



# SEA®

Sistemi Elettronici  
di Apertura Porte e Cancelli  
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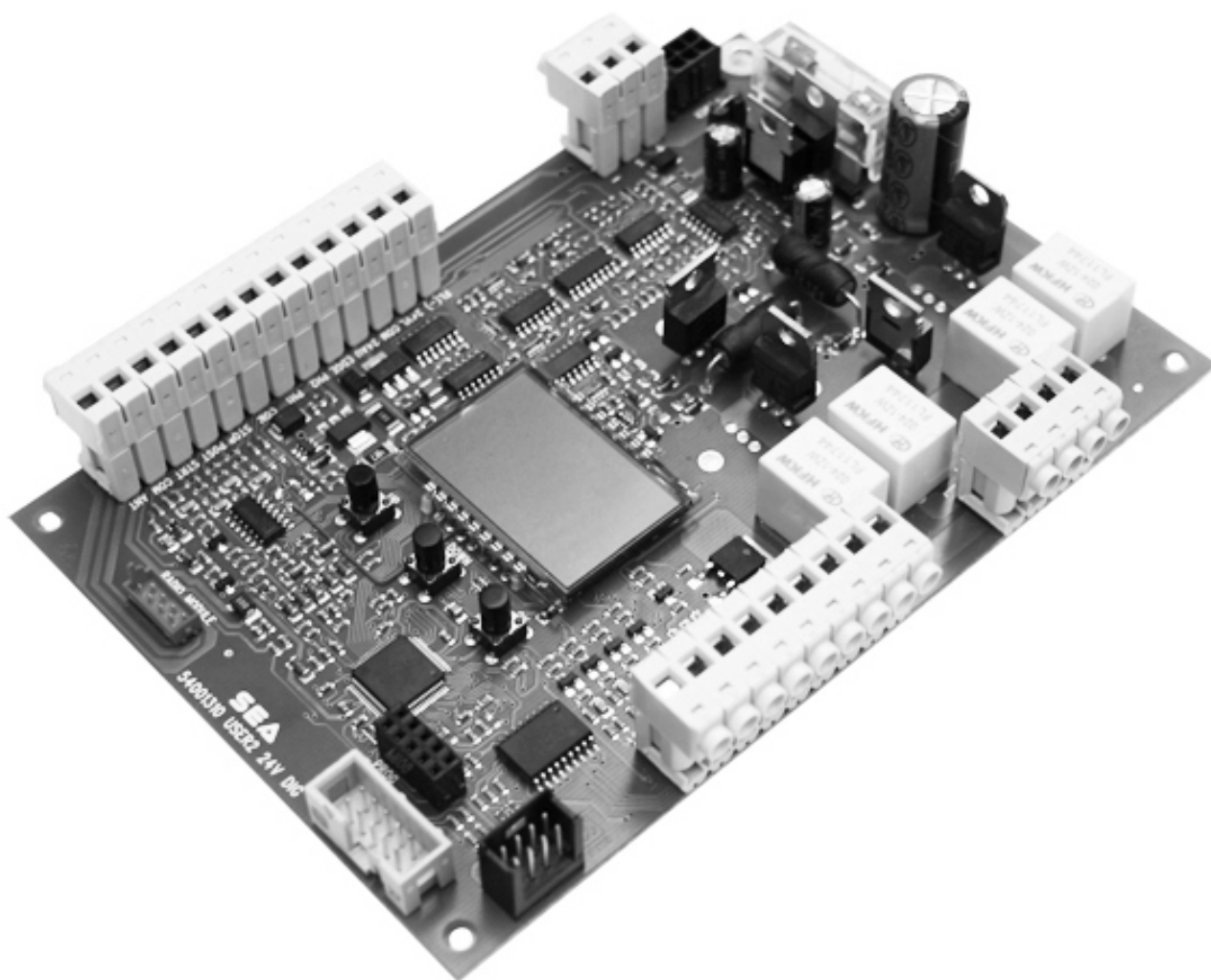
# CE

**English**

## **USER 2 - 24V DG**

**23024080/25/30**

***APPAR. ELETTRONICA 24V === PER CANCELLI A BATTENTE***  
***ELECTRONIC CONTROL UNIT 24V === FOR SWING GATES***  
***ARMOIRE ELECTRONIQUE 24 V === POUR PORTAILS A BATTANTS***  
***TARJETA ELECTRONICA 24V === PARA CANCELA ABATIBLES***



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**CONNESSIONI / CONNECTIONS / CONNEXIONS  
CONEXIONES / VERBINDUNGEN**

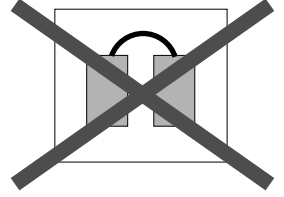
**ATTENZIONE:** la scheda è predisposta con il riconoscimento automatico degli ingressi N.C. non utilizzati (fotocelle, Stop e finecorsa) ad eccezione dell'ingresso **COSTA DI SICUREZZA**.

**WARNING:** The control unit is designed with the automatic detection of not used N.C. inputs (photo cells, Stop and Limit switch) except the **SAFETY EDGE** input.

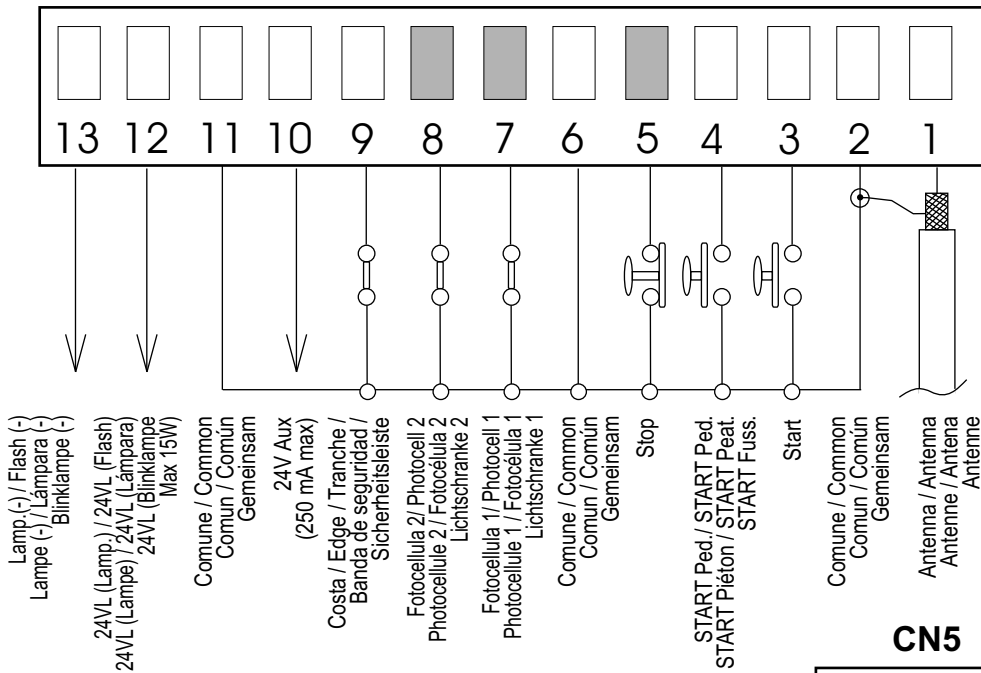
**AVERTISSEMENT:** L'armoire est conçue avec la détection automatique des accès N.C. pas utilisés (photocellules, Stop et fins de course), à l'exception de l'accès **BARRE PALPEUSE DE SECURITE**.

**ATENCIÓN:** la tarjeta está predispuesta con el reconocimiento automático de las entradas N.C. no utilizados, fotocélulas, stop y fin de carrera, con excepción de la entrada **COSTA DE SEGURIDAD**.

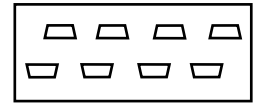
**ACHTUNG:** Die Steuerung ist mit der automatischen Erkennung der nicht verwendeten N.C. Eingänge, ausgestattet (Lichtschranken, Stop-und Endschalter) ausgenommen des Sicherheitsleitens Eingänge.



**CN1**

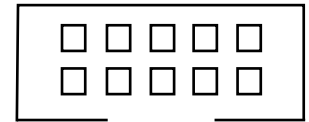


**RADIO MODULE (CNA)**



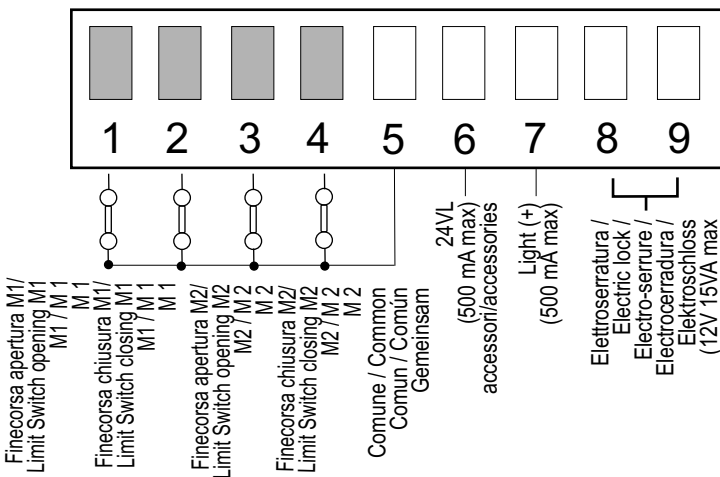
Connettore modulo ricevente  
Receiver module connector  
Connecteur module récepteur  
Conector modulo receptor  
Verbindungsmodul Empfänger

**JOLLY**

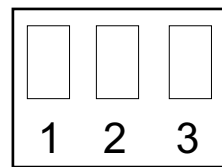


Connettore Programmatore Jolly  
Connector Programmer Jolly  
Connecteur Programmeur Jolly  
Conector Programador Jolly  
Anschluss Programmierer Jolly

**CN2**



**CN5**

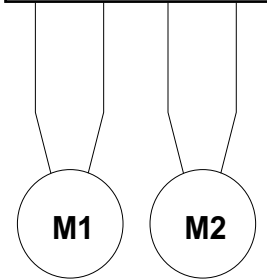
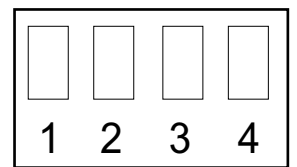


28V --- Caricabatteria / Battery charger / Chargeur de batterie / Cargabaterias / Batterieladegerät

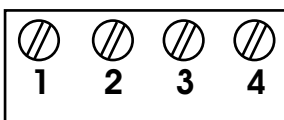
28V --- Positivo batteria / Positif batterie / Positivo Bateria / Positiv Batterie

Negativo caricabatteria / Negative battery charger / Negatif chargeur batterie / Negativo cargabaterias / Negativ Batterieaufladegerät

**CN3**

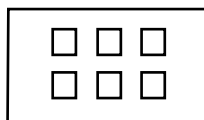


**CN4**



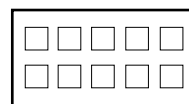
+24Vdc  
Enc1  
Enc2  
-

**EXP**



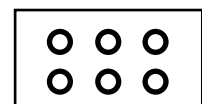
Connettore Modulo Esterno / Connector External Module / Connecteur / Conector / Anschluss

**PROG**



Connettore programmazione / Programming connector / Connector programming / Conector programación

**POWER**



Connettore alimentazione 24V --- / 24V --- Power connector / Connecteur alimentation 24V --- / Conector alimentación 24V ---

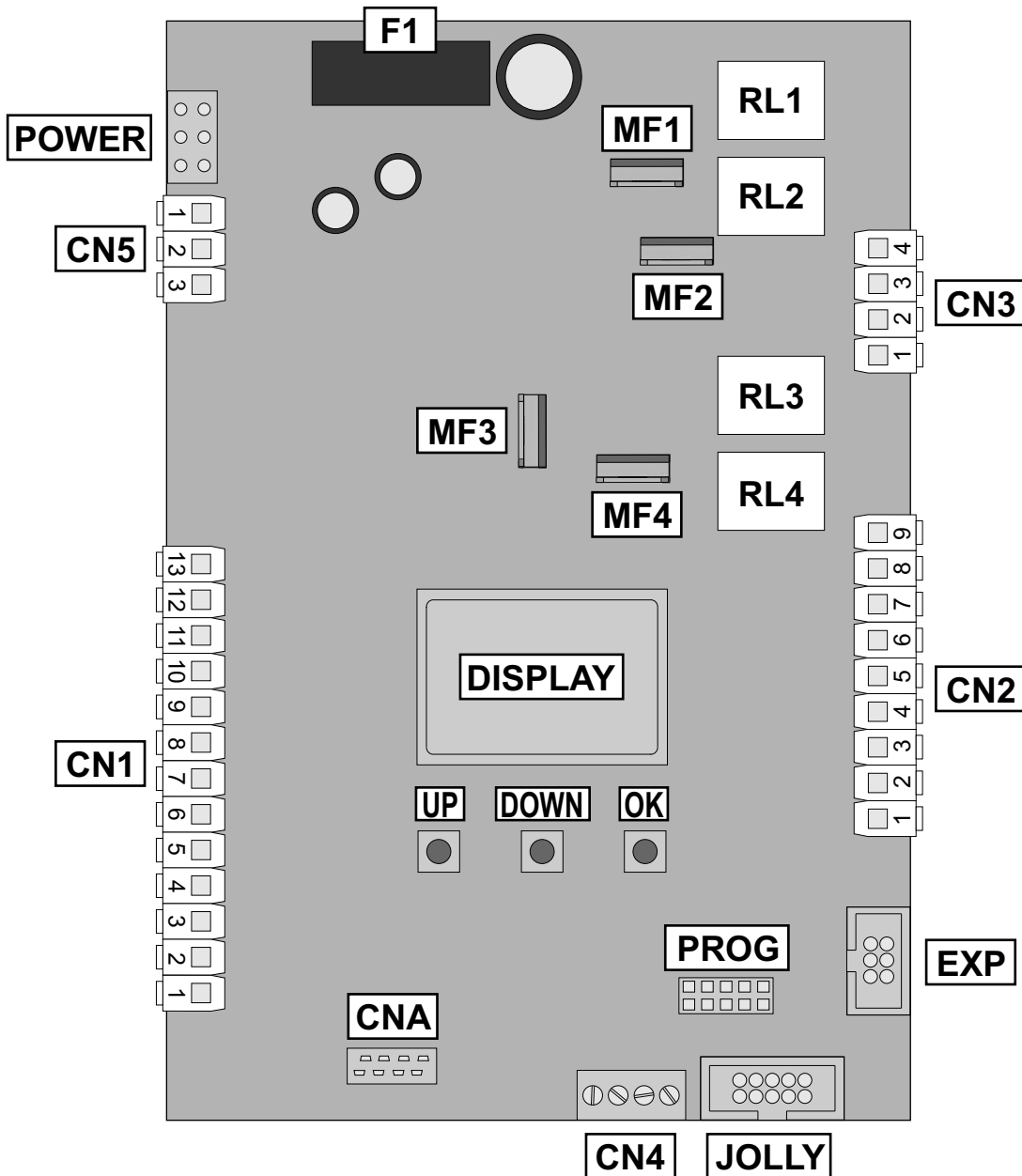


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# **DESCRIPTION OF THE COMPONENTS**



**CN1** = Input/Output connector

**CN2** = limit switch, 24VL, light, electro-lock connector

**CN3** = Motors connector

**CN4** = Encoder connector

**CN5** = Battery charger connector

**CNA** = Receiver module connection

**EXP** = External module connector

**JOLLY** = Jolly programmer connector

**MF1 - MF2** = Mosfet motor 2

**MF3 - MF4** = Mosfet motor 1

**POWER** = 24V  $\equiv$  power supply connection

**PROG** = Programming connector

**RL1 - RL2** = Relay motor 2

**RL3 - RL4** = Relay motor 1

**F1** = Fuse 1AT



## GENERAL INFORMATION

*The information in this section of the manual are only for technicians or for qualified or authorized installers.*

### GENERAL CHARACTERISTICS

The USER 2 24V DG control unit has been designed to manage one or two low voltage swing gate operators with or without electronic limit switches.

