

:SE24

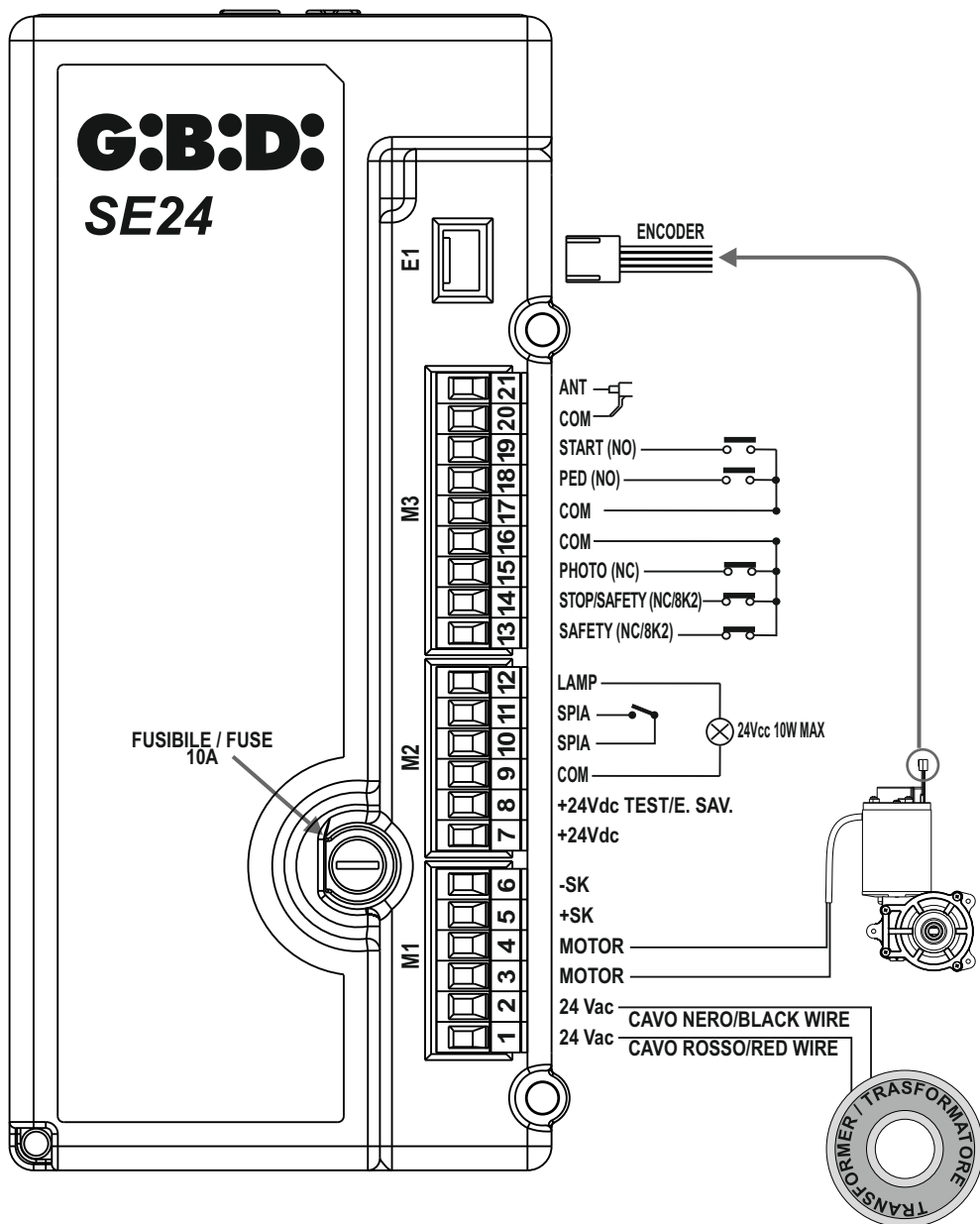


SE24 - (AS05860)
Firmware V.25 ➔

**Electronic control unit INSTRUCTIONS FOR
INSTALLATION**

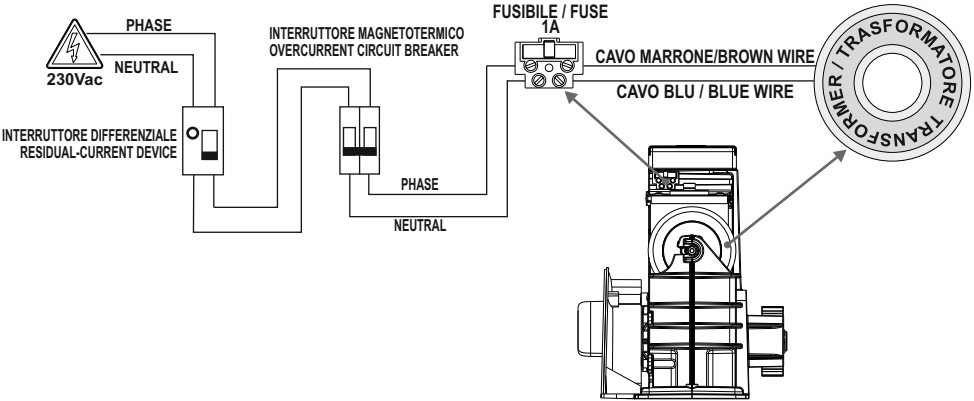
SCHEMA ELETTRICO / ELECTRICAL CONNECTIONS

1



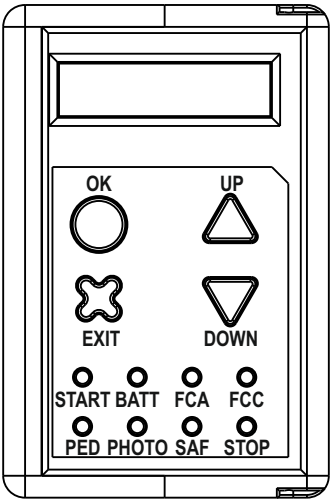
COLLEGAMENTO ALIMENTAZIONE / POWER SUPPLY CONNECTION

2



LEDS

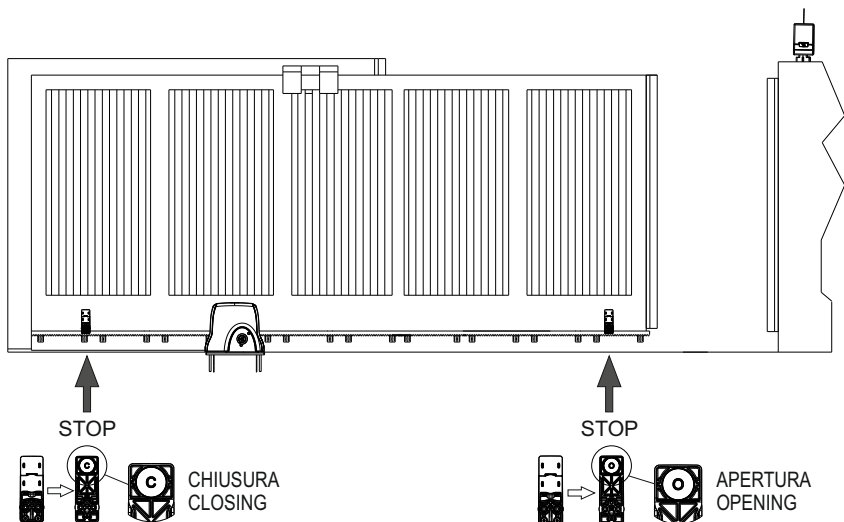
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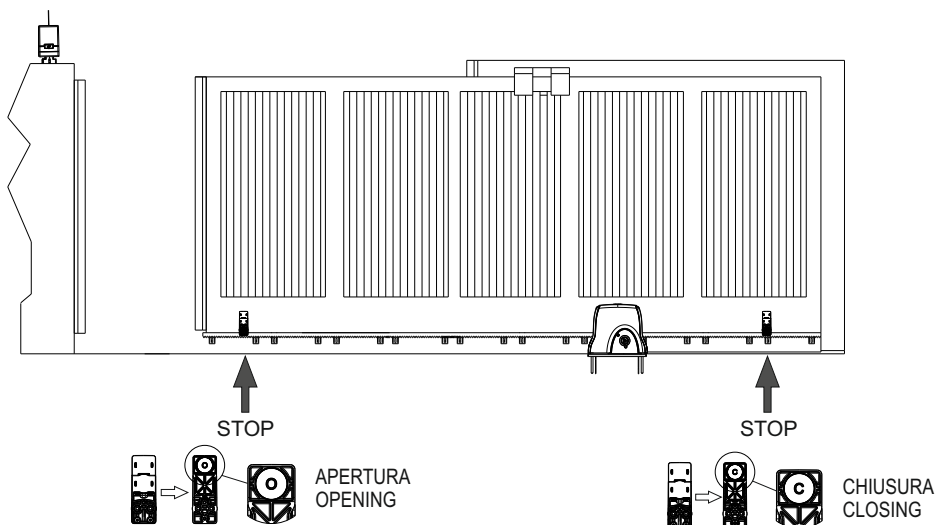
LED	COLORE / COLOR
START	VERDE / GREEN
BATT	ROSSO / RED
FCA	ROSSO / RED
FCC	ROSSO / RED
PED	VERDE / GREEN
PHOTO	ROSSO / RED
SAF	ROSSO / RED
STOP	ROSSO / RED

