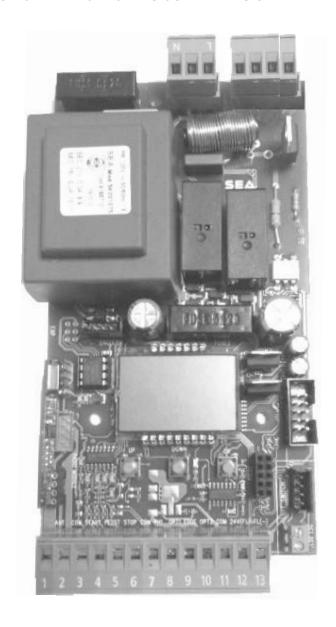




SLIDE DG R2F

CENTRALE DI COMANDO PER CANCELLI SCORREVOLI O A BATTENTE SINGOLO
CONTROL UNIT FOR SLIDING GATES OR SINGLE SWING GATES
ARMOIRE DE COMMANDE POUR PORTAILS COULISSANTS OU BATTANTS D'UN SEUL VANTAIL
CENTRAL ELECTRÓNICA PARA CANCELAS CORREDIZAS O ABATIBLES A HOJA INDIVIDUAL



SEA S.p.A.

Zona Industriale Sant' Atto - 64020 - Teramo - ITALY Telephone: + 39 0861 588341 - Fax: + 39 0861 588344

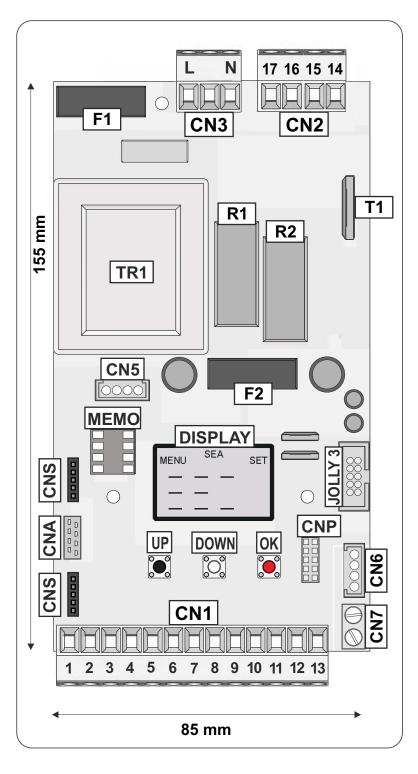
www.seateam.com seacom@seateam.com

67411695 REV. 05 - 10/2020



COMPONENTI - COMPONENTS

	ITALIANO	ENGLISH
CN1	ingresso / uscita	input output
CN2	motore - condensatore luce cortesia	motor capacitor coutesy light
CN3	alimentazione	power supply
CN5	encoder	encoder
CN6	finecorsa precablato	pre-wired limit-switch
CN7	finecorsa non precablato	not pre-wired limit- switch
CNA	ricevente RX	RX receiver
CNS	ricevente FIX	RF FIX receiver
CNP	programmazione	programming
МЕМО	memoria esterna trasmettitori (EEPROM)	TX external EEPROM
JOLLY	JOLLY 3 SEACLOUD	JOLLY 3 SEACLOUD
T1	triac pilotaggio motore	motor control triac
R1	relay motore e luce cortesia	motor and courtesy light relay
R2	relay scambio motore	motor exchange relay
F1	Fusibile 6.3AT su 230V 10AT su 115V	Fuse 6.3AT on 230V 10AT on 115V
F2	1A fusibile accessori	1A accessories fuse
TR1	trasformatore alimentazione	power transformer



DATI TECNICI - TECHNICAL DATA

ALIMENTAZIONE	230 Vac 50/60 Hz
POWER SUPPLY	115Vac 50/60 Hz

TEMPERATURA DI ESERCIZIO	-20°C	
WORKING TEMPERATURE	-20 6 / +50 6 /	

ASSORBIMENTO IN STAND-BY	30 mA
STAND-BY ABSORPTION	30 IIIA

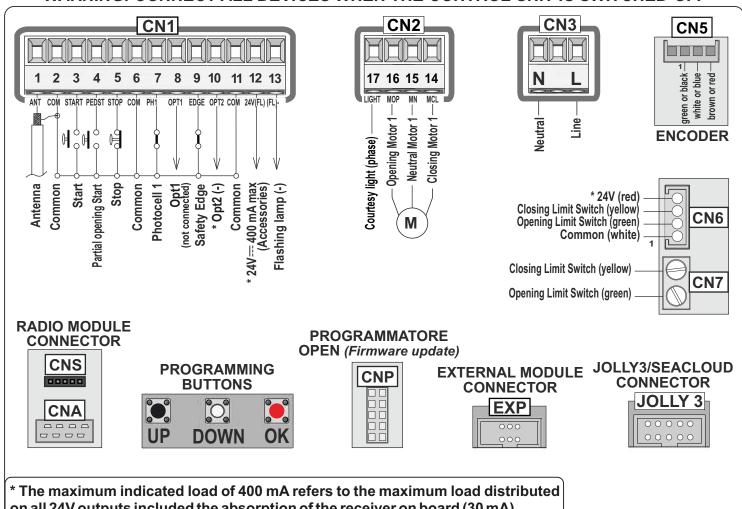
SCATOLA PER ESTERNO	183 x 238 x 120 mm
EXTERNAL BOX	IP55





1 - CONNECTIONS

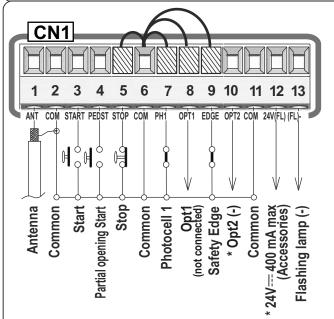
WARNING: CONNECT ALL DEVICES WHEN THE CONTROL UNIT IS SWITCHED-OFF



on all 24V outputs included the absorption of the receiver on board (30 mA)



OPTIONAL



WARNING: The control unit is designed for the automatic detection of not used N.C. inputs (Photocells, Stop and Limit switch) except for the SAFETY EDGE input. The excluded inputs during the self-programming can be restored through the «INPUT STATUS CHECK» menu (chapter 12) without need to repeat the control unit programming

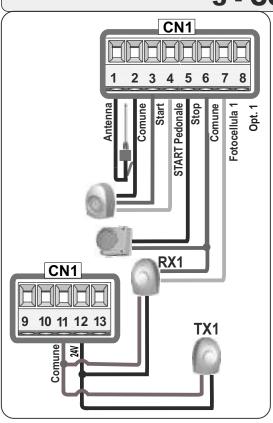
NOTE:

The herein reported functions are available starting from Software Revision 01.03 of this control unit and it is compatible with JOLLY 3 programmer





3 - CONNECTIONS ON CN1



3.1 - START (N.O.)

On clamps 2 and 3

The automation can be opened or closed through an impulse transmitted to this input (via key button, keyboard, etc.). To connect other Start devices (for ex. the magnetic loop) refer to the respective instructions

Note 1: For details on the logics that can be associated to the START button, see **chapter 14 (LOGICS)**

Note 2: If this contact is engaged during the pause (eg. Timer), the gate will not close until releasing

(3.2 - PARTIAL OPENING START (N.O.)

On clamps 2 and 4

The input allows to obtain the partial opening. It is possible to manage the opening space through the **menu-90** or through the JOLLY 3. It is also possible to manage the partial opening pause time through the **menu-91**

Note 1: For details on the logics that can be associated to the PARTIAL OPENING START button, see **chapter 14 (LOGICS)**

Note 2: If this contact is engaged during the pause (eg. Timer), the gate will not close until releasing

3.3 - STOP (N.C.) On clamps 5 and 6

If this button is pressed the engine stops immediately in whatever condition or position it is.

A new Start command will be required to restore the movement.

Note: After the Stop command, the engine will always re-start in closing

3.4 - PHOTOCELL 1

+ = 24V max 400mA (clamp 12)

COM = 0V (clamps 2-6-11)

Ph1 = Photocell 1(clamp 7)

Note 1: To perform the self-test, connect the TX positive to the clamp 10 (OPT2) and activate the Phototest function on **menu-94**;

Note 2: The default setting of the menu 97-PHOTOCELL 1 is on «closing»;

for further details see the menu table

3.5 - 24V AUX on input OPT2(-) max 400mA

From **menu 94-24VAUX** or through the JOLLY 3 it is possible to choose when to have voltage on the OPT2 output. It is advisable to connect the unused accessories (eg. Photocells) to the OPT2 output and then configure the **menu 94-24VAUX** as **«IN CYCLE AND PHOTOTEST»** so it will be possible to save energy by lowering the power consumption in stand-by and increasing the system autonomy

3.6 - TIMER (N.O.)

