



SEA[®]



ENGLISH

Automatic Gate Openers

International registered trademark n. 804888

SWING 2 DG

SWING 2 DG R2F

SWING 2 DG R2BF



CONTROL UNIT
TO MANAGE
ONE or TWO OPERATORS
(230V/110V)

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PRELIMINARY

● **The SWING 2 DG control unit requires the programming of the working times (chapter 15); it is not possible to start the operator correctly without first programming the control unit!**

● The unit and the accessories programming and settings can be carried out by the display on board or by the **JOLLY 3** programmer or **SEACLOUD**



● Functions and menus here described are valid only for the below listed software revisions; if some functions or menus do not correspond to your control unit, consult the previous manuals

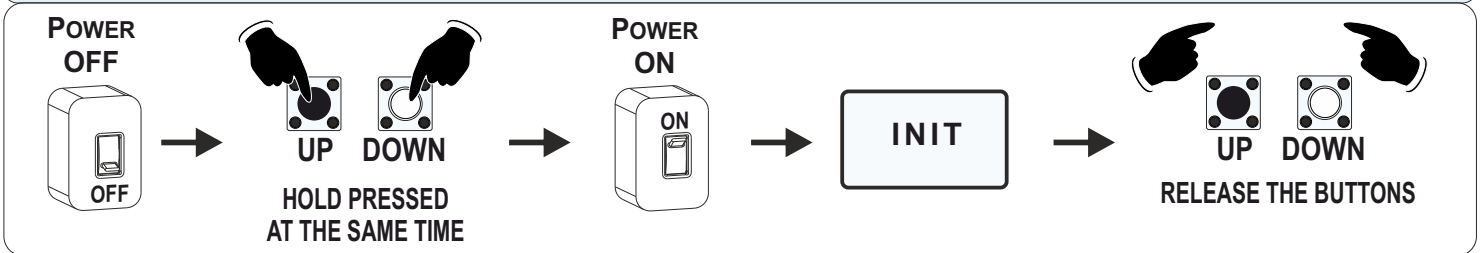
MODEL	SOFTWARE REVISION		MAIN DIFFERENCES BETWEEN THE TWO VERSIONS
SWING 2 DG R2F	03.05	→	MANAGEMENT OF NORMAL N.C. PHOTOCELLS ONLY. - STANDARD N.C. OR BALANCED 8K2 SAFETY EDGES MANAGEMENT ONLY
SWING 2 DG R2BF	00.03	→	ALSO MANAGEMENT OF TWO 10K PHOTOCELLS. - ALSO MANAGEMENT OF A 8K2 PURE RESISTIVE SAFETY EDGE

All wirings (circuits and accessories) must be made when the **control unit is OFF and not powered**; only after completing all wirings the control unit can be switched on and programmed

TECHNICAL INFORMATION

POWER SUPPLY	ABSORPTION IN STAND-BY	OPERATING TEMPERATURE	PROTECTION CLASS OF THE PLASTIC BOX (IF INCLUDED)
230VAC - 50/60 Hz OR 115VAC - 50/60 Hz	30 mA	-20° C +50° C	IP 55

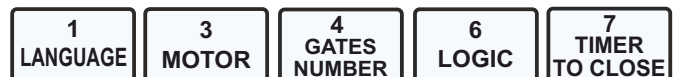
RESET PROCEDURE



QUICK START

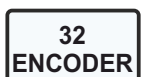
- Make all connections (**control unit OFF!**): motors, accessories and power cables
- **DO NOT jumper the N.C. contacts! - automatic detection of the N.C. contacts not in use!**
- Power on the control unit and check the correct status of the inputs (**chapter 14**)

● Enter the basic menu and set the following menus:
(if you do not set a time on menu 7, the logic will be **«semi-automatic»** - automatic reclosing disabled)



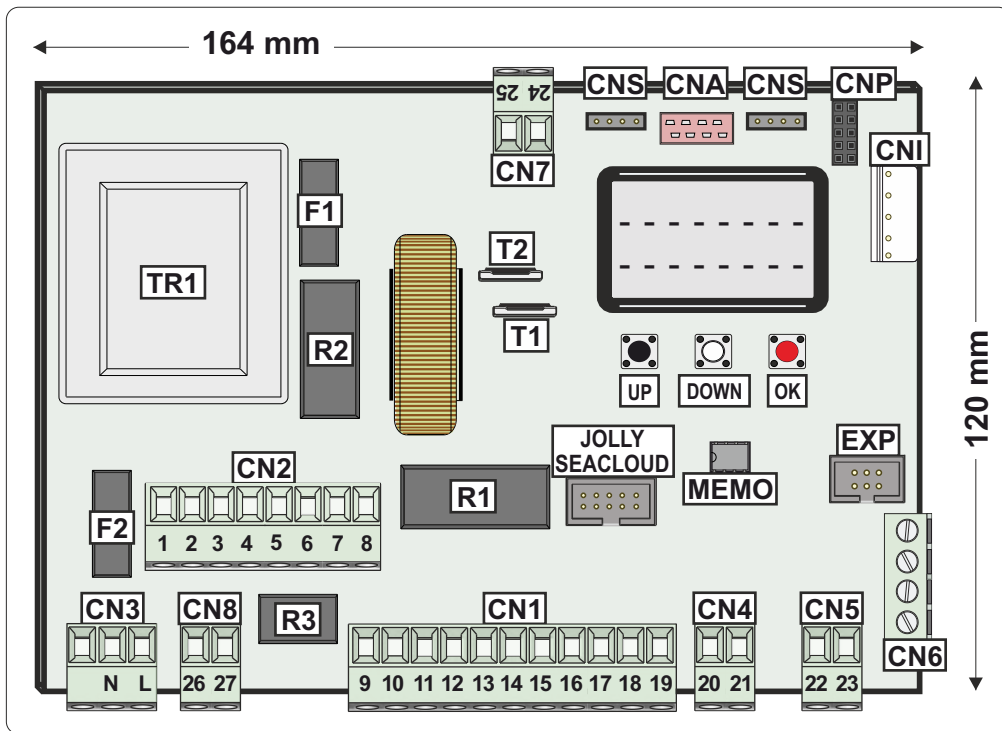
● Move the operator using the menus or ; if the gate opens by pressing and if the gate closes by pressing , the motors run correctly, otherwise swap the motors cables

- If installed, enable the encoder or the potentiometer on menu 32 - **paragraph 15.2**
- Start up the working times learning by following the procedure in **chapter 15**



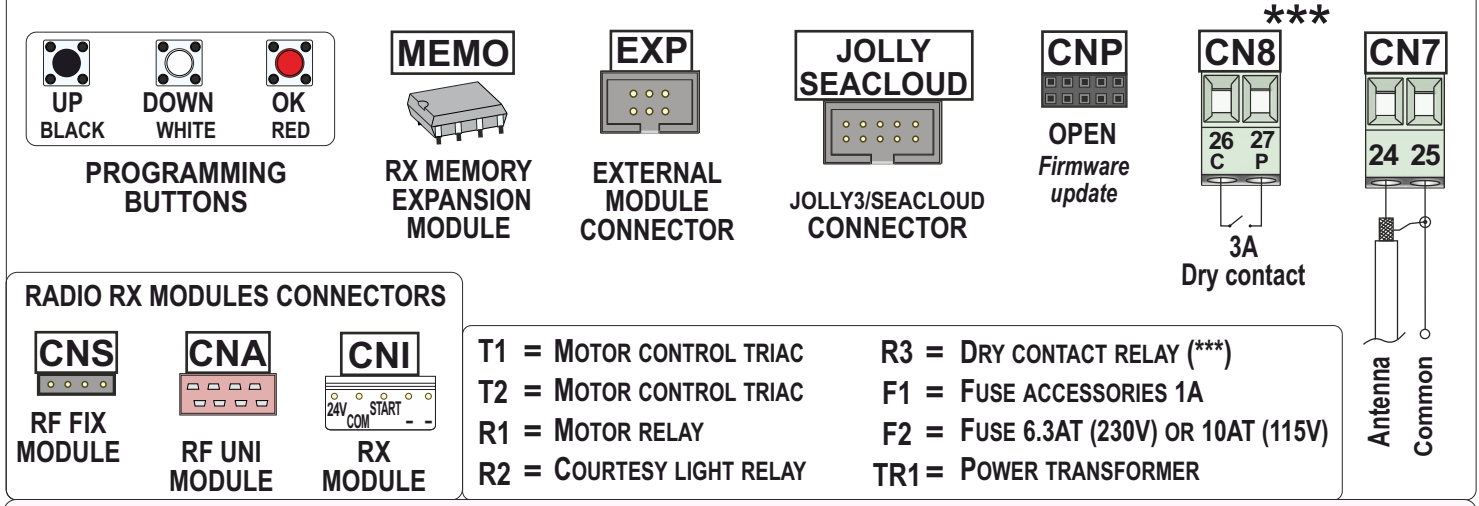
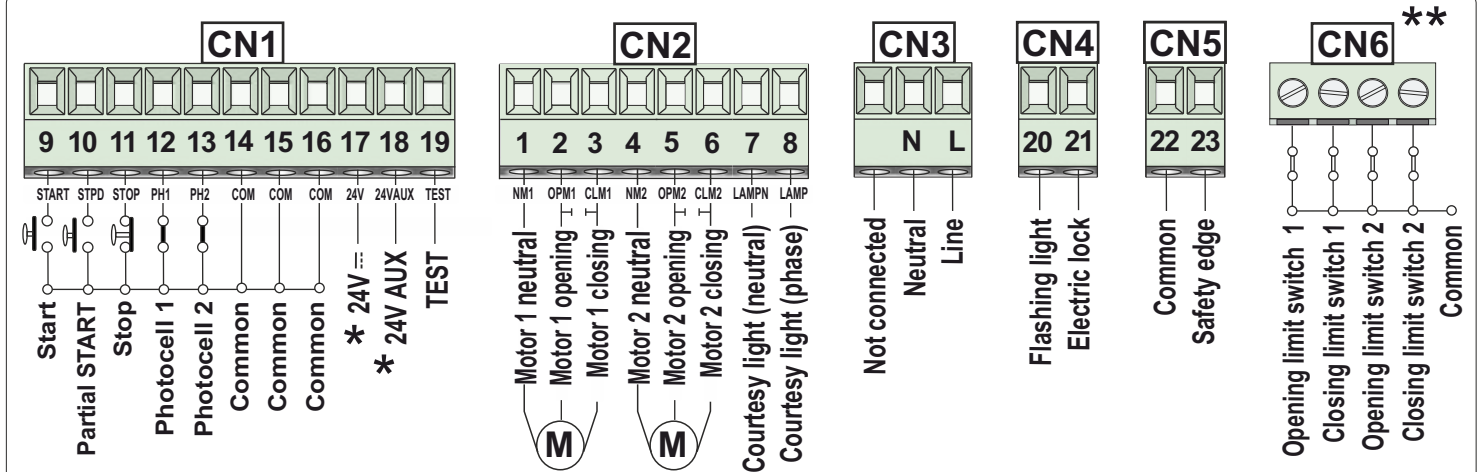
1 - WIRINGS

⚠ Make all the wirings when the control unit is not powered!
Keep the power cables separate from the command cables - always run cables in separate sheaths to prevent interferences!



OPTIONAL JUMPERS

- Automatic recognition of the N.C. inputs not in use
NO JUMPERS REQUIRED ON THE N.C. CONTACTS!
- To restore the excluded inputs use the «INPUTS MANAGEMENT» menu (*chapter 14*)
NO NEED TO SET UP THE UNIT AGAIN!



* All the 24V outputs support a maximum load of 500 mA - referred to the sum of the loads of all 24V accessories connected, including the absorption of the receiver on board (30 mA)

** The special CN6 connector is build only on the model SWING 2 DG R2F «FC» with limit switch management

*** The dry contact CN8 connector supports a maximum load of 3A and 250V; it is available only on the R2 DRY CONTACT hardware version with additional relay

2 - CONNECTIONS ON CN1

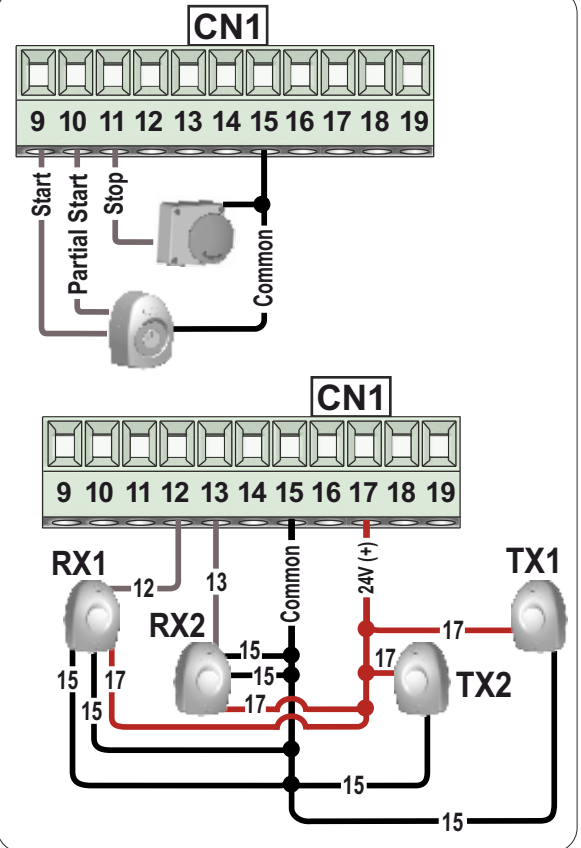
2.1 - START (N.O.)

- Connect the «START» command on clamps 9 and 14 (15/16)
 - Logics to be linked to the «START» command in **chapter 16**
- ⇒ If the input is engaged during the pause time, the gate does not close until the input is released

2.2 - PARTIAL START (N.O.)

- Connect the «PARTIAL START» on clamps 10 and 14 (15/16)
 - Logics to be linked to the «START» command in **chapter 16**
 - Partial opening space management: 90 PARTIAL OPENING
 - Partial opening pause time management: 91 PARTIAL PAUSE
- ⇒ If the input is engaged during the pause time, the gate does not close until the input is released

i If a **TRAFFIC LIGHT** is wired via SEM 2 unit, it is possible to enable the entry or exit priority linked to the «START» or «PARTIAL START» commands, via menu 89 89 TRAFFIC LIGHT RESERVATION



2.3 - TIMER (N.O.) - EXTERNAL CLOCK

- Connect the timer to the clamp 10 «PARTIAL START» or to the clamp 13 «PHOTOCELL 2» 92 TIMER
 - If wired to the «PARTIAL START», this command will be disabled (*on transmitters too*)
 - The timer opens and keeps the gate open until engaged; when released, the gate closes only after the pre-set pause time has elapsed
 - In the event of a safety accessory intervention, the timer automatically resets after 6 sec.
- ⇒ In the event of a power failure when the gate is open: if the **TIMER** is still active when the power is restored, the gate remains open; if the **TIMER** is no longer active, a «START» input will be required to close the gate

2.4 - STOP (N.C.)

- Connect the button for the «STOP» command on the clamps 11 and 14 (or 15 or 16)
- After the «STOP» command, press «START» to restore the movement (*the operator always starts-up in closing after the «STOP» command!*)

2.5 - PHOTOCELL 1 AND PHOTOCELL 2 (N.C.)

- Wirings: $+ = 24V \text{---} \text{max } 500\text{mA}$ (clamp 17) $\text{COM} = 0\text{V}$ (clamps 14 - 15 - 16)
- Management and photocells operating settings: menu 97 (photo 1) and menu 98 (photo 2)
- ⇒ Default settings of the menus: 97 = «CLOSING»; 98 = «OPENING AND CLOSING»
- «PHOTOTEST» function: connect the Tx-photocell negative cable on the clamp 19 «TEST» then choose which photocell to test among the options of the menu 95

USE SHIELDED PHOTOCELLS!

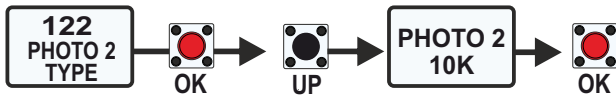
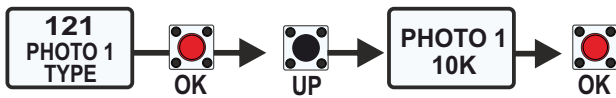
- 97
PHOTOCELL
1
- 98
PHOTOCELL
2
- 95
PHOTOTEST

i To save energy in stand-by connect the photocell power supply cable to the terminal 18 (AUX) and set the menu 94 to «IN CYCLE»!

2.6 - 10K PHOTOCELL SINGLE OR DOUBLE

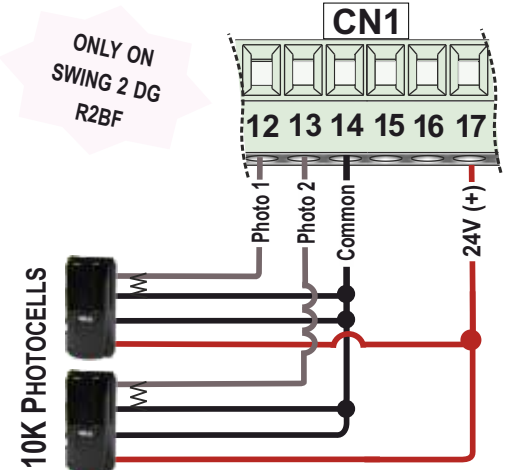
10K PHOTOCELLS - ONLY ON MODEL «SWING 2 DG R2BF»

- Connect 10K photocells on clamps 12-14-17 and 13-14-17
- ➔ Also use the two «COM» inputs on clamps 15 or 16 instead of the clamp 14
- One or two 10K photocells can be connected; set the menus 121 or 122 to «PHOTO 1 10K» or «PHOTO 2 10K»



- The desired operation mode can be set on the menus «PHOTOCELL» 97 and 98
- ➔ By the use of the 10K photocells, a further protection is given, even in the event of a short-circuit on the cables!

EXAMPLE OF 10K PHOTOCELLS CONNECTION



97 PHOTOCELL 1

98 PHOTOCELL 2

2.7 - LATCH OPENING OR LATCH CLOSING BUTTON

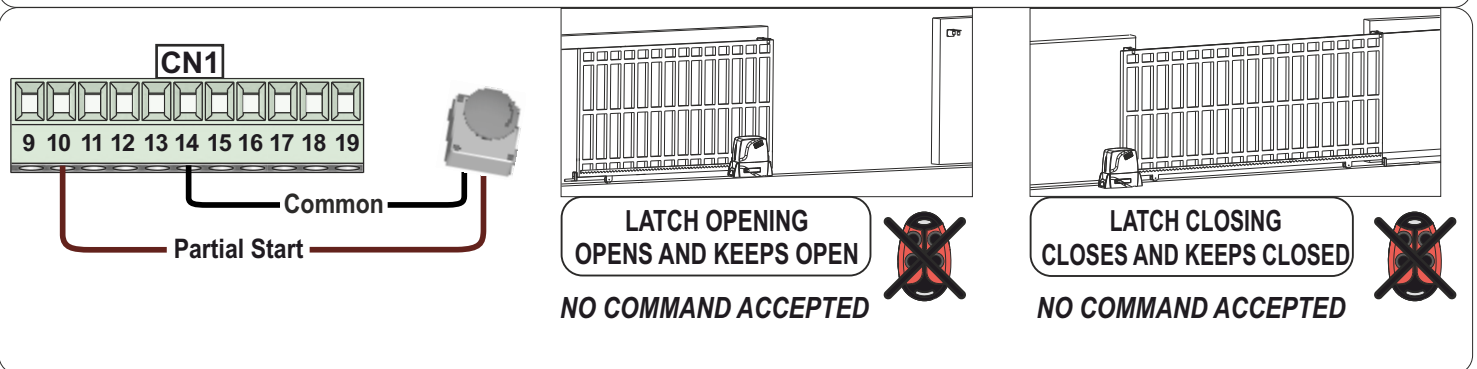
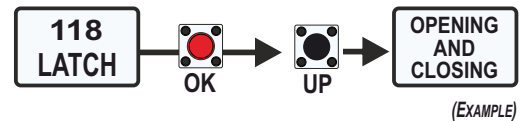
- Connect the button to use as LATCH on clamps 10 and 14

⚠ THE PARTIAL START FUNCTION WILL BE DISABLED!

