# LRX 2239 ELECTRONIC PANEL



12/24\*VDC low voltage electronic control unit, for the automation of swinging and rolling gates with incorporated receiver and battery charger.

- Mod.	LG 2239	: without radio receiver
- Mod.	LRS 2239	: 433.92 Mhz
- Mod.	LRS 2239 SET	: 433.92 Mhz "narrow band"
- Mod.	LRH 2239	: 868.3 Mhz "narrow band"

# **TECHNICAL DATA:**

- Transformer power supply: 230 Vac 50/60Hz 120W max.
- Control unit power supply: 12 Vac /20\*Vac 50/60Hz 120W

indux.	
<ul> <li>Flashing light output</li> </ul>	: 12/24* Vdc 4 W max.
- Emergency battery input	: 12 Vdc 7A/h max.
- Motor outputs	: 12/24*Vdc 2 x 50 W max.
- Electric lock output	: 12/24* Vdc 12W max.
- Power supply to photocells	: 12/24* Vdc 3 W max.
- Indicator light output	: 12 Vdc 3 W max.
- Working temperature	: -10 - 55 °C
- Radio receiver	: refer to type
- Op. transmitters	: 12-18 Bit or Rolling Code
- TX max codes in memory	: 120 (CODE or CODE PED)
- Dimensions of container	: 240x190x110 mm.
- Protection degree	: IP 56
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\* If using 24Vdc motors, replace the transformer provided with a 230/20 Vac transformer the power of which is suited to the type of motor used (120W max; the outputs for the flashing light, electric lock and photocell power supply will adapt to the voltage of 24Vdc, but it is only ever possible to connect a 12Vdc battery, even when using 24Vdc motors).

#### **TERMINAL BOARD CONNECTIONS:**

#### CN1:

- 1 : Power supply input 12 / 20\* Vac 120W max.
- 2 : Power supply input 12 / 20\* Vac 120W max..
- 3 : Input + Emergency battery 12Vdc 1.2 / 7 Ah max.
- 4 : Input Emergency battery 12Vdc 1,2 / 7 Ah max.
- 5 : Input + Solar panel
- 6 : Output + Flashing light 12/24\*Vdc 4W max.
- 7 : Output Flashing light 12/24\*Vdc 4W max.
- 8 : Output + Motor 1.
- 9 : Output Motor 1.
- 10 : Output + Motor 2.
- 11 : Output Motor 2.

#### CN2:

- 1 : Electric lock Output (+ 12/24\*Vdc 12W).
- 2 : Electric lock Output (+ 12/24\*Vdc 12W).
- 3 : Control and power supply to photocells (+ 12/24\*Vdc 3W).
- 4 : Control and power supply to photocells (+ 12/24\*Vdc 3W).
- 5 : Indicator light output (+ 12Vdc 3W ).
- 6 : Indicator light output (- 12Vdc 3W ).
- 7 : Open-Close/Open push button input (NO).
- 8 : Pedestrian / Close push button input (NO), DS AUX (NC).
- 9 : Common GND input.
- 10: Block input (NC).
- 11: Safety device input (NC).
- 12: Opening limit switch input for motor 1 (NC).
- 13: Closing limit switch input for motor 1 (NC).
- 14: Common GND input.
- 15: Opening limit switch input for motor 2 (NC).
- 16: Closing limit switch input for motor 2 (NC).
- 17: Aerial earth input.
- 18: Aerial hot pole input.

# **OPERATING CHARACTERISTICS:**

#### Automatic:

Using either the radio control (CODE led lit) or the low tension button panel (PUL) to operate the gates, commands will have the following effect: the first command impulse activates the opening mechanism either for the pre-set motor operating interval or until the activation of the opening limit switch. The second command impulse closes the gate. If a command impulse is received before the activation of the limit switch the direction of movement of the mechanism will be reversed whether engaged in opening or closing operations.

### Step-by-step:

Using either the radio control (CODE led lit) or the low tension button panel (PUL) to operate the gates, commands will have the following effect: the first command impulse activates the opening mechanism either for the pre-set motor operating interval or until the activation of the opening limit switch. The second command impulse closes the gate. If a command impulse is received before the activation of the limit switch the movement of the mechanism will be stopped. A further command impulse will reactivate the mechanism in the opposite direction.