On clamp 4 (Partial Opening Start)

It can be enabled through **menu-92** or via JOLLY 3. It opens and keeps the automation open until it releases the contact. When released, the operator will wait for the pause set then will close again

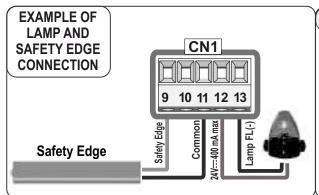
Note 1: If connected to the Partial Opening Start, this command will also be disabled on the remote control

Note 2: When the timer is active, in the event of a safety intervention, a Start command will be required to reset the movement

Note 3: In case of a power failure and with the gate open, if the TIMER is still active it will cause the gate reclosing; if no longer active, a new Start impulse will be required







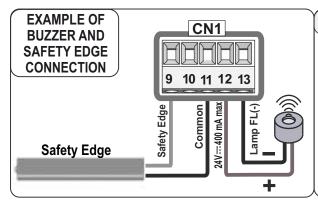
3.7 - 24V = FLASHING LIGHT - MAX 3W

On clamps 12 and 13

It warns of the gate movement by performing 1 blink per second on opening, 2 blinks per second on closing and remaining on steady during pause. Through the flashing light it is also possible to read the alarm signals linked to the Stop, Photocell1, Photocell2 and Edge devices. From menu 86-FLASHING LIGHT or JOLLY3 it is possible to modify its functions. Furthermore it is possible to manage the pre-flashing function from menu 85-PRE-FLASHING

3.8 - SAFETY EDGE On clamps 9 and 11

If activated, the safety edge opens the contact causing a partial inversion of the motion both in opening and closing. The function can be managed from menu **102-SAFETY EDGE 1 DIRECTION Note 1:** the safety edge functions can also be managed through the JOLLY 3

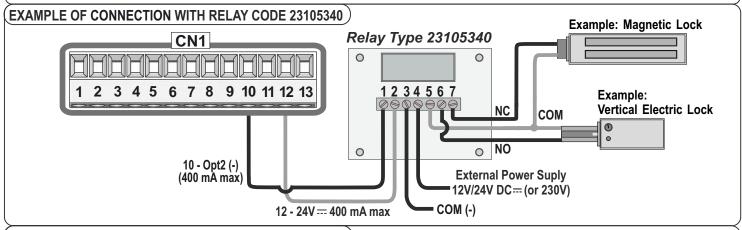


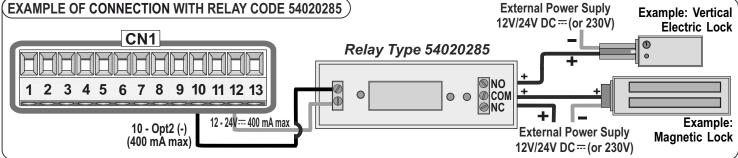
3.9 - BUZZER 24V --- On clamps 12 and 13

The Buzzer is a sound alarm that can be used as a security device. Use a self-oscillating 24V and 100 dB Buzzer; The Buzzer can be connected instead of the flashing light but it is necessary to set ****BUZZER***** on menu **86-FLASHING LIGHT** The Buzzer will activate after 2 consecutive interventions of the anti-crushing protection; to reset it press the STOP button; In any case, the sound of the Buzzer turns off automatically after 5 minutes and the automation will stand waiting for a new command

3.10 - MAGNETIC LOCK or VERTICAL ELECTRIC LOCK On clamps 10 and 12

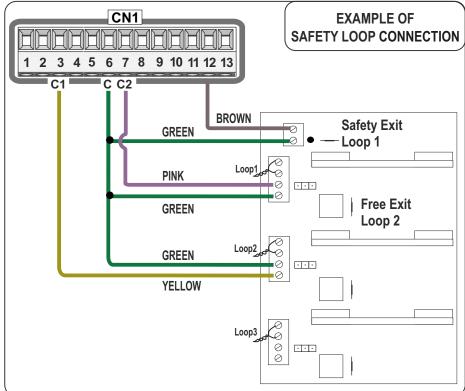
ATTENTION: set menu 94-24V AUX on «NEGATIVE BRAKE» before connecting the lock It is possible to connect a <u>magnetic lock</u> (MagLock) or a <u>vertical electric lock</u> through the Relay card code 23105340 (or old model code 54020285) to the control unit and to the external power supply (12V/24V DC power supply in case of 12V/24V lock or to 230V power supply in case of 230V lock)











3.11 - SAFETY LOOP

Safety Exit Loop (Loop 1)

Connection scheme of the 1 reader loop detector

7 = Photocell 1 contact (N.C.)

6 = Common

Free Exit Loop (Loop 2)

Connection scheme of the 1 reader loop detector

3 = Start contact (N.O.)

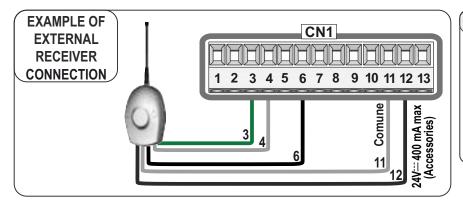
6 = Common

C1 = OPEN CONTACT

C2 = CLOSED CONTACT

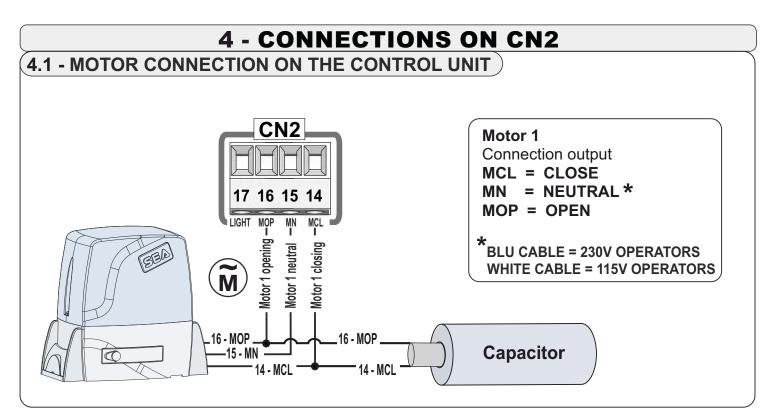
12 = 24 V

C(-) = 0 V



3.12 - EXTERNAL RECEIVER

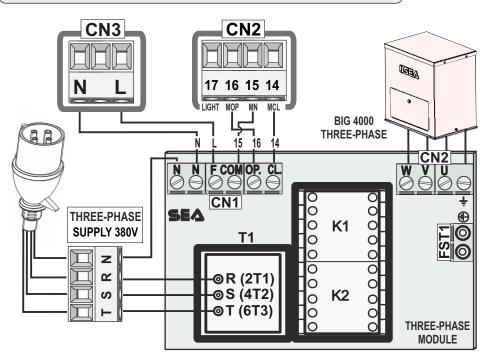
An external receiver can be connected to the control unit according to the connection diagram. For more details on connections and functionalities of the external receiver, refer to the relative instruction manual







4.2 - THREE-PHASE MODULE CONNECTION





On the **3-MOTOR menu**,

set

«3 THREE-PHASE-BOLLARD»

* T1 intervention threshold:

3,7A → BIG 4000 THREE-PHASE

1,8A → LEPUS

THREE-PHASE MODULE CONNECTORS

CN1 = On board power connector (220V)

(V)

 $K1 = 230V \sim 16A$ contactor

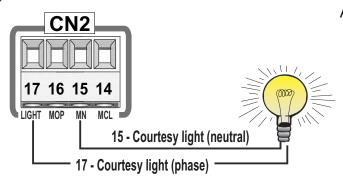
CN2 = Motor connector (380V)

K2 = 230V ~ 16A contactor

SFT1 = Ground connection Faston

T1 = Thermal switch *

4.3 - COURTESY LIGHT CONNECTIONS (230V or 115V)



A timed courtesy light (from 0 to 240 seconds) can be connected to the CN2, according to the aside connection diagram

See the **menu 88-COURTESY LIGHT** for settings

Exemple:

Timed Courtesy light from 0 up to 4 minutes

Max. 50W → 230V Max. 100W → 115V

5 - CONNECTIONS ON CN3

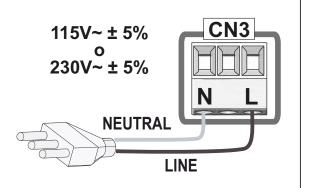
5.1 - CONTROL UNIT CONNECTION

Fuse 3,6A delayed on 230V~ power supply Fuse 6,3A delayed on 115V~ power supply

CAUTION!: for the connection to the power grid refer to the regulations in force

NOTE: It is recommended to use a 10A differential switch to protect the power supply system

NOTE: In case of unstable power supply, we recommend the use of an external UPS of minimum 800VA







6 - CONNECTIONS ON CN5

6.1 - ENCODER CONNECTION

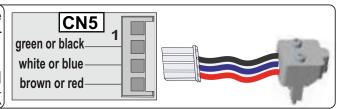
The **ENCODER** on board can be connected on CN5. In case of non pre-wired Encoder use an appropriate adapter respecting the cable colors

