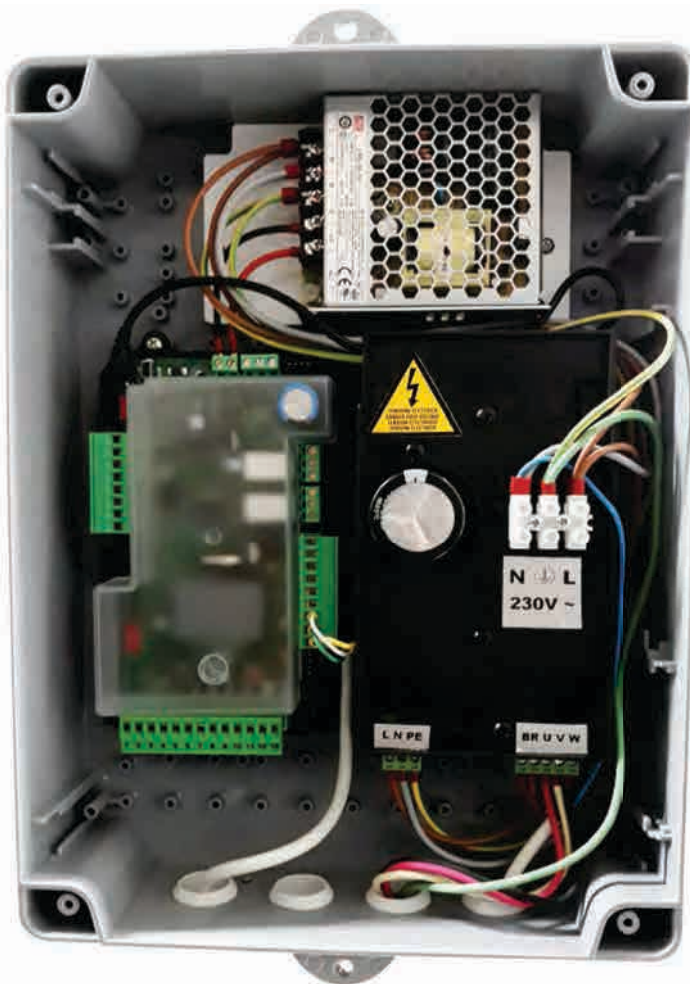


# Unigate FV



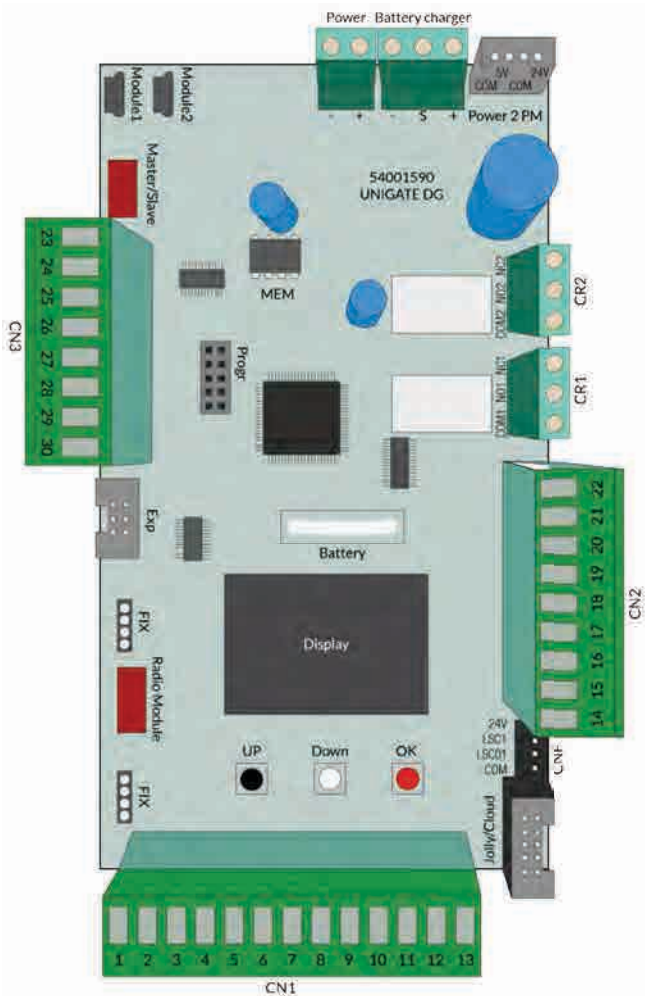
**SEA S.p.A.**

Zona industriale 64020 S.ATTO Teramo - (ITALY)

Tel. +39 0861 588341 r.a. Fax +39 0861 588344

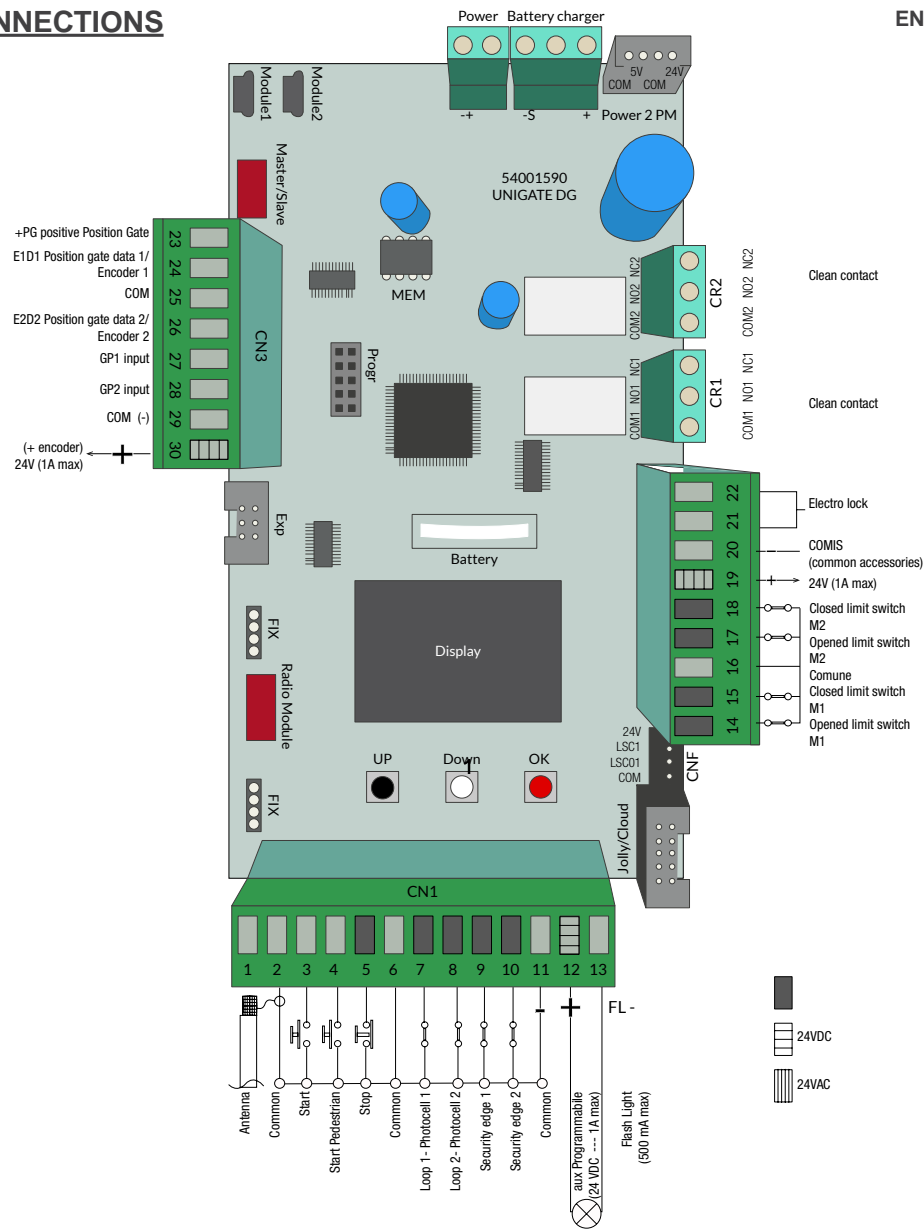
[www.seateam.com](http://www.seateam.com) [seacom@seateam.com](mailto:seacom@seateam.com)

Control unit power supply: 230 Vac 50/60 Hz - 115Vac 50/60 Hz  
Absorption in stand by: 30 mA  
Environment temperature: -20°C +50°C  
Specifications of external box: 325,7 X 246 X 140



CN1 = Input/output connectors  
CN2 = Limit switch, 24V~, Electric lock connector  
CN3 = Encoder terminal board/PositionGate/gp1/gp2  
Jolly/Cloud connector Jolly 3 or Sea Cloud  
FIX = FIX receiver plug in connector  
CR1 = Relay 1 clean contact terminal  
CR2 = Relay 2 clean contact terminal  
2PM = 2PM module power supply connector  
CNB = Batterie charger connector  
CNP = Programming connector

CLS = Limit switch quick connector  
Power - + = Power supply switching connector  
Module 1 = Motor 1FV module/2PM module connector  
Module 2 = Motor 2 FV module  
Master/Slave = Mater/Slave card connector  
Progr = Programming connector through Open  
Exp = SEM 2 external module connector  
CNR = UNI receiver connector  
Battery = Back up battery CR 2032  
MEM = Radio trans. memo for FIX receivers



**Warning: Automatic detection of not used N.C. inputs** (Photocells, Stop, Limit switch and Edges)



To reactivate an NC contact, follow this procedure:

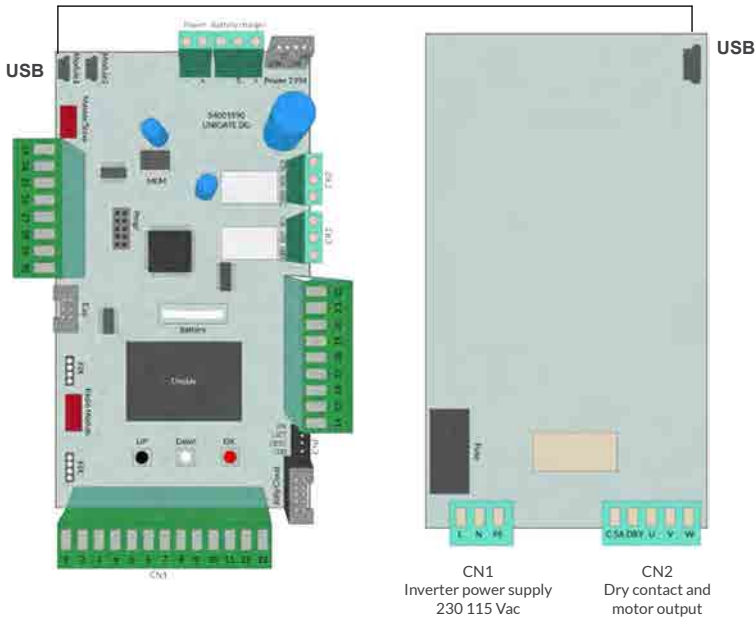
Go to 

MENU	SEA	SET
V 00.14 or		
subsequent		

 and press OK for 5 seconds, then enter the INPUT CHECK MENU and check the operating status of all inputs