INSTALLAZIONE FINECORSO / LIMIT SWITCHES POSITION

5

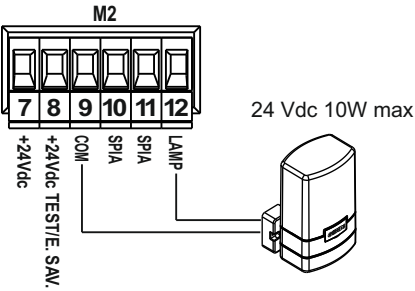


6



COLLEGAMENTO LAMPEGGIANTE / FLASHING LIGHT CONNECTION

7



LAMPEGGIO / FLASHING		
PRELAMPEGGIO PREFLASHING		
ON		
OFF		

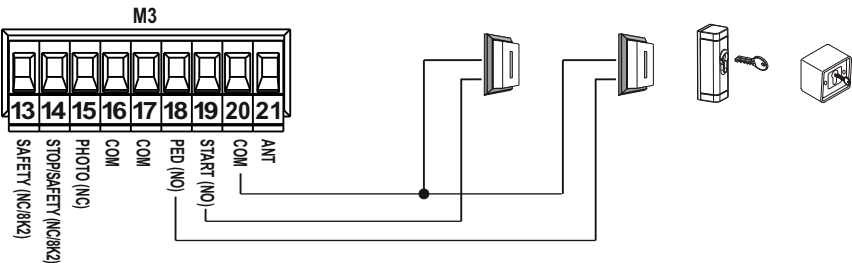
COLLEGAMENTO SPIA DI SEGNALAZIONE / WARNING LIGHT CONNECTION

8



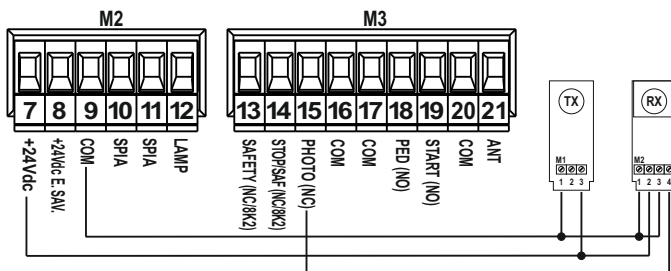
COLLEGAMENTO DISPOSITIVI DI COMANDO / CONTROL DEVICES CONNECTION

9



COLLEGAMENTO FOTOCELLULE / PHOTOCELLS CONNECTION

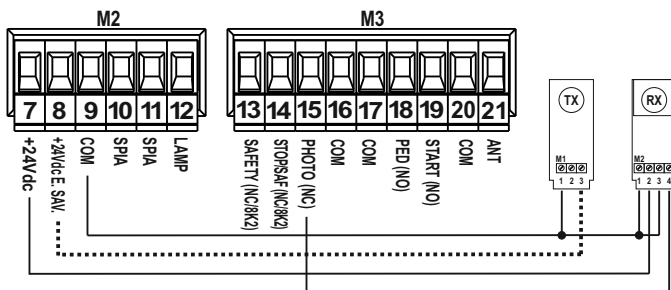
11



DCF180

COLLEGAMENTO FOTOCELLULE CON TEST / PHOTOCELLS CONNECTION WITH TEST

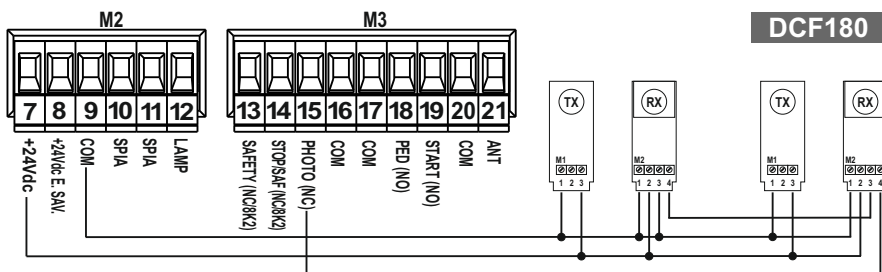
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COLLEGAMENTO FOTOCELLULE / PHOTOCELLS CONNECTION

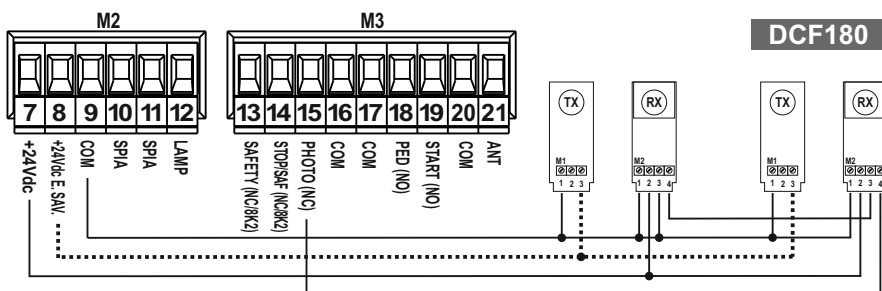
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COLLEGAMENTO FOTOCELLULE CON TEST / PHOTOCELLS CONNECTION WITH TEST

14

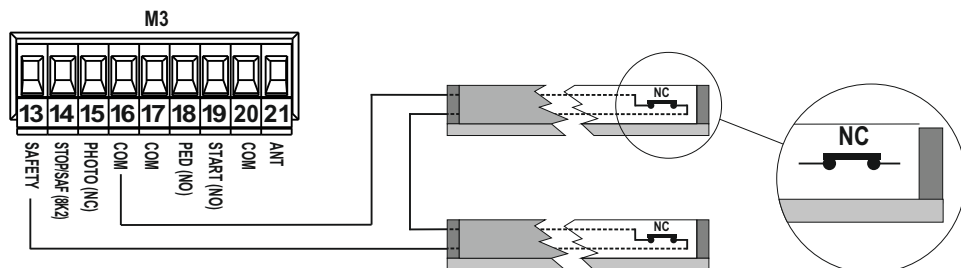


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COLLEGAMENTO "DISPOSITIVO DI SICUREZZA" NC / NC "SAFETY DEVICE" CONNECTION

Impostare morsetto 13 come "COSTA NC"
Set terminal 13 as «NC EDGE»

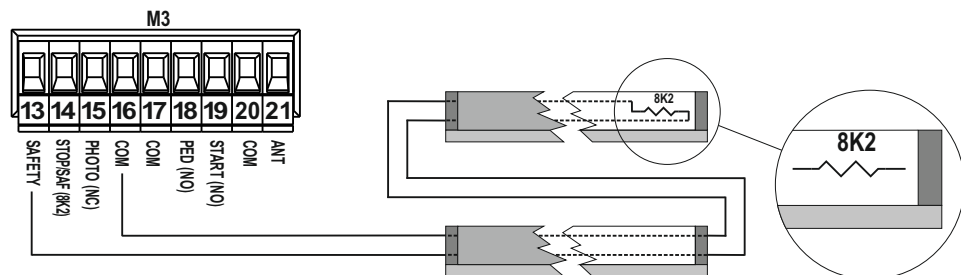
15



COLLEGAMENTO "DISPOSITIVO DI SICUREZZA" 8K2 / 8K2 "SAFETY DEVICE" CONNECTION

Impostare morsetto 13 come "COSTA 8K2"
Set terminal 13 as «8K2 EDGE»

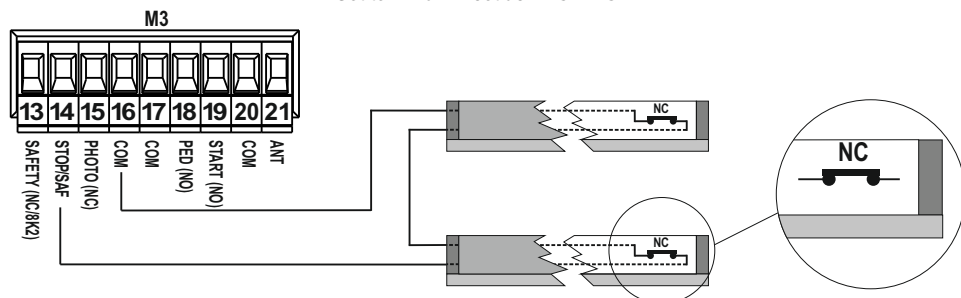
16



COLLEGAMENTO "DISPOSITIVO DI SICUREZZA" NC AGGIUNTIVO / ADDITIONAL NC "SAFETY DEVICE" CONNECTION

Impostare morsetto 14 come "COSTA NC"
Set terminal 14 set as «NC EDGE»

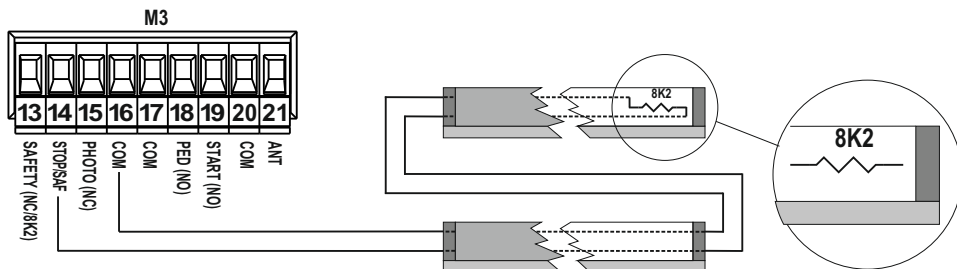
17



COLLEGAMENTO "DISPOSITIVO DI SICUREZZA" 8K2 AGGIUNTIVO / ADDITIONAL 8K2 "SAFETY DEVICE" CONNECTION

18

Impostare morsetto 14 come "COSTA 8K2"
Set terminal 14 as «8K2 EDGE»



COLLEGAMENTO STOP NC / NC STOP CONNECTION

19

Impostare morsetto 14 come "STOP NC"
Set terminal 14 as «NC STOP»



