E124



IT

QUICK GUIDE - istruzioni di collegamento e programmazione dell'apparecchiatura per la messa in funzione di un impianto tipo (per le illustrazioni fare riferimento all'inserto centrale). Le istruzioni complete devono essere scaricate dal sito www.faacgroup.com.

EN

QUICK GUIDE - equipment connection and programming instructions for operating a standard system (refer to the middle for the pictures collection). Complete instructions must be downloaded from the web sitewww.faacgroup.com.

FR

QUICK GUIDE - instructions pour la connexion et la programmation de la platine pour la mise en fonction d'une installation type (pour les illustrations se référer à la collection de figures central). Les instructions complètes doivent être téléchargées du site web www.faacgroup.com.

DE

QUICK GUIDE - Anweisungen für den Anschluss und die Programmierung des Geräts zur Inbetriebnahme einer Standardanlage (die Illustrationen finden Sie in der Mitte des Handbuchs). Die vollständigen Anweisungen müssen von der Website www.faacgroup.com heruntergeladen werden.

ES

QUICK GUIDE - instrucciones de conexión y programación del equipo para la puesta en funcionamiento de una instalación tipo (para las imagenes remítase al anexo central). Las instrucciones completas deben descargarse del sitio web www.faacgroup.com.

NL

QUICK GUIDE - instructies voor de aansluiting en programmering van de apparatuur voor de inbedrijfstelling van een standaardinstallatie (raadpleeg de inzet in het midden voor de afbeeldingen). De volledige instructies moeten van de website www.faacgroup.com worden gedownload.



Translation of the original instructions

Before attempting any Install, upstream of the Connect the earth cab Always separate power disturbance use sepa	work on the control unit (connections, mainten- e system, a differential thermal breaker with ade le to the relevant terminal. er cables from control and safety cables (push-bu- rate sheaths or a screened cable (with the scre	ance), always turn off power. equate tripping threshold, utton, receiver, photocells, etc.). To avoid any elect
	EU DECLARATION OF	CONFORMITY
The Manufacturer		
Company name:	FAAC S.p.A. Soc. Unipersonale	
Address:	Via Calari, 10 - 40069 Zola Predosa BOLOC	GNA - ITALIA
hereby declares unde	r its own exclusive liability that the following pro	duct:
Description	Control board	
Model:	E124	
complies with the follo	wing applicable EU legislations:	2014/30/EU , 2011/65/EU
Furthermore, the follow	wing harmonised standards have been applied:	EN61000-6-2:2005 , EN61000-6-3:2007 + A1:
Bologna, 10/1/2018	CEO A. Marcellan	
	A Mond	?
ECHNICAL SPECIFIC	CATIONS	
ny nower food from ma	ains with awitch	ing power food 230/115 \/~ 50/60 Hz

WARNINGS

The symbol / indicates notes that are important for the safety of persons and for the good condition of the automated

Important! For the safety of people, it is important that all the instructions be carefully observed. Incorrect installation or incorrect use of the product could cause serious harm to people.

Carefully read the instructions before beginning to install the product and keep them for future reference.

ΕN

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system.

with switching power feed 230/115 V~ - 50/60 Hz		
24 V 16 A max. (min. 20 V max. 28 V)		
stand-by = 4W max. ~ 400 W		
7 A		
24 V 		
24V max. 500 mA, BUS-2EASY max. 500 mA		
180 mA		
(-20 - +55) °C		
All self resetting		
2.5 A		
Semiautomatic, Automatic, "step-by-step" Semiautomatic, Automatic with reverse during pause, Automatic step-by-step, Safety devices automatic, Safety devices step-by-step automatic, "b" Semiautomatic, mixed logic "bC", Dead-man, Automatic with timer function		
Programmable (from 0 to 9 min 50 sec)		
Programmable (from 0 to 9 min 50 sec)		
Programmable on 50 levels		
Programmable on 10 levels		
Switching feeder, Battery, Decoder/Minidec/RP, X-COM, module XF433/868, USB		
BUS-2EASY, Inputs from IN1 to IN5, Travel limit device, Encoder.		
Flashing lamp, Motors, Electrical lock, OUT1, OUT2 (programmable), power feed to accessories		
1st and 2nd lev. with 3 keys (+, -, F) and LCD display./ 3rd lev. with PC connected via USB		

These instructions are to be considered as a rapid guide for installation. The complete instructions can be downloaded at the following address: www.faacgroup.com

To access PROGRAMMING FROM PC/MAC, connect the USB cable to the dedicated connector and consult the relative instructions. 1 732569 - Rev.F

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/32569	- Kev.F

J3 2EASY	J4 GND IN3 GND +24 OUT2 J6 GND FCA
	IN1 IN2 IN4 IN5 FCA1 FCC1
DES	SCRIPTION OF COMPONENTS
LCD	SIGNALS AND PROGRAMMING DISPLAY
SW1	"R1" PROGRAMMING PUSH-BUTTON
SW2	"R2" PROGRAMMING PUSH-BUTTON
SW3	" SETUP " PUSH-BUTTON
SW4	"+" PROGRAMMING PUSH-BUTTON
SW5	"-" PROGRAMMING PUSH-BUTTON
SW6	"F" PROGRAMMING PUSH-BUTTON
SW7	"RESET SW" SOFTWARE RESET PUSH-BUTTON
DL1	INPUT STATUS CONTROL LED "IN1"
DL2	INPUT STATUS CONTROL LED "IN2"
DL3	INPUT STATUS CONTROL LED "IN3"
DL4	INPUT STATUS CONTROL LED "IN4"
DL5	INPUT STATUS CONTROL LED "IN5"
DL6	INPUT STATUS CONTROL LED "FCA1"
DL7	INPUT STATUS CONTROL LED "FCC1"
DL8	INPUT STATUS CONTROL LED "FCA2"
DL9	INPUT STATUS CONTROL LED "FCC2"
DL10	INPUT STATUS CONTROL LED "ENC1" (Gatecoder)
DL11	INPUT STATUS CONTROL LED "ENC2" (Gatecoder)
DL12	LED FOR DEVICE BUS-2EASY ACTIVE
DL13	LED FOR BUS-2EASY DIAGNOSTICS
DL14	LED SIGNALLING PRIMARY POWER ON
DL15	LED SIGNALLING SECONDARY POWER ON