**No need to repeat self programming after reactivation of N.C. contacts.**

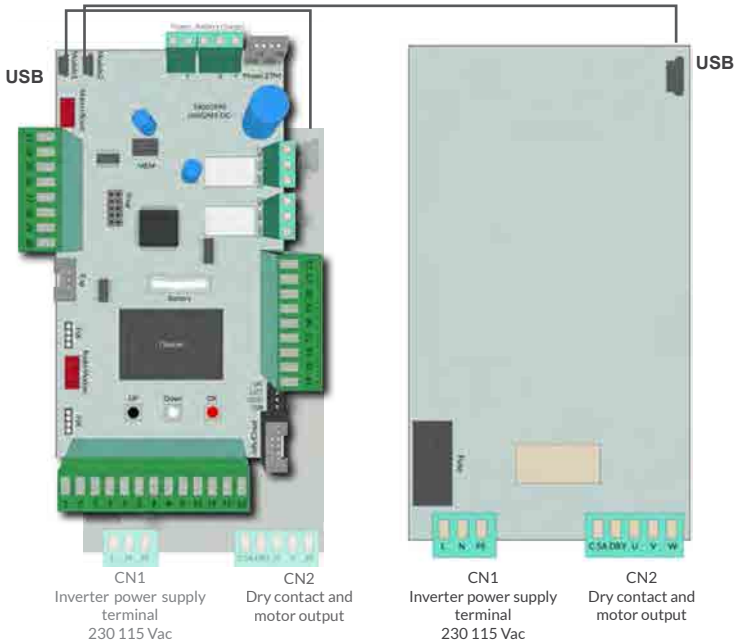
The herein reported functions are available starting from revision 00.14



L : phase  
N: neutral  
PE: ground

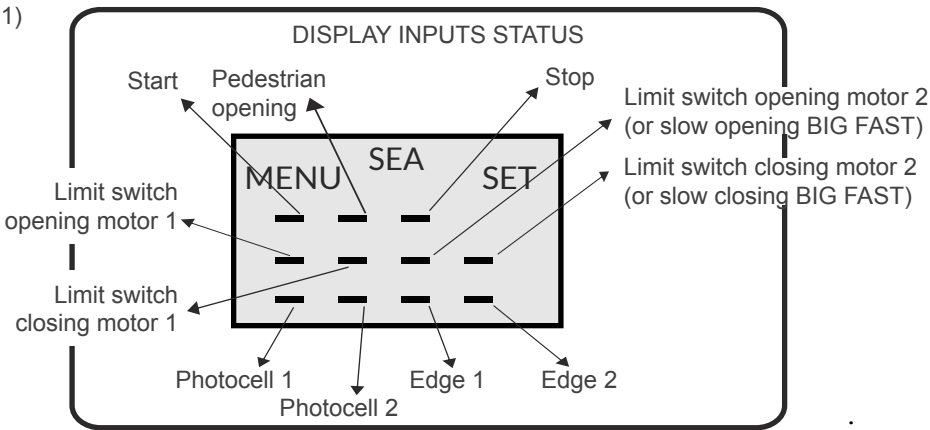
It is mandatory to connect the ground cable to the PE input

UNIGATE CONNECTION WITH TWO INVERTER MODULES



L : phase  
N: neutral  
PE: ground

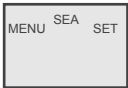
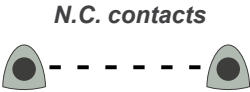
It is mandatory to connect the ground cable to the PE input



- When N.C.  
(Photo, Stop, Limit  
switch and Edge)



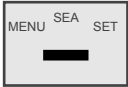
When not engaged or  
not wired



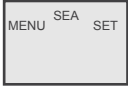
When the photocell  
is crossed or input is  
engaged



- When N.O.  
(Start, pedestrian  
start)



When input is engaged



When input is not  
engaged

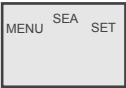
2)  
Power OFF



3)  
Keep pressed the two buttons UP and DOWN and, at the same time, connect the power supply  
cable for initialization of the control unit INIT appears on the display or go to menu 14: RESET

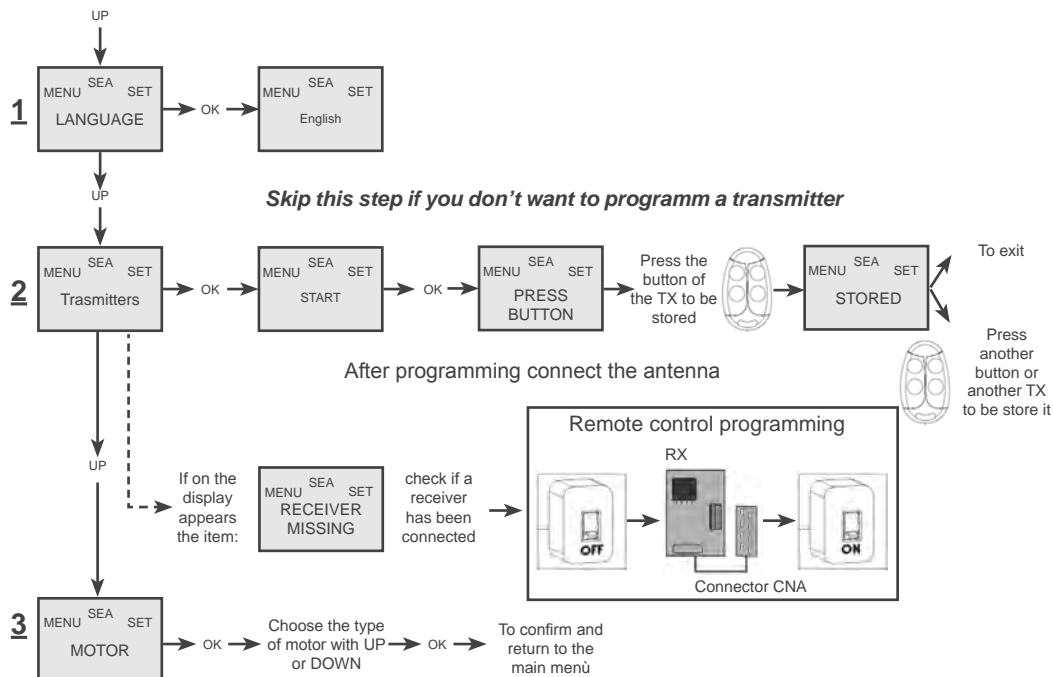


4)  
All parameters return to default configuration, see column "Default" in the table of the  
menus and all the inputs will show their real status



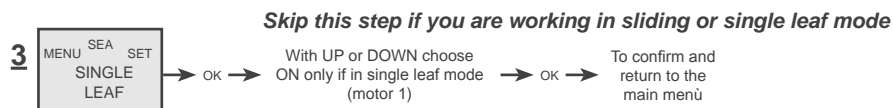
5)  
All NC contacts are automatically switched off if not used (no segments on display).  
If the contacts are connected, they will be On on the display (segment switched on).

To reactivate the NC contacts it is necessary to enter each menu which shows the NC contacts  
(e.g.: STOP, PHOTO, EDGE, LIMIT SWITCH....) and with SET put them on ON.



## CHOOSE BETWEEN SINGLE OR DOUBLE LEAF

Default (ON) = Single leaf



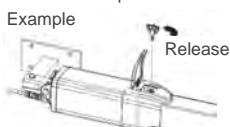
## PRESET INSTALLATION

**ATTENTION:** This procedure is potentially dangerous and must only be performed by specialized personnel

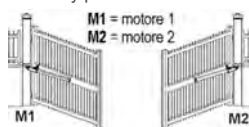
**A** Turn OFF the power



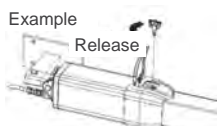
**B** Release the operators



**C** Manually push the leaves in half position



**D** Reset the mechanical lock

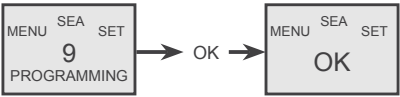


**E** Put the power ON

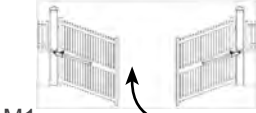


A) WITH IMPULSES \*

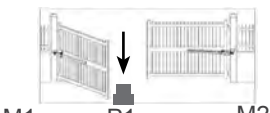
The gate will start the following cycle: M2 CLOSING - M1 CLOSING - M1 OPENING - M2 OPENING - M2 CLOSING - M1 CLOSING. To store the respective stops during cycle, press UP or DOWN or START on each mechanical stop point of the leaf. Self-learning has been completed. In the case of a single leaf the cycle will be CLOSING 1 - OPENING 1 - CLOSING 1.



**A** Both doors halfway

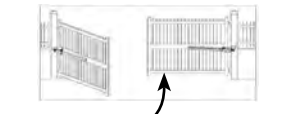


**B** M2 in closing

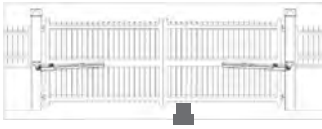


**C** M2 closed

Press UP or TX, if stored, when M2 is closed position.



**D** M1 in closing



**E** M1 closed

Press UP or TX, if stored, when M1 is closed position.



**F** M1 in opening

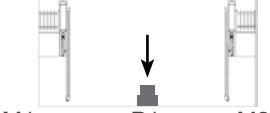


**G** M1 open

Press UP or TX, if stored, when M1 is open position.

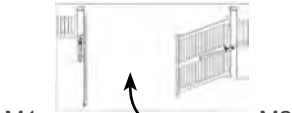


**H** M2 in opening



**I** M2 open

Press UP or TX, if stored, when M2 is in open position.

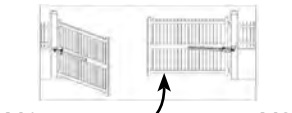


**L** M2 in closing

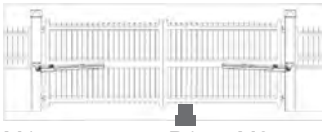


**M** M2 closed

Press UP or TX, if stored, when M2 is in closed position.



**N** M1 in closing



**O** M1 closed

Press UP or TX, if stored, when M1 is in closed position.

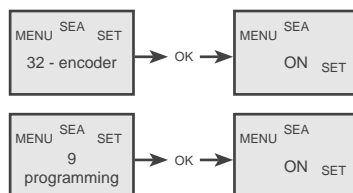
Make sure that, for all types of self-learning, the gate performs the following cycle: M2 CLOSING, M1 CLOSING, M1 OPENING, M2 OPENING, M2 CLOSING, M1 CLOSING. Otherwise, see the MOTOR REVERS function.

The cycle in case of single leaf will be CLOSE MOTOR 1 - OPEN MOTOR 1 - CLOSE MOTOR 1.

## B) ENCODER \*

When an Encoder is installed, it is necessary to select ON in the 32-ENCODER menu

Note: to adjust sensitivity on obstacle refer to the special menu



SELF-LEARNING starts AUTOMATICALLY.

Now it is necessary to wait until the leaf or leaves first start closing and then automatically complete the CLOSING - OPENING - CLOSING cycle.

## C) POTENTIOMETER \*

When the potentiometer is installed, it is necessary to select



SELF-LEARNING starts AUTOMATICALLY



Now it is necessary to wait until the leaf or leaves start before closing and automatically complete the cycle CLOSING - OPENING - CLOSING - OPENING with slowdown - CLOSING with slowdown

Note: to adjust sensitivity on obstacle refer to the special menu



The potentiometer threshold intervention is set automatically during self-learning

IT IS NOT NECESSARY TO ADJUST THE MENU FROM



Note 2: With the potentiometer you can also make the self-learning giving impulses on favourite opening or closing points; In this case it is also possible to modify the parameters I.AP.M1, I.CH. 1, I.AP.M2, I.CH.M2 of + 100 impulses, if you need to optimize the initial and the final position

*Nota 3: In the case of MIXED PROCEDURE (AUTOMATIC stop detection in closing and with MANUAL input in opening) the learning cycle will only be CLOSE-OPEN-CLOSE.*

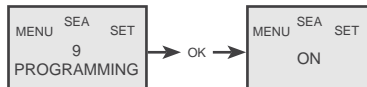


## D) AMPEROMETRIC\* (For electromechanical motors only)

This type of selflearning is possible **ONLY** for electromechanical operators and physical stops.



