reset of transmitters in RSEC3 Receiver

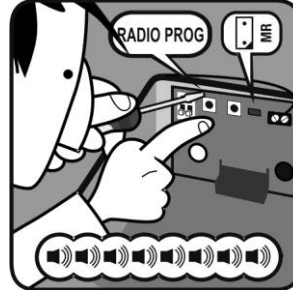
PRESS RPROG PUSHBUTTON



LED TRURNS ON



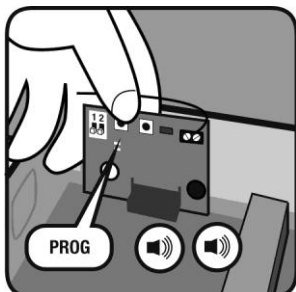
BRIDGE MR



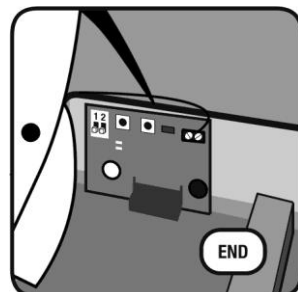
SEVERAL BEEPS & END RESET



PRESS RPROG PUSHBUTTON



LED TURNS OFF & END PROG



Maintenance

Leds and beeps indication table

R1/R2 Led	Check Led	Beeps	Equipment	Message / error	Solution
ON	OFF	No beeps	Rband3 transmitter	Detection of the safety edge	Verify that the IN1/IN2 led of the Rband3 transmitter is at ON to check the correct operation.
			Rband3 receiver	Communication failure between Rband2 transmitter and Rband3 receiver	Verify the radio signal with the Check function.
OFF	OFF	4 beeps each 20 seconds	Rband3 receiver	Rband3 transmitter low battery	Verify the batteries of the transmitter
OFF	ON	No beeps	Rband3 receiver	Check function. See coverage and signal quality table.	---

Replacing a transmitter

If a transmitter becomes damaged the whole system must be reset and replaced, and non-damaged transmitters must then be re-programmed into the receiver.

RSEC3 System check (Check function)

Press the receiver's CHECK button for at least 1 second to enter check mode. The indicator light will come on and four beeps will be heard.

Perform a complete door opening and closing manoeuvre. During the system check a beep will be heard every 1,5 seconds.

To exit Check mode, press the CHECK button or wait 5 minutes. On exiting check mode, seven consecutive beeps will be heard and the indicator light will flash continuously.

If the communication fails:

- In case you work with RB3, halt the door manoeuvre and press the safety edges installed to detect what has failed.
- In case you work with RS3, halt the door manoeuvre and check in operating mode (outside the Check function) that the D" green led indicates a coverage failure too.

Perform another system check until the result is correct.

Press the safety edges	N° flashes check led	Signal coverage	Result of check	Solution
Three consecutive beeps are heard	1	Very weak	Safety edge failure	Change the orientation of the transmitting-receiving aerials or install an AED-868 or FLAT-868 outdoor aerial to ensure the desired range.
	2	Weak	OK	The battery consumption will be higher
A single beep is heard	3	Normal	OK	
A single beep is heard	4	Good	OK	
A single beep is heard	5	Very good	OK	

Parameters

The configurable parameters of the control panels are grouped by parameter type as follows.

All these parameters depend on the installation type, used motor and used safety devices. Furthermore they depend on the needs of each installation like maneuver timings, speeds of the door, etc...

ON/OFF Option parameters

The ON/OFF parameters allows enable or disable control panel functions according to the needs of each installation.

The parameters marked with the file in grey are only read parameters and they cannot be modified.