- Management: set the desired operation mode on the menu 118

- To release the LATCH, press again the same button used to enable the function

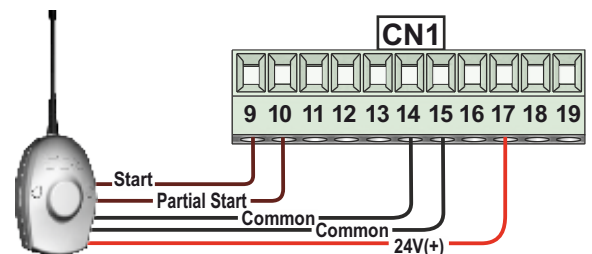
➔ The LATCH command can also be sent from SEACLOUD or enabled on the second channel of the transmitter (paragraph 18.4), thus keeping the PARTIAL START input free;



2.8 - EXTERNAL RECEIVER

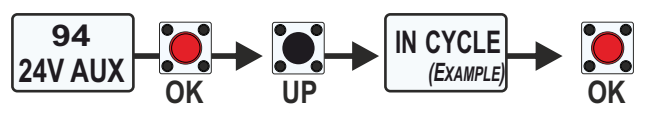
- An external receiver can be connected according to the connection diagram on the side.

- For the operation of the receiver, refer to its instruction manual



2.9 - 24V DC AUX OUTPUT OPTIONS - CLAMP 18 - MAX 500mA

● Management: on menu 94 choose how to have voltage on the AUX output, according to the type of accessory you have wired

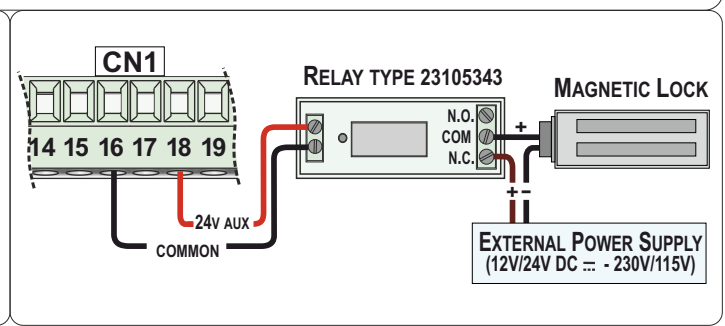
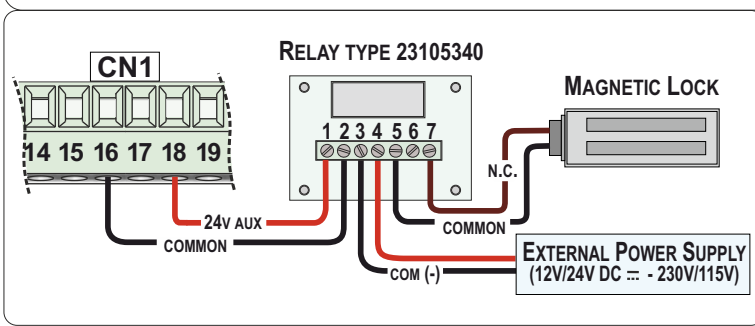
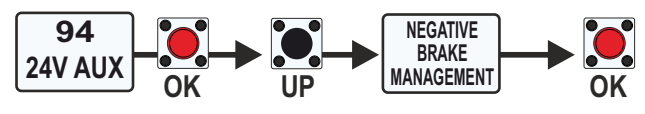


⚠ CONNECT THE ACCESSORY ONLY AFTER SETTING THE MENU 94 ON THE DESIRED OPTION!

● A RELAY CAN BE CONNECTED TO THE 24VAUX OUTPUT; the relay allows the connection and the management of additional accessories (locks etc.); some examples below, including the menu 94 settings

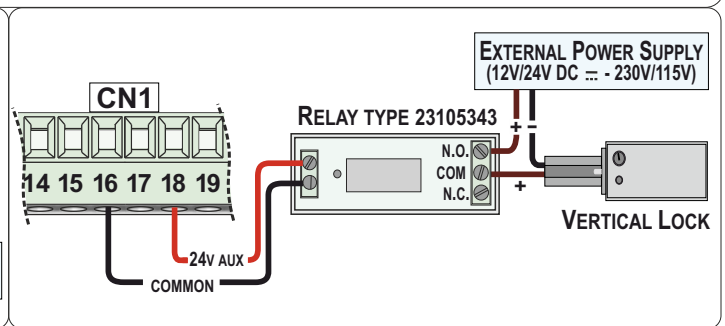
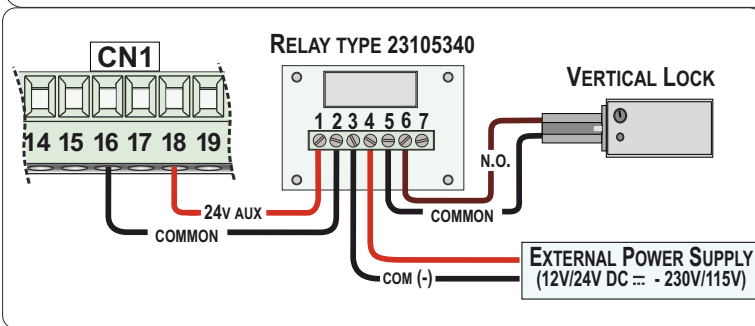
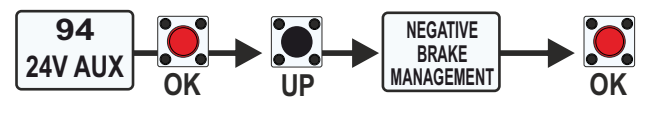
MAGNETIC LOCK - BY THE USE OF TWO DIFFERENT RELAY MODELS

● To use the magnetic lock, set the menu 94 to «NEGATIVE BRAKE MANAGEMENT» (24Vaux output powered during the cycle and 1 second before starting up)



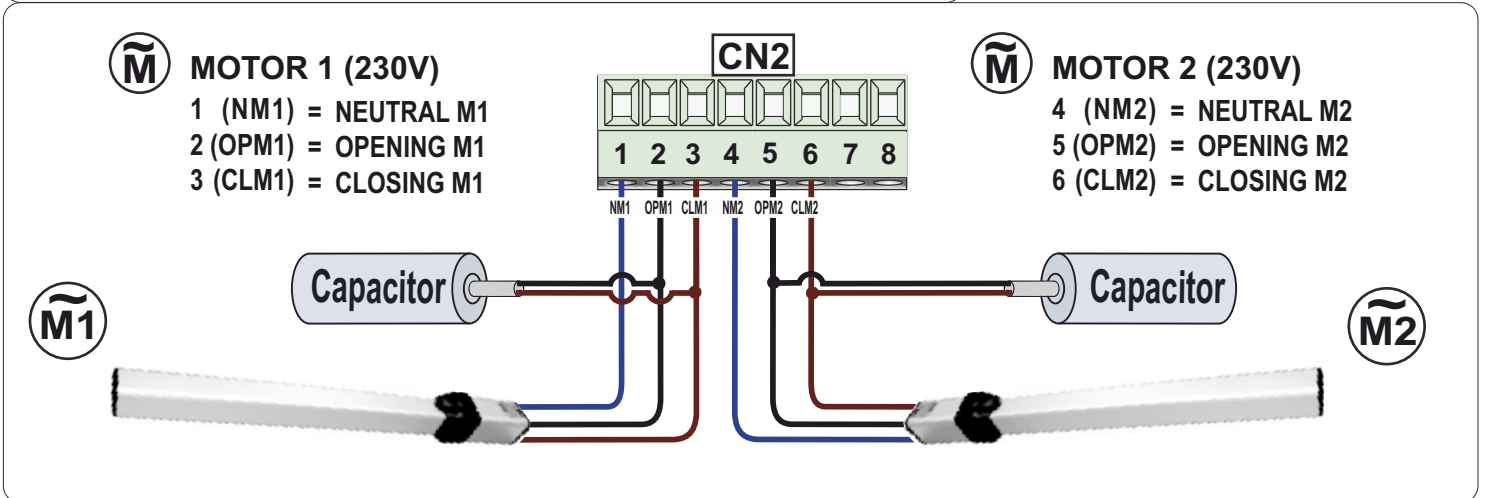
VERTICAL LOCK - BY THE USE OF TWO DIFFERENT RELAY MODELS

● To use the vertical lock, set the menu 94 to «NEGATIVE BRAKE MANAGEMENT» (24Vaux output powered during the cycle and 1 second before starting up)



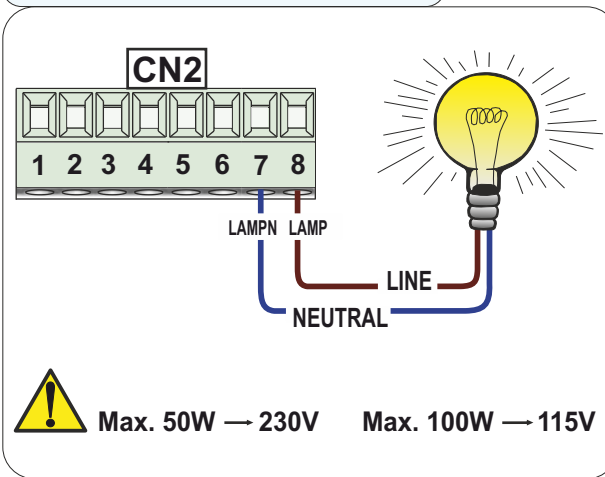
3- CONNECTION ON CN2

3.1 - MOTOR CONNECTION ON THE CONTROL UNIT



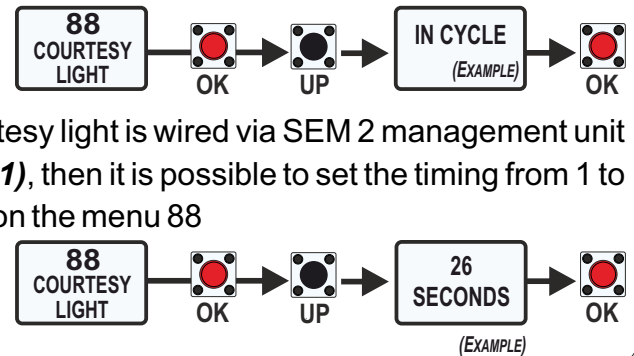
⇒ In the case of a single leaf, connect the operator as motor 1; if necessary, adjust the menu parameters for M1 only

3.2 - COURTESY LIGHT



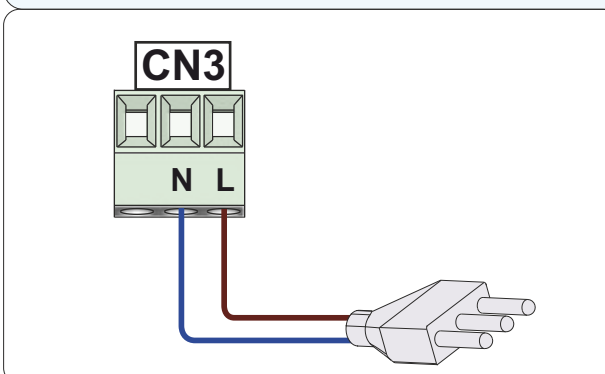
- Wire the courtesy light as shown in the diagram
- Courtesy light operation can be managed by menu 88

i If the courtesy light is wired via SEM 2 management unit (**paragraph 9.1**), then it is possible to set the timing from 1 to 240 seconds, on the menu 88



4 - POWER SUPPLY CONNECTION ON CN3

4.1 - CONTROL UNIT POWER SUPPLY



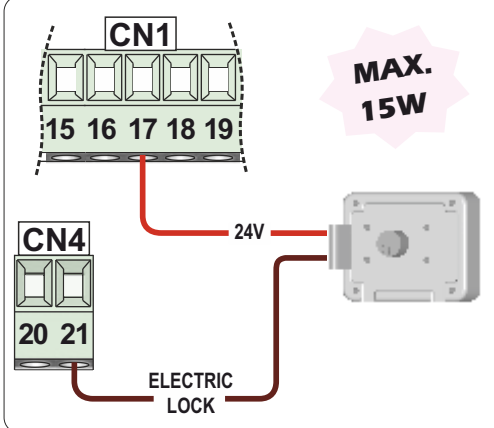
- FUSE 16AT DELAYED ON 230V~ POWER SUPPLY
FUSE 16AT DELAYED ON 115V~ POWER SUPPLY
- Use a 10A differential switch to protect the power supply system
- In case of unstable power supply, the use of an external UPS of min.800VA is recommended

! For the connection to the power grid respect the laws in force

! The control unit must be powered only after all the wirings have been completed!

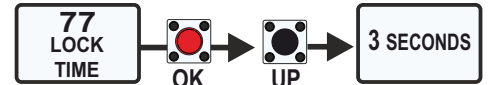
5 - CONNECTION ON CN4

5.1 - 12V ELECTRIC LOCK



- Wire the 12V electric lock as shown in the diagram

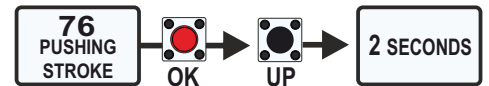
- Adjustment of the release time of the lock: menu 77



- Adjustment of the activation mode of the lock: menu 78

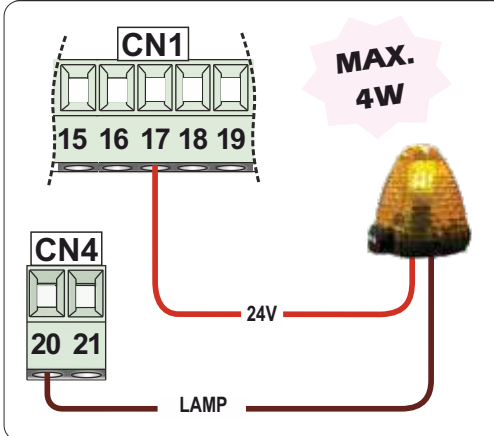


- **i** «PUSHING STROKE» OPTION: simplifies the lock release by giving a little pushing stroke before starting the movement



(EXAMPLES OF SETTINGS)

5.2 - 24V FLASHING LIGHT

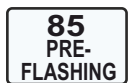


- Connect the 24V = flashing light as shown in the diagram

- The flashing light send signals when the gate moves:
 1 BLINK/SECOND IN OPENING
 2 BLINKS/SECOND IN CLOSING
 STEADY LIT DURING PAUSE

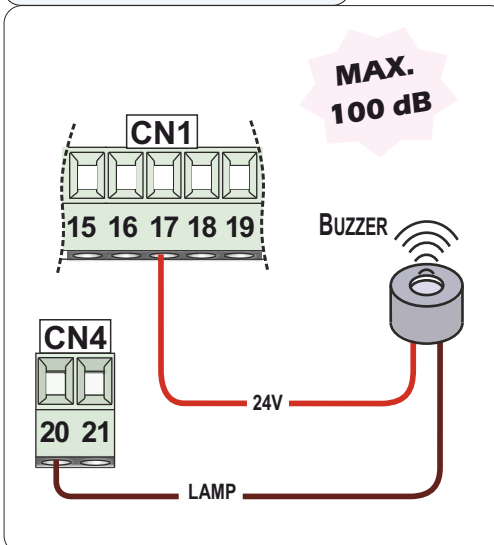


- Management of the operating mode: menu 86
- Pre-flashing function management: menu 85



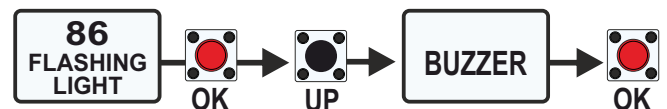
- ⇒ The control unit sends the warning signals also through the flashing lamp; see **chapter 19 «ALARMS»**

5.3 - 24V BUZZER



- Connect the 24V= oscillating Buzzer as shown in the diagram

- The Buzzer can be connected instead of the flashing light; **it is necessary to set the menu 86 to «BUZZER»**



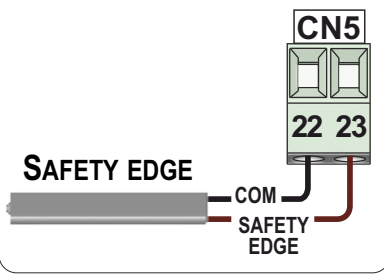
- The Buzzer activates after 2 consecutive interventions of the anti-crushing protection

- ⇒ Press the STOP button to turn off the buzzer; anyway, the sound switches off automatically after 5 minutes and the operator remains stopped waiting for a new command

- ⇒ **IF THE BUZZER DOES NOT RUN, MAKE SURE THAT THE MENU 86 IS SET TO «BUZZER» !**

6 - CONNECTION ON CN5

6.1 - SAFETY EDGE (N.C.)



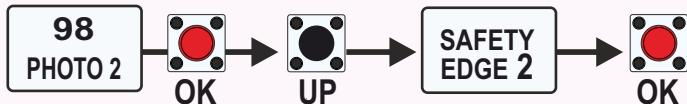
- Choice of the safety edges type - MENU 100
- Choice of the desired direction - MENU 102 (103*)

102
EDGE 1
DIRECTION

103*
EDGE 2
DIRECTION

100
SAFETY
EDGE 1

i A second safety edge (N.C. normal type) can be connected to the «PHOTOCELL 2» input and can be enabled by setting the menu 98 to «SAFETY EDGE 2»



* THE DIRECTION OF THIS SECOND SAFETY EDGE CAN BE MANAGED BY THE MENU 103

⇒ Options: **8K2 BALANCED SAFETY EDGE** or **8K2 RESISTIVE SAFETY EDGE**:

It is possible to wire an 8K2 BALANCED SAFETY EDGE or a PURE 8K2 RESISTIVE SAFETY EDGE (only on R2BF version) to control the contact through a resistance value to detect any short-circuits (in case of short-circuit, an alarm will be displayed - see chapter 19)

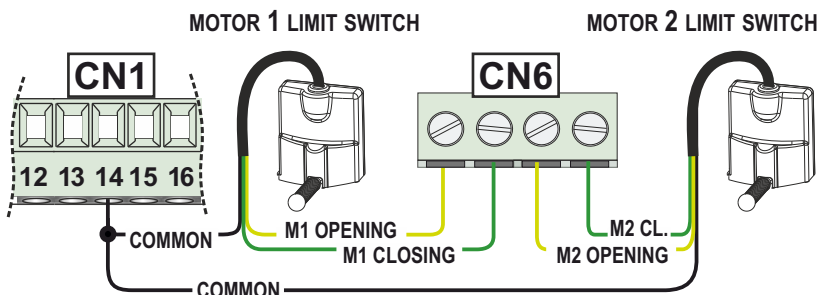


ON MODEL «R2F»: MANAGEMENT OF A SINGLE 8K2 BALANCED SAFETY EDGE (N.C.)

