

NET24N

Universal control panel for 24V operators
Operating instructions and warnings

EN

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1 WARNINGS SUMMARY

Read these warnings carefully; failure to respect the following warnings may cause risk situations.

⚠ WARNING Using this product under unusual conditions not foreseen by the manufacturer can create situations of danger, and for this reason all the conditions prescribed in these instructions must be respected.

⚠ WARNING DEA System reminds all users that the selection, positioning and installation of all materials and devices which make up the complete automation system, must comply with the European Directives 2006/42/CE (Machinery Directive), 2004/108/CE (electromagnetic compatibility), 2006/95/CE (low voltage electrical equipment). In order to ensure a suitable level of safety, besides complying with local regulations, it is advisable to comply also with the above mentioned Directives in all extra European countries.

⚠ WARNING Under no circumstances must the product be used in explosive atmospheres or surroundings that may prove corrosive and damage parts of the product.

⚠ WARNING To ensure an appropriate level of electrical safety always keep the 230V power supply cables apart (minimum 4mm in the open or 1 mm through insulation) from low voltage cables (motors power supply, controls, electric locks, aerial and auxiliary circuits power supply), and fasten the latter with appropriate clamps near the terminal boards.

⚠ WARNING All installation, maintenance, cleaning or repair operations on any part of the system must be performed exclusively by qualified personnel with the power supply disconnected working in strict compliance with the electrical standards and regulations in force in the nation of installation.

⚠ WARNING Using spare parts not indicated by **DEA** System and/or incorrect re-assembly can create risk to people, animals and property and also damage the product. For this reason, always use only the parts indicated by **DEA** System and scrupulously follow all assembly instructions.

⚠ WARNING Incorrect assessment of the impact forces can cause serious damage to people, animals or things. **DEA** System reminds the installer must verify that the impact forces, measured as indicated by the standard EN 12445, are actually below the limits set by the standard EN12453.

⚠ WARNING Any external security devices used for compliance with the limits of impact forces must be conform to standard EN12978.

☒ WARNING In compliance with EU Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), this electrical product should not be treated as municipal mixed waste. Please dispose of the product and bring it to the collection for an appropriate local municipal recycling.

2 PRODUCT DESCRIPTION

NET24N is a universal control panel for DEA System 1 or 2 24V operators automations with or without encoder.

The main feature of this control board is its ease of configuration of inputs and outputs according to any needs thus ensuring adaptability to any type of automation. It is therefore easy to set up and exclude all unnecessary functions.

3 TECHNICAL DATA

	TYPE 00		TYPE 01			TYPE 02	TYPE 03										
	LIVI 5/24	LIVI 8/24	GULLIVER	GEKO	LOOK MAC	LIVI 500 LIVI 502	LIVI 902/24 LIVI 905/24	PASS	STOP								
Power supply (V)	230 V ~ ±10% (50/60 Hz)																
Rated power transformer (VA)	80 VA (230/22V)	250 VA (230/22V)	120 VA (230/22V)	150 VA (230/22V)			150 VA (230/22V)	150 VA (230/22V)	250 VA* (230/22V)								
Fuse F2 (A) (transformer)	2A	3,15A	2A	3,15A		2A		3,15A	4A*								
Batteries	2x 12V 1,3A	2x 12V 4A	2x 12V 1,3A			2x 12V 4A											
Fuse F1 (A) (batteries input)	15A																
Outputs 24V motors (maximum output current) (A)	1x 5A	1x 10A	2x 5A				2x 5A	2x 7A*									
Warning: The above values are calculated by taking the maximum power supplied by the respective processors. In absolute terms, the maximum current from each output must not exceed 10A.																	
Auxiliaries power supply output	+ 24 V === max 200mA																
"Warning" output	+ 24 V === max 15 W																
Electric lock output	24V === max 5W or max 1 art. 110																
Flashing light output	24 V === max 15W																
Operating temperature range (°C)	-20÷50 °C																
Receiver frequency	433,92 MHz																
Transmitters type of coding	HCS fix-code - HCS rolling code - Dip-switch																
Max remote controllers managed	100																

* Values for STOP with boom \geq 6 mt.

CONFIGURATION OF THE CONTROL PANEL

The universal control unit Net24N can be used for the management of the following types (**TYPE**) of closures motorized by DEA System: swing and sliding gates, overhead doors and barriers.

In order to ensure maximum adaptability to each **TYPE** of closure, the control board provides an initial procedure, performed only at the first turn, for the optimal configuration of inputs, outputs and parameters (see diagram **A**). Once configured, the control panel will operate in the mode "dedicated" to the **TYPE** of selected closing. After performing the initial configuration it is sufficient to execute the standard programming for the installation on which it is operating.

All settings remain in memory even in the case of subsequent flare-ups (see diagram **B**).

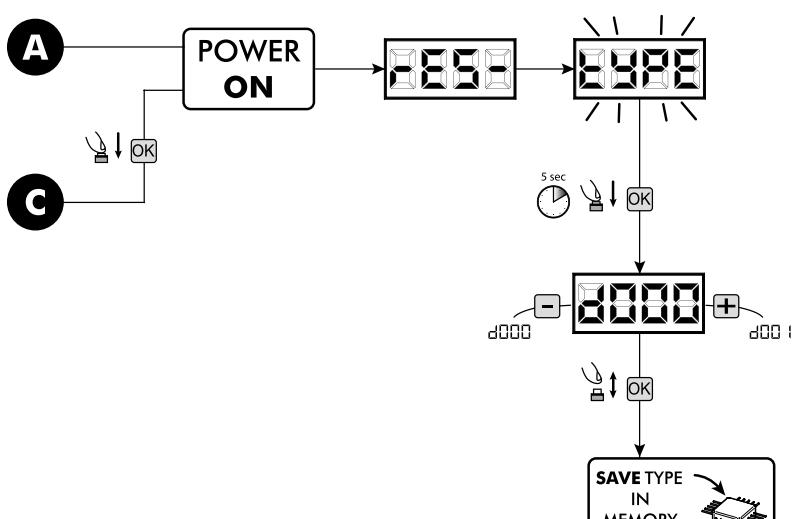
If necessary the **TYPE** of configured closing can be later adjusted following diagram **C**.

FIRST CONTROL BOARD IGNITION

Configuration after the first ignition

- A** For the first control panel ignition, proceed as follows:

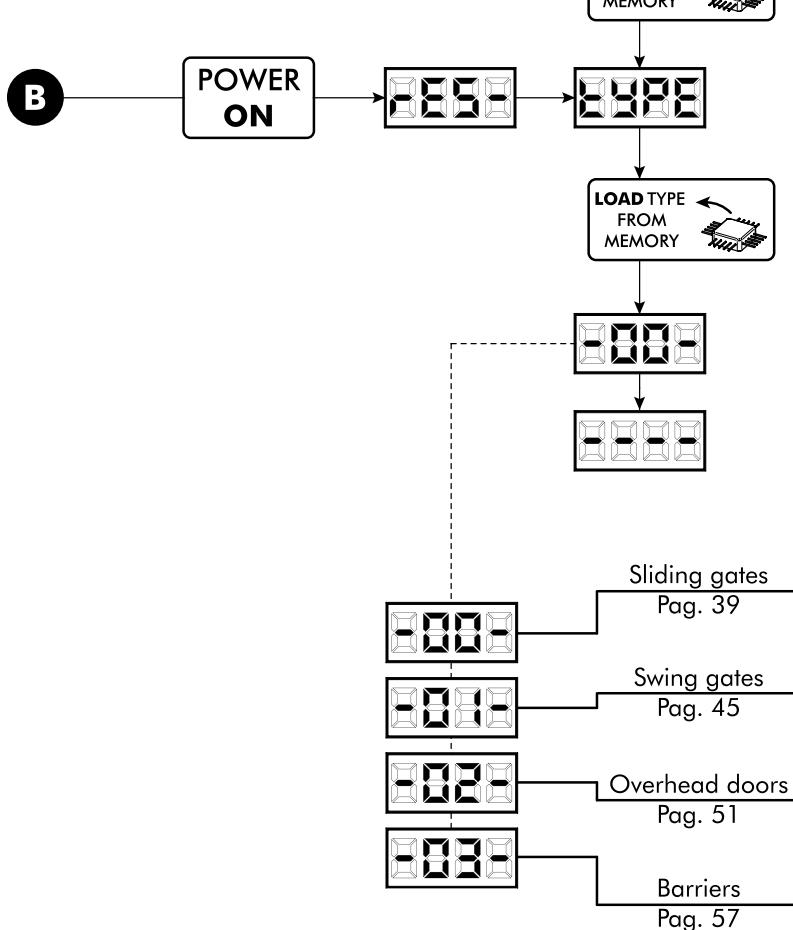
1. Apply power, the display shows in sequence the writing "**rES-**" and "**TYPE**" flashing;
2. Press the **OK** button and hold for 5 seconds until the display shows **d000** on the display;
3. Acting on the **[+]** and **[−]** keys, select the desired configuration depending on the type of installation (es. **d002**) and confirm by pressing the **OK** button;
At this point, the selection will be stored and reloaded each time in the future.
4. Follow signs, "**TYPE**", "**-□-**" followed by the symbol of closed gate "----".



Following ignitions

- B** If you have already saved a configuration, proceed as follows:

Apply power, the display shows in sequence the writing "**rES-**", "**TYPE**", "**-□-**" followed by the symbol of closed gate "----".



Modify the existing configuration

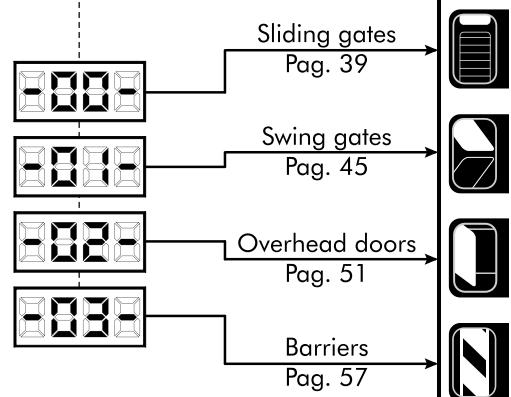
- C** If you have already saved a configuration and you want to change it, proceed as follows:

1. Hold down the **OK** button and give power, the display shows in sequence the writing "**rES-**" and "**TYPE**" flashing;
2. Press the **OK** button and hold for 5 seconds until the display shows **d000** (the value changes to match the previous configuration used) on the display;
3. Acting on the **[+]** and **[−]**, select the new desired configuration depending on the type of installation (es. **d002**) and confirm by pressing the **OK** button;

⚠ Stop the reconfiguration procedure prior to confirmation, involves loading the previous configuration by the control panel without any modification.

⚠ However, if the reconfiguration procedure is brought to an end, the new configuration will take the place of the previous one and will be reloaded each time in the future.

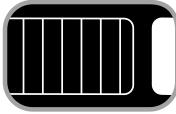
4. Follow signs, "**TYPE**", "**-□-**" followed by the symbol of closed gate "----".



To the Standard Programming



NOTES



4.1 SLIDING GATES CONFIGURATION

ELECTRICAL CONNECTIONS

Execute the wiring following the directions of table 1 and diagrams on page 40

Table 1 “terminal board connections”

1-2	+24VAUX	+24 V === power supply output for auxiliary devices 200mA
3-4	22V~	22 V ~ transformer power supply input
5-6	24VBatt	24 V === battery power supply or photovoltaic accumulator Green Energy input (follow carefully polarity indications).
7-8	M1	Operator 1 output
9	⊕	Connection of motors metallic parts
10-11	M2	Operator 2 output (if present)
12-13	WARNING	24 V === max 15 W output for open gate fix/flashing warning light (if P052=0/1) or courtesy light (if P052>1)
14-15	ELETTR	Electric-lock output max 1 art. 110 (if P062=0) or 24V === output max 5W configurable (if P062≠0)
16-17	FLASH	24 V === Flashing light output max 15W art. Lumy/24A/S
18-19	FCC 1	18 - N.C. 19 - Com Input 6 FCC 1. If it intervenes it stops M1 closing. If unused, short circuit.
20-21	FCA 1	20 - N.C. 21 - Com Input 5 FCA 1. If it intervenes it stops M1 opening. If unused, short circuit.
22-23	PHOTO 1	22 - N.C. 23 - Com Input 4 PHOTO 1. When enabled (see parameter P050 in the table), activation of PHOTO 1 provokes: an inversion of direction (during closing), the arrest of the movement (during opening), prevent the start (gate closed). If unused, short circuit.
24-25	SAFETY	24 - N.C. 25 - Com Input 3 SAFETY. If activated, it causes the inversion. See P055 and P056 on the parameters table. If unused, short circuit.
26-27	PED	26 - N.O. 27 - Com Input 2 PED. If activated, it opens motor nr. 1 only.
28-29	START	28 - N.O. 29 - Com Input 1 START. In case of intervention it provokes: the operator opening or closing. It may operate as “inversion” mode (P49=0) or “step by step” mode (P49=1).
30	Y	Aerial signal input
31	†	Ground aerial input
32-33	DEA_NET	DEA_NET net input (unused at the moment)
CON 1		230 V ~ ±10% (50/60 Hz) power supply input
J5	J9	Encoder selection Jumper: • A position = operators with encoder (remind to set P029=0) • B position = operators without encoder (remind to set P029=1)

If the installation requires different commands and / or additional to the standard, you can configure each input to the required rate.