It is of very small dimensions and besides the possibility to adjust motor speed, amperometric anti squeezing sensitivity, leaf delay in closing, pausing time, it is also possible to manage a display, through which it is possible to control a lot of management functions and the maintenance of the control unit.

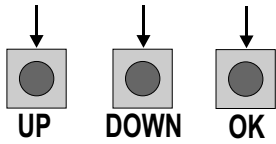
### TECHNICAL SPECIFICATIONS

|   |  |
|---|--|
| <b>Control unit power supply</b>            | 24V ===  |
| <b>Absorption in stand by</b>               | 30mA   |
| <b>Max. motor charge</b>                    | 90 W x 2   |
| <b>Max. accessories charge</b>              | 24AU (250mA)=== (Programmable) /<br>24VL (500mA)=== (Accessories and Flashing lamp)  |
| <b>Max. Flash light charge</b>              | 24VL=== (Flashing lamp) 15W max.   |
| <b>Environment temperature</b>              | -20°C ↓ +50°C ↓  |
| <b>Protection fuse (24V accessories)</b>    | 1AT  |
| <b>Function logic</b>                       | Automatic / Step by step type 1 / Step by step type 2<br>/ Safety / Dead man / 2 Buttons.  |
| <b>Opening/closing time</b>                 | In selflearning in programming phase   |
| <b>Time of pause</b>                        | Adjustable   |
| <b>Thrust</b>                               | Adjustable for single leaf and direction   |
| <b>Slow down</b>                            | Adjustable for single leaf and direction   |
| <b>Input on connecting terminal</b>         | Battery power supply / Total opening / Pedestrian<br>opening adjustable / Edge (opt.8K2)/  |
| <b>Output on connecting terminal</b>        | Stop / Limit switch opening and closing / Encoder /<br>Photcell in opening and closing   |
| <b>Board dimensions</b>                     | Power supply 24AU === (Programmable) /<br>Motors 24V ===/ 24VL=== Accessories and Flashing<br>lamp / Electro-lock 12V ===  |
| <b>Specifications of optional batteries</b> | 156 x 100 mm   |
| <b>Specifications of external enclosure</b> | 24V Pb 2Ah min.<br>305 x 225 x 125 mm - Ip55   |
| <b>Special accessories</b>                  | Battery charger card (code 23101105),<br>Relay card for traffic light management<br>(SEM Cod. 23021100),<br>Programmer JOLLY (code 23105276),<br>Programmer OPEN (code 23105290) Flashing lamp |

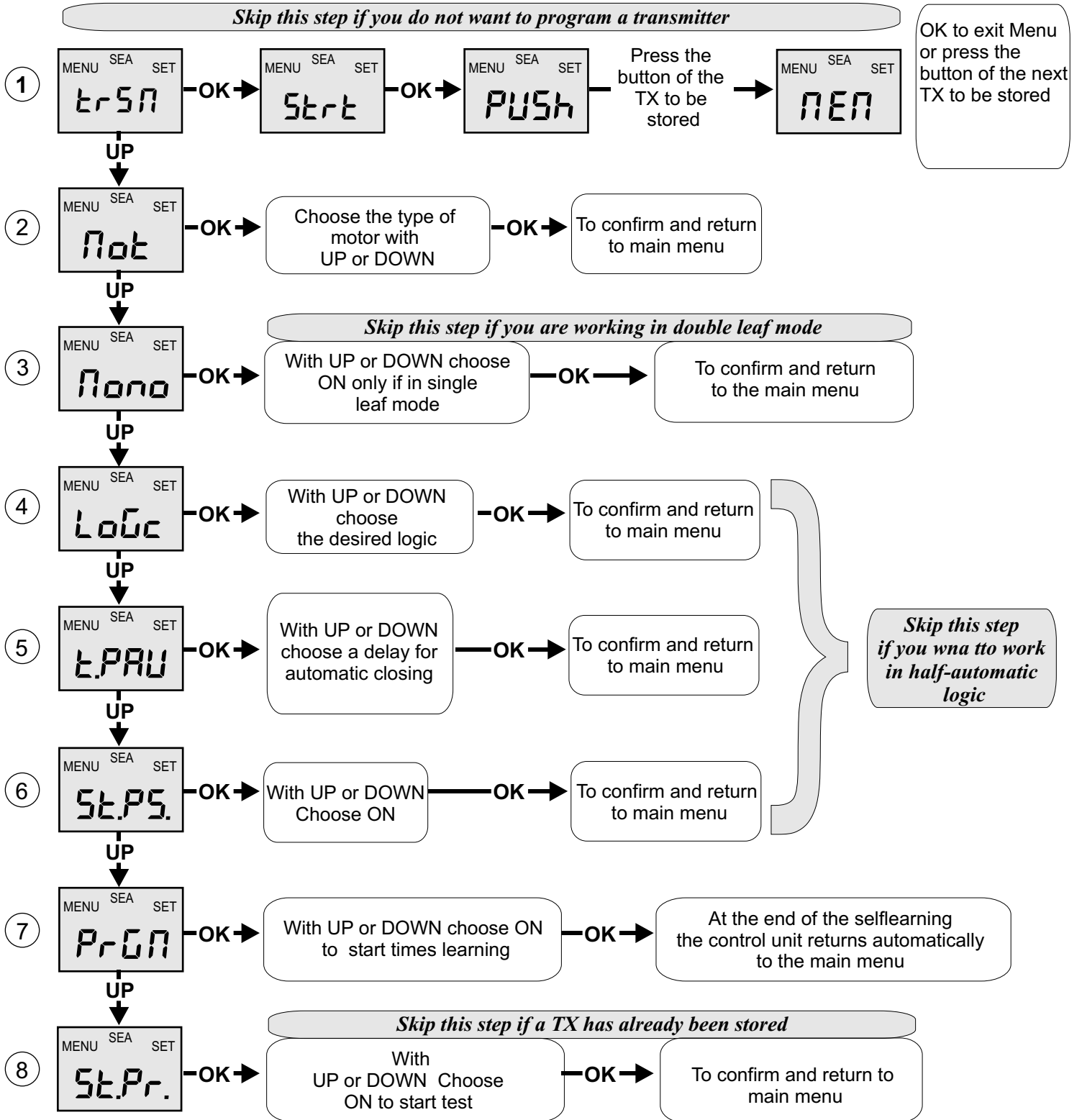
**NOTE:** The Jolly programmer will be functioning starting from Rev. 35 onwards. You can upgrade the software of the Jolly and the control units with the OPEN device and the update firmware software.



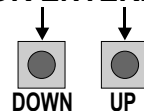
# QUICK START



## PROGRAMMING BUTTONS



ALL OTHER PARAMETERS HAVE DEFAULT SETTINGS WHICH ARE USEFUL FOR THE 90% OF THE APPLICATIONS BUT CAN BE HOWEVER SET THROUGH THE SPECIAL MENU. FOR ENTERING INTO THE SPECIAL MENU PRESS THE UP AND DOWN BUTTONS AT THE SAME TIME FOR 5 S.





# SELFLEARNING AND DEFAULT PARAMETERS

The control unit is pre-set with the default settings, to start the control unit with the **DEFAULT** settings just keep pressed the **UP** and **DOWN** buttons at the same time power supplying the control unit the display shows the message *In It.*

The **DEFAULT** settings are shown in the Menues table.

## WORKING TIMES SELF LEARNING

**Note1:** Put a jumper on SAFETY EDGE contact if not used.

**Note2:** It is not necessary to put a jumper on the limit switches, photocells and Stop if they are not used.

1) Check the right operation of the accessories (photocells, buttons etc.).

If necessary set the leaf delay.

2) If necessary adjust the selflearning speed.

3) Switch off power supply (Fig. 1), release the motors (Fig. 2-3) and manually place the leaf on the middle of the stroke (Fig. 4).

Restore the mechanical lock (Fig. 5-6)

4) Power the control unit (Fig.7)

5) Choose the desired motor type; use (default Flipper).

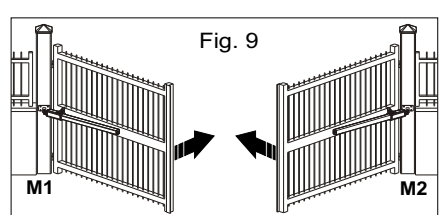
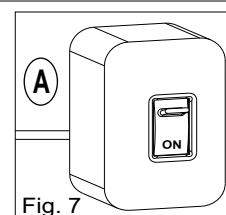
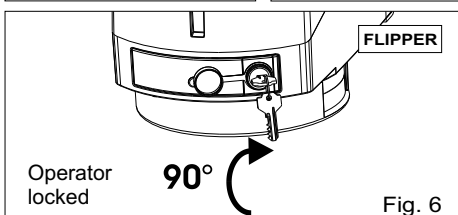
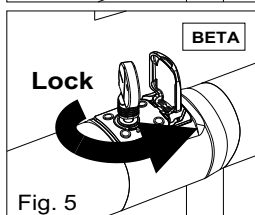
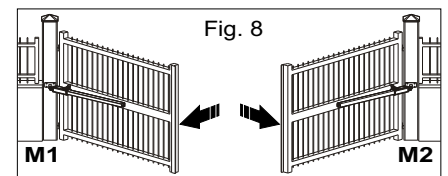
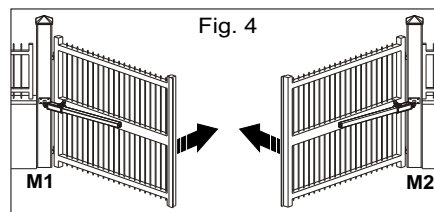
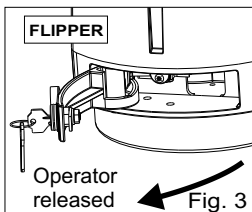
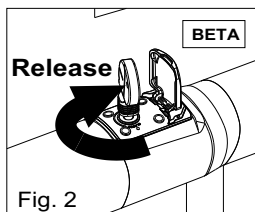
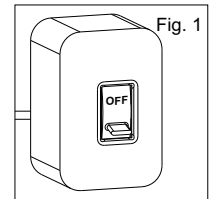
6) Select *Pr o ĩ* on the display, press OK and then UP and DOWN to start the programming.

**Note3:** If on single leaf mode set MONO on ON.

**Note4:** If one or both motors start in opening, switch off power and invert the motor(s) cable starting in opening. Afterwards repeat the procedure starting from point 4, or activate *In It.*

7) Both leaves will start a CLOSE - OPEN - CLOSE cycle automatically (CLOSE M2 - CLOSE M1 - OPEN M1 - OPEN M2 - CLOSE M2 - CLOSE M1).

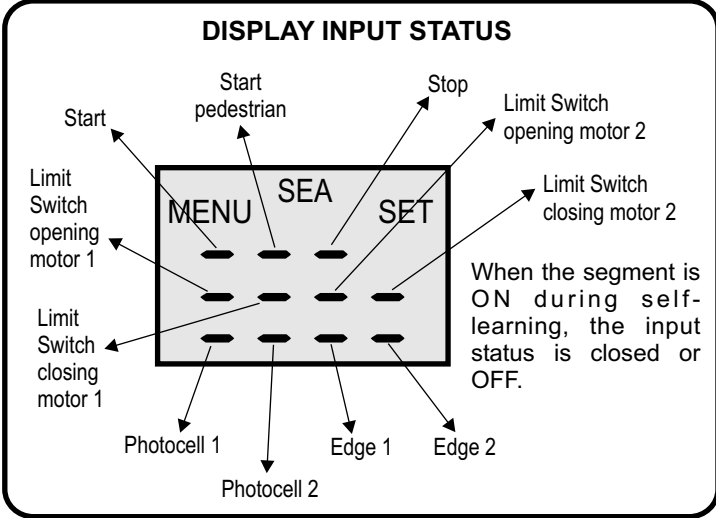
End of selflearning.