ON MODEL «R2BF»: MANAGEMENT OF A SINGLE 8K2 BALANCED SAFETY EDGE (N.C.) OR OF A SINGLE 8K2 PURE RESISTIVE SAFETY EDGE

7 - CONNECTION ON CN6

7.1 - LIMIT SWITCH - ON «FC» VERSION ONLY

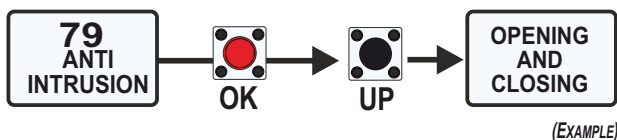


- Wire the opening and closing limit switches of the first and the second operator as shown in the diagram

⇒ The type of limit switch is automatically detected during the working times learning

i **ANTI-INTRUSION FUNCTION:**

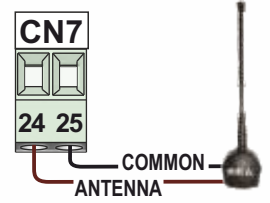
This function is linked to the limit switch activation; if enabled via the menu 79, this function restores the original position of the gate after a manual forcing or a blast of wind



8 - CONNECTION ON CN7 and CN8

8.1 - ANTENNA

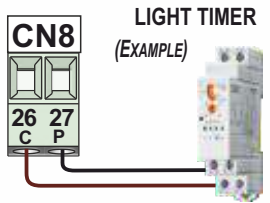
- Connect the antenna on the **CN7** terminal according to the wiring diagram



8.2 - DRY CONTACT RELAY

! *Dry contact relay available only on hardware version «R2 DRY CONTACT» with additional relay*

- **CN8** - dry contact relay: max. 3A and 250V
- The relay is for general use, for example it is possible to connect a timer to turn on a light
- Default operation in «START 3s» mode: the relay automatically activates at each «START» or «PARTIAL START» impulse for 3 seconds or at each photocell intervention

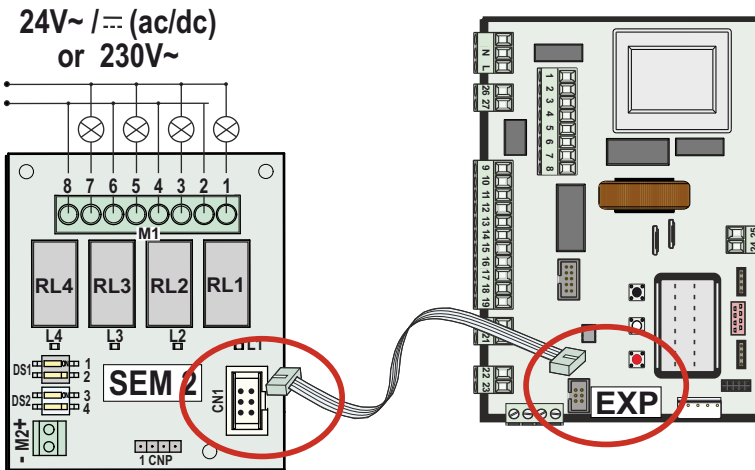


- On «R2BF» model it is possible to disable the «START 3s» operation by the menu 132 and choose to activate the relay manually, via remote control (*by storing the relay activation function on a TX key - see paragraph 18.4*)



9 - CONNECTION ON EXP

9.1 - «SEM 2» MANAGEMENT UNIT



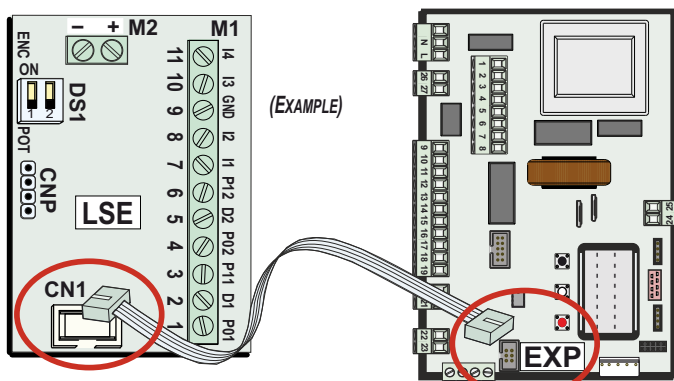
- The SEM 2 accessories management unit allows you to connect and manage the following additional accessories:

- TRAFFIC LIGHT
- COURTESY LIGHT
- VERTICAL ELECTRIC LOCK
- POSITIVE OR NEGATIVE ELECTRIC BRAKE

➔ SEM2 READS THE LIMIT SWITCHES STATUS (to connect those accessories whose activation depends on the limit switches status)

i **MORE DETAILS ON SEM 2 INSTRUCTIONS**

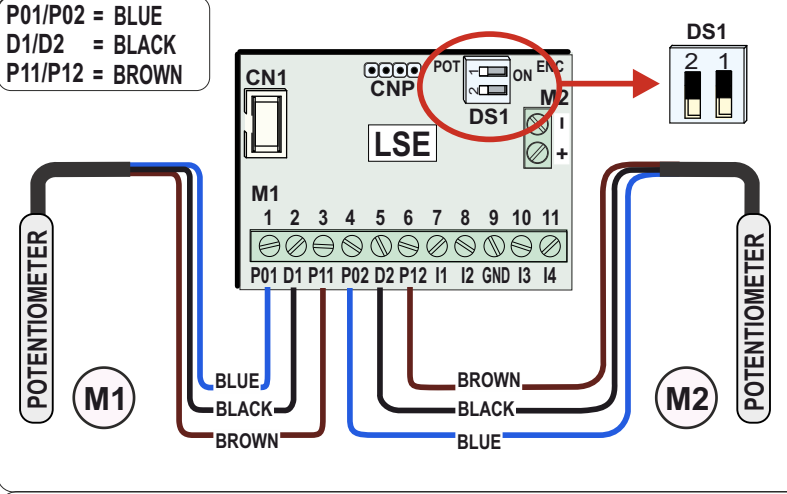
9.2 - «LSE» or «LE» or «LRT» MANAGEMENT UNITS



- The **LSE (or LE)** or **LRT** management circuits allow you to connect and manage different additional accessories, such as additional limit-switches, the temperature probe, the **POTENTIOMETER** or the **RT ENCODER**

i **MORE DETAILS ON LSE/LE/LRT INSTRUCTIONS**

9.3 - «POSITION GATE» LINEAR POTENTIOMETER CONNECTION VIA «LSE» or «LE»

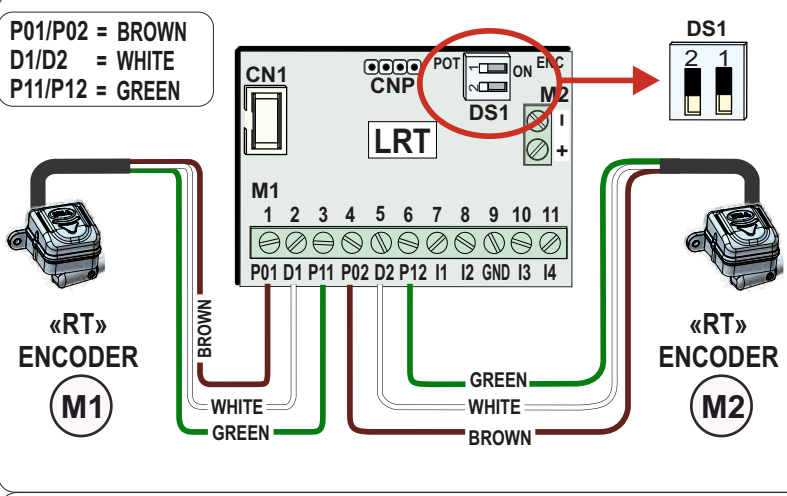


- Connect the «POSITION GATE» linear potentiometer for managing the correct position of the gate and the inversion on obstacles, as shown aside
 - Respect the cable colors
 - Set both the DS1 DIP-SWITCHES to «OFF»
-
- DIP SWITCH 1 = OFF
DIP SWITCH 2 = OFF
- ➔ The use of 3-pole shielded cables IS MANDATORY! - WIRE THE SHIELDS ON P11 AND P12

● To enable the linear potentiometer:

i The menus 51-52-53 (54-55-56) will be visible only if the potentiometer is enabled; the menus allow pulses to be displayed and adjusted - **paragraph 9.5**

9.4 - «RT» ABSOLUTE ENCODER CONNECTION VIA «LRT» CIRCUIT



- Connect the «RT» ABSOLUTE ENCODER for managing the correct position of the gate and the inversion on obstacles, as shown aside
 - Respect the cable colors
 - Set both the DS1 DIP-SWITCHES to «OFF»
-
- DIP SWITCH 1 = OFF
DIP SWITCH 2 = OFF
- ➔ The use of 3-pole shielded cables IS MANDATORY! - WIRE THE SHIELDS ON P11 AND P12

● To enable the «RT» ENCODER

i The menus 51-52-53 (54-55-56) will be visible only if the «RT» ENCODER is enabled; the menus allow pulses to be displayed and adjusted - **paragraph 9.5**

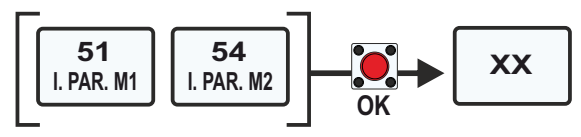
i The ANTI-INTRUSION FUNCTION is also available; It is linked to the potentiometer or the «RT» encoder activation; If enabled via menu 79, this function restores the original position of the gate after a manual forcing or a blast of wind

(EXAMPLE)

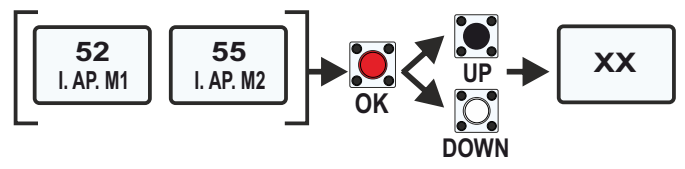
9.5 - LINEAR POTENTIOMETER or «RT» ABSOLUTE ENCODER CONFIGURATION

➔ The menus 51-52-53-54-55-56 are visible only when the menu 32 is set to «POSITION GATE» or ENCODER «RT»

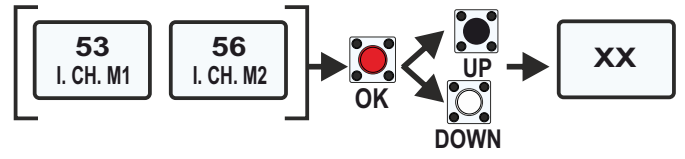
● Motor 1 (menu 51) or motor 2 (menu 54) partial impulses; display of the operator current position



● Motor 1 (menu 52) or motor 2 (menu 55) impulses in opening; display of the impulses when the leaf is completely open; possibility to increase or decrease the total pulses



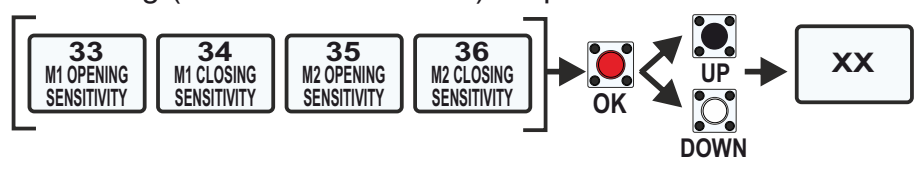
● Motor 1 (menu 53) or motor 2 (menu 56) impulses in closing; display of the impulses when the leaf is completely closed; possibility to increase or decrease the total pulses



9.6 - POTENTIOMETER or «RT» ENCODER PARAMETERS ADJUSTMENT

● Sensitivity parameters in opening and closing (Motor 1 and Motor 2) for potentiometer intervention time adjustment

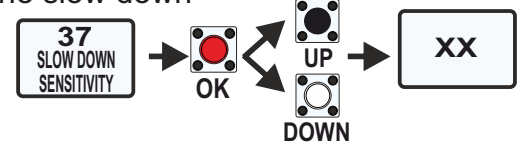
➔ For a quick reverse on obstacle decrease the sensitivity



Set to OFF (intervention excluded): merely detection of the impulses (does not reverse on obstacle)

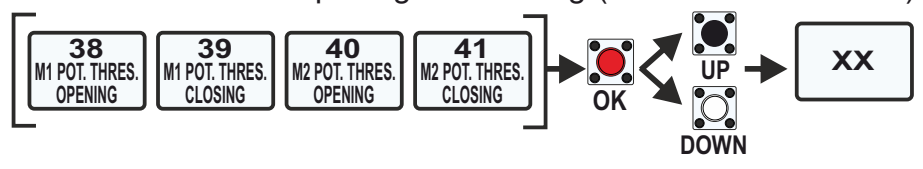
● Slowdown sensitivity menu to adjust the inversion time during the slow down

➔ For a quick reverse on obstacle decrease the sensitivity



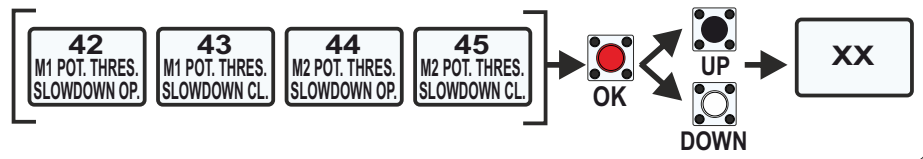
● To adjust the Encoder intervention threshold values in opening and closing (Motor 1 and Motor 2)

➔ The lower the threshold, the greater the force required for the inversion



● To adjust the threshold values for the Encoder intervention during the slow down, in opening and closing (Motor 1 and Motor 2)

➔ The lower the threshold, the greater the force required for the inversion

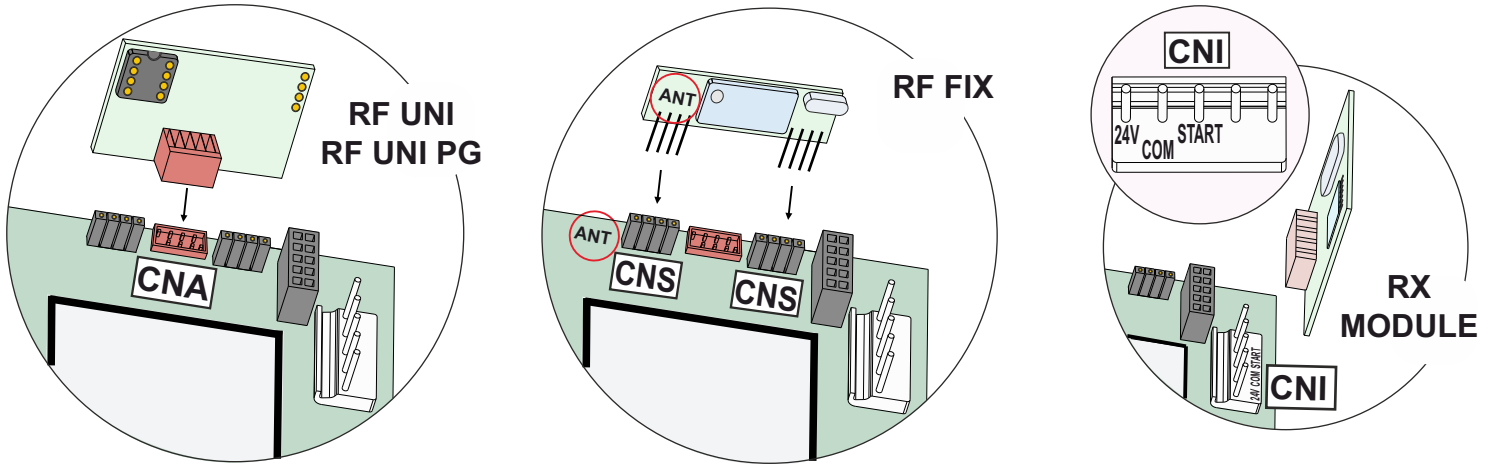


9.7 - ACCESS TO THE HIDDEN «DEBUG» MENU

● Display of the instantaneous speed values detected «VP1» and «VP2» (motor 1 and motor 2) to adjust the thresholds above described (thresholds must always be lower than the values shown in VP1 or VP2)



10 - RECEIVER CONNECTIONS

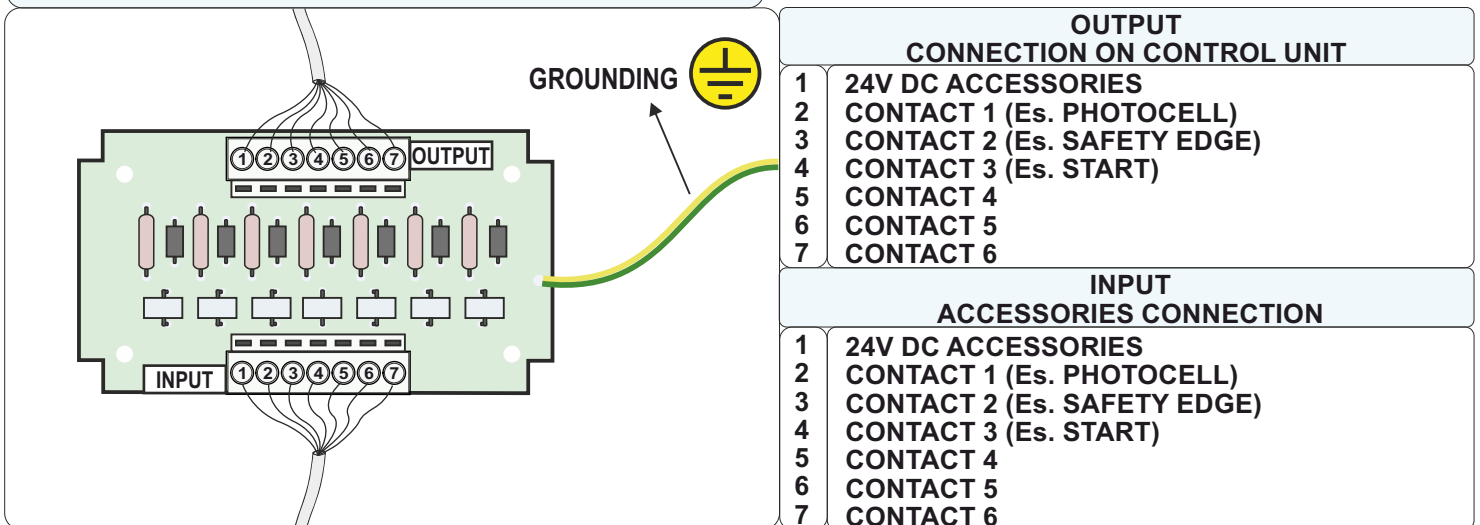


Respect the plug-in direction of the different circuits;
RF FIX: the «ANT» contacts printed on the receiver circuit and control unit circuit must match
RX module: the «24V» «COM» and «START» contacts on the receiver and control unit must match

SEA PLUG-IN RECEIVERS	MAX. USERS NUMBER
RF UNI	16 USERS WITHOUT ADDITIONAL MEMORY 800 USERS WITH MEMO ADDITIONAL MEMORY
RF UNI PG (OLD MODEL - NON EXTRACTABLE MEMORY)	100 USERS IF PROGRAMMED IN FIX CODE 800 USERS IF PROGRAMMED IN ROLLING CODE PLUS
RF UNI PG (NEW MODEL - EXTRACTABLE MEMORY)	496 USERS IF PROGRAMMED IN FIX CODE 800 USERS IF PROGRAMMED IN ROLLING CODE PLUS
RF FIX	16 USERS WITHOUT ADDITIONAL MEMORY 100 USERS WITH MEMO ADDITIONAL MEMORY

11 - ADDITIONAL FUNCTIONS

11.1 - «I/O SURGE PROTECTOR» CIRCUIT



- To protect up to 6 inputs and the 24V power supply from temporary overloads (*ie. lightning strikes*)
- Connect the 24VDC cable and the accessories cables on **INPUT**; connect the corresponding cables from **OUTPUT** to the control unit



CONNECT THE NEGATIVE AND THE COMMON CABLES FROM THE MAIN POWER SUPPLY TO THE CONTROL UNIT

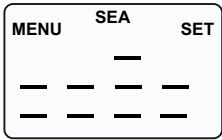
12 - DISPLAY and PROGRAMMING



**CONNECT ALL THE ACCESSORIES WHEN THE CONTROL UNIT IS SWITCHED OFF!
AFTER ALL CONNECTIONS HAVE BEEN MADE, POWER ON THE UNIT FOR SETTINGS**

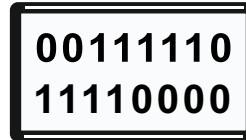
12.1 - DISPLAY DETAILS - *ref. chapter 14*

STANDARD DISPLAY



In standard display the inputs are represented by **OFF** or **ON** dashes depending on whether the corresponding contact respectively is **OPEN** or **CLOSED**

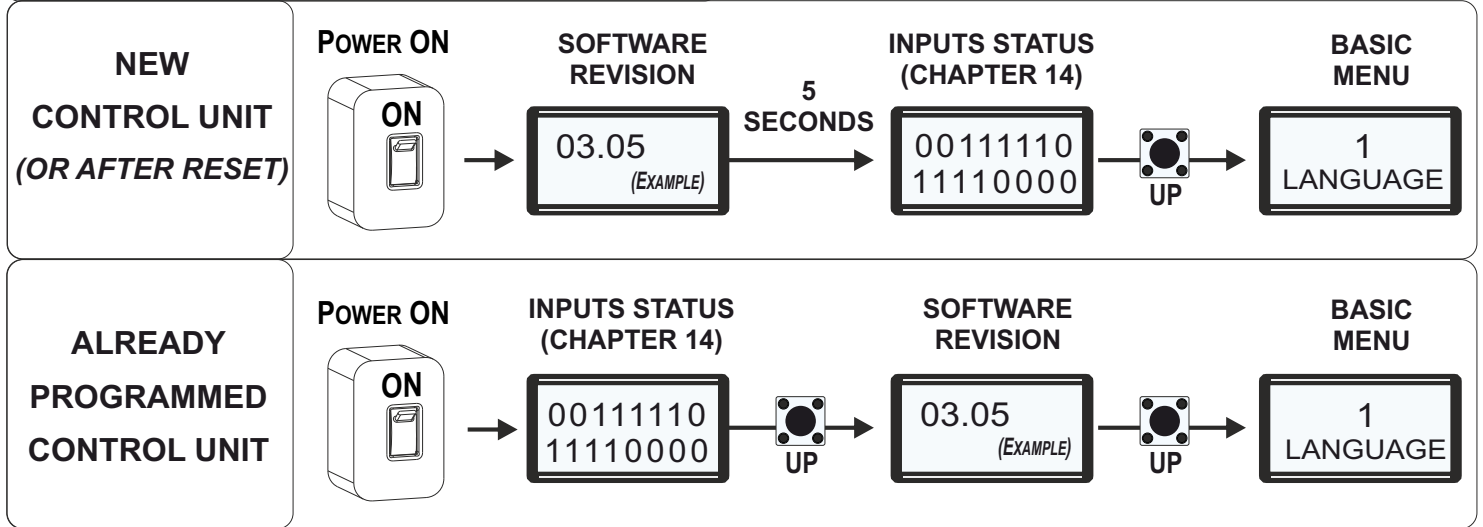
DISPLAY «BINGO» *OPTIONAL ONLY FOR «R2BF»*