#### Automatic closing:

The mechanism may be set up to automatically close the gate without sending additional commands.

The set-up procedure is described in the instructions for setting the delay period.

#### Pedestrian access:

Using the radio command (the CODE PED. led is on) or the button panel (PED), you can activate just motor 1 for the programmed length of time (T.MOT.PED. led).

#### Block input:

The control board allows for the connection of a blocking button (NC). Commands from the button during any phase will immediately stop the movement of the gate. A further command will only be executed if the blocking mechanism is deactivated, and in any case normal automatic opening will work. If not used the terminals must be jumped.

#### Safety device:

The control board allows for the connection and control of photocells in accordance with directive EN 12453.

Commands from the device during the opening phase will be ignored, and when the gate is closing they will reverse the direction of movement.

The control board needs the photocells to be connected to their respective dedicated inputs, otherwise it will not work.

### AUX 1 safety device (PED input):

The control unit, when configured, can be fitted with an Auxiliary 1 safety device together with the Pedestrian Input (NC).

Commands from the device during the opening phase will stop the gate temporarily; when reactivated, the control unit continues the opening phase. Commands whilst the gate is closing will reverse the direction of movement.

#### AUX 2 safety device (PED input):

The control unit, when configured, can be fitted with an Auxiliary 2 safety device together with the Pedestrian Input (NC).

Commands from the device during an opening or closing phase temporarily reverse and then stop the movement.

# Opening and closing limit switch:

The control unit permits the connection of an Opening and Closing limit switch for each Motor (NC). Commands from the limit switches during the respective work phases stop the respective motors immediately.

Warning: Connect the limit switches, if available; otherwise do not jump the FA1, FC1, FA2 or FC2 inputs on the terminal board.

#### Initial pick-up and motor power adjustment:

The electronic control unit is equipped with a VR1 trimmer for initial pick-up and motor power adjustment that are fully managed by the microprocessor. Adjustment can be within a range of 50% to 100% of max power.

Warning: you will need to repeat the teach-in phase if you wish to adjust the VR1 trimmer as the operation and deceleration times may be affected.

#### **Obstacle detection:**

The electronic control unit has a VR2 trimmer for adjusting the power required to detect obstacles. You can control this entirely from the microprocessor.

The trimmer's activation time can be set between a minimum of 0.1 seconds and a maximum of 3 seconds.

#### Warning:

- When limit switches are connected to the control unit, the detection of an obstacle causes the motor to change direction during the closing phase and reverse for 2 seconds during the opening phase.

- When no limit switches are connected to the control unit, the detection of an obstacle always causes the motor to change direction during the closing phase (and then take 5 seconds to close) and reverse for 2 seconds during the opening phase (and then take 5 seconds to stop).

#### Deceleration:

The motor deceleration function is used to avoid the gates moving at high speed towards the end of the opening and closing stages.

Deceleration can be programmed for the desired points (before the gates are totally open or closed) during Motor Timer programming.

# Warning light:

The centre allows the connection of a 12Vdc 3 W (max) light to show the state of the automation process. Light off automation closed, access open, slow flashing motor open, fast flashing motor closing.

#### Functioning of the Flasher or courtesy light:

The control unit has an output for the use of a flasher of 12/24\*Vdc 4W max. Its use is conditioned by the settings selected in Extended Menu 2.

# **Electric lock control Output:**

The control unit has an output for the use of electric locks of 12/24\*Vdc 12W max. It is activated for 2 seconds during each initial opening phase.

### Buffer battery:

The control unit has an incorporated 13.7 Vdc battery charger (you need to use 12V batteries, even for 24V motors). The control unit can be fitted with a buffer battery not exceeding 7Ah in capacity, which can be used for up to 20/30 complete phases. The flashing light, if fitted, turns on for only the first 4 seconds of the phase in the event of a power cut.

#### Solar panel:

The control unit can be fitted with a solar panel for charging the emergency battery.

# **Operation with TIMER:**

The control unit may be connected to a timer instead of using the open-close command button (PUL).

Example: at 8:00 a.m. the timer closes the contact and the control unit opens the gate; at 6:00 p.m. the timer opens the contact and the control unit closes the gate. Between 8:00 a.m. and 6:00 p.m. at the end of the opening phase, the control unit disables the flashing beacon, the automatic closing stage and the radio controls.