Note: to adjust sensitivity on obstacle refer to the special menu

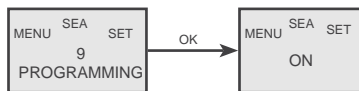


SELF-LEARNING starts AUTOMATICALLY

At this point it is necessary to wait until the leaf or leaves start before closing and automatically complete the CLOSING - OPENING - CLOSING cycle.

## E) WITH LIMIT-SWITCHES\*

1 - LIMIT SWITCH INPUT CHECK: check each limit switch on both doors by activating them before self-learning. The segment on the display will disappear when each limit switch is activated



SELF-LEARNING starts AUTOMATICALLY

At this point it is necessary to wait until the leaf or leaves first start closing and then automatically complete the CLOSING - OPENING - CLOSING cycle.

### \*REVERSE MOTOR

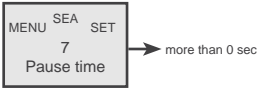
If the motor starts in opening, turn power off and on again, select "5 - **REVERSE MOTOR**" on the display through UP and DOWN press OK and put on ON, or, if you have the Jolly 3 programmer, activate the motor exchange function.



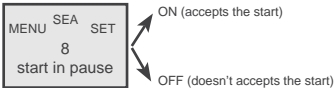
ONLY AFTER THE SELF LEARNING OF WORKING TIMES WITH AUTOMATIC LOGIC, IT WILL BE POSSIBLE TO CHANGE LOGICS INTO TO:

A) AUTOMATIC

A start impulse opens the gate. A second impulse during the opening will not be accepted.  
A start impulse during closing reverses the movement.  
NOTE 1: For automatic closing it is necessary to set a pause time, otherwise all the logics will be semi-automatic.



NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item 8-START IN PAUSE and choosing ON or OFF. By default, the parameter is OFF.

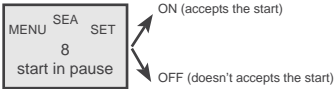


B) SECURITY

A start impulse opens the gate. A second impulse during opening reverses the movement.  
A start impulse during closing reverses the movement.  
NOTE 1: For automatic closing it is necessary to set a pause time, otherwise all the logics will be semi-automatic.

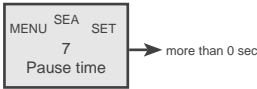


NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item 8-START IN PAUSE and choosing ON or OFF. By default, the parameter is OFF.

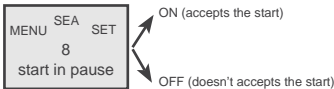


C) STEP BY STEP TYPE 1

The start impulse follows the OPEN-STOP-CLOSE-STOP-OPEN logic.  
NOTE 1: To have the automatic closing it is necessary to set a pause time, otherwise all the logic will be semi-automatic.



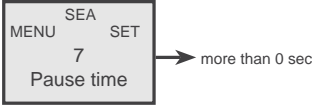
NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item 8-START IN PAUSE and choosing ON or OFF. By default, the parameter is OFF.



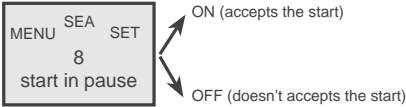
**D) STEP BY STEP TYPE 2**

The start impulse follows the OPEN-STOP-CLOSE -OPEN logic.

NOTE 1: To have the automatic closing it is necessary to set a pause time, otherwise all the logic will be semi-automatic.



NOTE2: It is possible to choose, whether to accept or not, the start in pause, selecting in the MENU the item 8-START IN PAUSE and choosing ON or OFF. By default, the parameter is OFF.



**E) DEAD MAN**

The gate opens as long as the START button of opening is pressed; releasing it the gate stops. The gate closes as long as the button connected to the PEDESTRIAN START is pressed; releasing it the gate stops. To execute complete opening and/or closing cycles the related pushbuttons must be constantly pressed.

**F) 2 BUTTONS**

One start opens, one pedestrian start closes. In opening the closing will not be accepted. In closing a start reopens, a pedestrian start (close) will be ignored.

**RADIO TRANSMITTER SELF LEARNING WITH  
UNI RECEIVER ON BOARD OF CONTROL UNIT**

ENGLISH

**WARNING:** Make the radio transmitters programming before you connect the antenna and insert the receiver into the special CMR connector (if available) with control unit turned off. With RF UNI and RF UNI PG module it will be possible to use both Coccinella Roll Plus transmitters and radio transmitters with fixed code. The first memorized radio transmitter will determine the type of the remaining radio transmitters. If the receiver is a Rolling Code, press the button of the radio transmitter that you want to program twice to memorize the first TX. In the case of transmitters with fixed code it is necessary to press 1 time the button of the transmitter you want to program to store the first remote control.

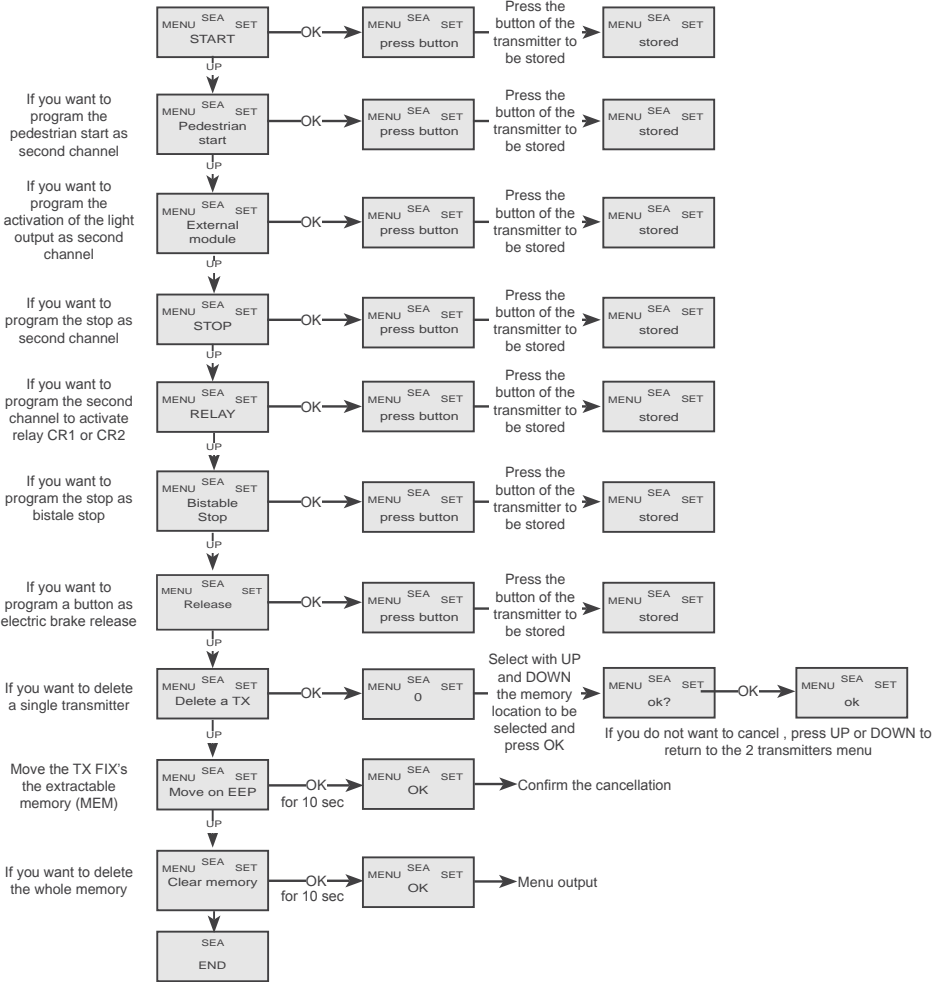
- Notes:
- Perform the radio transmitters learning only with stopped cycle and closed gate.
  - You can store max. 2 of the available 4 functions. If the control unit receives a code that has already been assigned to another function it will be updated with the new function.

RF UNI 16 users without memory  
800 users with additional memory MEM

RF UNI PG 100 users fixed code  
*old model* 800 users roll plus

RF UNI PG 100 users fixed code  
*new model* 800 users roll plus

TX button Memory location	1	2	3	4	serial number	customer
	0					
1						
2						
3						



**ATTENTION:** Program the radio controls before connecting the antenna and inserting the receiver into the appropriate CNS connector (if available) with the FIX RF module it will be possible to use only fixed code radio transmitter. Select the 2-TRANSMITTERS on the display and press OK, at this point using the UP and DOWN buttons, select the command to associate the button (maximum 2 commands can be associated) and press OK to confirm the choice, now press the button of the radio transmitter that you want to associate. If the memorization has been successful, the message "Memorized" will appear on the display.

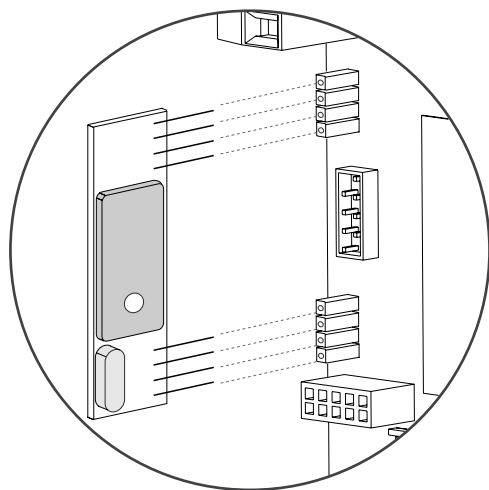
In MENU 2-TRANSMITTERS MENU it is possible to select the items: "Start" (to associate a Start command), "Pedestrian Start" (to associate a Pedestrian Start command), "Stop" (To associate a STOP command to the TX ), "Delete memory" (To delete all the TXs), "Delete one TX" (To delete the single TX but if it is a Rolling Code Plus transmitter), "Release" (to associate the TX with the electric brake release). To release the electric brake it is necessary to give 3 consecutive impulses, the 4th impulse will reactivate the electric brake lock.

**Note:**

- Perform radio control learning only with control unit switched off and closed the gate.
- It will be possible to memorize up to a maximum of 16 codes (buttons), by adding the MEM memory it will be possible to memorize up to 496 different codes.
- It is possible to memorize up to 2 of the 4 functions available. If a code is received that had already been assigned to a function it will be updated with the new function.

## **DELETING THE TX FROM THE RECEIVER**

With FIX RF modules, it will be possible to delete only the entire RX memory. Proceed as follows: select the "Clear memory" in the 2-TRANSMITTERS menu and keep the OK button pressed until "OK" appears on the display.



Connect the receiver to the CNS connectors, respecting the direction in the figure .



Enter the menu **Language** and press the button OK for 5 seconds, you can enter the CHECK MENU, where it is possible to check the operating status of all inputs.

