ELECTRONIC PANEL LRX 2100

GB

Mono-phase electronic programmer, for the automation of swinging and rolling gates with incorporated receiver.

- Mod. **LG 2100**: Without radio receiver
- Mod. **(LRQ 2100)** : 30,875 MHz
- Mod. **(LR 2100)** : 306 MHz
- Mod. **LRS 2100**: Narrow Band 433,92 MHz

( ) This product is destined only for countries in which its use is allowed

TECHNICAL DATA

– Power supply: 230V~ 50-60Hz 12,5W
– Power supply to flashing light: 230V~ 500W Max
– Power supply, motor: 230V~ 500W Max
– Power supply, Electric lock: 12V~ 12W Max
– Aux. Power output: 24V~ 5W Max
– Control lamp power supply: 24V~ 4W Max
– Operating temperature: -20÷85°C
- Op. transmitters: 12-18 Bit or Rolling Code
- TX max. codes in memory: 120 (CODE or CODE PED)
– Limit switch and low tension controls: 24VDC
– Dimensions: 240x185x110mm
– Protection capability: IP55

TERMINAL BOARD CONNECTIONS

Terminal Board CN1

1: Mains input 230V~
2: Mains input 230V~
3: Flashing light input 230V~
4: Flashing light input 230V~
5: Motor 1 output opening
6: Motor 1 output common
7: Motor 1 output closing
8: Motor 2 output opening
9: Motor 2 output common
10: Motor 2 output closing

Terminal Board CN2

1: Power supply to electric lock 12V~ 12W
2: Power supply to electric lock 12V~ 12W
3: Power supply to utilities 24V~ 5W
4: Power supply to utilities 24V~ 5W
5: Power supply to control lamp 24V~ 4W
6: Power supply to control lamp 24V~ 4W
7: open/close command button input (NO)
8: Single gate/pedestrian command input (NO)
9: GND common input
10: Block input (NC)
11: Safety device 1 input (NC)
12: GND common input
13: Safety device 2 input (NC)
14: Opening limit switch input (NC)
15: GND common input
16: Closing limit switch (NC)

Terminal Board CN3

1. Aerial earth input
2. Aerial hot pole input

IMPORTANT: *The inputs which are labelled as normally closed (NC) must be jumped if not used.*

OPERATING CHARACTERISTICS

Automatic (Select bridge J1 pos. 1-2 with central turned off)
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-Step (Select bridge J1 pos. 2-3 with central turned off)
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
In addition to the previously described operations, the mechanism may be set up to automatically close the gate.
The set-up procedure is described under the instructions for setting the delay period.

Pedestrian access:
If selected (led PED\ANTA S is off), using the radio command (led CODE PED is on) or the low tension button panel (PED) to activate the lock will mean that the first command opens the lock for 10 seconds and the centre waits for 10 seconds before closing the lock.

Single gate
If selected (PED/ANTA S. led on), using either the radio control (CODE PED led on) or the low tension button panel (PED), only motor one will be activated with respect normal operation.

Safety device 1
The control board allows for the connection and control of photocells and tyre sensors (NC).
Commands from these devices are ignored during opening, whilst the gate is closing they will reverse the direction of movement.
If not used the terminals must be jumped.

Safety device 2
The control board allows for the connection and control of photocells and tyre sensors (NC).
Commands from these devices during opening will stop the movement of the gate, whilst the gate is closing they will reverse the direction of movement.
If not used the terminals must be jumped.

Block input
The control board allows for the connection of a blocking button (NC)
Commands from this button during any operation will immediately stop the movement of the gate. A further command will only be executed if the blocking mechanism is deactivated. Normal automatic closing will work, preceded by a five second lamp flash.
If not used the terminals must be jumped

Control lamp
The control board allows for the connection of a 24V lamp to indicate the automatic operating status:

Lamp off indicates no automatic operation, lamp on indicates that automatic operation is activated, a slow flash shows that the gate is opening and a rapid flash shows that the gate is closing.

Electronic Clutch
The control board is fitted with an electronic clutch which may be regulated using the Trimmer VR1. The Trimmer VR1 should be regulated to permit the normal movement of the mechanism but the mechanism should stop if an obstacle is encountered (it is possible to test the setting, stopping the movement by hand.)

Flashing Light
The control board allows for the connection of a 230V~ flashing light. The light's operation is controlled by the motor/s activity, if the pre-flash function is activated or not and if automatic closing is activated or not activates the lamp during the delay period.