PROGRAMMING:

**SEL key:** selects the type of function to be stored; selection is indicated by a flashing LED.

By pressing the key repeatedly, you can select the desired function. The selection remains active for 10 seconds (indicated by the flashing LED); after 10 seconds, the control unit returns to its original status.

**SET key:** programmes the information according to the type of function selected previously using the SEL key.

<u>IMPORTANT</u>: The function of the SET key can be replaced with the radio control, if programmed previously (CODE LED on).

# MAIN MENU

The control unit is supplied by the manufacturer with the option of selecting a number of principal functions.

MAIN MENU				
Led reference	Led off	Led on		
1) TIPO MOTOR	Linear	Variable		
2) AUTO PGM	Automatic PGM = OFF	Automatic PGM = ON		
3) CODE	No code	Code activated		
4) CODE PED.	No code	Code activated		
5) T. MOT.	30 sec. activity	Programmed delay		
6) T.MOT.PED.	10 sec. pedestrian activity	Programmed delay		
7) T. PAUSA.	No automatic close	Automatic close		
8) RIT. ANTE	No gate delay	Programmed delay		

# 1) TYPE OF MOTOR:

The control unit has, by default, the operating logic for connecting linear actuators (TIPO MOTORE Led off). To enable the operating logic for connecting variable consumption motor reducers (TIPO MOTORE Led on), proceed as follows: press the SEL button until the TIPO MOTORE Led flashes, then press the SET button. The TIPO MOTORE Led turns on and remains steady. Repeat the procedure to restore the previous configuration.

# 2) AUTO PGM:

The control unit allows you to execute (Simplified) Automatic Programming.

Firstly, move the gates to their half-way position, press the SEL button until the AUTO PGM flashes, then press and hold the SET button; Motor 2 executes the closing phase up to the limit switch or stop, and then Motor 1 does the same. If the motors move in the wrong direction, release the SET button, unplug the control unit and connect the wires properly to the motors. If instead the motors act as required, the control unit should execute a complete opening and closing phase and therefore the entire auto programming procedure (you need to press and hold the SET button until the end of the Auto Programming procedure).

At the same time, the deceleration cycle is automatically configured at 15% of the complete cycle.

During automatic programming, you can use the radio control key on the control unit instead of the SET key, if stored previously.

### 3) CODE: (Radio control code)

The control unit can store up to 150 radio controls with different fixed or rolling codes.

#### Programming.

To programme the transmission code, proceed as follows: press the SEL key until the CODE LED flashes and send the desired code with the relevant radio control; programming is completed when the CODE LED turns on and remains steady. *If you have stored 150 codes and you repeat the programming operation, all the programming LEDs will start flashing to indicate that no more codes can be stored.* 

#### Deleting the codes.

All the stored codes are deleted as follows: press the SEL button until the CODE led flashes, then press the SET button and the CODE led turns off and the codes are deleted.

4) CODE PED: (Pedestrian radio control code)

The programming and deleting procedure is the same as the one illustrated above except that the led selected should be CODE PED.

5) MOTOR TIME and DECELERATION: (Programming a motor operation time of max 4 minutes)

The control unit is supplied by the manufacturer with a default motor operation time of 30 seconds, without deceleration.

To modify the operation time of motors 1 and 2, proceed as follows when the gate is closed: use the SEL key to navigate to T.MOT when the respective LED is flashing, then press the SET key briefly and motor 1 will begin its opening cycle; when the initial point of deceleration is reached press the SET key again: the T.MOT LED will start flashing more slowly and motor 1 will decelerate; when the desired position is reached, press the SET key to complete the opening cycle. The T.MOT LED now starts flashing normally again and motor 2 will begin its opening cycle; program the work time for Motor 2, following the same instructions as for Motor 1. After programming the opening times for the motors, motor 2 will start its closing cycle: repeat the same instructions as above for programming the closing cycle of motor 2 and then for motor 1.

To deactivate the deceleration function during programming, once the opening and closing cycle is completed, press the SET key twice in succession instead of just once.

If you use the control unit in the configuration with the 1 Motor LED 1-2 MOTORS OFF, you do not need to program the work time for Motor 2.

When programming, you can use the radio control key on the control unit instead of the SET key, if stored previously.