MENU FUNCTION TABLE				
To access the Menu for input control keep pressed OK for about 5 seconds.				
MENU			Description	Description
START	—OK	Enabled	Start Test	The contact must be a N.O. Contact . When activating the related command on the display SET lights up, the input works. If SET is always on, check the wirings.
		Blocked		
STOP	—OK	Enabled	Stop Test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
		Blocked		
START PARTIAL OPENING	—OK	Enabled	Partial Opening Test	The contact must be a N.O. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, check the wirings.
		Blocked		
EDGE 1	—OK	Enabled	Safety edge1 test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
		Blocked		
EDGE 2	—OK	Enabled	Safety edge2 test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
		Blocked		
PHOTO 1	—OK	Enabled	Photocell 1 test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
		Blocked		
PHOTO 2	—OK	Enabled	Photocell 2 test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact
		Blocked		
LIMIT SWITCH OPENING 1			M1 Opening limit switch test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. contact or that the related limit switch is not occupied.
LIMIT SWITCH CLOSING 1			M1 Closing limit switch test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact or that the related limit switch is not occupied.
LIMIT SWITCH OPENING 2			M2 Opening limit switch test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. contact or that the related limit switch is not occupied.
LIMIT SWITCH CLOSING 2			M2 Closing limit switch test	The contact must be a N.C. Contact. When activating the related command on the display SET lights up, the input works. If SET is always on, make sure that the contact is a N.C. Contact or that the related limit switch is not occupied.
0.0 V			voltage level on the batteries	This item indicates the battery charge level
END			Exit menu	

Note: If the Stop, Photocell 1 and Photocell 2, Edge 1 and Enge 2 contacts are not bridged in selflearning, they will be deactivated and can be reactivated through this menu, without repeating times selflearning.

A) 24V DC 11 and 12

PHOTOCELL 1 AND PHOTOCELL 2 (LOOP1 - LOOP2)

11 and 12 aux ~ (Accessories) 1A max COM = 0V

7 PH1 = Photocell contact 1

8 PH2 = Photocell contact 2

Default settings:

PHOTO 1 = "Close" - PHOTO 2 = "Open"

Photocell 2 can also be set as TIMER (see below TIMER function). For photocell options, see menu 97 and 98.

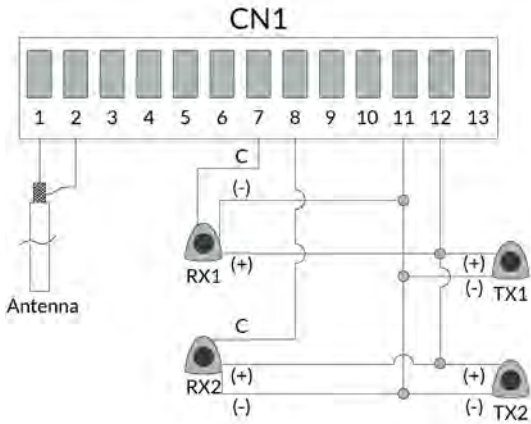
TIMER: holding PH2 pressed, the gate opens and remains open, while, when released, the gate repeats the selected pause time and starts closing. If a safety device is activated, the Timer resets automatically after 6 sec.

AUTOTEST function: make sure that the photocells are fully functional before any movement. If the test fails, it will be indicated on the display.

To activate the AUTOTEST:

- 1) Connect the TX photocell power supply to the aux 12 inputs
- 2) Enter the 95-FOTOTEST menu and select on which accessory (Photocell 1 or Photocell 2 or both) to activate this mode.

If you want to monitor the absorption of accessories, connect them to the inputs 20 of CN2 (COMIS) max 350mA



B) CONFIGURATION 24V DC AUX CN1 12 CONFIGURATION

On the 24V AUX you can select when and how to operate the connected auxiliary accessory. See menu 94-24V AUX.

The 94-24V AUX menu options are:

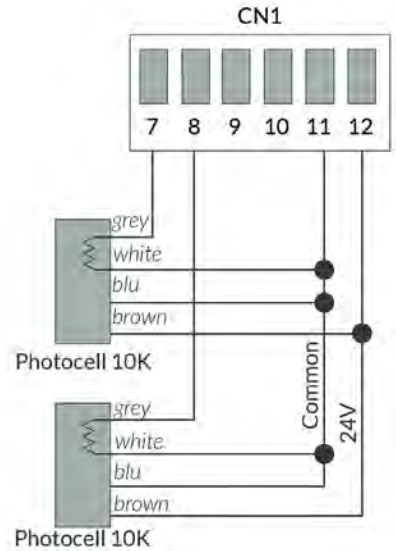
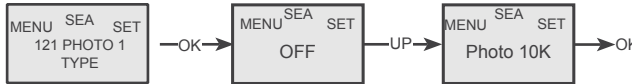
- Always
- Self-test
- In cycle
- In cycle and phototest
- Opening
- In cycle and pause
- Closing
- Indicator light gate open
- In pause



(See special menu)

On the clamps 7 and 11 - 8 and 11 of the CN1 it is also possible to connect a 10K Photocell.  
On menu 121 type photo 1 and on the menu 122 type photo 2, it will work according to the settings given from menu 97-PHOTO 1 and 98 Photo 2.  
Note1: Using the 10K Photocell, further protection will be provided also in the event of a short-circuit on the cables.

## Setting 10 K Photocell



## SAFETY EDGE 9 and 11 - 10 and 11

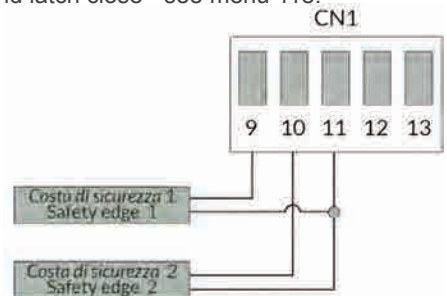
It is possible to connect a safety edge between the contacts 9 and 11 of CN1 (or two edges, with the second one connected between the contacts 10 and 11). When pressed, the Safety Edge opens the contact causing a partial inversion of the movement both in opening and in closing. The Safety Edge input can be set «only in closing», «only in opening» or both.

Note1: Through the on-board display or the JOLLY 3 programmer it is possible to activate the balanced edge 8K2, in this case the edge contact is controlled by a special resistance value revealing the eventual involuntary short-circuit of the device. In the case of imbalance of the device a special alarm will be shown on the on-board display or on the JOLLY programmer.  
It is also possible to set two 8K2 Safety Edges on each single input Safety Edge.

Note2: Self-test can be made also on a powered radio Edge (See Auto-test Menu)

Latch open / latch close function

Inputs 10 and 11 can be set accordingly as latch open and latch close - see menu 118.





# PEDESTRIAN START - STOP - START - CONNECTIONS

## PEDESTRIAN START (N.O.) 4

Function 1 (STANDARD): partial opening space adjustable from 5 to 100 (90-OPENING menu)

Function 2 (TIMER): by holding the pedestrian (4) the gate opens and remains open. Releasing it the gate repeats the selected pause and starts closing. In the case of a safety device activation the timer will automatically reset after 6 sec.

Function 3 (2 BUTTONS): in 2 buttons logic press the pedestrian Start (4) to close the gate.

Function 4 (DEADMAN): in deadman logic this button executes the re-closing if you keep it pressed.

## STOP (N.C.) 5

When pressing this button the motor immediately stops in any condition/position. To re-start the movement give a start command. After a stop the motor always re-starts in closing.

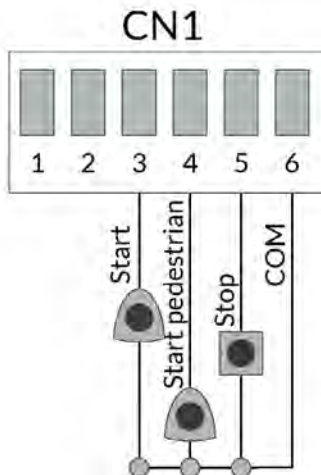
## START (N.O.) 3

Function 1 (STANDARD): an impulse given to this contact opens and closes the automation depending on the selected logic.

Function 2 (TIMER): holding START starts the TIMER function, releasing the start, the operator repeats the pause and then re closes. To connect other devices (e.g. the loop) refer to the related instructions leaflets (ie. loop detectors and proximity Switches). In the case of activation of a safety device the timer will automatically reset after 6 seconds.

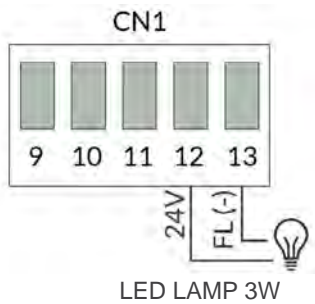
Function 3 (2 BUTTONS): in 2 buttons logic this button performs the opening.

Function 4 (DEADMAN): in deadman logic keep pressed the Start for the opening of the automation.



24V FLASHING LAMP 3W MAX 12 and 13

24V 3W Max Flashing Lamp (Control lamp)  
The 24V Flashing Lamp is connected between the connectors 12 (24VDC AUX) and FLS (-) of CN 1.  
The Flashing lamp advises that the automatic gate is moving with 1 flash/second in opening and 2 flashes / second in closing. During pause it remains switched on. Through the warning lamp it is also possible to identify alarms lied to the STOP, PHOTOCELL 1, PHOTOCELL 2 and EDGE 1 and EDGE 2 devices. Through the display or the JOLLY 3 programmer it is possible to activate the pre-flashing function and/or to modify the function of the flashing lamp choosing between fix flashing or control lamp. The preflashing can be timed from 0 to 5 seconds otherwise it is possible to set it before closing only.

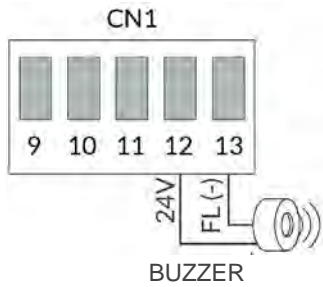


BUZZER (24V ) AUDIBLE ALARM

IMPORTANT NOTE: INSTEAD OF THE FLASHING LAMP, YOU CAN ALSO CONNECT A BUZZER  
IN THIS CASE SET THE 86-MENU ON «BUZZER»

Use an autoswinging buzzer 24V of 100 dB. The buzzer will be activated after two consecutive activations of the entrapment protection. To reset the alarm it is necessary to push the STOP button. Anyway after 5 minutes the buzzer will stop to sound and the automation stands still waiting for commands.

If Buzzer does not work, check if the 86-FLASHING LIGHT menu is set on “Buzzer”

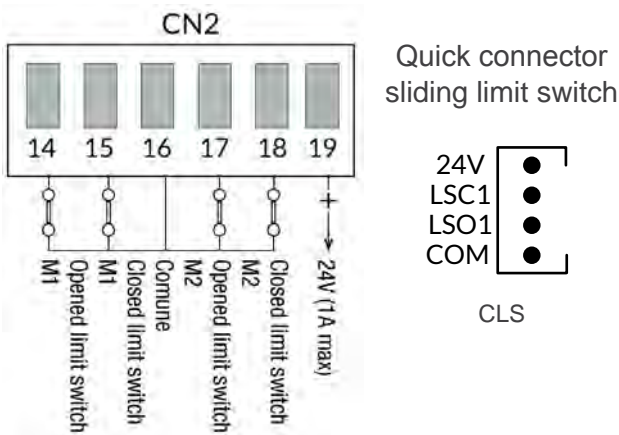


# LIMIT SWITCH CONNECTIONS

## LIMIT SWITCH 14 15 16 17 18

Does not need a jumper when not connected.  
For the limit switch function, limit switches must be installed, both in opening and closing. In the case of single-leaf connect motor 1 (it is not necessary to bridge the limit switches of motor 2).  
Anti-intrusion function can be activated. This function needs at least one limit switch, which pushes the motor in closing direction once it's released.

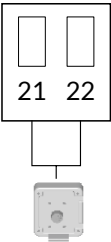
For the correct functioning of the limit switches there must be a correspondence between the direction of movement of the motors and the respective engaged limit switches.



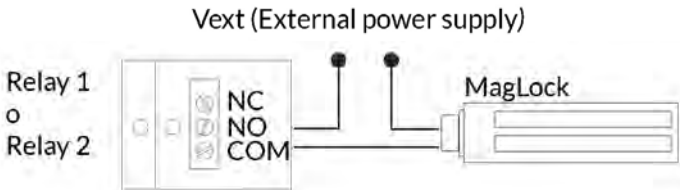
Note:  
on some motors, the opening and closing limit-switch inputs 2 are used as a slow-down limit switch.  
See BIG FAST Joint.