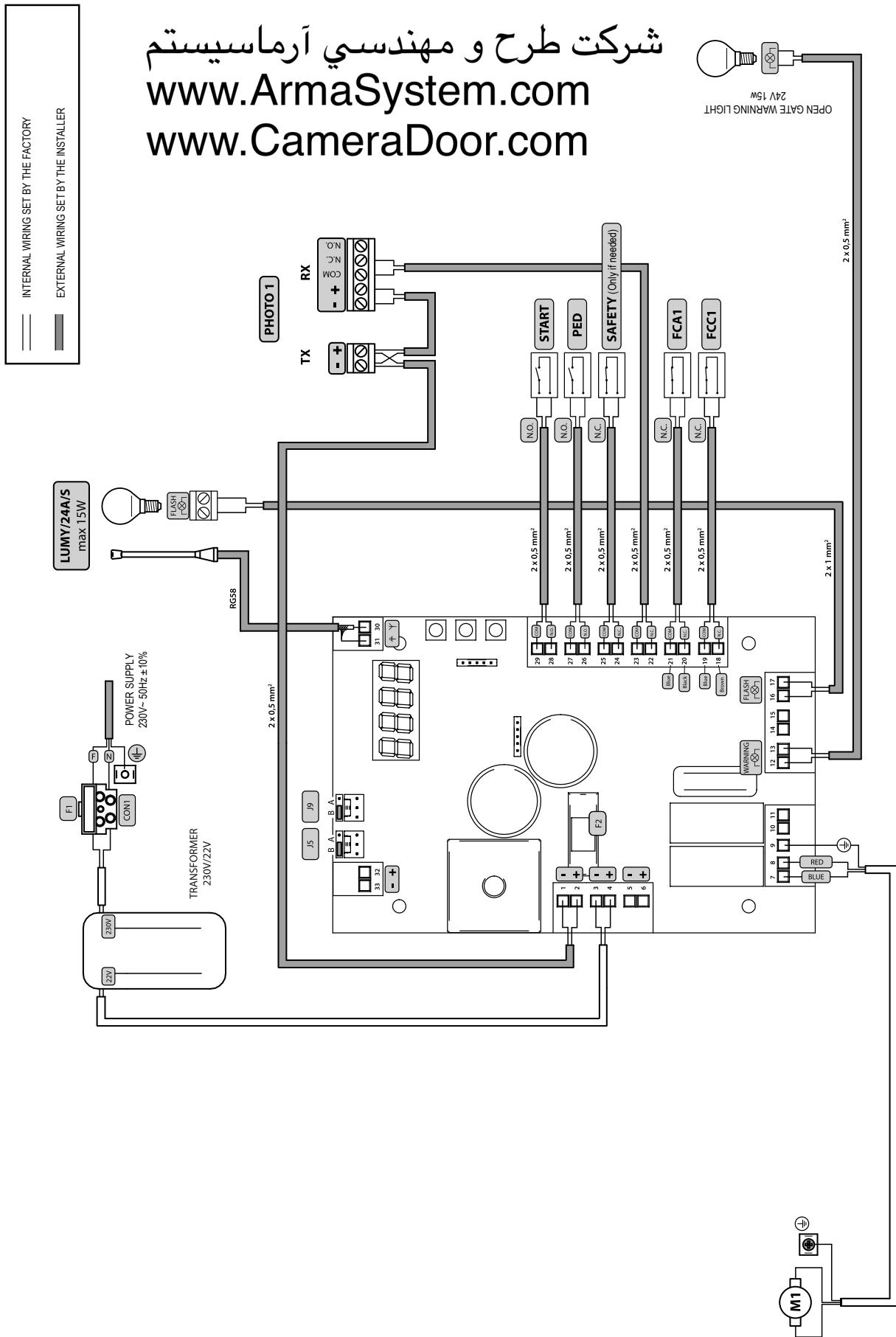
**Refer to Chapter
“Advanced Programming”.**

EN

SLIDING GATES



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STANDARD PROGRAMMING

1 Power Supply

Give power supply, the display shows the following symbols "rES-", "TYPE", "-00-" and then "----".



* If the control panel has already been programmed and the power fails or is switched off - once power is returned and a START command is given, the position reset procedure is performed (see "rESP" in the table "WORKING STATUS MESSAGES" on page 68).

2 Visualisation of inputs and operations-counter status

1. Press the **OK** key for 15 seconds;

2. The display will show respectively:

Inputs status (check it's correct);

- OPEN CONTACT
- CLOSE CONTACT

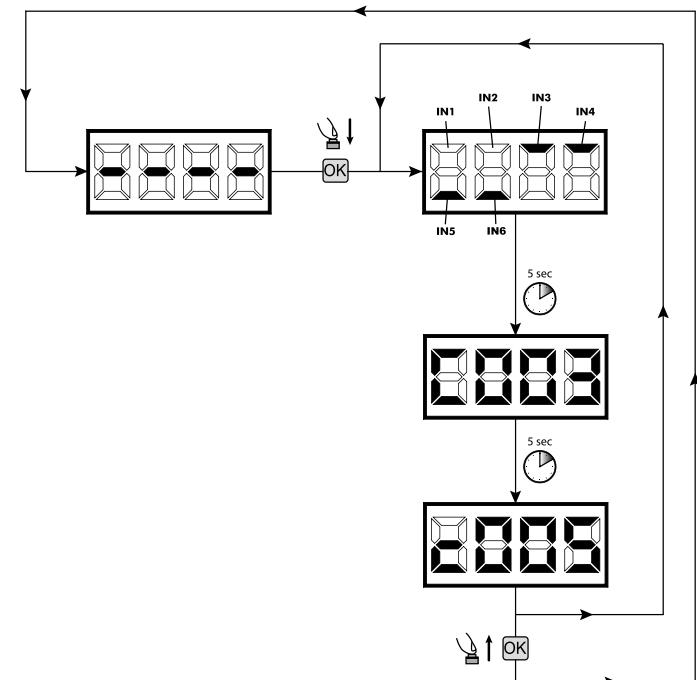
Total operations counter (* see P064):

i.g.: **C003** = $3 \times 100^*$ = 3000 operations performed

Maintenance operations-counter (* see P065):

i.g.: **c005** = 5×500 = 2500 operations remaining before the maintenance intervention request (**E----** = manoeuvres-counter disabled)

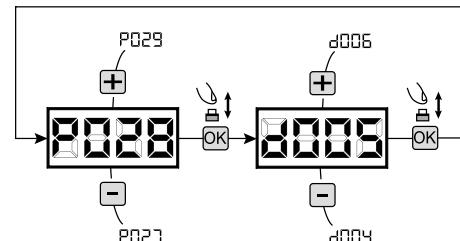
3. Hold down the **OK** key to display a cyclic 3 options, or release the **OK** button to exit the parameter.



3 Selection type of operators

! IMPORTANT !

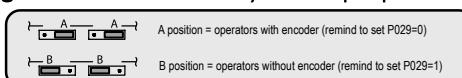
1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P028;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
 - d005=LIVI 5/24;
 - d006=LIVI 8/24;
 - d007=GULLIVER;
4. Confirm your choice by pressing the **OK** key (display returns again to P028).



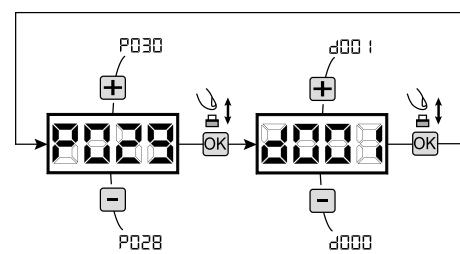
4 Selection operating with or without encoder

! IMPORTANT !

Warning: Remember to correctly set the jumpers J5 and J9.



1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P029;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
 - d000=for operators with encoder;
 - d001=for operators without encoder;
4. Confirm your choice by pressing the **OK** key (display returns again to P029).



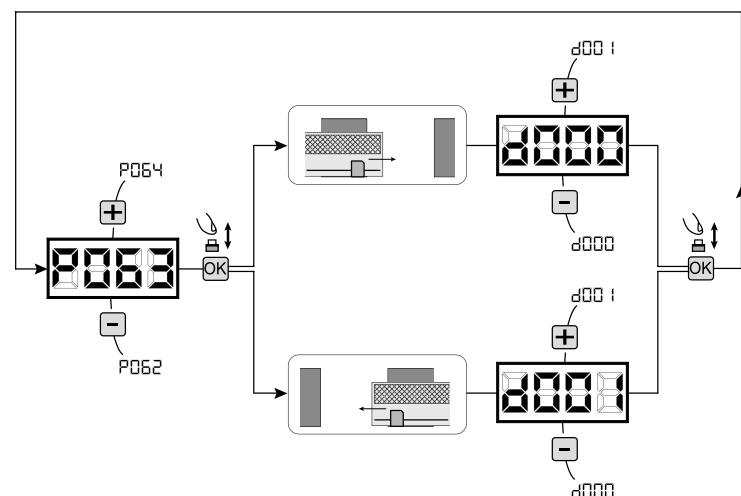
EN

SLIDING GATES



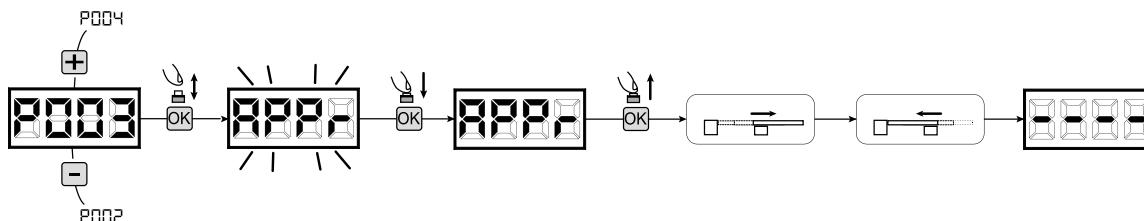
5 Selection of direction of motion

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P063;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
 - d000=motor in standard position (on the left of the gap);
 - d001=motor in inverted position (on the right of the gap);
4. Confirm your choice by pressing the **OK** key (display returns again to P063).



6 Motor stroke learning

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P003;
2. Access the parameter by pressing the **OK** key;
3. When "APP_r" flashes, continue pressing the **OK** key;
4. Release the **OK** key when "APP_r" stops flashing; the learning procedure starts;
5. Wait for the door searches and stops on the opening stop and then on the closing stop.
If you want to anticipate the stopping strokes in opening, you can manually intervene by giving an impulse to "Start" button (or pressing the "OK" on the control panel) simulating the stroke.
6. Once the procedure is ended, the display will show "----".

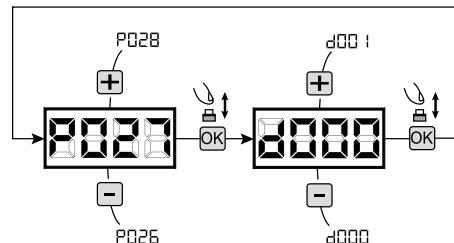


7 Transmitters learning

7.1 Transmitters coding selection

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P027;
2. Confirm by pressing on the **OK** key;
3. Select the type of transmitter by scrolling **[+]** and **[−]** keys:
 - d000=fix rolling-code (suggested);
 - d001=complete rolling-code;
 - d002=dip-switch;
4. Confirm by pressing on the **OK** key (display shows again P027).

Warning: If you need to vary the type of encoding, and only if other remotes with different encoding are memorized, you need to erase memory (P004) **AFTER** you have set the new encoding.

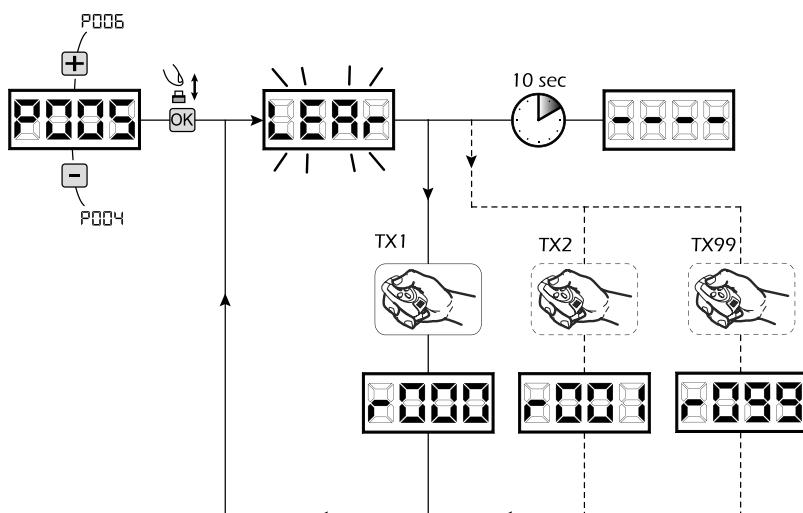




7.2 Learning

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P005;
2. Confirm by pressing on the **OK** key;
3. When the symbol “**LERF**” flashes, press on any key of the transmitter you want to memorize;
4. The display visualizes the number of the transmitter just memorized and then “**LERF**” flashing;
5. Memorize all necessary transmitters repeating this procedure from step 3;
6. Wait 10 seconds before quitting the memorization mode, display shows now “----”.