Pressure maintenance on hydraulic engines
The central is provided from the manufacturer with the function of pressure maintenance on disconnected hydraulic engines. To enable the function proceed as follows: keep MODE key pressed for 5 seconds, when it shows the simultaneous lighting of all the **RED** Led and soon after the extinction, the programming is completed.
To disconnect the function, repeat the above-mentioned operation or execute the RESET procedure (all the data memorized will be lost).

TIMER functioning :
The centre allows a timer to be connected instead if the open-close (PUL) button command.
For example: the timer can be set to open the gates at 8am and to close at 6pm. During this period automatic closing and flashing signals are disactivated.

PROGRAMMING

SEL Button: selects the type of function to be memorised. The selection is indicated by a flashing Led.
By repeatedly pressing the button it is possible to choose the desired function. The selection will remain active for 10 seconds, indicated by a flashing Led, if no other operations are executed during this period the control board will return to its previous state.

MODE Button: Programmes the information relative to the type of function previously selected with the SEL button.

LED Ref.	LED OFF	LED ON
1) 1-2 MOTORI	1 motor automated	2 motors automated
2) CODE	No Code	Code activated
3) CODE PED.	No code	Code activated
4) INB.CMD:AP	OFF	ON
5) PED/ANTA S.	Pedestrian	Single gate
6) COLPO ARIETE	OFF	ON
7) PRELAMP.	OFF	ON
8) T. MOT.	4 minute activity	Programmed delay
9) T.PAUSA	No automatic close	Automatic close
10) RIT.ANTE AP	No gate delay	Programmed delay
11) RIT.ANTE AP	No gate delay	Programmed delay
12) POWER	Mains ON	Mains OFF

1) 1-2 MOTORS
The control board is supplied with the possibility to choose between two pre-set configurations for mechanisms with 1-2 motors. The factory set-up and pre-set default is for typical operation with one motor only (for example a rolling gate). If the mechanism is required to operate two motors simultaneously (for example a double gate) follow these instructions: using the SEL button, select the 1-2 Motori led (flashing), pressing the MODE button will cause the 1-2 MOTORI led to remain on.
To deactivate this function (i.e. return to default, one motor operation) follow these instructions: using the SEL button, select the 1-2 Motori led (flashing), pressing the MODE button will cause the 1-2 MOTORI led to remain off.

2) CODE: Radio control code
The board allows the memorisation up to 120 radio commands having different codes, which are either fixed or rolling code.
Programming.
The transmission code is programmed in the following manner: press the SEL button until the CODE led flashes, immediately transmit the pre-selected code with the desired remote control, in the moment in which the led CODE remains accessible, the programming, will be complete When all 120 codes have been stored in the memory all the Led lights will flash, signalling that nothing else can be stored..
Programming through Radio command.
This procedure, consents to enable the programming, without direct intervention of the SEL task on the panel, but executing the operation at a distance, allows the programming of transmission codes without the having to use the SEL button on the central direct. The ability of programming is executed in the following manner: send in a continuous manner for max. 10 seconds the codes of the radio command previously memorised, at the same time the panel will enter into programming mode as explained above.
Ability of programming through Radio command.
The panel is furnished by the builder with the radio command disabled, if you wish to enable the function, proceed in the following manner: the panel board is powered by an output of 230VAC, keeping the SELL task pressed, at the same time you will obtain a brief flashing of all the Leeds and the programming will be complete.
If you wish to disable the function previously enabled, repeat the operation or follow the RESET procedure.
Cancellation.
All the transmission codes are cancelled in the following manner: press the SEL button until the CODE led flashes, then press the MODE button and the CODE Led will be turned off and the cancellation will be completed.

3) CODE PED: Ped./Anta S. radio control code
The programming procedure is the same as above except that the led selected should be CODE PED.

4) INB. CMD. AP: Suppression of commands during opening
The control board is supplied with the suppression of commands during opening deactivated (INB. CMD. AP. Led off). To activate this function, follow these instructions: press the SEL button until the INB. CMD. AP. Led flashes then press the MODE button and the INB. CMD. AP. Led will remain lit. To deactivate this function, follow these instructions: press the

SEL button until the INB. CMD. AP. Led flashes. Pressing the MODE button will cause the INB. CMD. AP. Led to turn off.