## ELECTRIC LOCK OUTPUT 21 22

A 12V=15W max electric lock can be connected  
The electric lock can be deactivated when not used for energy saving on the control unit.  
The electric lock release can be timed from 0 to 5 seconds  
The electric lock can be set: only before opening, only before closing or in both directions.



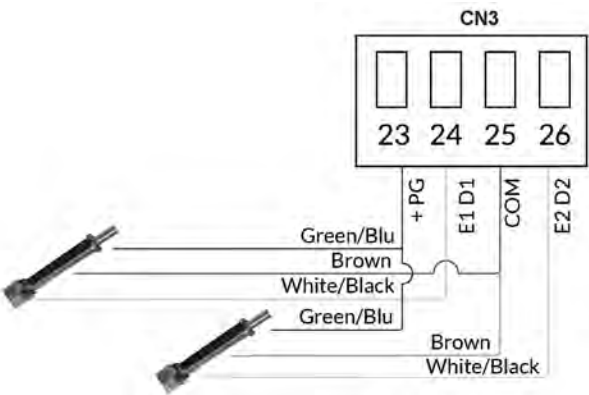
## MAGLOCK CONNECTIONS



NOTA:  
set the negative electric brake function in menu 132.

The position gate allows to know the exact position of the gate and to have the reverse on the obstacle. The position gate is applicable on the hydraulic motors Half Tank and Mini Tank new series, in combination with the LE card.

To use the position gate, activate it in the 32 encoder menu: potentiometer



If the reading of the potentiometer is reversed compared to the movement of the motor, on the display will appear the alarm “Potentiometer direction” and you will have to reverse the brown wire with the green one and repeat programming.

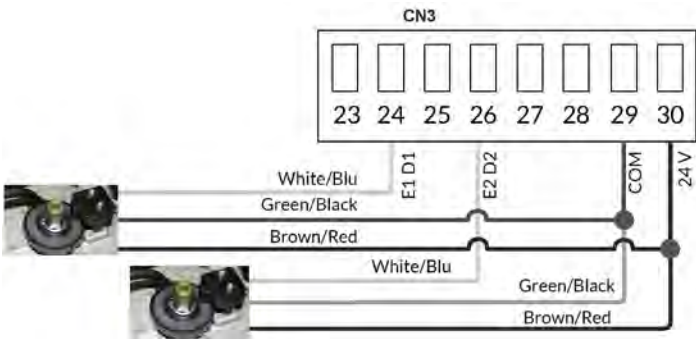
**Note:**  
for distances of more than 2 meters, it is recommended to connect a shielded cable with a sheath connected to COM 25

Adjustable sensitivity intervention threshold. See menus 33 to 45.  
The sensitivity on the obstacle is adjustable from 0 - 99%. The higher the percentage, the more difficult it will be to detect the obstacle.

ENCODER CONNECTIONS

The encoder allows to know the position of the gate and to have the inversion on the obstacle. To use the encoder it is necessary to activate it in the appropriate “32 encoder on” menu. The sensitivity on the obstacle is adjustable from 0 - 99%.

The higher the percentage, the more difficult it will be to detect the obstacle



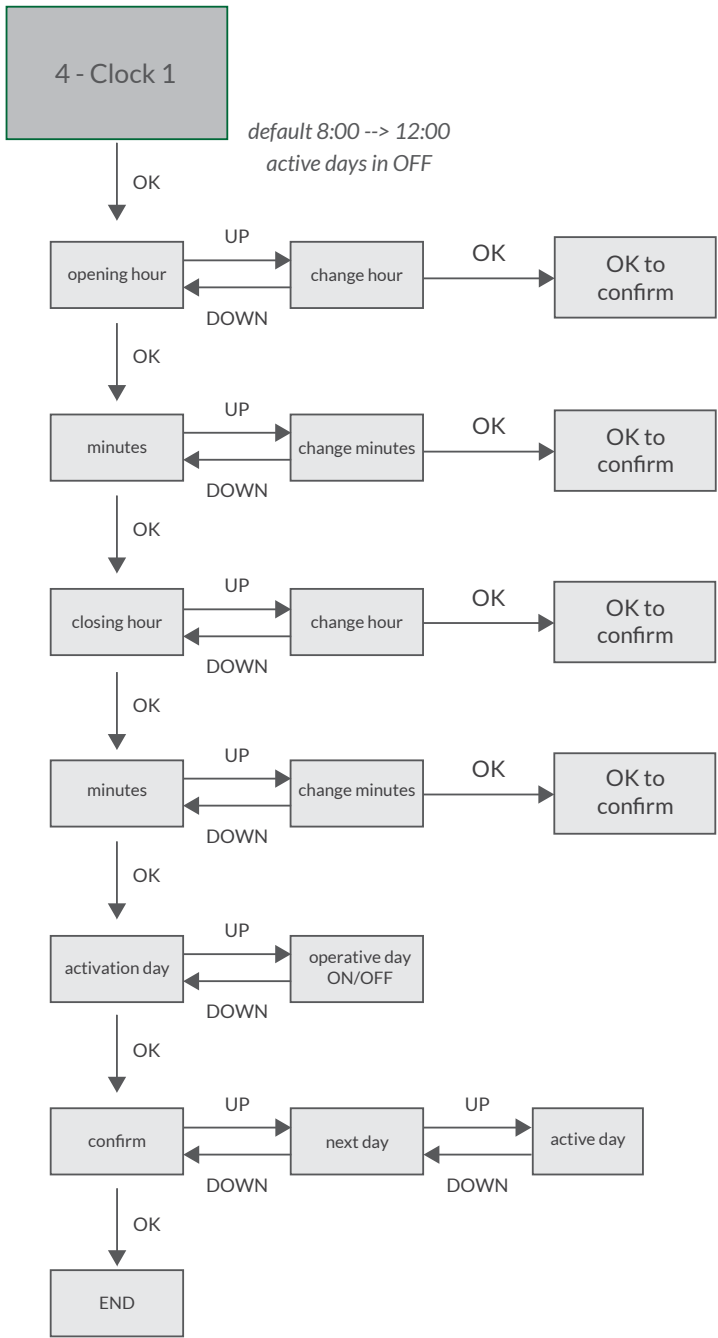
AMPEROMETRIC DEVICE FOR ELECTROMECHANICAL OPERATORS

(active on Surf motor IV)

This control unit comes with an obstacle detection system working only on electromechanical operators allowing to have the reversing on obstacles and the automatic detection of the stops. Sensitivity adjustable from OFF to 99% in the special menu. The more the percentage is high the more the obstacle detection will be difficult. On hydraulic unit this parameter will be always OFF.

TIME SLOT SETTINGS ON CLOCK MENU 1, 2, 3 AND 4  
(MENU FROM 124 TO 127)

ENGLISH



These inputs can have different functions, depending on how they are set in menus 130 and 131

## OUTPUT MANAGEMENT CR1 AND CR2

These two outputs CR1 CR2 are clean contacts whose functionality depends on how the menus 132 and 133 are set

## COMIS INPUT FUNCTION

The COMIS input can be used as common for accessories up to a maximum load of 350 mA, the exceeding of the maximum load will be reported

## SINGLE MOTOR and DRY CONTACT CONNECTION

### MOTOR 1

Motor connection 1

The motor must be connected to the terminal block CN2 of the Inverter module, in terminals U, V, W.

Motor to be connected in the case of a single leaf. In the case of two motors, connect the second motor to the second Inverter module, again in the CN2 terminal board.

### Clean contact (C. 5A DRY)

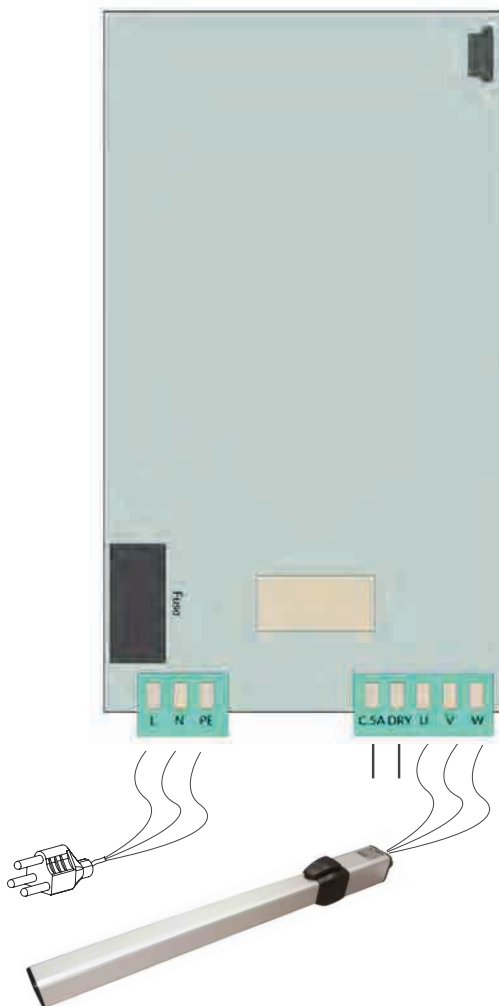
Clean contact can be set in the 134 relay PV 1 Module menu.

Note:  
on the BIG motor it is set by default as photocell negative brake management

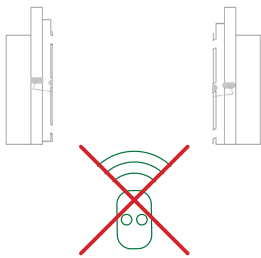
### POWER INPUT

To connect the power supply, follow the regulations in force.

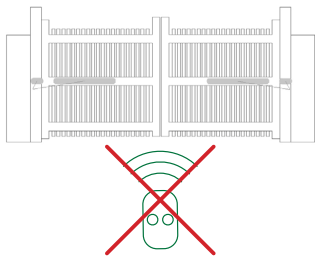
Note:  
it is mandatory to connect the earth cable to the PE.



Latch Opening



Latch Closing



With 118 Menu you can set the following functions:

- 1. Latch Opening
- 2. Latch Closing
- 3. Opening & Closing
- 4. Off

1) Latch Opening:

It is used to open and keep open the automation. No other type of START is accepted until it will be deactivated.  
To activate the function connect a normally open contact on Edge 1, the edge function will be automatically disabled.

2) Latch Closing:

It is used to close and keep closed the automation. No other type of START until it will be deactivated.  
To activate the function connect a normally open contact on Edge 2, the edge function will be automatically disabled.

3) Opening & Closing:

To set both functions.

4) Off:

To deactivate both functions.