ENCODER

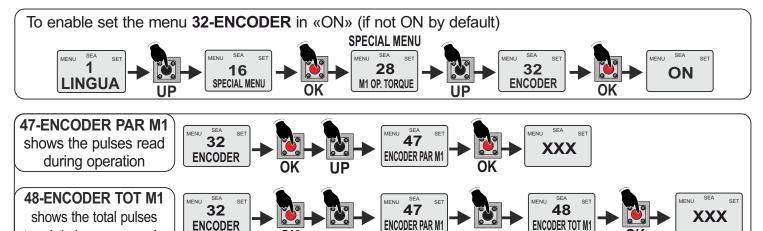
OLD TYPE ENCODER NEW TYPE ENCODER **BROWN - WHITE - GREEN**

OK

RED - BLUE - BLACK



OK

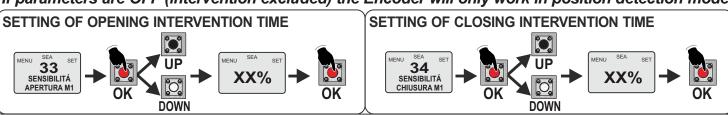


7.2 - ENCODER SETTINGS

stored during programming

values can be set from a minimum of 10% (rapid intervention) to a maximum of 99% (slow intervention). If parameters are OFF (intervention excluded) the Encoder will only work in position detection mode

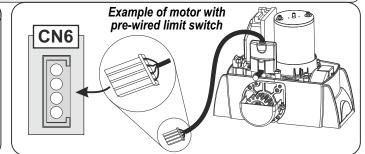
UP



7 - CONNECTIONS ON CN6 and CN7

7.1 - PREWIRED LIMIT SWITCH - CN6

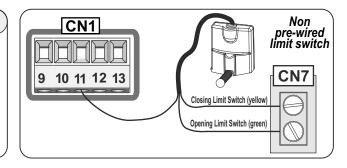
The pre-wired limit switches can be connected through the CN6 connector on the control unit, as shown in the figure beside. The control unit can manage mechanical, inductive or magnetic limit switches; it is possible to set the type of limit switch used through menu 104-SELECT LIMIT SWITCH



7.2 - NON PREWIRED LIMIT SWITCH - CN7

If a quick-fit connector is not present, the limit switch must be connected to connector CN7 and to terminal 11 (common) of connector CN1, as shown in the figure beside.

It is possible to set the type of limit switch used through menu 104-SELECT LIMIT SWITCH



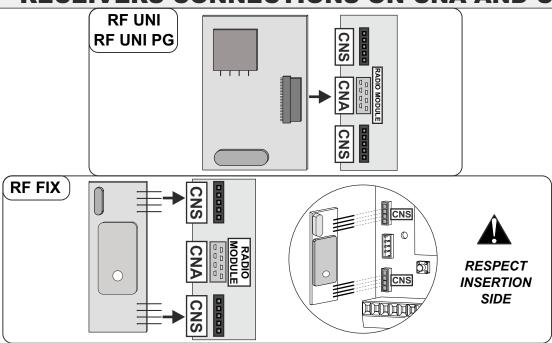




7.3 - A IMPORTANT NOTES

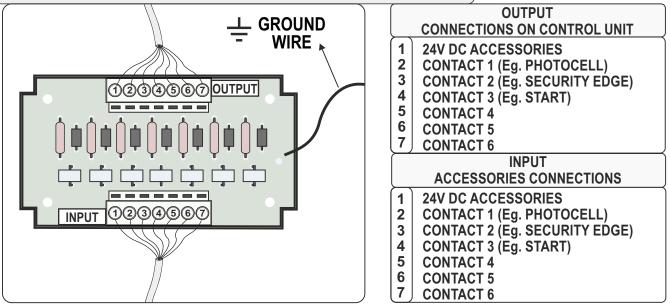
- 1) If not connected, the limit switches must not be bridged
- 2) On some specific applications it will not be necessary to connect the limit switches as the control unit will automatically detect whether they are present or not.
- 3) It is possible to activate the <u>anti-intrusion function</u> (menu 79-ANTI INTRUSION): this function is linked to the presence of at least one limit switch, which, if released, forces the motor to re-close.
- **4)** For a correct operation of the limit switches there must be a correspondence between the direction of movement of the motors and the respective limit switches involved.
- 5) For SEA magnetic limit switches, set the menu 104-SELECT LIMIT SWITCH on «N.O.»

8 - RECEIVERS CONNECTIONS ON CNA AND CNS



9 - ADDITIONAL FUNCTIONS

9.1 - «I/O SURGE PROTECTOR» CIRCUIT CONNECTION



It is possible to connect the **«SURGE PROTECTOR»** device, to protect up to 6 inputs + 24V power supply from overvoltages due, for example, to the lightning strikes. Simply connect the cable of the accessory to be protected to the **INPUT** of the SURGE PROTECTOR circuit and then, from the corresponding number on the **OUTPUT** terminal block, connect the cable to the control unit

NOTE: connect the common and the power supply negative directly on the control unit





10 - DISPLAY AND PROGRAMMING

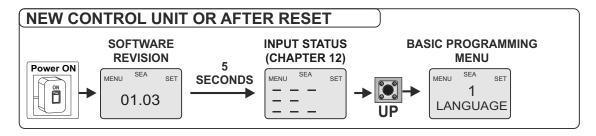


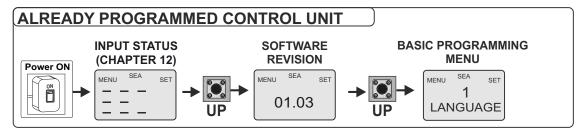
WARNING! MAKE ALL DEVICES CONNECTIONS ON SWITCHED-OFF CONTROL UNIT BEFORE THE PARAMETERS CONFIGURATION THROUGH DISPLAY

10.1 - SWITCHING ON THE CONTROL UNIT

When a new control unit is powered on, the display shows the software revision first and the **INPUT STATUS** after 5 seconds.

If a control unit is already programmed, the display immediatelly shows the **INPUT STATUS** view





It is possible to navigate within the menus through the programming keys UP and DOWN (to scroll back and forth) and OK to access submenus or to confirm a choice

PROGRAMMING BUTTONS

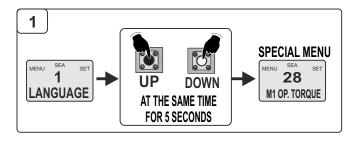


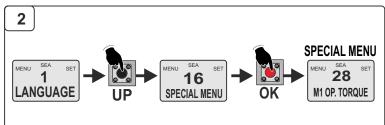
10.2 - BASIC PROGRAMMING MENU AND SPECIAL MENU

The control unit is equipped with a **basic programming menu** which can be accessed through the procedure above indicated when a control unit is switched on

The control unit is also equipped with a **special menu** that allows the setting of various parameters and the configuration of the accessories.

To access **THE SPECIAL MENU** choose one of the following 2 procedures:

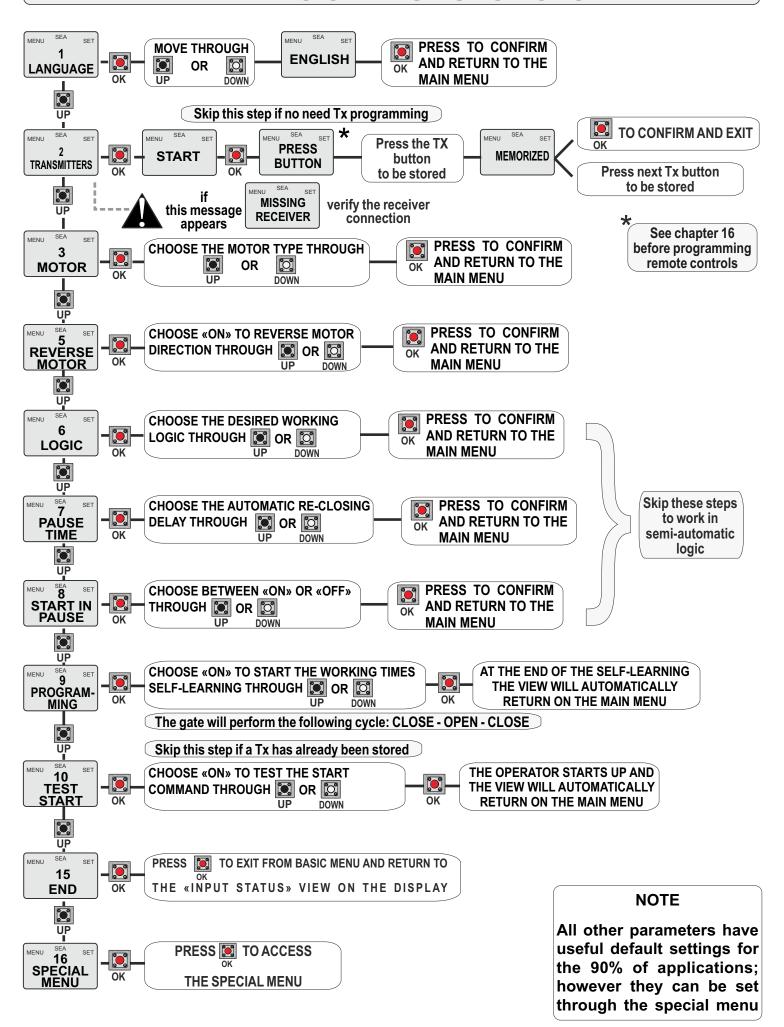








11 - BASIC MENU FUNCTIONS

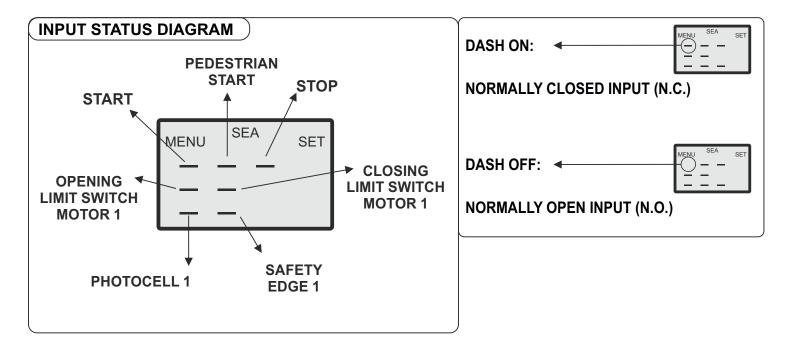




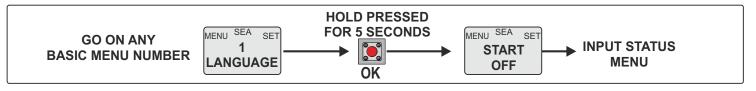


12 - INPUT STATUS CHECK AND MANAGEMENT

The input status check menu is displayed at the start of the control unit (for more details see chapter 10). Each input corresponds to a fixed position on the display, according to the diagrams below Each input can be **NORMALLY OPEN (N.O.)** or **NORMALLY CLOSED (N.C.)**



12.1 - ACCESS TO THE INPUTS STATUS MENU AND MANAGEMENT



Within this management menu it is possible to enable or disable the inputs; for the procedure see the table in the next paragraph (12.2);

The LIMIT SWITCHES inputs and the battery status (0.0V) cannot be managed, but only their current status (ON or OFF) is displayed

WARNING

START and PARTIAL OPENING START must be NORMALLY OPEN (N.O.) contacts:

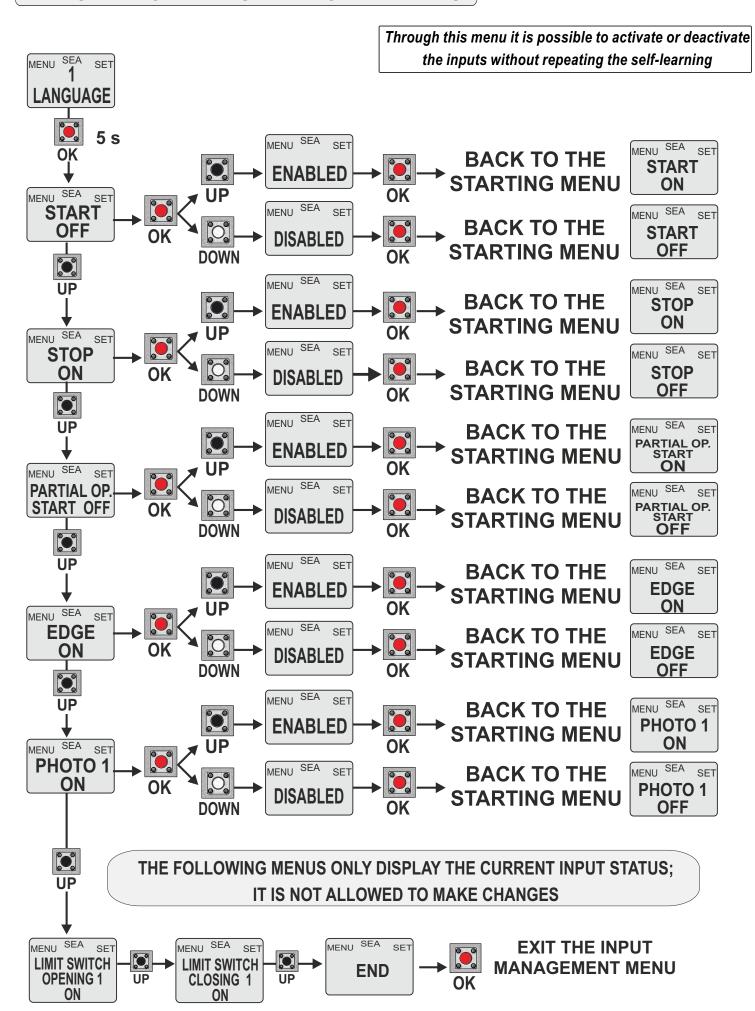
If «ON» appears on the display when one of the two command is activated, the input is working If «OFF» is displayed even after the command activation, then it is advisable to check the wirings

ALL OTHER CONTACTS ARE NORMALLY CLOSED (N.C.):

If «OFF» appears on the display when a command is activated, the input is working If «ON» is displayed even after the command activation, then it is advisable to check the wirings



12.2 - SLIDE DG R2F INPUT MANAGEMENT MENU







13 - WORKING TIMES SELF-LEARNING



WARNING!

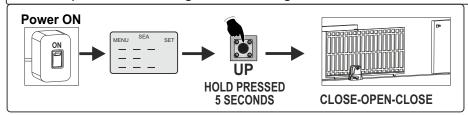
POTENTIALLY DANGEROUS PROCEDURE. TO BE PERFORMED EXCLUSIVELY BY SPECIALIZED INSTALLERS AND IN SAFETY CONDITIONS

NOTE PRELIMINARI:

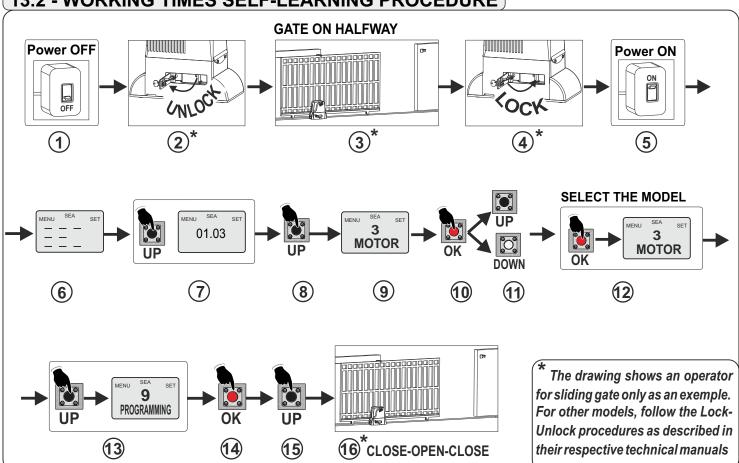
- It is not necessary to jumper Limit switches, Photocells, Stop or Safety Edges inputs if not used
- Check the correct operation of all accessories (Photocells, Push buttons etc.)

13.1 - QUICK START

The electronic unit on board the **SLIDING OPERATORS** is already set by default on the respective sliding operator model which also has default settings for various parameters therefore it is possible to proceed with the quick self-learning of the working times







NOTE 1: If a motor performs the first learning cycle starting in opening, remove the power supply and reverse the motor cables (or set to ON the menu **5-REVERSE MOTOR**), then repeat the procedure





13.3 - SELF-LEARNING WITH LIMIT-SWITCHES

Working times self-learning through detection of the limit-switch points (with or without ENCODER)

<u>PRELIMINARY NOTE:</u> Check on the **INPUT STATUS** menu that the correct limit switches are engaged for each direction of movement (see chapter 12)

WORKING TIMES SELF-LEARNING: AFTER THE ABOVE-MENTIONED CHECKS, FOLLOW THE PROCEDURE ILLUSTRATED IN THE PARAGRAPH 13.2

NOTE 1: If a motor starts in closing, arrives up to the limit switch lever then it stops, it will be necessary to invert the limit switch cables and repeat the learning procedure

13.4 - SELF-LEARNING WITH ENCODER

Working times self-learning through detection of the pulses by Encoder

PRELIMINARY NOTES:

- Check the activation and the correct reading of the Encoder (menu 32 and sub-menus 47 and 48 - see chapter 6)

WORKING TIMES SELF-LEARNING: AFTER THE ABOVE-MENTIONED CHECKS, FOLLOW THE PROCEDURE ILLUSTRATED IN THE PREVIOUS PARAGRAPH (13.2)