COLLEGAMENTO STOP 8K2 / 8K2 STOP CONNECTION

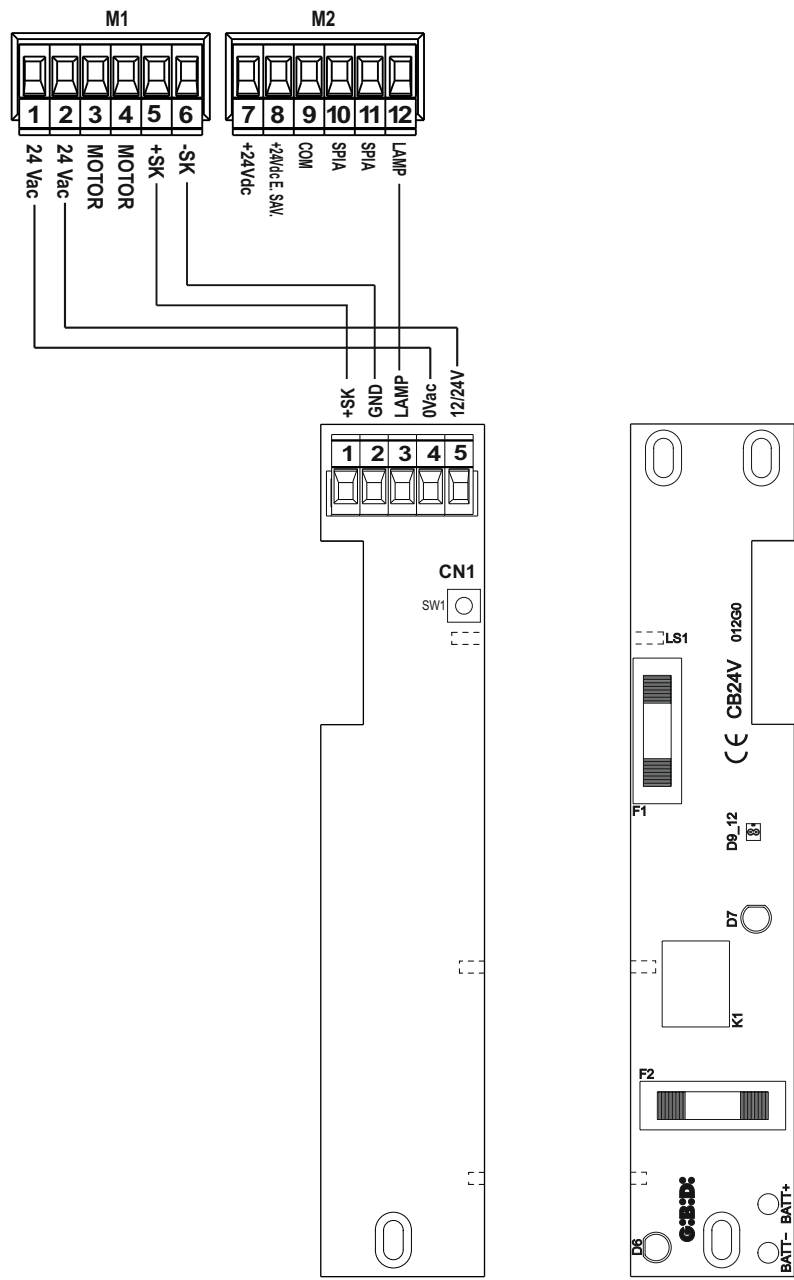
20

Impostare morsetto 14 come "STOP 8K2"
Set terminal 14 as «8K2 STOP»



COLLEGAMENTO CON CARICABATTERIE CB24 / CONNECTIONS WITH CB24 BATTERY CHARGER

21



UK

1 - TECNICAL CHARACTERISTICS

Control unit	SE24 / AS05860
Type	Electronic control unit for the automation of a sliding gate with 24Vdc motor
Power supply	230 Vac single-phase 50/60 Hz
No. of motors	1
Motor power supply	24 Vdc
Flashing light	24 Vdc 10W max
Warning light	Clean contact, max. external power supply 24Vac/dc 400mA
Accessory and safety device power supply	24 Vdc 4W max total
Radio receiver	on board (max. 50 transmitters)
Operating temperature	-20°C +60°C
Type of battery suggested	GIBIDI BATTERIES KIT

2 - TECHNICAL CHARACTERISTICS / FUNCTIONS

- Programming by textual display.
- Red warning led of N.C. contacts (photo, closing limit switch, opening limit switch, safety, stop) and 8K2 (safety, stop).
- Green warning led of N.O. conatcts (start and ped).
- Learning of the automatic operating time, with simplified procedure.
- Radio receiver on board that can store up to 50 transmitters.
- START and PED buttons on board.
- Safety test made before opening and closing movement.
- Slow down in opening and closing .
- Stop and motion inversion after the intervention of safety devices.
- Amperometric reading of motor absorption for the anti-crushing function, both during normal operation and in slow mode.
- Programming of automatic reclosing and pause time.
- Pedestrian operation with adjustable opening.
- Presetting for use with backup batteries (GIBIDI BATTERIES KIT) .
- Checking of batteries charging. During the operation with batteries, an acoustic signal sinchronyzed with the flashing light will be enabled. When the batteries are almost exhausted, after an opening command the gate will open and remain open.In case the batteries are not charged enough, the gate will not open.
- Photocells active during closing or during opening and closing.
- Adjustment of motor SPEED and SLOW DOWN.
- Operating logics: Condominium - Step by Step - Step by Step with Stop -Dead Man.
- Energy saving.
- Soft-Start and Soft-Stop to limit mechanical shocks.
- 1 input for 8K2 or NC safety device.
- 1 input selectable as safety device (8K2 or NC) or STOP (8K2 or NC).

3 - INSTALLATION WARNINGS

- Before proceeding with the installation, it is necessary to fit a differential magnetothermal switch with a maximum capacity of 10A upstream of the system. The switch must guarantee an omnipolar separation of the contacts, with an opening distance of at least 3 mm.
- To prevent possible interferences, differentiate and always keep the power cables (min. section 1,5mm²) separate from the signal cables (min. section 0,5mm²).
- Make the connections referring to the following tables and to control unit screen-print. Be extremely careful to connect in series all the devices that are connected to the same N.C. (normally closed) input and in parallel all the devices that share the same N.O. (normally open) input.
- An incorrect installation or improper use of the product may compromise system safety.
- Keep all the materials contained in the packaging away from children, since they pose a potential hazard.
- The manufacturer declines all responsibility for improper functioning of the automated device, if the original components and accessories suitable for specific application are not used.
- When the installation is completed, always carefully check the proper functioning of the system and the devices used.
- This instruction manual addresses professionals qualified to install "live equipment" and therefore requires a good technical knowledge and installation in compliance with the regulations in force.
- Maintenance must be carried out by qualified personnel.
- Before carrying out any cleaning or maintenance operation, disconnect the control unit from the mains.
- The control unit described in this document may only be used for the purpose for which it was designed.
- Check the intended end use and take all the necessary safety precautions.
- The use of the products for purposes different from the intended use has not been tested by the manufacturer and is therefore on full responsibility of the installer.
- Mark the automated device with visible warning plates.
- Warn the user that children or animals should not play or stand near the gate.
- Appropriately protect the dangerous points (for example using a sensitive edge).

4 - WARNING FOR THE USER

In the event of an operating fault or failure, cut the power upstream of the control unit and call the technical service. Periodically check safety devices functioning. Any repairs must be carried out by specialized personnel using original and certified materials.

The product may not be used by children or persons with reduced physical, sensorial or mental capacities, or lacking experience and knowledge, unless appropriately instructed. Do not access the circuit board for adjustments and/or maintenance.



WARNING: IMPORTANT SAFETY INSTRUCTIONS.

It is important for the safety of persons to follow these instructions.
Keep this instruction manual.

UK

5 - ELECTRICAL CONNECTIONS: TERMINAL BOARDS

Terminal	Position	Signal	Description
M1	1	0 Vac	0 Vac input.
	2	24 Vac	24 Vac input.
	3	MOTOR	24Vdc motor output.
	4	MOTOR	24Vdc motor output.
	5	+SK BAT	Positive connection to the BATTERY CHARGER BOARD.
	6	-SK BAT	Negative connection to the BATTERY CHARGER BOARD.
M2	7	+24Vdc	Power supply +24Vdc external accessories (photocells, radio, etc.).
	8	+24Vdc TEST / ENERGY SAVING	Power supply +24Vdc for external safety devices subjected to TEST or ENERGY SAVING.
	9	COM	Common INPUT - OUTPUT.
	10	SPIA	Clean contact N.O. programmable, needs external power supply, contact max.I capacity 400mA 24Vac/dc.
	11		See chapter 18 for operation and setting.
	12	LAMP	Flashing light output 24V 10W max (slow blinking in opening, off with gate open, fast blinking in closing); it can also be connected to the BATTERY CHARGER BOARD.
M3	13	SAFETY	SAFETY DEVICES input programmable 8K2 or NC. After the intervention of safety device, the control unit stops the motion and inverts it. The third intervention in succession determines the stop of the motion and the control unit waits for some commands.
	14	STOP / SAFETY	Programmable STOP/SAFETY DEVICES 8K2 or NC input.
	15	PHOTO	PHOTOCELL input (N.C.).
	16	COM	Common INPUT - OUTPUT.
	17	COM	Common INPUT - OUTPUT.
	18	PED	PEDESTRIAN input (N.O.) The pedestrian manoeuvre is made after the closing of this contact. The operation logic of the pedestrian manoeuvre is AUTOMATIC (not modifiable).
	19	START	START (N.O.) input.
	20	COM	Antenna braid input.
	21	ANT	Antenna signal input.
E1	Motor ENCODER connector. DO NOT TOUCH.		

MAX
160mA
TOTAL

6 - PROTECTION FUSES

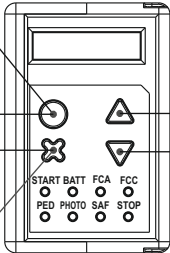
Position	Value	Type	Description
F1	10A	FAST	It protects the control unit.

7 - BUTTONS

- During the programming it means OK/CONFIRMATION.
- During normal operation it has START function.

- When the motor is not running, if you push them at the same time, they allow to enter the menus for the setting of operation parametres.


- During the programming it means BACK/DELETE.
- During normal operations it has PEDESTRIAN function.





- During the programming they allow to scroll the menus or the available options.
- After entering the menus, if you push them at the same time for 4s, they allow to accede to FACTORY RESET procedure.