Num.	Value	On/off	Description
02	Auto close	0 – OFF	Enables the autoclose function.
		1 – ON	
03	No stop on opening	0 – OFF	Enables the non inversion at opening function.
		1 – ON	
06	Inhib.4cm S.EDGE.CL	0 – OFF	Enables the safety edge inhibition function during the last 4cm of the closing movement.
		1 – ON	
07	Dead man	0 – OFF	Enables the deadman function.
		1 – ON	
08	SEC.CL inhibition	0 – OFF	Enables the closing safety contact inhibition function.
		1 – ON	
09	FC.OP installed	0 – OFF	Indicates whether, during programming, the panel has found and memorised a limit switch on opening and, therefore, will act accordingly. In most cases, it will open until this is found, adding pulses or time if required.
		1 – ON	
0A	FC.CL installed	0 – OFF	Indicates whether, during programming, the panel has found and memorised a limit switch on closure and, therefore, will act accordingly. In most cases, it will close until this is found, adding pulses or time if required.
		1 – ON	
0E	Time mode	0 – OFF	Enables the operation by Time, i.e. the position is controlled by counting time.
		1 – ON	
11	Customization ID	0 – OFF	Shows the customization number of the control panel.
		1 – ON	
18	SEC.CL programmed	0 – OFF	Indicates if the closing security contact has been programmed during the manoeuvre. The security contact inhibition during the closing movement may not comply with regulations.
		1 – ON	
1A	Closing by CSEC	0 – OFF	Enables the closure by security contact.
		1 – ON	
22	Lock mode	0 – OFF	Indicates the RSENS lock configuration, if it has been detected on programming mode.
		1 – ON	
23	RBAND detected	0 – OFF	Indicates the RBAND presence, if it has been detected on programming mode.
		1 – ON	
24	Error info displayed	0 – OFF	Enables the advanced level of errors/warnings displayed.
		1 – ON	
26	Motor outputs inverted	0 – OFF	Enables the sense inversion of motor outputs.
		1 – ON	
28	RBAND mode	0 – OFF	Enables the RBAND mode.
		1 – ON	
29	RSENS mode	0 – OFF	Enables the RSENS mode.
		1 – ON	
2A	RSENS detected	0 – OFF	Indicates the RSENS presence, if it has been detected on programming mode.
		1 – ON	
2E	Deadman if RSEC virgin	0 – OFF	Enables dead man operating if a not programmed RSEC/R is detected.
		1 – ON	
2F	Autodetect OptoEdge IN1	0 – OFF	Indicates that the IN1 input is configured as optical edge input.
		1 – ON	
30	Autodetect OptoEdge IN2	0 – OFF	Indicates that the IN2 input is configured as optical edge input.
		1 – ON	
31	Autodetect OptoEdge IN3	0 – OFF	Indicates that the IN3 input is configured as optical edge input.
		1 – ON	
91	Pre-FLASH option	0 – OFF	Enables the pre-flash function at the beginning of the manoeuvre.
		1 – ON	
92	RSENS Dynamic Radio	0 – OFF	Enables the dynamic adjustment mode the radio power for the RSENS.
		1 – ON	

B1	Block On/off by password	0 – OFF	Enables the blockage of the control panel via password (default value 0000).
		1 – ON	
B4	Current blockage status	0 – OFF	Indicates if the control panel is blocked currently.
		1 – ON	
BE	Absolut encoder mode	0 – OFF	Enables the operating by absolute encoder, that means that the position control is done by the absolute encoder control
		1 – ON	

Numeric parameters

The numeric parameters allow defining different values of the control panels.

Note: When the **V-DPLAY** is used to read and/or configure parameters, it must be taken into account the following. The **V-DPLAY** card only shows the two first digits of the most weight of the value. The real value then will be the value showed on the display multiplied by a scale factor (DPLAY factor), indicated on the third column of the table.

$$\text{Real value} = \text{showed value} * \text{DPLAY factor}$$

For example, if, for the 33 parameter, the display shows a 2, the real value will be $2 * 1000 = 2000$.