In the new **BINGO** display the inputs are represented by «**0**» and «**1**» symbols depending on whether the corresponding contact is **OPEN (0)** or **CLOSED (1)**

➔ *All other screens and views are identical in the two displays*

12.2 - POWER ON THE CONTROL UNIT



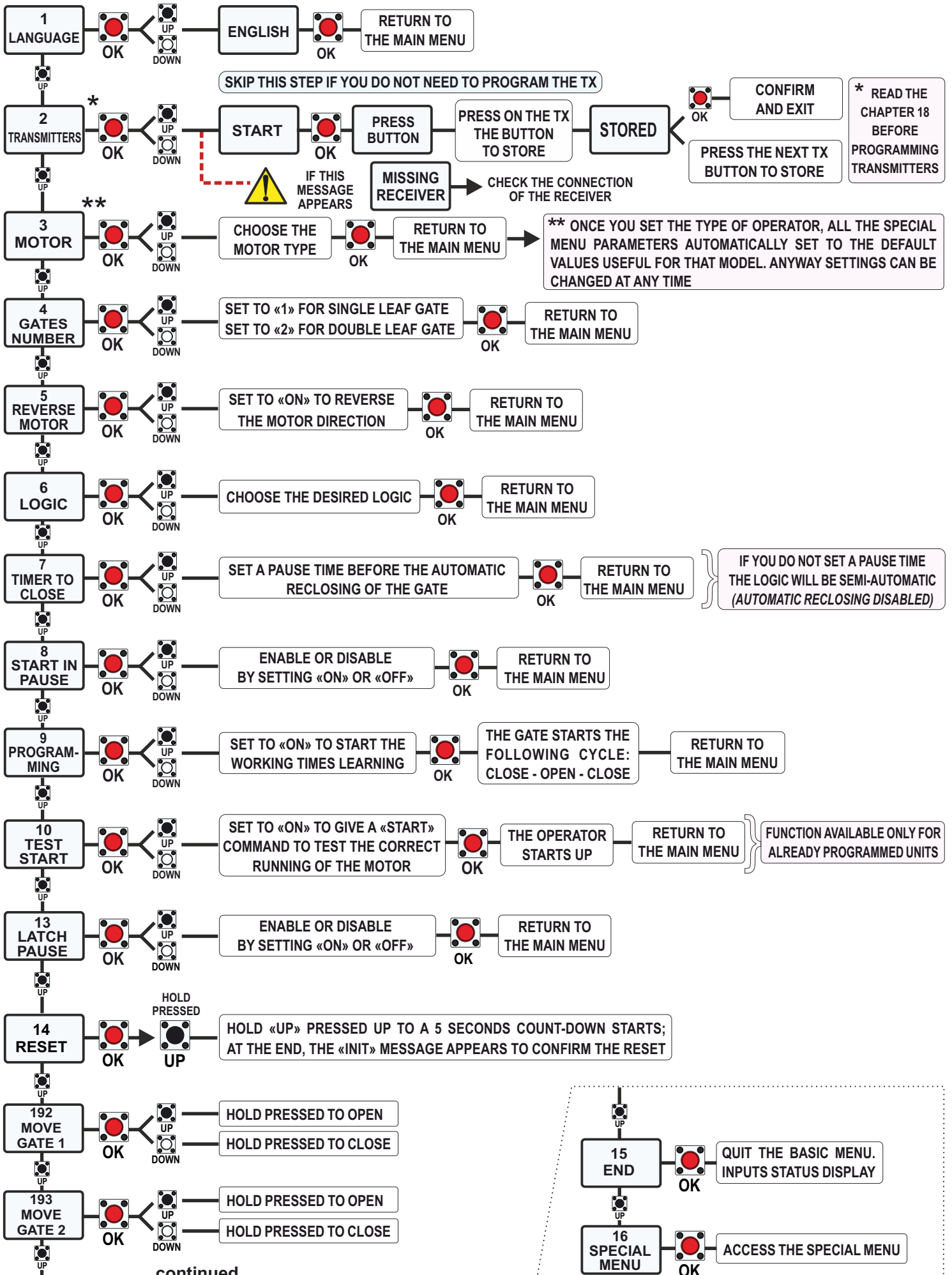
12.3 - BASIC MENU and SPECIAL MENU

- The control unit has a **BASIC MENU** (*chapter 13*) which allows the basic settings in order to start using the product quickly
- The **SPECIAL MENU** allows to change default settings, or to enable/disable the accessories or the control unit functions
- To access the **SPECIAL MENU** use one of the two following methods



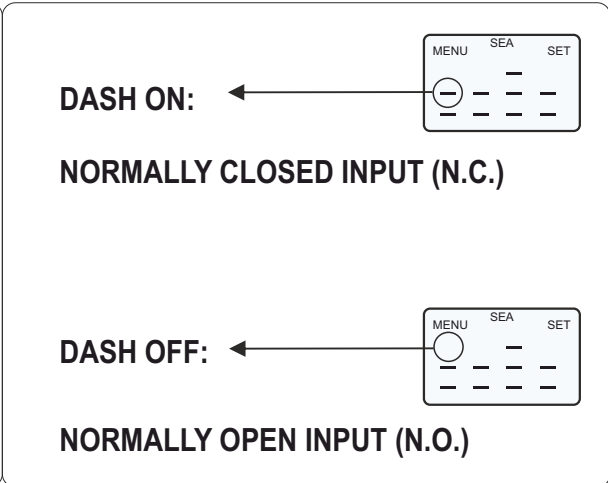
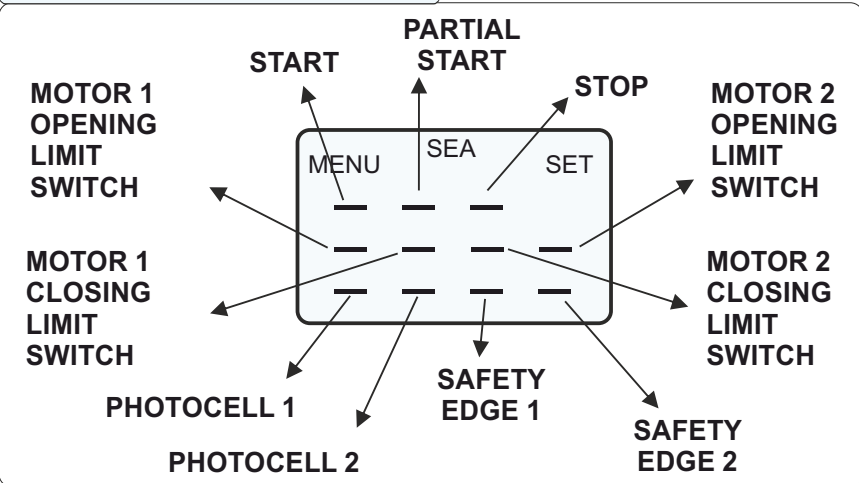
➔ *In the **BASIC MENU** it is possible to **select the operator type** in use and other necessary options. Once the type has been chosen, all the special menus are automatically set to the default values useful for that operator, so further settings may not be necessary*

13 - BASIC MENU

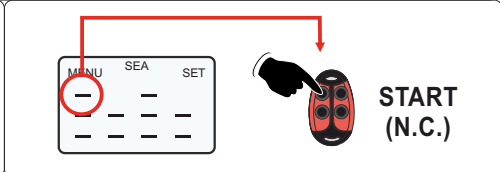
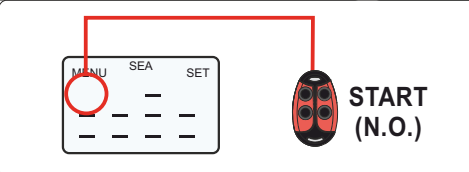


14 - INPUTS STATUS MANAGEMENT

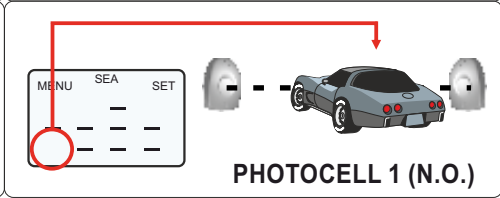
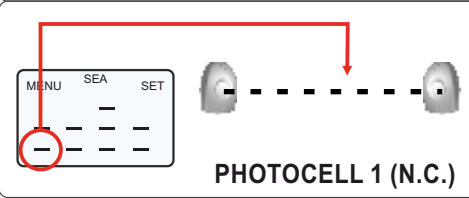
14.1 - INPUTS DISPLAY



● Example: if you give a «START» command, its input switches from normally open to normally closed



● Example: if you pass by the photocell, its input switches from normally closed to normally open

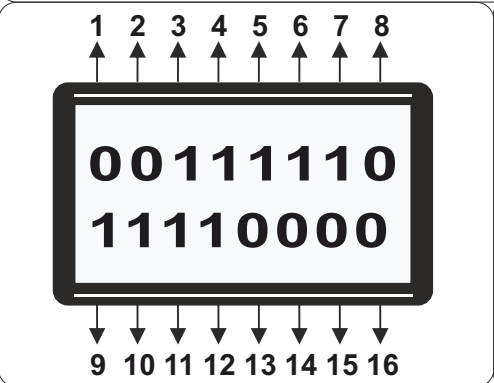


14.2 - INPUTS DISPLAY ON «BINGO»

- Every input corresponds to a fixed position on the display, according to the diagram below
- Every input can be: **NORMALLY OPEN (0)** - **NORMALLY CLOSED (1)**

0 N.O. - NORMALLY OPEN

1 N.C. - NORMALLY CLOSED

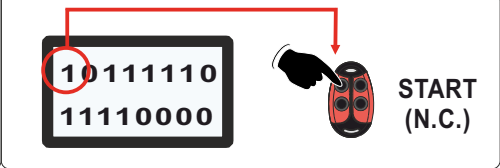
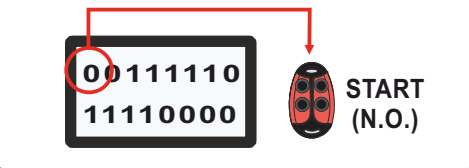


- 1 START (*)
- 2 PARTIAL START
- 3 STOP
- 4 PHOTOCELL 1
- 5 PHOTOCELL 2
- 6 SAFETY EDGE 1
- 7 SAFETY EDGE 2
- 8 NOT IN USE

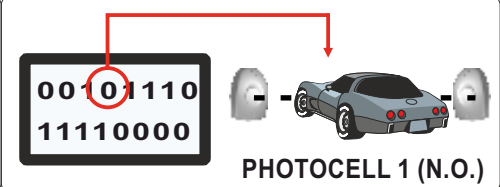
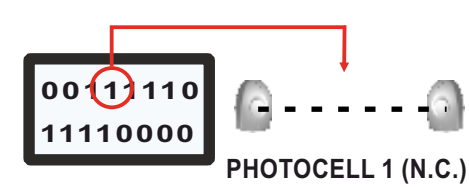
- 9 MOTOR 1 OPENING LIMIT SWITCH
- 10 MOTOR 1 CLOSING LIMIT SWITCH
- 11 MOTOR 2 OPENING LIMIT SWITCH
- 12 MOTOR 2 CLOSING LIMIT SWITCH
- 13 NOT IN USE
- 14 NOT IN USE
- 15 NOT IN USE
- 16 NOT IN USE

* If a **TIMER** is connected to the **START** input, it keeps the contact normally closed; in this case the display will show «T» on position n° 1

● Example: if you give a «START» command, its input switches from normally open to normally closed



● Example: if you pass by the photocell, its input switches from normally closed to normally open



14.3 - ACCESS TO THE INPUTS MANAGEMENT MENU

GO ON ANY BASIC MENU NUMBER



HOLD PRESSED 5 SECONDS

INPUTS MANAGEMENT MENU



• The «inputs management menu» shows the inputs in their current status: ON or OFF

(EXAMPLE)



(EXAMPLE)



• Inside the «INPUTS MANAGEMENT MENU» it is possible to enable or disable the inputs; *paragraph 14.4*

• **START** and **PARTIAL START** are **NORMALLY OPEN (N.O.)** contacts
If «ON» is displayed when the contact is activated, then the input works
If «OFF» is displayed when the contact is activated, then check the wirings

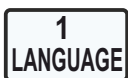


• **ALL OTHER CONTACTS** are **NORMALLY CLOSED (N.C.)** contacts
If «OFF» is displayed when an accessory is wired, then the input works
If «ON» is displayed when an accessory is wired, then check the wirings

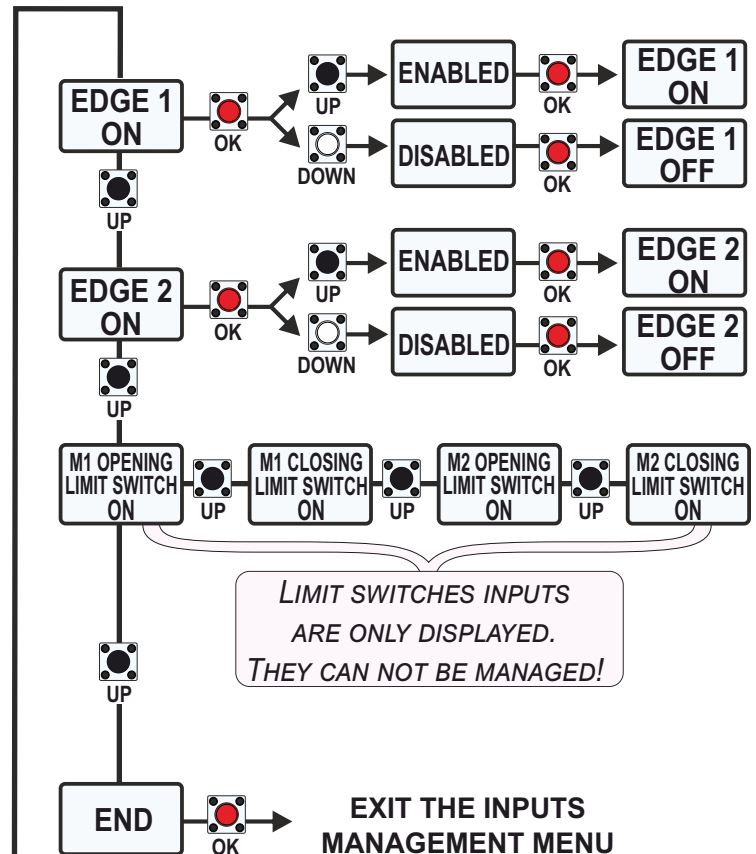
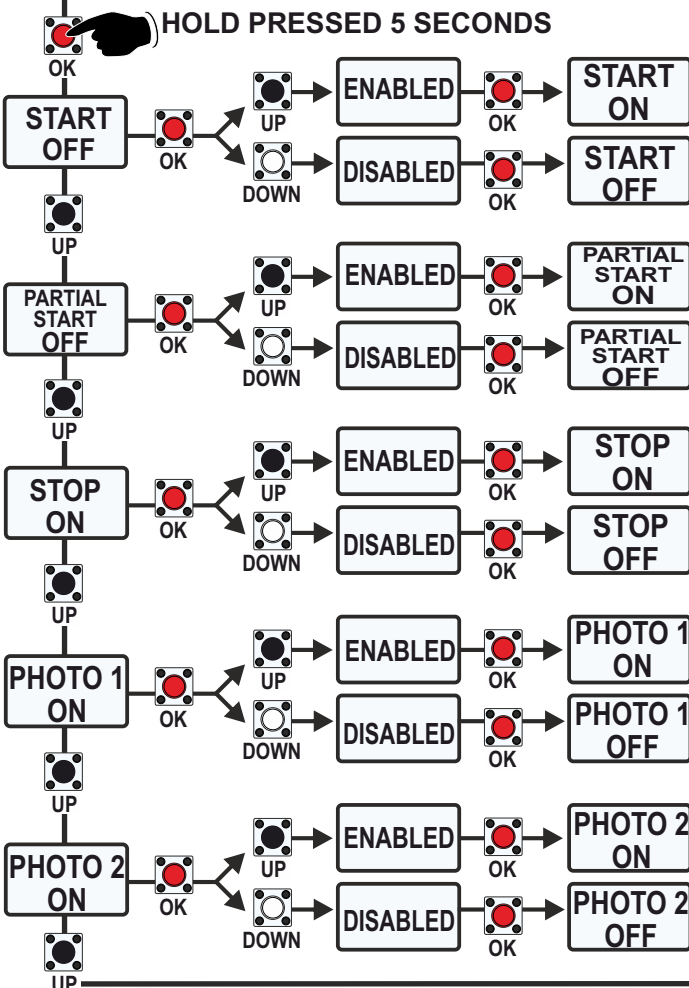


➔ *THE LIMIT SWITCHES INPUTS CANNOT BE MANAGED, BUT ONLY DISPLAYED IN THEIR CURRENT STATE (ON OR OFF)*

14.4 - INPUTS MANAGEMENT MENU



THIS MENU ALLOWS TO ENABLE OR DISABLE THE INPUTS WITHOUT REPEATING THE WORKING TIMES LEARNING



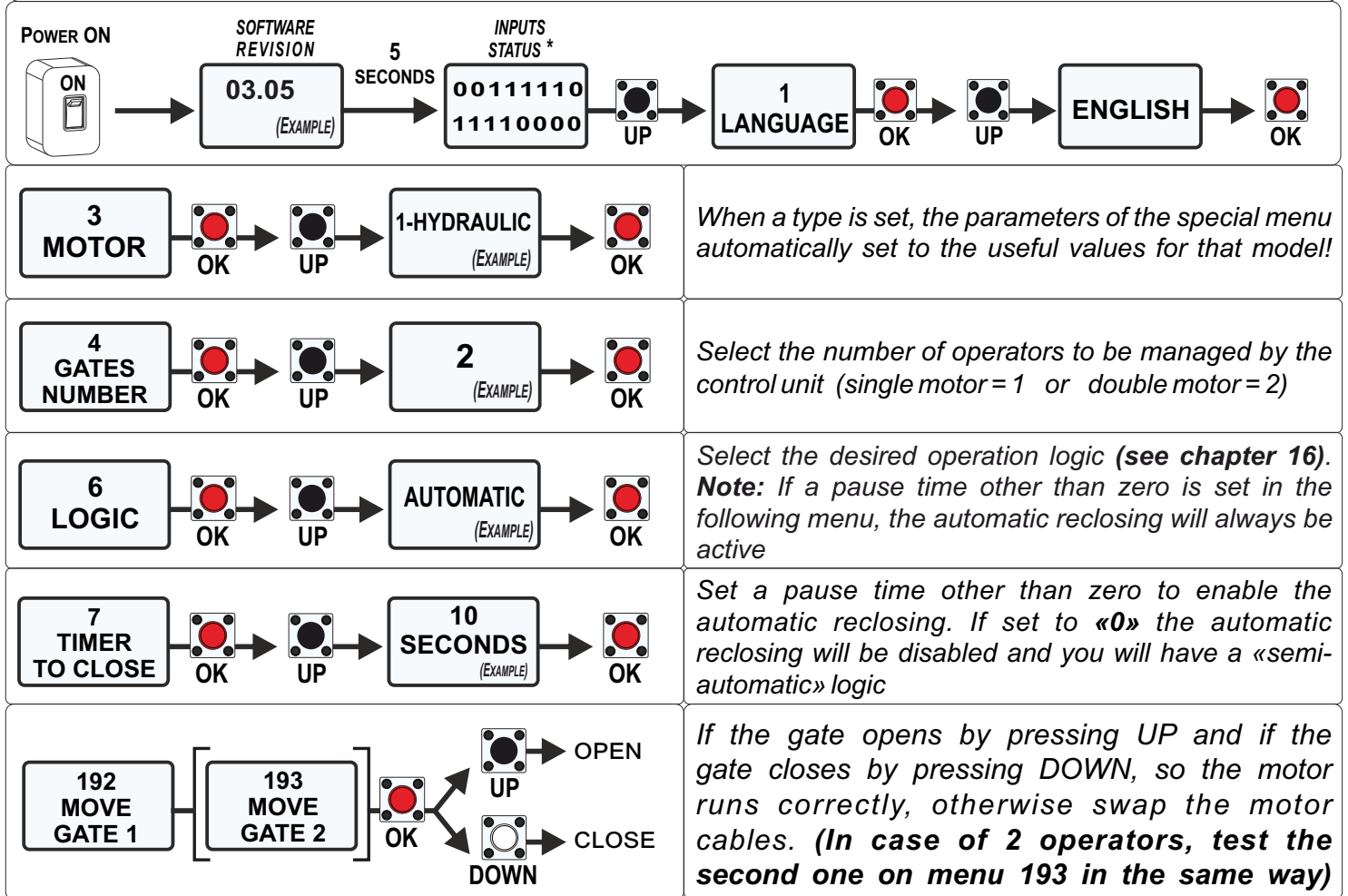
15 - WORKING TIMES LEARNING


DANGER!
HAVE A QUALIFIED SERVICE PERSON TO CARRY OUT THE OPERATIONS IN SAFE CONDITIONS

- ⇒ Check the correct operation of all accessories (photocells, buttons, etc.)
- ⇒ Do not jumper the inputs not in use (limit switch, safety edge, etc.)