Warning: In the case of rolling code remotes, the receiver can be put into learning mode by pressing the hidden button on a remote control previously learned.

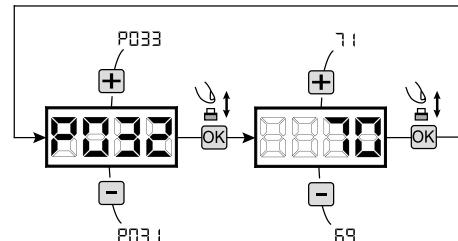


8 Adjustment of operating parameters

If you need to modify the operating parameters (force, speedness etc.):

1. Scroll down the parameters until you visualize the desire parameter (i.g. P032);
2. Confirm by pressing on the **OK** key;
3. By pressing on **[+]** and **[−]**, set up the desired value;
4. Confirm by pressing on the **OK** key (display shows the parameters previously selected).

For the complete list of the “Operating Parameters” See the table on page. 66.



9 Programming complete

WARNING At the end of the programming procedure, use the buttons **[+]** and **[−]** until the appearance of the symbol “----”, the operator is now ready again for new manoeuvres.

To perform any “Advanced Programming” operations (cancellation of the remotes, configuration inputs, etc ...), see on page 63.



NOTES



4.2 SWING GATES CONFIGURATION

ELECTRICAL CONNECTIONS

Execute the wiring following the directions of table 1 and diagrams on page 46.

Table 1 "terminal board connections"

1-2		+24 V === power supply output for auxiliary devices 200mA
3-4		22 V ~ transformer power supply input
5-6		24 V === battery power supply or photovoltaic accumulator Green Energy input (follow carefully polarity indications).
7-8		Operator 1 output
9		Connection of motors metallic parts
10-11		Operator 2 output (if present)
12-13		24 V === max 15 W output for open gate fix/flashing warning light (if P052=0/1) or courtesy light (if P052>1)
14-15		Electric-lock output max 1 art. 110 (if P062=0) or 24V === output max 5W configurable (if P062≠0)
16-17		24 V === Flashing light output max 15W art. Lumy/24A/S
18-19		<p>18 - N.C. Input 6 STOP. In case of intervention, it stops the movement of both motors during any operation. If unused, short circuit.</p> <p>19 - Com</p>
20-21		<p>20 - N.C. Input 5 PHOTO 2. When enabled (see parameter P051 in the table), activation of PHOTO 2 provokes: an inversion of direction (during closing), the arrest of the movement (during opening), prevent the start (gate closed). If unused, short circuit.</p> <p>21 - Com</p>
22-23		<p>22 - N.C. Input 4 PHOTO 1. When enabled (see parameter P050 in the table), activation of PHOTO 1 provokes: an inversion of direction (during closing), the arrest of the movement (during opening), prevent the start (gate closed). If unused, short circuit.</p> <p>23 - Com</p>
24-25		<p>24 - N.C. Input 3 SAFETY. If activated, it causes the inversion. See P055 and P056 on the parameters table. If unused, short circuit.</p> <p>25 - Com</p>
26-27		<p>26 - N.O. Input 2 PED. If activated, it opens motor nr. 1 only.</p> <p>27 - Com</p>
28-29		<p>28 - N.O. Input 1 START. In case of intervention it provokes: the operator opening or closing. It may operate as "inversion" mode (P49=0) or "step by step" mode (P49=1).</p> <p>29 - Com</p>
30		Aerial signal input
31		Ground aerial input
32-33		DEA_NET net input (unused at the moment)
CON 1		230 V ~ ±10% (50/60 Hz) power supply input
J5		Encoder selection Jumper: <ul style="list-style-type: none"> • A position = operators with encoder (remind to set P029=0) • B position = operators without encoder (remind to set P029=1)

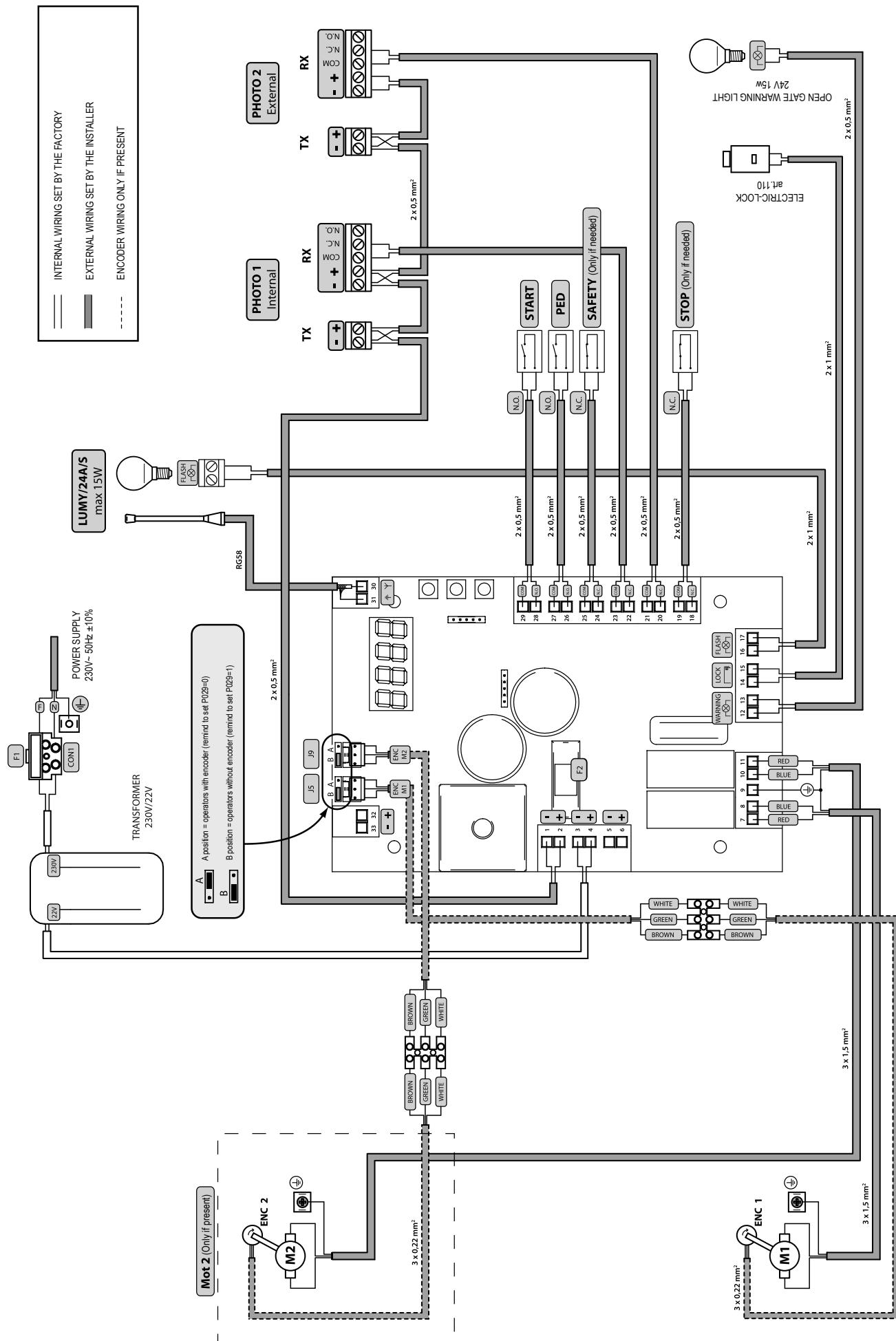
If the installation requires different commands and / or additional to the standard, you can configure each input to the required rate.

Refer to Chapter
"Advanced Programming".

EN

SWING GATES





STANDARD PROGRAMMING

1 Power Supply

Dare alimentazione, sul display compaiono in sequenza le scritte "rES-", "TYPE", "-□ !-" seguite dal simbolo di cancello chiuso "----"



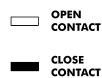
* If the control panel has already been programmed and the power fails or is switched off - once power is returned and a START command is given, the position reset procedure is performed (see "rESP" in the table "WORKING STATUS MESSAGES" on page 68).

2 Visualisation of inputs and operations-counter status

1. Press the **OK** key for 15 seconds;

2. The display will show respectively:

Inputs status (check it's correct);



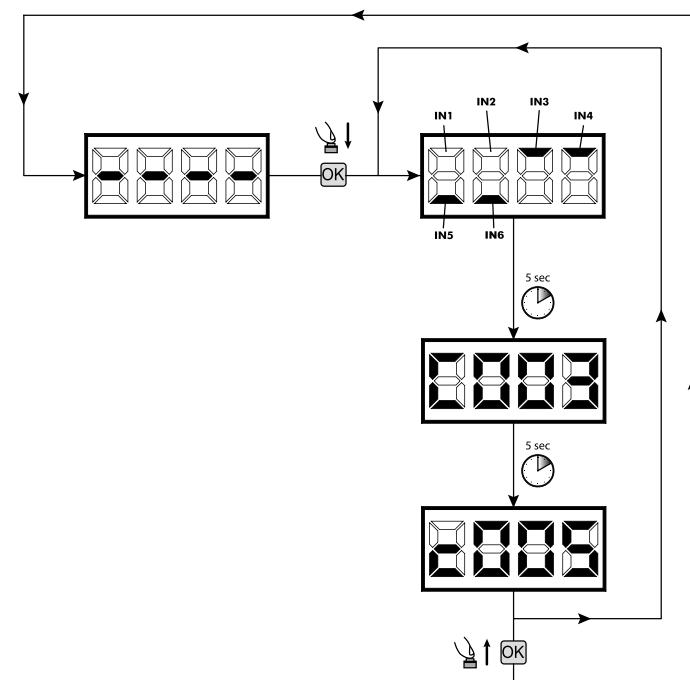
Total operations counter (* see P064):

i.g.: **C003** = 3x100* = 3000 operations performed

Maintenance operations-counter (* see P065):

i.g.: **c005** = 5*500 = 2500 operations remaining before the maintenance intervention request (**c----** = manoeuvres-counter disabled)

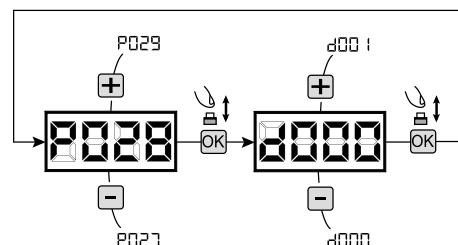
3. Hold down the **OK** key to display a cyclic 3 options, or release the **OK** button to exit the parameter.



3 Selection type of operators

! IMPORTANT !

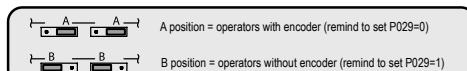
1. Scroll down the parameters with **[+]** and **[-]** keys until you visualise P028;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[-]** keys, set:
 - d000=GEKO;
 - d001=LOOK - MAC;
 - d002=GHOST;
 - d003=LIVI 500/502;
4. Confirm your choice by pressing the **OK** key (display returns again to P028).



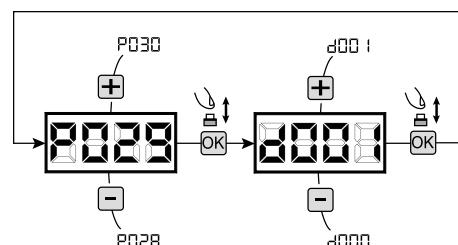
4 Selection operating with or without encoder

! IMPORTANT !

Warning: Remember to correctly set the jumpers J5 and J9.

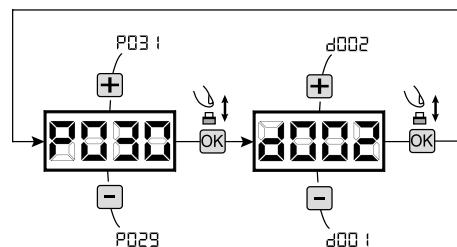


1. Scroll down the parameters with **[+]** and **[-]** keys until you visualise P029;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[-]** keys, set:
 - d000=for operators with encoder;
 - d001=for operators without encoder;
4. Confirm your choice by pressing the **OK** key (display returns again to P029).



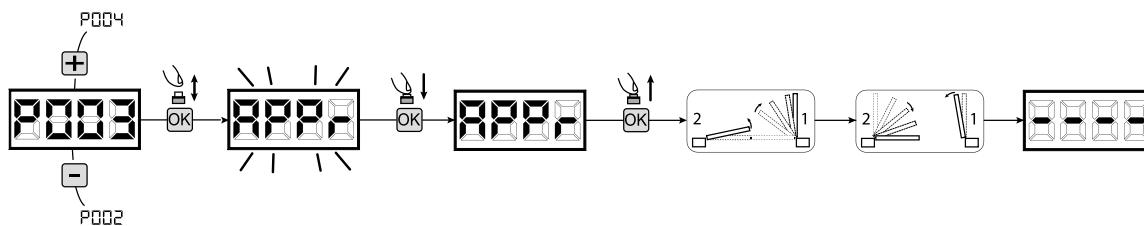
5 Selection 1 or 2 operators functioning

1. Scroll down the parameters with **+** and **-** keys until you visualise P030;
2. Access the parameter by pressing the **OK** key;
3. Acting on **+** and **-** keys, set:
- d001=for a single motor operating;
- d002=for 2 motors operating;
4. Confirm your choice by pressing the **OK** key (display returns again to P030).