DL16	LED FOR "SW1" PUSH-BUTTON (R1 PUSH-BUTTON)
DL17	LED FOR "SW2" PUSH-BUTTON (R2 PUSH-BUTTON)
DL18	LED FOR "SW3" PUSH-BUTTON (SETUP PUSH-BUTTON)
DL19	PRESSURE SIGNALLING LED "RESET SW" PUSH-BUTTON
DL20	ALARM SIGNALLING LED "ALARM"
J1	POWER FEEDER SWITCHING CONNECTOR
J2	SECONDARY POWER SELECTOR
J3	CONNECTOR FOR CONNECTION TO BUS-2EASY DEVICES
J4	CONNECTOR FOR TERMINAL BOARD INPUTS
J5	CONNECTOR FOR OUT2 OUTPUT (see 2nd level prog.)
J6	TRAVEL LIMITS CONNECTOR
J7	CONNECTOR FOR LEAF 1 AND LEAF 2 ENCODER INPUTS
J 8	CONNECTOR FOR OUT1 OUTPUT (see 2nd level prog.)
J 9	FLASHING LAMP OUTPUT CONNECTOR
J10	CONNECTOR FOR ELECTRICAL LOCK OUTPUT
J11	LEAF 1 MOTOR CONNECTOR
J12	LEAF 2 MOTOR CONNECTOR
J13	CONNECTOR FOR RECEIVER MODULE XF433/XF868
J14	CONNECTOR: DECODER / MINIDEC / RP RECEIVER
J15	USB CONNECTOR FOR PROGRAMMING FROM PC
M1A	ACCESSORIES MODULE CONNECTOR

J2)

BATTERY

(DL15)

POWER SUPPLY

USB USB USB USB USB USB USB USB USB USB	LCD MODULE SW4 SW5 SW5 SW6 SETUP	J
DL12 DL13 DL1 DL2 DL3 DL4 DL5 J3 J4 GND IN3 GND +24 IN1 IN2 IN4 IN5	DL6 DL7 DL8 DL9 DL10 DL11 J5 J5 J8 J9 J10 J11 - + J1 12 13 14 15 16 17 18 19 20 - + 12 OUT2 J6 GND FCA2 FCC2 J7 ENC2 GND OUT1 LAMP LOCK MOT1 FCA1 FCC1 GND ENC1 +24	J12 1 2 MOT2

2

LAYOUT AND COMPONENTS OF E124 BOARD

CLOCK BATTERY

M1A

RADIO

(J14)

DL14

F∕A∕⊂

±®



POWER FEED



J1: Select the correct power feed, by turning the power switching selector to its correct position (Default 230 V~)



SECONDARY POWER FEED

J2: In the absence of a primary feed from the mains, the control unit can be fed by a secondary low voltage (24V----) power feed. Power can be supplied by a pack of batteries, recharged by a battery charger integrated in the board, or by a stabilised power feeder. In both cases, the power supply must have the following characteristics:

Voltage: (24 ± 4) V==-Current: 16 A max.



If you use an external stabilised feeder, you must disable the "battery charger" function via the PC (see dedicated instructions).

INPUTS DEFAULT SETTING

Terminal-board J4

IN1	OPEN A	N.O. contact
IN2	OPEN B	N.O. contact
IN3	STOP	N.C. contact
IN4	FSW OP	N.C. contact
IN5	FSW CL	N.C. contact

Connector J13 – XF Module (OMNIDEC)

Channel 1	OPEN A
Channel 2	OPEN B

Connector J14 - Radio

Channel 1 RP	OPEN A
Channel 2 RP2	OPEN B

TERMINAL BOARD MOTORS

- **J11 (MOT1)**: Connection of motor connected to leaf 1, i.e. the leaf which opens first during an opening operation.
- J12 (MOT2): Connection of the motor connected to leaf 2, i.e. the leaf which opens second.



If only one motor is connected, it must be connected to terminal J11 (MOT1).



LED OPERATION

LED	Description	ON (contact closed)	OFF (contact open)		
DL1	IN1 OPEN A	Command enabled	Command disabled		
DL2	IN2 OPEN B	Command enabled	Command disabled		
DL3	IN3 STOP	Command disabled	Command enabled		
DL4	IN4 FSW OP	Safety devices disabled	Safety devices tripped		
DL5	IN5 - FSW CL	Safety devices disabled	Safety devices tripped		
DL6	FCA1	Opening travel-limit devices free	Opening travel-limit devices engaged		
DL7	FCC1	Closing travel-limit devices free	Closing travel-limit devices engaged		
DL8	FCA2	Opening travel-limit devices free	Opening travel-limit devices engaged		
DL9	FCC2	Closing travel-limit devices free	Closing travel-limit devices engaged		
DL10	ENC1	Flashing during operation (Gatecoder)			
DL11	ENC2	Flashing during operation (Gatecoder)			
DL12	SIGNALLING LED FOR DEVICE BUS-2EASY ACTIVE				
DL13	SIGNALLING LED FOR BUS-2EASY DIAGNOSTICS				
DL14	LED SIGNALLING PRIMARY POWER ON				
DL15	LED SIGNALLING SECONDARY POWER ON				
DL16	LED FOR "SW1" PUSH-BUTTON (R1 PUSH-BUTTON)				
DL17	LED FOR "SW2" PUSH-BUTTON (R2 PUSH-BUTTON)				
DL18	LED FOR "SW3" PUSH-BUTTON (SETUP PUSH-BUTTON)				
DL19	LED " RESET SW " PUSH-BUTTON				
DL20	ALARM SIGNALLING LED " ALARM "				



Flashing LED ALARM indicates alarm in progress (a situation which does not prejudice gate operation)



LED ALARM on steady light indicates error in progress (a situation which blocks operation until cause of error is eliminated)

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4

CONNECTION OF TRADITIONAL SAFETY DEVICES

With the E124 control unit, you can use both traditional photocells (N.C. contact with relay) and/or photocells with BUS-2EASY.