6) T. MOT. PED: (Programming pedestrian operation time of max 4 minutes)

The control unit is supplied by the manufacturer with predefined operation time of Motor 1 (Pedestrian) of 10 seconds without deceleration.

To modify the pedestrian operation time, follow this procedure with the shutter closed: with the SEL key go to T.MOT.PED. LED when flashing, then press the SET key rapidly, Motor 1 starts the opening cycle; when the initial point of deceleration is reached press the SET key again, the motor decelerates until the desired position is reached, press the SET key to complete the opening cycle. The T.MOT.PED LED starts flashing rapidly, now repeat the programming operation for closing. To deactivate the deceleration function, during programming, once the opening and closing cycle is completed, press the SET key twice in a sequence.

During programming the radio control key of the control unit can be used instead of the SET key, if stored previously.

7) T. PAUSA: (Programming the aut. Closing time - 4 min max.)

The control unit is supplied by the manufacturer without an automatic closing procedure. To enable the automatic closing function proceed as follows: use the SEL key to navigate to T. PAUSA when the respective LED is flashing, then press the SET key again briefly; the automatic closing time is stored and the T. PAUSA LED remains lit constantly.

To restore the initial configuration (without automatic closing) navigate to T.PAUSA when the respective LED is flashing then press the SET key twice within 2 seconds; the LED switches off and the operation is complete.

When programming, you can use the radio control key on the control unit instead of the SET key, if stored previously.

**8) T. RIT. ANTE:** (Programming door delay of max. 15 sec.) The control unit is supplied by the manufacturer without door delay during opening and closing. To programme the door delay time, follow this procedure with the shutter closed: with the SEL key to the RIT.ANTE LED when flashing, press the SET key, wait for the desired interval of time, then press the SET key again; the fixed door delay time of 2 seconds during opening is stored, the door delay time during closing is stored for the programmed time and the RIT.ANTE LED is on. To restore the initial configuration (without door delay) go to the

RIT.ANTE LED when flashing then press the SET key twice within 2 seconds; the LED goes off and the operation is completed.

# **EXTENDED MENU 1**

The control unit is supplied by the manufacturer with only the option of directly selecting the functions listed in the main menu.

To enable the functions listed in extended menu 1, proceed as follows: press the SET button and hold for 5 seconds; the T.PAUSA and RIT. ANTE LEDs will flash in alternation and you have 30 seconds to select the functions of Extended Menu 1 using the SEL and SET buttons; after another 30 seconds, the control unit returns to the main menu.

	EXTENDED MEN	NU 1
Led reference	Led off	Led on
A) TIPO MOTORE	INB. CMD AP = OFF	INB. CMD AP. = ON
B) AUTO PGM	Electronic brake = ON	Electronic brake = OFF
C) CODE	Automatic	Step-by-step
D) CODE PED.	Aries effect = OFF	Aries effect = ON
E) T. MOT.	Closure effect = OFF	Closure effect = ON
F) T.MOT.PED.	Follow Me = OFF	Follow Me = ON
G) T. PAUSA	Flashing beacon ON/O	FF in alternation
H) RIT. ANTE	Flashing beacon ON/O	FF in alternation

# A) TYPE OF MOTOR

(command inhibition during opening and pause time, if entered) :

The command inhibition function during opening and pause time, if entered, is used when automation includes the loop detector. During opening or pause the control unit does not detect the commands given by the loop detector at every passage.

The control unit is supplied by default with the command inhibition function during opening and pause time not enabled. To enable the function follow this procedure: check that the Extended Menu 1 is enabled (the T.PAUSA and RIT ANTE LEDs start flashing in alternation), use the SEL key to navigate to TIPO MOTORE when the respective LED is flashing, and press the SET key: the TIPO MOTORE LED switches on and programming is complete.

Repeat the operation to restore the previous configuration.

# B) AUTO PGM (Electronic brake) :

The control unit is supplied by the manufacturer with the electronic brake function disabled. To enable the function proceed as follows: check that the extended menu 1 is enabled (the T. PAUSA and RIT ANTE LEDs start flashing in alternation), use the SEL key to navigate to AUTO PGM when the corresponding LED is flashing and press the SET key: the AUTO PGM LED switches on and programming is complete.