6 Motor stroke learning

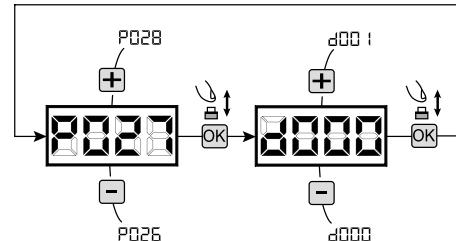
1. Scroll down the parameters with **+** and **-** keys until you visualise P003;
2. Access the parameter by pressing the **OK** key;
3. When "RPPr" flashes, continue pressing the **OK** key;
4. Release the **OK** key when "RPPr" stops flashing; the learning procedure starts;
5. Wait for the door (or doors in case of using 2 motors) searches and stops on the opening stop and then on the closing stop.
If you want to anticipate the stopping strokes in opening, you can manually intervene by giving an impulse to "Start" button (or pressing the "OK" on the control panel) simulating the stroke.
6. Once the procedure is ended, the display will show "----".



7 Transmitters learning

7.1 Transmitters coding selection

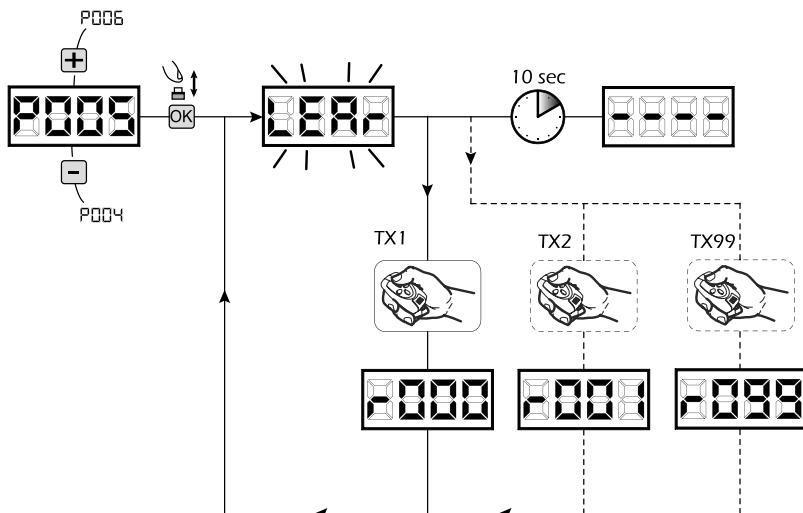
1. Scroll down the parameters with **+** and **-** keys until you visualise P027;
2. Confirm by pressing on the **OK** key;
3. Select the type of transmitter by scrolling **+** and **-** keys:
- d000=fix rolling-code (suggested);
- d001=complete rolling-code;
- d002=dip-switch;
4. Confirm by pressing on the **OK** key (display shows again P027).



Warning: If you need to vary the type of encoding, and only if other remotes with different encoding are memorized, you need to erase memory (P004) **AFTER** you have set the new encoding.

7.2 Learning

1. Scroll down the parameters with **+** and **-** keys until you visualise P005;
2. Confirm by pressing on the **OK** key;
3. When the symbol "LER" flashes, press on any key of the transmitter you want to memorize;
4. The display visualizes the number of the transmitter just memorized and then "LER" flashing;
5. Memorize all necessary transmitters repeating this procedure from step 3;
6. Wait 10 seconds before quitting the memorization mode, display shows now "----".



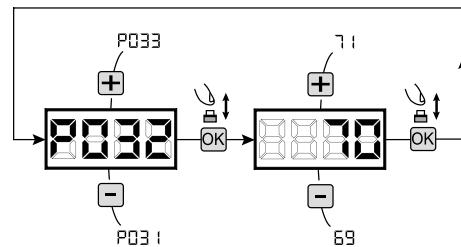
Warning: In the case of rolling code remotes, the receiver can be put into learning mode by pressing the hidden button on a remote control previously learned.

8 Adjustment of operating parameters

If you need to modify the operating parameters (force, speedness etc.):

1. Scroll down the parameters until you visualize the desire parameter (i.g. P032);
2. Confirm by pressing on the **OK** key;
3. By pressing on **[+]** and **[−]**, set up the desired value;
4. Confirm by pressing on the **OK** key (display shows the parameters previously selected).

For the complete list of the “Operating Parameters” See the table on page. 66.



9 Programming complete

WARNING At the end of the programming procedure, use the buttons **[+]** and **[−]** until the appearance of the symbol “----”, the operator is now ready again for new manoeuvres.

To perform any “Advanced Programming” operations (cancellation of the remotes, configuration inputs, etc. ..), see on page 63.

EN

SWING GATES





NOTES



4.3 OVERHEAD DOORS CONFIGURATION

ELECTRICAL CONNECTIONS

Execute the wiring following the directions of table 1 and diagrams on page 52.

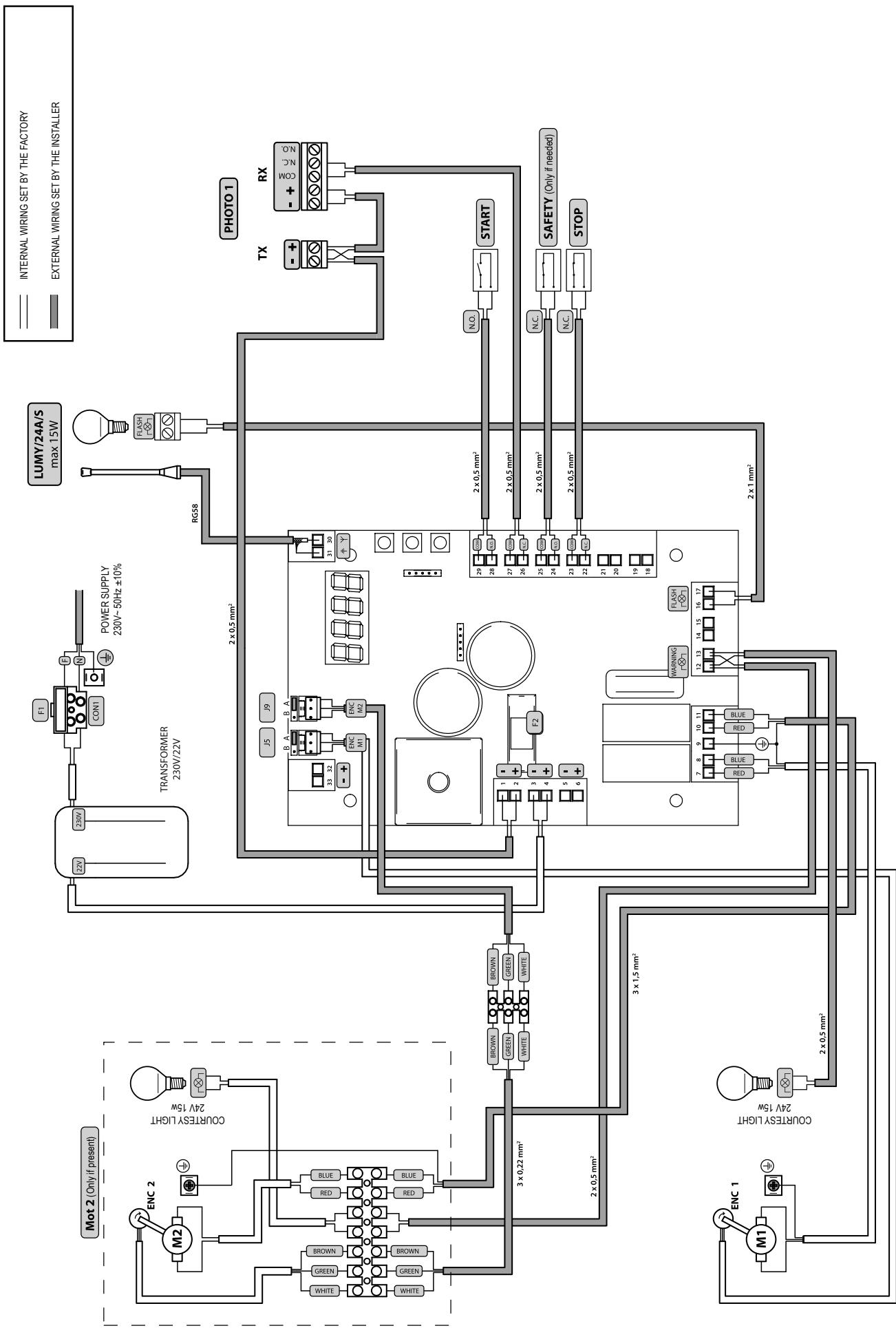
Table 1 "terminal board connections"

1-2		+24 V === power supply output for auxiliary devices 200mA
3-4		22 V ~ transformer power supply input
5-6		24 V === battery power supply or photovoltaic accumulator Green Energy input (follow carefully polarity indications).
7-8		Operator 1 output
9		Connection of motors metallic parts
10-11		Operator 2 output (if present)
12-13		24 V === max 15 W output for open gate fix/flashing warning light (if P052=0/1) or courtesy light (if P052>1)
14-15		Electric-lock output max 1 art. 110 (if P062=0) or 24V === output max 5W configurable (if P062≠0)
16-17		24 V === Flashing light output max 15W art. Lumy/24A/S
18-19		18 - N.O. 19 - Com Input 6. Unused.
20-21		20 - N.O. 21 - Com Input 5. Unused.
22-23		22 - N.C. 23 - Com Input 4 STOP. In case of intervention, it stops the movement of both motors during any operation. If unused, short circuit.
24-25		24 - N.C. 25 - Com Input 3 SAFETY. If activated, it causes the inversion. See P055 and P056 on the parameters table. If unused, short circuit.
26-27		26 - N.C. 27 - Com Input 2 PHOTO 1. When enabled (see parameter P050 in the table), activation of PHOTOTO 1 provokes: an inversion of direction (during closing), the arrest of the movement (during opening), prevent the start (gate closed). If unused, short circuit.
28-29		28 - N.O. 29 - Com Input 1 START. In case of intervention it provokes: the operator opening or closing. It may operate as "inversion" mode (P49=0) or "step by step" mode (P49=1).
30		Aerial signal input
31		Ground aerial input
32-33		DEA_NET net input (unused at the moment)
CON 1		230 V ~ ±10% (50/60 Hz) power supply input
J5		Encoder selection Jumper: • A position = operators with encoder (remind to set P029=0) • B position = operators without encoder (remind to set P029=1)

If the installation requires different commands and / or additional to the standard, you can configure each input to the required rate.

**Refer to Chapter
"Advanced Programming".**





STANDARD PROGRAMMING

1 Power Supply

Give power supply, the display shows the following symbols "rES-", "TYPE", "-02-" and then "----".



* If the control panel has already been programmed and the power fails or is switched off - once power is returned and a START command is given, the position reset procedure is performed (see "rESP" in the table "WORKING STATUS MESSAGES" on page 68).

2 Visualisation of inputs and operations-counter status

1. Press the **OK** key for 15 seconds;

2. The display will show respectively:

Inputs status (check it's correct);



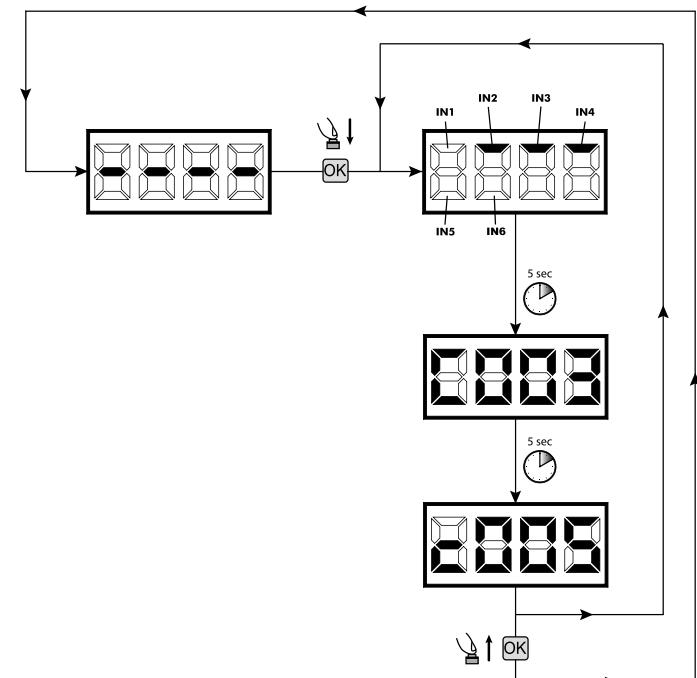
Total operations counter (* see P064):

i.g.: **c003** = $3 \times 100^*$ = 3000 operations performed

Maintenance operations-counter (* see P065):

i.g.: **c005** = 5×500 = 2500 operations remaining before the maintenance intervention request (**c----** = manoeuvres-counter disabled)

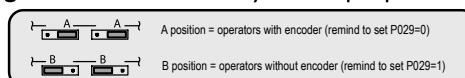
3. Hold down the **OK** key to display a cyclic 3 options, or release the **OK** button to exit the parameter.