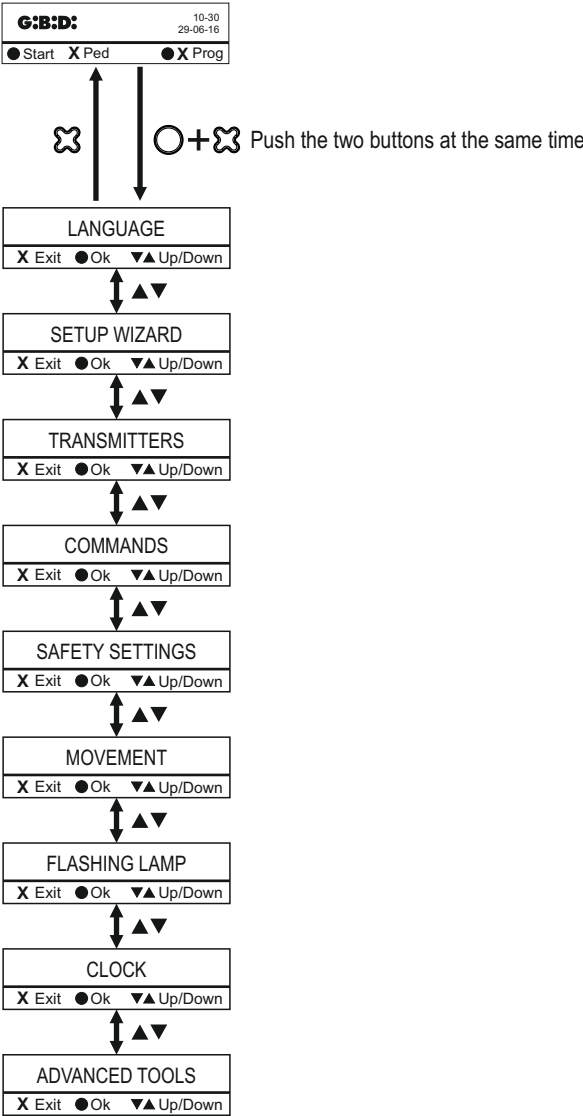
8 - SIGNALLING LEDs

NAME	Colour	Description
START	GREEN	It's on when the START command is enabled from the terminal board or the receiver.
BATT	RED	On, during the operation with batteries only.
FCA	RED	Always on, it turns off when the opening limit switch is intercepted.
FCC	RED	Always on, it turns off when the closing limit switch is intercepted.
PED	GREEN	It turns on when PED command is activated from the terminal board or the receiver.
PHOTO	RED	Always on, it turns off when PHOTO terminal contact is open.
SAF	RED	Always on, it turns off when an incorrect value on SAFETY terminal is detected.
STOP	RED	Always on, it turns off when an incorrect value on STOP terminal is detected.

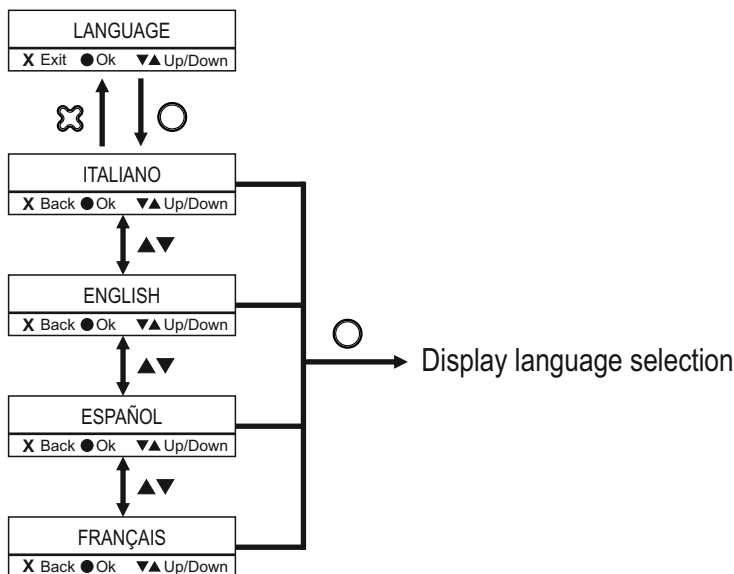
 **WARNING:**
Signalling LED will be visible at rest only if ENERGY SAVING is DISABLED

9 - ACCESS TO THE MENUS

When the motor is not running, if you push buttons   at the same time, you can acceded to the menus for operation parametres setting.
The default values of the different parameters in following paragraphs are underlined.



10 - LANGUAGE MENU



11 - SETUP WIZARD MENU

Setup wizard is a guided and simplified procedure for the first setup of the system after having completed the mechanical and electrical installation.

We suggest to always run this procedure before proceeding with more adjustments.

This procedure allows to:

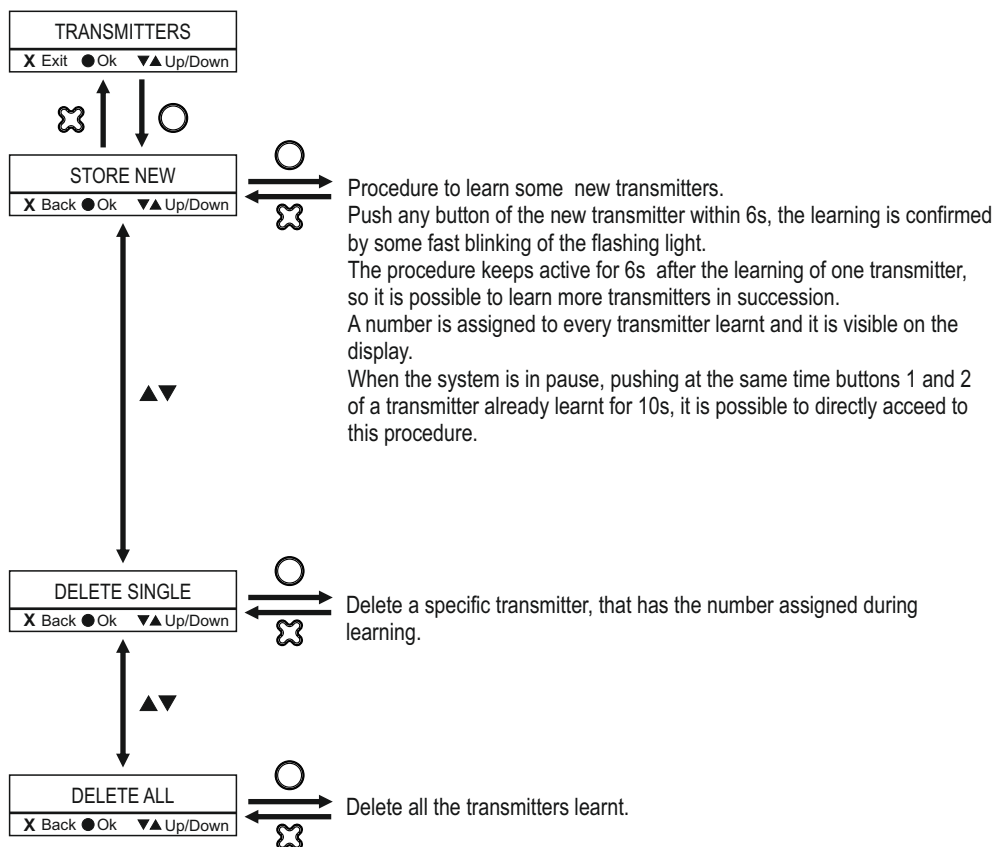
- Enable the possible safety devices installed.
- Check and automatically correct the opening direction without intervene on motor cables.
- Check and automatically correct the right disposition of the limit switches.
- Run the travel learning.
- Run the anti-crushing threshold learning.

During travel and anti-crushing threshold learning, the intervention of safety devices or common inputs activation determine the non success of the procedure, that you must repeat.

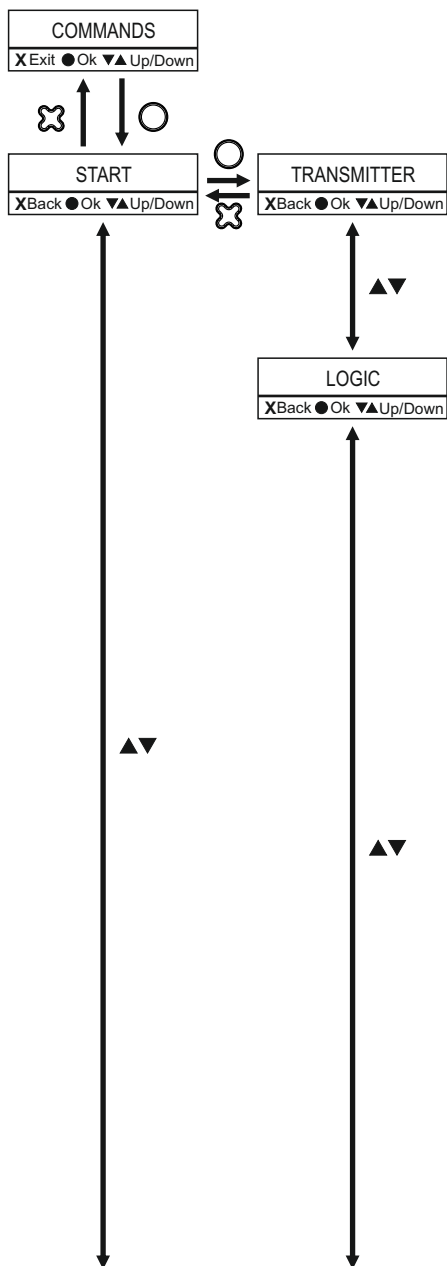
At the end of Setup Wizard, the system is ready for base use.

UK

12 - TRANSMITTERS MENU



13 - COMMANDS MENU



BUTTON 1: START command on button 1.

BUTTON 2: START command on button 2.

BUTTON 3: START command on button 3.

BUTTON 4: START command on button 4.

Selection of the operation logic of «START» command.