ADDRESSING THE BUS-2EASY PHOTOCELLS

P\$B

, Important: the same address must be given to both transmitter and receiver.

Make sure that there are not two or more photocell pairs with the same address.

If you are not using any BUS-2EASY accessory, leave free connector BUS-2EASY E124

The following table shows the programming operations of the dip-switch inside the transmitter and the BUS-2EASY photocells receiver.



Dip1	Dip2	Dip3	Dip4	Rif.	Туре
OFF	OFF	OFF	OFF		
OFF	OFF	OFF	ON		
OFF	OFF	ON	OFF		
OFF	OFF	ON	ON	B-C	OPENING
OFF	ON	ON	OFF		
OFF	ON	ON	ON		
ON	OFF	OFF	OFF		
ON	OFF	OFF	ON		
ON	OFF	ON	OFF		
ON	OFF	ON	ON	D	CLOSING
ON	ON	OFF	OFF		
ON	ON	OFF	ON		
ON	ON	ON	OFF		
OFF	ON	OFF	OFF	А	OPENING
OFF	ON	OFF	ON		and CLOSING
ON	ON	ON	ON	/	OPEN PULSE



BUS-2EASY ENCODER CONNECTION

Leaf 1 opens as first and closes as second





- 1. Connect the 2 encoder cables to the BUS-2EASY input (red terminal) on the board.
- 2. Check that the encoder is connected correctly according to the table. The LEDs must be checked with the leaf stopped



If necessary, swap the 2 connecting wires to obtain the correct coupling of the encoder with the leaf as indicated in the following figure.



FAA⊂

Connector J13 – XF MODULE rapid connection



The control unit has an integrated 2-channel decoding system (DS, SLH, LC/RC) named OMNIDEC. This system makes it possible to save – through an extra receiver module – XF433 or XF868 radio commands of the same frequency, but of a different type (DS, SLH, LC/RC). It is possible to save both total opening (OPEN A) and partial opening (OPEN B) of the automated system, up to a maximum of 256 channels.

Insert and remove the boards only after cutting power.

PROGRAMMING

Programming is divided in two levels:

- BASIC programming
- ADVANCED programming

The programming phases are (see **Tab.**):

- 1. to access PROGRAMMING (1A or 1B);
- 2. to show the set values and modify them, if you want. Changing the values is effective immediately, while the final memorisation must be carried out upon exiting programming (5).
- 3. exit the programming by using St function. Select do SAVE the configuration you just performed, otherwise select no to EXIT WITHOUT SAVING any changes.

You can EXIT programming at anytime:

press and hold F and then also – to switch directly to 5



This board also allows programming using a PC or MAC.

This programming requires connection to PC/MAC via USB cable and USB-B relevant port.

The programming SOFTWARE with relevant instructions, must be downloaded from the website:

www.faacgroup.com

The programming using a PC/MAC, with the **default PASSWORD** does not inhibit the programming by board. The writing PC will be displayed in correspondence with the modified values. **Notes**: when you modify the values by board the previous PC/MAC programming will be overwrote.

The default password is 0000.

The programming using a PC/MAC, with a modified PASSWORD (different from the default one), will inhibit the programming by board. If one of the buttons is pressed, the display will show \Pr programming for 5 sec and changes will be allowed only by PC /MAC.



BASIC PROGRAMMING

Dioplay	play Basic Function		cF						
Display				5	Ч	Э	6	S	
cF	Configures the parameters with DEFAULT values corresponding to an installation with non-FAAC operators. (see column cF 0).	0		5	Ч	Э	6	5	
	Configures the parameters with DEFAULT values corresponding to an installation with operators FAAC 412, 413/415, 770, 390, 770N (see column C ^F 1).								
	Configures the parameters with DEFAULT values corresponding to an installation with operators FAAC 391 (see column ⊂ 2).								
	Configures the parameters with DEFAULT values corresponding to an installation with operators FAAC S700H/S800H (see column								
	Configures the parameters with DEFAULT values corresponding to an installation with operators FAAC 418. (see column c^{-} 4).								
	Configures the parameters with DEFAULT values corresponding to an installation with operators FAAC S450H (see column CF								
	 Configures the parameters with DEFAULT values corresponding to an installation with operators FAAC S800H ENC (see column c^F 6). 								
	PC Mixed configuration from a PC/MAC								
	At the time of changing the set motor type on the board, the relevant defaults are uploaded.								
-IE	DEFAULT:	Ч		Ч		L	-	Ч	
	indicates that all the set values correspond to the default values.								
	indicates that one or more set values are different from the de- fault.								
	Set 🚽 if you want to restore the default settings.								
	FUNCTION LOGICS:	E E			6	-	F		
	E Semi-automatic	· · ·		-			-		
	EP Semi-automatic Step-by-Step								
	S Automatic Safety Devices								
	SR Automatic with reversal during pause								
	SP Automatic Step-by-Step Safety Devices								
	Automatic 1								
	Automatic								
	RP Automatic Step-by-Step								
	Automatic timer								
	Semi-automatic "b"								
	b C Mixed (Pulses for opening / Dead-man commands for closing)								
	C Dead-man								
	Logic modified from a PC/MAC								
	Other more detailed programming possibilities are feasible by programming with a PC (see dedicated instructions).								