Num.	Numeric	Factor DPLAY	Description
5	Time/pulse extra inv.	1000	Time or pulse number added in each inversion.
32	Max.num movements	10000000	Limit number of panel movements as of which a special mode is enabled (operating or notification mode) in order to indicate that door maintenance is required.
33	Opening stop point	1000	Stop point for the opening movement. In the case of operations by pulses, it indicates the number of pulses required to open from the ground synchronism or closed door. The ground is normally point 0. In the case of operations by time, the entire opening movement operation duration is indicated. The panel returns the count in slow speed units, the programme recalculates by adding the slow and normal speeds, multiplied by the normal/slow ratio factor, as applicable.
34	Closing stop point	1000	Stop point for the closure movement. In the case of operations by pulses and on most panels, this is position value 0. It will be of no use for controlling the position of the door. In the case of operations by time, the entire closure movement operation duration is indicated. The panel returns the count in slow speed units, the programme recalculates by adding the slow and normal speeds, multiplied by the normal/slow ratio factor, as applicable.
37	Open Ped.stop point	1000	Stop point for the door during pedestrian opening movements.
38	Close Ped.stop point	1000	Stop point for the door during pedestrian closure movements.
3B	SEC.CL inhib.point	1000	Point at which security contact inhibition is started during the closing movement.
3E	Max.time/pulses to limit	1000	Number of pulses or time to be added to the opening and closure movement to search for the reference, i.e. to reach the end of run or mechanical stop memorised during programming.
3F	Inertia opening	1000	Number of pulses that the door has run with the motor at a standstill due to inertia during opening operations.
40	Inertia closing	1000	Number of pulses that the door has run with the motor at a standstill due to inertia during closure operations.
41	Autoclose value	10	Auto-close time.
42	Inhib.zone start point	1000	Size of the inhibition zone of any safety device at the end of the maneuver.
47	Max.security detections	10	Number of security trigger reversals permitted before auto-close is inhibited. Where the door exceeds this maximum number of consecutive closure reversals without being able to close completely, the auto-close function will be disabled.
4A	Electrolock time	10	Activation time of the electrolock.
4B	Courtesy light time	10	Activation time of the garage light.
4C	Flash frequency	10	Flash period time.
50	Panic signal period	10	Activation time of the panic signal.
53	RSENS inhib.margin	10	Inhibition zone of the closing maneuver of RSENS.
B2	Password value	100(*)	Password's value for the blockage of the control panel.
B3	Inversion time by SEC.CL	100	Inversion time after closing security detection.

(*) The password value is composed of 4 digits so that it can take values from 0000 to 9999. As it is modified the V-DPLAY accessory, first introduce the first 2 digits higher (P1) and then the other 2 digits (P2).

Switch parameters

The switch parameters allow assigning different functions to each option of the switch. Each switch input (option) can have different values; they are indicated on the third column of the following table.

If there is a physical switch on the board with one of the following parameters associated, it will be taken into account always. That means, if option 1 of the physical switch on the board has assigned the function Autoprogramming and it is at ON, and the parameter 01 (Autoprogramming) is at OFF, the control panel will take the value Autoprogramming at ON.

Switch parameters

Num	Switch	Available values - description
54	Switch 1	0 NO FUNCTION The switch has not got a defined function
55	Switch 2	1 AUTOPROGRAMMING Enables the autoprogramming function
56	Switch 3	2 AUTOCLOSE Enables the autoclose function
57	Switch 4	3 NOSTOP ON OPENING Enables the non inversion at opening function
58	Switch 5	4 SLOW SPEED Enables the slow speed
59	Switch 6	5 ELECTROLOCK Enables the electrolock function
5A	Switch 7	6 INH.4CM S.EDGE.CL Enables the safety edge inhibition function during the last 4cm of the closing movement.
5B	Switch 8	7 DEAD MAN Enables the deadman function
5C	Switch 9	8 SEC.CL INHIBITION Enables the closing safety contact inhibition function.
		9 RSENS CONFIG Enables the RSENS mode.
		10 RBAND CONFIG Enables the RBAND mode.
		11 TIME/HALL CONFIG Configures: 1 - ON: Time function; 2 - OFF: HALL function
		12 SEC.CL TEST Enables the closing security contact autotest
		13 SEC.OP TEST Enables the opening security contact autotest
		14 PRE-FLASH Enables the pre-flash function
		15 CLOSING BY SEC.CL Enables the closing security contact
		16 COURTESY LIGHT/FLASH Configures: 1 - ON: garage light output; 2 - OFF: flash output
		17 TEST PRESSURE SWITCH Configuration test pressure switch function.
		18 INH.OP.PRESSURE SW Enables the inhibition function of the pressure switch during the opening sequence.
		19 SEC.CL OPEN REF Configuration of close security contact as opening reference function.
		20 AUTO DETECT.FC. Configuration of the autodetection of limit switches by current (AC motors).
		21 REVERSE STRIKE Configuration of the reverse strike at open.

Jumpers

Jumper	Function
JP	If cut off does not allows Side-prog programming

Input parameters

The input parameters allow configuring each available input of the control panel. Each input can have different values; they are indicated on the third column of the following table.