STEP-BY-STEP logic

Operation in reply to START command:

- Gate closed → OPEN
- During opening → CLOSE
- Gate open → CLOSE
- During closing → OPEN

STEP-BY-STEP WITH STOP logic

Operation in reply to **START** command :

- Gate closed → OPEN
- During opening → STOP
- Gate open → CLOSE
- During closing → STOP
- After a STOP → inverts the motion

AUTOMATIC logic

Operation in reply to START command:

- Gate closed → OPEN
- During opening → IRRELEVANT
- Gate open → Recharges the automatic closing time if the automatic reclosing is enabled, otherwise closes.
- During closing → OPEN

DEAD MAN logic

Operation:

If Start button is held down: OPEN

If Pedestrian button is held down: CLOSE

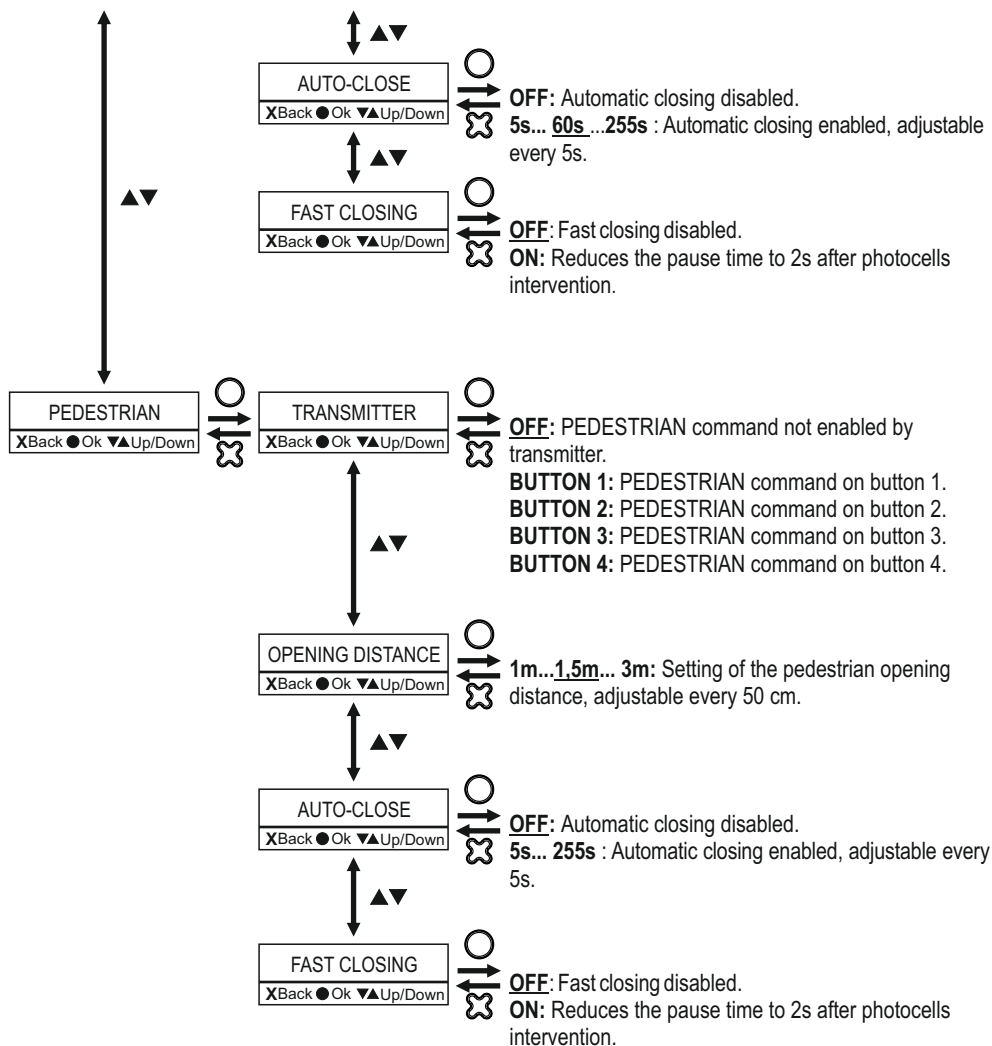
SAFETY. PHOTO inputs will not be active.

STOP will be active.

Not manageable with transmitter.

UK

13 - COMMANDS MENU



The operation logic of the pedestrian command is AUTOMATIC and cannot be modified.

14 - SAFETY DEVICES MENU

SAFETY SETTINGS
X Exit ● Ok ▼▲ Up/Down

PHOTOCELLS
X Back ● Ok ▼▲ Up/Down

MODE
X Back ● Ok ▼▲ Up/Down

DEVICE TEST
X Back ● Ok ▼▲ Up/Down

PHOTOCELLS ACTIVE IN CLOSE:

PHOTO input active only during closing phase.
Stop the motion and inverts completely opening.
If intercepted in pause, it charges the pause time again.

PHOTOCELLS ACTIVE IN CLOSE AND OPEN:

PHOTO input active in opening and closing.
When the photocell is intercepted, both in opening and closing, the gate motion is blocked as long as the same photocell has not been released.
Then there is always an opening phase.
If intercepted in pause, it charges the pause time again.

OFF: Photocells disabled.

ON:

At movement command of the gate (START, OPENING, CLOSING, ETC) the power supply is cut off from the transmitters for 1 s and then given again to verify its correct operation.

If the test fails, an anomaly is signalled by some blinking of the flashing light, see chapter 21.

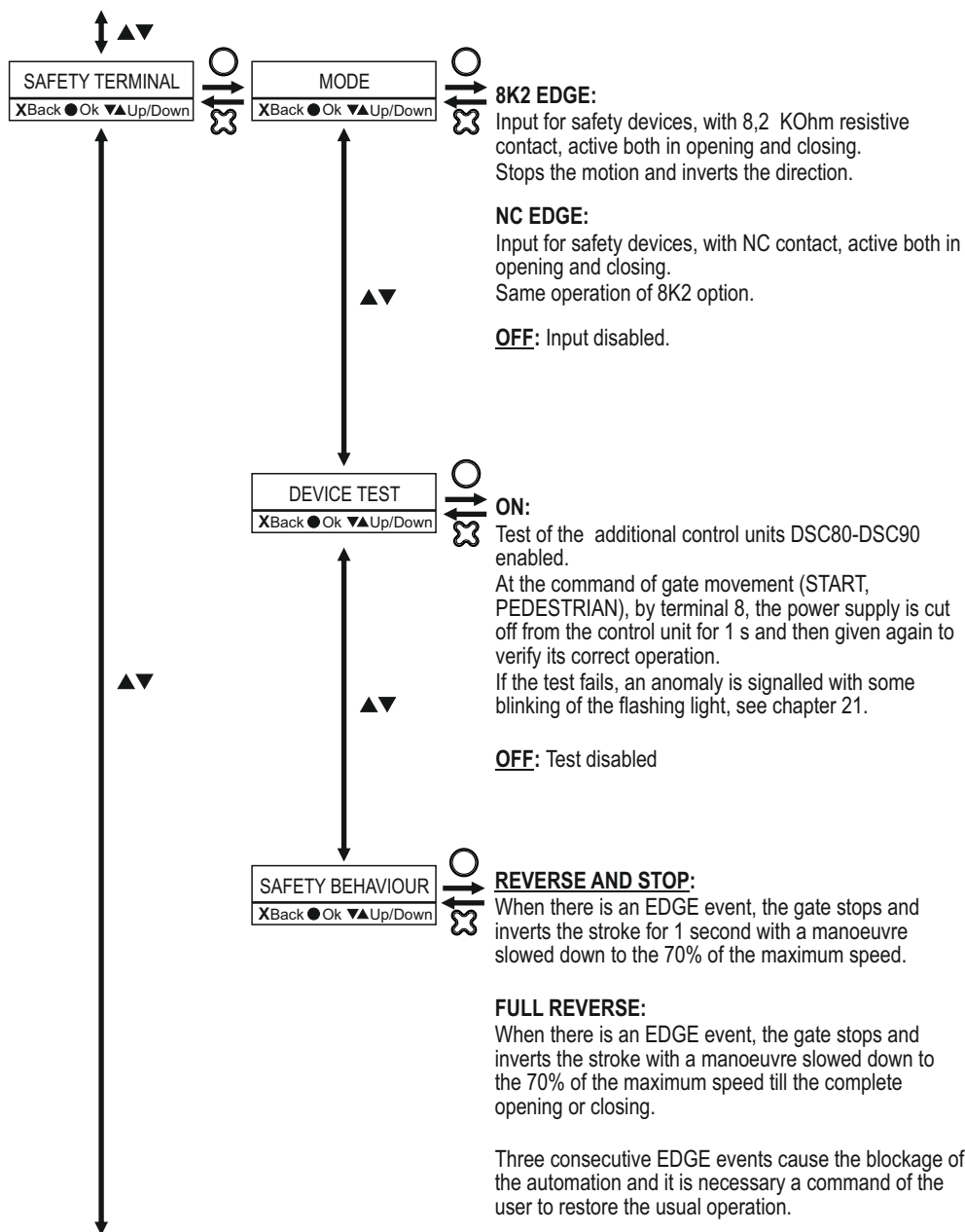
It is necessary to feed only the transmitters by the terminal 8.

With this function enabled, there will be a delay between the opening/closing command and the motor activation.