Diamlay	Decis Function		-F						
Display		0	1 2 4	36	5				
PA	PAUSE TIME A (visualised only if the selected logic allows automatic reclosing):	30	30	30	30				
	Pause time following a TOTAL opening command. It has only effect if a logic with pause time was selected. Can be adjusted from 0 to 59 sec. in one-second steps.								
	Next, the viewing changes in minutes and ten seconds (separated by a dot) and time is adjusted in 10-second steps, up to the maximum value of 9.5 minutes.								
	E.g.: if the display shows 2.5 , the pause time will be 2 min. and 50 sec.								
РЬ	PAUSE TIME B (visualised only if the selected logic allows automatic reclosing):	30	30	ЭO	30				
	Pause time following a PARTIAL opening command. It has only effect if a logic with pause time was selected.								
No	NR. OF MOTORS: You can select the number of motors present in the system:	-02	50	-02	50				
	<pre> = 1 motor 2 = 2 motors</pre>								
	If the SETUP is performed with only one motor, and later two motors are used, the board will signal error $ - $ - con- figuration error, which can be deleted by repeating the SETUP with two motors or by returning to one motor.								
	If a SETUP is performed with two motors and later only one is used, the board will not signal an error. Only the motor connected to input M1 will move.								
	When programming from a PC/MAC, you can select different partial openings.								
F)	MOTOR 1 POWER:	25	25	40	35				
	both opening and closing.								
	I = minimum power I = maximum power								
	If the power is modified, we recommend performing a new SETUP - see the related paragraph.								
	Other more detailed programming possibilities are feasible by programming with a PC (see dedicated instructions).								
53	MOTOR 2 POWER (visualised only with the function $\Pi_{\Box} = \frac{2}{3}$):	25	25	40	35				
	You can adjust the maximum power of motor 2, which is the same during both opening and closing.								
SP	SPEED: Adjusts the motion speed of the motors. There are 10 levels. The value is relative and not absolute, because the speed value refers to the weight of the leaf measured during the SETUP cycle	08	08	08	08				
	<pre></pre>								
	Other more detailed programming possibilities are feasible by programming with a PC (see dedicated instructions).								

Diamlari	Paola Eurotian								
Display	Basic Function	0	H 2 H	3 6	5				
C_	ENCODER USE:			U	U				
	You can enable/disable the use of encoders (both BUS and GATECODER encoders):								
	= encoders on both motors								
	□□ = encoders disabled								
	$\underbrace{When using configurations}_{use the encoder, \Box \Box}, \underbrace{5 \text{ or } 6}_{it is mandatory to}$								
co	LIMIT SWITCH WHEN OPENING:								
	Lets you set or disable use of the opening limit switch on swing-leaves.								
	opening limit switches disabled								
	= the limit switch determines the stopping of motion								
	02 = the limit switch determines the start of deceleration								
	After having changed the value of this function, SETUP is required: the card will signal error I (configuration error)								
	until the SETUP is performed again or until the previous value is restored								
	LIMIT SWITCH WHEN CLOSING:								
	Lets you set or disable use of the closing limit switch on swing-leaves.				по				
	= closing limit switches disabled								
	 = the limit switch determines the stopping of motion = the limit switch determines the start of deceleration 								
	After having changed the value of this function, SETUP is required: the card will signal error ¹ (configuration error) until the SETUP is performed again or until the previous value is restored.								
D Cd	DELAY FOR CLOSING LEAF (visualised only with the function \square = $\frac{2}{3}$):	05	85	05	05				
	Is the delay time for starting leaf 1 closing with respect to leaf 2. Makes it possible to avoid overlapping of the two leaves. Adjustable from 0 to 5 sec, in 1- second steps. Next the value 59, the viewing changes to minutes and tenths of a second (separated by a decimal point) and time is adjusted in 10-second steps								
	e.g.: if the display shows 1.2, the time is 1 min and 20 sec								
- Harris	BUS-2EASY DEVICES ENTRY:	00		00	00				
	See the related paragraph.			1.0					

FAAC

Dianlas	ay Basic Function		cF						
Display			1 2 4	36	5				
50	MOTOR 2 dead-man DRIVE mode (visualised only with the function $\Pi = 2$)								
	 ● OPENS (visualising □ □) until the button is held down 								
	CLOSES (visualising CL) until the button is held down								
	MOTOR 1 dead-man DRIVE mode								
	• OPENS (visualising \Box) until the button is held down								
	CLOSES (visualising CL) until the button is held down								
<u> -</u> !	WORK TIME LEARNING (SETUP):								
	See the related paragraph.								
CL	AUTOMATED SYSTEM STATUS:		I		U				
	You can exit programming, choosing whether or not to save the configura	ation you jı	ust performed.		_				
	1. set the choice:								
	5 to SAVE and EXIT the programming								
	to EXIT the programming WITHOUT SAVING								
	2. press the button F to confirm; at the end the display returns to visualize	ze the auto	mated system statu	IS:					
	00 = CLOSED 07 = FAILS	SAFE in pr	ogress						
	\square = OPEN \square = Stationary then "OPENS" \square = Pre-fl	king BUS ash then "(-2EASY devices	in progress					
	Image: Stationary then "CLOSES"	ash then "(CLOSES"						
	UH = In "PAUSE"	gency oper	n						
	05 = during Opening HP = Hold	position	e						
	WARNING If power is lost to the board prior to confirmation lost.	ation (step	9 2.), all changes n	nade will be					
	You can EXIT programming at any time: press and hold F	and then a	lso – to switch dire	ctly to <mark>5</mark> E.					