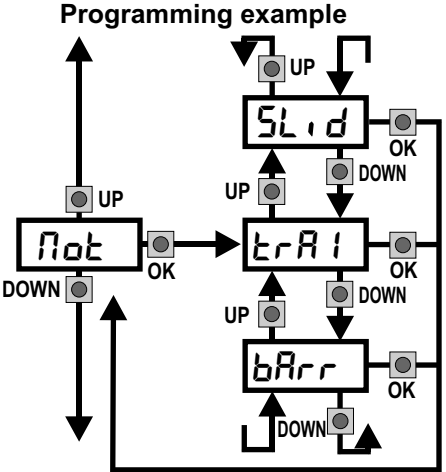


# SELECTION OF THE SETTINGS

The settings of the control unit are made through the UP, DOWN and OK buttons. The UP and DOWN buttons to scroll through the MENUS and SUBMENUS. By pressing OK you enter from MENU into SUBMENU and confirm the choice. Pressing the UP and DOWN buttons at the same time you access the SP MENU for special settings. Pressing the OK button for 5 seconds, you enter the TEST MENU, where you can check the operating status of all inputs.



Initial system  
 Software Version



| MENU FUNCTION board USER 2 24V DG INPUT TESTS<br>(To access the Menu for input TESTS keep pressed OK for about 5 seconds) |                              |  |
|---|------------------------------|--|
| MENU  | Description                  | Description  |
| St <u>ar</u> t  | Start test                   | The contact must be a N.O. Contact . When activating the related command on the display SET lights up, the input works.<br>If SET is always on, check the wirings.   |
| St <u>o</u> P   | Stop test                    | The contact must be a N.C. Contact. If activating the related command on the display SET lights up, the input works.<br>If SET is always on, make sure that the contact is a N.C. Contact  |
| PE <u>d</u> a   | Pedestrian start test        | The contact must be a N.O. Contact . When activating the related command on the display SET lights up, the input works.<br>If SET is always on, check the wirings.   |
| Ed <u>G</u> E   | Safety edge test             | The contact must be a N.C. Contact. If activating the related command on the display SET lights up, the input works.<br>If SET is always on, make sure that the contact is a N.C. Contact  |
| PH <u>a</u> .1  | Photocell 1 test             | The contact must be a N.C. Contact. If activating the related command on the display SET lights up, the input works.<br>If SET is always on, make sure that the contact is a N.C. Contact  |
| PH <u>a</u> .2  | Photocell 2 test             | The contact must be a N.C. Contact. If activating the related command on the display SET lights up, the input works.<br>If SET is always on, make sure that the contact is a N.C. Contact  |
| FL <u>a</u> .1  | M1 opening limit switch test | The contact must be a N.C. Contact. If 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. |
| FL <u>c</u> .1  | M1 closing limit switch test | The contact must be a N.C. Contact. If 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. |
| FL <u>a</u> .2  | M2 opening limit switch test | The contact must be a N.C. Contact. If 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. |
| FL <u>c</u> .2  | M2 closing limit switch test | The contact must be a N.C. Contact. If 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. |
| 00  | Batteries' voltage level     | Batteries charge level indicator   |





## SELECTION OF THE SETTINGS

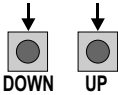
| MENU FUNCTIONS TABLE USER 2 24V DG |                    |   |   |         |           |
|------------------------------------|--------------------|---|---|---------|-----------|
| MENU                               | Description        | SET   | Description                             | Default | Set value |
| Tr5n                               | Transmitter        | Start   | Start                                   | Start   |           |
|                                    |                    | StPd  | Pedestrian Start                        | StPd    |           |
|                                    |                    | NESt  | Exp. output                             |         |           |
|                                    |                    | StoP  | Stop                                    |         |           |
|                                    |                    | dEL.  | Delete TX                               |         |           |
|                                    |                    | dEL.S   | Delete single transmitter               |         |           |
| Mot                                | Motor type         | SURF  | Surf - Alpha motors                     | FL.P    |           |
|                                    |                    | bEtA  | Beta motors                             |         |           |
|                                    |                    | FL.P  | Flipper motors                          |         |           |
|                                    |                    | F iELd  | Field motors                            |         |           |
| Nono                               | Leaf setting       | on OFF  | <b>In ON activates single leaf mode</b> | OFF     |           |
| LoGL                               | Working logics     | Auto  | Automatic                               | Auto    |           |
|                                    |                    | PP.1  | Step by step type 1                     |         |           |
|                                    |                    | PP.2  | Step by step type 2                     |         |           |
|                                    |                    | 2PuL  | Two buttons                             |         |           |
|                                    |                    | S.LU  | Safety                                  |         |           |
|                                    |                    | uoPr  | Dead man                                |         |           |
| tPRu                               | Time of pause      | d.Sb  | OFF (semi-automatic logics)             | d.Sb    |           |
|                                    |                    | i2.3  | Setting from 1s to 4min.                |         |           |
| StPS                               | Start in pause     | OFF   | Start is not accepted during pause      |         |           |
|                                    |                    | on  | Start is accepted during pause          |         |           |
| PrGN                               | Selflearning times | OFF on  | Times learning start                    |         |           |
| StPr                               | Test start         | OFF on  | Start command                           | OFF     |           |
| End                                | Exit menu          | Select END and press OK to exit the menu. The menu switches off automatically after 2 minutes |   |         |           |

**Note:** On the USER 2 24GV DG Hydro (cod. 23024080) will change only the visualizations of the "Type of motor" menu.

| MENU FUNCTIONS TABLE USER 2 24V DG HIDRO |             |       |                                |         |           |
|--|-------------|-------|--------------------------------|---------|-----------|
| MENU                                     | Description | SET   | Description                    | Default | Set value |
| Mot                                      | Motor type  | Idro  | Electro-hydraulic              |         |           |
|  |             | HEr 1 | <b>Electro-hydraulic Rev.1</b> | HEr 1   |           |
|  |             | CoPP  | Compact                        |         |           |



# SELECTION OF THE SETTINGS



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

**SPECIAL MENU FUNCTIONS TABLE USER 2 24V DG**

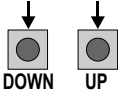
(To enter the Special Menu keep pressed UP and DOWN at the same time for 5 seconds.

To exit the Special Menu pressed END or keep pressed UP and DOWN at the same time for 5 seconds)

| MENU SP | Description                       | SET     | Description  | Default | Set value |
|---------|-----------------------------------|---------|--|---------|-----------|
| SP.N1   | Motor M1 speed                    | 30 100  | Motor M1 speed   | 75      |           |
| SP.N2   | Motor M2 speed                    | 30 100  | Motor M2 speed   | 75      |           |
| SL.dn   | Slowdown speed                    |         |  | 30      |           |
| SP.Lr   | Learning speed                    | 30 100  | Learning speed   | 50      |           |
| tr.op   | Leaf delay setting in opening     | d.5b 6  | Setting from OFF to 6 seconds  | 3       |           |
| tr.cl   | Leaf delay setting in closing     | d.5b 20 | From OFF to 20 seconds setting   | 3       |           |
| τ.op1   | M1 opening torque                 | 0 100   | Opening torque M1 and amperometric sensitivity<br>Note: By increasing the torque the sensitivity decreases | 70      |           |
| τ.cl1   | M1 closing torque                 | 0 100   | Closing torque M1 and amperometric sensitivity<br>Note: By increasing the torque the sensitivity decreases | 70      |           |
| τ.op2   | M2 opening torque                 | 0 100   | Opening torque M2 and amperometric sensitivity<br>Note: By increasing the torque the sensitivity decreases | 70      |           |
| τ.cl2   | M2 closing torque                 | 0 100   | Closing torque M2 and amperometric sensitivity<br>Note: By increasing the torque the sensitivity decreases | 70      |           |
| PU.ov   | PushOver                          | d.5b    | OFF  | d.5b    |           |
|         |                                   | oP.cL   | Opening and closing  |         |           |
|         |                                   | ooPE    | Opening only   |         |           |
|         |                                   | ocLo    | Closing only   |         |           |
| r.Str   | Reversing Stroke                  | d.5b 3  | From OFF to 3 seconds  | d.5b    |           |
| Sdo1    | <b>M1 opening slowdown</b>        | d.5b 50 | From OFF to 50% of the stroke  | 30      |           |
| Sdc1    | <b>M1 closing slowdown</b>        | d.5b 50 | From OFF to 50% of the stroke  | 30      |           |
| Sdo2    | <b>M2 opening slowdown</b>        | d.5b 50 | From OFF to 50% of the stroke  | 30      |           |
| Sdc2    | <b>M2 closing slowdown</b>        | d.5b 50 | From OFF to 50% of the stroke  | 30      |           |
| Pr.bl.  | Pre-flashing                      | d.5b    | OFF  | d.5b    |           |
|         |                                   | t.2.3   | Adjustable from 1s to 5s   |         |           |
|         |                                   | τL.on   | Only before closing  |         |           |
| LG.bU   | Flashing lamp or Buzzer output    | RLY5    | Flashing lamp always on  | LAMP    |           |
|         |                                   | LAMP    | Classic flashing light   |         |           |
|         |                                   | SPY     | Control lamp   |         |           |
|         |                                   | bEEP    | Buzzer   |         |           |
| invk    | Motors and limit-switch inversion | oFF     | Synchronized right motor   | oFF     |           |
|         |                                   | on      | Synchronized left motor  |         |           |
| Enc     | Encoder activation                | on oFF  | In On enables the Encoder reading  | oFF     |           |
| LC.ov   | Courtesy light                    | τYτL    | Only during cycle active.  | τYτL    |           |
|         |                                   | t.2.3   | Courtesy light setting from 1s to 4min.  |         |           |
| PE.do   | Pedestrian opening                | 20 100  | Pedestrian opening space adjustment  | 100     |           |



# SELECTION OF THE SETTINGS



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

**SPECIAL MENU FUNCTIONS TABLE USER 2 24V DG**

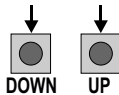
(To enter the Special Menu keep pressed UP and DOWN at the same time for 5 seconds.

To exit the Special Menu pressed END or keep pressed UP and DOWN at the same time for 5 seconds)

| MENU SP | Description                     | SET      | Description  | Default | Set value |
|---------|---------------------------------|----------|--|---------|-----------|
| PPEd    | Pedestrian Pause                | 5trt     | Pedestrian opening pause same as for total opening                       | 5trt    |           |
|         |                                 | d.5b     | OFF  |         |           |
|         |                                 | i2.3     | Setting from 1s to 4 min.  |         |           |
| 5.5tr   | Soft Start                      | 0 99     | Acceleration rampe (100% = 3s)   | 75      |           |
|         |                                 | d.5b     | OFF  |         |           |
| CYCL    | Number of cycl. for maintenance | 100 10E4 | Setting from 100 to 100000   | 10E4    |           |
| n.CYE   | Number of executed cycles       | 0 10E9   | Note: To reset keep pressed OK for 5 s.                                  |         |           |
| E.Pr    | Timer management                | d.5b     | OFF  | d.5b    |           |
|         |                                 | PH2      | Timer function ON on photo2 input  |         |           |
|         |                                 | PEd      | Timer function ON on pedestrian input                                    |         |           |
| 5.EdG   | Safety edge                     | d.5b     | Edge is ON but not protected   | d.5b    |           |
|         |                                 | B2       | Edge is ON and protected by a 8k2 resistor                               |         |           |
| PH.1C   | Photocell 1 management          | CLo5     | Photocell ON in closing  | CLo5    |           |
|         |                                 | oPEo     | Photocell ON in opening and closing                                      |         |           |
|         |                                 | 5toP     | Photocell ON also before opening   |         |           |
|         |                                 | PRrC     | Photocell stops in closing and closes when free                          |         |           |
|         |                                 | CL.1n    | Photocell gives a command for immediate closing during pause and opening |         |           |
|         |                                 | rPPR     | Photocell pausing time loading   |         |           |
| PH.2C   | Photocell 2 management          | CLo5     | Photocell ON in closing  | oPEo    |           |
|         |                                 | oPEo     | Photocell ON in opening and closing                                      |         |           |
|         |                                 | 5toP     | Photocell ON also before opening   |         |           |
|         |                                 | PRrC     | Photocell stops in closing and closes when free                          |         |           |
|         |                                 | CL.1n    | Photocell gives a closing command during opening, pause and closing      |         |           |
|         |                                 | rPPR     | Photocell pausing time loading   |         |           |
| 24VA    | 24Vaux output management        | RLY5     | 24Vaux output always power supplied                                      |         |           |
|         |                                 | oP.CL    | 24Vaux output power supplied only during opening and closing             |         |           |
|         |                                 | oPEo     | 24Vaux output power supplied only during opening                         |         |           |
|         |                                 | CLo5     | 24Vaux output power supplied only during closing                         |         |           |
|         |                                 | PRo5     | 24Vaux output power supplied only during pause                           |         |           |
|         |                                 | PHtE     | 24Vaux output for connection of photocell TX to autotest                 |         |           |



# SELECTION OF THE SETTINGS



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

**SPECIAL MENU FUNCTIONS TABLE USER 2 24V DG**

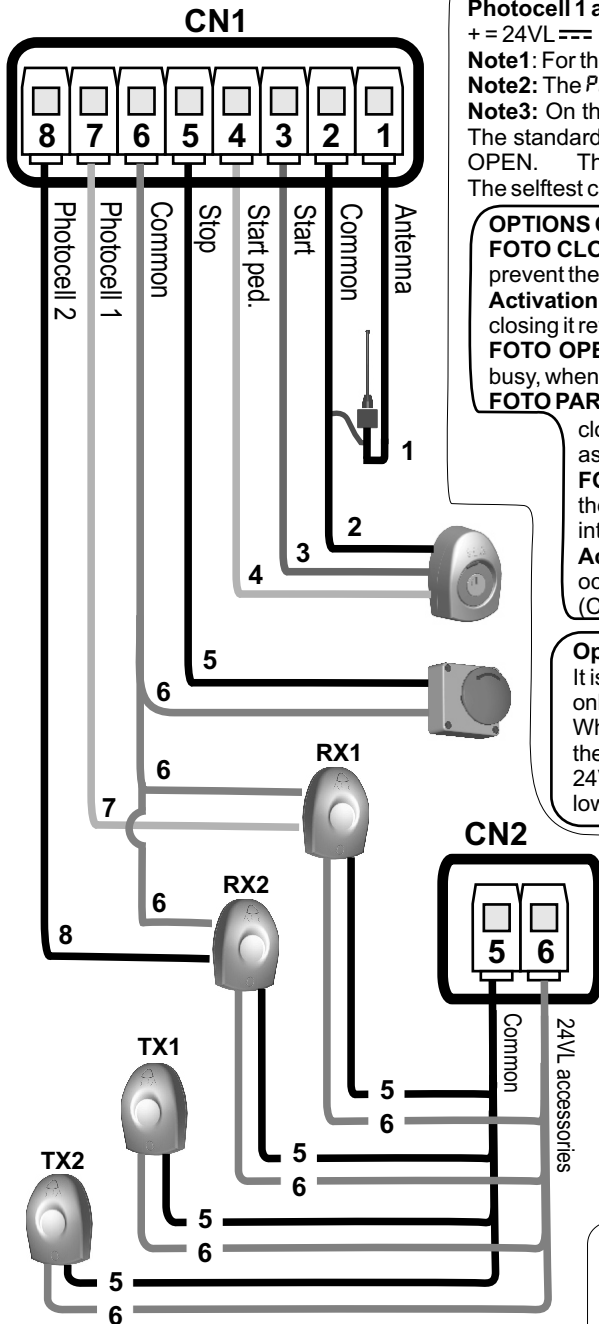
(To enter the Special Menu keep pressed UP and DOWN at the same time for 5 seconds.