13.5 - SELF-LEARNING THROUGH PULSES

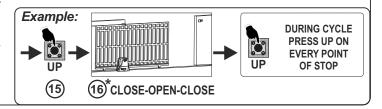
Working times self-learning through manual impulse on the stop points

PRELIMINARY NOTES:

- BEFORE PROCEEDING WITH THE WORKING TIMES SELF-LEARNING it is necessary to set the operating logics, make the desired parameter adjustments and, if used, to program the radio transmitters

WORKING TIMES SELF-LEARNING: AFTER THE ABOVE-MENTIONED CHECKS, FOLLOW THE PROCEDURE ILLUSTRATED IN THE PARAGRAPH 13.2 UP TO POINT N° (15), THEN DURING THE

LEARNING CYCLE «CLOSE - OPEN - CLOSE», IT WILL BE POSSIBLE TO GIVE A MANUAL PULSE (BY PRESSING the UP or DOWN buttons or by giving a START command) ON EVERY LEAF POINT OF STOP



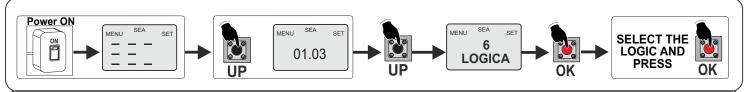




14 - OPERATING LOGICS

PRELIMINARY NOTES

- 1) For the automatic closing it is necessary to set a pause time; through the menu **7-PAUSE TIME** set a time between 1 second and 240 seconds; by default this parameter is OFF (SEMI-AUTOMATIC logic: after the opening, a START impulse will be required to close the gate)
- **2)** It is possible to choose whether or not to accept the Start in pause; on menu **8-START PAUSE** select ON By default this parameter is OFF



AUTOMATIC LOGIC

A **START** impulse opens the gate. A second **START** impluse during the opening will not be accepted.

A **START** impulse during closing reverses the movement

SAFETY LOGIC

A **START** impulse opens the gate. A second **START** impulse during opening reverses the movement.

A START impulse during closing reverses the movement

STEP BY STEP TYPE 1 LOGIC

The START impulse follows the OPEN-STOP-CLOSE-STOP-OPEN logic

STEP BY STEP TYPE 2 LOGIC

The START impulse follows the OPEN-STOP-CLOSE-OPEN logic

DEAD MAN LOGIC

The gate opens as long as the **START** opening button is held pressed; when released the gate stops The gate closes as long as the **PARTIAL OPENING START** is held pressed; when released the gate stops To carry out the complete opening and/or closing cycles it is necessary to hold the respective buttons constantly pressed

2 PUSH-BUTTONS LOGIC

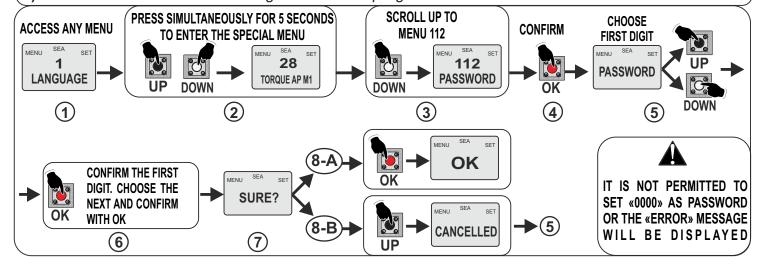
One **START** opens, one **PARTIAL OPENING START** closes.

A closing input will not be accepted during opening. A **START** command reopens during closing movement while the **PARTIAL OPENING START** (to close) will be ignored

15 - PASSWORD MANAGEMENT

PRELIMINARY NOTES:

- 1) Once the password is enabled, the menu cannot be adjusted;
- 2) If You forgot the password, contact the SEA technical assistance; SEA will evaluate whether or not to provide the procedure for the control unit unlocking
- 3) Password CAN NOT be set through the JOLLY 3 programmer







16 - RECEIVERS AND REMOTE CONTROLS

SEA PLUG-IN RECEIVERS (see chapter 8)	MAX NUMBER OF USERS
RF UNI	16 USERS Without additional memory 800 USERS With MEMO RF additional memory
RF UNI PG (Old Model - non-extractable memory)	100 USERS Fix Code 800 USERS Roll Plus
RF UNI PG (New Model - extractable memory)	800 USERS Fix Code 800 USERS Roll Plus
RF FIX	16 USERS Without additional memory 496 USERS With MEMO RF additional memory

PRELIMINARY NOTES:

- With the control unit OFF, check if the RECEIVER module is correctly connected to the connector
- Power up the control unit and program the radio transmitters before connecting the antenna
- RF UNI and RF UNI PG modules allow the use of both ROLL PLUS and FIX CODE radio transmitters
- Perform the radio transmitters learning only with closed gate and stopped motor
- It is possible to store up to 2 of the available functions
- The START function must ALWAYS be assigned
- If the second function assigned will be modified later, then all the radio transmitters will acquire this last function on the second channel
- The RF FIX module only allows the use of FIX CODE radio transmitters

WARNING The first stored radio transmitter will determine the coding of the following ones: if the first radio transmitter is stored as ROLLING CODE, then all the following radio transmitters must be stored as ROLLING CODE (FIX CODE storing will not be accepted). Vice versa, if the first radio transmitter is stored as a FIX CODE, then all the following radio transmitters must be stored as FIX CODE (ROLLING CODE storing will not be accepted)

STORING OF A ROLLING CODE RADIO TRANSMITTER:

Follow the procedures on the paragraph 16.2 for programming the remote control different buttons When choosing the remote control button to be programmed, it is required to *«Press the Button»*; to store THE FIRST REMOTE CONTROL in ROLLING CODE the button must be pressed TWICE IN SUCCESSION; for the subsequent remote controls it is sufficient to press it ONLY ONCE as required by the procedure

STORING OF A FIX CODE OR ROLLING CODE PLUS RADIO TRANSMITTER:

Follow the procedures on the paragraph 16.2 for programming the remote control different buttons; to store REMOTE CONTROLS in FIX CODE or ROLLING CODE PLUS the button must be pressed ONCE as required by the procedure (for both the first remote control and the following ones)

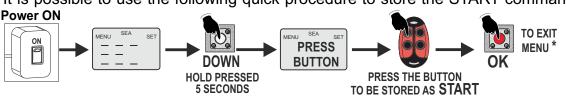
FOR THE INSTALLER: 2-REMOTE CONTROLS menuly shows the stored radio transmitters serial number; It is advisable to create a table* as reminder of the serial numbers for each remote assigned to every customer, for an easy transmitter/customer management

Memory Button Location	1	2	3	Serial Number	Customer
0					
1					
2					
3					

^{*}exemple of table

16.1 - START COMMAND QUICK SELF-LEARNING

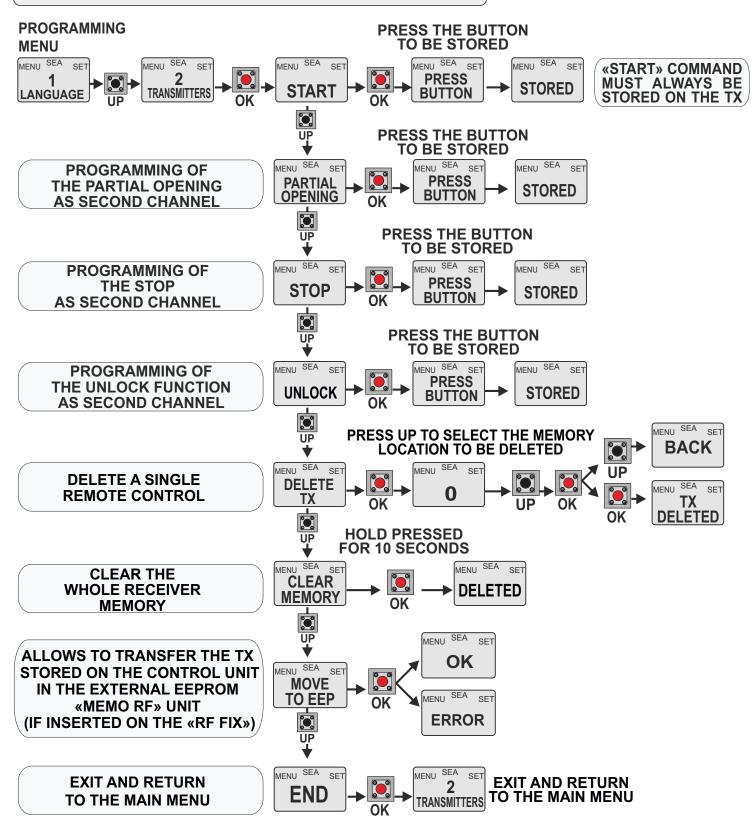
It is possible to use the following guick procedure to store the START command on the remote control