ADVANCED PROGRAMMING

Diaplay	Display Advanced Function		-F						
Display			1 2 4	36	5				
be	TIME OF MAXIMUM POWER AT STARTING:	02	nə	02	02				
	You can set the starting time. During start the motors work at maximum power for starting the movement. Adjustable from \bigcirc to \bigcirc sec, in 1-second steps (ignoring the power level selected with \bigcirc and \bigcirc).								
	Other more detailed programming possibilities are feasible by programming with a PC (see dedicated instructions).								
cS	FINAL STROKE WHEN CLOSING (RAM STROKE) (NOT displayed if function $F[=]$):	no	no	по	ПО				
	Lets you enable/disable the ram stroke on swing-leaves.								
	The ram stroke facilitates latching of the electric lock by activating the motors at maximum power during final closing. = enabled (for 2 sec) = disabled								
	In case of systems with an absolute encoder, to enable this function a setup must be performed using the automatic leaf stop on the mechanical contact point.								
-S	REVERSE STROKE WHEN OPENING displayed if function $[finite] = 1$): Lets you enable/disable the reverse stroke on leaf doors. The reverse stroke facilitates unlatching of the electric lock. When the automatic system is closed, before starting to open, the motors give a brief push to close.	no	no	no	no				
	\exists = enabled (for 2 sec) = disabled								
	In case of systems with an absolute encoder, to enable this function a setup must be performed using the automatic leaf stop on the mechanical contact point.								
EL	ELECTRIC LOCK ON LEAF 2: The board has a terminal dedicated to the connection of an electric lock. Normally the electric lock must be connected to leaf 1. If the electric lock is located on leaf 2, adjust the parameter. This parameter does not allow the setting \exists if $\exists n = 2$) \exists = electric lock on leaf 2 $\neg \Box$ = electric lock on leaf 1		no						
Od	DELAY FOR OPENING LEAF (visualised only with the function = $\stackrel{?}{\sim}$): You can set the delay time for starting leaf 2 opening with respect to leaf 1, in order to avoid overlapping of the two leaves. Adjustable from $\stackrel{?}{\circ}{\circ}$ sec, in 1- second steps. Next the value 59, the viewing changes to minutes and tenths of a second (separated by a decimal point) and time is adjusted in 10-second steps up to the maximum value of $\stackrel{?}{\circ}{\circ}$ minutes. <i>e.g.: if the display shows</i> $\stackrel{?}{\circ}{\circ}{\circ}{\circ}$, <i>the time is 1 min and 20 sec.</i>	50	50	50	92				
	LEAF 1 DECELERATION: You can adjust the deceleration space as a percentage of the total travel of leaf 1. Adjustable from 00 to 99 %, in 1% steps. 00 = no deceleration 01 = minimum deceleration space 99 = maximum deceleration space	30	30	20	30				

Display	Dlay Advanced Function		сF						
Display			1 2 4	36	5				
-5	LEAF 2 DECELERATION (visualised only with the function n = 2): You can adjust the deceleration space as a percentage of the total travel of leaf 2. Adjustable from 00 to 99 %, in 1% steps. 00 = no deceleration 01 = minimum deceleration space 99 = maximum deceleration space	30	30	20	30				
PF	PRE-FLASHING: You can enable/disable the pre-flashing. Pre-flashing duration = 3 sec. You can choose: Image: pre-flashing before each movement Image: pre-flashing only at the end of the pause time								
Ph	CLOSING PHOTOCELLS: The intervention of closing photocells causes the reversing of automated system (opening). You can choose: = operate the reversal only after the photocells are released = operate the reversal immediately		no	no	no				
Rd	ADMAP FUNCTION: Allows operation in compliance with French regulation NFP 25/362. = enabled = disabled	no	no	no	по				
EC	ANTI-CRUSHING SENSITIVITY: Varying this function varies the amount of time after which, in case of obstacle, the board commands reversal of the leaves, or it will command a stop if the leaves are in the contact point search space (see the pa- rameter -). The fourth consecutive obstacle detected in the same direction and posi- tion will be defined as a contact point and the leaf will stop in that position. U = minimum sensitivity (maximum time before reversal) U = maximum sensitivity (minimum time before reversal)	01	06	05	05				
US	ULTRA-SENSITIVITY: This function activates an obstacle detection system, based on the control of the variation of the current absorbed by the motor, causing immediate leaf reversal. y = active no = excluded	no	no	У	У				
-8	MECHANICAL STOP SEARCH ANGLE (NOT displayed if function FC or FR = 0): You can adjust the contact point search angle within which the board will stop movement without reversing, if it encounters an obstacle or the contact point. Adjustable from 0.3 to 20 degrees. From 0.3 to 9.9 degrees, adjustments are made in 0.1 degree steps. From 10 to 20 degrees, adjustments are made in 1 degree steps.	10	10	4.0	4.0				

Dieplay	Display Advanced Function		cF						
Display				2 4	Э	6	5		
SF	 SOFT TOUCH: (visualised only with the function En = no): After touching the travel stop point, the leaves reverse and then rest gently. y = active no = excluded ■ This function can be useful to respect the impact curve specified by current standards. 	no	ſ	o	ſ				
	Other more detailed programming possibilities are feasible by PC programming (see dedicated instructions).					_			
	Other more detailed programming possibilities are feasible by PC programming (see dedicated instructions). OUT 1: You can set the output OUT1 (open collector N.O.) in one of the following functions: II = Always active II = FAIL-SAFE II = FAIL-SAFE II = COURTESY LIGHT (off = closed; on = during opening and open/in pause; flashing = during closing) II = COURTESY LIGHT (stays on for the duration of the movement (even in SETUP) in addition to the set time of function II II = ACTIVE ERROR II = automated system OPEN or in PAUSE II = automated system MOVING II = automated system in EMERGENCY II = automated system in CLOSING II = electric lock control before OPENING and before CLOSING II = electric lock control before OPENING and before CLOSING II = timed output which can be activated from the second radio channel OMNIDEC (see function [1]) II = timed output which can be activated from the second radio channel OMNIDEC (see function [1]) II = active during movement of leaf 1 II = active during movement of leaf 1 II = active during movement of leaf 2								
El	OUT 1 TIMING (visualised only with the function \bigcirc = \bigcirc or \bigcirc = $ \bigcirc$) : You can adjust the timing of OUT 1 output if a timed function has been selected with a time from 1 to \bigcirc minutes in 1-minute steps for functions 03-14	01	6]	C)	01		
-02	OUT 2: You can set the output OUT2 (open collector N.O.). See the options as .	02	C	32	C)2	02		
F5	OUT 2 TIMING (visualised only with the function \bigcirc = \bigcirc = \bigcirc or \bigcirc = = $ \neg $): Adjustable as \lfloor].	01	C]	C)	01		