Num	Inputs	Available values - description			
5E	IN 1:IN10	0 NO FUNCTION The input has not got a defined function.			
		1 S.EDGE.CL Closing safety edge input (8k2) .			
		2 S.EDGE.OP Opening safety edge input (8k2).			
		5 FC.OP M1 M1 motor opening limit switch input (NC).			
		6 FC.OP M2 M2 motor opening limit switch input (NC).			
		7 FC.CL M1 M1 motor closing limit switch input (NC).			
		8 FC.CL M2 M2 motor closing limit switch input (NC).			
		9 SEC.OP Opening security contact input (NC).			
		10 SEC.CL Closing security contact input (NC).			
		11 STOP Stop pushbutton input (NC).			
		12 START Start pushbutton input (NO).			
		13 OPEN Open pushbutton input (NO).			
		14 CLOSE Close pushbutton input (NO).			
		15 PEDESTRIAN START Pedestrian pushbutton input (NO).			
		16 PEDESTRIAN OPEN Open pedestrian pushbutton input (NO).			
		17 DEAD MAN OPEN Open pushbutton input in deadman mode (NO).			
		18 DEAD MAN CLOSE Close pushbutton input in deadman mode (NO).			
		19 DEAD MAN OP-CL Start pushbutton input in deadman mode (NO).			
		20 HALL A MOTOR 1 HALL A for M1 motor input			
		21 HALL B MOTOR 1 HALL B for M1 motor input			
		22 HALL A MOTOR 2 HALL A for M2 motor input			
		23 HALL B MOTOR 2 HALL B for M2 motor input			
		24 ZERO CROSS Configuration input as zero pass.			
		25 PROG Programming pushbutton input PROG.			
		26 CURRENT MOTOR 1 Configuration input as current motor 1.			
		27 CURRENT MOTOR 2 Configuration input as current motor 2.			
		5F	START pushbutton IN	28 SEC.OP Magnetic opening security contact input (connected to MTC).	
		60		29 RADIO START Start pushbutton via radio input (NO).	
		61		30 STOP BY TEMPERATURE Temperature stop input (thermal).	
		62		31 SEC.CL Magnetic closing security contact input (connected to MTC).	
		6A		PROG pushbutton IN	32 SEC.OP AUTOTEST Opening security contact with autotest function input (NC). If this input is used, an autotest output ready to perform autotest functions must be used.
					33 SEC.CL AUTOTEST Closing security contact with autotest function input (NC). If this input is used, an autotest output ready to perform autotest functions must be also used.
		6E		(DCS CH1) IN	34 S.EDGE.CL AUTOTEST Closing safety edge with autotest function input (NC). If this input is used, an autotest output ready to perform autotest functions must be also used.
					35 S.EDGE.OP AUTOTEST Opening safety edge with autotest function input (NC). If this input is used, an autotest output ready to perform autotest functions must be also used.
		72		(DCS CH2) IN	36 RSENS DETECTION Configuration input as RSENS detection.
					37 RBAND OPEN DETECT Configuration input as RBAND opening detection.
					38 RBAND CLOSE DETECT Configuration input as RBAND closing detection.
					39 STOP N.O. STOP input (NO)
					40 OPTO EDGE.CL Closing optical safety edge input.
					41 OPTO EDGE.OP Opening optical safety edge input.
					42 PRESSURE SWITCH Configuration input as pressure switch
					43 AUTOEDGE.CL Closing automatic 8K2/OPTO safety edge input.
					44 AUTOEDGE.OP Opening automatic 8K2/OPTO safety edge input.
					45 COURTESY LIGHT ON Courtesy light activation input.
					46 OPEN SLOW SPEED REF Configuration input as opening slow speed entering reference.
					47 CLOSE SLOW SPEED REF Configuration input as closing slow speed entering reference.
		74		(Motion C1) IN	48 OPEN INSIDE Configuration input as open from inside.
		75		(Motion C2) IN	
76	(Motion C3) IN				
77	(Motion C4) IN				

Output parameters

The output parameters allow configuring each available input of the control panel. Each output can have different values; they are indicated on the third column of the following table.

