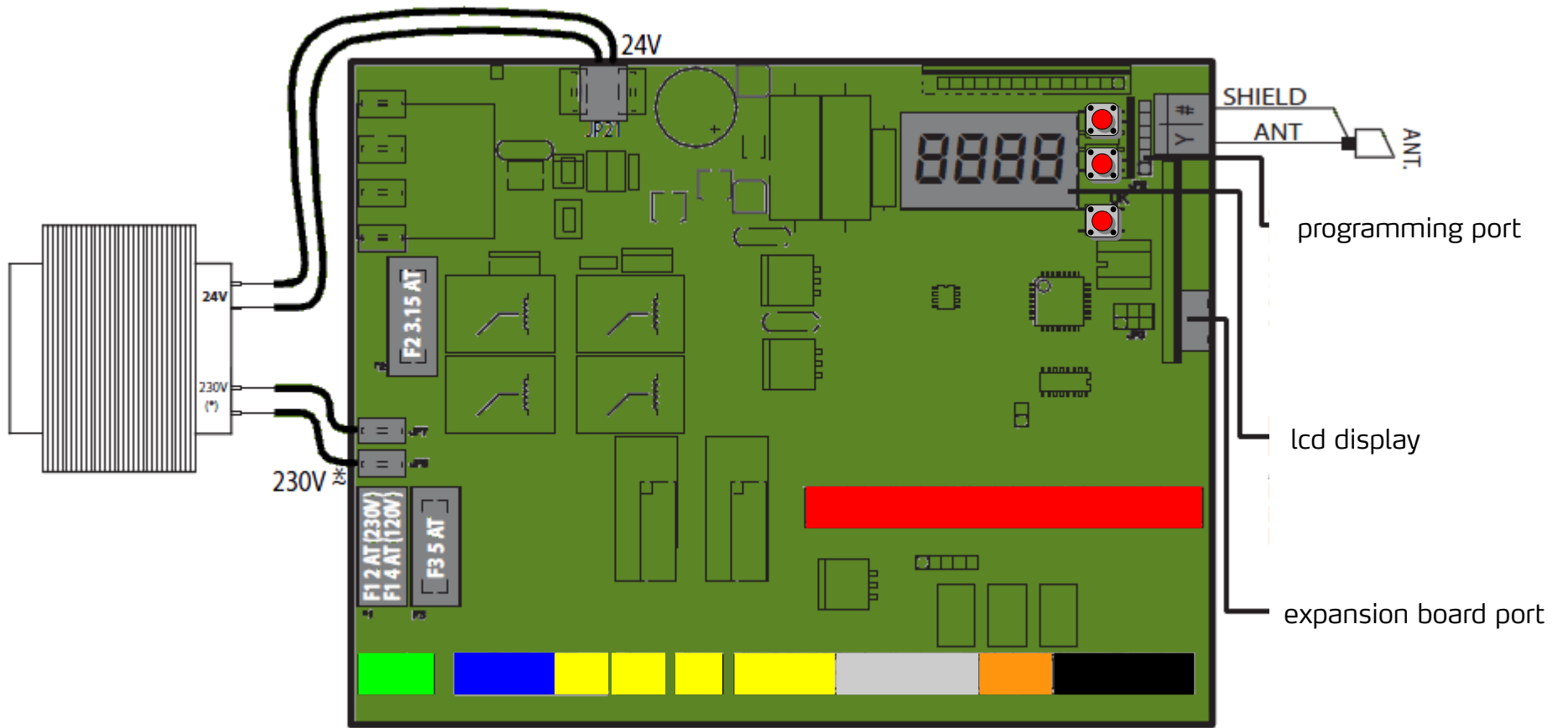


# THALIA P

---

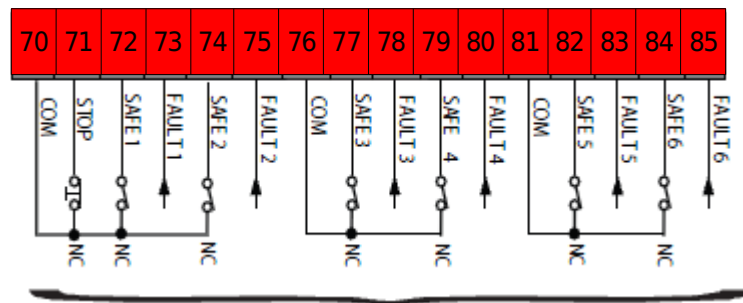
Controller for all 24V Bft swing gate operators