The control unit reduces the forward motion of the gate due to inertia in the presence of a stop or inversion command. Repeat the operation to restore the previous configuration.

# C) CODE (Automatic/Step-by-step operation):

The control unit has, by default, the operating logic for "automatic" operation. To select the operating logic for "stepby-step" operation, proceed as follows: check that the Extended Menu 1 is enabled (the T.PAUSE and RIT ANTE LEDs start flashing in alternation), press the SEL key until the CODE Led flashes, then press the SET key; the CODE Led turns on and remains steady and programming is complete. Repeat the operation to restore the previous configuration.

# D) CODE PED. (Aries (ramming) effect) :

The control unit is supplied by the manufacturer with the aries (ramming) effect function disabled. To enable the Aries (ramming) effect at maximum power, proceed as follows: check the extended menu 1 is enabled (the T.PAUSA and RIT ANTE LEDs flash in alternation), press the SEL key until the CODE PED Led flashes, then press the SET key, at the same time the CODE PED LED turns on and remains steady and

programming is complete. To enable the Aries (ramming) effect at the power configured using the VR1 Trimmer, repeat the above procedure, pressing the SEL key twice (the CODE PED Led flashes quickly) instead of once. Repeat the operation to restore the previous configuration.

In this way the lock can be unlocked and the opening phase can be executed correctly. Before starting the opening process, the control unit sends a closing command for 2 seconds, at a power associated with the selection.

# E) T. MOT. (Closure strike):

The control unit is supplied by the manufacturer with the closure strike function not enabled. To enable the function, proceed as follows: check the extended menu is enabled (the T. PAUSA and RIT. ANTE LEDs flash in alternation), press the SEL key until the T. MOT. LED flashes, then press the SET key: the T. MOT. LED turns on and programming is complete. If you wish to enable the Closure strike function at the configured power with the VR1 trimmer, repeat the above procedure, pressing the SEL key twice (the T.MOT. Led flashes quickly) instead of once. Repeat the operation to restore the previous configuration.

If Deceleration during closing is programmed, the control unit will add 1-sec time at the power associated with the selection (after completing the decelerated closing phase) in order to overcome the lock, if present.

# F) T. MOT. PED. (Follow Me):

The control unit is supplied by the manufacturer with the Follow Me function not enabled. To enable the function, proceed as follows: check the extended menu 1 is enabled (the T.PAUSA and RIT ANTE LEDs flash in alternation), press the SEL button until the T.MOT.PED Led flashes, then press the SET key; at the same time the T.MOT.PED LED turns on and remains steady and programming is complete. In this way the control unit executes the closing phase immediately, ignoring the configured operating logics, if it detects transit with activation of the photocell connected to the DS input during the opening, Pause and Closing phases.

Repeat the operation to restore the previous configuration.

# **EXTENDED MENU 2**

The control unit is supplied by the manufacturer with only the option of directly selecting the functions listed in the main menu.

To enable the functions listed in Extended Menu 2, proceed as follows: open Extended Menu 1 (as instructed in the respective section), then press and hold the SET key for 5 seconds; the T.PAUSA and RIT ANTE LEDs flash at the same time; you have 30 seconds to select the functions of Extended Menu 2 using the SEL and SET buttons; after another 30 seconds, the control unit returns to the main menu.

	EXTENDED N	MENU 2
Led reference	Led off	Led on
A) TIPO MOTOR	RE Remote PGM = OF	F Remote PGM = ON
B) AUTO PGM	Photocell test= OFF	Photocell test = ON
C) CODE Pre-fl	ash and Cour. light=OFI	F Pre-flash or Cour. light=ON
D) CODE PED.	Flash in Pause = OFF	Flash in Pause = ON
E) T. MOT.	PUL=PUL/PED=PED	PUL=PUL/PED=DS AUX1/2
F) T.MOT.PED.	PUL=PUL / PED=PED	PUL=AP / PED=CH
G) T. PAUSA	Flash ON/OF	F simultaneously
H) RIT. ANTE	Flash ON/OF	F simultaneously

# A) TYPE OF MOTOR

(Remote programming of radio control):

The control unit enables remote programming of the transmission code, without using the SEL key.

To program the transmission code in remote mode, proceed as follows: send the previously stored radio control code continuously for more than 10 seconds and the control unit will enter the programming mode as described above for the CODE Led in the main menu.