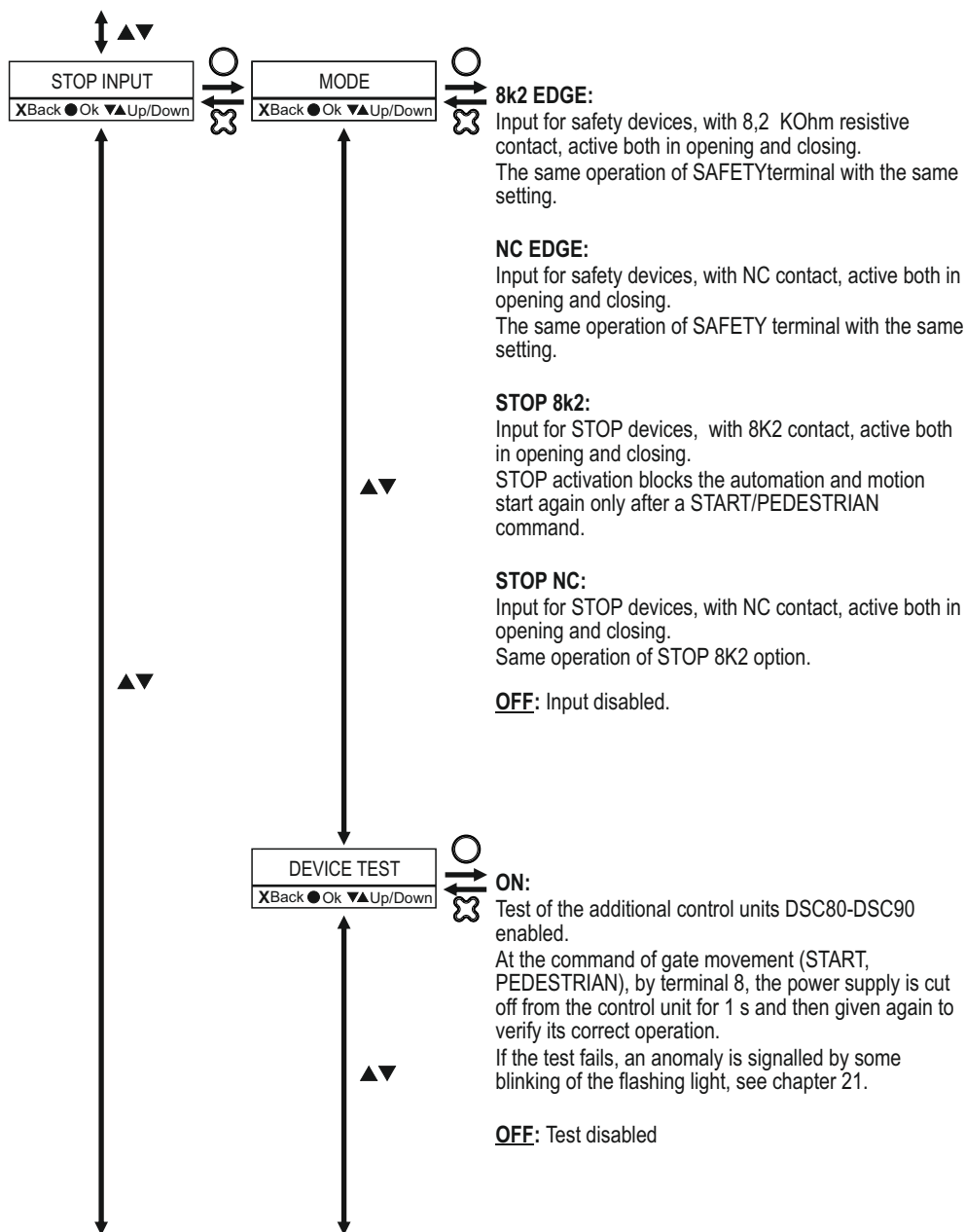
OFF: Test disabled

UK

14 - SAFETY DEVICES MENU



14 - SAFETY DEVICES MENU



UK

14 - SAFETY DEVICES MENU

↑▲▼

SAFETY BEHAVIOUR

XBack ●Ok ▼▲Up/Down

○

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✕

REVERSE AND STOP:

When there is an EDGE event, the gate stops and inverts the stroke for 1 second with a manoeuvre slowed down to the 70% of the maximum speed.

FULL REVERSE:

When there is an EDGE event, the gate stops and inverts the stroke with a manoeuvre slowed down to the 70% of the maximum speed till the complete opening or closing.

Three consecutive EDGE events cause the blockage of the automation and it is necessary a command of the user to restore the usual operation.

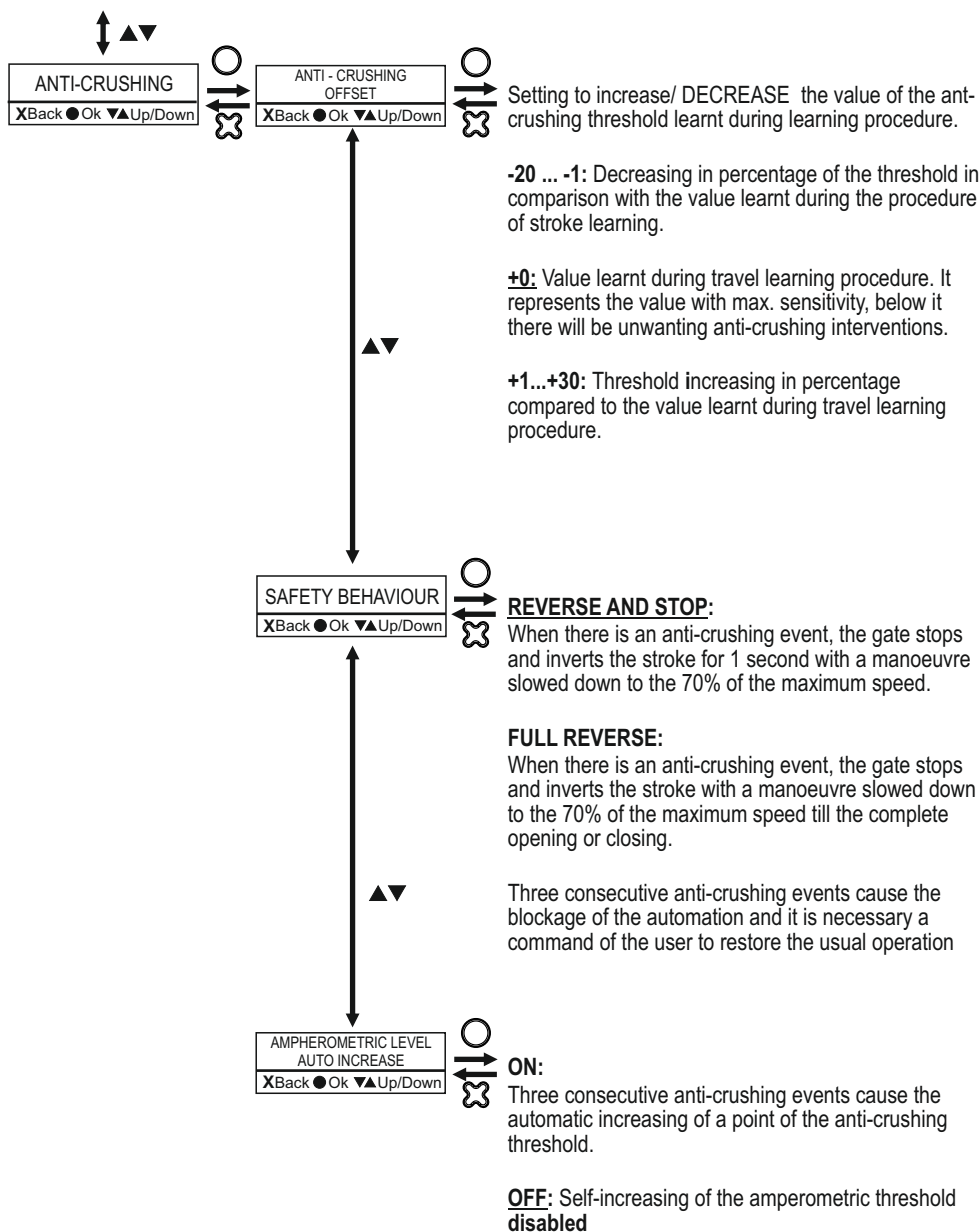
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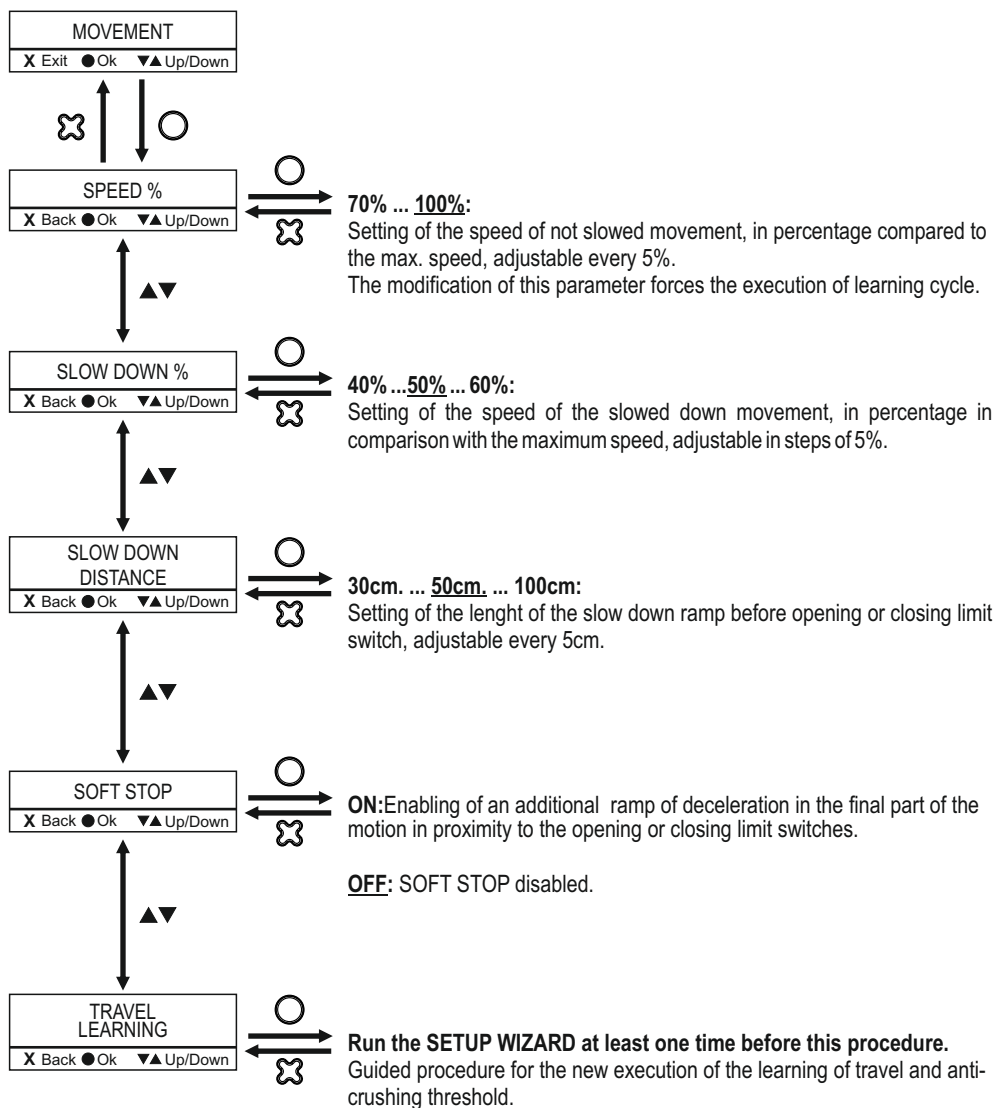
IRRELEVANT SETTINGS IF THE TERMINAL IS SET AS STOP