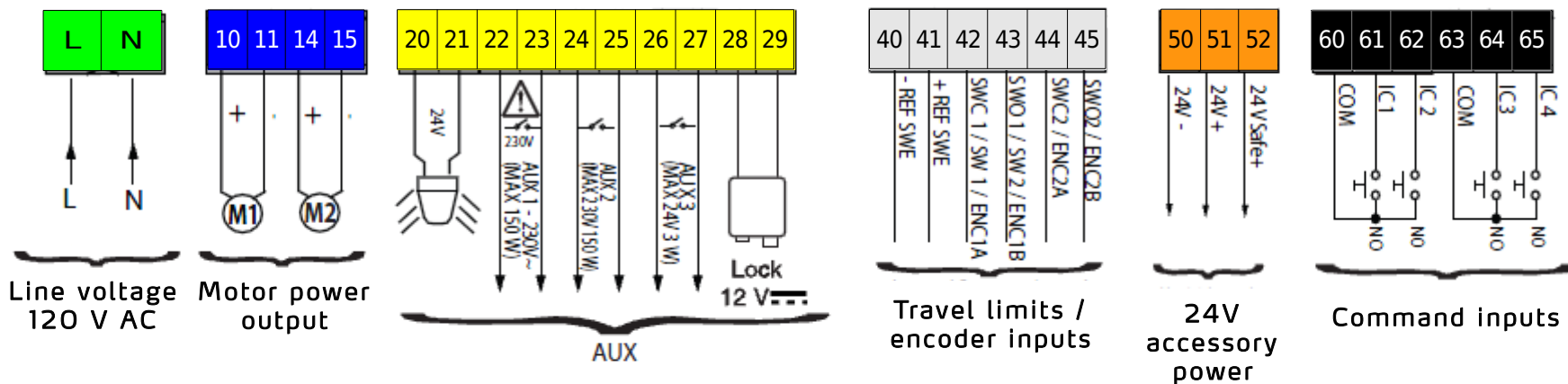


control board wiring





Safety devices inputs



Type	Operator	Description	Motor terminal	Wire color	Thalia terminals for Motor 1	Thalia terminals for Motor 2
1	Eli 250 BT	Motor +	n/a	Brown	10	14
		Motor -	n/a	Blue	11	15
		Limit common	n/a	White	41	41
		Close limit	n/a	Brown	42	44
		Open limit	n/a	Brown	43	45
2	Phobos BT	Limit output	1	White	42	43
		Motor +	2	Red	10	14
		Motor -	3	Black	11	15
3	Igea BT	Limit output	1	White	42	43
		Motor +	2	Red	10	14
		Motor -	3	Black	11	15
4	Lux BT 2B	Motor +	1	Red	10	14
		Motor -	2	Black	11	15
		Encoder Com	3	Green	41	41
		Encoder Out	4	White	42	43
5	Lux G BT 2B	Motor +	1	Red	10	14
		Motor -	2	Black	11	15
		Encoder Com	3	Green	41	41
		Encoder Out	4	White	42	43
6	Sub BT	Limit output	n/a	White	42	43
		Motor +	n/a	Red	10	14
		Motor -	n/a	Black	11	15

## auxiliary outputs

TERMINAL	NAME	DEFAULT
20	24V LIGHT	24 V DC COURTESY LIGHT OUTPUT ( 25W MAX)
21		
22	AUX 1	120V OUTPUT - COURTESY LIGHT. POWERED DURING AND FOR 90 SECONDS AFTER OPERATION
23		
24	AUX 2	GATE OPEN INDICATOR – OPEN CONTACT – CLOSSES WHEN GATE IS NOT CLOSED. FLASHES DURING THE CLOSING CYCLE
25		
26	AUX 3	RADIO RECEIVER 2ND CHANNEL OUTPUT (N.O.)
27		
28	LOCK OUTPUT	12V DC OUTPUT FOR SOLENOID LOCK
29		

## command inputs

TERMINAL	NAME	DEFAULT	DESCRIPTION
60	COM	COMMON	
61	IC 1	START	OPENS, STOPS AND CLOSSES
62	IC 2	PED	PARTIAL OPENING
63	COM	COMMON	
64	IC 3	OPEN	OPEN ONLY COMMAND
65	IC 4	CLOSE	CLOSE ONLY COMMAND

## safety inputs

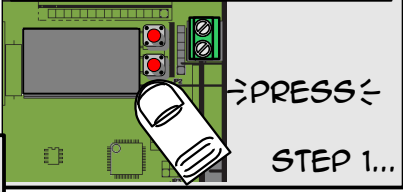
TERMINAL	NAME	DEFAULT	DESCRIPTION
70	COM	COMMON	
71	STOP	STOP	STOP BUTTON INPUT
72	SAFE 1	PHOT	OBSTRUCTION SENSOR INPUT – ALWAYS ACTIVE
73	FAULT 1	SUPERVISION CIRCUIT 1	
74	SAFE 2	BAR	SAFETY EDGE INPUT
75	FAULT 2	SUPERVISION CIRCUIT 2	
76	COM	COMMON	
77	SAFE 3	PHOT OP	OBSTRUCTION SENSOR – ACTIVE ONLY WHILE OPENING
78	FAULT 3	SUPERVISION CIRCUIT 3	
79	SAFE 4	PHOT CL	OBSTRUCTION SENSOR – ACTIVE ONLY WHILE CLOSING
80	FAULT 4	SUPERVISION CIRCUIT	
81	COM	COMMON	
82	SAFE 5	PHOT	OBSTRUCTION SENSOR INPUT – ALWAYS ACTIVE
83	FAULT 5	SUPERVISION CIRCUIT	
84	SAFE 6	BAR	SAFETY EDGE INPUT
85	FAULT 6	SUPERVISION CIRCUIT	

quick start menu



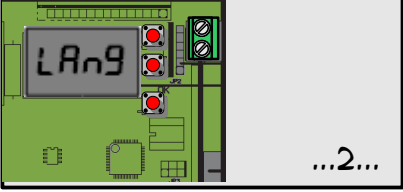


PRESS THE [OK] BUTTON ONCE TO ENTER THE QUICK START MENU.