16.2 - REMOTE CONTROLS PROGRAMMING TABLE



SLIDE DG R2F MENU FUNCTIONS TABLE

	MENU	SET	DESCRIPTION	DEFAUL	NOTE	
		Italiano	Italian			
		English	English			
1	LANGUAGE	Français	French	- English		
_	LANGUAGE	Español	Spanish			
		Dutch	Dutch			
		Polish	Polish			
		Start	Start			
		Partial opening	Partial opening			
		Stop	Stop			
2	TRANSMITTERS	Unloch	To store a command for the electric brake unlocking	Start		
_	TRANSIVITIENS	Delete a transmitter	Deletes single transmitter	Partial		
		Clear memory	Deletes transmitter memory	Opening		
		Move to EEP	Transfers the TX stored on the control unit to the external EEPROM ("MEMO" - Optional)			
		End	"Transmitters" menu output			
		Mechanic	Electro-mechanic operators			
	MOTOR	Hydraulic	Hydraulic operators	Mechanic		
		Sliding	Sliding operators			
3		Reversible sliding	Reversible sliding operators			
		Magnetic sliding	Sliding operators with magnetic limit-switch			
		Three-phase-Bollards	Three-phase operators and Bollards			
		Seagear	SEAGEAR operator			
5	REVERSE MOTOR	On	To reverse opening with closing or vice-versa (both motors and limit-swiches are reversed)	Off		
		Off	Off			
		Automatic	Automatic			
		Open-stop-close-stop-open	Step by step type 1			
6	LOGIC	Open-stop-close-open	Step by step type 2	Auto-		
0	Logic	2 button	Two buttons	matic		
		Safety	Safety			
		Dead man	Dead man			
7	PAUSE TIME	Off	OFF (semi-automatic logics)	Off		
,	FAOSE TIME	1 240	Setting from 1 second to 4 minutes	Ojj		
8	START IN PAUSE	Off	The Start is not acceped during pause	Off		
	STAIL IN FAUSE	On	The Start is acceped during pause	Off		
9	PROGRAMMING	Off On	Times learning start	Off		
10	TEST START	Off On	Start command	Off		
15	END	Return to the display of the firmware version and to the inputs state				
16	SPECIAL MENU		Press OK to enter the special menu			



SPECIAL MENU

PRESS AT THE SAME TIME FOR 5 SECONDS TO ENTER OR TO EXIT THE SPECIAL MENU

	SPECIAL MENU FUNCTIONS TABLE SLIDE DG R2F					
	SP MENU	SET	DESCRIPTION	DEFAULT	NOTES	
28	OPENING TORQ 1	10 100	Opening torque Motor 1: by increasing the torque, more strenght will be required to execute the inversion in case of obstacle. Note: with hydraulic motors the torque will be on 100%	<i>75</i>		
29	CLOSING TORQ 1	10 100	Closing torque Motor 1: by increasing the torque, more strenght will be required to execute the inversion in case of obstacle. Note: with hydraulic motors the torque will be on 100%	75		
32	ENCODER	On	ON = Encoder enabled OFF = disabled - shows working times learnt	Off		
	47 ENCODER PAR. M1	xxx.	Impulses read by Encoder during operation (Motor	r1)		
	48 ENCODER TOT. M1	xxx.	Impulses stored during programming (Motor 1)			
32	ENCODER	Off	ON = Encoder enabled OFF = disabled - shows working times learnt	Off		
	65 OPENING TIME M1	XXX.S	Indicates the working times self-learning in openin closing (Motor 1). With UP or DOWN it is possible	_	ase	
	66 CLOSING TIME M1	XXX.S	or reduce the working times	to merce	isc	
33	OPENING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	Adjusts the Encoder or Potentiometer intervention time on Motor 1 in opening	10		
		Off (Intervention excluded)	Disabled			
34	CLOSING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	Adjusts the Encoder or Potentiometer intervention time on Motor 1 in closing	10		
		Off (Intervention excluded)	Disabled			
		For menu 47 and 48	see menu 32-Encoder = On			
59	OPENING SLOWDOWN 1	Off (*) 50	From OFF to 50% of the stroke	20		
60	CLOSING SLOWDOWN 1	Off (*) 50	From OFF to 50% of the stroke	20		
63	DECELERATION	0 % 100%	Adjust the passage between normal speed and slowdown speed	100%		
		For menu 65 and 66	see menu 32-Encoder = Off			
70	OPENING POSITION RECOVERY	0 20 seconds	Retrieves the inertia of the motor in opening after Stop or reversing	1s		
71	CLOSING POSITION RECOVERY	0 20 seconds	Retrieves the inertia of the motor in closing after Stop or reversing	1s		

	SP MENU	SET	DESCRIPTION	DEFAULT	NOTES
72	OPENING TOLERANCE MOTOR 1	0 100	Adjust the tolerance between stop and obstacle on Motor 1 in opening	0	
73	CLOSING TOLERANCE MOTOR 1	0 100	Adjust the tolerance between stop and obstacle on Motor 1 in closing	0	
		Off			
80	PUSHOVER	Opening and closing	Allows the leaf to make an extra move at	Off	
	T OSTIOVEN	Only closing	maximum torque to ensure the tightening	٠,,	
		Only opening			
81	PERIODICAL PUSHOVER	Off 8	Allows the repetition of the pushover function at a distance of time adjustable from 0 to 8 hours at hourly intervals		
82	MOTOR RELEASE	0.1 3.0	Adjustable from 1 to 3 - the motor slightly reverse its direction at the end of the cycle	0.1	
		Off	Disabilitato		
84	BRAKE	Off 100%	Adjusts the braking on the limit switches	Off	
0.5	PRE-FLASHING	Only closing	Pre-flashing only active before closing	- Off	
85		0.0 5 s Pre-flashing	Pre-flashing		
		Normal	Normal		
	FLASHING LIGHT	Light	Control lamp		
86		Always	Always ON	Normal	
		Buzzer	Buzzer		
07	FLASHING LIGHT AND	Off	The flashing light remains OFF with active timer and open gate	255	
87	TIMER	On	The flashing light remains ON with active timer and open gate	Off	
		Off	Disabled		
88	COURTESY LIGHT	1 240	Courtesy light setting from 1sec. to 4min.	20	
		In cycle	Courtesy light in cycle		
90	PARTIAL OPENING	5% 100%	Setting from 5 to 100	100%	
		= Start	The pause in partial opening is the same as in total opening		
91	PARTIAL PAUSE	Off	Disabled	= Start	
		1 240	Setting from 1second to 4 minutes		
02	TIMED	Off	Turn the selected input into an input to which	055	
92	TIMER	On partial entry	connecting an external clock	Off	
		Off	Disabled		
93	FIRE SWITCH	On Partial entry	Function active on Partial entry input	Off	

	SP MENU	SET	DESCRIPTION	DEFAULT	NOTES
		Always	AUX output always powered		
		In cycle	AUX output active only during cycle		
		Opening	AUX powered only during opening		
		Closing	AUX output powered only during closing		
	24V AUX	In pause	AUX output powered only during pause		
94	(OPT2 output) Device to be connected	Autotest	Security self-test	Always	
	on 24V(FL) and OPT2	In cycle and phototest	Self-test function active only during cycle		
		Positive brake management	Positive Electric-brake (24V in ON with stationary gate)		
		Negative brake management	Negative Electric-brake (24V in ON with gate in cycle and 1 second before the start)		
		Closing	If the photocell is occupied during closing, it reverses the movement; If the photocell is occupied during the pause, it prevents the reclosing		
	PHOTOCELL 1 SHADOW LOOP 1	Opening	If occupied, the photocell blocks the movement as long as it is busy; when released, the opening movement continues		
		Stop	If the photocell is occupied before the Start input, the Start will be ignored. If the photocell is occupied after the Start input, the photocell will be ignored. If the photocell is occupied during closing, the gate will reopen		
		Stop and close	If the photocell is occupied during closing, it stops the movement; when released, the closing movement continues		
97		Close	The photocell stops the gate until it is occupied in both opening and closing; when released, the photocell gives a closing command (the gate closes one second after the photocell release)		
		Pause reload	If the photocell is occupied during pause, it recharges the pause time set. If the photocell is occupied during closing, it reverses the movement		
		Shadow loop	Until occupied, with open gate, the shadow loop prevents the reclosing. Shadow loop is switched off during closing		
		Delete pause time	If the photocell is occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time set		

	SP MENU	SET	DESCRIPTION	DEFAULT	NOTES
		Opening and closing	Active in opening and closing	Opening	
102	SAFETY EDGE 1 DIRECTION	Only opening	Active only in opening	and	
		Only closing	Active only in closing	Closing	
		Automatic	Limit-switch in automatic recognition		
104	SELECT LIMIT SWITCH	Only opening	Limit-switch active in opening only	Automatic	
		Only closing	Limit-switch active in closing only		
106	DIAGNOSTICS	1 10	Shows last event <i>(See alarms table)</i>		
107	MAINTENANCE CYCLES	100 10E4	Setting from 100 to 100000	10E4	
108	PERFORMED CYCLES	O 10E9	Reports the executed cycles. Hold pressed OK to reset the cycles	0	
112	PASSWORD	Note: "0000" setting is not allowed	Allows the entering of a password blocking the control unit parameters modification		
120	BASIC MENU	Press OK to exit the special menu. The special menu switches off automatically after 20 minutes			