5) PEDESTRIAN PASSAGE / SINGLE GATE OPERATION
The control board is supplied with the Pedestrian passage function activated (PED./ANTA S. Led off). To activate single gate operation, follow these instructions: press the SEL button until the PED/ANTA S. Led flashes then press the MODE button and the PED/ANTA S. Led will remain lit. To deactivate this function, follow these instructions: press the SEL button until the PED/ANTA S. Led flashes. Pressing the MODE button will cause the PED/ANTA S. Led to turn off.

6) KICKBACK
The control board is supplied with the kickback deactivated (COLPO ARIETE Led off). To activate this function, follow these instructions: press the SEL button until the COLPO ARIETE Led flashes then press the MODE button and the COLPO ARIETE Led will remain lit. With this function activated, each time the mechanism activates the opening cycle it will automatically perform a short closing cycle. To deactivate this function, follow these instructions: press the SEL button until the COLPO ARIETE Led flashes. Pressing the MODE button will cause the COLPO ARIETE Led to turn off.

7) PRE-FLASHING
The control board is supplied with the pre-flash deactivated (PRELAMP Led off). To activate this function, follow these instructions: press the SEL button until the PRELAMP Led flashes then press the MODE button and the PRELAMP Led will remain lit. With this function activated, each time the mechanism is activated the light will flash for three seconds before any movement. To deactivate this function, follow these instructions: press the SEL button until the PRELAMP Led flashes. Pressing the MODE button will cause the PRELAMP Led to turn off.

8) T. MOT.: Maximum programmed operating interval 4 min
The command board is supplied with a pre-set motor operating interval of 30 seconds.
Before resetting the motor operating interval the gate must be closed. The procedure is as follows: press the SEL button until the T. MOT. Led flashes, then press and hold down the MODE button. The gate will start to open, once it reaches the desired position, release the MODE button and the T. MOT. Led will remain on. If an infinite motor operating interval is required: press the SEL button until the T. MOT. Led flashes, then press the MODE button for less than one second and the T. MOT. Led will turn off. If a limit switch is used it is a good idea to memorise an operating interval slightly longer than required to activate the limit switch.

9) T. PAUSE: Maximum programmed aut. closing 4 minutes
The command board is supplied with automatic closing (Pause interval of 15 seconds) activated. Before resetting the pause interval the gate must be closed. The procedure is as follows: Press the SEL button until the T. PAUSA Led flashes, then press and hold down the MODE button for a period equal to the desired pause interval between closing and opening operations. Release the MODE button and the T. PAUSA Led will remain on. If automatic closing is not required: press the SEL button until the T. PAUSA Led flashes, then press the MODE button for less than one second and the T. PAUSA Led will turn off.

10) GATE OPENING DELAY: Maximum programmed delay 30 seconds
If 2 motor operation is selected the command board has a pre-set gate opening delay (motor 2 will activate 3 seconds after motor 1). Before resetting the delay interval the gate must be closed. The procedure is as follows: press the SEL button until the RIT. ANTE AP Led flashes, then press and hold down the MODE button for a period equal to the desired interval of between the activation of the two motors. Release the MODE button and the RIT. ANTE AP Led will remain on. If an opening delay is not required: press the SEL button until the RIT. ANTE AP Led flashes, then press the MODE button for less than one second and the RIT. ANTE AP Led will turn off.

11) GATE CLOSING DELAY: Maximum programmed delay 30 seconds
If 2 motor operation is selected the command board has a pre-set gate closing delay. (motor 1 will activate 3 seconds after motor 2) Before resetting the delay interval the gate must be closed. The procedure is as follows: Press the SEL button until the RIT. ANTE CH Led flashes, then press and hold down the MODE button for a period equal to the desired interval of between the activation of the two motors. Release the MODE button and the RIT. ANTE CH Led will remain on. If a closing delay is not required: Press the SEL button until the RIT. ANTE CH Led flashes, then press the MODE button for less than one second and the RIT. ANTE CH Led will turn off.

PROGRAMME RESET (LED 1…11)
If it is necessary to reset the programme board to its default values, that is, as supplied by the factory; press both the SEL and MODE buttons together. All the RED Led will flash once.

12) POWER
The POWER led indicates that the mains power is connected.