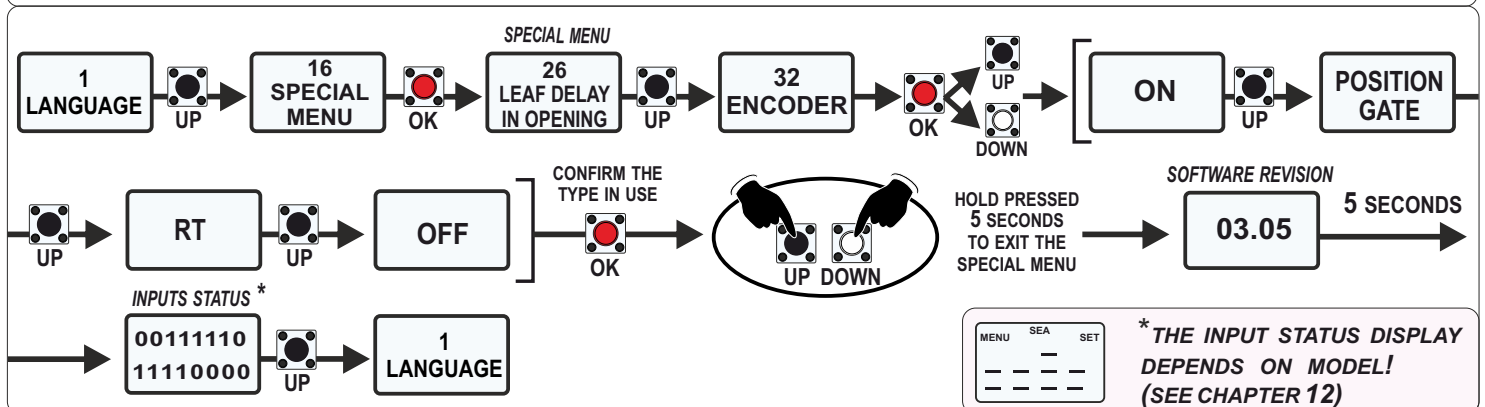
15.1 - PRELIMINARY SETTINGS

⇒ **Before programming the working times, it is necessary to carry out the essential settings of the basic menu. It is not possible to correctly start-up the times learning without carrying-on the following settings!**



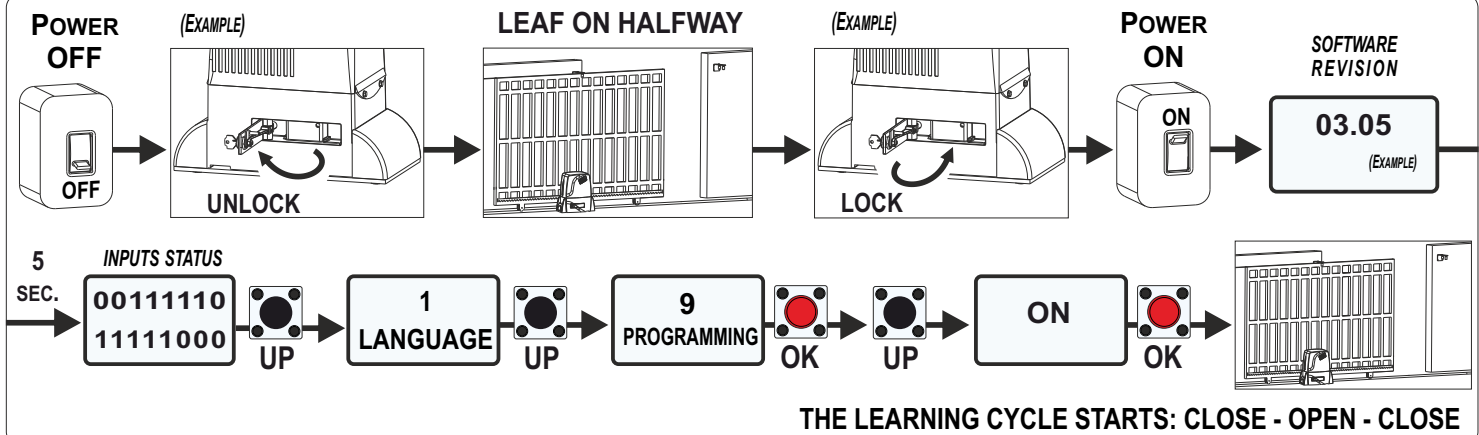
15.2 - ENCODER OR POTENTIOMETER ACTIVATION (IF INSTALLED)

● If the operator is equipped with an encoder or potentiometer (POSITION GATE), then it is necessary to check that they are correctly enabled in special menu 32, **before the working times learning!**



15.3- WORKING TIMES LEARNING BY LIMIT SWITCH

- Working times learning through automatic detection of the limit switches
- Check that the special menu 32 is «OFF» (see paragraph 15.2)
- Check on the **INPUTS STATUS MENU** (chapter 14) that the correct limit switch is engaged for each movement direction
- Start-up the working times learning by following the procedure below:

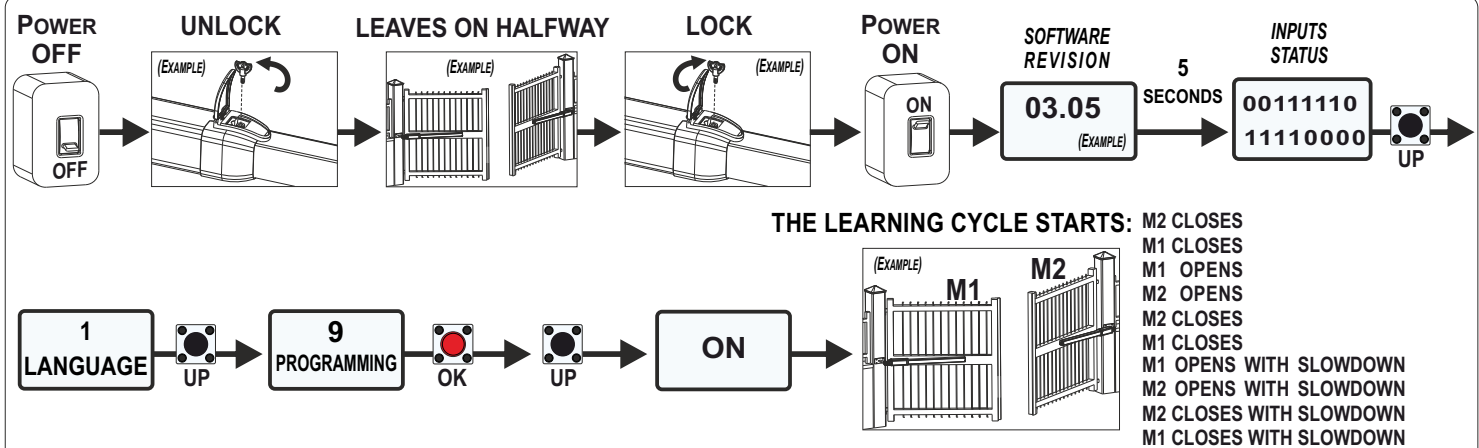


- ➔ If the motor starts closing, reaches the limit switch lever and stops, then swap the limit switch cables and repeat the procedure;
- ➔ If the motor starts opening, reaches the limit switch lever and stops, then swap the motor cables and repeat the procedure;

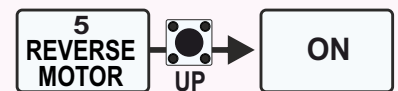
15.4 - WORKING TIMES LEARNING BY POTENTIOMETER or «RT» ENCODER

FOR «RT» ENCODER: USE THIS PROCEDURE ONLY ON SWING GATE OPERATORS!

- Working times learning through the automatic detection of the end-of-stroke points
- Enable the «**POSITION GATE**» or «**RT**» ENCODER in special menu 32 (see paragraph 15.2)
- Start-up the working times learning by following the procedure below:



- ➔ If the operators perform the first learning cycle starting in opening, wait for the end of the cycle and reverse the motors rotation through the menu 5, then repeat the learning procedure



! In case the «**POTENTIOMETER DIRECTION**» alarm is displayed, swap the brown wire with the blue wire and repeat the times learning - **VALID ONLY FOR LINEAR POTENTIOMETER!**

- After the learning, it is possible to check the correct reading of the impulses by accessing the following menus (paragraph 9.5):
- After the learning, it is possible to adjust the sensitivity parameters by the following menus (paragraph 9.6):

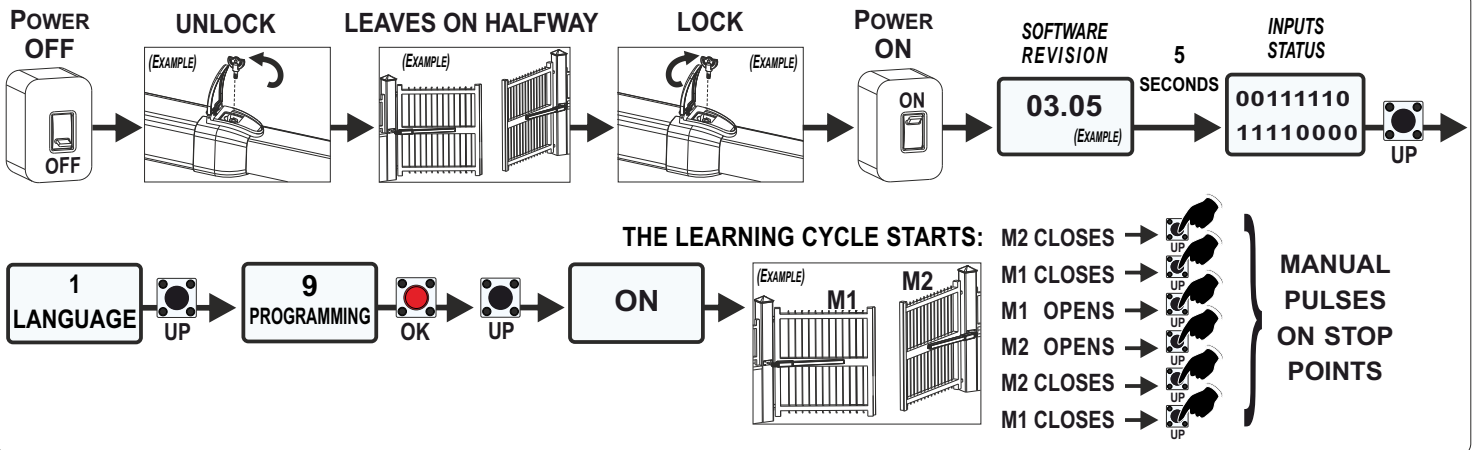
51 I. PAR. M1	52 I. AP. M1	53 I. CH. M1	54 I. PAR. M2	55 I. AP. M2	56 I. CH. M2
33 M1 OPENING SENSITIVITY	34 M1 CLOSING SENSITIVITY	35 M2 OPENING SENSITIVITY	36 M2 CLOSING SENSITIVITY	37 SLOW DOWN SENSITIVITY	

15.5 - WORKING TIMES LEARNING BY MANUAL PULSES

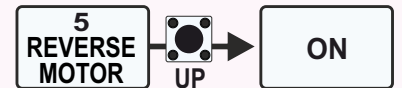
FOR OPERATORS WITHOUT LIMIT SWITCH, WITHOUT ENCODER AND WITHOUT POTENTIOMETER (I.E: DOUBLE SWING GATE OPERATORS)

- Times learning through manual pulses on the points of stop
- Check that the menu 32 is «OFF» (see paragraph 15.2); if necessary, manually adjust the working times by the menus: (these menus are available only when the menu 32 is «OFF»)

65 M1 OPENING TIME	66 M1 CLOSING TIME	67 M2 OPENING TIME	68 M2 CLOSING TIME
---------------------------------	---------------------------------	---------------------------------	---------------------------------

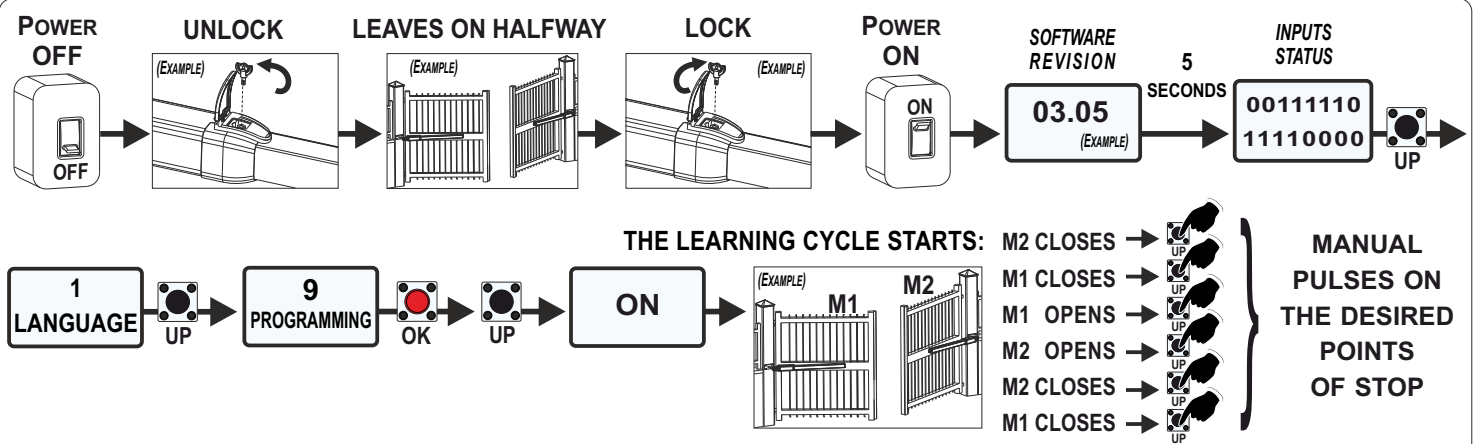


⇒ If the operators perform the first learning cycle starting in opening, wait for the end of the cycle and reverse the motors rotation through the menu 5, then repeat the learning procedure

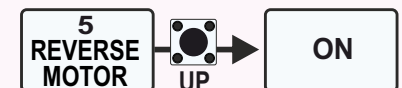


15.6 - LEARNING BY MANUAL PULSES - with POTENTIOMETER or «RT» ENCODER

- Times learning through POTENTIOMETER or «RT» ENCODER which detect the manual pulses on the **desired** points of stop (allowing the choice of the end-of-stroke points)
- Enable the POTENTIOMETER OR «RT» ENCODER on menu 32 (paragraph 15.2)



⇒ If the operators perform the first learning cycle starting in opening, wait for the end of the cycle and reverse the motors rotation through the menu 5, then repeat the learning procedure



! In case the «**POTENTIOMETER DIRECTION**» alarm is displayed, swap the brown wire with the blue wire and repeat the times learning - **VALID ONLY FOR LINEAR POTENTIOMETER!**

- After the learning, it is possible to check the correct reading of the impulses by accessing the following menus (paragraph 9.5):

51 I. PAR. M1	52 I. AP. M1	53 I. CH. M1	54 I. PAR. M2	55 I. AP. M2	56 I. CH. M2
-------------------------	------------------------	------------------------	-------------------------	------------------------	------------------------

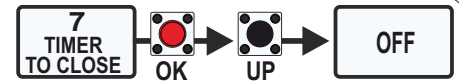
- After the learning, it is possible to adjust the sensitivity parameters by the following menus (paragraph 9.6):

33 M1 OPENING SENSITIVITY	34 M1 CLOSING SENSITIVITY	35 M2 OPENING SENSITIVITY	36 M2 CLOSING SENSITIVITY	37 SLOW DOWN SENSITIVITY
--	--	--	--	---------------------------------------

16 - LOGICS

! THE DEFAULT LOGIC IS «AUTOMATIC», ANYWAY IT CAN BE CHANGED AFTER THE WORKING TIMES LEARNING!

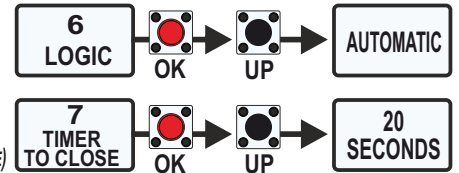
● **SEMI-AUTOMATIC LOGIC:** automatically set when the menu 7 is «OFF» (*automatic reclosing disabled*)



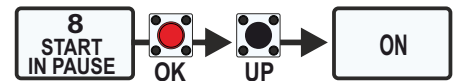
● **SEMI-AUTOMATIC operation:** a **START** command opens the gate; another **START** command closes; *In semi-automatic logic, the automatic reclosing is always disabled.*

● This logic matches with other logics (*except «AUTOMATIC»*), keeping the automatic reclosing disabled

● **AUTOMATIC LOGIC:** pre-set by default. Anyway it can be manually enabled through the menu 6 or through the menu 7 by setting a pause time different than 0 and up to 240 seconds (*The menu 7 also enables the automatic reclosing when different than 0*)

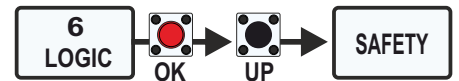


● Through the menu 8 it is possible to choose if the **START** command given during the pause time is accepted or not

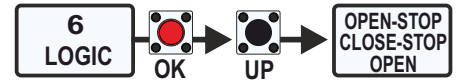


● **AUTOMATIC operation:** a **START** command opens the gate; another **START** command is not accepted if given during the opening; a **START** command reverses the movement if given during the closing

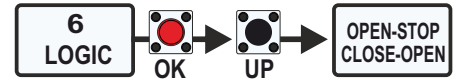
● **SAFETY LOGIC:** a **START** command opens the gate; another **START** command reverses the movement if given during the opening a **START** command reverses the movement if given during the closing



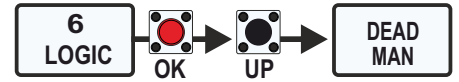
● **STEP BY STEP TYPE 1 LOGIC:** the **START** command follows the logic: **OPEN - STOP - CLOSE - STOP - OPEN**



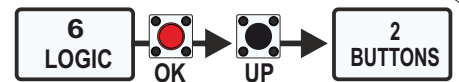
● **STEP BY STEP TYPE 2 LOGIC:** the **START** command follows the logic: **OPEN - STOP - CLOSE - OPEN**



● **DEAD MAN LOGIC:** the gate opens as long as the **START** command is held pressed; when released the gate stops. The gate closes as long as the **PARTIAL START** is held pressed; when released the gate stops.