FAA⊂

Display	Display Advanced Function		cF								
Display			1 2 4	3 6	S						
AS	MAINTENANCE REQUEST - CYCLE COUNTER (linked to the subse- quent two functions):	no	по	ПО	D						
	You can enable the signaling of maintenance request, or the cycle counter.										
	= enable the SIGNALING when the program- med number of cycles has been reached (as de- fined in subsequent two functions nc and nd). Signaling consists of a pre-flashing of 8 sec (in addition to the time may already be set with the function PF) before each movement.										
	□ = enable the CYCLE COUNTER, that will be displayed in the subsequent two functions □ and □ up to a displayed maximum of 65,530.										
	If the number of cycles performed is greater than 65,530 the subsequent two functions $\neg c$ and $\neg d$ will display 65 and 53, respectively.										
00	CYCLE PROGRAMMING (THOUSANDS):		00	00							
1 11-	If $H_{2}^{+} = \frac{1}{2}$ the display will show the number of thousands of cycles after which the signaling of maintenance request begins (can be set from $\frac{1}{2}$ to $\frac{1}{2}$).				00						
	If $HS = no$ the display will show the number of thousands of work cycles performed. The value displayed is updated with the succession of the cycles, interacting with the value in nd.										
	When $B_{5}^{1} = \square_{0}^{1}$ you can reset the cycle counter: press simultaneously $+$ and $-$ for 5 sec.										
64	CYCLE PROGRAMMING (TENS):		00								
1 11_1	If $H_{\Box} = \frac{1}{2}$ the display will show the number of tens of cycles after which the signaling of maintenace request begins (can be set from $\frac{1}{2}$ to $\frac{1}{2}$).	00	00		00						
	If $B_{5} = n_{0}$ the display will show the number of tens of work cycles performed. The value displayed is updated with the succession of the cycles, interacting with the value in n_{c} .										
	e.g.: if the system has performed 11,218 cycles, nc = 11 and $nd = 21$ will be displayed										

	AUTOMATED SYSTEM STATUS:		ų		
!(_	You can exit programming, choosing whether or not to save the configuration you just performed. 1. set the choice:				
	5 to SAVE and EXIT the programming				
	 to EXIT the programming WITHOUT SAVING 2. press the button F to confirm; at the end the display return 	ns to visualize the automated system status :			
	 CLOSED = OPEN = Stationary then "OPENS" = Stationary then "CLOSES" = In "PAUSE" = Opening = Closing 	 FAIL SAFE in progress = checking BUS-2EASY devices in progress = Pre-flash then "OPENS" = Pre-flash then "CLOSES" = Emergency open = Emergency close HP = Hold position 			

BUS-2EASY DEVICE INSTALLATION

You can add BUS-2EASY devices to the system at any time, proceeding as follows:

- 1. Cut off the electrical power to the board.
- 2. Install and set the BUS-2EASY accessories according to the instructions of the devices.
- 3. Connect the BUS-2EASY devices according to the instructions of Chapter ELECTRICAL CONNECTIONS.
- 4. Power up the board.
- 5. Complete the procedure for BUS-2EASY device entry.

BUS-2EASY DEVICE ENTRY

- 1. Access BASIC programming and scroll through the functions up until bu. When **F** is released, the display will show the BUS-2EASY devices status (see the figure).
- 2. Perform the entry: simultaneously press and hold + and for at least 5 sec (during this time, the display will blink).
- 3. \exists will appear as a confirmation of entry completion.
- 4. Release the + and buttons. The status of the BUS-2EASY devices will be displayed.



Fig. Visualising the BUS-2EASY status in the function bu: each segment of the display shows one type of device.

Fig. examples of BUS-2EASY status visualization on display.

In STAND BY (gate closed and in stand-by) with BUS-2EASY *Encoder* on leaf 1 and leaf 2 and BUS-2EASY *Photocells* correctly connected and entered.

In case of BUS-2EASY *Encoder* on leaf1 and leaf 2 and BUS-2EASY *Photocells* correctly connected and entered and with <u>closing photocells engaged</u>:

CHECKING THE SECURING DEVICES ENTERED ON THE BOARD

To verify the types of BUS device recognised through the entry:

1. Press and hold the + button during stand-by visualisation; the segments corresponding to at least one entered device will go ON. E.g.:



To check the condition of the BUS-2EASY connection, verify the LED on the board:

LED DL15 (Red)

ON	Safety device engaged or pulse generator active				
OFF	NO safety device engaged neither pulse generator active				
LED DL14 (Green)					
ON steady Normal activity (led ON even if there are no devices).					
Slow blinking (blink every 2,5 sec)	BUS-2EASY line short-circuit.				
Rapid blinking (blink every 0.5 sec)	Error in the BUS-2EASY connection. Repeat the device entry. If the error occurs again, check: - That there are no more than one device in the system with the same address. - Calling error (number > or < the connected BUS devices). - FAIL SAFE error on the BUS device.				
OFF	Board in Sleep mode (if used).				

TIME LEARNING - SETUP

When the board is powered, if a SETUP has never been performed, or if the board requests it, on the display 50 indicates that a SETUP must be performed.

During SETUP, the connected BUS-2EASY accessories are always entered. The BUS-2EASY encoders entered by the SETUP must always be enabled using the parameter $\begin{bmatrix} n \end{bmatrix}$ (BASIC Programming).

If a system without an encoder is installed, mechanical stops will be required for the leaves.



During SETUP all safety devices are disabled! Therefore, carry out the operation avoiding any transit in the leaf movement area.





Perform the SET-UP as follows:

- 1. Enter BASIC programming and go to the parameter **L**, when F is released -- will appear.
- 2. Ensure that the gate leaves are closed. Otherwise, proceed as follows:
 - Press and hold -/R2 to close leaf 2
 - Press and hold +/R1 to close leaf 1

Should pressing +/R1 and/or -/R2 command opening of the corresponding leaf, cut off power and, on terminal board J11 or J12, invert the cables of the corresponding motor.

- 3. With the gate leaves closed, launch SETUP by pressing and holding + and until 5 begins to flash on the display (about 3 sec).
- 4. Release + e Leaf 1 begins its opening movement.

Operation WITHOUT Safecoder	Operation WITH Safecoder or S800H ENC
Leaf 1 automatically acknowledges the mechanical stop.	Leaf 1 automatically acknowledges the mechanical stop. It will in
	any case be possible to stop leaf movement at any time and in the
	desired point by sending an OPEN A pulse.

5. On the display $\subseteq 2$ will flash (only if 2 motors have been selected): leaf 2 begins opening.

Operation WITHOUT Safecoder	Operation WITH Safecoder or S800H ENC
Leaf 2 automatically acknowledges the mechanical stop.	Leaf 2 automatically acknowledges the mechanical stop. It will in any case be possible to stop leaf movement at any time and in the desired point by sending an OPEN A pulse.