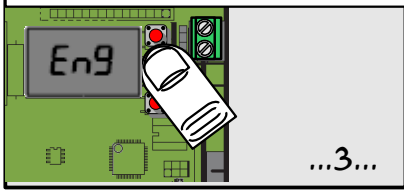
STEP 1...

THE SCREEN WILL DISPLAY "LANG" (LANGUAGE)...



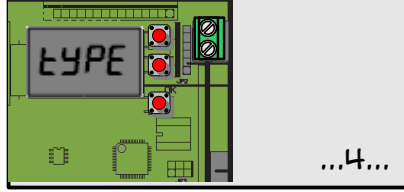
...2...

...PRESS THE [-] BUTTON TO SCROLL DOWN TO "ENG" (ENGLISH) AND THEN PRESS [OK]



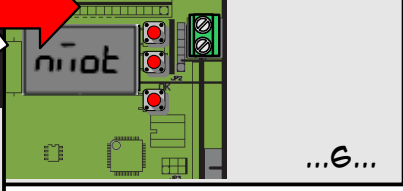
...3...

NEXT YOU SELECT THE TYPE OF MOTOR...



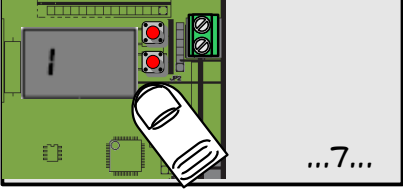
...4...

THEN SELECT THE NUMBER OF MOTORS CONNECTED...



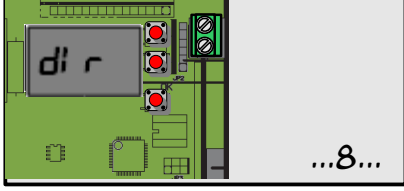
...6...

"1" OR "2" AND PRESS [OK]



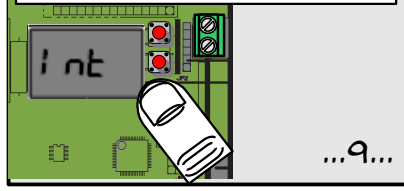
...7...

NEXT, DETERMINE THE OPENING DIRECTION...



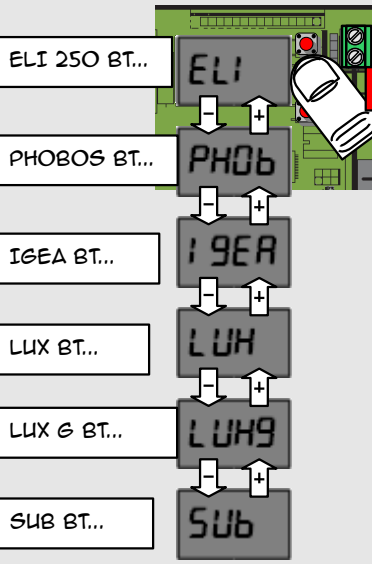
...8...

SELECT "INT" FOR PULL-TO-OPEN, OR, "EXT" FOR PUSH-TO-OPEN. THEN PRESS [OK]



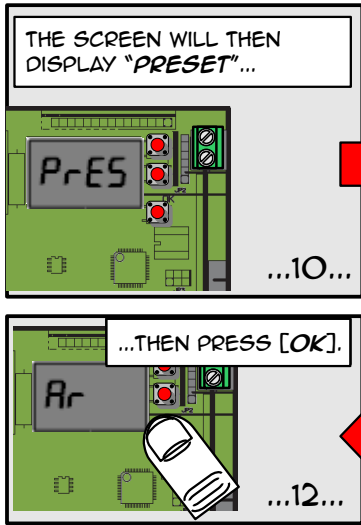
...9...

PRESS THE [-] BUTTON TO SCROLL DOWN...



...AND THEN PRESS THE [OK] BUTTON ONCE YOU HAVE SELECTED YOUR OPERATOR

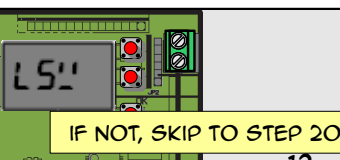
...5...



SCROLL DOWN USING THE [-] BUTTON AND SELECT YOUR PRESET, "AR", "SR", "AC", "SC" OR "IND" BASED ON THE LOGIC FEATURES ON THE TABLE BELOW.

LOGIC PRESETS	AR	SR	AC	SC	IND
	AUTOMATIC RESIDENTIAL	SEMI-AUTOMATIC RESIDENTIAL	AUTOMATIC COMMERCIAL	SEMI-AUTOMATIC COMMERCIAL	INDUSTRIAL
AUTOMATIC CLOSING TIMER	X		X		
PRE-ALARM			X	X	
UNINTERRUPTED OPEN CYCLE			X	X	
INSTANT REVERSE ON CLOSING	X		X		
HOLD TO RUN					X
QUICK REMOTE PROGRAMMING	X	X	X	X	

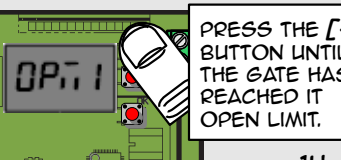
THE SCREEN WILL THEN READ "LSW ADJUST" IF LUX OR LUX G WAS SELECTED.