The control unit is supplied by the manufacturer with remote programming of the transmission code not enabled; to enable

the function proceed as follows: check the extended menu 2 is enabled (the T. PAUSA and RIT. ANTE LEDs flash simultaneously), press the SEL button until the TIPO MOTOR LED flashes, then press the SET key, at the same time the LED TIPO MOTOR turns on and remains steady and programming is complete. Repeat the operation to restore the previous configuration.

# B) AUTO PGM (Photocell Test):

The control unit is supplied by the manufacturer with programming of the Photocell Test disabled; to enable the function (in accordance with standard EN 12453), proceed as follows: check the extended menu 2 is enabled (the T. PAUSA and RIT. ANTE LEDs flash simultaneously), press the SEL button until the AUTO PGM Led flashes, then press the SET key, at the same time the LED AUTO PGM turns on and remains steady and programming is complete. In this way, the Photocell connected to the DS input is tested before the automation starts any of the phases.

Repeat the operation to restore the previous configuration. If not used, the DS input must be jumped and the Photocell Test disabled.

# C) CODE (Pre-flash/ Courtesy Light):

The control unit is supplied by the manufacturer with the Preflash and Courtesy Light functions not enabled. To enable the Pre-flash function, proceed as follows: check the Extended Menu 2 is enabled (the T. PAUSA and RIT. ANTE LEDs flash simultaneously), press the SEL key until the CODE LED flashes, then press the SET key, at the same time the CODE LED turns on and remains steady and programming is complete. To enable the Courtesy light function, repeat the above procedure, pressing the SEL key twice (the CODE LED flashes quickly) instead of once. Repeat the operation to restore the previous configuration.

**Pre-flashing:** The 12 Vdc 4 W light output is always activated 3 seconds before the automation starts any of the phases. **Courtesy light:** The 12 Vdc 4W light output is activated for 3 seconds whenever an opening command is transmitted.

# D) CODE PED (Use of the Flashing Beacon) :

The control unit is supplied by the manufacturer with use of the flashing beacon during the Pause Time disabled. To enable use of the flashing beacon, check the Extended Menu 2 is enabled (the T. PAUSA and RIT. ANTE LEDs flash simultaneously), press the SEL key until the CODE PED LED flashes, then press the SET key, at the same time the CODE PED LED turns on and remains steady and programming is complete. Repeat the operation to restore the previous configuration.

# E) T. MOT. (Selection of the PED / DS AUX1-AUX2 input) :

The control unit is supplied by the manufacturer with a PED input for connecting a cyclical (NO) Pedestrian control button.

To select use of the input as DS AUX 1, proceed as follows: check the Extended Menu 2 is enabled (the T. PAUSA and RIT. ANTE LEDs flash simultaneously), press the SEL key until the T.MOT. LED flashes, then press the SET key, at the same time the T.MOT. LED turns on and remains steady and programming is complete.

Repeat the operation to restore the previous configuration.

To select use of the input as DS AUX 2, repeat the above procedure for use as DS AUX 1, pressing the SEL key twice (the T. PAUSA and RIT. ANTE LEDs flash quickly and at the same time) instead of once.

Repeat the operation to restore the previous configuration.

# F) T. MOT. PED. (Selection of the PUL and PED inputs) :

The control unit is supplied by the manufacturer with a PUL control input for connecting a cyclical (NO) main control button, and a PED control input for connecting a cyclical (NO) Pedestrian control button. To select a different use for the PUL and PED inputs, proceed as follows: check the Extended Menu 2 is enabled (the T. PAUSA and RIT. ANTE LEDs flash

simultaneously), press the SEL button until the T.MOT.PED Led flashes then press the SET key, at the same time the T.MOT.PED LED turns on and remains steady and programming is complete.

In this way, the PUL input enables connection of a (NO) button just for the opening phase, and the PED input enables connection of a (NO) button just for the closing phase. Repeat the operation to restore the previous configuration.

# **EXTENDED MENU 3**

The control unit is supplied by the manufacturer with only the option of directly selecting the functions listed in the main menu.

To enable programming of the control unit's deceleration power, proceed as follows: open Extended Menu 2 (as instruction in the respective section), then press and hold the SET button for 5 seconds at the end of which the T.PAUSA and RIT. ANTE LEDs flash in alternation and then simultaneously; you have 30 seconds to select the required deceleration value using the SEL and SET buttons; after another 30 seconds, the control unit returns to the main menu.