14 - SAFETY DEVICES MENU



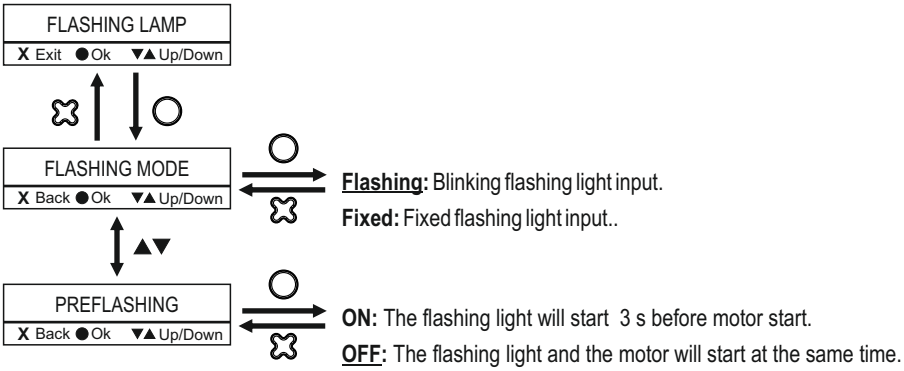
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15 - MOVEMENT MENU

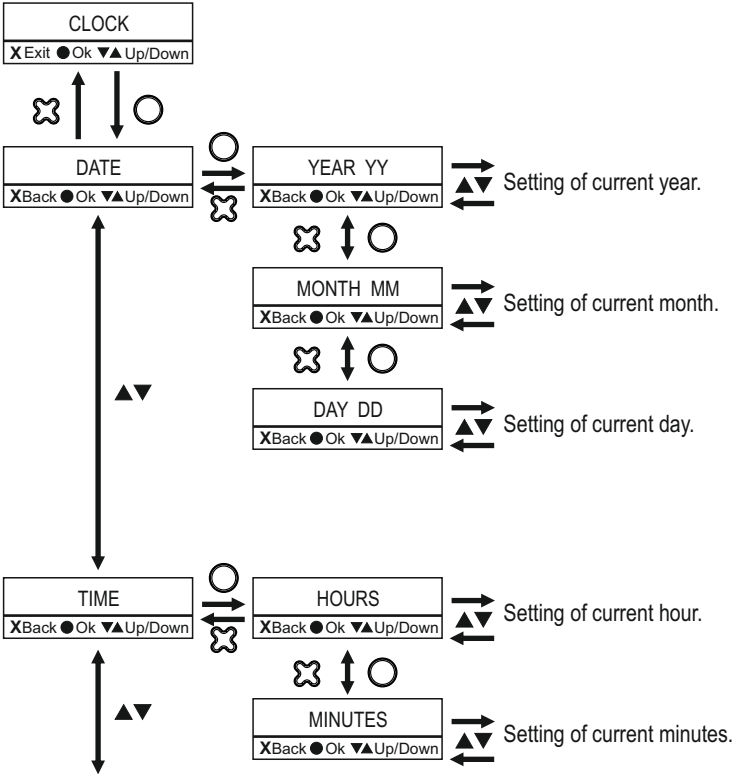


During the learning of travel and anti-crushing threshold, the intervention of safety devices or the activation of command inputs determines that the procedure has not been successful and it will be necessary to repeat it.

16 - BLINKING MENU

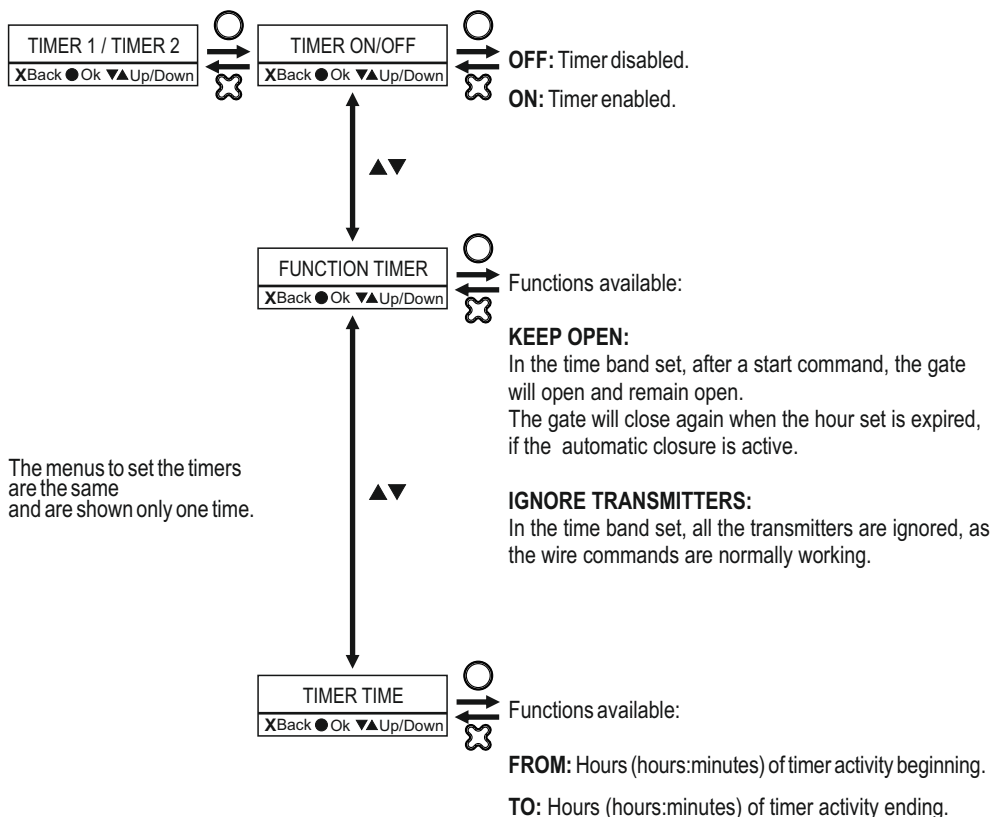
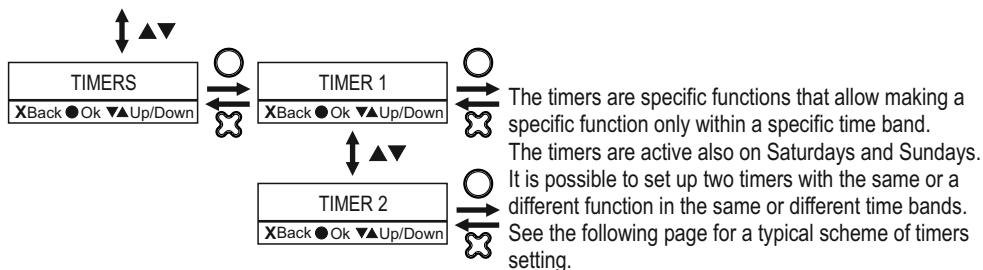