● **2 BUTTONS LOGIC:** a **START** command opens the gate; a **PARTIAL START** command closes the gate

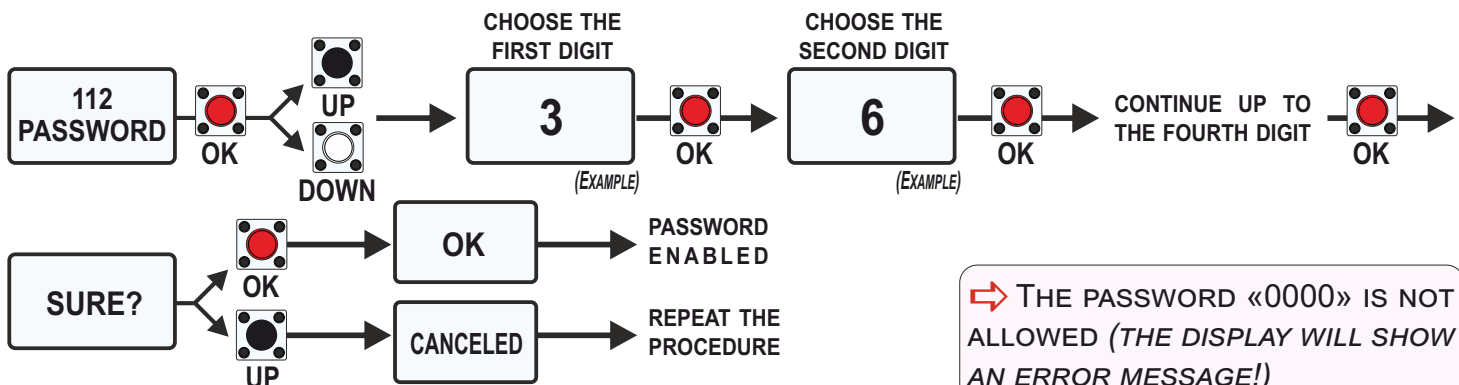


The **START** command reopens the gate if given during the closing. The **PARTIAL START** command is not accepted if given during the opening or during the closing

17 - PASSWORD

● Once the password is enabled, all the menus can not be adjusted, they are only displayed

● If you forget the password, contact the SEA technical assistance: **SEA reserves the right to evaluate and decide whether to provide or not the unlocking procedure**



➡ THE PASSWORD «0000» IS NOT ALLOWED (THE DISPLAY WILL SHOW AN ERROR MESSAGE!)

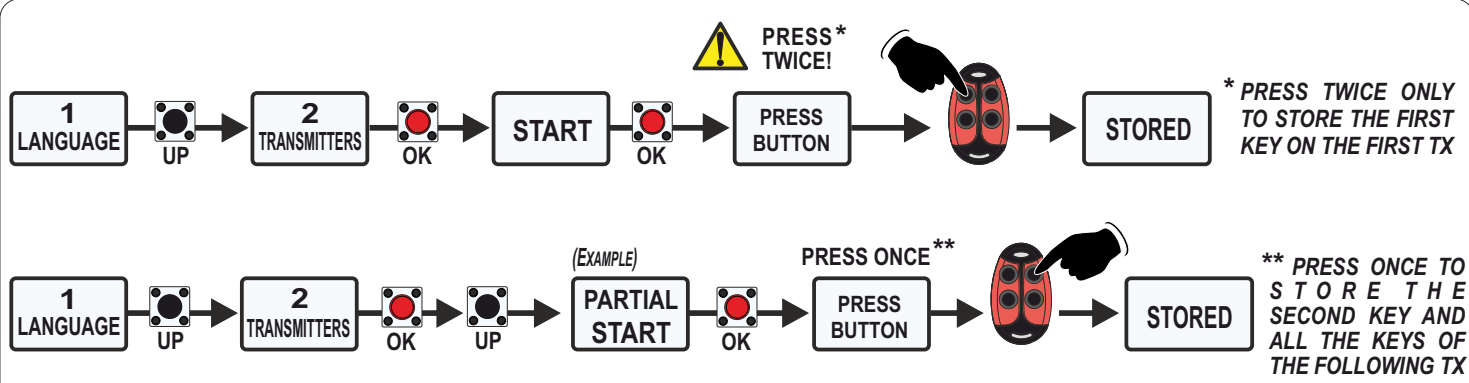
18 - RECEIVERS AND TRANSMITTERS

CONNECT THE RECEIVER CIRCUIT WHEN THE CONTROL UNIT IS NOT POWERED, AS SHOWN IN CHAPTER 10

- **When the control unit is switched-off**, check if the receiver is correctly plugged in
- Program the transmitters before connecting the antenna
- Program the transmitters only when the gate is closed and the motor is stopped
- **RF UNI** and **RF UNI PG** allow the use of both **ROLL PLUS/UNI TX** and **FIX CODE TX**
- **RF FIX** allows the use of **FIX CODE** transmitters only
- It is possible to store up to 2 among the available functions
- The **START** command must **ALWAYS** be stored on the first channel of the TX
- If the second stored function is modified, then all the transmitters acquire this change on the second channel

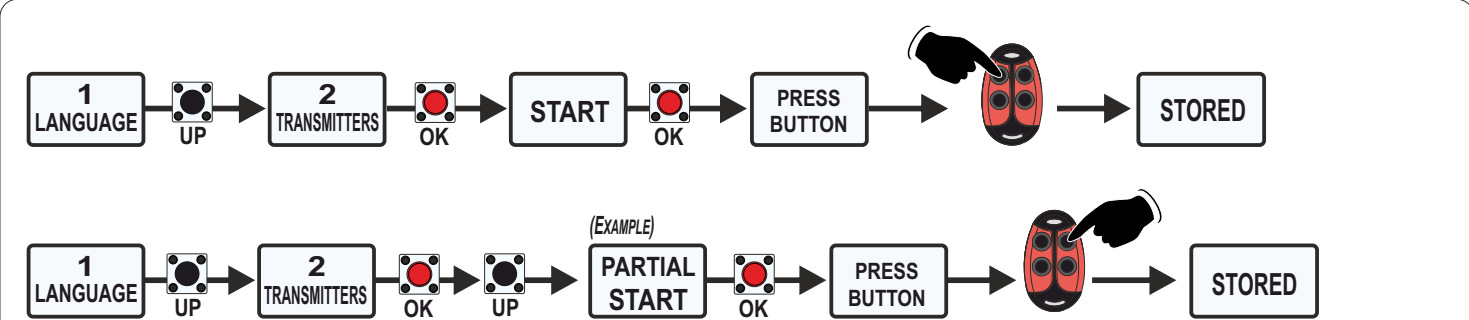
THE FIRST STORED TRANSMITTER DETERMINES THE CODING OF THE FOLLOWING ONES if the first transmitter is stored as *ROLLING CODE*, then all the followings must be stored as *ROLLING CODE*; transmitters with different coding are not accepted - see the coding passage on Tx instruction!

18.1 - OLD «ROLLING CODE» CODING



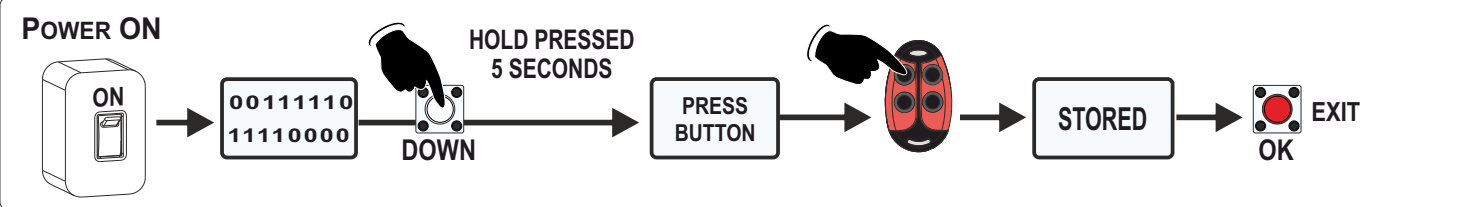
More details on the functions available in **paragraph 18.4**

18.2 - «ROLLING CODE PLUS» - «UNI» - «FIX CODE» TRANSMITTERS

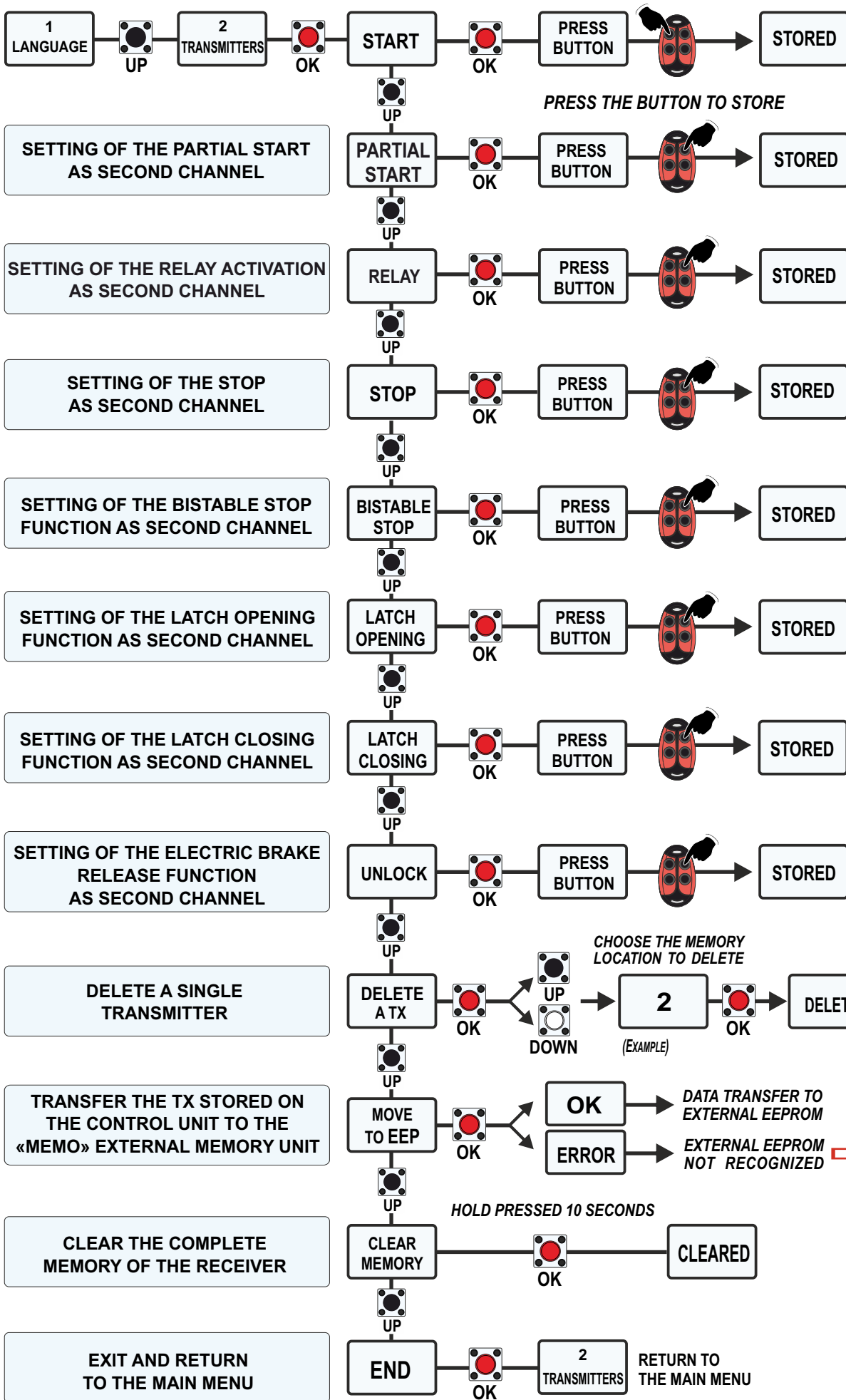


More details on the functions available in **paragraph 18.4**

18.3 - «START» COMMAND QUICK LEARNING



18.4 - TRANSMITTERS FUNCTIONS DIAGRAM



➔ THE « START » COMMAND MUST ALWAYS BE STORED ON THE FIRST TX CHANNEL

PRESS THE BUTTON TO STORE

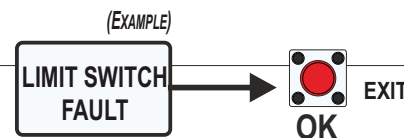
➔ To UNLOCK THE ELECTRIC BRAKE GIVE 3 CONSECUTIVE PULSES; TO LOCK IT AGAIN, GIVE 4 CONSECUTIVE PULSES

➔ CHECK IF THE «MEMO» EEPROM UNIT IS CORRECTLY PLUGGED-IN ON THE RECEIVER

19 - ALARMS

19.1 - FAULTS SHOWN ON THE DISPLAY

- The control unit advises of the faults may happen through a message on the display (*Note: press ok to exit the message*)
- Below the list of the faults that are signaled on the display and the possible solutions to the problems (*if the fault message holds out, contact the technical support*)



WARNING MESSAGE	SOLUTION
FAULT MOTOR	Motor power supply fault - Check that there are no short circuits on the motor or on the control unit; check that the gate is not blocked or stuck on a stop point. Check that the encoder (<i>if enabled</i>) is correctly wired to the control unit. Unlock the operator and give a START command to check that the motor runs: if the motor runs then disconnect the power supply, lock the operator again and restore the power supply; if the motor does not run, then it is burned
FAULT 24	24V or 24VAUX power supply fault - Check that there are no short circuits on wirings or on the control unit; check that there is no overload
FAULT NET	Main power supply fault - Check that a power failure is not occurred; check that the main power supply is active; Check the fuse F2
FAULT PHOTOCELL 1 SELF-TEST	«PHOTOCELL 1 SELF-TEST» function fault - Check the operation of the photocells and/or their wirings on the control unit
FAULT PHOTOCELL 2 SELF-TEST	«PHOTOCELL 2 SELF-TEST» function fault - Check the operation of the photocells and/or their wirings on the control unit
FAULT LIMIT SWITCH	Limit switch activation fault - Check the operation of both limit switches and that there is a correspondence between the direction of movement of the motor and the limit switch engaged
FAULT POTENTIOMETER (1 or 2)	Potentiometer fault - <i>The message appears only if the menu 32 is set to «POSITION GATE».</i> The potentiometer management unit (LE / LSE) is damaged or not correctly wired or set
FAULT POTENTIOMETER DIRECTION (M1)	Potentiometer cables wiring error on Motor 1 - Swap the wiring cables of the potentiometer (<i>swap the blue cable with the brown cable</i>)
FAULT POTENTIOMETER DIRECTION (M2)	Potentiometer cables wiring error on Motor 2 - Swap the wiring cables of the potentiometer (<i>swap the blue cable with the brown cable</i>)
FAULT POTENTIOMETER «RT» OR POSITION GATE	Potentiometer fault - <i>The message appears only if the menu 32 is set to «POSITION GATE» or to «RT».</i> The potentiometer management unit (LE/LSE) or the «RT» encoder management unit (LRT) is damaged or not correctly wired or set
FAULT FLASHING LIGHT	Flashing light fault - Check the wirings and / or the condition of the lamp
FAULT SAFETY EDGE (1 or 2)	Safety edge fault - Check the metal wire of the safety edge and the cables wirings. Check that the contact is closed by accessing the «INPUT STATUS» menu (<i>paragraph 14.2</i>)
FAULT ENCODER	Encoder fault - <i>The message appears only if the menu 32-ENCODER is set to «ON».</i> The Encoder management unit (LE / LSE) is damaged or not correctly wired or set
PASSWORD ERROR	Password error - Enter the password correctly; It is not possible to set «0000» as a password; If you forgot the password, please contact the technical assistance.

19.2 - FAULTS SIGNALLED ON THE FLASHING LIGHT

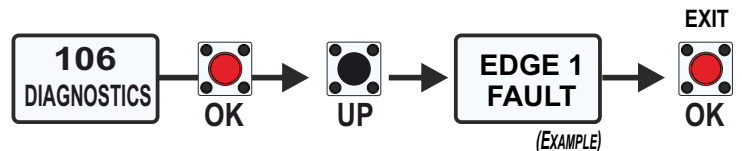
- It is also possible to visualize the warning signals through the flashing light simply by observing the number of flashes emitted (*see the table of correspondences below*)
- When an event occurs, the warning flashes will be issued at each «START» command

ALARM TYPE	NUMBER OF FLASHES
MOTOR FAILURE (M1 OR M2)	9 SLOW (EVERY 0.5 SEC) 10 TIMES
PHOTOCELL FAILURE DURING CLOSING	2 SLOW (EVERY 0.5 SEC) 5 TIMES
PHOTOCELL FAILURE DURING OPENING	3 SLOW (EVERY 0.5 SEC) 5 TIMES
PHOTOCELL SELF-TEST FAILED	3 SLOW (EVERY 0.5 SEC) 1 TIME
COLLISION - OBSTACLE DETECTED DURING OPENING	6 SLOW (EVERY 0.5 SEC) 10 TIMES
COLLISION - OBSTACLE DETECTED DURING CLOSING	6 SLOW (EVERY 0.5 SEC) 10 TIMES
SAFETY EDGE FAILURE	4 SLOW (EVERY 0.5 SEC) 3 TIMES
M1 POTENTIOMETER FAILURE	11 FAST (EVERY 0.2 SEC) 4 TIMES
M2 POTENTIOMETER FAILURE	11 FAST (EVERY 0.2 SEC) 4 TIMES
«RT» POTENTIOMETER OR «POSITION GATE» FAULT	11 FAST (EVERY 0.2 SEC) 4 TIMES
FAULT ON STOP CONTACT	5 SLOW (EVERY 0.5 SEC) 1 TIME
LIMIT SWITCH FAILURE OR ERROR	4 FAST (EVERY 0.2 SEC) 10 TIMES
MAX. CYCLES ACHIEVED-MAINTENANCE REQUIRED	7 SLOW (EVERY 0.5 SEC) 1 TIME

➡ The «CYCLES ALARM» warning refers to the reaching of the maximum cycles number established after which the maintenance is necessary

19.3 - «DIAGNOSTICS» MENU TO DISPLAY LATEST EVENTS

● The warnings and the alarms remain in the control unit memory, up to a max. of 10 events. To see the stored events, access the menu 106. Below is the table with the type of events saved in the diagnostics



➡ If the fault message holds out, carry out the required checks or disconnect the device generating the fault

TYPE OF EVENT	WARNING MESSAGE STORED
EVENTS OR ALARMS REGARDING FAULTS ON MOTOR	MOTOR FAULT
EVENTS OR ALARMS REGARDING FAULTS ON PHOTOCELL 1 OR PHOTOCELL 2 IN OPENING	PHOTO OPENING
EVENTS OR ALARMS REGARDING FAULTS ON PHOTOCELL 1 OR PHOTOCELL 2 IN CLOSING	PHOTO CLOSING
EVENTS OR ALARMS REGARDING FAULTS ON 10K PHOTOCELLS	10K PHOTOCELL
EVENTS OR ALARMS REGARDING THE DETECTION OF OBSTACLES IN THE OPENING PHASE	OBSTACLE IN OPENING
EVENTS OR ALARMS CONCERNING THE DETECTION OF OBSTACLES IN THE CLOSING PHASE	OBSTACLE IN CLOSING
EVENTS OR ALARMS CONCERNING FAULTS ON THE SAFETY EDGE 1	SAFETY EDGE 1 FAULT
EVENTS OR ALARMS CONCERNING FAULTS ON THE SAFETY EDGE 2	SAFETY EDGE 2 FAULT
EVENTS OR ALARMS CONCERNING FAULTS ON THE ABSOLUTE POTENTIOMETER	POT. 1 or POT. 2 FAULT
EVENTS OR ALARMS CONCERNING FAULTS ON THE «STOP» CONTACT	STOP
REACHING OF THE MAXIMUM CYCLES ESTABLISHED - MAINTENANCE REQUIRED	MAINTENANCE
EVENTS OR ALARMS CONCERNING FAULTS ON THE MAIN POWER SUPPLY	MISSING NETWORK
EVENTS OR ALARMS CONCERNING FAULTS ON THE OPENING OR CLOSING LIMIT SWITCHES	LIMIT SWITCH

 **IT IS ALWAYS RECOMMENDED TO CONSULT THE CHAPTER 20 DEDICATED TO TROUBLESHOOTING. MOST OF THE PROBLEMS CAN BE SOLVED BY FOLLOWING THE GIVEN INSTRUCTIONS!**

20 - TROUBLESHOOTING



MAKE SURE THAT ALL THE SAFETY DEVICES ARE «ON»