CONTROL UNIT RESET: Hold the UP and DOWN buttons pressed at the same time until the message «INIT» appears on the display





ALARMS

The control unit advises about faults by a message on the display. The table below shows which faults are advised and what to do in the event of a malfunction. However, it is possible to read the last 10 fault warnings by accessing the **106-DIAGNOSTIC** menu

Note 1: To exit the alarms display press OK

If the warning signal does not disappear, carry out all the checks required for that error or disconnect the device generating error to check whether the signal disappears

It is also possible to visualize the warning signals through the flashing light or the pilot light, simply by observing the number of flashes emitted and checking the correspondence in the flashing table below. When an event occurs, the warning flashes are issued at each Start command:

Note 3: When there are no events, the normal operation (with **86-FLASHING LIGHT** set on "**NORMAL**") is: 1 flash per second in opening - 2 flashes per second in closing - steady during pause

WARNING	DESCRIPTION	SOLUTION	
FAULT MOTOR	Motor power supply failure	Be sure there are no short circuits on the motor or on the control unit; Check the gate is not locked or stuck on stop point; Check the encoder (if active) is connected to the control unit; By unlocking the operator, try giving a Start command and hear if the motor runs dry; If the motor does not run at all, then it is burned, therefore call the technician; If the motor runs, disconnect the power supply, lock the operator again and restore the power	
FAULT 24	24V power supply failure	Check that there are no short circuits on wirings or on the control unit that there is no overload	
FAULT NET	Power supply failure	Check the power supply or check the F2 fuse	
FAULT SELF-TEST	Photocells self-test failure	Check the photocells operation and/or wirings on control unit	
FAULT LIMIT SWITCH	Limit switch activation failure	Check the operation of both limit switches and/or the correspondence between the motor movement direction and the engaged limit switch	
FAULT FLASHING LIGHT	Flashing light failure	Check connections and / or conditions of the lamp	

ALARM TYPE	
Motor failure	
Photocell in closing	
Photocell in opening	
Opening collision	
Safety edge	
Stop	
Maximum cycles reached	
Closing collision	
Limit switch error	

A Periodically, *it would be advisable to reprogram the learning times on the control unit*, according to the number of performed cycles, on the type of operator or in case of malfunctionings.

The warning signal "MAXIMUM CYCLES REACHED" and the 7 flashes shown in the table aside refer to the achievement of the maximum cycles established before maintenance; therefore it is advisable to carry out maintenance and reset the number of cycles on the control unit





TROUBLESHOOTING

Advices

Make sure all Safeties are turned ON

Problem Found	Possible Cause	Solutions	
Operator doesn't respond to any START impulse	a) Check the connected N.C. contacts b) Burnt fuse	a) Check the connections or the jumpers on the connections of the safety edge or of the stop and of the photocell if connected b) Replace the burnt fuse on the control unit	
Operator does not run and diagnostic display not on.	a) No power to control board b) Open fuse c) Defective control board	a) Check AC power b) Check fuses c) Replace defective control board	
Operator does not respond to a wired control/command (example: Open, Close, etc.)	a) Check Open and Close command input b) Stop button is active c) Reset button is stuck d) Entrapment Protection Device active	a) Check all Open and Close inputs for a stuck on input b) Check Stop button is not stuck on c) Check Reset button d) Check all Entrapment Protection Device inputs for a stuck on sensor	
Operator does not respond to a transmitter	a) Stop button is active b) Reset button is stuck c) Poor radio reception	a) Check Stop button is not stuck on b) Check Reset button c) Check if similar wired control operates correctly. Check antenna wire	
Motor turn only one way	a) Check resistance between motor phase and neutral, if the resistance is MOhmb) Try to invert the motor phase and watch if the motor change or not the direction	a) Change cable b) If the motor is blocked change the cable if the motor go only in one direction the motor relay direction is damaged	
Gate doesn't move while the motor is running	a) The motor is in the released position b) There is an obstacle	a) Re-lock the motor b) Remove obstacle	
Gate doesn't reach the complete Open / Closed position	a) Wrong setting of the limit switches b) Error on programming c) Gate is stopped by an obstacle d) Torque too low e) Gate is too heavy for automatic slow-down	a) Set limit switches b) Repeat programming c) Remove obstacle d) Increase torque parameter e) Set the slow-down on OFF	
Gate opens but doesn't close	a) The contacts of the photocells are connected and open b) The stop contact is connected and open c) The edge contact is open d) Ammeter alarm	a) b) c) Check the jumpers or the connected devices and the signals indicated on the warning lamp d) Check if the ammeter alarm has intervened and eventually increase the torque parameter	
Gate doesn't close automatically	a) Pause time set too high b) Control unit in semi-automatic logic	a) Adjust pause time b) Set the pause parameter on a different value from the OFF	
Gate moves, but cannot set correct limits	a) Gate does not move to a limit position b) Gate is too difficult to move	a) Use manual disconnect, manually move gate, and ensure gate moves easily limit to limit. Repair gate as needed b) Gate must move easily and freely through its entire range, limit to limit. Repair gate as needed	
Gate does not fully open or fully close when setting limits	a) Gate does not move to a limit position b) Gate is too difficult to move	a) Use manual disconnect, manually move gate, and ensure gate moves easily limit to limit. Repair gate as needed b) Gate must move easily and freely through its entire range, limit to limit Repair gate as needed	
Gate stops during travel and reverses immediately	a) Control Open/Close becoming active b) The obstacle sensitivity is too low	a) Check all Open and Close inputs for an active input b) Check the obstacle sensitivity value and try to increase this parameter	





Advices

Make sure all Safeties are turned ON

Problem Found	Possible Cause	Solutions	
Gate doesn't respect slow down points	a) ENCODER is not working properly if It's activated b) Mechanical clutch loose c) Slow down space is too wide d) Potentiometer is not working properly if It's activated e) The recovery position parameters are too high or too low	a) Check menu for encoder parameters "Encoder Par" shall be from a low value +/- 10 (gate completely closed) to "Encoder tot" (gate completely opened). If the movement of Ipar is not linear in the range (+/-10 - Encoder tot) probably the Encoder is defective b) Tight mechanical clutch c) Reduce slow down space d) Check menu for potentiometer parameters "IPar" shall be from "I. CH." (gate completely closed) to "I.AP." (gate completely opened). If the movement of Ipar is not linear in the range (I.AP I.CH.) probably the potentiometer is defective e) Reduce or increase the recovery position parameters	
Gate opens suddenly without start command	a) Frequency or other noise from main line b) Short circuit on the start contact	a) Wiring AC shall be separate from DC wire and pass through separate conduits. If there is a frequency noise it is possible to change frequency to another MHz like 868 for example or FM b) Check all start contacts	
Gate doesn't close in automatic logic during pause even if a loop/photo is set as start	a) START IN PAUSE is not in ON b) The photo/loop input is not set as delay pause time	a) Put in ON the menu of START IN PAUSE b) Set in the photo/loop menu (delay pause time)	
Gate doesn't have power to close or reach limit switch	a) Slow down not possible for that site due to heavy gate or inclination or not new installation	a) Put Slow Down in OFF	
Obstruction in gates path does not cause gate to stop and reverse	a) Force adjustment needed	a) Refer to the Adjustment section to conduct the obstruction test and perform the proper force adjustment that is needed (sensitivity - torque)	
Photoelectric sensor does not stop or reverse gate	a) Incorrect photoelectric sensor wiring b) Defective photoelectric sensor c) Photoelectric sensors installed too far apart	a) Check photoelectric sensor wiring. Retest that obstructing photoelectric sensor causes moving gate to stop, and may reverse direction b) Replace defective photoelectric sensor. Retest that obstructing photoelectric sensor causes moving gate to stop, and may reverse direction c) Move the photoelectric sensors closer together or use edge sensors instead	
Edge Sensor does not stop or reverse gate	a) Incorrect edge sensor wiring b) Defective edge sensor	a) Check edge sensor wiring. Retest that activating edge sensor causes moving gate to stop and reverse direction b) Replace defective edge sensor. Retest that activating edge sensor causes moving gate to stop and reverse direction	
Alarm sounds for 5 minutes or alarm sounds with a command	a) Double entrapment occurred (two obstructions within a single activation)	a) Check for cause of entrapment (obstruction) detection and correct. Press the reset button to shut off alarm and reset the operator.	
Shadow loop does not keep gate at the open limit	a) Vehicle detector setup incorrectly b) Defective vehicle loop detector c) Wrong settings	a) Review Shadow loop detector settings. Adjust settings as needed b) Replace defective Shadow loop detector c) Check the photo2 menu is set on shadow loop	
Accessories connected to the accessory power not working correctly, turning off or resetting	a) Accessory power protector active b) Defective control board	a) Disconnect all accessory powered devices and measure accessory power voltage (should be 23-30 Vdc). If voltage is correct, connect accessories one at a time, measuring accessory voltage after every new connection b) Replace defective control board	
FAILURE 24VAUX	a) Overload or short-circuit on the output N°10 b) Burnt fuse	a) Check a short circuit on the cable b) Change fuse	