To exit the Special Menu pressed END or keep pressed UP and DOWN at the same time for 5 seconds)

| MENU SP      | Description   | SET           | Description   | Default      | Set value |
|--------------|---|---------------|---|--------------|-----------|
|              |   | <i>PHEC</i>   | Phototest economy<br>Output for Self-test ON only during the operation of the motors.                                 |              |           |
| <i>rESP</i>  | Space retrieve                                      | <i>0 15</i>   | Retrieves the inertia of the motor after Stop or reversing from 0% to 15 %  | <i>5</i>     |           |
| <i>rPot</i>  | Reversing on limit switch                           | <i>d 5b 3</i> | After reading the limit switch in closing the motor inverts for the set time, adjustable from 0 to 3sec.              | <i>d 5b</i>  |           |
| <i>PaPr</i>  | Periodic Push Over                                  | <i>d 5b 8</i> | Allows the repetition of the Pushover function at a distance of time adjustable from 0 to 8 hours at hourly intervals | <i>d 5b</i>  |           |
| <i>ALLr</i>  | Antiintrusion alarm                                 | <i>d 5b</i>   | <b>If the limit switch is freed manually it forces the reclosing of the gate</b>                                      | <i>d 5b</i>  |           |
|              |   | <i>aLo</i>    | Only on closing limit switch  |              |           |
|              |   | <i>oPE</i>    | Only on opening limit switch  |              |           |
|              |   | <i>oPL</i>    | On limit switch in closing and in opening   |              |           |
| <i>tSEr</i>  | Electrolock release time                            | <i>d 5b 5</i> | <b>Sets the lock release time from 0 to 5 s</b>   | <i>1</i>     |           |
| <i>Lt IN</i> | Courtesy light management with timer                | <i>oFF</i>    | When timer is ON the courtesy light can be kept switched OFF  | <i>oFF</i>   |           |
|              |   | <i>on</i>     | With timer ON courtesy light can be kept ON   |              |           |
| <i>d RG</i>  | Events diagnostic                                   | <i>0 10</i>   | Shows last event (See alarms table)   |              |           |
| <i>Ph tE</i> | Auto-test photocells                                | <i>Ph 12</i>  | Auto-test active on Photo1 and Photo2   | <i>Ph 12</i> |           |
|              |   | <i>Ph 1</i>   | Auto-test active only on Photo1   |              |           |
|              |   | <i>Ph 2</i>   | Auto-test active only on Photo2   |              |           |
| <i>tLo 1</i> | Tolerance between stop and obstacle motor 1 opening | <i>0 100</i>  | Adjusts the tolerance between stop and obstacle   | <i>0</i>     |           |
| <i>tLc 1</i> | Tolerance between stop and obstacle motor 1 closing | <i>0 100</i>  | Adjusts the tolerance between stop and obstacle   | <i>0</i>     |           |
| <i>tLo 2</i> | Tolerance between stop and obstacle motor 2 opening | <i>0 100</i>  | Adjusts the tolerance between stop and obstacle   | <i>0</i>     |           |
| <i>tLc 2</i> | Tolerance between stop and obstacle motor 2 closing | <i>0 100</i>  | Adjusts the tolerance between stop and obstacle   | <i>0</i>     |           |
| <i>SOP 1</i> | Sensitivity on obstacle                             | <i>0 99</i>   | Adjusts the revesing sensitivity on motor 1 in opening.<br>Note: Only with Encoder On active.                         | <i>d 5b</i>  |           |
| <i>SCL 1</i> | Sensitivity on obstacle                             | <i>0 99</i>   | Adjusts the revesing sensitivity on motor 1 in closing.<br>Note: Only with Encoder On active.                         | <i>d 5b</i>  |           |
| <i>SOP 2</i> | Sensitivity on obstacle                             | <i>0 99</i>   | Adjusts the revesing sensitivity on motor 2 in opening.<br>Note: Only with Encoder On active.                         | <i>d 5b</i>  |           |
| <i>SCL 2</i> | Sensitivity on obstacle                             | <i>0 99</i>   | Adjusts the revesing sensitivity on motor 2 in closing.<br>Note: Only with Encoder On active.                         | <i>d 5b</i>  |           |
| <i>PSrd</i>  | Enter password                                      | <i>----</i>   | Allows the entering of a password blocking the control unit parameters modification (see page 38)                     |              |           |
| <i>End</i>   | Exit special menu                                   |               | Select END and press OK to exit the special menu.<br>The special menu switches off automatically after 20 minutes.    |              |           |



# START - STOP - PEDESTRIAN START - ANTENNA - PHOTOCELL - EDGE



## Photocell 1 and Photocell 2 Connections

+ = 24VL --- COM = 0V PH1 = Photocell contact 1 PH2 = Photocell contact 2

**Note1:** For the autotest connect the TX to the 24VL clamp and activate the Autotest function.

**Note2:** The PhEE will keep the photocells OFF while the gate is closed, thus saving energy.

**Note3:** On the PhEE menu you can also activate the self-test even on the single photocell.

The standard setting of the photocell 1 is FOTO CLOSE and the one of the photocell 2 is FOTO OPEN. The photocell 2 can be set also as TIMER (see TIMER function).

The selftest can be applied also on single photocell.

## OPTIONS ON FOTO1 and FOTO2 adjustable on on-board display or with JOLLY terminal.

**FOTO CLOSE activation (CLo5):** if occupied, reverses the movement in closing, during pause it prevent the closing.

**Activation repeat pause (rPPR):** If occupied, during pause it recharges the timer of pause. In closing it reverses the movement.

**FOTO OPEN activation (oPEo):** If activated the photocell blocks the movement as long as it's busy, when released the opening continues.

**FOTO PARK activation (PRrE):** in opening it is not active; in pause are activated it commands the closing when released, otherwise it's not active; in closing it stops the movement as long as it is busy, when released the closing continues.

**FOTO STOP activation (StoP):** When activated before the opening the photocell blocks the automation as long as it is busy, during the opening it will be ignored. In closing the intervention of the photocell causes the reopening.

**Activation PHOTO CLOSE IMMEDIATELY:** The photocell stops the gate as long as it is occupied in both opening and closing, when released it gives a closing command (Closing one second after release of the photocell).

## Options 24AU --- can be set with on-board Display or with Jolly device.

It is possible to chose when having tension on the 24AU output. The options are: always, only during opening, only during cycle, only before opening or only during pause.

When using control units with batteries and / or solar panels, we recommend connecting the accessories which are not used when operator stands still (e.g. photocells) to a 24VAux output, setting the option "oP.L.". With this setting you can save energy by lowering power consumption in stand-by, increasing the autonomy of the system.

## PEDESTRIAN START (N.O.) The pedestrian start can be connected between the clamps 2 and 4 of the CN1 terminal.

This input allows a partial opening the opening space can be set through the on-board display or through the JOLLY device.

**Note1:** The contact for partial opening is a N.O. Contact (Normally open).

**Note2:** In 2 BUTTONS logic it is necessary to keep pressed the Start Ped. to re-close the automation.

**Note3:** In dead man logic this button executes the re-closing if you keep it pressed.

**Note4:** When closed during pause, the gate will reclose only after this input has been reopened.

**TIMER activation:** This input can be transformed into TIMER (See TIMER).

## STOP (N.C.) The STOP is connected between the clamps 2 and 5 of the CN1 terminal.

The pressure on this button immediately stops the motor in any condition/position. A start command is needed to re-start the movement. After a stop the motor always re-starts in closing.

## START (N.O.) The START is connected between the clamps 2 and 3 of the CN1 terminal.

An impulse given to this contact opens and closes the automation depending on the selected logic it can be given by a key switch, a keypad, etc. To connect the other devices refer to the related instructions leaflets. (ie. loop detectors and proximity switches).

**Note1:** In DEAD MAN logic it is necessary to keep pressed the Start for the opening of the automation.

**Note2:** In 2 BUTTONS logic this button performs the opening.

**Timer activation:** it is possible to connect a timer on the start only in auto logic with time of pause different than DISB and with START IN PAUSE function OFF.

## TIMER

Can be activated through on-board display or through the Jolly programmer. In both cases it's a N.O. contact which provokes the opening of the automation keeping it open until it is activated. When it's released, the gate attends the set pausing time and executes the reclosing. The TIMER command can be activated on the inputs FOTO2, START PEDESTRIAN.

**Note1:** When activated on the pedestrian entry, the pedestrian will be disabled also on the radio transmitter.

**Note2:** In case of intervention of a security device during the timer (Stop, Ammeter, Edge), to restore the movement it will be necessary to give a start impulse.

**Note3:** In case of no power supply with open gate and active Timer the control unit will restore its use, otherwise if during restore of the power supply the TIMER is not activated it will be necessary to give a start impulse for the reclosing.





# SAFETY GATE OR AMPEROMETRIC MANAGEMENT

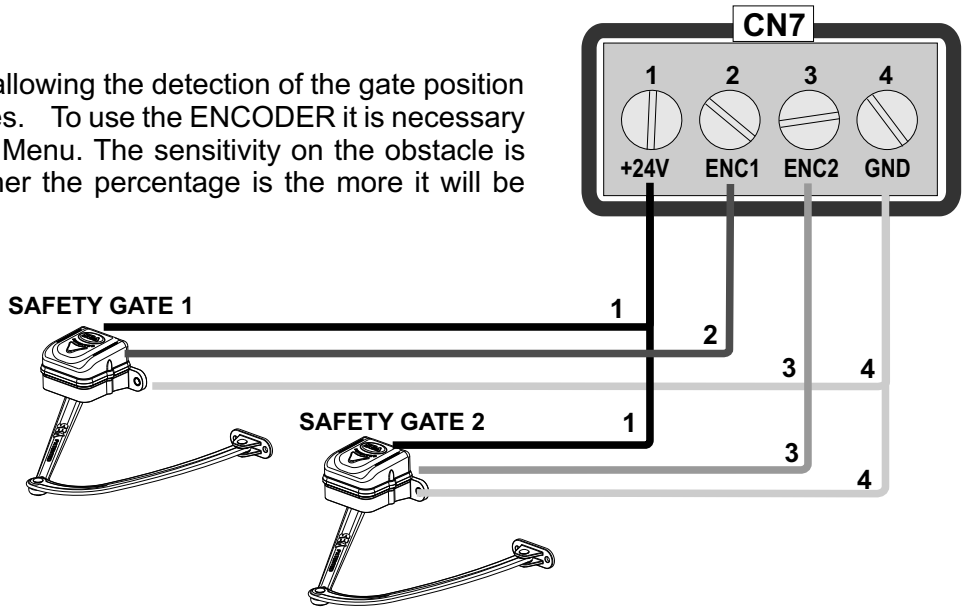
## AMPEROMETRIC DEVICE FOR ELECTROMECHANICAL OPERATORS

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. The sensitivity is adjustable for single leaf and single opening and closing direction through the torque parameter.

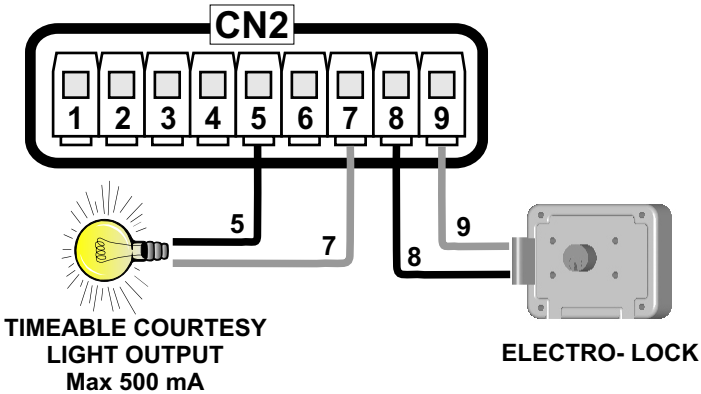
### SAFETY GATE

The Safety Gate is an ENCODER allowing the detection of the gate position and its reversing in case of obstacles. To use the ENCODER it is necessary to enable it inside the special ENC Menu. The sensitivity on the obstacle is adjustable from 0 - 99%. The higher the percentage is the more it will be difficult to detect the obstacle.

**ATTENTION:** The first operation after power failure, will be executed with the set speed to search the mechanical stops limit.

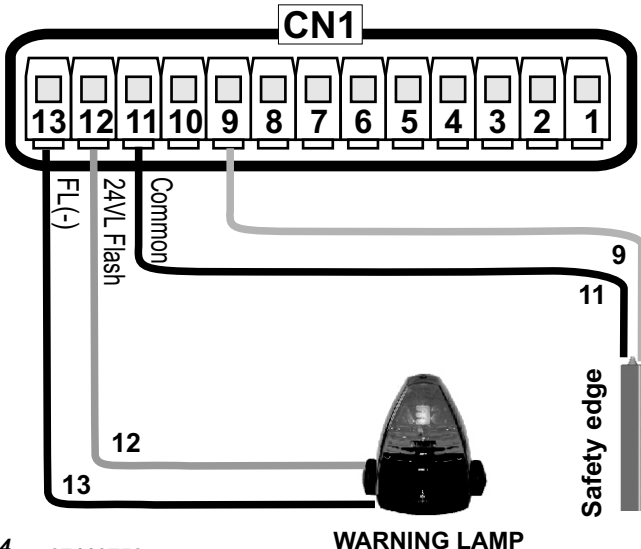


# ELECTRO- LOCK AND WARNING LAMP



**Electro-lock exit**  
An electro-lock of 12V --- 15W max can be connected. It is possible to deactivate the electro-lock if not used. This operation allows to save energy of the control unit. The release of the electro-lock can be 'timed' from 0 to 5 s.