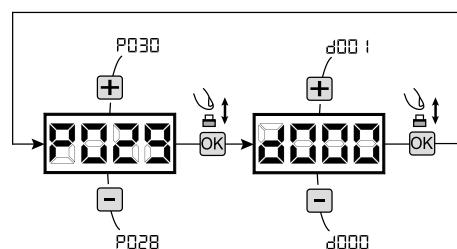
3 Selection operating with or without encoder

! IMPORTANT !

Warning: Remember to correctly set the jumpers J5 and J9.

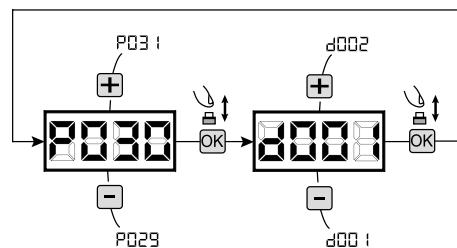


1. Scroll down the parameters with **+** and **-** keys until you visualise P029;
2. Access the parameter by pressing the **OK** key;
3. Acting on **+** and **-** keys, set:
 - d000=for operators with encoder;
 - d001=for operators without encoder;
4. Confirm your choice by pressing the **OK** key (display returns again to P029).



4 Selection 1 or 2 operators functioning

1. Scroll down the parameters with **+** and **-** keys until you visualise P030;
2. Access the parameter by pressing the **OK** key;
3. Acting on **+** and **-** keys, set:
 - d001=for a single motor operating;
 - d002=for 2 motors operating;
4. Confirm your choice by pressing the **OK** key (display returns again to P030).



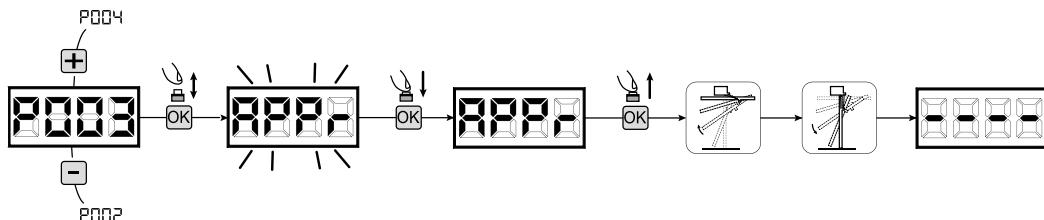
EN

OVERHEAD DOORS



5 Motor stroke learning

1. Scroll down the parameters with **[+]** and **[-]** keys until you visualise P003;
2. Access the parameter by pressing the **OK** key;
3. When "APP" flashes, continue pressing the **OK** key;
4. Release the **OK** key when "APP" stops flashing; the learning procedure starts;
5. Wait for the door searches and stops on the opening stop and then on the closing stop.
If you want to anticipate the stopping strokes in opening, you can manually intervene by giving an impulse to "Start" button (or pressing the "OK" on the control panel) simulating the stroke.
6. Once the procedure is ended, the display will show "----".

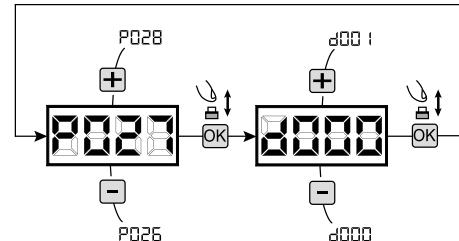


6 Transmitters learning

7.1 Transmitters coding selection

1. Scroll down the parameters with **[+]** and **[-]** keys until you visualise P027;
2. Confirm by pressing on the **OK** key;
3. Select the type of transmitter by scrolling **[+]** and **[-]** keys:
- d000=fix rolling-code (suggested);
- d001=complete rolling-code;
- d002=dip-switch;
4. Confirm by pressing on the **OK** key (display shows again P027).

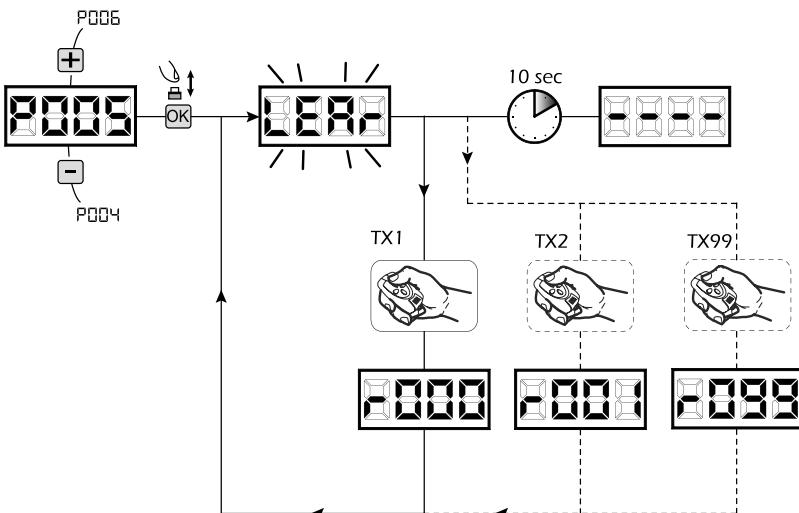
Warning: If you need to vary the type of encoding, and only if other remotes with different encoding are memorized, you need to erase memory (P004) **AFTER** you have set the new encoding.



7.2 Learning

1. Scroll down the parameters with **[+]** and **[-]** keys until you visualise P005;
2. Confirm by pressing on the **OK** key;
3. When the symbol "LER" flashes, press on any key of the transmitter you want to memorize;
4. The display visualizes the number of the transmitter just memorized and then "LER" flashing;
5. Memorize all necessary transmitters repeating this procedure from step 3;
6. Wait 10 seconds before quitting the memorization mode, display shows now "----".

Warning: In the case of rolling code remotes, the receiver can be put into learning mode by pressing the hidden button on a remote control previously learned.

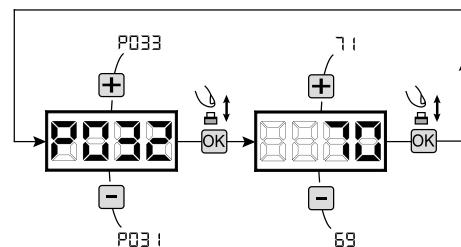


7 Adjustment of operating parameters

If you need to modify the operating parameters (force, speedness etc..):

1. Scroll down the parameters until you visualize the desire parameter (i.g. P032);
2. Confirm by pressing on the **OK** key;
3. By pressing on **[+]** and **[-]**, set up the desired value;
4. Confirm by pressing on the **OK** key (display shows the parameters previously selected).

For the complete list of the “Operating Parameters” See the table on page. 66.



8 Programming complete

WARNING At the end of the programming procedure, use the buttons **[+]** and **[-]** until the appearance of the symbol “----”, the operator is now ready again for new manoeuvres.

To perform any “Advanced Programming” operations (cancellation of the remotes, configuration inputs, etc. ..), see on page 63.

EN

OVERHEAD DOORS



**NOTES**



4.4 BARRIERS CONFIGURATION

ELECTRICAL CONNECTIONS

Execute the wiring following the directions of table 1 and diagrams on page 58.

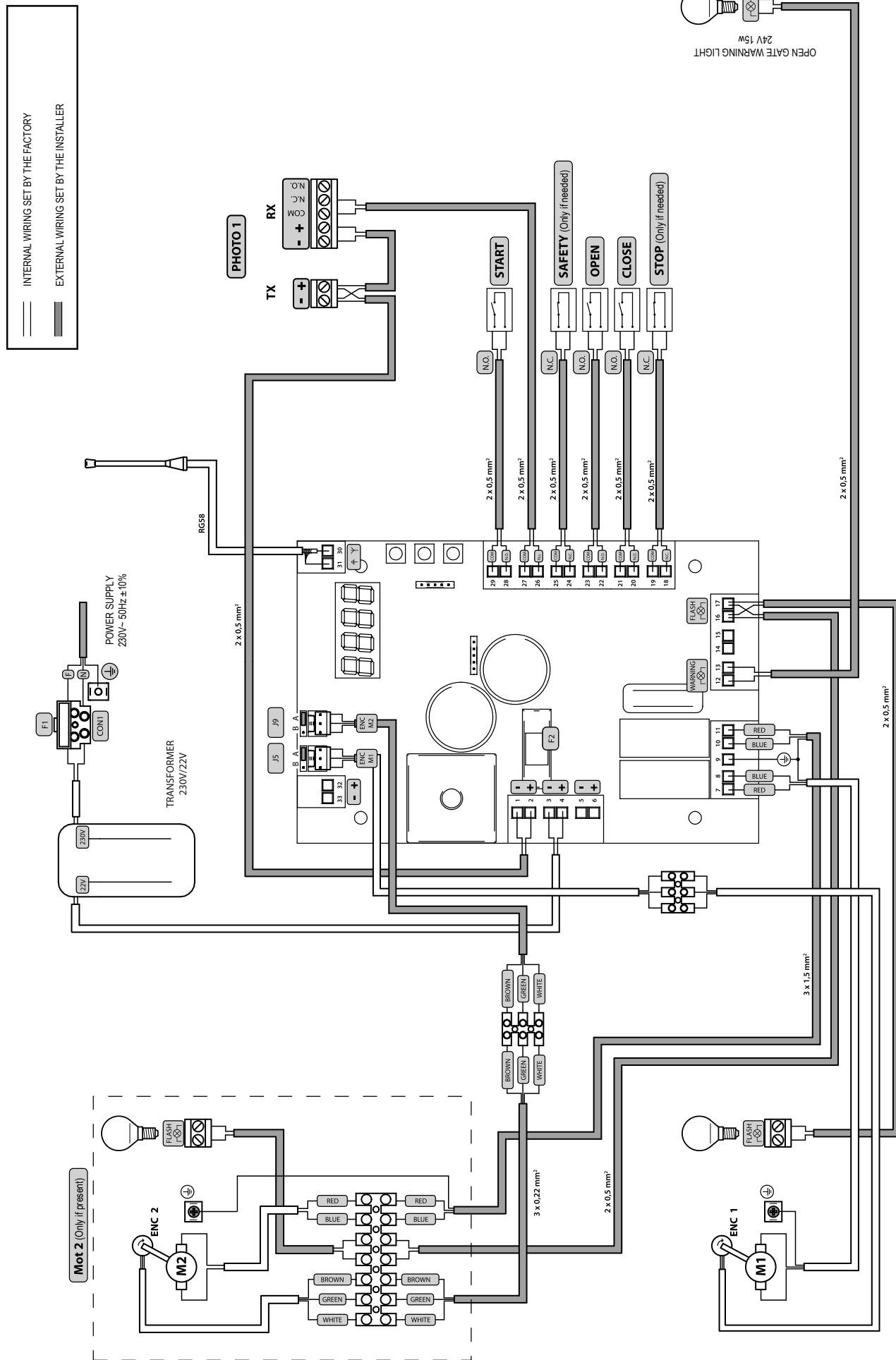
Table 1 "terminal board connections"

1-2		+24 V === power supply output for auxiliary devices 200mA
3-4		22 V ~ transformer power supply input
5-6		24 V === battery power supply or photovoltaic accumulator Green Energy input (follow carefully polarity indications).
7-8		Operator 1 output
9		Connection of motors metallic parts
10-11		Operator 2 output (if present)
12-13		24 V === max 15 W output for open gate fix/flashing warning light (if P052=0/1) or courtesy light (if P052>1)
14-15		Electric-lock output max 1 art. 110 (if P062=0) or 24V === output max 5W configurable (if P062≠0)
16-17		24 V === Flashing light output max 15W art. Lumy/24A/S
18-19		<p>18 - N.C. Input 6 STOP. In case of intervention, it stops the movement of both motors during any operation. If unused, short circuit.</p> <p>19 - Com</p>
20-21		<p>20 - N.O. Input 5 CLOSE. If it intervenes, it causes the closing maneuver.</p> <p>21 - Com</p>
22-23		<p>22 - N.O. Input 4 OPEN. If it intervenes it causes the opening maneuver.</p> <p>23 - Com</p>
24-25		<p>24 - N.C. Input 3 SAFETY. If activated, it causes the inversion. See P055 and P056 on the parameters table. If unused, short circuit.</p> <p>25 - Com</p>
26-27		<p>26 - N.C. Input 2 PHOTO 1. When enabled (see parameter P050 in the table), activation of PHOTOTO 1 provokes: an inversion of direction (during closing), the arrest of the movement (during opening), prevent the start (gate closed). If unused, short circuit.</p> <p>27 - Com</p>
28-29		<p>28 - N.O. Input 1 START. In case of intervention it provokes: the operator opening or closing. It may operate as "inversion" mode (P49=0) or "step by step" mode (P49=1).</p> <p>29 - Com</p>
30		Aerial signal input
31		Ground aerial input
32-33		DEA_NET net input (unused at the moment)
CON 1		230 V ~ ±10% (50/60 Hz) power supply input
J5		Encoder selection Jumper:
		• A position = operators with encoder (remind to set P029=0)
		• B position = operators without encoder (remind to set P029=1)

If the installation requires different commands and / or additional to the standard, you can configure each input to the required rate.