PROBLEM	POSSIBLE REASON	SOLUTION
The operator does not respond to any START command	<ul style="list-style-type: none"> a) Check that the N.C. are connected b) Blown fuse 	<ul style="list-style-type: none"> a) Check the connections and the jumpers on the safety edge or stop or photocell inputs, if connected b) Replace the blown fuse on the control unit
The operator does not run and the diagnostic display is off	<ul style="list-style-type: none"> a) The control unit is not powered b) Fuse open c) Defective control unit 	<ul style="list-style-type: none"> a) Check the AC power supply b) Check the fuses c) Replace the defective control unit
The operator does not respond to a wired command (example: Opening, Closing, etc.)	<ul style="list-style-type: none"> a) Check the inputs of the opening and closing commands b) The STOP button is activated c) The Reset button is blocked d) Anti-entrapment safety device active 	<ul style="list-style-type: none"> a) Check all the opening and closing inputs to make sure they are not blocked b) Check the STOP button is not blocked c) Check the Reset button d) Check among all the inputs of the anti-entrapment protection device, if there is a blocked sensor
The operator does not respond to a remote control	<ul style="list-style-type: none"> a) The STOP button is activated b) The Reset button is blocked c) Poor radio reception 	<ul style="list-style-type: none"> a) Check the STOP button is not blocked b) Check the Reset button c) Check if the other wired devices are working correctly; check the antenna cable
The motor runs in one direction only	<ul style="list-style-type: none"> a) Check the resistance between the motor phase and neutral and verify that the resistance is MOhm b) Try to invert the motor phase and see if it changes direction or not 	<ul style="list-style-type: none"> a) Replace the cable b) If the motor is blocked, replace the cable; if the motor moves in one direction only, the motor direction relay is damaged
The gate does not move but the motor runs	<ul style="list-style-type: none"> a) The engine is in the locked position b) Presence of an obstacle 	<ul style="list-style-type: none"> a) Release the motor b) Remove the obstacle
The gate does not reach the complete open or closed position	<ul style="list-style-type: none"> a) Wrong limit switch setting b) Programming error c) Gate is stopped by an obstacle d) Torque too low e) The gate is too heavy to perform the automatic slowdown 	<ul style="list-style-type: none"> a) Set the limit switches b) Repeat the working times programming c) Remove the obstacle d) Increase the torque parameter e) Set the slowdown to OFF
The gate opens but does not close	<ul style="list-style-type: none"> a) The photocells contacts are connected and open b) Stop contact connected and open c) The safety edge contact is open d) Amperometric alarm 	<ul style="list-style-type: none"> a) b) c) Check the jumpers or the connected devices or the warning signals on the flashing lamp d) Check for a possible the amperometric alarm and, if necessary, increase the torque parameter
The gate does not close automatically	<ul style="list-style-type: none"> a) Pause time set too high b) Semi-automatic logic control unit 	<ul style="list-style-type: none"> a) Adjust the pause time b) Set the PAUSE TIME menu to a value different than OFF
The gate moves, but the limit switches cannot be set correctly	<ul style="list-style-type: none"> a) The gate does not move towards a stop position b) It is too difficult to move the gate 	<ul style="list-style-type: none"> a) Manually unlock and move the gate and make sure the gate moves easily from limit switch to limit switch. If necessary, repair the gate b) The gate must be able to move easily and freely throughout its travel, from limit switch to limit switch. If necessary, repair the gate
The gate does not fully open or close when the limit switches are set	<ul style="list-style-type: none"> a) The gate does not move towards a limit switch b) It is too difficult to move the gate 	<ul style="list-style-type: none"> a) Manually unlock and move the gate and make sure the gate moves easily from limit switch to limit switch. If necessary, repair the gate b) The gate must be able to move easily and freely throughout its travel, from limit switch to limit switch. If necessary, repair the gate
The gate stops during travel and reverses direction	<ul style="list-style-type: none"> a) Open/Close control active b) The obstacle detection sensitivity is too low 	<ul style="list-style-type: none"> a) Check if there is an active input among all the opening and closing inputs b) Check the obstacle detection sensitivity value and try to increase it
The gate opens but does not close with TX or closing timer	<ul style="list-style-type: none"> a) Opening control active b) Pause not set c) The closing anti-entrapment protection device is active d) The photocell contact is open e) The fire switch input is active 	<ul style="list-style-type: none"> a) Check if there is an active input among the open inputs b) Check the pause settings c) Check if there is an active sensor among all the inputs of the anti-entrapment protection device d) Check the contact of the photocells e) Check the fire switch input

PROBLEM	POSSIBLE REASON	SOLUTION
The gate does not respect the slowdown start points	<ul style="list-style-type: none"> a) The encoder does not work properly when activated b) Slow mechanical clutch c) Too large deceleration space d) The potentiometer does not work correctly when activated e) The parameters of the recovery position are too high or too low 	<ul style="list-style-type: none"> a) Check in the Encoder menu that the "Encoder Par" parameter is set from a low value of +/- 10 (gate completely closed) to "Encoder tot" (gate completely open). If the IPAR movement is not in line with the range of values (from +/- 10 to "Encoder tot") probably the encoder is defective b) Tighten the mechanical clutch c) Reduce the slowdown space d) Check in the Potentiometer menu that the "IPAR" parameter is set from "I.CH." (gate completely closed) to "I.AP." (gate completely open). If the "IPAR" movement is not in line with the range of values (from I.AP. to I.CH.), the potentiometer is probably faulty e) Reduce or increase the values of the "recovery position"
The gate opens suddenly but any START command have been given	<ul style="list-style-type: none"> a) Frequency or disturbances on the main line b) Short-circuit on the START contact 	<ul style="list-style-type: none"> a) The AC wiring must be separated from the DC wires and run through separate conduits. If it is a frequency disturbance, you can change the frequency to another MHz value, such as 868 or FM b) Check all the START contacts
The gate does not accept the close command during the pause in automatic logic, even if the loop or photocell are set as Start	<ul style="list-style-type: none"> a) START IN PAUSE is not ON b) The photocell/loop input is not set as "pause reload" 	<ul style="list-style-type: none"> a) Turn ON the START IN PAUSE menu b) Set "pause reload" in the photocell / loop menu
The gate does not have the necessary force to close or reach the limit switch	<ul style="list-style-type: none"> a) Slowing down is not possible either because the gate is too heavy or because of the inclination or because the installation is not new 	<ul style="list-style-type: none"> a) Set the slowdown to OFF
The gate travel is obstructed and cannot stop or reverse	<ul style="list-style-type: none"> a) Force the necessary adjustment 	<ul style="list-style-type: none"> a) Refer to the adjustment parameter to carry out the obstruction tests and make the correct adjustments of the force (sensitivity - torque)
The photocell does not stop or reverse the gate travel	<ul style="list-style-type: none"> a) The photocell wiring is incorrect b) The photocell is faulty c) The photocells have been installed too far apart 	<ul style="list-style-type: none"> a) Check the photocell wiring. Check that the gate stops and reverses its direction when the photocell is engaged b) Replace the faulty photocell. Check that the gate stops and reverses its direction when the photocell is engaged c) Install the photocells closer or use safety edges with sensors
The safety edge does not stop or reverse the travel of the gate	<ul style="list-style-type: none"> a) Incorrect wiring of the edge sensor b) Defective edge sensor 	<ul style="list-style-type: none"> a) Check the safety edge wiring. Check that the gate stops and reverses its direction when the edge is activated b) Replace the defective safety edge and check that the gate stops and reverses its direction when it is activated
The alarm sounds for 5 minutes or the alarm sounds after a command	<ul style="list-style-type: none"> a) A double entrapment has occurred (two obstructions within a single activation) 	<ul style="list-style-type: none"> a) Check the cause of the entrapment detection (obstruction) and correct it. Press the reset button to silence the alarm and reset the operator
The shadow loop does not hold the gate on the opening limit switch	<ul style="list-style-type: none"> a) Shadow loop sensor incorrectly adjusted b) Defective shadow loop sensor c) Wrong setting 	<ul style="list-style-type: none"> a) Check the shadow loop settings and reset as needed b) Replace the defective vehicle sensor c) Check that menu 98 is on SHADOW LOOP
The accessories connected to the accessory power supply do not work properly, they turn off or restart	<ul style="list-style-type: none"> a) Accessory power supply protection active b) Defective electronic control unit 	<ul style="list-style-type: none"> a) Disconnect all devices powered by the "accessories power supply" and measure their voltage (must be 23-30 Vdc). If the voltage is correct, reconnect the accessories one at a time, measuring each time the voltage b) Replace the defective control unit
Fault on the 24VAUX	<ul style="list-style-type: none"> a) Overload/short-circuit on AUX input b) Blown fuse 	<ul style="list-style-type: none"> a) Check if the cable is shorted b) Replace the fuse
The control unit turns on but the motor does not run	<ul style="list-style-type: none"> a) STOP active or wrong jumpers b) Open or close the active input c) Active Entrapment Protection Device d) Defective electronic control unit 	<ul style="list-style-type: none"> a) Check that the STOP button is not blocked, that it is a N.C. contact or put a jumper on the Stop input b) Check that none of the opening and closing inputs are blocked c) Check whether there is a blocked sensor among all the entrapment protection device inputs d) Replace the defective control unit

SWING 2 DG (R2F) - (R2BF) MENU FUNCTIONS TABLE

THE DESCRIBED FUNCTIONS ARE VALID FOR ALL SWING 2 DG VERSIONS, EXCEPT WHERE EXPRESSLY STATED

MENU		SET	DESCRIPTION	DEFAULT	NOTE
1	LANGUAGE	<i>Italiano</i>	Italian	English	
		<i>English</i>	English		
		<i>Français</i>	French		
		<i>Español</i>	Spanish		
		<i>Dutch</i>	Dutch		
2	TRANSMITTERS	<i>START</i>	START	Start Partial Opening	
		<i>Partial START</i>	Partial START		
		<i>Relay</i>	To enable the Relay for 3 seconds		
		<i>STOP</i>	STOP		
		<i>Bistable STOP</i>	Pressed once, it stops the gate. Pressed twice, it reactivates the START input		
		<i>Latch opening</i>	One impulse opens and keep open. A second impulse restore the movement		
		<i>Latch closing</i>	One impulse closes and keep closed. A second impulse restore the movement		
		<i>Unlock</i>	To store a command for unlocking the electric brake		
		<i>Delete a transmitter</i>	To delete a single transmitter (TX)		
		<i>Move to EEP</i>	To transfer the transmitters stored on the control unit to the external EEPROM (MEM), if connected		
		<i>Clear memory</i>	To delete the full transmitters memory on the receiver		
	<i>End</i>	To exit the menu «transmitters»			
3	MOTOR	<i>1- Hydraulic</i>	Hydraulic operators	Mechanic	
		<i>2- Sliding</i>	Sliding operators		
		<i>3- Reversible Sliding</i>	Reversible sliding operators		
		<i>4- Mechanic Swing</i>	Electro-mechanic swing operators		
		<i>11- Cougar</i>	Electro-mechanic swing operator		
4	GATES NUMBER	<i>From 1 to 2</i>	To set the number of motors to be managed	1	
5	REVERSE MOTOR	<i>On</i>	To reverse the opening with the closing or vice-versa (both motors and limit-switches are reversed)	Off	
		<i>Off</i>	Off		
6	LOGIC	<i>Automatic</i>	Automatic logic - automatic reclosing enabled	Auto- matic	
		<i>Open-stop-close-stop-open</i>	Step by step type 1		
		<i>Open-stop-close-open</i>	Step by step type 2		
		<i>2 button</i>	Two buttons		
		<i>Safety</i>	Safety		
		<i>Dead man</i>	Dead man		

MENU		SET		DESCRIPTION	DEFAULT	NOTE	
7	TIMER TO CLOSE	<i>Off</i>		Semi-automatic logic enabled a START command opens and another START closes the gate - automatic reclosing disabled	<i>Off</i>		
		1	240	To set a pause time (from 1 second to 4 minutes) before the automatic reclosing			
8	START IN PAUSE	<i>Off</i>		The START command is not accepted during pause	<i>Off</i>		
		<i>On</i>		The START command is accepted during pause			
9	PROGRAMMING	<i>Off</i>	<i>On</i>	To start up the working times learning	<i>Off</i>		
10	TEST START	<i>Off</i>	<i>On</i>	To give a START command for testing the operator (This command can be used only if the unit has already been programmed!)	<i>Off</i>		
13	LATCH PAUSE	<i>Off</i>	<i>On</i>	If «ON» the operator complies with the pause time set when the function «LATCH OPENING» is disabled. When «OFF» the pause time set is not respected	<i>Off</i>		
14	RESET	A count-down of 5 seconds will start by holding the UP button; at its end «INIT» will appear on the display as confirmation of the control board reset					
192	MOVE GATE 1 *	Allows to move the gate in order to test the motor running or simply to position the gate as desired. The command works in a temporary «dead man» mode: HOLD UP PRESSED = THE GATE OPENS HOLD DOWN PRESSED = THE GATE CLOSES			  UP DOWN	----	
193	MOVE GATE 2 *	Allows to move the gate in order to test the motor running or simply to position the gate as desired. The command works in a temporary «dead man» mode: HOLD UP PRESSED = THE GATE OPENS HOLD DOWN PRESSED = THE GATE CLOSES			  UP DOWN	----	
* The command is accepted only at the end of the cycle or after a STOP command; it is not accepted during the cycle and during the pause							
15	END	Press OK to return to the display of the firmware version and to the one of inputs state					
16	SPECIAL MENU	Press OK to enter the special menu					



SPECIAL MENU


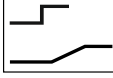
PRESS AT THE SAME TIME FOR 5 SECONDS TO ENTER OR TO EXIT THE SPECIAL MENU

THE DESCRIBED FUNCTIONS ARE VALID FOR ALL SWING 2 DG VERSIONS, EXCEPT WHERE EXPRESSLY STATED

SPECIAL MENU		SET		DESCRIPTION	DEFAULT	NOTE
26	LEAF DELAY IN OPENING	Off	6	Adjustable from OFF to 6 seconds	1,5	
27	LEAF DELAY IN CLOSING	Off	20	Adjustable from OFF to 20 seconds	2,5	
28	OPENING TORQ 1	30%	100 %	Motor 1 torque in opening: the higher the torque value, the more force is required to execute the inversion in case of obstacle. The torque is set to 100% on hydraulic operators	75%	
29	CLOSING TORQ 1	30%	100 %	Motor 1 torque in closing: the higher the torque value, the more force is required to execute the inversion in case of obstacle. The torque is set to 100% on hydraulic operators	75%	
30	OPENING TORQ 2	30%	100 %	Motor 2 torque in opening: the higher the torque value, the more force is required to execute the inversion in case of obstacle. The torque is set to 100% on hydraulic operators	75%	
31	CLOSING TORQ 2	30%	100 %	Motor 2 torque in closing: the higher the torque value, the more force is required to execute the inversion in case of obstacle. The torque is set to 100% on hydraulic operators	75%	
32	ENCODER	ON (only if connected via LSE management unit)		ON = Standard Encoder Enabled OFF = Standard Encoder Disabled (when OFF, only the learnt working times are shown)	Off	
	47 ENCODER PAR. M1	xxx.		Impulses read by Encoder during operation (Motor 1)		
	48 ENCODER TOT. M1	xxx.		Impulses stored during programming (Motor 1)		
	49 ENCODER PAR. M2	xxx.		Impulses read by Encoder during operation (Motor 2)		
	50 ENCODER TOT. M2	xxx.		Impulses stored during programming (Motor 2)		
32	ENCODER	Position Gate		To enable the linear potentiometer «POSITION GATE» (only if connected via LE or LSE management unit)	Off	
		RT		To enable the «RT» absolute encoder (only if connected via LRT management unit)		
51	I.PAR.M1 *	-----		To show the current position of the potentiometer/absolute encoder on the leaf moved by Motor 1 . This parameter is useful to see if the potentiometer or the absolute encoder are correctly read		
52	I.AP.M1	From the value learned to ± 100 pulses		To show the impulses stored by the control unit when the leaf moved by Motor 1 is fully open		
53	I.CH.M1	From the value learned to ± 100 pulses		To show the impulses stored by the control unit when the leaf moved by Motor 1 is fully close		
54	I.PAR.M2 *	-----		To show the current position of the potentiometer/absolute encoder on the leaf moved by Motor 2 . This parameter is useful to see if the potentiometer or the absolute encoder are correctly read		
55	I.AP.M2	From the value learned to ± 100 pulses		To show the impulses stored by the control unit when the leaf moved by Motor 2 is fully open		
56	I.CH.M2	From the value learned to ± 100 pulses		To show the impulses stored by the control unit when the leaf moved by Motor 2 is fully close		

* While the partial impulses are displayed, it is possible to OPEN (by pressing UP) or CLOSE (by pressing DOWN) the operator to verify the correct reading of the potentiometer - only for «POSITION GATE»

SPECIAL MENU		SET	DESCRIPTION	DEFAULT	NOTE
32	ENCODER	OFF	ON = Standard Encoder Enabled OFF = Standard Encoder Disabled <i>(when OFF, only the learnt working times are shown)</i>	Off	
	65 OPENING TIME M1	xxx.s	To display the learnt value during the working times self learning, in opening and closing (Motor 1) . With UP or DOWN it is possible to increase or reduce the working times		
	66 CLOSING TIME M1	xxx.s			
	67 OPENING TIME M2	xxx.s			
	68 CLOSING TIME M2	xxx.s			
33	OPENING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer or «RT» Encoder intervention time on the Motor 1 in opening	Off	
		Off (Intervention excluded)	Disabled		
34	CLOSING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer or «RT» Encoder intervention time on the Motor 1 in closing	Off	
		Off (Intervention excluded)	Disabled		
35	OPENING SENSITIVITY MOTOR 2	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer or «RT» Encoder intervention time on the Motor 2 in opening	Off	
		Off (Intervention excluded)	Disabled		
36	CLOSING SENSITIVITY MOTOR 2	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer or «RT» Encoder intervention time on the Motor 2 in closing	Off	
		Off (Intervention excluded)	Disabled		
37	SLOWDOWN SENSITIVITY	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer or «RT» Encoder intervention on the Motor during the slowdown	Off	
		Off (Intervention excluded)	Disabled		
38	M1 POTENTIOMETER THRESHOLD IN OPENING	0 1000 <i>(available only if the «Position Gate» or the «RT» Encoder have been wired and the menu 32 correctly set)</i>	<u>To adjust the threshold of the Potentiometer or «RT» Encoder intervention.</u> This parameter self-determines during the working times learning but can also be adjusted later, on the condition that the set value is lower than the value shown in VP1 or VP2 (<u>instantaneous speed values which can be shown by accessing the DEBUG menu</u>). NOTE: The lower the threshold value, the slower is the response of the potentiometer.	It depends on model	
39	M1 POTENTIOMETER THRESHOLD IN CLOSING				
40	M2 POTENTIOMETER THRESHOLD IN OPENING				
41	M2 POTENTIOMETER THRESHOLD IN CLOSING				
42	M1 POTENTIOMETER THRESHOLD IN SLOWDOWN - OPENING				
43	M1 POTENTIOMETER THRESHOLD IN SLOWDOWN - CLOSING	0 100 <i>(available only if the «Position Gate» or the «RT» Encoder have been wired and the menu 32 correctly set)</i>	<u>To adjust the threshold of the Potentiometer or «RT» Encoder intervention during the slowdown.</u> The value can be manually increased on the condition that the set value is lower than the value shown in VP1 or VP2 <i>(instantaneous speed values which can be shown by accessing the DEBUG menu)</i>	It depends on model	
44	M2 POTENTIOMETER THRESHOLD IN SLOWDOWN - OPENING				
45	M2 POTENTIOMETER THRESHOLD IN SLOWDOWN - CLOSING				