**Flashing Lamp 24VL --- 15W (Warning lamp) / 24VL --- 4W Led**  
The warning lamp advises that the automatic gate is in movement performing 1 flash /second in opening and 2 flashes / second in closing. Instead it remains turned on fix during pause.  
To connect it, connect the wires of the warning lamp as shown in the figure. **Note:** It is recommended to use the flash 24V Led.  
Pre-flashing from 0 to 5 seconds can be activated before operator start or only before closing.  
Furthermore from the flashing lamp it is possible to verify some alarm signals. See alarms indications.  
It is possible to set this exit with fixed flashing also when the gate is not moving or it is possible to change this exit into control lamp. In such case all the indications of alarm remain on the warning lamp as long as they are active.



**SAFETY EDGE**  
It is possible to connect an active safety edge on the terminal CN1. If this device is pressed it opens the contact causing a partial inversion of the movement both in opening and in closing. If not used bridge the contacts 9 and 11 of CN1. Note: contact N.C.



## LIMIT SWITCH

### Limit switch

If not connected they don't have to be bridged.

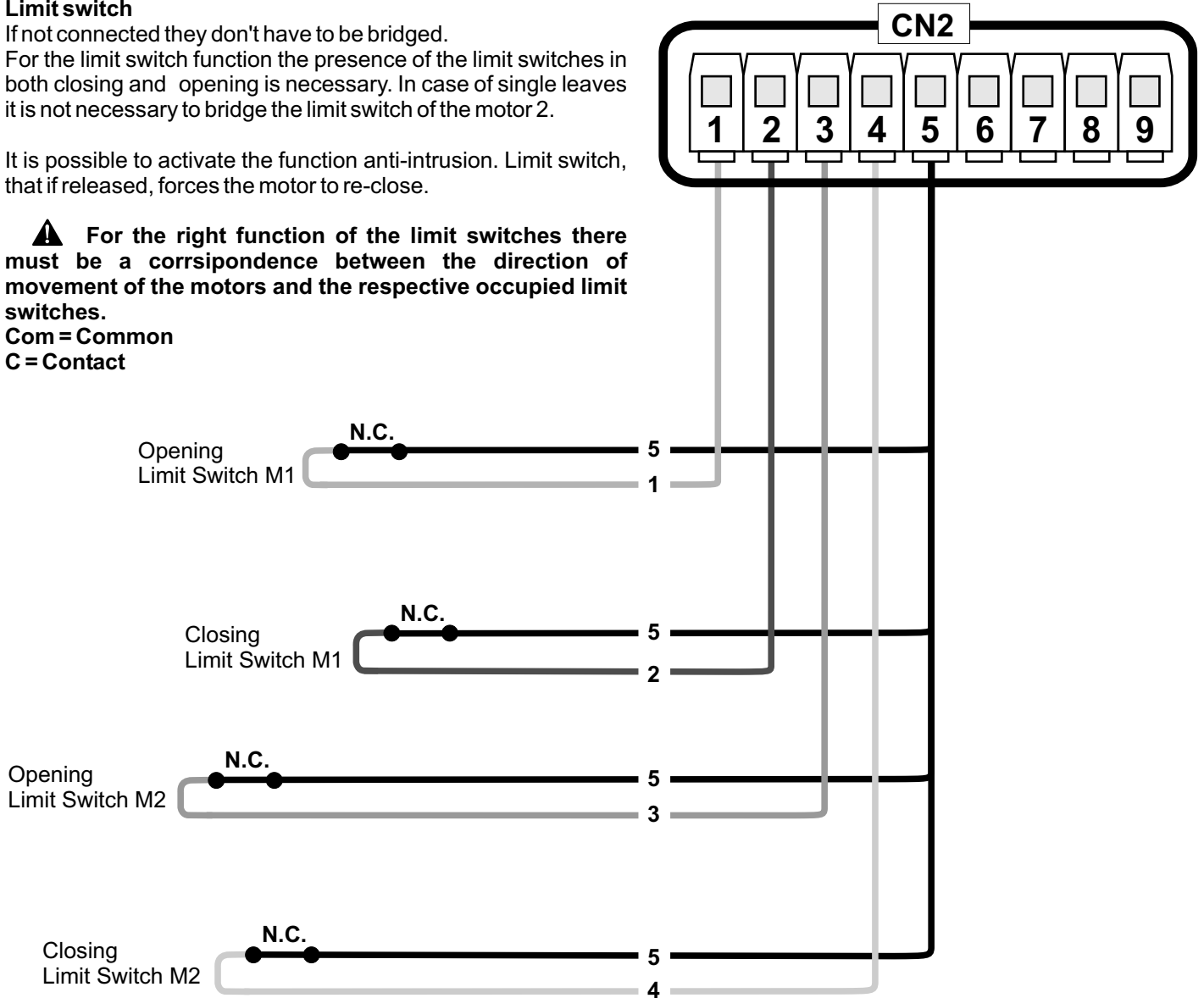
For the limit switch function the presence of the limit switches in both closing and opening is necessary. In case of single leaves it is not necessary to bridge the limit switch of the motor 2.

It is possible to activate the function anti-intrusion. Limit switch, that if released, forces the motor to re-close.

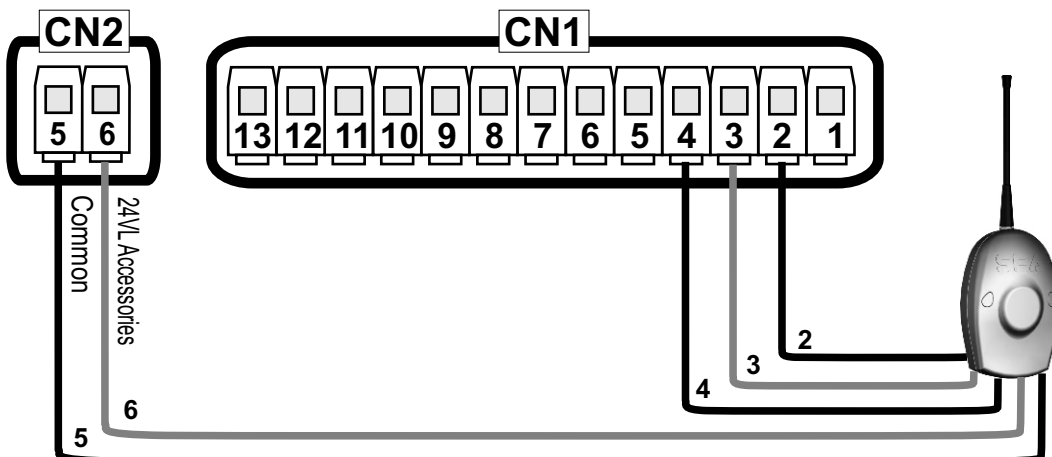
**⚠ For the right function of the limit switches there must be a correspondence between the direction of movement of the motors and the respective occupied limit switches.**

**Com = Common**

**C = Contact**



## EXTERNAL RECEIVER

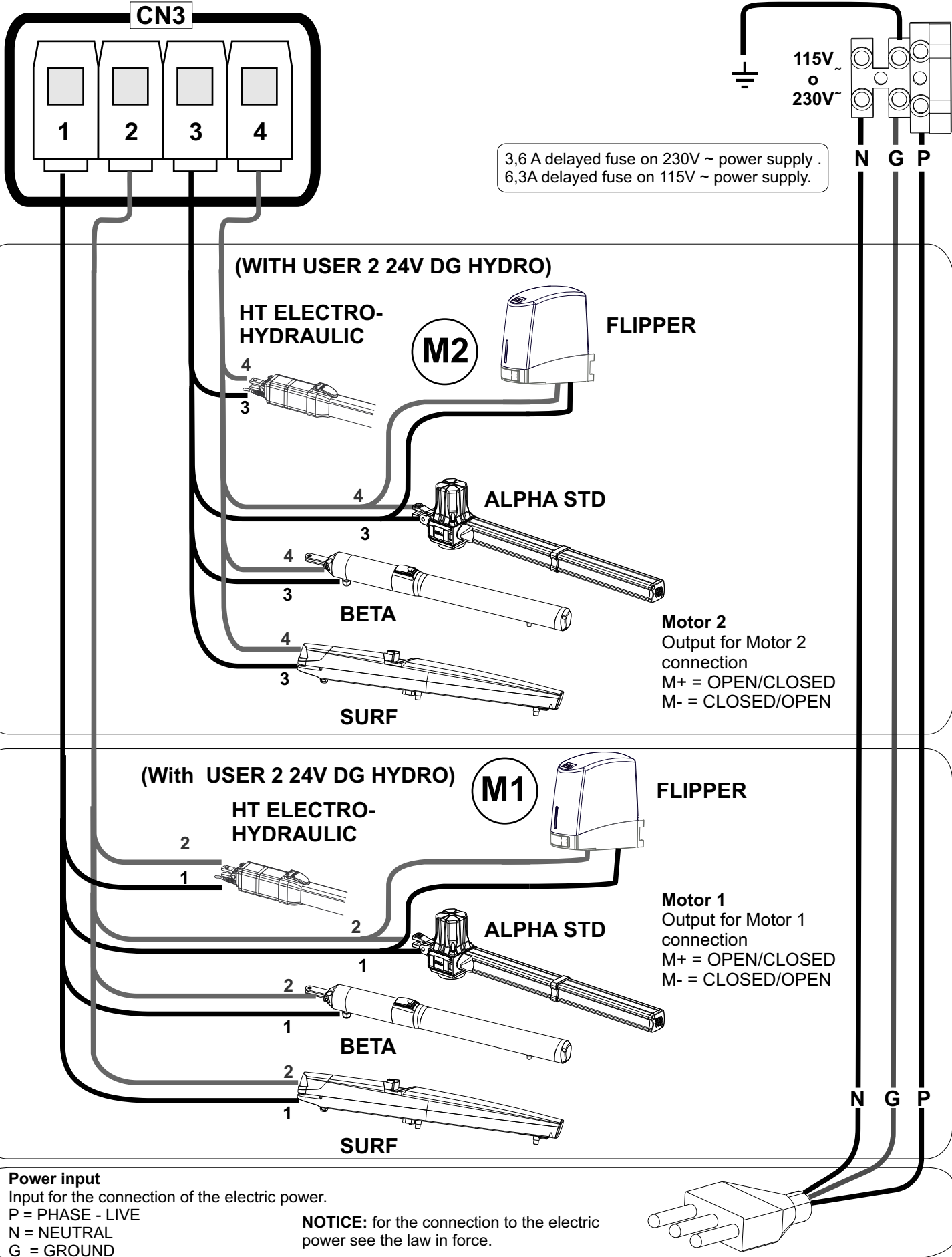


**Example: Connection of a radio receiver**

For the connection of the receiver refer to the relative instructions manual.



**POWER SUPPLY - MOTORS**







# **RADIO TRANSMITTER SELF LEARNING**

## **WITH RECEIVER ON BOARD OF CONTROL UNIT**

**⚠ WARNING:** Make the radio transmitters programming before you connect the antenna and insert the receiver into the special CMR connector (if available) with turned off control unit. (The control unit automatically recognizes if the receiver is a RF, RF Roll, RF Roll Plus or RF UNI module).

**With RF Roll or RF Roll Plus module it will be possible to use only Coccinella Roll or Coccinella Roll Plus radio transmitters. or Smart Dual Roll or Smart Dual Roll Plus.**

**With the RF UNI module it will be possible to use both the transmitters of the Roll Plus series and those with fixed code. The first memorized transmitter determines the type of the remaining radio transmitters.**

Select through the display **LR5M** and press OK, now select with the UP and DOWN buttons, the command to which you want to associate the button (it is possible to associate max. 2 commands) and press OK to confirm the choice, now press the button of the radio transmitter which you want to associate. If the storage is successful, the display will show **REN**.

If the receiver is a Rolling Code, press twice the button of the radio transmitter that you want to program to memorize the first TX. In the **LR5M** MENU it is possible to select **5LRt** (to associate a Start command), **5LPd** (Pedestrian Start), **RE5t** (For the activation of a contact on the EXP output), **5tOP** (To associate the STOP command to the TX), **dEL**. (To delete all TX), **dEL5** (To delete the single transmitter only if it is a Rolling Code Plus).

- Notes:**
- Enter radio transmitters learning only when the working cycle stops and the gate is closed.
  - If the radio transmitters are Rolling Code it's possible to memorize up to 800 codes (buttons).
  - If the radio transmitters are with fixed code it will be possible to memorize up to max. 30 codes (buttons).
  - You can store max. 2 of the available 4 functions. If the control unit receives a code which was already associated to another function it will be updated with the new function.

**DELETE TRANSMITTERS FROM THE RECEIVER**

With modules different from RF UNI, it will be possible to delete only the entire memory of the receiver. Proceed as follows: select from the menu **LR5M dEL** and hold the OK button until the display shows the message **donE**.

With the RF UNI module, it will be possible to also delete the single button of the transmitter. It can be done in two ways:  
 1) If you have the transmitter, or if you are using transmitters with fixed code, the cancellation can be executed by simply retransmitting the code. Ex. Button 1 of the transmitter memorized as START; access the menu **LR5M** press OK, select **5LRt**, press OK. Send a **5LRt** command from the transmitter and on the display will show **dEL**. At this point the single button results deleted.

2) If you do not have a transmitter, or you are using a Roll Plus transmitter, you can delete the transmitter selecting the serial number of the transmitter to be deleted. Proceed as follows: Access the menu **LR5M**, press OK, select **dEL5**, press OK, choose the memory location to be deleted through the UP and DOWN buttons, press OK, check on the display if the serial number of the transmitter to be deleted is the right one, press OK, on the display shows **5LRt**, if the transmitter to be deleted is the right one press OK, otherwise press the DOWN button to return to the menu **LR5M**.

**Note:** When using Roll Plus transmitters, it is recommended to record on a table similar to the below example, the serial number associating it to the memory location where it was stored.