17 - CLOCK MENU

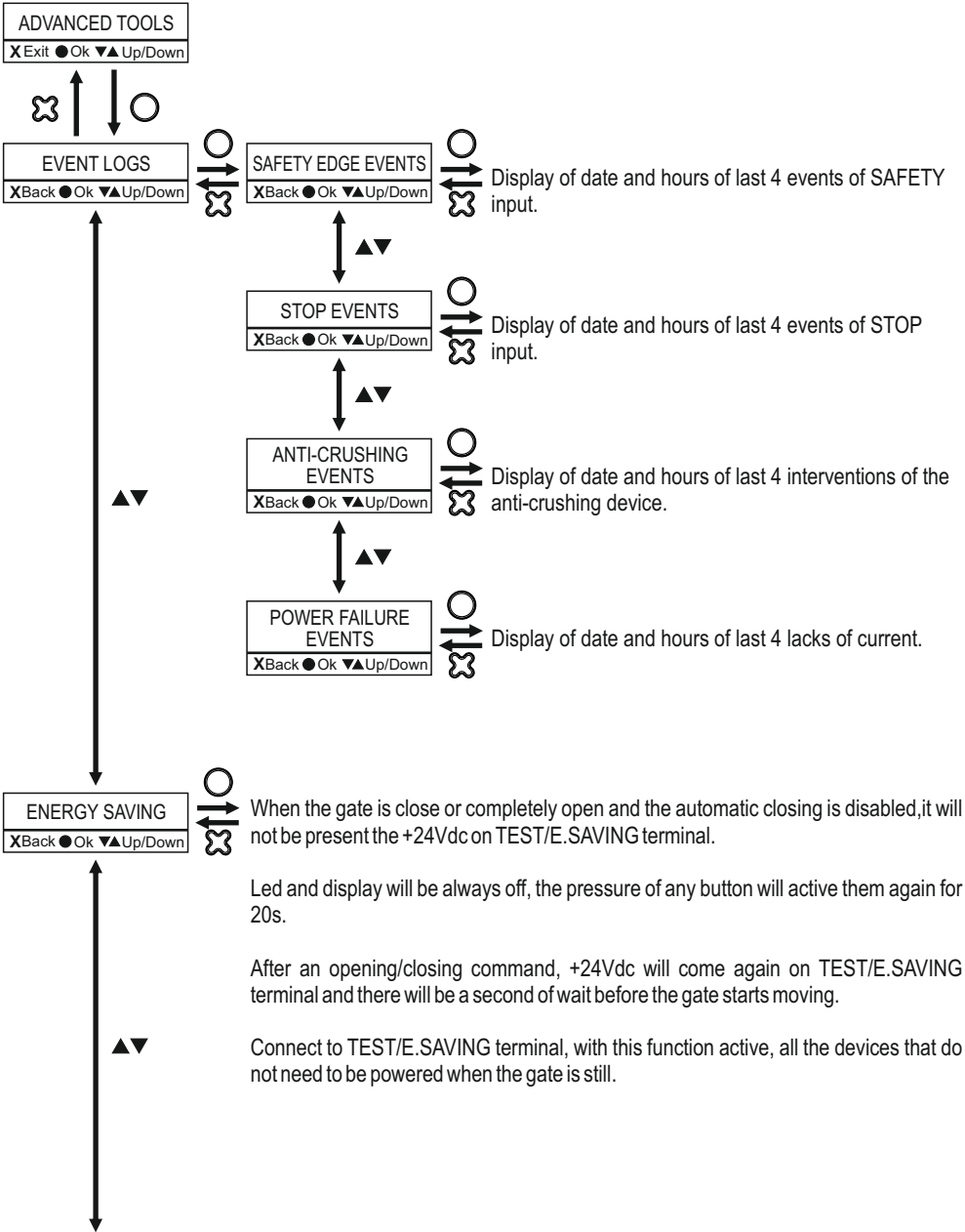


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17 - CLOCK MENU

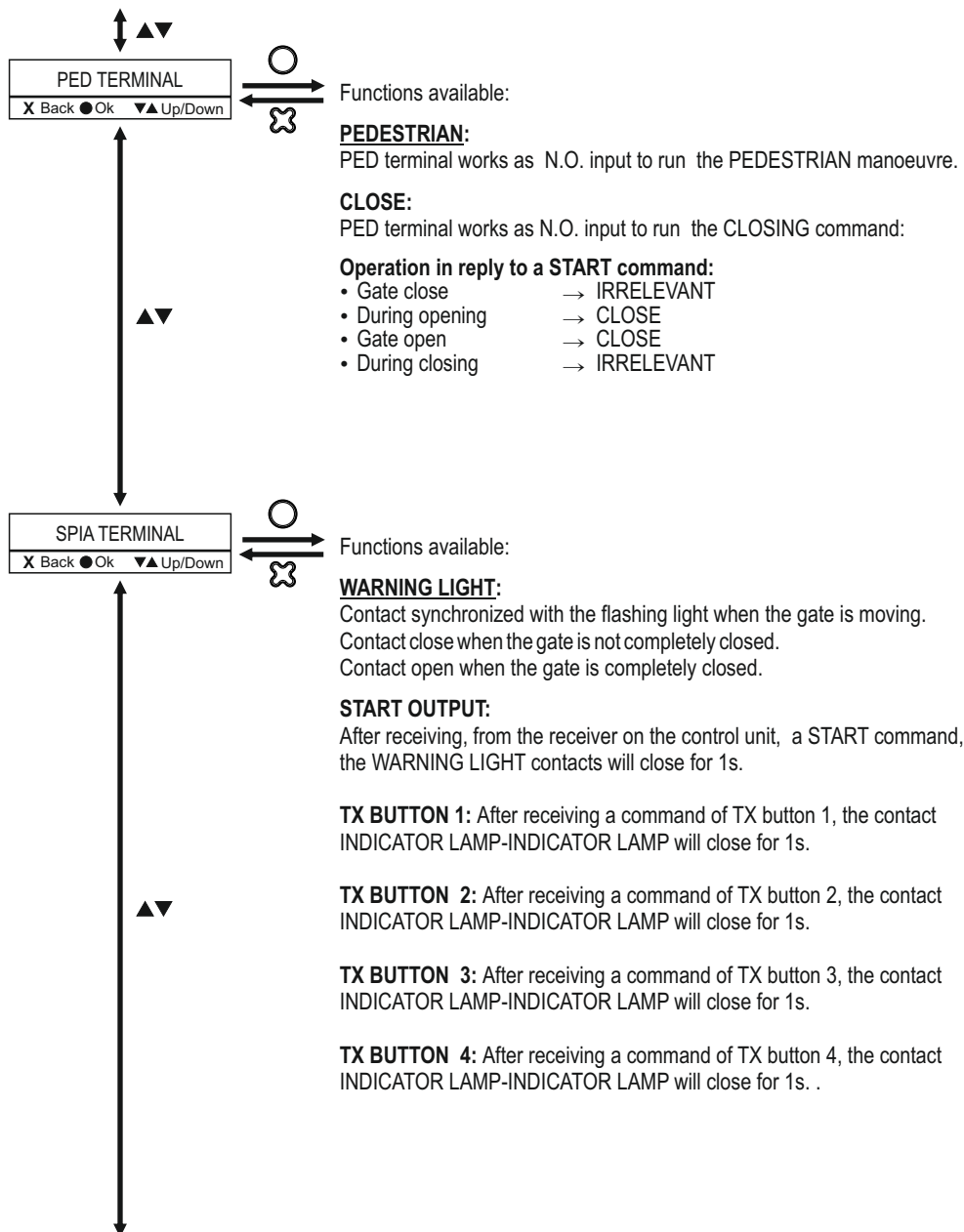


18 - ADVANCED MENU

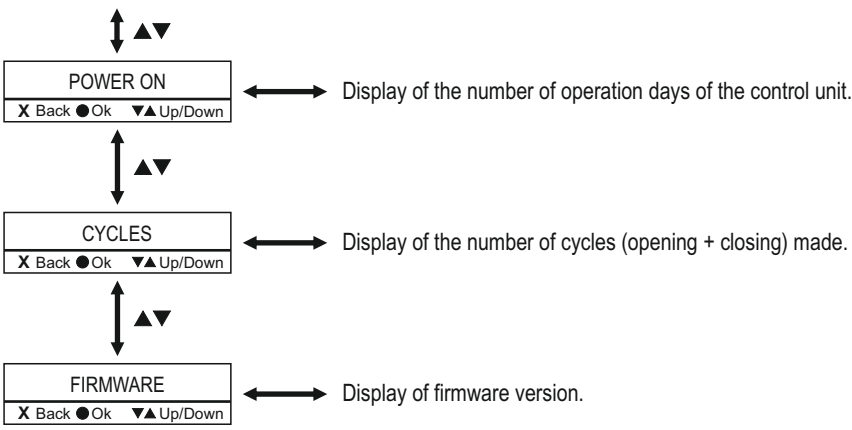


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18 - ADVANCED MENU

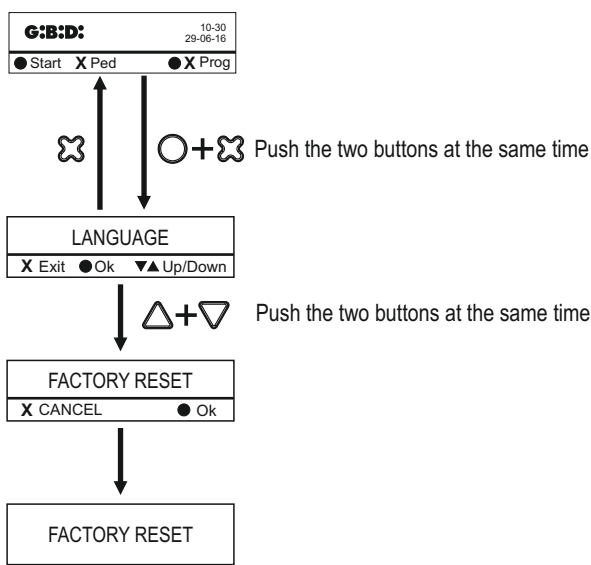


18 - ADVANCED MENU



19 - FACTORY RESET

The procedure of factory reset allows restoring all the parameters and the setting to default values. The transmitters stored will not be deleted.



UK

20 - FINAL CHECKS

- Check the electrical connections: an improper connection may be harmful to both the control unit and the operator.
- Check the correct position of the limit switches.
- Always preset the mechanical stops in opening and closing.
- Check the correct operation of photocells and safety devices.
- Check that the motors are blocked and ready for the operation.
- Remove possible obstacles in the operating area of the gate.
- Check the correct operation of the automated device.

21 - SUMMARY OF SIGNALLING OF FLASHING LIGHT ANOMALIES

Device	Flashing light signalling
Limit switches absent or badly positioned	7 fast blinkings
Encoder reading error	6 fast blinkings
Learning procedure not made	5 fast blinkings
Photocells test failed or photocells intercepted at rest in presence of START command with PHOTO input enabled in opening	4 slow blinkings
SAFETTY or STOP terminals not OK before the motion.	3 slow blinkings
SAFETY terminal test failed	2 slow blinkings
STOP terminal test failed	1 slow blinking

Thank you for choosing GIBIDI.

 **READ CAREFULLY THESE INSTRUCTIONS BEFORE PROCEEDING WITH INSTALLATION.**

WARNINGS:
This product has been tested by G.I.B.I.D.I. for full compliance with the requirements of the directives in force. G.I.B.I.D.I. S.r.l. reserves the right to change the technical data without prior notice in relation to product development.

DISPOSAL: G.I.B.I.D.I. advises to recycle the plastic components and to dispose of them at special authorised centres for electronic components, thus protecting the environment from polluting substances.



Declaration of conformity UE

The manufacturer: **GI.BI.DI. S.r.l.**

Via Abetone Brennero, 177/B,
46025 Poggio Rusco (MN) ITALY

declares that the products:

ELECTRONIC CONTROL UNIT SE24

are in conformity to the following Directives:

- **Directive 2014/53/UE**
- **Directive 2011/65/UE**

and that the following harmonised standards have been applied:

- **EN 62479:2010**
- **EN 609501:2006+A11:2009+A12:2011+A1:2010+A2:2013**
- **EN 301 489-1 V2.1.1:2017, EN 301 489-3 V2.1.1:2017**
- **EN 300 220-1 V3.1.1:2017, EN 300 220-2 V3.2.1:2018**
- **EN 60335-1:2012+A11:2014**
- **EN 60335-2-103:2015+A1:2015**
- **EN 62233:2008**
- **EN 61000-6-2:2005**
- **EN 61000-6-3:2007+A1:2011**

Moreover declares that the product must not be used until the machine in which it has been incorporated has not been declared in accordance with 2006/42/CE Directive.

Date 05/10/2021

The Legal Representative
Michele Prandi



UKCA manufacturer declaration:

The UKCA declaration is available at <http://conformity.gibidi.com>

NOTE/NOTES

GIBIDI

GI.BI.DI. S.r.l.

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Numero Verde: 800.290156

www.gibidi.com