With the TX remote control you can set the following functions:

- 1. Latch Opening
- 2. Latch Closing

1) Latch Opening:

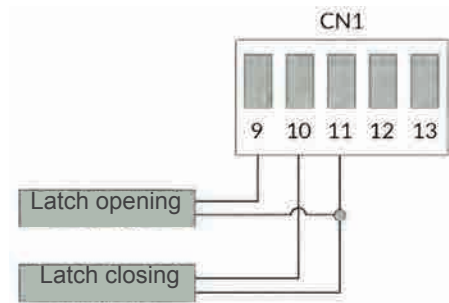
Use the 2 Transmitters menu: program the TX as Latch Opening

2) Latch Closing:

Use the 2 Transmitters menu: program the TX as Latch Closing

With the Sea Cloud System you can set the following functions:

- 1. Latch Opening
- 2. Latch Closing

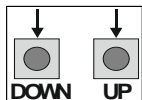


*\*If inputs 9 and 10 are used as Latch Opening and Latch Closing functions, they can no longer be used as Edge Security 1 and Edge Security 2.*

**UNIGATE FV MENU FUNCTIONS TABLE**

MENU		SET	DESCRIPTION	DEFAULT	SET VALUE
1	LANGUAGE	Italiano	Italian	English	
		English	English		
		Français	French		
		Español	Spanish		
		Dutch	Dutch		
2	TRANSMITTERS	Start	Start	Start	
		Partial opening	Partial opening		
		External module	External module		
		Stop	Stop		
		Relay 1	To Activate Relay 1 for 3 seconds. This function requires menu "Relay 1" set on "TX Relay"		
		Relay 2	To Activate Relay 2 for 3 seconds. This function requires menu "Relay 2" set on "TX Relay"	Partial Opening	
		Bistable Stop	Pressed once, it stops the gate. Pressed twice, it reactivates the START input		
		Latch opening	1 impulse opens and keep open. A second impulse restore the movement		
		Latch closing	1 impulse closes and keep closed. A second impulse restore the movement		
		Unloch	Storing of a command to unlock the electric brake		
		Delete a transmitter	Deletes single transmitter		
		Move to EEP	Transfers the Tx stored on the control unit to an external EEPROM (MEM), if connected		
		Clear memory	Deletes transmitter memory		
		End	“Transmitters” menu output		
		3	MOTOR		
Barrier *	230V Barrier - Series I (INVERTER)				
Lepus Fast *	Lepus FAST				
BIG Fast **	BIG 2000 Fast - BIG Super Fast sliding operators				
BIG Super Fast **	Series I BIG (INVERTER BIG)				
BIG **	BIG 4000 sliding - Series I BIG (INVERTER BIG)				
Bollards **	Bollards - Series I BIG (INVERTER BIG)				
Surf *	Surf operator				
Lepus Reversible *	Lepus Reversible				
Joint BF *	4 limit-switches hydraulic operator - Series I (INVERTER)				
* Operators to be managed through UNIGATE 1I or UNIGATE 2I    ** Operators to be managed through UNIGATE 1I BIG or UNIGATE 2I BIG					
4	ONE SINGLE LEAF *	Off	Disabled	On	
		On	In ON activates single leaf mode (Motor1)		
5	REVERSE MOTOR	On	In ON reverses opening with closing and/or vice-versa (both motors + limit-swiches are reversed)	Off	
		Off	Off		
6	LOGIC	Automatic	Automatic	Automatic	
		Open-stop-close-stop-open	Step by step type 1		
		Open-stop-close-open	Step by step type 2		
		2 button	Two buttons		
		Safety	Safety		
		Dead man	Dead man		
7	PAUSE TIME	Off	OFF (semi-automatic logics)	Off	
		1    240	Setting from 1 second to 4 minutes		
8	START IN PAUSE	Off	The Start is not accepted during pause	Off	
		On	The Start is accepted during pause		
9	PROGRAMMING	Off    On	Times learning start	Off	
10	TEST START	Off    On	Start command	Off	
14	RESET	A count-down of 5 seconds will start by holding the UP button; at its end "INIT" will appear on the display as confirmation of the control board reset			
15	END	Press OK to return to the display of the firmware version and to the one of 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 UNIGATE FV					
For entering into the special menu move on one of the menu and press the UP and DOWN buttons at the same time for 5 seconds For exiting the special menu press END or move on one of the menu and press the UP and DOWN at the same time for 5 seconds					For
MENU SP	SET	DESCRIPTION	DEFAULT	SET VALUE	
17	OPENING SPEED 1	30 100	Speed in opening Motor 1	80	
18	CLOSING SPEED 1	30 100	Speed in closing Motor 1	80	
19	OPENING SPEED 2	30 100	Speed in opening Motor 2	80	
20	CLOSING SPEED 2	30 100	Speed in closing Motor 2	80	
21	SLOWDOWN SPEED IN OPENING 1	From 10% to 60% of the maximum speed	Slow-down speed in opening Motor 1	30	
22	SLOWDOWN SPEED IN CLOSING 1	From 10% to 60% of the maximum speed	Slow-down speed in closing Motor 1	30	
23	SLOWDOWN SPEED IN OPENING 2	From 10% to 60% of the maximum speed	Slow-down speed in opening Motor 2	30	
24	SLOWDOWN SPEED IN CLOSING 2	From 10% to 60% of the maximum speed	Slow-down speed in closing Motor 2	30	
25	LEARNING SPEED	20% 100 %	Adjusts the time self-learning speed. This parameter can change according to the motor type set	50	
26	LEAF DELAY IN OPENING	Off 6	Setting from OFF to 6 seconds	1,5	
27	LEAF DELAY IN CLOSING	Off 20	Setting from OFF to 20 seconds	2,5 *	
28	OPENING TORQ 1	50% 100 %	Opening torque Motor 1: by increasing the torque, more strenght will be required to execute the inversion in case of obstacle	100%	
29	CLOSING TORQ 1	50% 100 %	Closing torque Motor 1: by increasing the torque, more strenght will be required to execute the inversion in case of obstacle	100%	
30	OPENING TORQ 2	50% 100 %	Opening torque Motor 2: By increasing the torque, more strenght will be required to execute the inversion in case of obstacle	100%	
31	CLOSING TORQ 2	50% 100 %	Closing torque Motor 2: By increasing the torque, more strenght will be required to execute the inversion in case of obstacle	100%	
32	ENCODER	On	In ON enables the Encoder, in OFF it's disabled	Off	
47	ENCODER PAR. 1	xxx.	Impulses read by Encoder during operation (Motor1)		
48	ENCODER TOT. 1	xxx.	Impulses stored during programming (Motor 1)		
49	ENCODER PAR. 1	xxx.	Impulses read by Encoder during operation (Motor2)		
50	ENCODER TOT. 2	xxx.	Impulses stored during programming (Motor 2)		
32	ENCODER	Potentiometer	Enables the reading of the potentiometer	Off	
51	I.PAR.M1	-----	Reports the current position of the potentiometer on the leaf of motor 1. This parameter is useful for seeing if the potentiometer is read correctly		
52	I.AP.M1	From the value learnt to $\pm 100$ pulses	Reports the impulses stored by the control unit when the leaf of Motor 1 is fully open		
53	I.CH.M1	From the value learnt to $\pm 100$ pulses	Reports the impulses stored by the control unit when the leaf of Motor 1 is fully close		
54	I.PAR.M2	-----	Reports the current position of the potentiometer on the leaf of Motor 2. This parameter is useful for seeing if the potentiometer is read correctly		
55	I.AP.M2	From the value learnt to $\pm 100$ pulses	Reports the impulses stored by the control unit when the leaf of Motor 2 is fully open		
56	I.CH.M2	From the value learnt to $\pm 100$ pulses	Reports the impulses stored by the control unit when the leaf of Motor 2 is fully close		

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
32	ENCODER	Off	ON enables the Encoder; OFF shows working times learnt	Off	
	65 OPENING TIME M1	xxx.s	Indicates the working times self-learning in opening and closing (Motor 1). With UP or DOWN it is possible to increase or reduce the working times		
	66 CLOSING TIME M1	xxx.s			
	67 OPENING TIME M2	xxx.s	Indicates the working times self-learning in opening and closing (Motor 2). With UP or DOWN it is possible to increase or reduce the working times		
	68 CLOSING TIME M2	xxx.s			
33	OPENING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	Adjusts the Encoder or Potentiometer intervention time on Motor 1 in opening	Off	
		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	Off	
		Off (Intervention excluded)	Disabled		
35	OPENING SENSITIVITY MOTOR 2	10% (Fast intervention) 99% (Slow intervention)	Adjusts the Encoder or Potentiometer intervention time on Motor 2 in opening	Off	
		Off (Intervention excluded)	Disabled		
36	CLOSING SENSITIVITY MOTOR 2	10% (Fast intervention) 99% (Slow intervention)	Adjusts the Encoder or Potentiometer intervention time on Motor 2 in closing	Off	
		Off (Intervention excluded)	Disabled		
37	SLOWDOWN SENSITIVITY MOTOR	10% (Fast intervention) 99% (Slow intervention)	Adjusts the amperometric sensitivity in slowdown. Active only if the motors are electromechanical	Off	
		With potentiometer	In case of linear potentiometer, this parameter allows to set the inversion time in slow-down from 0 to 5 seconds (= 99%)	30%	
38	POTENTIOMETER THRESHOLD OPENING 1	1 1000 (only if the Menu-32 Encoder is set on "Potentiometer")	Adjusts the threshold of the potentiometer intervention. The parameter self-determines in learning but can also be adjusted later. The lower the value, the slower will be the response of the potentiometer. The parameter can be set as maximum threshold at the value read on the DEBUG VPI, VP2 menu	----	
39	POTENTIOMETER THRESHOLD CLOSING 1				
40	POTENTIOMETER THRESHOLD OPENING 2				
41	POTENTIOMETER THRESHOLD CLOSING 2				
42	POTENTIOMETER SLOWDOWN THRESHOLD OPENING 1	1 100 (only if the Menu-32 Encoder is set on "Potentiometer")	Adjusts the threshold of the potentiometer in slowdown. By default this value is set on 15 and can be increased manually up to the maximum value read on the DEBUG VPI, VP2 Menu	15	
43	POTENTIOMETER SLOWDOWN THRESHOLD CLOSING 1				
44	POTENTIOMETER SLOWDOWN THRESHOLD OPENING 2				
45	POTENTIOMETER SLOWDOWN THRESHOLD CLOSING2				
46	CLOSING INVERSION	Total	In case of obstacle or edge it totally reverses the movement during the closing. If activated, the automatic reclosing will be attempted 5 times	Total	
		Partial	It partially reverses the direction (of about 30 cm) in case of obstacle or edge or potentiometer, then it stops		
For menu 47 and 50 see menu 32-Encoder = On					
For menu from 51 to 56 see menu 32-Encoder = Potentiometer					

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
57	WORKING CURRENT 1	..... Ampere	Shows the absorbed current during Motor 1 working		
58	WORKING CURRENT 2	..... Ampere	Shows the absorbed current during Motor 2 working		
59	OPENING SLOWDOWN 1	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	30	
60	CLOSING SLOWDOWN 1	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	30	
61	OPENING SLOWDOWN 2	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	30	
62	CLOSING SLOWDOWN 2	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	30	
63	DECELERATION	0 % 100% 	Adjust the passage between normal speed and slowdown speed	<i>It depends on motor</i>	
64	ACCELERATION	0,1 s 5 s 	Acceleration ramp Adjusts the motor start	<i>It depends on motor</i>	
<b>For menu from 65 to 68 see menu 32-Encoder = Off (They are visible even with 32-Encoder set ON)</b>					
69	ANTI OVERLAP	Off	Desactivates the leaves anti-overlapping control, allowing separate control of the two leaves	Off	
		On	Activates the leaves anti-overlapping control		
70	OPENING POSITION RECOVERY	0 20 seconds (only if 32-Encoder is OFF)	Retrieves the inertia of the motor in opening after Stop or reversing	1s	
71	CLOSING POSITION RECOVERY	0 20 seconds (only if 32-Encoder is OFF)	Retrieves the inertia of the motor in closing after Stop or reversing	1s	
72	OPENING TOLERANCE MOTOR 1	0% 100%	Adjusts the tolerance between stop and obstacle on Motor 1 in opening	20%	
73	CLOSING TOLERANCE MOTOR 1	0% 100%	Adjust the tolerance between stop and obstacle on Motor 1 in closing	20%	
74	OPENING TOLERANCE MOTOR 2	0% 100%	Adjusts the tolerance between stop and obstacle on Motor 2 in opening	20%	
75	CLOSING TOLERANCE MOTOR 2	0% 100%	Adjust the tolerance between stop and obstacle on Motor 2 in closing	20%	
76	PUSHING STROKE	Time Pushing Stroke Off - 3 sec	Before opening, the motor starts in closing for the set time, in order to simplify the lock release	Off	
		Repeat Lock Release Off - On	If On, the lock will release both before and after the pushing stroke		
		End			
77	LOCK TIME	Off 5	Sets the lock release time from 0 to 5 seconds	3	
78	LOCK	Only opening	Active only before opening	Only opening	
		Only closing	Active only before closing		
		Opening and closing	Active before opening and closing		
79	ANTI INTRUSION	Only opening	If you force the gate manually, the control unit starts the motor to restore the status of the gate before forcing (only with limit switch)	Off	
		Only closing			
		Opening and closing			
		Off			