**TABLE EXAMPLE**

| Memory location \ Transmitter button | 1 | 2 | 3 | 4 | Serial number | Customer |
|--------------------------------------|---|---|---|---|---------------|----------|
| 0                                    |   |   |   |   |               |          |
| 1                                    |   |   |   |   |               |          |
| 2                                    |   |   |   |   |               |          |
| 3                                    |   |   |   |   |               |          |
| 4                                    |   |   |   |   |               |          |
| 5                                    |   |   |   |   |               |          |
| 6                                    |   |   |   |   |               |          |
| 7                                    |   |   |   |   |               |          |
| 8                                    |   |   |   |   |               |          |
| 9                                    |   |   |   |   |               |          |
| 10                                   |   |   |   |   |               |          |
| 11                                   |   |   |   |   |               |          |
| 12                                   |   |   |   |   |               |          |
| 13                                   |   |   |   |   |               |          |
| 14                                   |   |   |   |   |               |          |
| 15                                   |   |   |   |   |               |          |
| 16                                   |   |   |   |   |               |          |
| 17                                   |   |   |   |   |               |          |
| 18                                   |   |   |   |   |               |          |
| 19                                   |   |   |   |   |               |          |
| 20                                   |   |   |   |   |               |          |



## **FUNCTION LOGIC**

### **AUTOMATIC LOGIC**

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: 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 ST.PS and choosing ON or OFF. By default, the parameter is OFF.**

### **SECURITY LOGIC**

A start impulse opens the gate. A second impulse during opening reverses the movement.  
A start impulse during closing reverses the movement.

**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 ST.PS and choosing ON or OFF. By default, the parameter is OFF.**

### **STEP BY STEP TYPE 1 LOGIC**

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 ST.PS and choosing ON or OFF. By default, the parameter is OFF.**

### **STEP BY STEP TYPE 2 LOGIC**

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 ST.PS and choosing ON or OFF. By default, the parameter is OFF.**

### **DEAD MAN LOGIC**

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.

### **2 PUSHBUTTONS LOGIC**

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

## **PASSWORD ENTERING MANAGEMENT**

With a new control unit all menus can be displayed and set and the password will be disabled.

Selecting one of the Menus and keeping UP and DOWN pressed at the same time for 5 seconds, you will access the SP Menu containing the *P5.r.d.* Submenu.

Pressing OK in the *P5.r.d.* Menu, you will proceed with the entering of the numeric code of the 4-digit PASSWORD.

Use UP and DOWN to increase or decrease the number, press OK to confirm it and you will pass automatically to the entering of the next number. Pressing OK after the last entered number the word *5URÈ* appears, confirm the activation of the PASSWORD and the message *done* appears, pressing UP or DOWN instead you can cancel the operation and *NULL* will appear on the display.

Once entered the PASSWORD, it will be definitively activated, once the display switch off timeout has expired, or by turning off and on again the control unit. Once the PASSWORD has been activated, the menus of the display can be only displayed but not set. To unlock them you must enter the correct PASSWORD in the *P5.r.d.* menu, if the password is wrong the message *Err* will appear.

At this point, if the password has been entered correctly, the menus will be unlocked and it will be possible to change the parameters of the control unit again.

If the control unit has been unlocked through *P5.r.d.* Menu, it is possible to enter a new and different password, using the same entering process as for the first one; at this point, the old password will no longer be valid.

If the password has been forgotten, the only way to unlock the control unit is to contact the SEA technical assistance, which will assess whether to provide the procedure to unlock the control unit or not.

**Note:** The password cannot be set through the Jolly terminal.



# **PROGRAMMER JOLLY PARAMETERS ADJUSTMENT**

The JOLLY programmer allows to keep under control and to change all parameters of the control unit without need to use the buttons of the control unit. Compared to the on-board display, the programmer allows to view the programming instructions in the user's language and in a non-encrypted way. In addition to the JOLLY programmer, the user can work comfortably standing up without looking at the control unit.

The arrow indicates that the parameter can be changed with the + and - buttons.

|                 |   |
|-----------------|---|
| <b>Screen 1</b> |   |
| Language: IT    | Available languages: IT,EN,FR,ES [ Italian, English, Spanish, French] |



|                 |   |
|-----------------|---|
| <b>Screen 2</b> |   |
| Motor           | [Field, Alpha/Surf, Beta/FlipSp, Flipper] |
| Enc             | Encoder [on/off]                          |
| Speed1          | [30÷100 ] motor 1 speed adjustment        |
| Speed2          | [30÷100 ] motor 2 speed adjustment        |



|                 |   |
|-----------------|---|
| <b>Screen 3</b> |   |
| Slow Speed      | [30÷100 ] slowdown speed adjustment                     |
| Learn speed     | [30÷100 ] selflearning speed adjustment                 |
| Sp.Decel.O1     | [Off÷100 ] motor 1 slowdown space in opening adjustment |
| Sp.Decel.C1     | [Off÷100 ] motor 1 slowdown space in closing adjusmtent |



|                 |   |
|-----------------|---|
| <b>Screen 4</b> |   |
| Sp.Decel.O2     | [Off÷100 ] motor 2 slowdown space in opening adjustment |
| Sp.Decel.C2     | [Off÷100 ] motor 2 slowdown space in closing adjustment |
| SoftStart       | [0÷100 ] adjusts the acceleration ramp                  |
| Torque op.M1    | [10÷100]% (max. motors current)                         |



|                 |   |
|-----------------|---|
| <b>Screen 5</b> |   |
| Torque cl.M1    | [10÷100]% (max. Motors current)               |
| Torque op.M2    | [10÷100]% (max. Motors current)               |
| Torque.cl.M2    | [10÷100]% (max. Motors current)               |
| Cycle           | [Secur./auto/deadman/step1/step2/two buttons] |



|                           |  |
|---------------------------|--|
| <b>Screen 6</b>           |  |
| Double leaf / Single leaf |  |
| Pause time                | [0÷240]s (pausing time in seconds, 0s halfautomatic logic) |
| Learning                  | Times learning [On-Off]                                    |
| Cycles                    | [0÷... ] (Number of executed cycles )                      |



|                 |  |
|-----------------|--|
| <b>Screen 7</b> |  |
| Pedestrian      | [30÷100]% (Pedestrian opening rate)  |
| Open delay      | [Off÷6s]% (Leaf delay in opening)  |
| Close delay     | [Off÷20s]% (Leaf delay in closing)   |
| Anti Intrusion  | [Off,Open,Close.,op.cl.] (Implies the presence of a N.C. contact on limit switch which if released forces the motors in closing) |



|                 |  |
|-----------------|--|
| <b>Screen 8</b> |  |
| Preblink        | [Close, Off, 0÷5s] (Only before closing, OFF from 0 to 5s)   |
| Light Time      | [Cycle, Off, 0÷240s] (Only during cycle, OFF from 0 to 240s) |
| Ph.test         | [1,2-1-2] (Only on Foto1, only on Foto2, on both)            |
| Max Cycles      | [100÷100000] (Number of cycles for maintenance)              |





# **PROGRAMMER JOLLY PARAMETERS ADJUSTMENT**

| <b>Screen 9</b> |   |   |
|-----------------|---|---|
| Flash           | [Normal/Control/always/beep]  | ← |
| Photo1          | [Close/Open/stop/park/close imm./rel.pause]                               | ← |
| Photo2          | [Close./Open/stop/park/close imm./rel.pause]                              | ← |
| 8k2 edge        | [On-Off] (On ON it allows to connect a balanced edge with 8k2 resistance) | ← |

| <b>Screen 10</b> |  |   |
|------------------|--|---|
| Timer            | [OFF-Ped-Foto2] (Allows the timer activation on the Foto2 or pedestrian input)                         | ← |
| Pos. Recovery    | [0÷100]% (Percentage of position recovery)   | ← |
| 24V aux          | [Cycle/in open /in clos./pause/ph.test/ph.T.ECO/always]  | ← |
| Start pause      | [ON/OFF] (On ON and if the autom. clos. is on ON a start will cause the immediate closure of the gate) | ← |

| <b>Screen 11</b> |   |   |
|------------------|---|---|
| Mot.inv.         | [ON/OFF] (Allows to changes at the same time the limit switch and the direction of motor rotation without disconnecting the cables) | ← |
| Start            | [ON/OFF] (Equivalent to giving a test start)  | ← |
| Rev. Mot.        | [0÷100%] (Activates an inversion at the end of closing)   | ← |
| P.Ped            | [start, Off, 0÷240 sec] (Differenciates the pedestrian pause from the total one)  | ← |

| <b>Screen 12</b> |   |   |
|------------------|---|---|
| Tl.op.1          | [0÷ 100%] (Tolerance between stop and obstacle) | ← |
| Tl.cl.1          | [0÷ 100%] (Tolerance between stop and obstacle) | ← |
| Tl.op.2          | [0÷ 100%] (Tolerance between stop and obstacle) | ← |
| Tl.cl.2          | [0÷ 100%] (Tolerance between stop and obstacle) | ← |

| <b>Screen 13</b> |  |   |
|------------------|--|---|
| Push ov.         | [Off,open., close.,Open.cl.] (Activates the motors at max. torque at the end of closing or opening or in both cases) | ← |
| Leaf Stroke      | [0÷3 sec] (Facilitates the electrolock release)  | ← |
| P.O.PR.          | [0÷8 ore] (Activates the periodic Push Over with stoped motors)  | ← |
| Lock             | [0 a 5s] (Activates the click of the lock from 0 to 5 seconds)   | ← |

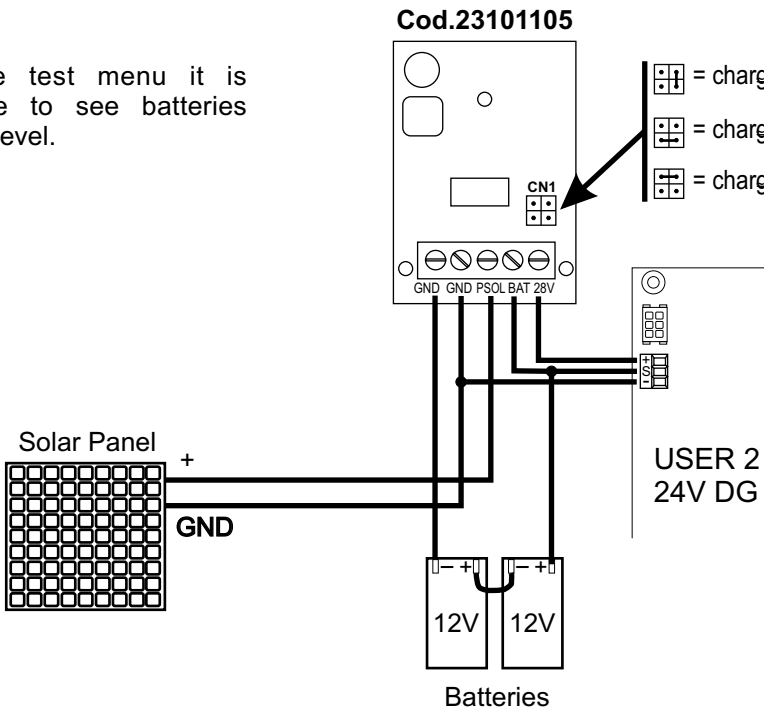
| <b>Screen 14</b> |   |   |
|------------------|---|---|
| L.Timer          | [Off-On] Allows to keep switched on or off the control light if a Timer is active | ← |

| <b>Screen 15</b> |   |   |
|------------------|---|---|
| Event            | Summarizes the last 10 events that occurred on the unit | ← |



**CONNECTION OF BATTERIES TO BATTERY CHARGER CARD**

**NOTE:**  
On the test menu it is possible to see batteries charge level.



28V=== Battery charger (BAT)  
Positive battery +  
Negative battery charger -

| Battery current (mA) | Battery (Ah) |
|----------------------|--------------|
| 800                  | 12 or 16     |
| 360                  | 7            |
| 200                  | 2            |

Insert two 12V batteries connected in series.

**ALARMS INDICATIONS**

| Signals | Kind of alarm                 | Solutions   |
|---------|-------------------------------|---|
| FRLUL   | Motors current fault          | Sure there are no short circuits on the motor or on the control unit.   |
| FEL24   | 24V Power supply fault        | Make sure there are no short circuits on the wiring or on the control unit and no overloads.  |
| FELAU   | 24Vaux output voltage         | Make sure there are no short circuits on wiring or control unit and no overload.  |
| FEL1    | Power supply fault            | Check the network or the F1 fuse.   |
| FbRE    | Battery voltage fault         | If network is not present   |
| FEdG    | Balanced edge input fault     | Check for a 8.2 Ohms resistive value on the edge input, if not available enter it, or disable the reading of the 8k2 in the special menu. |
| FPho    | Self-test photocells fault    | Check the photocells operation and / or connections on the control unit.  |
| FELC    | Limit switch activation fault | Check the operation of both limit switches and / or correspondence between movement direction of the motor and engaged limit switches.    |
| FELFL   | Flashing lamp fault           | Check connections and / or conditions of the lamp.  |
| CYCL    | Max. cycles                   | Maintain and / or reset the number of performed cycles.   |

**Note:** To exit from the error messages, press OK. If the error persists, make all required checks for the specific error and / or disconnect the device that generates the error to see if the error disappears.

At each opening and closing of the automation the flashing light will blink. It blinks once per second during opening and twice per second during closing, while it remains lit during pause.

It is possible to view the alarms also on the flashing light or on the control lamp, simply by observing the number of flashes emitted and verifying the reference in the table below:

| Flashings Number | Kind of alarm        | Flashings Number | Kind of alarm       |
|------------------|----------------------|------------------|---------------------|
| 9                | Motors fault         | 5                | Stop                |
| 2                | Photocell in closing | 7                | Max. Reached cycles |
| 3                | Photocell in opening | 6                | Closing impact      |
| 6                | Opening impact       | 4 fast           | Limit switch error  |
| 4                | Safety edge          |                  |                     |

**ALARM SIGNALS**

Periodically, in relation to the number of manoeuvre and the type of gate, it is recommended to execute, if the gate has modified the attritions and it doesn't work, **the re-programming of the times of learning on the electronic board.**

The 7 flashes refer to the attainment of the established maximum cycles for the maintenance of the control unit, therefore it is recommended to perform the maintenance and to put on zero the number of cycles.