**Refer to Chapter
"Advanced Programming".**





STANDARD PROGRAMMING

1 Power Supply

Give power supply, the display shows the following symbols "rES-", "TYPE", "-03-" and then "----".



* If the control panel has already been programmed and the power fails or is switched off - once power is returned and a START command is given, the position reset procedure is performed (see "rESP" in the table "WORKING STATUS MESSAGES" on page 68).

2 Visualisation of inputs and operations-counter status

1. Press the **OK** key for 15 seconds;

2. The display will show respectively:

Inputs status (check it's correct);

- OPEN CONTACT
- CLOSE CONTACT

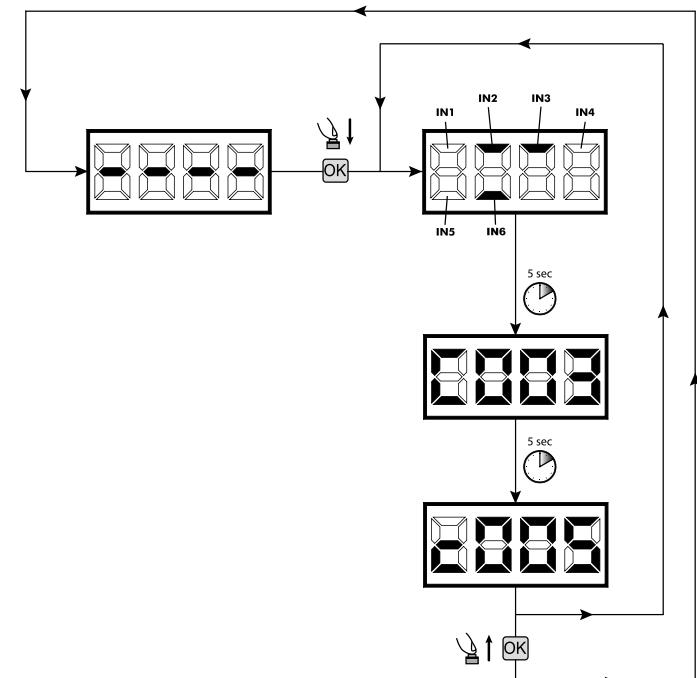
Total operations counter (* see P064):

i.g.: **C003** = $3 \times 100^*$ = 3000 operations performed

Maintenance operations-counter (* see P065):

i.g.: **c005** = 5×500 = 2500 operations remaining before the maintenance intervention request (**C----** = manoeuvres-counter disabled)

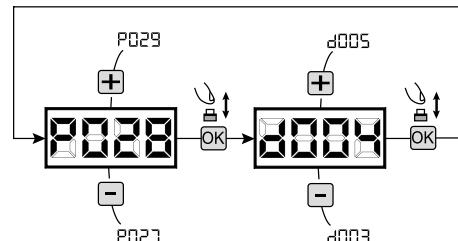
3. Hold down the **OK** key to display a cyclic 3 options, or release the **OK** button to exit the parameter.



3 Selection type of operators

! IMPORTANT !

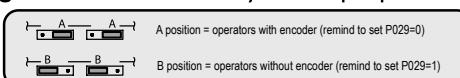
1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P028;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
 - d003=PASS;
 - d004=STOP;
4. Confirm your choice by pressing the **OK** key (display returns again to P028).



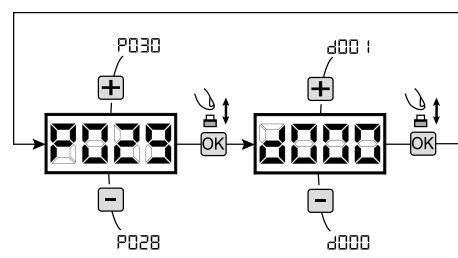
4 Selection operating with or without encoder

! IMPORTANT !

Warning: Remember to correctly set the jumpers J5 and J9.

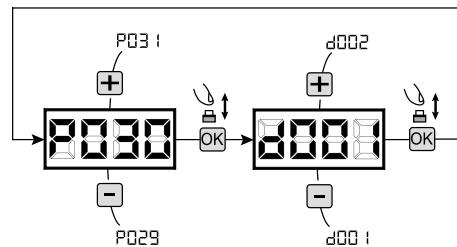


1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P029;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
 - d000=for operators with encoder;
 - d001=for operators without encoder;
4. Confirm your choice by pressing the **OK** key (display returns again to P029).



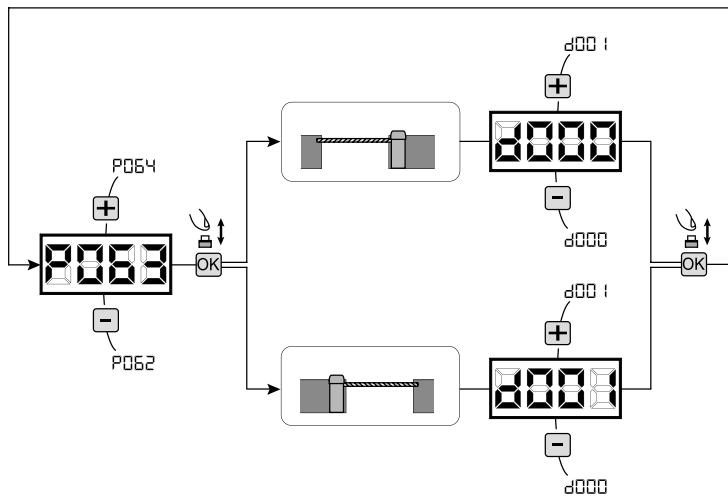
5 Selection 1 or 2 operators functioning

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P030;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
- d001=for a single motor operating;
- d002=for 2 motors operating;
4. Confirm your choice by pressing the **OK** key (display returns again to P030).



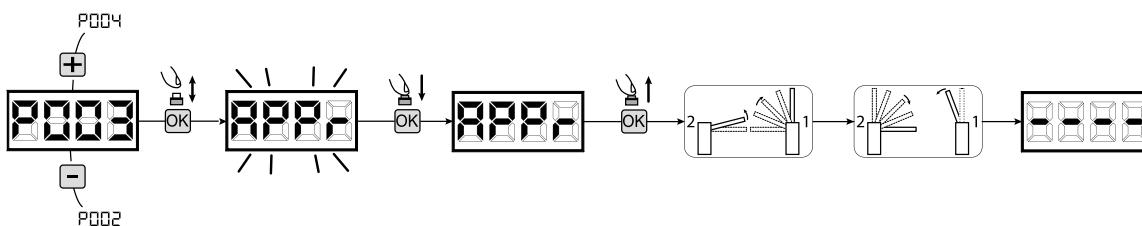
6 Selection of direction of motion

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P063;
2. Access the parameter by pressing the **OK** key;
3. Acting on **[+]** and **[−]** keys, set:
- d000=motor in standard position (on the right of the gap);
- d001=motor in inverted position (on the left of the gap);
4. Confirm your choice by pressing the **OK** key (display returns again to P063).



7 Motor stroke learning

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P003;
2. Access the parameter by pressing the **OK** key;
3. When "APPF" flashes, continue pressing the **OK** key;
4. Release the **OK** key when "APPF" stops flashing; the learning procedure starts;
5. Wait for the boom (or booms if two opposite barriers) searches and stops on the opening stop and then on the closing stop.
If you want to anticipate the stopping strokes in opening, you can manually intervene by giving an impulse to "Start" button (or pressing the "OK" on the control panel) simulating the stroke.
6. Once the procedure is ended, the display will show "----".

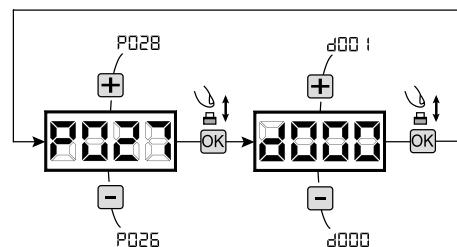


8 Transmitters learning

8.1 Transmitters coding selection

1. Scroll down the parameters with **[+]** and **[−]** keys until you visualise P027;
2. Confirm by pressing on the **OK** key;
3. Select the type of transmitter by scrolling **[+]** and **[−]** keys:
- d000=fix rolling-code (suggested);
- d001=complete rolling-code;
- d002=dip-switch;
4. Confirm by pressing on the **OK** key (display shows again P027).

Warning: If you need to vary the type of encoding, and only if other remotes with different encoding are memorized, you need to erase memory (P004) **AFTER** you have set the new encoding.

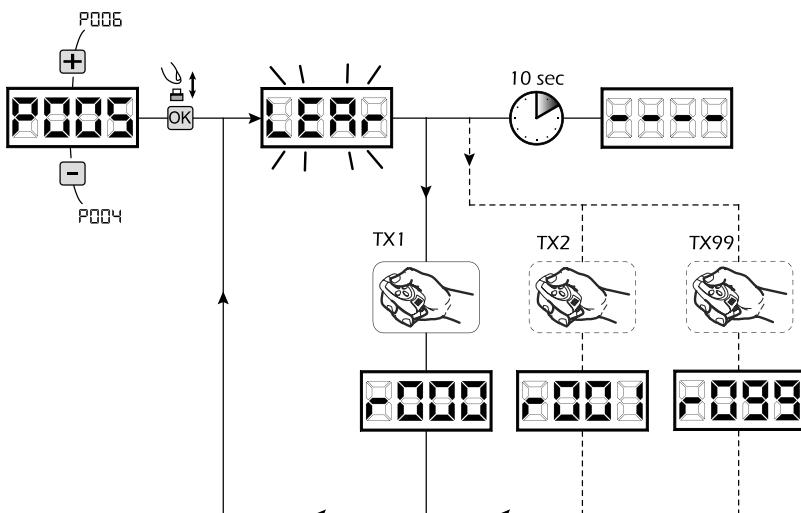




8.2 Learning

1. Scroll down the parameters with **+** and **-** keys until you visualise P005;
2. Confirm by pressing on the **OK** key;
3. When the symbol “**LER**” flashes, press on any key of the transmitter you want to memorize;
4. The display visualizes the number of the transmitter just memorized and then “**LER**” flashing;
5. Memorize all necessary transmitters repeating this procedure from step 3;
6. Wait 10 seconds before quitting the memorization mode, display shows now “----”.

Warning: In the case of rolling code remotes, the receiver can be put into learning mode by pressing the hidden button on a remote control previously learned.

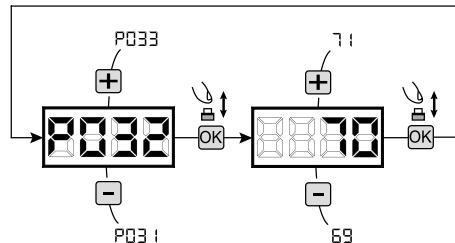


9 Adjustment of operating parameters

If you need to modify the operating parameters, follow the procedure below.

Warning: In order to ensure an optimum operation, the parameters given in the table must be set as indicated for the type of barrier used.

1. Scroll down the parameters until you visualize the desire parameter (i.g. P032);
2. Confirm by pressing on the **OK** key;
3. By pressing on **+** and **-**, set up the desired value;
4. Confirm by pressing on the **OK** key (display shows the parameters previously selected).



For the complete list of the “Operating Parameters” See the table on page. 66.

Recommended values for standard “TYPE 03 - Barriers”

	BOOM	Running speed (P032 - P033)	Slowdown speed (P034)	Slowdown duration (P035 - P036)	Soft-start (P054)	Facilitation release (P057)	Stop margin (P058 - P059)
STOP	STOP_L (7,5 m)	65%	30%	30%	1	2	15
	STOP_L (6 m)	80%	30%	30%	1	2	15
	STOP_L (5 m)	90%	30%	30%	1	2	15
	STOP_L (4 m)	90%	30%	30%	0	2	15
	STOP_V (4 m)	100%	30%	30%	0	1	7
PASS	PASS_L (4 m)	100%	30%	30%	1	2	20
	PASS_V (3 m)	100%	25%	35%	0	1	5
	PASS_V (4 m)	85%	25%	30%	0	1	5

10 Programming complete

WARNING At the end of the programming procedure, use the buttons **+** and **-** until the appearance of the symbol “----”, the operator is now ready again for new manoeuvres.

To perform any “Advanced Programming” operations (cancellation of the remotes, configuration inputs, etc ..), see on page 63.



NOTES

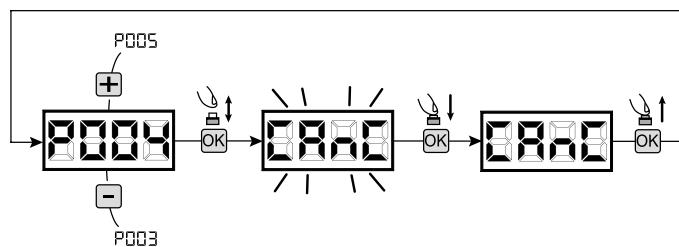
5 ADVANCED PROGRAMMING

Here are some added programming procedures relating to remotes memory management and advanced configuration of the control inputs.