Num	Output	Available values - description
78	OUT 1:OUT 6	0 ALWAYS OFF The output has not got a defined function
79		1 COURTESY LIGHT LEVEL Garage light level output (duration = maneuver time + programmed time)
7A		

7B		2	COURTESY LIGHT PULSE	Garage light pulse output (duration = programmed time)
90		3	FLASH	Flash output
A1		4	FLASH+COURTESY LIGHT	Flash+courtesy light by level output.
A2		5	ELECTROLOCK	Electrolock output
A3		6	ELECTROBRAKE	Electrobrake control output
A4		7	CLOSE AUTOTEST SIGNAL	Closing security contact autotest output
A5		8	OPENING SEQ. START	Active output right at the beginning of the opening operation
A6		9	OPENING SEQUENCE	Active output during all the opening operation
A7		10	CLOSING SEQ. START	Active output right at the beginning of the closing operation
A8		11	CLOSING SEQUENCE	Active output during all the closing operation
A9		12	ERROR SIGNAL	Active output when error detection
AA		13	PEDESTRIAN SEQUENCE	Active output during pedestrian mode
AB		14	PANIC SIGNAL	Active output when panic signal detection
AC		15	GREEN LIGHT	Green traffic light control output
AD		16	RED LIGHT	Red traffic light control output
AE		17	INSIDE GREEN LIGHT	Green inside traffic light control output (traffic control mode)
	(TL-CARD-V) OUT	18	INSIDE RED LIGHT	Red inside traffic light control output (traffic control mode)
		19	OUTSIDE GREEN LIGHT	Green outside traffic light control output (traffic control mode)
		20	OUTSIDE RED LIGHT	Red outside traffic light control output (traffic control mode)
		21	INTRUSIVE SIGNAL	Intruder detection function output
		22	S.EDGE ACTIVE	Active output when safety edge detection
		23	SEC.OP ACTIVE	Active output when opening security contact detection
		24	SEC.CL ACTIVE	Active output when closing security contact detection
		25	FC.OP ACTIVE	Active output when opening limit switch detection
		26	FC.CL ACTIVE	Active output when closing limit switch detection
		27	ALARM	Active output when alarm signal detection
		28	MAX. NUM.SEQUENCES	Active output when the maximum number of maneuvers is exceeded
		29	ALWAYS ON	Output always active
		30	MOTOR RUNNING	Active output at any door movement
		31	LOW BATTERY SIGNAL	Active output when low battery detection
		32	OPEN AUTOTEST SIGNAL	Opening security contact autotest output
		33	ELECTROMAGNET	Configuration output as electromagnet control.
		34	BOLLARD	Configuration output as bollard control signal.
		35	BOLLARD LIGHT	Configuration output as a crown of light bollard.
		36	BOLLARD RED LIGHT	Configuration output as red traffic light bollard mode.
		37	BOLLARD WARNINGLIGHT	Configuration output as warning traffic light bollard mode.
AF				
BO				

Status parameters

The status parameters indicate the state of the maneuver, last errors or control panel versions. These parameters are only read parameters and they cannot be modified.

Num.	Parameters	Factor DPLAY	Description
7F	Control panel status	10	Shows the control panel state (open, lost, closed)
80	Control panel last error	10	Shows the value of the last error detected
81	Number of sequences	100000000	Shows the number of memorized manoeuvres
96	Software version	1000	Shows the software version of the control panel
97	EEPROM version	1000	Shows the memory data version
98	Serial number	100000000	Shows the serial number of the control panel
99	Production ID	100000000	Shows the production number of the control panel
9A	Panel last Problem	10	Shows the last problem detected
9B	Panel last Warning	10	Shows the value of the last warning detected
9D	101-104 TL-CARD-V Status	10	Shows if the TL-CARD-V with the 101, 102, 103, 104 output is connected.

9E	111-114 TL-CARD-V Status	10	Shows if the TL-CARD-V with the 111, 112, 113, 114 outputs is connected.
9F	121-124 TL-CARD-V Status	10	Shows if the TL-CARD-V with the 121, 122, 123, 124 outputs is connected.
A0	131-134 TL-CARD-V Status	10	Shows if the TL-CARD-V with the 131, 132, 133, 134 outputs is connected.