# **TROUBLE SHOOTING**

| <b>Advices</b>   |  |  |
|--|--|--|
| <b>Make sure all Safety LED are turned ON</b>          |  |  |
| <b>All not-used N.C. contacts must have jumpers</b>    |  |  |
| <b>Problem Found</b>                                   | <b>Possibile Cause</b>   | <b>Solutions</b>   |
| Motor doesn't respond to any START impulse             | a.) Jumper missing on one of the N.C. Contacts<br>b.) Burnt fuse   | a.) Check the connections or the jumpers on the connections of the safety edge, of the stop and of the photocell<br>b.) Replace the burned fuse on the control unit led 1 turned on. |
| Gate doesn't move while the motor is running           | a.) The motor is in the released position<br>b.) There is an obstacle  | a.) Re-lock the motor<br>b.) Remove obstacle   |
| Gate doesn't reach the complete Open / Closed position | a.) Wrong setting of the limit switches<br>b.) Error on programming<br>c.) Gate is stopped by an obstacle<br>d.) The fitting geometry is inadequate<br>e.) Torque or speed too low | a.) Set limit switches<br>b.) Repeat programming<br>c.) Remove obstacle<br>d.) Check fitting geometry following the operator installation manual<br>e.) Increase torque parameter    |
| The gate opens but doesn't close                       | a.) The photocell contacts are not closed<br>b.) Ammeter alarm   | a.) Check the jumpers or the signals on the flashing lamp or on the display<br>b.) Check if the ammeter alarm has intervened and eventually increase the torque parameter.           |
| The gate doesn't close automatically                   | a.) Pause time set to high<br>b.) Control unit in semi-autom. logic  | a.) Adjust pause time<br>b.) Adjust the automatic or security logic  |

## **Page for both installer and user**

### **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**

| <b>WAREHOUSING TEMPERATURES</b> |                        |                               |                               |
|---------------------------------|------------------------|-------------------------------|-------------------------------|
| <b>T<sub>min</sub></b>          | <b>T<sub>Max</sub></b> | <b>Dampness<sub>min</sub></b> | <b>Dampness<sub>Max</sub></b> |
| - 20°C                          | + 65°C                 | 5% <i>Not condensing</i>      | 90% <i>Not condensing</i>     |

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.*

## CONDIZIONI DI VENDITA

**EFFICACIA DELLE PRESENTI CONDIZIONI GENERALI DI VENDITA:** Le presenti condizioni generali di vendita si applicano a tutti gli ordini indirizzati a SEA S.p.A. Tutte le vendite fatte da SEA ai clienti sono regolate secondo le presenti condizioni di vendita che costituiscono parte integrante del contratto di vendita ed annullano ogni clausola contraria o pattuizioni particolari presenti nell'ordine o in altro documento proveniente dall'acquirente (cliente)

**AVVERTENZE GENERALI** Gli impianti di automazioni porte e cancelli vanno realizzati esclusivamente con componenti SEA, salvo accordi specifici. L'inosservanza delle norme di sicurezza vigenti (Norm. EUROPEE EN 12453 - EN 12445 e altro) e di buona tecnica esclude la SEA da ogni responsabilità. La SEA non risponde del mancato rispetto della corretta e sicura installazione secondo le norme.

**1) PROPOSTA D'ORDINE** La proposta d'ordine si intenderà accettata solo dopo la sua approvazione da parte della SEA. Conseguenza della sua sottoscrizione, l'acquirente sarà vincolato alla stipula di un contratto d'acquisto, secondo quanto contenuto nella stessa proposta d'ordine e nelle presenti condizioni di vendita. Viceversa, la mancata comunicazione all'acquirente dell'approvazione della proposta d'ordine, non comporta la sua automatica accettazione da parte della SEA

**2) VALIDITÀ OFFERTA** Le offerte proposte dalla SEA o dalla sua struttura commerciale periferica, avranno una validità di 30 giorni solari, salvo diversa comunicazione in merito.

**3) PREZZI** I prezzi della proposta d'ordine sono quelli del listino in vigore alla data della redazione della stessa. Gli sconti applicati dalla struttura commerciale periferica della SEA si intenderanno validi solo dopo la loro accettazione da parte della SEA. I prezzi si intendono per merce resa franco ns. stabilimento in Teramo, esclusi IVA ed imballaggi speciali. La SEA si riserva il diritto di modificare in qualsiasi momento il listino, dando opportuno preavviso alla rete di vendita. Le condizioni speciali riservate agli acquisti con formula agevolata Qx, Qx1, Qx2, Qx3 sono riservate ai distributori ufficiali dietro accettazione scritta da parte della direzione SEA.

**4) PAGAMENTI** Le forme di pagamento ammesse sono quelle comunicate o accettate di volta in volta dalla SEA. Il tasso di interesse sul ritardo da pagamento è del 1,5% mensile e comunque non oltre il tasso massimo legalmente consentito.

**5) CONSEGNA** La consegna avverrà indicativamente ma non tassativamente entro 30 giorni lavorativi dalla data di ricezione dell'ordine, salvo diverse comunicazioni in merito. Il trasporto degli articoli venduti sarà effettuato a spese ed a rischio dell'acquirente. La SEA si libera dall'obbligo della consegna rimettendo la merce al vettore, sia esso scelto dalla SEA oppure dall'acquirente. Eventuali smarrimenti e/o danneggiamenti della merce dovuti al trasporto, sono a carico dell'acquirente.

**6) RECLAMI** Eventuali reclami e/o contestazioni dovranno pervenire alla SEA entro 8 giorni solari dalla ricezione della merce, supportati da idonei documenti provanti la loro veridicità.

**7) FORNITURA** L'ordine in oggetto viene assunto da SEA senza alcun impegno e subordinatamente alle possibilità di approvvigionamento delle materie prime occorrenti alla produzione; eventuali mancate esecuzioni totali o parziali non possono dar luogo a reclami e riserve per danni. La fornitura SEA è strettamente limitata alla sola merce di sua produzione, esclusi il montaggio, l'installazione ed il collaudo. La SEA declina pertanto ogni responsabilità per danni che dovessero derivare, anche a terzi, dall'inosservanza delle norme di sicurezza e della buona regola d'arte nelle fasi dell'installazione e dell'impiego dei prodotti venduti.

**8) GARANZIA** La garanzia minima è di 12 mesi e può essere estesa, come di seguito, in caso di riconsegna del certificato di garanzia.

**SILVER:** Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 24 mesi dalla data di fabbricazione riportata sull'operatore.

**GOLD:** Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 36 mesi dalla data di fabbricazione riportata sull'operatore.

**PLATINUM:** Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 36 mesi dalla data di fabbricazione riportata sull'operatore. La garanzia di base (36 mesi) sarà estesa per ulteriori 24 mesi (fino ad un totale di 60 mesi) qualora venga acquistato il certificato di garanzia che dovrà essere compilato e rispedito alla SEA S.p.A. entro 60 giorni dall'acquisto. L'elettronica e le centrali di comando sono garantite per 24 mesi dalla data di fabbricazione. Nell'eventualità di difettosità del prodotto, la SEA si impegna alla sua sostituzione gratuita oppure alla sua riparazione, previa restituzione al proprio centro di riparazione. La definizione di stato di garanzia è ad insindacabile giudizio della SEA. I pezzi sostitutivi restano di proprietà della SEA. In modo vincolante, il materiale dell'acquirente ritenuto in garanzia deve essere spedito al centro di riparazione della SEA in porto franco e sarà rispedito dalla SEA in porto assegnato. La garanzia non si estende alla manodopera eventualmente accorsa. I difetti riconosciuti non produrranno alcuna responsabilità e/o richiesta di danni, di qualsiasi natura essi siano, da parte dell'acquirente nei riguardi della SEA. La garanzia non è in ogni caso riconosciuta qualora sia stata apportata alla merce qualsivoglia modifica, oppure vi sia stato un uso improprio, oppure si sia in presenza di una qualsivoglia sua manomissione o di un montaggio non corretto, oppure se sia stata rimossa l'etichetta apposta dal produttore comprensiva del marchio SEA registrato n° 804888. La garanzia non è inoltre valida nel caso la merce SEA sia stata in parte o in toto accoppiata a componenti meccanici e/o elettronici non originali, ed in particolare in assenza di una specifica autorizzazione in merito, ed inoltre nel caso in cui l'acquirente non sia in regola con i pagamenti. La garanzia non comprende danni derivati dal trasporto, materiale di consumo, avarie dovute al mancato rispetto delle specifiche prestazionali dei prodotti indicate nel listino. Non è riconosciuto alcun indennizzo durante il tempo di riparazione e/o sostituzione della merce in garanzia. La SEA declina ogni responsabilità per danni a cose o persone derivanti dall'inosservanza delle norme di sicurezza e della non conforme installazione o dall'impiego errato dei prodotti venduti. La riparazione dei prodotti in garanzia e fuori garanzia è subordinata al rispetto delle procedure comunicate da SEA.

**9) RISERVATO DOMINIO** Sulla merce venduta è valida la clausola del riservato dominio, della quale la SEA deciderà autonomamente se avvalersi o meno, in virtù della quale l'acquirente acquisisce la proprietà della merce, solo dopo che il suo pagamento sia stato completamente effettuato.

**10) FORO COMPETENTE** Per qualsiasi controversia avente per oggetto l'applicazione di questo contratto, viene eletto competente il Foro di Teramo. La lingua valida nell'interpretazione di cataloghi, manuali di installazione, condizioni di vendita o altro è quella italiana. La SEA si riserva la facoltà di apportare modifiche tecniche atte a migliorare i propri prodotti, presenti o meno in questo Listino, in qualsiasi momento senza preavviso. La SEA declina ogni responsabilità derivante da possibili inesattezze contenute nel presente listino, derivanti da errori di stampa e/o trascrizione. Il presente Listino annulla e sostituisce quelli precedenti. L'acquirente ai sensi della legge 196/2003 (codice privacy) acconsente all'inserimento dei propri dati personali derivanti dal presente contratto negli archivi informatici e cartacei della SEA S.p.A. al loro trattamento per motivi commerciali ed amministrativi.

**Diritti di proprietà industriale:** il cliente, con l'acquisto, accetta le presenti condizioni di vendita e riconosce in capo a SEA la titolarità esclusiva del marchio internazionale SEA registrato n. 804888 apposto sulle etichette dei prodotti e/o sui manuali e/o su ogni altra documentazione, e si impegna ad utilizzare il medesimo nella propria attività di rivendita e/o installazione secondo modalità che non ne riducano in alcun modo i diritti, a non rimuovere, sostituire o alterare marchi o altri segni distintivi di qualsiasi genere apposti ai prodotti.

E' vietata ogni forma di riproduzione o utilizzo del marchio SEA e di ogni altro segno distintivo presente sui prodotti, salvo autorizzazione scritta di SEA S.p.A..

**Agli effetti dell'articolo 1341 del C.C. si approvano specificatamente per iscritto le clausole di cui ai numeri:**

**4) PAGAMENTI - 8) GARANZIA - 10) FORO COMPETENTE**

## TERMS OF SALES

**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. Non-compliance 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. 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.

**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. Industrial ownership rights: once the Buyer has recognized that SEA has the exclusive legal ownership of the registered SEA brand, 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 expressively clauses under numbers:**

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



### **Italiano** AVVERTENZE GENERALI PER INSTALLATORE E UTENTE

1. Leggere attentamente le **Istruzioni di Montaggio** e le **Avvertenze Generali** prima di iniziare l'installazione del prodotto. Conservare la documentazione per consultazioni future
2. Non disperdere nell'ambiente i materiali di imballaggio del prodotto e/o circuiti
3. Questo prodotto è stato progettato e costruito esclusivamente per l'utilizzo indicato in questa documentazione. Qualsiasi altro utilizzo non espressamente indicato potrebbe pregiudicare l'integrità del prodotto e/o rappresentare fonte di pericolo. L'uso improprio è anche causa di cessazione della garanzia. La SEA S.p.A. declina qualsiasi responsabilità derivata dall'uso improprio o diverso da quello per cui l'automatismo è destinato.
4. I prodotti SEA sono conformi alle Direttive: Macchine (2006/42/CE e successive modifiche), Bassa Tensione (2006/95/CE e successive modifiche), Compatibilità Elettromagnetica (2004/108/CE e successive modifiche). L'installazione deve essere effettuata nell'osservanza delle norme EN 12453 e EN 12445.
5. Non installare l'apparecchio in atmosfera esplosiva.
6. SEA S.p.A. non è responsabile dell'inosservanza della Buona Tecnica nella costruzione delle chiusure da motorizzare, nonché delle deformazioni che dovessero verificarsi durante l'uso.
7. Prima di effettuare qualsiasi intervento sull'impianto, togliere l'alimentazione elettrica e scollegare le batterie. Verificare che l'impianto di terra sia realizzato a regola d'arte e collegarvi le parti metalliche della chiusura.
8. Per ogni impianto SEA S.p.A. consiglia l'utilizzo di almeno una segnalazione luminosa nonché di un cartello di segnalazione fissato adeguatamente sulla struttura dell'infisso.
9. SEA S.p.A. declina ogni responsabilità ai fini della sicurezza e del buon funzionamento della automazione, in caso vengano utilizzati componenti di altri produttori.
10. Per la manutenzione utilizzare esclusivamente parti originali SEA.
11. Non eseguire alcuna modifica sui componenti dell'automazione.
12. L'installatore deve fornire tutte le informazioni relative al funzionamento manuale del sistema in caso di emergenza e consegnare all'Utente utilizzatore dell'impianto il libretto d'avvertenze allegato al prodotto.
13. Non permettere ai bambini o persone di sostare nelle vicinanze del prodotto durante il funzionamento. L'applicazione non può essere utilizzata da bambini, da persone con ridotte capacità fisiche, mentali, sensoriali o da persone prive di esperienza o del necessario addestramento. Tenere inoltre fuori dalla portata dei bambini radiocomandi o qualsiasi altro datore di impulso, per evitare che l'automazione possa essere azionata involontariamente.
14. Il transito tra le ante deve avvenire solo a cancello completamente aperto.
15. Tutti gli interventi di manutenzione, riparazione o verifiche periodiche devono essere eseguiti da personale professionalmente qualificato. L'utente deve astenersi da qualsiasi tentativo di riparazione o d'intervento e deve rivolgersi esclusivamente a personale qualificato SEA. L'utente può eseguire solo la manovra manuale.
16. La lunghezza massima dei cavi di alimentazione fra centrale e motori non deve essere superiore a 10 m. Utilizzare cavi con sezione 2,5 mm<sup>2</sup>. Utilizzare cablaggi con cavi in doppio isolamento (cavi con guaina) nelle immediate vicinanze dei morsetti specie per il cavo di alimentazione (230V). Inoltre è necessario mantenere adeguatamente lontani (almeno 2,5 mm in aria) i conduttori in bassa tensione (230V) dai conduttori in bassissima tensione di sicurezza (SELV) oppure utilizzare un'adeguata guaina che fornisca un isolamento supplementare avente uno spessore di almeno 1 mm.