SPECIAL MENU		SET	DESCRIPTION	DEFAULT	NOTE
46	CLOSING INVERSION <i>Not available if the menu 86 is set to «BUZZER»</i>	Total	In case of obstacle or safety edge intervention during the closing, the gate totally reverses the movement. If the automatic reclosing is enabled (automatic logic), it is attempted for 5 times	Partial	
		Partial	In case of obstacle or safety edge / potentiometer / «RT» Encoder intervention, the gate partially reverses direction (of about 30 cm) then stops		
The menus 47 - 48 - 49 - 50 are shown only if the menu 32- ENCODER = ON					
The menus 51 - 52 - 53 - 54 - 55 - 56 are shown only if the menu 32- ENCODER = Position Gate or RT					
59	OPENING SLOWDOWN 1	Off (*) 50% Hydraulic	Adjustable from OFF (<i>disabled</i>) to the 50% of the stroke. On hydraulic operators, the slowdown is automatically set to «Hydraulic» if the value exceeds 50%	It depends on model	
60	CLOSING SLOWDOWN 1	Off (*) 50% Hydraulic	Adjustable from OFF (<i>disabled</i>) to the 50% of the stroke. On hydraulic operators, the slowdown is automatically set to «Hydraulic» if the value exceeds 50%	It depends on model	
61	OPENING SLOWDOWN 2	Off (*) 50% Hydraulic	Adjustable from OFF (<i>disabled</i>) to the 50% of the stroke. On hydraulic operators, the slowdown is automatically set to «Hydraulic» if the value exceeds 50%	It depends on model	
62	CLOSING SLOWDOWN 2	Off (*) 50% Hydraulic	Adjustable from OFF (<i>disabled</i>) to the 50% of the stroke. On hydraulic operators, the slowdown is automatically set to «Hydraulic» if the value exceeds 50%	It depends on model	
* For motors with hydraulic brake (CF) or double hydraulic brake (2CF) this parameter must be set to OFF					
63	DECELERATION	0% 100% 	To adjust the change from normal speed to slowdown speed	100%	
64	ACCELERATION	0% 100% 	Acceleration ramp. To adjust the motor start up speed	100%	
The menus 65 - 66 - 67 - 68 are shown only if the menu 32- ENCODER = OFF					
69	ANTI OVERLAP	Off	To disable the anti-overlapping control of the leaves allowing their separate control	Off	
		On	To enable the anti-overlapping control of the leaves		
70	OPENING POSITION RECOVERY	0 20 seconds only if 32-Encoder is OFF	After a STOP or an inversion command given during the opening, the gate recovers the excess space traveled by inertia	1 s	
71	CLOSING POSITION RECOVERY	0 20 seconds only if 32-Encoder is OFF	After a STOP or an inversion command given during the closing, the gate recovers the excess space traveled by inertia	1 s	
72	OPENING TOLERANCE MOTOR 1	0% 100% (*)	To adjust the tolerance space between the recognition of the mechanical stop in opening and the recognition of the obstacle - In case of obstacle within the tolerance space, this will be considered as mechanical stop	80%	
73	CLOSING TOLERANCE MOTOR 1	0% 100% (*)	To adjust the tolerance space between the recognition of the mechanical stop in closing and the recognition of the obstacle - In case of obstacle within the tolerance space, this will be considered as mechanical stop	80%	
74	OPENING TOLERANCE MOTOR 2	0% 100% (*)	To adjust the tolerance space between the recognition of the mechanical stop in opening and the recognition of the obstacle - In case of obstacle within the tolerance space, this will be considered as mechanical stop	80%	
75	CLOSING TOLERANCE MOTOR 2	0% 100% (*)	To adjust the tolerance space between the recognition of the mechanical stop in closing and the recognition of the obstacle - In case of obstacle within the tolerance space, this will be considered as mechanical stop	80%	
* With «RT» Encoder:		0% = 20 impulses	100% = 200 impulses		
With «POSITION GATE» :		0% = 20 impulses	100% = 500 impulses		

SPECIAL MENU		SET	DESCRIPTION	DEFAULT	NOTE
76	PUSHING STROKE	<i>Time Pushing Stroke</i> <i>Off - 3 sec</i>	Before opening, the motor starts up in closing for the time set, in order to simplify the lock release	Off	
		<i>Repeat Lock Release</i> <i>Off - On</i>	If ON , the lock will be released both before and after the pushing stroke		
		<i>End</i>	To exit the menu		
77	LOCK TIME	<i>Off</i> <i>5 seconds</i>	To adjust the lock release time from 0 to 5 seconds	3 s	
78	LOCK	<i>Only opening</i>	To enable the lock only before opening	Opening and closing	
		<i>Only closing</i>	To enable the lock only before closing		
		<i>Opening and closing</i>	To enable the lock before both opening and closing		
79	ANTI INTRUSION	<i>Only opening</i>	If the gate moves, whether due to wind or manual forcing, the function starts up the operator to restore the initial position. (function available only if limit switch or potentiometer or «RT» encoder are installed)	Off	
		<i>Only closing</i>			
		<i>Opening and closing</i>			
		<i>Off</i>			
80	PUSHOVER	<i>Off</i>	The gate leaf makes an extra movement at the maximum torque to ensure the tightening of the gate In case of a STOP command, the Pushover function is restored only after a new START command	Off	
		<i>Opening and closing</i>			
		<i>Only closing</i>			
		<i>Only opening</i>			
81	PERIODIC PUSHOVER	<i>Off</i> <i>8h</i> If the pushover is enabled	To activate the repetition of the pushover function at a time distance adjustable from 0 to 8 hours, at hourly intervals	Off	
82	MOTOR RELEASE	<i>Opening 1</i> <i>Off - 3 s</i>	If different than OFF, the motor slightly reverses the rotation direction for the set time (up to 3 seconds) at the end of the cycle	Off <small>(hydraulic)</small> 0.1 <small>(mechanic)</small>	
		<i>Closing 1</i> <i>Off - 3 s</i>			
		<i>Opening 2</i> <i>Off - 3 s</i>			
		<i>Closing 2</i> <i>Off - 3 s</i>			
		<i>End</i>			
83	EXTRA TIME *	<i>0.0 s</i> <i>10 s</i>	If the limit switches are installed, it is possible to add an extra time (max. 10 seconds) to the movement of the operator after the reading of the limit switches Note: If an Encoder is installed, the space can be set by impulses (from 0 to 100)	0.0 s	
* Only if the operator is equipped with hydraulic slowdown and one or more slowdown-menus (from 59 to 62) are set to «HYDRAULIC» (EXTRA TIME will be applied to the operator and to the moving direction of the menu set to «HYDRAULIC»)					
84	BRAKE	<i>Off</i> <i>100%</i>	To adjust the braking on the limit switch	Off	
85	PRE-FLASHING	<i>Only closing</i>	To enable the pre-flashing only before closing (To access this option: press DOWN when 0.0 is shown)	Off	
		<i>0.0</i> <i>5.0 s</i>	To set the pre-flashing duration		
86	FLASHING LIGHT	<i>Normal</i>	Normal	Normal	
		<i>Light</i>	Warning lamp function		
		<i>Always</i>	Always ON		
		<i>Buzzer</i>	Buzzer		
87	FLASHING LIGHT AND TIMER	<i>Off</i>	The flashing light will be OFF with enabled timer and open gate	Off	
		<i>On</i>	The flashing light will be ON with enabled timer and open gate		
88	COURTESY LIGHT	<i>Off</i>	Disabled	In cycle	
		<i>1</i> <i>240</i>	Adjustable from 1 second to 4 minutes		
		<i>In cycle</i>	Courtesy light only in cycle		

SPECIAL MENU		SET		DESCRIPTION	DEFAULT	NOTE
89	TRAFFIC LIGHT RESERVATION	Off	On	To get the priority in entry (via a START command) or in exit (via a PARTIAL START command). The function is available only if a traffic light is wired via SEM unit	Off	
90	PARTIAL OPENING	20%	100%	Adjustable from 20% to 100%	100%	
91	PARTIAL PAUSE	= START		The pause time in partial opening is the same as in total opening	= START	
		Off		Disabled		
		1	240	Adjustable from 1 second to 4 minutes		
92	TIMER	Off		The selected input will be turned into an input (on CN1) to which connect an external clock	Off	
		On Photocell 2				
		On Partial START				
94	24V AUX (Max. 500 mA) The AUX output allows the wiring of additional accessories via relay; accessories will work according to the chosen option	Always		AUX output always powered	Always	
		In cycle		AUX output powered only during cycle		
		Opening		AUX output powered only during opening		
		Closing		AUX output powered only during closing		
		In pause		AUX output powered only during pause		
		Positive brake management		AUX output powered only when the gate is stationary Ex.: positive electric brake connected via relay		
		Negative brake management		AUX output powered during cycle and 1 second before starting the movement Ex.: negative electric brake connected via relay		
		Open gate warning light		1 flash per second - during opening 2 flashes per second - during closing Steady lit - gate in «STOP» or «OPEN» status		
START 3 s		AUX output powered at every START input or at every photocells or safety edge intervention, for 3 seconds ie.: a courtesy light connected via relay				
95	PHOTO-TEST	Photocell 1		Self-test enabled only on photocell 1	Off	
		Photocell 2		Self-test enabled only on photocell 2		
		Photocells 1 and 2		Self-test enabled on photocells 1 and 2		
		Off		Disabled		
97	PHOTOCELL 1	Closing		If the photocell is occupied during closing, the gate reverses the movement; If the photocell is occupied during the pause, it prevents the gate reclosing	Closing	
		Opening and closing		If the photocell is occupied during opening or closing, it stops the gate movement; when the photocell is released, the movement continues		
		STOP		If the photocell is occupied before the START input, the START will be ignored. If the photocell is occupied after the START input, the photocell will be ignored. If the photocell is occupied during closing, the gate will reopen		
		STOP and close		If the photocell is occupied during closing, it stops the gate movement; when released, the closing continues		
		Close		The photocell stops the gate until it is occupied in both opening and closing; when released, it send a closing input (the gate closes 1s after the photocell release)		
		Pause reload		If the photocell is occupied during opening or closing, it stops the gate movement; when released, the movement continues. If the photocell is occupied during the pause, it recharges the pause time set		
		Delete pause time		If the photocell is occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time set		

SPECIAL MENU		SET	DESCRIPTION	DEFAULT	NOTE
98	PHOTOCELL 2	<i>Closing</i>	If the photocell is occupied during closing, the gate reverses the movement; If the photocell is occupied during the pause, it prevents the gate reclosing	Opening and Closing	
		<i>Opening and closing</i>	If the photocell is occupied during opening or closing, it stops the gate movement; when the photocell is released, the movement continues		
		<i>STOP</i>	If the photocell is occupied before the START input, the START will be ignored. If the photocell is occupied after the START input, the photocell will be ignored. If the photocell is occupied during closing, the gate will reopen		
		<i>STOP and close</i>	If the photocell is occupied during closing, it stops the gate; when released the closing movement continues		
		<i>Close</i>	The photocell stops the gate until it is occupied in both opening and closing; when released, the photocell gives a closing command (the gate closes one second after the photocell release)		
		<i>Pause reload</i>	If the photocell is occupied during opening or closing, it stops the gate movement; when released, the movement continues. If the photocell is occupied during the pause, it reloads the pause time set		
		<i>Pause reload Photo closing</i>	If the photocell is occupied during the pause, it reloads the pause time set. If the photocell is occupied during closing, the gate reverses the movement		
		<i>Delete pause time</i>	If the photocell is occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time set		
		<i>STOP and open</i>	If the photocell is occupied during opening, the gate will stop; when released, the gate continues the opening movement. The photocell is ignored during closing		
		<i>Safety edge 2</i>	To enable the second safety edge; it is possible to choose the working direction of the second safety edge through the menu 103		
100	SAFETY EDGE 1 <i>Menu available on model R2F only</i>	<i>Normal</i>	Standard safety edge - N.C. contact	Normal	
		<i>8K2</i>	Safety edge protected by a 8K2 resistor enabled		
	SAFETY EDGE 1 <i>Menu available on model R2BF only</i>	<i>Normal</i>	Standard safety edge - N.C. contact		
		<i>8K2 N.C.</i>	Safety edge protected by a 8K2 resistor enabled		
		<i>8K2 N.C. Double</i>	Two safety edges protected by 8K2 resistor enabled		
		<i>8K2 RES</i>	Resistive edge protected by 8K2 resistor enabled		
<i>8K2 RES Double</i>	Two resistive edges protected by 8K2 RES enabled				
102	SAFETY EDGE 1 DIRECTION	<i>Opening and closing</i>	Safety edge enabled in opening and closing	Opening and Closing	
		<i>Only opening</i>	Safety edge enabled only in opening		
		<i>Only closing</i>	Safety edge enabled only in closing		
103	SAFETY EDGE 2 DIRECTION <i>Menu available only if the menu 98 is set to «SAFETY EDGE 2»</i>	<i>Opening and closing</i>	Safety edge enabled in opening and closing	Opening and Closing	
		<i>Only opening</i>	Safety edge enabled only in opening		
		<i>Only closing</i>	Safety edge enabled only in closing		
104	SELECT LIMIT SWITCH	<i>Automatic</i>	Automatic detection of the limit switch	Automatic	
		<i>Only opening</i>	Limit switch enabled only in opening		
		<i>Only closing</i>	Limit switch enabled only in closing		
		<i>Motor internal</i>	To be enabled if the operator is equipped with an inner limit switch that stops the motor phase		

SPECIAL MENU		SET		DESCRIPTION	DEFAULT	NOTE
106	DIAGNOSTICS	1	10	To display the last 10 events (<i>alarms</i>) (See Chapter «ALARMS»)	----	
107	MAINTENANCE CYCLES	100	240000	Adjustable from 100 to 240000 cycles	100000	
108	PERFORMED CYCLES	0	240000	To display the executed cycles. Hold pressed OK to reset the cycles	0	
112	PASSWORD	Note: «0000» setting is not allowed		To enter a password for blocking the control unit parameters modification	----	
114	EXP MANAGEMENT	SEM 2		The SEM 2 management unit can be connected to the EXP input	SEM2	
		Relay		A relay management unit can be connected to the EXP input		
116	REPEAT LEAF DELAY	On	Off	In case of a STOP command when the gate is on its halfway, the leaves will repeat the «leaf delay» set on menus 26-27	On	
118	LATCH	Off		Disabled	Off	
		Opening		To enable the LATCH button wired to the «PARTIAL START» N.O. input; (the PARTIAL START function will be disabled) after a LATCH button command the gate opens and stay open till a new LATCH button command		
		Closing		To enable the LATCH button wired to the «PARTIAL START» N.O. input; (the PARTIAL START function will be disabled) after a LATCH button command the gate closes and stay closed till a new LATCH button command		
<p>To disable the LATCH, press one more time the same button used to enable The LATCH command can also be sent from Tx or SEACLOUD, thus keeping the PARTIAL START input free</p>						
119	DISPLAY WRITING SPEED	From 30% to 100%		The scrolling speed of the text can be adjusted from 30% to 100%	80%	
<p>If the menu 119 is set to the minimum value of 30%, the scrolling speed will be low. On the contrary, if adjusted to the maximum value of 100%, the scrolling speed of the text will be very high. Note: the speed does not change on the display of the JOLLY 3 programmer!</p>						
120	BASIC MENU	<p>Press OK to exit the special menu. The special menu switches off automatically after 20 minutes</p>				
121	PHOTO 1 TYPE <i>Menu available on model R2BF only</i>	Normal		Standard photocell without 10K control	Normal	
		Photo 1 10K		Photocell with 10K control		
122	PHOTO 2 TYPE <i>Menu available on model R2BF only</i>	Normal		Standard photocell without 10K control	Normal	
		Photo 2 10K		Photocell with 10K control		
132	RELAY <i>Menu available on model R2BF only</i>	START 3s		To enable the Relay for 3 seconds at every Start or reopening command	Start 3s	
		Off		Disabled		
190	BASIC MENU <i>On model R2BF only</i>	<p>Press OK to exit the special menu. The special menu switches off automatically after 20 minutes</p>				

PART FOR BOTH INSTALLER AND END-USER

MAINTENANCE: periodically, it would be advisable to reprogram the working times on the control unit according to the number of cycles performed over time and according to the type of operator, especially if changes in friction, malfunctions or non-compliance with the previously set working times are noticed. Periodically clean the optical system of the photocells.

SAFETY PRECAUTIONS: all electrical works and the choice of the operating logic should comply with the current regulations. A 16A/0,030 differential switch must be used. Separate the source cables (*operators, power supply*) and command cables (*photocells, push-buttons, etc*). Be sure the system is properly grounded. Always run cables in separate sheaths to prevent interferences

SPARE PARTS: send request for spare parts to: **SEA S.p.A. - Teramo - ITALY - www.seateam.com**

SAFETY AND ENVIRONMENTAL COMPATIBILITY: do not waste product packaging materials and/or circuits; do not dispose of the product with other domestic waste at the end of its life cycle. In order to avoid any possible environmental or health damage caused by irregular waste disposal, we recommend to separate this product from other types of waste and to recycle it in a responsible way in order to provide the sustainable re-use of material resources. Domestic users are invited to contact the retailer where the product has been purchased or the local office to get all the information related to differential waste collection and recycling of this kind of product.

STORAGE: T = -30°C/+60°C ; Humidity = min. 5% / max. 90% (without condensation); Materials must be properly packaged, handled with care and with appropriate vehicles

WARRANTY LIMITS: - see the sales conditions

MAINTENANCE AND DECOMMISSION: must be carried out only by specialized and authorized personnel

THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT

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

GENERAL NOTICE

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 comply with Directives: Machine Regulation 2006/42/CE and following adjustments, Low Tension (2006/95/CE), Electromagnetic Consistency (2004/108/CE); Installation must respect 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 grounding system is perfectly constructed, and connect to it the metal parts of the gate
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 concerning the automated system safety and efficiency, if components used are not produced by SEA
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 the system 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. The User can apply only the manual function of emergency.
16. The power cables maximum length between the central engine and motors should not be greater than 10 m. Use cables with 2,5 mm² section. Use double insulation cable (cable sheath) to the immediate vicinity of the terminals, in particular for the 230V cable. Keep an adequate distance (at least 2.5 mm in air), between the conductors in low voltage (230V) and the conductors in safety low voltage (SELV) or use an appropriate sheath that provides extra insulation having a thickness of 1 mm

TERMS OF SALE

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 customers 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 EN12453 – EN 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 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 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 or damage of the goods during transport, are at Buyer's cost

6) COMPLAINTS Any complaints 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 its supplies of raw material which is necessary for the production; Eventual completely or partially unsuccessful executions cannot be reason for complaints or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.

8) WARRANTY The standard warranty period is 12 months. This warranty time can be extended by means of expedition of the warranty coupon as follows:

SILVER: The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.

GOLD: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.

PLATINUM: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty (36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA S.p.A. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre. The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities. The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper assembly, or if the label affixed by the manufacturer has been removed including the SEA registered trademark No. 804888. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods. The repair of products under warranty and out of warranty is subject to compliance with the procedures notified by SEA

9) RESERVED DOMAIN A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer purchases property 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 num.804888 affixed on product labels and/or on manuals and/or on any other documentation, he will commit himself to use it in a way which does not reduce the value of these rights, he won't also remove, replace or modify brands or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any particularity on the products, unless preventive and expressed authorization by SEA. **In accomplishment with art.1341 of the Italian Civil Law it will be approved expressly clauses under numbers: 4) PAYMENTS - 8) GUARANTEE - 10) COMPETENT COURT OF LAW**

DECLARATION OF CONFORMITY

DICHIARAZIONE DI CONFORMITÀ

SA S.p.A. declares under its proper responsibility and, if applicable, under the responsibility of its authorised representative that, by installing the appropriate safety equipment and noise filtering, the products:

La SEA S.p.A. dichiara sotto la propria responsabilità e, se applicabile, del suo rappresentante autorizzato che, con l'installazione degli adeguati dispositivi di sicurezza e di filtraggio disturbi, i prodotti:

DESCRIPTION - DESCRIZIONE	MODEL - MODELLO	TRADEMARK - MARCA
SWING 2 DG R2F (AND ALL ITS BY-PRODUCTS - E TUTTI I SUOI DERIVATI)	23021096	SEA

- are 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;
- comply with the essential safety requirements related to the products within the field of applicability of the Community Directives 2014/35/UE and 2014/30/UE
- sono costruiti per essere incorporati in una macchina o per essere assemblati con altri macchinari per costruire una macchina ai sensi della Direttiva 2006/42/CE;
- sono conformi ai requisiti essenziali di sicurezza relativi ai prodotti entro il campo di applicabilità delle Direttive Comunitarie 2014/35/UE e 2014/30/UE

PLACE AND DATE OF ISSUE
LUOGO E DATA DI EMISSIONE

TERAMO, 06/09/2022

THE MANUFACTURER OR THE AUTHORIZED REPRESENTATIVE
IL COSTRUTTORE o IL RAPPRESENTATE AUTORIZZATO

SEA S.P.A.
ZONA INDUSTRIALE SANT'ATTO
64100 - TERAMO - ITALY
+ 39 0 861 588341
www.seateam.com

L'Amministratore
The Administrator
Ennio Di Saverio


NOTES

A series of horizontal dotted lines for taking notes.



SEA®



Automatic Gate Openers

International registered trademark n. 804888

SEA S.p.A.

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