IF NOT, SKIP TO STEP 20

...13...

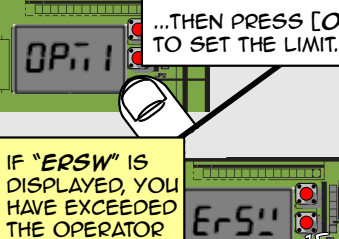
"OPM1" (OPEN MOTOR 1) WILL BE DISPLAYED ON THE SCREEN



PRESS THE [+] BUTTON UNTIL THE GATE HAS REACHED IT OPEN LIMIT.

...14...

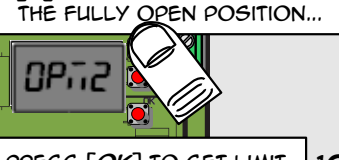
...THEN PRESS [OK] TO SET THE LIMIT.



IF "ERSW" IS DISPLAYED, YOU HAVE EXCEEDED THE OPERATOR LIMIT.

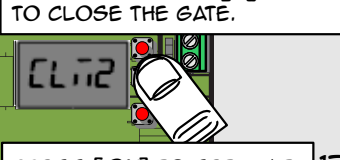
...15...

IF 2 MOTORS WERE SELECTED, "OPM2" WILL SHOW. PRESS [+] TO BRING THE 2<sup>ND</sup> GATE TO THE FULLY OPEN POSITION...



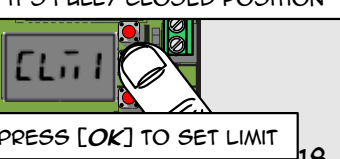
PRESS [OK] TO SET LIMIT ...16...

IF 2 MOTORS WERE SELECTED, "CLM2" (CLOSE MOTOR 2) WILL SHOW. PRESS THE [-] BUTTON TO CLOSE THE GATE.



PRESS [OK] TO SET LIMIT...17...

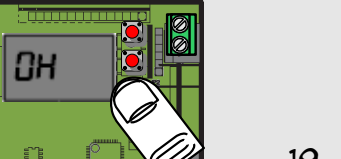
"CLM1" (CLOSE MOTOR 1) IS DISPLAYED. PRESS THE [-] BUTTON TO BRING THE GATE TO IT'S FULLY CLOSED POSITION



PRESS [OK] TO SET LIMIT

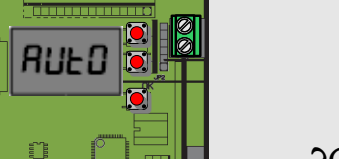
...18...

THE SCREEN WILL READ "OK" . PRESS [OK] TO CONTINUE..




...19...

THE WORD "AUTOSET" WILL SCROLL ACROSS THE SCREEN



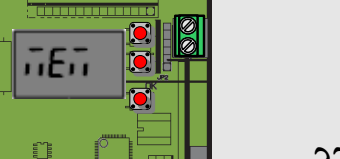
...20...

UPON PRESSING [OK], THE GATE WILL OPEN AND CLOSE AUTOMATICALLY 1 TO 3 TIMES



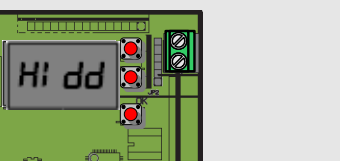
...21...

NEXT, THE SCREEN WILL THEN READ "MEM REMOTES"



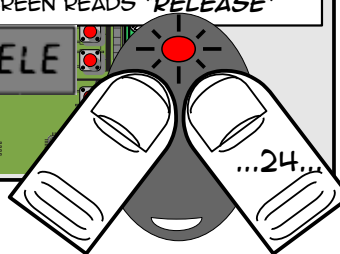
...22...

WHEN THE SCREEN READS "HIDDEN BUTTON"...



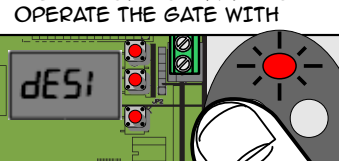
...23...

SIMULTANEOUSLY PRESS AND HOLD THE 2 BUTTONS ON YOUR REMOTE UNTIL THE SCREEN READS "RELEASE"




...24...

THE SCREEN WILL THEN READ "DESIRED BUTTON". PRESS THE BUTTON YOU WANT TO OPERATE THE GATE WITH



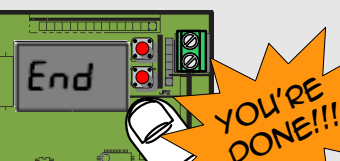
...25...

THE SCREEN WILL DISPLAY "OK" AND THE NUMBER OF THE REMOTE IN MEMORY. REPEAT THE PROCESS FOR ADDITIONAL REMOTES



...26...