TO THE ATTENTION OF BOTH INSTALLER AND END USER

MAINTENANCE: Periodically, based on the number of maneuvers performed over time and based on the type of operator, if a change in friction, malfunctioning or non-compliance with the previously set times are noticed, *it would be advisable to reprogram the learning times on the control unit*

Periodically clean the optical systems of the photocells

REPLACEMENTS: Send request for spare parts to: SEA S.p.A. - Teramo - ITALY - www.seateam.com

SAFETY AND ENVIRONMENTAL COMPATIBILITY: Disposal of packaging materials and/or circuits should take place in an approved disposal facility



REGULAR PRODUCT DISPOSAL (electric and electronic waste)

(It's applicable in EU countries and in those ones provided with a differential waste collection)

This brand on the product or on documentation indicates that the product must not be disposed off together with other domestic waste at the end of its life cycle. In order to avoid any possible environmental or health damage caused by irregular waste disposal, we recommand to separate this product from other types of waste and to recycle it in a responsible way in order to provide the sustainable re-use of material resources. Domestic users are invited to contact the retailer where the product has been purchased or the local office to get all the information related to differential watse collection and recycling of this kind of product

IMMAGAZZINAMENTO

WAREHOUSING TEMPERATURES					
T _{min}	T _{Max}	Dampness min	Dampness _{Max}		
- 20°C ↓	+ 65°C	5% not condensing	90% not condensing		

Materials handling must be made with appropriate vehicles

WARRANTY LIMITS - see the sales conditions

SEA S.p.A. reserves the right to make any required modification or change to the products and/or to this manual without any advanced notice obligation

GENERAL NOTICE FOR THE INSTALLER AND THE USER

- 1. **Read carefully these Instructions** before beginning to install the product. Store these instructions for future reference
- 2. Don't waste product packaging materials and /or circuits.
- 3. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger. SEA S.p.A. declines all liability caused by improper use or different use in respect to the intended one.
- 4. The mechanical parts must be comply with Directives: Machine Regulation 2006/42/CE and following adjustments), Low Tension (2006/95/CE), electromagnetic Consistency (2004/108/CE) Installation must be done respecting Directives: EN12453 and En12445.
- 5. Do not install the equipment in an explosive atmosphere.
- 6. SEA S.p.A. is not responsible for failure to observe Good Techniques in the construction of the locking elements to motorize, or for any deformation that may occur during use.
- 7. Before attempting any job on the system, cut out electrical power and disconnect the batteries. Be sure that the earthing system is perfectly constructed, and connect it metal parts of the lock.
- 8. Use of the indicator-light is recommended for every system, as well as a warning sign well-fixed to the frame structure.
- 9. SEAS.p.A. declines all liability as concerns the automated system's security and efficiency, if components used, are not produced by SEAS.p.A..
- 10. For maintenance, strictly use original parts by SEA.
- 11. Do not modify in any way the components of the automated system.
- 12. The installer shall supply all information concerning system's manual functioning in case of emergency, and shall hand over to the user the warnings handbook supplied with the product.
- 13. Do not allow children or adults to stay near the product while it is operating. The application cannot be used by children, by people with reduced physical, mental or sensorial capacity, or by people without experience or necessary training. Keep remote controls or other pulse generators away from children, to prevent involuntary activation of the system.
- 14. Transit through the leaves is allowed only when the gate is fully open.
- 15. The User must not attempt to repair or to take direct action on the system and must solely contact qualified SEA personnel or SEA service centers. User can apply only the manual function of emergency.
- 16. The power cables maximum length between the central engine and motors should not be greater than 10 m. Use cables with 2,5 mm² section. Use double insulation cable (cable sheath) to the immediate vicinity of the terminals, in particular for the 230V cable. Keep an adequate distance (at least 2.5 mm in air), between the conductors in low voltage (230V) and the conductors in low voltage safety (SELV) or use an appropriate sheath that provides extra insulation having a thickness of 1 mm.



TERMS OF SALES

EFFICACY OF THE FOLLOWING TERMS OF SALE: the following general terms of sale shall be applied to all orders sent to SEAS.p.A. All sales made by SEA to all costumers are made under the prescription of this terms of sales which are integral part of sale contract and cancel and substitute all apposed clauses or specific negotiations present in order document received from the buyer.

GENERAL NOTICE The systems must be assembled exclusively with SEA components, unless specific agreements apply. Noncompliance with the applicable safety standards (European Standards EM12453 – EM 12445) and with good installation practice releases SEA from any responsibilities. SEA shall not be held responsible for any failure to execute a correct and safe installation under the above mentioned standards.

- 1) PROPOSED ORDER The proposed order shall be accepted only prior SEA approval of it. By signing the proposed order, the Buyer shall be bound to enter a purchase agreement, according to the specifications stated in the proposed order.
- On the other hand, failure to notify the Buyer of said approval must not be construed as automatic acceptance on the part of SEA.
- 2) PERIOD OF THE OFFER The offer proposed by SEA or by its branch sales department shall be valid for 30 solar days, unless otherwise notified.
- 3) **PRICING** The prices in the proposed order are quoted from the Price List which is valid on the date the order was issued. The discounts granted by the branch sales department of SEA shall apply only prior to acceptance on the part of SEA. The prices are for merchandise delivered ex-works from the SEA establishment in Teramo, not including VAT and special packaging. SEA reserves the right to change at any time this price list, providing timely notice to the sales network. The special sales conditions with extra discount on quantity basis (Qx, Qx1, Qx2, Qx3 formula) is reserved to official distributors under SEA management written agreement.
- **4) PAYMENTS** The accepted forms of payment are each time notified or approved by SEA. The interest rate on delay in payment shall be 1.5% every month but anyway shall not be higher than the max. interest rate legally permitted.
- 5) DELIVERY Delivery shall take place, approximately and not peremptorily, within 30 working days from the date of receipt of the order, unless otherwise notified. Transport of the goods sold shall be at Buyer's cost and risk. SEA shall not bear the costs of delivery giving the goods to the carrier, as chosen either by SEA or by the Buyer. Any loss and/or damage of the goods during transport, are at Buyer's cost.
- **6) COMPLAINTS** Any complaints and/or claims shall be sent to SEA within 8 solar days from receipt of the goods, proved by adequate supporting documents as to their truthfulness.
- 7) SUPPLY The concerning order will be accepted by SEA without any engagement and subordinately to the possibility to get it's supplies of raw material which is necessary for the production; Eventual completely or partially unsuccessful executions cannot be reason for complains or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.
- **8) WARRANTY** The standard warranty period is 12 months. This warranty time can be extended by means of expedition of the warranty coupon as follows:
- **SILVER:** The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.
- **GOLD:** The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.

PLATINUM: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty (36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA S.p.A. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre. The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities.

The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper assembly, or if the label affixed by the manufacturer has been removed including the SEA registered trademark No. 804888. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods. The repair of products under warranty and out of warranty is subject to compliance with the procedures notified by SEA.

- 9) RESERVED DOMAIN A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer purchases propriety of the goods only after full payment of the latter.
- 10) COMPETENT COURT OF LAW In case of disputes arising from the application of the agreement, the competent court of law is the tribunal of Teramo. SEA reserves the faculty to make technical changes to improve its own products, which are not in this price list at any moment and without notice. SEA declines any responsibility due to possible mistakes contained inside the present price list caused by printing and/or copying. The present price list cancels and substitutes the previous ones. The Buyer, according to the law No. 196/2003 (privacy code) consents to put his personal data, deriving from the present contract, in SEA archives and electronic files, and he also gives his consent to their treatment for commercial and administrative purposes.

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La SEA S.p.A. dichiara sotto la propria responsabilità e, se applicabile, del suo rappresentante autorizzato che il prodotto:

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Descrizione / Description

Modello / Model

Marca / Trademark

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SEA

(e tutti i suoi derivati / and all its by-products)

è costruito per essere incorporato in una macchina o per essere assemblato con altri macchinari per costruire una macchina ai sensi della Direttiva 2006/42/CE

is built to be integrated into a machine or to be assembled with other machinery to create a machine under the provisions of Directive 2006/42/CE

è conforme ai requisiti essenziali di sicurezza relativi al prodotto entro il campo di applicabilità delle Direttive Comunitarie 2014/35/UE e 2014/30/UE

is conforming to the essential safety requirements related to the product within the field of applicability of the Community Directives 2014/35/UE and 2014/30/UE

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