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
80	PUSHOVER	Off	Allows the leaf to make an extra move at maximum torque to ensure the tightening	Off	
		Opening and closing			
		Only closing			
		Only opening			
81	PERIODICAL PUSHOVER	Off 8h (only if Pushover is ON)	Allows the repetition of the pushover function at a distance of time adjustable from 0 to 8 hours at hourly intervals	Off	
82	MOTOR RELEASE	Opening 1 Off - 3 s	If different from Off, the motor slightly reverse its direction at the end of the cycle	It depends on motor	
		Closing 1 Off - 3 s			
		Opening 2 Off - 3 s			
		Closing 2 Off - 3 s			
		End			
83	EXTRA TIME *	0.0 s 10 s	With limit-switches, it adds an extra time to the movement of the motors after the limit-switches reading	1.0 s	
85	PRE-FLASHING	Only closing	Pre-flashing only active before closing (to access this setting push DOWN button when 0.0 value is shown)	0.0 s	
		0.0 5.0 s	Pre-flashing		
86	FLASHING LIGHT	Normal	Normal	Normal	
		Light	Control lamp		
		Always	Always ON		
		Buzzer	Buzzer		
87	FLASHING LIGHT AND TIMER	Off	The flashing light remains OFF with active timer and open gate	Off	
		On	The flashing light remains ON with active timer and open gate		
88	COURTESY LIGHT	Off	Disabled	In cycle	
		1 240	Courtesy light setting from 1sec. to 4min.		
		In cycle	Courtesy light in cycle		
89	TRAFFIC LIGHT RESERVATION	Off On	If ON, the partial input will be activated to work on the auxiliary board "SEM" (traffic light management)	Off	
90	PARTIAL OPENING	5% 100%	Setting from 5% to 100%	50%	
91	PARTIAL PAUSE	= Start	Pause in partial opening same as in total opening	= Start	
		Off	Disabled		
		1 240	Setting from 1 second to 4 minutes		
92	TIMER	Off	Turns the selected input into an input to which connect an external clock	Off	
		On photo2			
		On partial entry			
		Clock			
93	FIRE SWITCH	Off	Disabled	Off	
		On Photo2	Function active on Photocell 2		
		On Partial entry	Function active on Partial entry input		

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
94	24V AUX (Max. 500 mA)	<i>Always</i>	AUX output always power supplied	<i>Always</i>	
		<i>In cycle</i>	AUX output active only during cycle		
		<i>Opening</i>	AUX output power supplied only during opening		
		<i>Closing</i>	AUX output power supplied only during closing		
		<i>In pause</i>	AUX out put power supplied only during pause		
		<i>Autotest</i>	Security test		
		<i>In cycle and photo-test</i>	AUX active only during cycle with photo-test function		
		<i>In cycle and pause</i>	AUX power supplied during cycle and during pause		
		<i>Courtesy light</i>	It will work as per Menu-88 settings		
		<i>Barrier and Bollard LED lights</i>	the 24Vaux output will pilot the lights on the automa- tion so that, when it is closed the light is switched-on, when open the light is switched-off and when the automation is moving the light blinks		
		<i>Open gate warning Light</i>	1 flash per second in opening 2 flashes per second in closing Steady lit in Stop or Open		
95	PHOTO-TEST	<i>Photo 1</i>	Self-test active only on photo 1	<i>Off</i>	
		<i>Photo 2</i>	Self-test active only on photo 2		
		<i>Photo 1 and 2</i>	Self-test active on photo 1 and 2		
		<i>Off</i>	Disabled		
96	SECURITY EDGE SELF-TEST	<i>Edge 1</i>	Test enabled on edge 1	<i>Off</i>	
		<i>Edge 2</i>	Test enabled on edge 2		
		<i>Edges 1 and 2</i>	Test enabled on edges 1 and 2		
		<i>Off</i>	Disabled		
97	PHOTOCELL 1	<i>Closing</i>	If the photocell is occupied during closing, it reverses the movement; it prevents the reclosing during pause	<i>Closing</i>	
		<i>Opening and closing</i>	If occupied, the photocell stops the movement as long as it is busy; when released, the opening movement continues		
		<i>Stop</i>	If the photocell is activated before the Start input, the Start will be ignored. If it is activated after the Start input, the photocell will be ignored. If it is activated during closing, the gate will reopen		
		<i>Stop and close</i>	In closing, the photocell stops the movement until it is occupied; when released the closing movement continues		
		<i>Close</i>	The photocell stops the gate until it is occupied in both opening and closing; when released, it gives a closing command (it closes one sec. after its release)		
		<i>Closing Pause reload</i>	If occupied during the pause, the photocell recharges the same pause time set. In closing it reverses the movement		
		<i>Opening and Closing Pause reload</i>	If occupied during the pause, the photocell recharges the same pause time set. In closing it reverses the movement; in opening it stops the automation and when the photocell is released the opening continues		
		<i>Shadow loop</i>	If occupied, with open gate, the shadow loop prevents reclosing. It is switched off during closing		
		<i>Delete pause time</i>	If occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time		
		<i>Shadow loop PR (pause reloading)</i>	If the shadow loop is temporarily released, the pause time is reloaded before closing		

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
98	PHOTOCELL 2	<i>Closing</i>	If the photocell is occupied during closing, it reverses the movement; it prevents the reclosing during pause	<i>Opening and closing</i>	
		<i>Opening and closing</i>	If occupied, the photocell stops the movement as long as it is busy; when released, the opening movement continues		
		<i>Stop</i>	If the photocell is activated before the Start input, the Start will be ignored. If it is activated after the Start input, the photocell will be ignored. If it is activated during closing, the gate will reopen		
		<i>Stop and close</i>	In closing, the photocell stops the movement until it is occupied; when released the closing movement continues		
		<i>Close</i>	The photocell stops the gate until it is occupied in both opening and closing; when released, it gives a closing command (it closes one sec. after its release)		
		<i>Opening Pause reload</i>	If occupied during the pause, the photocell recharges the same pause time set. In opening, the gate stops and when released the movement continues		
		<i>Opening and Closing Pause reload</i>	If occupied during the pause, the photocell recharges the same pause time set. In closing it reverses the movement; in opening it stops the automation and when the photocell is released the opening continues		
		<i>Shadow loop</i>	If occupied, with open gate, the shadow loop prevents reclosing. It is switched off during closing		
		<i>Delete pause time</i>	If occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time		
		<i>Shadow loop PR (pause reloading)</i>	If the shadow loop is temporarily released, the pause time is reloaded before closing		
		<i>Stop and open</i>	If the photocell is activated during opening, the gate will stop and will continue opening movement only when the photocell is released. The photocell is ignored during closing		
99	PHOTO OFF IN CLOSING	0%      50%	In closing, it excludes the photocell reading for the space percentage set	0%	
100	SECURITY EDGE 1	<i>Normal</i>	Normal N.C. contact	<i>Normal</i>	
		<i>8K2</i>	Edge is active and protected by a 8K2 resistor		
		<i>8K2 Double</i>	Allows to connect two 8K2 protected edges		
101	SECURITY EDGE 2	<i>Normal</i>	Normal N.C. contact	<i>Normal</i>	
		<i>8K2</i>	Edge is active and protected by a 8K2 resistor		
		<i>8K2 Double</i>	Allows to connect two 8K2 protected edges		
102	SECURITY EDGE 1 DIRECTION	<i>Opening and closing</i>	Active in opening and closing	<i>Opening and Closing</i>	
		<i>Only opening</i>	Active only in opening		
		<i>Only closing</i>	Active only in closing		
103	SECURITY EDGE 2 DIRECTION	<i>Opening and closing</i>	Active in opening and closing	<i>Opening and Closing</i>	
		<i>Only opening</i>	Active only in opening		
		<i>Only closing</i>	Active only in closing		

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
104	SELECT LIMIT SWITCH	<i>Normal</i>	Limit switch detected during self-learning	<i>Normal</i>	
		<i>Only opening</i>	Active limit-switch in opening only		
		<i>Only closing</i>	Active limit-switch in closing only		
		<i>Ext</i>	Limit-switch connected on the interface board for 4 cams limit-switches		
		<i>N.O.</i>	Limit-switch type N.O. (Normally Open) <i>Example: magnetic limit-switch</i>		
106	DIAGNOSTICS	1 10	Shows last event (See alarms table)	----	
107	MAINTENANCE CYCLES	100 240000	Setting from 100 to 240000	100000	
108	PERFORMED CYCLES	0 240000	Reports the executed cycles. Keep pressed OK to reset the cycles	0	
109	THERMOMETER	xx °C (xx °C)	It shows the temperature if a probe is connected on GP1 or GP2 and they are set on "Thermometer" <i>It is possible to connect up to two temperature probes; when two probes are connected, display will show both temperatures detected</i>	Off	
112	PASSWORD	----	Allows the entering of a password blocking the control unit parameters modification	----	
113	EMERGENCY	<i>Off</i>	Disabled	<i>Off</i>	
		<i>Emergency</i>	Without main power but batteries connected, the gate will open fully and will stay open. The gate recloses when the power is back		
		<i>Last opening</i>	Without main power, if batteries are lower than 22V the gate opens and stay open. The gate recloses when the power is back		
		<i>Last closing</i>	Without main power, if batteries are lower than 22V the gate closes and stay closed until the power is back		
115	DECELERATION RAMP	0,1 s 5s	Deceleration management in case of inversion or Stop	0,5 s	
116	REPEAT DELAY OPENING	On Off	In case of STOP at the mid stroke, leaves will repeat the leaf delay	On	
117	ALWAYS CLOSE	Off 240 seconds	In the event of a power failure, if the door has been manually open, it closes only after the set time has elapsed (from 0 to 240 s), as soon as the power is restored	Off	
118	LATCH	<i>Off</i>	Disabled	<i>Off</i>	
		<i>Opening</i>	Uses the "Edge 1" N.O. input (the edge is so disabled). The gate opens and stay open till a new Start input		
		<i>Closing</i>	Uses the "Edge 2" N.O. input (the edge is so disabled). The gate closes and stay closed till a new Start input		
		<i>Opening and closing</i>	Uses the "Edge 1" N.O. input for opening and the "Edge 2" N.O. input for closing (both edges are so disabled) It enables both opening and closing functions above mentioned		
119	DISPLAY WRITING SPEED	From 30% to 100%	See Note 3 below	80%	
120	BASIC MENU	Press OK to exit the special menu. The special menu switches off automatically after 20 minutes			