PRESS [OK] TO FINISH SETUP

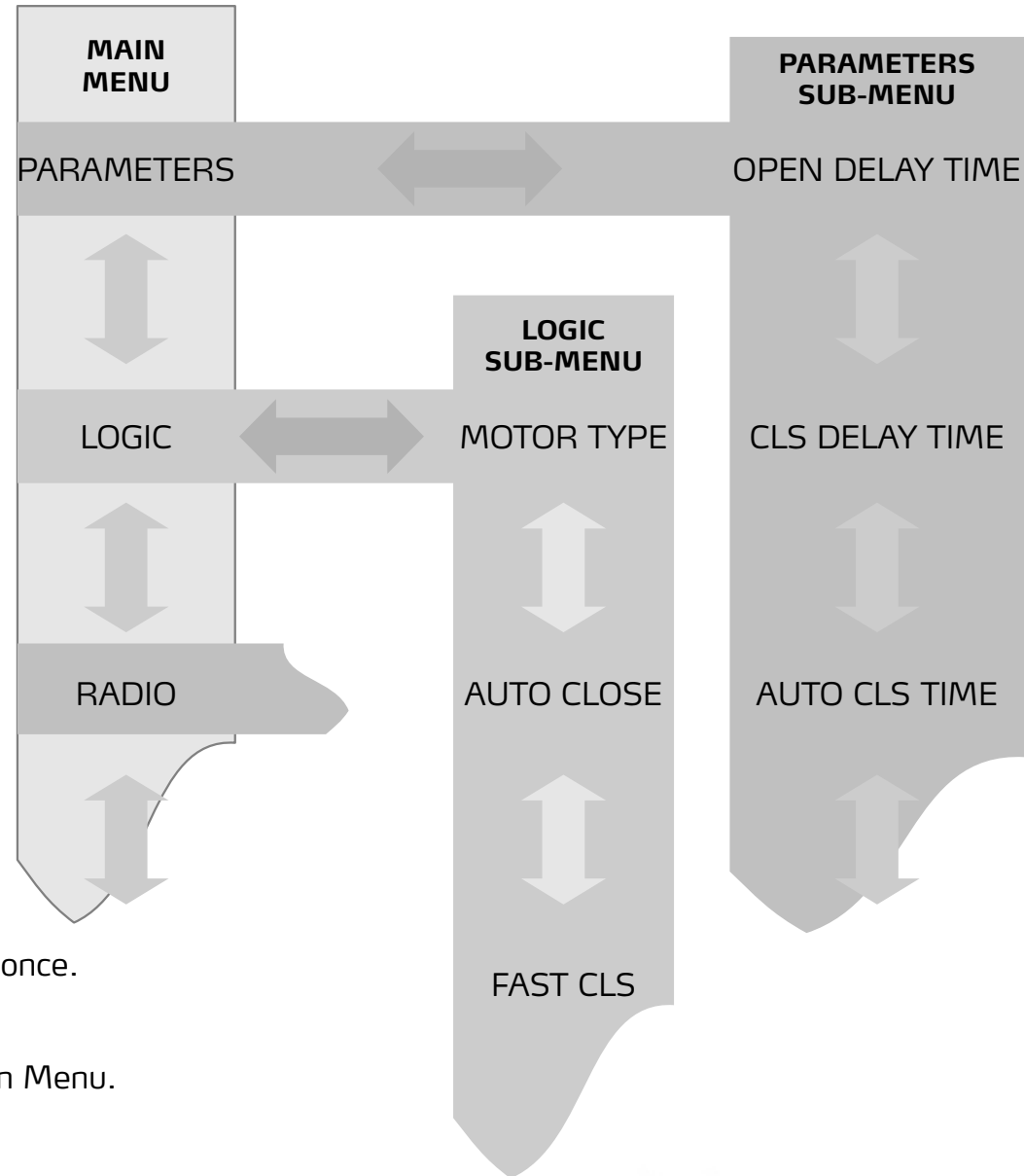
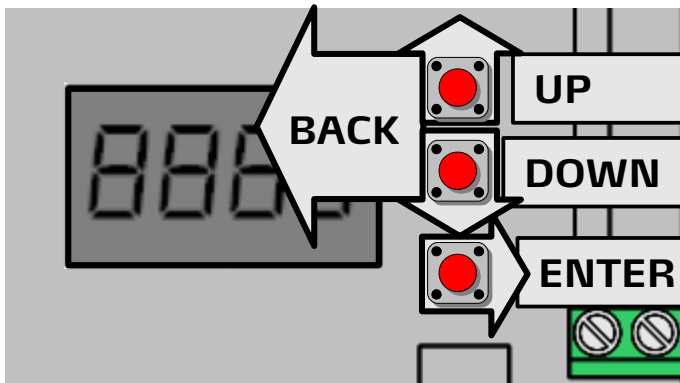


YOU'RE DONE!!!

programming menu

The programming menu is navigated using the 3 buttons found on the upper right corner of the control board, next to the LCD screen. The top button is the UP button. It is also used to increase displayed values in the programming menu. The middle button is the DOWN button. It is also used to decrease displayed values in the programming menu. The lower button is the ENTER button.

Pressing the UP & DOWN button at the same time serves as the BACK button



To enter the **QUICK SETUP MENU**, press the **ENTER** button once.

To enter the **MAIN MENU**, press **ENTER** twice quickly.

To exit programming, press **BACK (UP + DOWN)** from the Main Menu.