Light indicators

Function	Indicates	Default value
ON	Power supply	Normally light on
STOP/ERROR	Operating warning or error	Normally light off
PROG	Programming mode	Normally light off
INXX	Input activated	Normally light off
OUTXX	Output activated	Normally light off

Display messages

Serious errors

Errors associated with the security of the installation or equipment malfunction. These errors must be resolved always.

	Error	Description	Solution
<i>Er02</i>	INT. ERROR	Internal error	Go to the technical service
<i>Er08</i>	HA ERROR	Hall A error	Verify the hall A input connections
<i>Er09</i>	PROG TIME MAX	Hall B error	Program a maneuver below the maximum allowed time
<i>Er12</i>	S.EDGE.CL ERROR	Closing safety edge error	Verify the security edge band connections when closing
<i>Er13</i>	S.EDGE.OP ERROR	Opening safety edge error	Verify the security edge band connections when opening
<i>Er16</i>	TEMP ON	Motor temperature sensor activated	Verify the motor state and the temperature sensor connection
<i>Er19</i>	TEST.CL ERROR	Closing auto test error	Verify that the security device connected to the security connection when closing is in good conditions and correctly installed
<i>Er20</i>	TEST.OP ERROR	Opening auto test error	Verify that the security device connected to the security connection when opening is in good conditions and correctly installed
<i>Er21</i>	RSENS NC WHEN PROG	Control panel programmed without RSENS connected	Connect the RSEC card and program the control panel again
<i>Er22</i>	RSENS NOT FOUND	Control panel programmed with RSENS connected and now it is not connected	Program the control panel again without RSEC or connect the RSEC again that was programmed to the control panel previously
<i>Er23</i>	RSENS PROG ERROR	RSENS programming error, are R and T paired?	Program the transmitter RSENS to the RSEC receiver card
<i>Er26</i>	STOP	Control panel stopped by an STOP	Verify that the STOP input has been activated
<i>Er28</i>	INTERNAL ERROR	Internal control panel error	Go to the technical service
<i>Er29</i>	DOOR LOCKED RSENS	Closed door latch	Open the door's latch before the opening manoeuvre
<i>Er30</i>	RBAND NOT FOUND	Control panel programmed with RBAND connected and now it is not connected	Program the control panel again without using RBAND or connect the RBAND that was connected to the control panel previously
<i>Er31</i>	RBAND NC WHEN PROG	Control panel not programmed with RBAND connected	Connect the RBAND card and program the control panel again
<i>Er32</i>	FC NOT LEARNT	End of course learning error	Verify the intern motor limit switches
<i>Er33</i>	ERROR SYNC RSENS	Synchronization error between the receiver and the transmitter	Program the transmitter RSENS to the RSEC receiver card

Er36	RSENS RADIO ERROR	Detection through opening current	Verify the batteries of the RSENS emitter id they are charged, verify the radio signal with the Check function
Er39	CTROL PANEL BLOCKED	Control panel cannot enter programmation because it is blocked.	Enter the password with V-DPLAY or VERSUS-PROG for unlocking the control panel.
Er41	ERROR ABSOLUT ENCODER	Absolut encoder not found or returning a mistake	Verify the connection of the absolute encoder

Minor errors

Errors that do not inhibit the operation of the control panel but it is recommended to solve for a good operating.

	Error	Description	Solution
Er01	NOT PROGRAMMED	Control panel not programmed	Program the control panel again
Er07	REF. NOT FOUND	Any reference has been reached	Define a reference when programming the control panel (limit switch, mechanical stop, etc...)
Er24	FCO	Control panel programmed with RSENS but without FCO	A limit switch should be installed to improve the installation with the RSENS system
Er25	RSENS LOW BATTERY	RSENS low battery	Verify the batteries of the RSENS transmitter

Warnings

Informative messages from the control panel.