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
121	PHOTO 1 TYPE	<i>Normal</i>	Standard photocell without 10K control	<i>Normal</i>	
		<i>Photo 1 10K</i>	Photocell with 10K control		
122	PHOTO 2 TYPE	<i>Normal</i>	Standard photocell without 10K control	<i>Normal</i>	
		<i>Photo 2 10K</i>	Photocell with 10K control		
123	DATE AND TIME	<i>Mon - Sun dd/mm/yyyy Time</i>	Allows to set the day, date and time for the management of the programmed openings. (Only if the buffer battery is present and is charge)	----	
124	CLOCK 1	<i>Opening time Closing time Days End</i>	Allows the setting of a first time band in which keeping the gate open. It is possible to set, in order, opening time, closing time and the days on which you want to open and keep the gate open	----	
125	CLOCK 2	<i>Opening time Closing time Days End</i>	Allows the setting of a first time band in which keeping the gate open. It is possible to set, in order, opening time, closing time and the days on which you want to open and keep the gate open	----	
126	CLOCK 3	<i>Opening time Closing time Days End</i>	Allows the setting of a third time band in which keeping the gate open. It is possible to set, in order, opening time, closing time and the days on which you want to open and keep the gate open	----	
127	CLOCK 4	<i>Opening time Closing time Days End</i>	Allows the setting of a fourth time band in which keeping the gate open. It is possible to set, in order, opening time, closing time and the days on which you want to open and keep the gate open	----	
130	GP1	<i>Off</i>	Disabled	<i>Off</i>	
		<i>Emergency open</i>	Allows the connection of an opening button that allows the automation operating in "Dead Man" logic. The button will only work in case of safety devices failure or in case of stuck Start button		
		<i>Open</i>	Allows the connection of an opening button that allows the automation operating in "Dead Man" logic. The button will only work when the gate is closed or after a Stop command		
		<i>Thermometer</i>	Allows the connection of a temperature probe to see an external temperature which will be shown on the control unit display by accesing the 109-menu (Example: probe for detection of hydraulic motor oil temperature)		
131	GP2	<i>Off</i>	Disabled	<i>Off</i>	
		<i>Emergency close</i>	Allows the connection of a closing button that allows the automation operating in "Dead Man" logic. The button will only work in case of safety devices failure or in case of stuck Start button		
		<i>Close</i>	Allows the connection of a closing button that allows the automation operating in "Dead Man" logic. The button will only work when the gate is closed or after a Stop command		
		<i>Thermometer</i>	Allows the connection of a temperature probe to see an external temperature which will be shown on the control unit display by accesing the 109-menu (Example: probe for detection of hydraulic motor oil temperature)		



MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
132	RELAY 1	<i>Off</i>	Disabled	<i>Off</i>	
		<i>Start 3s</i>	Activates the relay 1 for 3 seconds at every Start or reopening command		
		<i>Traffic light 1</i>	The relay 1 will manage a traffic light with green light switched on only when the gate is open		
		<i>Traffic light in entrance</i>	At a Start command, the traffic light in entrance turns green and the access priority is acquired while the traffic light in exit turns red. (with TRAFFIC LIGHT BY RESERVATION menu ON)		
		<i>Traffic light in exit</i>	At a Start command the traffic light in exit turns green and the access priority is acquired while the traffic light in entrance turns red. (TRAFFIC LIGHT BY RESERVATION menu ON)		
		<i>Lock copy</i>	The relay 1 will be On for the time set on LOCK menu		
		<i>Flashing light copy</i>	Relay 1 repeats the flashing-light functions		
		<i>Courtesy light copy</i>	The relay 1 will be On for the time set on COURTESY LIGHT menu		
		<i>Opening 1 limit-switch</i>	The relay 1 will be On if the motor 1 opening limit-switch is activated or if motor 1 is in "Open" status		
		<i>Closing 1 limit-switch</i>	The relay 1 will be On if the motor 1 closing limit-switch is activated or if motor 1 is in "Close" status		
		<i>Opening 2 limit-switch</i>	The relay 1 will be On if the motor 2 opening limit-switch is activated or if motor 2 is in "Open" status		
		<i>Closing 2 limit-switch</i>	The relay 1 will be On if the motor 2 closing limit-switch is activated or if motor 2 is in "Closed" status		
		<i>Tx Relay</i>	It is possible to activate the relay 1 for 3 seconds by giving an impulse from the remote control		
		<i>Negative brake and Photocell 1 management</i>	The negative electric-brake is not active on the intervention of the photocell		
		<i>Negative brake 1 management</i>	Negative electric-brake (in On with the gate in cycle and 1 second before the Start input)		
		<i>Positive brake 1 management</i>	Positive electric-brake (in On with stationary gate)		
		<i>Opening electric-valve</i>	The relay 1 is active during opening		
		<i>Closing electric-valve</i>	The relay 1 is active during closing		

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
133	RELAY 2	<i>Off</i>	Disabled	<i>Off</i>	
		<i>Start 3s</i>	The relay 2 is activated for 3 seconds at every Start input or every opening command		
		<i>Traffic light 1</i>	The relay 2 will manage a traffic light with green light on only with open gate		
		<i>Traffic light in entrance</i>	At a Start command the traffic light in entrance turns green and the access priority is acquired while the traffic light in exit turns red. (with TRAFFIC LIGHT BY RESERVATION menu ON )		
		<i>Traffic light in exit</i>	At a Start command the traffic light in exit turns green and the priority is acquired while the traffic light in entrance turns red. (with TRAFFIC LIGHT BY RESERVATION menu ON )		
		<i>Lock copy</i>	The relay 2 will be On for the time set on LOCK menu		
		<i>Flashing light copy</i>	The relay 2 repeats the flashing-light functions		
		<i>Courtesy light copy</i>	The relay 2 will be On for the time set on COURTESY LIGHT menu		
		<i>Opening 1 limit-switch</i>	The relay 2 will be On if the motor 1 opening limit-switch is activated or if motor 1 is in "Open" status		
		<i>Closing 1 limit-switch</i>	The relay 2 will be On if the motor 1 closing limit-switch is activated or if Motor 1 is in "Closed" status		
		<i>Opening 2 limit-switch</i>	The relay 2 will be On if the Motor 2 opening limit-switch is activated or if Motor 2 is in "Open" status		
		<i>Closing 2 limit-switch</i>	The relay 2 will be On if the motor 2 closing limit-switch is activated or if motor 2 is in "Closed" status		
		<i>Tx Relay</i>	It is possible to activate the relay 2 for 3 seconds by giving an impulse from the remote control		
		<i>Negative brake and Photocell 2 management</i>	The negative electric-brake is not active on the intervention of the photocell		
		<i>Negative brake 2 management</i>	Negative electric-brake (in On with the gate in cycle and 1 second before the Start input)		
		<i>Positive brake 2 management</i>	Positive electric-brake (in On with stationary gate)		
		<i>Opening electric-valve</i>	The relay 2 is active during opening		
		<i>Closing electric-valve</i>	The relay 2 is active during closing		
134	RELAY FV 1 (Relay on the FV MODULE 1)	<i>Off</i>	Disabled	<i>It depends on motor</i>	
		<i>Positive brake management</i>	Positive electric-brake (The relay FV1 will be ON only with stopped gate)		
		<i>Negative brake management</i>	Negative electric-brake (The relay FV1 will be ON only during gate cycle and 1 second before start)		
		<i>Negative brake management and Photocell</i>	Negative electric-brake (The relay FV1 will be ON only with during gate cycle and 1 second before start, except in case of photocell intervention)		
		<i>Fan</i>	The relay on FV MODULE will activate for the whole cycle duration plus 2 further minutes		

MENU SP		SET	DESCRIPTION	DEFAULT	SET VALUE
135	RELAY FV 2 (Relay on the FV MODULE 2)	Off	Disabled	It depends on motor	
		Positive brake management	Positive electric-brake (The relay FV2 will be ON only with stopped gate)		
		Negative brake management	Negative electric-brake (The relay FV2 will be ON only with automation in cycle and 1 second before starting movement)		
		Negative brake management and Photocell	Negative electric-brake (The relay FV2 will be ON only during gate cycle and 1 second before start , except in case of photocell intervention)		
		Fan	The relay on FV MODULE will activate for the whole cycle duration plus 2 further minutes		
136	EFO	0% 100%	The EFO function generates a closing with a higher speed than the set percentage. It works only with bollard through a command on the PEDESTRIAN START input	50%	
137	COMIS	0 350 mA	It shows the absorption of the accessories connected on input 20	----	
138	COMIS THRESHOLD	Off 350mA	Allows to set a maximum absorption threshold over which an error message appears (error message appears also when over 350 mA)	Off	
140	THRESHOLD A OPENING 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in opening (over the set threshold the motor will detect an obstacle)	It depends on motor	
141	THRESHOLD A CLOSING 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in closing (over the set threshold the motor will detect an obstacle)	It depends on motor	
142	THRESHOLD A OPENING 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in opening (over the set threshold the motor will detect an obstacle)	It depends on motor	
143	THRESHOLD A CLOSING 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in closing (over the set threshold the motor will detect an obstacle)	It depends on motor	
144	THRESHOLD A OPENING SLOWDOWN 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in slowdown during opening	It depends on motor	
145	THRESHOLD A CLOSING SLOWDOWN 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in slowdown during closing	It depends on motor	
146	THRESHOLD A OPENING SLOWDOWN 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in slowdown during opening	It depends on motor	
147	THRESHOLD A CLOSING SLOWDOWN 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in slowdown during closing	It depends on motor	
190	BASIC MENU	Press OK to exit the special menu. The special menu switches off automatically after 20 minutes			

**Note 1:** The \* indicates that the default value or the menu may change depending on the selected motor type

**Note 2:** After initialization the parameters "motor type" and "limit switch type" remain on the value chosen in the setup program

**Note 3:** Display writing speed set on 30% keeps writing slow; Display writing speed set on 100% keeps writing fast

Please note that speed does not change on JOLLY 3 display

**MAINTENANCE**

Considering the number of working cycles and the kind of gate, if the gate has changed the clutches and doesn't work it's necessary to periodically proceed, with the learning times reprogramming on the electronic control unit. Periodically clean the optical systems of the photocells.

**REPLACEMENTS**

Any request for spare parts must be sent to:

SEA S.p.A. - Zona Ind.le, 64020 S.ATTO - Teramo - Italia

**SAFETY AND ENVIRONMENTAL COMPATIBILITY**

Disposal of the packaging materials of products 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)

The brand that you find on the product or on documentation signals that the product must not be disposed off together with other domestic waste at the end of life cycle. In order to avoid any possible environmental or health damage caused by irregular waste disposal, we recommend to separate this product from other forms 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 in charge of all the information related to differential waste collection and recycling of this kind of product.

**STORING: Warehousing temperatures**

T min: - 20°C

T Max: + 65 °C

Dampness min: 5% not condensing

Dampness Max: 90% not condensing

Materials handling must be made with appropriate vehicles.

**WARRANTY LIMITS**

For the guarantee see the sales conditions on the official SEA price list.

SEA 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. SEA S.p.A. declines all liability as concerns the automated system's security and efficiency, if components used, are not produced by SEA S.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 mm<sup>2</sup> 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.

### **EFFICACY OF THE FOLLOWING TERMS OF SALE:**

the following general terms of sale shall be applied to all orders sent to SEA S.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. according to the General Data Protection Regulation UE 679/2016 (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.

Industrial ownership rights: once the Buyer has recognized that SEA has the exclusive legal ownership of the registered SEA brand num.804888 affixed on product labels and/or on manuals and/or on any other documentation, he will commit himself to use it in a way which does not reduce the value of these rights, he won't also remove, replace or modify brands or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any particularity on the products, unless preventive and expressed authorization by SEA.

In accomplishment with art. 1341 of the Italian Civil Law it will be approved expressly clauses under numbers:

4) PAYMENTS - 8) GUARANTEE - 10) COMPETENT COURT OF LAW

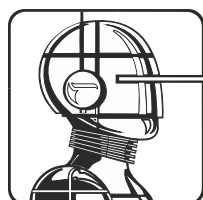


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