## MAIN PROGRAMMING MENU

MAIN	SELECTION
PARAM >	SUB-MENU - ADJUSTMENT OF ALL NUMERICAL VALUES (TIME, TORQUE & PERCENTAGES)
LOGIC >	SUB-MENU - ADJUSTMENT AND/OR SELECTION OF ALL FEATURES AND BEHAVIOR LOGICS
RADIO >	SUB-MENU - BUILT-IN 2 CHANNEL RECEIVER PROGRAMMING
DEFAULT	Restores board to factory settings. No effect on RADIO
LANGUAGE >	PROGRAMMING MENU LANGUAGE SELECTION
AUTOSET	Operates motor(s) several times and automatically adjust its FORCE settings
L. SW ADJ	Limit of travel adjustment. Only available with type 4 and 5 motors
STAT >	BOARD INFORMATION AND DIAGNOSTICS
PASSWORD	Password setting for wireless programmer

MAIN	SELECTION	DESCRIPTION	DEFAULT	RANGE
PARAM >	OPEN DELAY TIME	Motor 2 opening delay in seconds	1	0-10
	CLS DELAY TIME	Motor 1 closing delay in seconds	1	0-10
	TCA	Auto-close time adjustment in seconds	10	1-180
	TRF. LGHT.CLR. T	Traffic zone clear time adjustment in seconds	40	1-180
	OP. DIST. SLOWD	Slowdown starting distance from end of open travel expressed in percentage	10	0-50
	CL. DIST. SLOWD	Slowdown starting distance from end of close travel expressed in percentage	10	0-50
	DIST. DECEL	Slowdown starting distance from end of open and close travel expressed in percentage	15	0-50
	OP. FORCE	Percentage of opening force exerted over the AUTOSET value before obstruction is sensed	50	1-99
	CLS. FORCE	Percentage of closing force exerted over the AUTOSET value before obstruction is sensed	50	1-99
	OP SPEED	Motor opening speed expressed in percentage	99	15-99
	CL SPEED	Motor closing speed expressed in percentage	99	15-99
	SLOW SPEED	Slowdown speed expressed in percentage from maximum speed.	25	15-99

MAIN	SELECTION	DESCRIPTION	DEFAULT	RANGE	
LOGIC >	MOTOR TYPE	1=Eli 250; 2=Phobos BT, 3=Igea BT; 4=Lux BT; 5=Lux G BT; 6=Sub BT	0	0-6	
	TCA	Timer to Close Automatically. 0=OFF / 1=ON	0	0-1	
	FAST CLS.	Closes when sensors are cleared. 0=OFF / 1=ON	0	0-1	
	STEP-BY-STEP MOVEMENT *	Determines how the system reacts when a START command is received during operation	0	0-2	*
	PRE-ALARM	Gate running output (AUX value=6) closes 3 sec. before gate movement. 0=OFF / 1=ON	0	0-1	
	HOLD-TO-RUN	Requires continuous OPEN or CLOSE command input for gate to operate. 0=OFF / 1=ON	0	0-2	
	IBL OPEN	Ignores START input during the opening cycle. 0=OFF / 1=ON	0	0-1	
	IBL TCA	Ignores the START input while counting down for automatic closing. 0=OFF / 1=ON	0	0-1	
	IBL CLOSE	Ignores the START input during the closing cycle. 0=OFF / 1=ON	0	0-1	
	RAM BLOW C. OP	Pushes gate against physical stop before opening	0	0-1	
	RAM BLOW C. CL	Pushes gate against physical stop before closing	0	0-1	
	BLOC PERSIST	Hourly push against physical stop	0	0-1	
	PRESS SWC	Pushes gate against physical stop for .5 seconds after close limit has been reached.	0	0-1	
	ICE	Continuos force learning on every operation.	0	0-1	
	1 MOT. ON	Single Motor operation. 0= (2)motors; 1=(1)motor.	0	0-1	
	OPEN IN OTHER DIRECT.	0 = Pull to open; 1 = Push to open	0	0-1	
	SAFE 1 *	Configuration of safety input terminal 72. Defaulted as Phot (Obstruction)	0	0-8	*
	SAFE 2 *	Configuration of safety input terminal 74. Defaulted as Bar(Safety Edge)	6	0-8	*
	SAFE 3 *	Configuration of safety input terminal 77. Defaulted as Phot Op (Opening Obstruction)	2	0-8	*
	SAFE 4 *	Configuration of safety input terminal 79. Defaulted as Phot Cl (Closing Obstruction)	4	0-8	*
	SAFE 5 *	Configuration of safety input terminal 82. Defaulted as Phot (Obstruction)	0	0-8	*
	SAFE 6 *	Configuration of safety input terminal 84. Defaulted as Bar(Safety Edge)	6	0-8	*
	IC 1 *	Configuration of command input terminal 61. Defaulted as Start E	0	0-6	*
	IC 2 *	Configuration of command input terminal 62. Defaulted as Ped (Partial open)	4	0-6	*
	IC 3 *	Configuration of command input terminal 64. Defaulted as Open	2	0-6	*
	IC 4 *	Configuration of command input terminal 65. Defaulted as Close	3	0-6	*
	AUX 1 *	Configuration of auxiliary output terminals 22 & 23 . Defaulted as Gate not closed contacts.	3	0-8	*
	AUX 2 *	Configuration of auxiliary output terminals 24 & 25 . Defaulted as Mag-lock contacts.	1	0-8	*
	AUX 3 *	Configuration of auxiliary output terminals 26 & 27. Defaulted as 2 <sup>nd</sup> channel contacts.	0	0-8	*
	LOCK *	Terminal 28 and 29 output selection. Defaulted as 12v Solenoid lock	0	0-3	*
	FIXED CODE	Rolling code defeat. 0 = rolling code; 1 = fixed code	0	0-1	
	RADIO PROG	Quick remote programming. 0 = disabled; 1 = enabled	1	0-1	
	SERIAL MODE	0 = Slave unit; 1 = Master unit	0	0-1	
	ADDRESS	Unit's network identification number.	0	0-127	
	EXPI 1 *	Configuration of Expansion board input 1. Defaulted as Start command.	1	0-14	*
	EXPI 2 *	Configuration of Expansion board input 2. Defaulted as Start command.	0	0-10	*
	EXPO 1 *	Configuration of Expansion board output 1. Defaulted as Traffic light control..	9	0-9	*
	EXPO 2 *	Configuration of Expansion board output 2. Defaulted as Traffic light control..	9	0-9	*
	TRAFFIC LIGHT PREFLASHING	Red light flashes for 3 sec. at every start. 0 = Off; 1 = On	0	0-1	
	TRAFFIC LIGHT RED LAMP ALWAYS ON	Red light remains on when gate is closed. 0 = Off; 1 = On	0	0-1	