Steps 4 and 5 with function \square :

FR = 0 (the limit switch determines the stopping of motion) the OPEN A pulse for stopping motion is ignored.

FR = 02 (the limit switch determines the start of deceleration) with **Safecoder** installed or operator **S800H ENC** send an OPEN A pulse only after involving the opening limit switch, without **Safecoder** or with operators different than **S800H ENC**, make sure that the limit switch is engaged before the mechanical stop.

6. On the display 53 will flash (only if 2 motors have been selected): leaf 2 begins closing.

Operation WITHOUT Safecoder	Operation WITH Safecoder or S800H ENC		
Leaf 2 automatically acknowledges the mechanical stop.	Leaf 2 automatically acknowledges the mechanical stop. It will in any case be possible to stop leaf movement at any time and in the desired point by sending an OPEN A pulse.		
7. On the display 54 flashes: leaf 1 begins closing.			
Operation WITHOUT Safecoder	Operation WITH Safecoder or S800H ENC		
Leaf 1 automatically acknowledges the mechanical stop	Leaf 1 automatically acknowledges the mechanical stop. It will in any case be possible to stop leaf movement at any time and in the desired point by sending an OPEN A pulse.		

Steps 6 and 7 with function F[:

F[= 0] (the limit switch determines the stopping of motion) the OPEN A pulse for stopping motion is ignored.

F[= 02] (the limit switch determines the start of deceleration) with **Safecoder** installed or operator **S800H ENC** send an OPEN A pulse only after involving the closing limit switch, without **Safecoder** or with operators different than **S800H ENC**, make sure that the limit switch is engaged before the mechanical stop

- 8. 55 flashes on the display: both leaves open at full speed.
- 9. 56 flashes on the display: both leaves close at full speed.
- 10. The board will automatically exit the programming menu and will display the automated system status (00) to confirm that the SETUP procedure has been completed correctly. If the procedure is not completed correctly, on the display 50 will start flashing, indicating that a new SETUP procedure must be performed.

The deceleration spaces can be configured and modified from the display using the parameters \neg and \neg (see Advanced Programming) without repeating the SETUP.

TESTING THE AUTOMATED SYSTEM

Once installation and programming is completed, ensure that the system is operating correctly.

Be especially careful that the safety devices operate correctly and ensure that the system complies with all current safety regulations. Close the cover in the provided seat with gasket.



MEMORISING THE RADIO CODE

The control board features an integrated 2-channel decoding system (DS, SLH/SLH LR, RC) called OMNIDEC. This system lets you memorise, using an additional receiver module (on J5 connector) and more radio controls having different technology but the same frequency. You can thus control both total opening (OPEN A) and partial opening (OPEN B).

 $^{>}$ The procedures indicated in this paragraph are only valid for the OMNIDEC system (receiver inserted on connector J13.) See the relative instructions for standard decoding boards (inserted on J14).

The different types of radio code (DS, SLH/SLH LR, LC/RC) can coexist simultaneously on the two channels. You can enter up to 250 radio codes divided between OPEN A and OPEN B/CLOSE.

To use different encoding systems on the same channel, you must complete the learning of each encoding system and then repeat the procedure for the other one.

Other, more detailed, programming options are available using a PC/MAC (see dedicated PC/MAC instructions). For example, you can set an automatic OPEN command on the radio channel to command an automatic cycle (open-pause-close) regardless of the selected logic.

MEMORISING THE SLH/SLH LR RADIO CONTROLS

- 1. Press and hold + (OPEN A programming) or (OPEN B/CLOSE programming).
- After keeping the button pressed for about 5 sec, the corresponding radio LED (DL11 or DL12) will begin to flash slowly for about 20 sec. 2. Release the button. 3.
- Simultaneously press and hold P1 and P2 on the SLH/SLH LR radio control (only MASTER radio control). 4.
- The radio control LED will begin to flash. 5.
- Release both buttons. 6.
- Ensure that LED DL11 or DL12 on the board is still flashing (see point 2) and, while the radio control LED is still flashing, press and hold 7. the desired button on the radio control (the radio control LED will go on steady).
- The corresponding LED on the board (DL11 or DL12) will go on steady for 1 sec and then go off, indicating that memorisation has been 8. completed.
- 9. Release the radio control button.

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RADIO 1

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10. To complete memorisation, press the button of the memorised radio control twice in succession. The automated system will perform an opening cycle.

Ensure that there are no obstacles (by people or things) during the automated system movement.



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RADIO 2



To enable other radio controls with the same system code, you must transfer the system code of the memorised radio control button to the button corresponding to the radio control you wish to add:

- 1. Simultaneously press and hold P1 and P2 on the memorised radio control.
- 2. The radio control LED will begin to flash.
- 3. Release both buttons.
- 4. Press and hold, while the radio control LED is still flashing, the memorised button (the radio control LED will go on steady).
- 5. Bring the radio controls close together, press and hold the corresponding button of the radio control you wish to add, and release only after the radio control LED flashes twice, indicating that memorisation has been completed.
- 6. Press the button of the memorised radio control twice in succession. The automated system will perform an opening cycle.

Ensure that there are no obstacles (by people or things) during the automated system movement.



MEMORISING LC/RC RADIO CONTROLS (433MHz ONLY)

- 1. Press and hold + (OPEN A programming) or (OPEN B/CLOSE programming).
- 2. After keeping the button pressed for about 5 sec, the corresponding radio LED (DL11 or DL12) will begin to flash slowly for about 20 sec.
- 3. Release the button.
- 4. During radio LED flashing, press the desired button of the LC/RC radio control.
- 5. The corresponding LED on the board (DL11 or DL12) will go on steady for 1 second, indicating that memorisation has been completed, and will begin flashing again for another 20 sec during which you can memorise another radio control.
- 6. When the 20 sec have elapsed, the LED will turn off, indicating that the procedure has been completed.
- 7. To add other radio controls, repeat the procedure from point

REMOTE MEMORISATION OF LC/RC RADIO CONTROLS

With LC/RC radio controls you can remotely memorise other radio controls, i.e. without working directly on the board, using a previously memorised radio control.