IMPORTANT NOTES FOR THE INSTALLER

- *In order for the receiving part of the radio to function correctly, in cases where two or more centres are used, it is advisable to install them at a distance of at least 3 meters from each other.*
- *The electronic exchange offers no type of separation device and it will therefore be necessary for the fitter to install one beforehand.*
- *The fixing of the electricity supply cables and their connection, must be guaranteed by means of the assembly of cable presses.*

DECLARATION OF CONFORMITY

SEAV s.r.l. declares that the products

Electronic panel LG 2100 – LRS 2100 SET

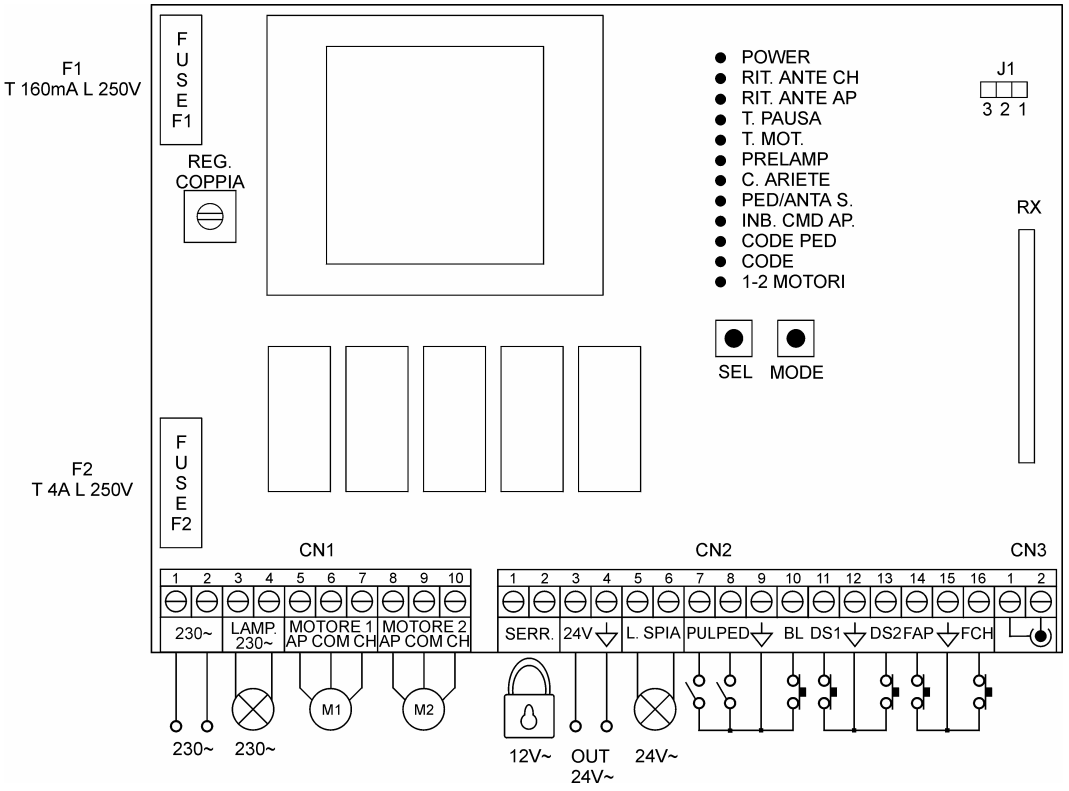
are conformant to all of the requirements laid out in the EC directive number: 99/5 which are based on the following standards:

EN 301 489-1/3 - EN 300 220-1/3 - EN 60335-1.

The sample which has been tested meets the essential requirements which have been specified above, on the basis of the results of the tests performed.

Osimo, 26/03/01

CE


F1
T 160mA L 250V
FUSE F1
REG. COPPIA
POWER
RIT. ANTE CH
RIT. ANTE AP
T. PAUSA
T. MOT.
PRELAMP
C. ARIETE
PED/ANTA S.
INB. CMD AP.
CODE PED
CODE
1-2 MOTORI
J1
3 2 1
RX
SEL
MODE
F2
T 4A L 250V
FUSE F2
CN1
CN2
CN3
1 2 3 4 5 6 7 8 9 10
230~
LAMP. 230~
MOTORE 1 AP COM CH
MOTORE 2 AP COM CH
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
SERR.
24V
L. SPIA
PULPED
BL
DS1
DS2
FAP
FCH
1 2
M1
M2
230~
230~
12V~
OUT 24V~
24V~