1 Deletion of memorized transmitters

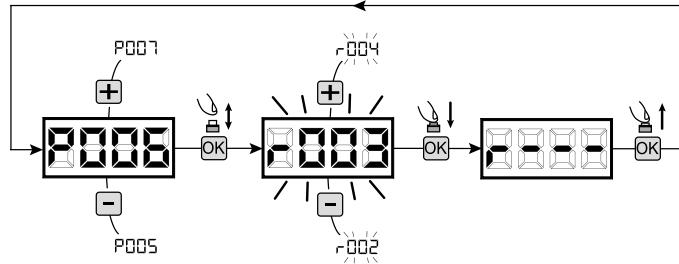
1.1 Deletion of all transmitters

1. Scroll down the parameters until you visualize P004;
2. Confirm by pressing on the **OK** key;
3. When “**RnE**” is flashing, press the **OK** key for a few seconds;
4. Release the **OK** key as soon as “**RnE**” stops flashing;
5. All memorized transmitters have been deleted (display shows again P004).



1.2 How to search and delete a transmitter

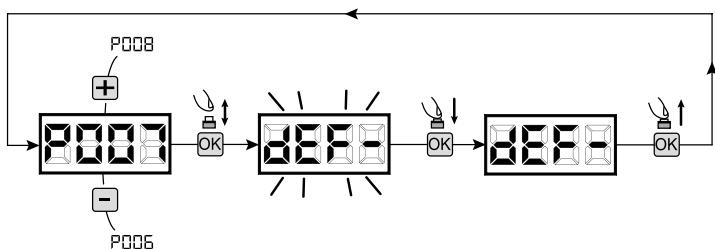
1. Scroll down the parameters until you visualize P006;
2. Confirm by pressing on the **OK** key;
3. By pressing on **[+]** and **[-]** keys, select the transmitter you want to delete (eg. **r 003**);
4. When “**r 003**” flashes, confirm the deletion by pressing the **OK** key for a few seconds;
5. Release the **OK** key when appears “**---**”;
6. The selected transmitter is deleted (display shows again P006).



2 Resetting of default parameters

1. Scroll down the parameters until you visualize P007;
2. Confirm by pressing on the **OK** key;
3. When “**dEF-**” flashes, press the **OK** key;
4. Release the **OK** key as soon as “**dEF-**” stops flashing; Default parameters for the configuration currently in use are restored;
6. At the end of the operation display returns to P007.

Warning: After you restore the default parameters, you must program the control panel again and adjust all operating parameters, in particular, remember to properly set the configuration of parameters (P028 - P029 - P030 – operator configuration).

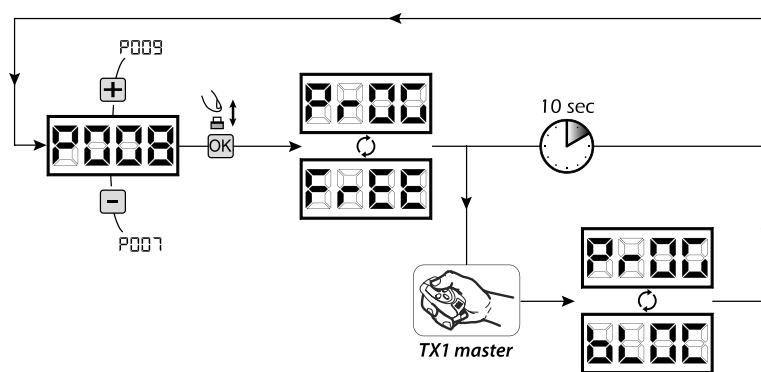


3 Locking-Unlocking access to programming

By using a “dip-switch” remote (regardless of the type of remotes already memorized) it's possible to lock-unlock access to the programming of the control panel to avoid tampering. The remote setting is the locking-unlocking code verified by the control board.

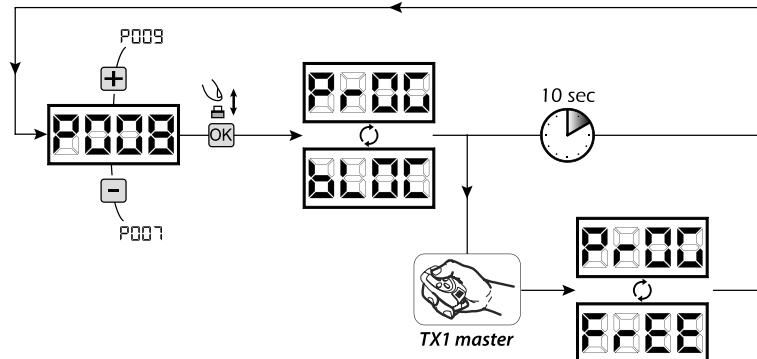
3.1 Locking access to programming

1. Scroll through the parameters with the buttons **[+]** and **[-]** until the display shows P008;
2. Access the parameter by pressing the button **OK**;
3. The display shows alternately the writing **PrOG/FREE** to indicate that the control board is waiting for the transmission of the block code;
4. Within 10 seconds press CH1 on the “TX Master”, the display shows **PrOG/bLOC** before returning to the list of parameters;
5. Access to programming is locked.



3.2 Unlocking access to programming

1. Scroll through the parameters with the buttons **[+]** and **[−]** until the display shows P008;
2. Access the parameter by pressing the button **OK**;
3. The display shows alternately the writing **PrOG/bLOC** to indicate that the control board is waiting for the transmission of the unlocking code;
4. Within 10 sec. press the CH1 of the "TX Master", the display shows **PrOG/FrEE** before returning to the list of parameters;
5. Access to programming is unlocked.



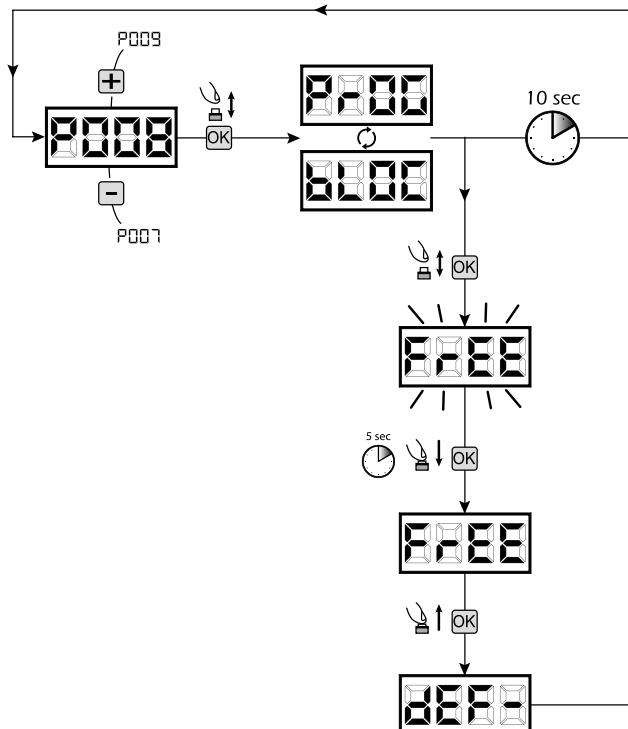
3.3 Unlocking access to programming and global reset

WARNING! This procedure involves the loss of all stored settings.

The procedure allows the unlocking of the control panel without having to know its unlocking code.

Following this release, you must program the control panel again and adjust all operating parameters, **in particular, remember to properly set the configuration of parameters (P028 - P029 - P030 - operator configuration)**. You will also need to repeat the measurement of impact forces to ensure the installation compliance to standards.

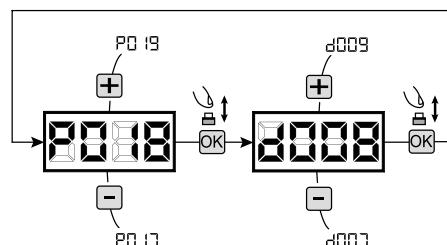
1. Scroll through the parameters with the buttons **[+]** and **[−]** until the display shows P008;
2. Access the parameter by pressing the button **OK**;
3. The display shows alternately the writing **PrOG/bLOC**;
4. Press the button **OK**, the display shows the flashing writing **FrEE**;
5. Press the button again and hold for 5 seconds (releasing it before, the procedure is terminated): The display shows the fixed writing **FrEE** followed by **dEF-**, before returning to the list of parameters;
6. Access to programming is unlocked.



4 Inputs configuration

Where the installation requires different commands and / or additional to the standard ones described by plan, you can configure each input for the operation desired (eg START, PHOTOS, STOP, etc ...).

1. Scroll down the parameters with the **[+]** and **[−]** to see that corresponding to the desired one:
 - P017=for INPUT 1;
 - P018=for INPUT 2;
 - P019=for INPUT 3;
 - P020=for INPUT 4;
 - P021=for INPUT 5;
 - P022=for INPUT 6;
2. Confirm by pressing on the **OK** key to get access to the parameter (eg. P018);
3. Scroll down with the **[+]** and **[−]** keys to set the value corresponding to the desired operation (refer to table "Input Configuration parameters" on page 65);
4. Confirm by pressing on the **OK** key (display shows again P018).
5. Execute the new connection to the input just reconfigured.



5 Programming complete

WARNING At the end of the programming procedure, use the buttons **[+]** and **[−]** until the appearance of the symbol **---**, the operator is now ready again for new manoeuvres.

	PAR.	PROCEDURE	SETTABLE VALUES
	P001	Positioning of operator 1	
	P002	Positioning of operator 2	
	P003	Memorization of the motors' stroke	
	P004	Deletion of transmitters	
	P005	Transmitter's memorizing	
	P006	Search and deletion of a transmitter	
PROGRAMMING PROCEDURES	P007	Loading of standard parameters: the list is up dated with factory settings	
	P008	Lock access to programming	
	P009	Unused parameter	
	P010	Unused parameter	
	P011	Unused parameter	
	P012	Unused parameter	
	P013	Unused parameter	
	P014	Unused parameter	
	P015	Unused parameter	

	PAR.	PARAMETER DESCRIPTION	SETTABLE VALUES	DEFAULT VALUES (for different standards of installation)
	P016	INPUT_3 selectionning input type	dEF0 dEF1 dEF2 overhead door swing gate	dEF2 barriers
	P017	INPUT_1 operating selection	000 (Contatto pulito) 001 (Contatto pulito)	000 (Contatto pulito)
	P018	INPUT_2 operating selection	001 (START) 002 (PED. (pedestrian)) 003 (OPEN separated open) 004: CLOSE (separated close) 005: OPEN PM (man present open) 006: CLOSE PM (man present close) 007: ELOCK-IN (electric-lock activation. See P062)	001 (START) 002 (PEDESTRIAN)
	P019	INPUT_3 operating selection	001 (SAFETY) 002 (PHOTO 1) 003 (PHOTO 2)	001 (SAFETY)
	P020	INPUT_4 operating selection	001 (STOP) 002 (PHOTO 1) 003 (PHOTO 2)	003 (OPEN)
	P021	INPUT_5 operating selection	001 (STOP) 002 (NONE)	004 (CLOSE)
	P022	INPUT_6 operating selection	001 (STOP) 002 (FCC1) 003 (FCC2)	001 (STOP)
	P023	Allocation of CHANNEL 1 of remotes	001 (START) 002 (NONE)	001 (START)
	P024	Allocation of CHANNEL 2 of remotes	003 (NONE)	002 (NONE)
	P025	Allocation of CHANNEL 3 of remotes	004 (NONE)	003 (NONE)
	P026	Allocation of CHANNEL 4 of remotes	005 (NONE)	004 (NONE)
	P027	Selection of type of remotes	006 (NONE)	005 (NONE)
			007	006