	Error	Description	Solution
Er03	FC.CL M1 NOT FOUND	Closing end of course Motor 1 not found when expected	Verify the limit switch installation when motor 1 is closing
Er04	FC.CL M2 NOT FOUND	Closing end of course Motor 2 not found when expected	Verify the limit switch installation when motor 2 is closing
Er05	FC.OP M1 NOT FOUND	Opening end of course Motor 1 not found when expected	Verify the limit switch installation when motor 1 is opening
Er06	FC.OP M2 NOT FOUND	Opening end of course Motor 2 not found when expected	Verify the limit switch installation when motor 2 is opening
Er10	S.EDGE.CL ON	Closing safety edge activated	Verify that the security edge activation was produces by an obstacle
Er11	S.EDGE.OP ON	Opening safety edge activated	Verify that the security edge activation was produces by an obstacle
Er14	C.SEC.CL ON	Closing security contact activated	Verify that the security edge activation was produces by an obstacle
Er15	C.SEC.OP ON	Opening security contact activated	Verify that the security edge activation was produces by an obstacle
Er17	MAG.DETEC ON	Magnetic closing security activated	Verify that the security edge activation was produces by an obstacle
Er18	RSENS ON	RSENS security activated	Verify that the security edge activation was produces by an obstacle
Er27	C.SEC.M ON	Magnetic security contact activated	Verify that the security edge activation was produces by an obstacle
Er34	ERROR RADIO DESCRIPT	Receiving not programmed transmitters from another customer or installer	Verify that in the installation there are no emitters of another client/ installer activated with our control panel
Er35	ERROR RADIO RTDS	The radio signal received is very low	Verify the installation and the radio signal
Er37	S.OPTOEDGE.CL ON	Closing optical safety edge activated	Verify that the security edge activation was produces by an obstacle
Er38	S.OPTOEDGE.OP ON	Opening optical safety edge activated	Verify that the security edge activation was produces by an obstacle
Er40	PRESSURE SW ON	Pressure switch activation (hydraulic motor).	Verify that the pressure switch activation was produced by an obstacle.

Safety instructions

Safety instructions for installation



Disconnect the power supply whenever you proceed to the installation or repair of the control panel.

• **The panel must be installed while the power is disconnected.**

- Before installing the panel, remove all unnecessary ropes or chains and disable any equipment such as locks that is not necessary for the automatic operation.
- Before installing the panel, check that the door is in good mechanical condition, correctly balanced and that it opens and closes correctly.
- Install the manual unlocking device at a height lower than 1.8m.
- Install any permanent control next to the door away from any moving part and at a minimum height of 1.5m.
- For permanently connected equipment, an easily accessible power disconnection device must be incorporated into the wiring. It is recommended that this be of the emergency switch type.
- If the control panel is supplied without emergency stop button, this will be incorporated in the installation, connecting it to the STOP terminal.
- For correct use of the security edge, this must never be activated when the door is fully closed. It is wise to install the ends of run before activating the edge.
- This equipment can only be handled by a specialist fitter, by maintenance staff or by a suitably trained operator.
- To connect the power supply and motor wiring, 2.5 mm² section terminals must be used.
- Use protective goggles when handling the equipment.
- Fuses must only be handled when the appliance is disconnected from the mains.
- The instructions for using this equipment must remain in the possession of the user.
- European door normative EN 12453 and EN 12445 specify the following minimum protection and door safety levels:
 - for single-family dwellings, prevent the door from making contact with any object or limit the force of contact (e.g. safety band), and in the case of automatic closing, it is necessary to complement this with a presence detector (e.g. photocell).
 - for communal and public installations, prevent the door from making contact with any object or limit the force of contact (e.g. safety band), and complement this with a presence detector (e.g. Photocell)

Safety instructions for the use

- Do not allow children to play with the door controls.
- Keep the remote controls out of the reach of children.
- Watch the door movement and keep people away until the door is fully open or closed.
- Precaution when operating the manual unlocking device, as the door may suddenly fall due to the bad condition of the springs or door unbalance. Details on how to use the manual unlocking device must be provided by the manufacturer or the device installer.
- Examine the installation frequently, especially the cables, springs and supports, to detect signs of wear, damage or unbalance. Do not use the door if repair work or adjustments are required, as this may cause damage.

Use of the equipment

Designed for automation of garage doors and industrial loading docks, in accordance with the general description. Not guaranteed for other uses.

The manufacturer reserves the right to change the equipment specification without prior warning

JCM TECHNOLOGIES, S.A. declares herewith that the product **I30** complies with the requirements of the 2006/42/CE Machinery Directive, as well as with the ones of the 2004/108/CE Electromagnetic Compatibility Directive and 2006/95/CE Low Voltage Directive, insofar as the product is used correctly.

EC Declaration of conformity

See website www.jcm-tech.com