\* see advanced logic programming for additional information



MAIN	SELECTION	DESCRIPTION	DEFAULT	RANGE
RADIO >	ADD START	Learns transmitter button as START command		
	ADD 2CH	Learns transmitter button as 2 <sup>nd</sup> channel		
	ERASE 64	Erase complete memory		
	COD RX	Show receiver ID Code		
	WK	W LINK.		

MAIN	SELECTION	DESCRIPTION	DEFAULT	RANGE
LANGUAGE >	ITA	Italian		
	FRA	French		
	DEU	German		
	ENG	English		
	ESP	Spanish		

MAIN	SELECTION	DESCRIPTION	DEFAULT	RANGE
STAT >	VERS	Displays board firmware version.		
	N. CYCLES	Displays number of hundreds of cycles (001=100; 010=1000; 100=10,000)		
	N. REMOTES	Displays the number of remotes in memory.		
	ERR	Displays the last 30 board errors in decending order.		

**other main menu options**



advanced logic programming

## STEP-BY-STEP LOGICS

VALUE	0	1	2
LOGIC	4-STEP	3-STEP	2-STEP
OPENING	STOPS + TCA	STOPS + TCA	REVERSES
CLOSING	STOPS	REVERSES	REVERSES

## SAFE LOGICS

VALUE	FUNCTION	DESCRIPTION
0	PHOT	OBSTRUCTION SENSOR INPUT, NON-CONTACT
1	PHOT TEST	OBSTRUCTION SENSOR INPUT, NON-CONTACT, SUPERVISED
2	PHOT OP	OPENING OBSTRUCTION SENSOR INPUT, NON-CONTACT
3	PHOT OP TEST	OPENING OBSTRUCTION SENSOR INPUT, NON-CONTACT, SUPERVISED
4	PHOT CL	CLOSING OBSTRUCTION SENSOR INPUT, NON-CONTACT
5	PHOT CL TEST	CLOSING OBSTRUCTION SENSOR INPUT, NON-CONTACT, SUPERVISED
6	BAR	SAFETY EDGE (CONTACT OBSTRUCTION) INPUT
7	BAR TEST	SAFETY EDGE (CONTACT OBSTRUCTION) INPUT, SUPERVISED
8	BAR 8K2	SAFETY EDGE (CONTACT OBSTRUCTION) EOL RESISTOR SUPERVISED INPUT

## IC & EXPI LOGICS

VALUE	FUNCTION	IC 1 - 4	EXPI 1	EXPI 2
0	START - EXTERNAL	●	●	●
1	START - INTERNAL	●	●	●
2	OPEN	●	●	●
3	CLOSE	●	●	●
4	PED (PARTIAL OPEN)	●	●	●
5	TIMER (HOLD OPEN)	●	●	●
6	TIMER PED (HOLD PARTIAL OPEN)	●	●	●
7	OBSTRUCTION		●	●
8	OPENING OBSTRUCTION		●	●
9	CLOSING OBSTRUCTION		●	●
10	SAFETY EDGE		●	●
11	OBSTRUCTION, SUPERVISED		●	
12	OPENING OBSTRUCTION, SUPERVISED		●	
13	CLOSING OBSTRUCTION, SUPERVISED		●	
14	SAFETY EDGE, SUPERVISED		●	