INPUTS CONFIGURATION PARAMETERS

OPERATORS CONFIGURATION PARAMETERS		OPERATING PARAMETERS		
		dEF0 sliding gate	dEF1 swing gate	dEF2 overhead door
P028	Selection type of operators	<ul style="list-style-type: none"> • 000: GEKO • 001: LOOK / MAC • 002: GHOST • 003: LIV 500/502 / 902 / PASS • 004: STOP • 005: LIV 5/24 • 006: LIV 8/24 • 007: GULLIVER 		
P029	Selected work with or without encoders.			
	WARNING: J5, J9 and P029 must be set correctly before performing the procedure for programming			
P030	Selectioning operators number	<ul style="list-style-type: none"> • 001 : one operator • 002: two operators 		
P031	Unused parameter			
P032	Operators speed adjustment during the stroke while opening	15%tot.....100%tot	100	100
P033	Operators speed adjustment during the stroke while closing	15%tot.....100%tot	100	100
P034	Operators speed adjustment during slow-down while opening and closing	15%tot.....100%tot	0-100	0-100
P035	Slow down duration adjustment while opening	5%tot.....80%tot	0-25	0-20
P036	Slow down duration adjustment while closing	5%tot.....80%tot	0-25	0-20
P037	Operator 1 force adjustment while opening (if = 100% obstacle detection deactivated)	15%tot.....100%tot	0-50	0-50
P038	Operator n.1 force adjustment while closing (if = 100% obstacle detection deactivated)	15%tot.....100%tot	0-50	0-50
P039	Operator n.2 force adjustment while opening (if = 100% obstacle detection deactivated)	15%tot.....100%tot	0-50	0-50
P040	Operator n.2 force adjustment while closing (if = 100% obstacle detection deactivated)	15%tot.....100%tot	0-50	0-50
P041	Automatic closing times adjustment	0sec.....255sec	0-50	0-50
P042	Automatic closing times adjustment (se = 0 pedestrian automatic closing deactivated)	0sec.....255sec	0-50	0-50
P043	Pedestrian stroke duration adjustment (se = 0 pedestrian automatic closing deactivated)	5%tot.....100%tot	0-30	0-35
P044	Pre-flashing time adjustment	0sec.....10sec	0-50	0-50
P045	Adjustment of phase displacement time while opening	0sec.....30sec	0-50	0-50
P046	Adjustment of phase displacement time while closing	0sec.....30sec	0-50	0-50
P047	Collectivity function: if it is activated it deactivates both opening and closing inputs for the whole duration of automatic opening and closing	<ul style="list-style-type: none"> • 000: "collectivity function" deactivated • 001: "collectivity function" activated 	0-50	0-50
P048	Ram blow function: it pushes the motors closed for one second before each opening movement, so as to ease the electric-lock release	<ul style="list-style-type: none"> • 000: "ram blow" deactivated • 001: "ram blow function" activated 	0-50	0-50
P049	"Reversal" mode selection (during the manoeuvre a command impulse reverse the movement) or "step by step" (during the manoeuvre a command impulse stops the movement). A next impulse restart the operator to the opposite direction.	<ul style="list-style-type: none"> • 000: "reversal function" • 001: "step by step function" 	0-50	0-50
P050	PHOTO input functioning: if=0 photocells are enabled while closing and at start when gate is closed; if=1 photocells are always enabled; if=2 photocells are enabled while closing only. When enabled, its activation provokes: the inversion (while closing), the stop (while opening) and prevent the starting (when gate is closed).	<ul style="list-style-type: none"> • 000: photocells enabled while closing and at gate closed • 001: photocells always enabled • 002: photocells enabled only while closing • 003: as 000 but with "close immediately" enabled • 004: as 001 but with "close immediately" enabled • 005: As 002 but with "close immediately" enabled 	0-50	0-50
PHOTO 1	Operation mode selection of the warning light output: If = 0 "warning light" (output always ON when the gate is open, OFF after a closing operation), If = 1 "flashing warning light" (slow intermittent output during opening and fast while closing, always ON at gate opened, always OFF at the end of a closing operation only), If > 1 "courtesy light" (output ON during each movement, OFF when the motor stops, after the setting delay)	<ul style="list-style-type: none"> • 000: "warning light" • 001: "flashing warning light" >001 : "courtesy light" off delay (1sec.....255sec) 	0-50	0-50
PHOTO 2			0-50	0-50

		dEF0 sliding gate	dEF1 swing gate	dEF2 overhead door	dEF3 barriers
P053	Searches for end of stroke while opening too: when activated, operators stop only at their arrival at the end of stroke, also while opening.	• 000: Stop when opening on a memorized point	• 001: Stop when opening on the end of stroke	000	001
P054	"soft start" function: motors accelerate gradually until they reach the set speed, avoiding sudden departures	• 000: "soft start" deactivated	• 001: "soft start" activated	001	001
P055	Adjust the inversion on obstacle period (detected by internal anti-crushing sensor or by the safety input when activated): if = 0 it makes a complete inversion, if > 0 indicates the duration (in seconds) of the run, after inversion resulting from detection of an obstacle during the opening.	• 000: inversion completa su ostacolo >000: durata dell'inversione su ostacolo (1sec.....10sec)	000	000	000
P056	Adjust the inversion on obstacle period (detected by internal anti-crushing sensor or by the safety input when activated): if = 0 it makes a complete inversion, if > 0 indicates the duration (in seconds) of the run, after inversion resulting from detection of an obstacle during the closing.	• 000: complete reversal on obstacle >000: duration of reversal on obstacle (1sec.....10sec)	000	000	000
P057	Facilitation manual release: If ≠ 0, after detecting the locking stop, the engine reverses for a brief time to release the pressure on it, and thus facilitate the manual release. The set value shows the length of the inversion. If=0 function disabled	• 000: facilitating release disabled >000: facilitation activated with release time equal to: (0x25ms.....20x25ms)	000	003	002
P058	Margin adjustment of the opening stroke: adjusts the duration of the "race" during which any obstacle is interpreted as a stroke, stopping the operator without executing the inversion. The value set indicates the number of revolutions of the rotor.	1.....255	012	025	020
P059	Margin adjustment of the closing stroke: adjust the duration of the last stretch of the "race" during which any obstacle is interpreted as a stroke, stopping the operator without executing the inversion. The value set indicates the number of revolutions of the rotor.	1.....255	012	025	020
P060	Operators force adjustment at stroke arrival - If = 0, setting off (the force value on the stroke is calculated automatically) - If ≠ 0, indicates the value (expressed in % of the max value) of the force exerted on the stroke.	0%tot.....100%tot	000	000	000
P061	"Energy saving" mode: If= 1 after 10sec of inactivity, the control panel turns the 24V outputs and the display off that will be turned on at first command received (use recommended battery-powered and / or solar panel).	• 000: "Energy saving" not active • 001: "Energy saving" active	000	000	000
P062	Electric-lock operating: if = 0 electric-lock art. 110, if = 1 24V output commanded by ELOCK_IN input in impulsive mode, if=2 24V output commanded by ELOCK_IN input in step-by-step mode, if>2 24V output commanded by ELOCK_IN input in temporized mode (the set value indicates the delay of turning off expressed in sec).	• 000: "Electric-lock art. 110 output • 001: "24V d.c. max 5W Impulsive output • 002: "24V d.c. max 5W Step-by-Step Output >002: "24V d.c. max 5W Temporized output (3sec.....25sec)	000	000	000
P063	Run direction inversion: If=1 automatically reverses the outputs open/close of the operators and any opening/closing limit switches inputs, avoiding having to manual change the wiring when installing the operator in an inverted position.	• 000: "Standard installation" • 001: "Inverted installation"	000	000	000
P064	Multiplexer operations-counter: Multiply the number of operations after which the total operations-counter will be updated. To view the values, refer to the section "Visualisation of inputs and operations-counter status".	• 000: "x100 • 001: "x1000 • 002: "x10000 • 003: "x100000	001	001	001
P065	Maintenance Operations-counter: if = 0 reset the counter and disables the intervention request, if>0 indicates the number of operations (x 500) to be made before the control panel executes a 4 second additional pre-flash to indicate the need of maintenance. i.g.: If P064 = 050, operations number = 50x500 = 25000 operations	• 000: "Request Maintenance disabled >000: "Number of operations (x 500) for required maintenance	000	000	000
P066	Warning: Before you set a new value of the counter-maneuvres maintenance, the same must be reset by setting P065 = 0 and only later P065 = "new value".	Selection of operating flashing light output: If= 0: intermittent flashing light output If=1: fixed flashing light output	000	000	000
P067	Unused parameter				
P068	Unused parameter				
P069	Unused parameter				
P070	Unused parameter				

OPERATING PARAMETERS

6 MESSAGES SHOWN ON THE DISPLAY

WORKING STATUS MESSAGES	
Mess.	Description
---	Gate is closed
JL	Gate is opened
OPEN	Opening under way
CLOS	Closing under way
STEP	While in step-by-step mode, the control board awaits further instructions after a start command
BLOC	Stop command received
rESP	Reset current position: The control unit has just been turned on after a power failure, or the gate has exceeded the maximum number (50) of inversions allowed without ever getting to the closing stroke, or the maximum number (3) of consecutive operations allowed of the anti-crushing device. Once the control unit has been reset and open command given the gate will start moving at slow speed, until it reaches end of travel. At this stage any start pulses are ignored.

ERROR MESSAGES		
Mess.	Description	Possible solutions
ErrP	Error position: The reset position procedure is not successful. The control panel is awaiting commands.	- Make sure there are no specific frictions and / or obstacles during the run; - Give a start pulse to initiate a position reset procedure; - Verify that the operation is completed successfully, manually helping the run, if necessary; - Adjust power and speed settings if necessary.
Err3	External photocells and/or safety devices are activated or out of order.	- Make sure that all safety devices and/or photocells installed are working properly.
Err4	Possible failure to the control board power circuit.	- Disconnect and connect power supply. Give a start impulse, if this error appears again, replace the control board.
Err5	Time-out operators run: The engine/s exceeded the maximum operating time (5min) without ever stopping.	- Give a start pulse to start the position reset procedure; - Ensure that this operation is successful.
Err6	Time-out obstacle detection: With anti-crushing sensor disabled, was still detected the presence of an obstacle that prevents movement of the leaf for a period of 10 seconds more.	- Make sure there are no specific frictions and / or obstacles during the run; - Give a start pulse to initiate a position reset procedure; - Verify that the operation is completed successfully.
Err7	Operators mouvement not detected.	- Make sure that operators and encoders connections are well done. - Check that jumpers J5 and J9 are well positioned as shown on the electric wiring. - If this error appears again, replace the control panel.

7 INSTALLATION TEST

The testing operation is essential in order to verify the correct installation of the system. **DEA** System wants to summarize the proper testing of all the automation in 4 easy steps:

- Make sure that you comply strictly as described in paragraph 2 "WARNINGS SUMMARY";
- Test the opening and closing making sure that the movement of the leaf match as expected. We suggest in this regard to perform various tests to assess the smoothness of the gate and defects in assembly or adjustment;
- Ensure that all safety devices connected work properly;
- Perform the measurement of impact forces in accordance with the standard 12445 to find the setting that ensures compliance with the limits set by the standard EN12453.

8 PRODUCT DISPOSAL

 **WARNING** In compliance with EU Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), this electrical product should not be treated as municipal mixed waste. Please dispose of the product and bring it to the collection for an appropriate local municipal recycling.

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1 RÉCAPITULATIF DES AVERTISSEMENTS

Vous devez les lire attentivement. L'inobservation des avertissements suivants peut rendre certaines situations dangereuses.

⚠ ATTENTION L'utilisation du produit dans des conditions anormales non prévues par le constructeur peut se révéler potentiellement dangereuse. Par conséquent, respectez les conditions prévues dans les présentes instructions.

⚠ ATTENTION DEA System vous rappelle que le choix, la position et l'installation de tous les dispositifs et les matériaux qui constituent l'ensemble complet de la fermeture, doivent être exécutés conformément aux Directives Européennes 2006/42/CE (Directive Machines) et ses modifications ultérieures, 2004/108/CE (compatibilité électromagnétique), 2006/95/CE et ses modifications ultérieures (appareils électriques à basse tension). Dans tous pays extracommunautaires, non seulement vous devez suivre les normes spécifiques en vigueur mais, pour atteindre un niveau de sûreté suffisant, on vous conseille d'observer aussi les prescriptions des Directives susmentionnées.

⚠ ATTENTION Vous ne devez absolument pas utiliser ce produit dans un milieu explosible, ni dans des milieux qui peuvent être agressifs et qui peuvent détériorer ces pièces.

⚠ ATTENTION Afin d'assurer une sécurité électrique, gardez toujours nettement séparés (minimum 4 mm en air ou 1 mm à travers l'isolation) le câble d'alimentation 230V des câbles à très basse tension de sécurité (alimentation des moteurs, commandes, électro-serrure, antenne, alimentation des circuits auxiliaires) éventuellement en les fixant à l'aide de pattes d'attache appropriées à proximité des bornes.

⚠ ATTENTION Toute opération d'installation, de maintenance, de nettoyage ou de réparation de toute l'installation doit être exécutée exclusivement par du personnel qualifié. Opérez toujours quand l'alimentation est coupée, et conformez-vous rigoureusement à toutes les normes en matière d'installations électriques en vigueur dans le pays où cette automatisation doit être installée.

⚠ ATTENTION L'utilisation de pièces de rechange non indiquées par **DEA** System et/ou un râssemblage incorrect peuvent être potentiellement dangereux pour les personnes, les animaux et les choses. De plus, cela peut provoquer des dysfonctionnements du produit. Par conséquent, utilisez toujours les pièces indiquées par **DEA** System et suivez les instructions données pour l'assemblage.

⚠ ATTENTION L'estimation erronée des forces d'impact peut être très dangereuse pour les personnes, animaux ou choses. **DEA** System vous rappelle que l'installateur doit vérifier que ces forces d'impact, mesurées selon les indications de la norme EN 12245, sont effectivement inférieures aux limites prévues par la norme EN12453.

⚠ ATTENTION Tout dispositif de sécurité externe éventuellement utilisé afin de respecter les limites des forces d'impact doit être conformes à la norme EN12978.

 **ATTENTION** Conformément à la Directive 2002/96/EC sur les déchets d'équipements électriques et électroniques (DEEE), ce produit électrique ne doit en aucun cas être mis au rebut sous forme de déchet municipal non trié. Veuillez vous débarrasser de ce produit en le renvoyant au point de ramassage local dans votre municipalité, à des fins de recyclage.