### **English** 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 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 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.

### **Français** CONSIGNES POUR L'INSTALLATEUR ET L'UTILISATEUR

1. Lire attentivement les **instructions** avant d'installer le produit. Conserver les instructions en cas de besoin.
2. Ne pas disperser dans l'environnement le matériel d'emballage du produit et/ou des circuits
4. Ce produit a été conçu et construit exclusivement pour l'usage indiqué dans cette fiche. Toute autre utilisation non expressément indiquée pourraient compromettre l'intégrité du produit et/ou représenter une source de danger. SEA S.p.A. décline toute responsabilités qui dériverait d'usage impropre ou différent de celui auquel l'automatisme est destiné. Une mauvaise utilisation cause la cessation de la garantie.
5. Les composants doivent répondre aux prescriptions des Normes: Machines (2006/42/CE et successifs changements); Basse Tension (2006/95/CE et successifs changements); EMC (2004/108/CE et successifs changements). L'installation doit être effectuée conformément aux Normes EN 12453 et EN 12445.
6. Ne pas installer l'appareil dans une atmosphère explosive.
7. SEA S.p.A. n'est pas responsable du non-respect de la Bonne Technique de construction des fermetures à motoriser, ni des déformations qui pourraient intervenir lors de l'utilisation.
8. Couper l'alimentation électrique et déconnecter la batterie avant toute intervention sur l'installation. Vérifier que la mise à terre est réalisée selon les règles de l'art et y connecter les pièces métalliques de la fermeture.
9. On recommande que toute installation soit doté au moins d'une signalisation lumineuse, d'un panneau de signalisation fixé, de manière appropriée, sur la structure de la fermeture.
10. SEA S.p.A. décline toute responsabilité quant à la sécurité et au bon fonctionnement de l'automatisme si les composants utilisés dans l'installation n'appartiennent pas à la production SEA.





11. Utiliser exclusivement, pour l'entretien, des pièces SEA originales.
12. Ne jamais modifier les composants d'automatisme.
13. L'installateur doit fournir toutes les informations relatives au fonctionnement manuel du système en cas d'urgence et remettre à l'Usager qui utilise l'installation les "Instructions pour l'Usager" fournies avec le produit.
14. Interdire aux enfants ou aux tiers de stationner près du produit durant le fonctionnement. Ne pas permettre aux enfants, aux personnes ayant des capacités physiques, mentales et sensorielles limitées ou dépourvues de l'expérience ou de la formation nécessaires d'utiliser l'application en question. Eloigner de la portée des enfants les radiocommandes ou tout autre générateur d'impulsions, pour éviter tout actionnement involontaire de l'automatisme.
15. Le transit entre les vantaux ne doit avoir lieu que lorsque le portail est complètement ouvert.
16. L'utilisateur doit s'abstenir de toute tentative de réparation ou d'intervention et doit s'adresser uniquement et exclusivement au personnel qualifié SEA ou aux centres d'assistance SEA. L'utilisateur doit garder la documentation de la réparation. L'utilisateur peut exécuter seulement la manoeuvre manuel.
17. La longueur maximum des câbles d'alimentation entre la carte et les moteurs ne devrait pas être supérieure à 10 m. Utilisez des câbles avec une section de 2,5 mm<sup>2</sup>. Utilisez des câblage avec câble à double isolation (avec gaine) jusqu'à proximité immédiate des terminaux, en particulier pour le câble d'alimentation (230V). Il est également nécessaire de maintenir une distance suffisante (au moins 2,5 mm dans l'air), entre les conducteurs en basse tension (230V) et les conducteurs de très basse tension de sécurité (SELV) ou utiliser une gaine ayant une épaisseur d'au moins 1 mm, qui fournisse une isolation supplémentaire.

### **Español** ADVERTENCIAS GENERALES PARA INSTALADORES Y USUARIOS

- 1 Leer las **instrucciones de instalación** antes de comenzar la instalación. Mantenga las instrucciones para consultas futura
2. No desperdiciar en el ambiente los materiales de embalaje del producto o del circuito
3. Este producto fue diseñado y construido exclusivamente para el uso especificado en esta documentación. Cualquier otro uso no expresamente indicado puede afectar la integridad del producto y ser una fuente de peligro. El uso inadecuado es también causa de anulación de la garantía. SEA S.p.A. se exime de toda responsabilidad causadas por uso inapropiado o diferente de aquel para el que el sistema automatizado fue producido.
4. Los productos cumplen con la Directiva: Maquinas (2006/42/CE y siguientes modificaciones), Baja Tension (2006/95/CE, y siguientes modificaciones), Compatibilidad Electromagnética (2004/108/CE modificada). La instalación debe ser llevada a cabo de conformidad a las normas EN 12453 y EN 12445.
5. No instalar el dispositivo en una atmósfera explosiva.
6. SEAS.p.A. no es responsable del incumplimiento de la mano de obra en la construcción de la cancela a automatizar y tampoco de las deformaciones que puedan producirse durante el uso.
7. Antes de realizar cualquier operación apagar la fuente de alimentación y desconectar las baterías. Comprobar que el sistema de puesta a tierra sea diseñado de una manera profesional y conectar las partes metálicas del cierre.
8. Para cada instalación se recomienda utilizar como mínimo una luz parpadeante y una señal de alarma conectada a la estructura del marco.
9. SEAS.p.A. no acepta responsabilidad por la seguridad y el buen funcionamiento de la automatización en caso de utilización de componentes no producidos por SEA.
10. Para el mantenimiento utilizar únicamente piezas originales SEAS.p.A..
11. No modificar los componentes del sistema automatizado.
12. El instalador debe proporcionar toda la información relativa al funcionamiento manual del sistema en caso de emergencia y darle al usuario el folleto de adjunto al producto.
13. No permita que niños o adultos permanecen cerca del producto durante la la operación. La aplicación no puede ser utilizada por niños, personas con movilidad reducida de tipo físico, mental, sensorial o igual por personas sin experiencia o formación necesaria. Tener los radiomandos fuera del alcance de niños así como cualquier otro generador de impulsos radio para evitar que el automación pueda ser accionada accidentalmente.
14. El tránsito a través de las hojas sólo se permite cuando la puerta está completamente abierta.
15. Todo el mantenimiento, reparación o controles deberán ser realizados por personal cualificado. Evitar cualquier intento a reparar o ajustar. En caso de necesidad comunicarse con un personal SEA calificado. Sólo se puede realizar la operación manual.
16. La longitud máxima de los cables de alimentación entre motor y central no debe ser superior a 10 metros. Utilizar cables con 2,5 mm<sup>2</sup>. Utilizar cables con doble aislamiento (cables con vaina) hasta muy cerca de los bornes, especialmente por el cable de alimentación (230V). Además es necesario mantener adecuadamente distanciados (por lo menos 2,5 mm en aire) los conductores de baja tensión (230V) y los conductores de baja tensión de seguridad (SELV) o utilizar una vaina adecuada que proporcione aislamiento adicional con un espesor mínimo de 1 mm.

### **Deutsch** ALL GEMEINE HINWEISE FUER DEN INSTALLATEUR UND DEN NUTZER

1. Lesen Sie die **Installierungsanweisungen** sorgfältig durch bevor Sie mit der Installation beginnen. Diese Anweisungen an einem leicht zugänglichen Ort aufbewahren.
2. Verpackungsmaterial des Produkts und/oder der Schaltkreise umweltgerecht entsorgen.
3. Dieses Produkt wurde speziell und ausschließlich für den, in den Unterlagen beschriebenen Zweck, geplant und hergestellt. Jede andere Verwendung, die nicht ausdrücklich angegeben wurde kann die Integrität des Produkts schädigen und/oder eine Gefahrenquelle darstellen. Die nicht fachgerechte Nutzung des Produkts bewirkt die Erlöschung der Garantie. SEA S.p.A. lehnt jegliche Haftung, für unsachgemäße oder andere Nutzung, als die wofür das Produkt bestimmt ist, ab.
4. SEA Produkte entsprechen den folgenden Richtlinien: Maschinenrichtlinie (2006/42/EG und nachträglich geänderten Fassungen), Niederspannungs-Richtlinie (2006/95/EG und nachträglich geänderten Fassungen), EMV (2004/108/EG und nachträglich geänderten Fassungen). Installation gemäß Standard EN12453 und EN12445 durchführen.
5. Installieren Sie das Gerät nicht in explosionsgefährdeten Umgebungen, das Vorhandensein von brennbaren Gasen oder Dämpfen stellt ein ernstes Sicherheitsrisiko dar.
6. SEA S.p.A. ist nicht für die Nichtbeachtung der Guten Technik bei der Herstellung von zu motorisierenden Toren und für deren eventuellen Verformungen, die während des Gebrauchs auftreten könnten, haftbar.
7. Vor allen Eingriffen, das Gerät ausschalten und die Batterien trennen. Sicherstellen, dass die Erdung fachgerecht hergestellt wurde und die Metallteile des Tores daran anschließen.
8. Für jede Anlage wird empfohlen, mindestens ein Blinklicht zu montieren und ein Warnschild auf der Torstruktur anzubringen.
9. SEAS.p.A. übernimmt keine Haftung für Sicherheit und reibungslosen Betrieb des Antriebs, bei Verwendung von Komponenten, die nicht von der SEA Produktion stammen.
10. Für die Wartung nur SEA Originalteile verwenden.
11. Keinerlei Änderungen auf Komponenten der Automation vornehmen.
12. Der Installateur muss den Nutzer des Antriebs über den manuellen Betrieb des Systems im Notfall unterrichten und ihm, das, dem Produkt beiliegende, Handbuch übergeben.
13. Der Aufenthalt von Kindern oder Erwachsenen in der Nähe des Tores während seines Betriebes ist nicht gestattet. Die Anlage darf nicht von Kindern, Personen mit eingeschränkten körperlichen, geistigen oder sensorischen Fähigkeiten oder von Menschen ohne notwendige Erfahrung oder Anweisungen benutzt werden. Fernbedienungen oder andere Impulsgeber außerhalb der Reichweite von Kindern halten, um die versehentliche Aktivierung der Anlage zu verhindern.
14. Die Durchfahrt zwischen den Flügeln ist nur bei vollständig geöffnetem Tor zulässig.
15. Sämtliche Wartungs- und Reparaturarbeiten oder periodische Kontrollen, müssen von qualifiziertem Fachpersonal durchgeführt werden. Der Endverbraucher muss davon absehen eigenständig Reparaturen oder Eingriffe jeder Art an der Anlage durchzuführen und muss sich ausschliesslich an qualifiziertes SEA Fachpersonal wenden. Der Endverbraucher darf nur die manuelle Notfunktion durchführen.
16. Die maximale Länge der Stromkabel zwischen Steuerung und Motoren ist 10 Meter. Verwenden Sie Kabel mit 2,5 mm<sup>2</sup> Querschnitt und Doppelisolierung (Kabelmantel) in der unmittelbaren Nähe von Klemmen, insbesondere für das Speisungskabel (230V). Die Speisungskabel (230V) und die Sicherheits-Niederspannungskabel (SELV) müssen in einem Abstand von mindestens 2,5 mm gehalten werden, oder eine geeignete Hülse von 1mm Dicke, für eine zusätzliche Isolierung verwenden..



**Dichiarazione di conformità**  
**Declaration of Conformity**

La SEA s.r.l. dichiara sotto la propria responsabilità e, se applicabile, del suo rappresentante autorizzato che il prodotto:

*SEA srl declares under its proper responsibility and, if applicable, under the responsibility of its authorised representative that the product:*

| <b>Descrizione / Description</b>                 | <b>Modello / Model</b> | <b>Marca / Trademark</b> |
|--|------------------------|--------------------------|
| User 2 - 24V DG (e tutti i suoi derivati)        | 23024080/25/30         | SEA                      |
| <i>User 2 - 24V DG (and all its by-products)</i> | <i>23024080/25/30</i>  | <i>SEA</i>               |

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 2006/95/CE e 2004/108/CE.

*it is conforming to the essential safety requirements related to the product within the field of applicability of the Community Directives 2006/95/CE and 2004/108/CE.*

**COSTRUTTORE o RAPPRESENTANTE AUTORIZZATO:**  
**MANUFACTURER or AUTHORISED REPRESENTATIVE:**

SEAS.r.l.  
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I test sul prodotto sono stati effettuati in configurazione standard e in riferimento alle norme specifiche per la sua classe d'utilizzo.

*The products have been tested in standard configuration and with reference to the special norms concerning the classe of use.*

(Luogo, data di emissione)  
(Place, date of issue)  
Teramo, 06/06/2012

L'Amministratore  
The Administrator  
Ennio Di Saverio  




**SEA**<sup>®</sup>  
electronic opening system

Questo articolo è stato prodotto seguendo rigide procedure di lavorazione ed è stato testato singolarmente al fine di garantire i più alti livelli qualitativi e la vostra soddisfazione. Vi ringraziamo per aver scelto SEA.

This item has been produced following strict production procedures and has been singularly tested for the highest quality levels and for your complete satisfaction. Thanks for choosing SEA.

Cet article a été produit suivant des procédures d'usinage strictes et il a singulièrement été testé afin de garantir les plus hauts niveaux de qualité pour votre satisfaction. Nous vous remercions d'avoir choisi SEA.

Este artículo ha sido producido siguiendo rigidos procedimientos de elaboración y ha sido probando singolarmente a fin de garantizar los mas altos niveles de calidad y vuestra satisfaccion. Le agradecemos por haber escogito SEA.



**SEA<sup>®</sup>**

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di Apertura Porte e Cancelli  
International registered trademark n. 804888



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