## AUX LOGICS

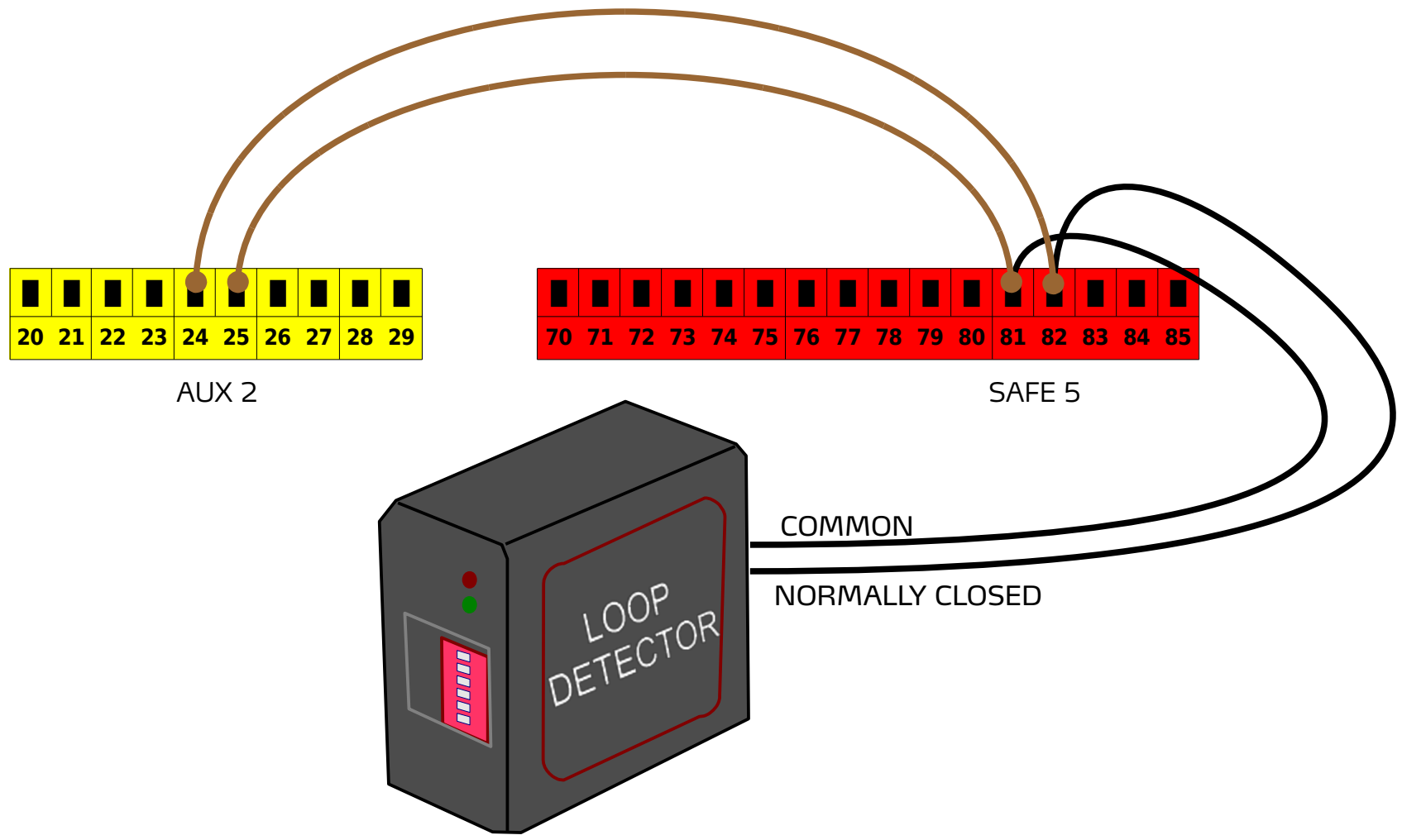
VALUE	FUNCTION
0	2ND CHANNEL RECEIVER OUTPUT
1	GATE OPEN LIGHT. CONTACTS CLOSE WHEN GATE IS NOT CLOSED. FLASHES WHILE CLOSING
2	COURTESY LIGHT. CONTACTS CLOSE DURING AND FOR 90 SECONDS AFTER OPERATION.
3	GATE NOT CLOSED. CONTACTS CLOSE UNTIL CLOSE LIMIT IS REACHED
4	START OF CYCLE. CONTACTS CLOSE FOR 1 SECOND AT THE BEGINNING OF EACH CYCLE
5	GATE OPEN ALARM. CONTACTS CLOSE IF GATE IS HELD OPEN FOR MORE THAN DOUBLE THE TIMER TO CLOSE TIME
6	GATE RUNNING. CONTACTS CLOSE WHILE MOTORS ARE POWERED
7	SOLENOID LOCK. CONTACTS CLOSE FOR 2 SECOND AT THE BEGINNING OF OPEN CYCLE
8	MAGNETIC LOCK. CONTACTS CLOSE WHEN GATE IS CLOSED
9	TRAFFIC LIGHT CONTROL (EXPANSION BOARD OUTPUT WITH TLB BOARD ONLY)

## LOCK LOGICS

VALUE	FUNCTION
0	12V DC SOLENOID LOCK OUTPUT
1	12V DC MAGNETIC LOCK OUTPUT
2	24V DC SOLENOID LOCK OUTPUT
3	24V DC MAGNETIC LOCK OUTPUT

special wiring examples

Programming: LOGIC ►► SAFE 5 ►► 004  
                  AUX 2 ►► 006



Programming: LOGIC ▶▶ IC 3 ▶▶ 002 (default)  
                  AUX 3 ▶▶ 000 (default)  
rADIO ▶▶ Add 2CH ▶▶ (Program transmitters)