- 1. Take a radio control that has already been memorised on one of the 2 channels (OPEN A or OPEN B/CLOSE) and move to the vicinity of the board.
- 2. Simultaneously press and hold P1 and P2 until both LEDs flash slowly for 5 sec.
- 3. Within 5 seconds, press the previously memorised radio control button to activate the learning phase for the selected channel.
- 4. The LED on the board corresponding to the channel in learning mode will flash for 20 sec within which another radio control code is transmitted by pressing the button.
- 5. The corresponding LED on the board will go on steady for 2 sec (indicating that memorisation has been completed) and will begin flashing again for another 20 sec, during which you can memorise other radio controls, and will finally go off.



MEMORISING DS RADIO CONTROLS

- On the DS radio control, choose the desired ON OFF combination of the 12 dip-switches. Press and hold + (OPEN A programming) or (OPEN B/CLOSE programming). 1.
- 2
- After keeping the button pressed for about 5 sec, the corresponding radio LED (DL11 or DL12) will begin to flash slowly for about 20 sec. 3. Release the button. 4
- During radio LED flashing, press the button of the radio control you wish to program. 5.
- 6. The corresponding LED on the board (DL11 or DL12) will go on steady for 1 second and then go off, indicating that memorisation has been completed.
- 7 To add other different codes, repeat the procedure starting from point 1.
- 8. To add other radio controls with the same code, set the 12 dip-switches according to the same combination as the already memorised radio control.



DELETING THE RADIO CONTROLS

- This operation CANNOT be reversed. This will delete <u>ALL</u> the radio control codes memorised as both OPEN A and OPEN B/ CLOSE. The cancellation procedure is active only in gate status visualisation mode.
- 1. Press and hold -

- 2. After pressing for about 5 sec, the DL12 LED begins to flash slowly; after another 5 sec of slow flashing and holding, the LEDs DL11 and DL12 begin flashing more rapidly (cancellation has started).
- 3. Once rapid flashing has stopped, LEDs DL11 and DL12 will go on steady, confirming the cancellation of all the radio codes (OPEN A and OPEN B/CLOSE) from the board memory.

4. Release . The LEDs will go off, indicating correct cancellation.



SIGNALLING ERRORS AND ALARMS

In case of **ERRORS** (conditions that stop gate operation) or **ALARMS** (conditions that do not compromise gate operation) it is possible to see the number related to the warning.

These warnings will disappear in the following cycle only if the situation causing them is removed.

When there is an ERROR, the ALARM LED will go on steady. When an ALARM is triggered, the ALARM LED starts to flash. By simultaneously pressing + and - the display will show corresponding error number.

N°	ERROR	SOLUTION
01	Board broken	Replace the board
50	Thermal protection active	Wait for the board to cool down, check for overloads
03	Motor 1 faulty	Check that the mater works and that the wiring is not interrupted or demograd
04	Motor 2 faulty	Check that the motor works and that the winng is not interrupted or damaged
05	Invalid SETUP	Repeat board SETUP
08	BUS-2EASY device error	Ensure that no two pairs of devices have the same address.
09	BUS-2EASY output short-circuit	Check the connections of the connected and entered BUS-2EASY devices
10	Motor 1 limit switch error	Check the limit switch connections for motor 1
11	Motor 2 limit switch error	Check the limit switch connections for motor 2
12	BUS-2EASY call	Ensure that the BUS devices are operating correctly and, if necessary, repeat BUS device acquisition
13	FAIL SAFE	Check that the safety devices (photocells) are operating correctly
14	Configuration error	Check that the board is configured correctly (basic and advanced programming) and, if necessary, repeat SETUP
IS	Movement timeout reached	Check that the motors are blocked; check that any limit switches are activated correctly and that the mechanical stops are present.
16	Deep sleep	The board is in advanced energy-saving mode. No action required.
٦١	Motor 1 encoder fault	Check the connections or replace motor 1 encoder
18	Motor 2 encoder fault	Check the connections or replace motor 2 encoder
19	Incorrect memory data	Repeat BUS-2EASY device entry and/or re-program the board
45	Battery operation	No action required.
93	High absorption at +24∨	Check that absorption by the accessories connected is within permitted limits

N°	ALARM	Solution/Description
20	Obstacle on MOTOR 1 (only with encoder)	Remove any possible obstacle on leaf 1
51	Obstacle on MOTOR 2 (only with encoder)	Remove any possible obstacle on leaf 2
55	MOTOR 1 current limited	Check the force set on motor 1
53	MOTOR 2 current limited	Check the force set on motor 2
2.5	LOCK 1 output short-circuit	Remove the cause of the short-circuit
56	LOCK 2 output short-circuit	Remove the cause of the short-circuit
гs	Nr. of consecutive obstacles exceeded during opening	Remove any possible obstacle. Should the problem persist, repeat SETUP
28	Nr. of consecutive obstacles exceeded during closing	Remove any possible obstacle. Should the problem persist, repeat SETUP
Э О	XF radio code memory full	Cancel the radio codes that are not being used using the PC program or use an additional DEC/MINIDEC/ RP module
31	Tampering alarm	Movement was performed with automation in status SE= OO or OI. Perform a manoeuvre cycle.
35	Emergency active	Check that the emergency input is not active (configuration only possible from PC/Mac)
35	TIMER active and TIMER function operating:	TIMER function is operating
40	Service request	Contact the installer for maintenance
50	The HOLD POSITION is operating (active on PC/MAC)	HOLD POSITION function is operating
60	TIMER active and error in TIMER data	Reload a correct TIMER configuration with the PC/MAC programme
62	Loss of time and date on the board (only if the TIMER is operating)	Reload the time and date with the PC/MAC programme and replace the BAT1 - CR2032 buffer battery
63	JOLLY TIMER is activated	JOLLY TIMER is enabled by terminal board J3
64	TIMER DISABLED is operating	TIMER is disabled by terminal board J3



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