	EXTENDED MENU 3
Le	evel LEDs on
1	TIPO MOTORE
2	TIPO MOTORE - AUTO PGM
3	TIPO MOTORE - AUTO PGM - CODE
4	TIPO MOTORE - AUTO PGM - CODE - CODE PED.
5	TIPO MOTORE - AUTO PGM - CODE - CODE PED T. MOT.
6	TIPO MOT AUTO PGM - CODE - CODE PED T. MOT T.MOT.PED.

#### Programming deceleration

The control unit allows you to program the power for the deceleration phase.

You can choose between 6 different levels of power: each combination of lighted LEDs is associated with a level, as indicated in the table above; in practice, the number of LEDs switched on (starting with the TIPO MOTORE Led) indicates the level of power. Use the SEL button to scroll through the levels of power; for each level of power selected, the highest LED in the respective set flashes (for instance, if you select level 4, the TIPO MOTORE, AUTO PGM and CODE LEDs are steady while the CODE PED Led flashes); press SET to confirm.

The default setting is Level 3.

# **RESET:**

To restore the default configuration, press the SEL and SET keys simultaneously; all **RED** LEDs will light up and then switch off.

### DIAGNOSTICS:

#### Photocell test:

The control unit can be fitted with safety devices in accordance with step 5.1.1.6 of the EN 12453 standard. Each work cycle includes a test to check the working order of the connected photocell. If the photocell is not connected and/or not working, the control unit disables operation and all the LEDs flash at the same time to indicate the test has failed. The photocell has to be fixed before the control unit can be put to normal use again. This guarantees monitoring of faults in according with Category 2 of EN 954-1.

# Command input test:

The control unit is fitted with a LED for each low voltage command input, allowing you to monitor status quickly. Operating principle: LED on = input closed, LED off = input open.

# FOR THE USER - IMPORTANT

 The device should not be used by children or by individuals with reduced physical or psychological abilities unless supervision is provided or instruction given on how to operate it.

- Do not let children play with the device; keep radio controls out of their reach.

- CAUTION: Keep this instruction manual in a safe place and adhere to the important safety instructions contained within it. Non-adherence to these instructions may lead to property damage and serious accidents.

 Examine the system frequently to check for any signs of damage. Do not use the device if it needs to be repaired.

# Warning

All operations which require the casing to be opened (such as wire connection, programming, etc.) must be carried out during installation, by skilled staff only.

For any other procedure which requires the casing to be opened again (programming, repairs or site modifications), please contact the technical assistance service.

# **I**MPORTANT NOTES FOR THE INSTALLER

- Before shutter automation, it is necessary to check the product is in good condition and that it complies with EN 12604 and the Machines Directive.
- The control unit is not equipped with a 230 V a/c electric line sectioning device. The installer is responsible for installing a sectioning device in the system. The sectioning device must be positioned so that it is protected against accidental closure, in compliance with section 5.2.9 of standard EN 12453.
- The wiring of external electrical components must comply with EN 60204-1 as amended in section 5.2.7 of EN 12453. Power supply leads and connection cables must be secured through the use of cable clamps, which are supplied with the product.
- Take care when drilling the outer casing to feed through the power and connecting cables and when assembling the cable glands, to maintain the IP degree of protection of the casing as best as possible. Also take care to fasten the cables firmly in place.
- The back of the casing is set up for mounting on a wall (holes for mounting with nogs, or holes for screws).
   Take all precautions to ensure the IP degree of protection is not affected during installation.
- If applicable, the keypad for manual control must be mounted in such a way as not to compromise the safety of the user.
- The motor reducer used to move the shutter must comply with section 5.2.7. of EN 12453.
- The D.S. Power Supply output is specifically for powering the photocells. It must not be used for any other applications.
- The control unit tests the working order of the photocells for each work cycle to guarantee the safety of the Category 2 anti-crushing devices in accordance with step 5.1.1.6 of EN 12453. The control unit is disabled whenever the safety devices are not connected and/or not in good working order.
- For the radio receiver to operate correctly when two or more control units are used, we recommend that you install the devices at least 3 metres away from each other.





