

ELECTRONIC PANEL LRX 2145

Mono-phase electronic exchange, for the automation of swing-doors with incorporated receiver.

- Mod. **LG 2145** : Without radio Receiver
- Mod. (**LRQ 2145**) : 30,875 Mhz
- Mod. (**LR 2145**) : 306 Mhz
- Mod. (**LRS 2145 / 330**) : 330 Mhz
- Mod. (**LRS 2145 / 418**) : 418 Mhz
- Mod. **LRS 2145** : 433,92 Mhz "narrow band"

() This product is designed only for countries in which this use is allowed

TECHNICAL DATA:

- Power supply : 230 Vac 50-60Hz 20W max.
- Flashing light output: 230 Vac 500 W max.
- Motor output 230 Vac 500 W max.
- Electric lock output: 12 Vac 12 W max.
- Aux. power output 24 Vac 5 W max.
- Warning light output: 24 Vac 4 W max.
- Limit switch and BT controls: 24 Vcc
- Working temperature: -20 ÷ 85 °C
- Radio receiver: refer to type
- Op. transmitters: 12-18 Bit or Rolling Code
- TX max. codes in memory: 120 (CODE or CODE PED)
- Container dimensiond: 240x185x110 mm.
- Protection capability: IP 65

TERMINAL BOARD CONNECTION:

CN1 : Terminal board

- 1 : Earth.
- 2 : Earth.
- 3 : Earth.

CN2 : Terminal board

- 1 : 230 Vac input.
- 2 : 230 Vac input.
- 3 : 230 Vac flash input.
- 4 : 230 Vac flash input.
- 5 : Opening 1 motor output.
- 6 : Common 1 motor output.
- 7 : Closing 1 motor output.
- 8 : Opening 2 motor output.
- 9 : Common 2 motor output.
- 10 : Closing 2 motor output.

CN3 : Terminal board

- 1 : Electric lock feed output 12 Vac 12 W.
- 2 : Electric lock feed output 12 Vac 12 W.
- 3 : 24 Vac 5 W service feed output.
- 4 : 24 Vac 5 W service feed output.
- 5 : Warning light output 24 Vac 4 W.
- 6 : Warning light output 24 Vac 4 W.
- 7 : Open-close push button input (NA).
- 8 : Single pedestrian push button input (NA).
- 9 : Common GND input.
- 10 : Input lockout (NC).
- 11 : Safety device input 1 (NC).
- 12 : Common GND input.
- 13 : Safety device input 2 (NC).
- 14 : Opening limit switch input (NC).

- 15 : Common GND input.
- 16 : Closing limit switch input (NC).
- 17 : Aerial earth input .
- 18 : Aerial hot pole input.

IMPORTANT NOTICE FOR THE INSTALLER

- *In order to have proper functioning of the radio receiver, in cases where two or more supply-stations are used, it is advised to install them at a distance of at least 3 metres from each other.*
- *The supply-station must not have any type of sectioning mechanism from the electrical line 230 Vac; it is therefore the responsibility of the installer to see the installation of a sectioning device within the plant.*
- *The fixing of the electricity supply cables and their connection, must be guaranteed by means of the assembly of the cable presses which are provided as "optional".*
- *The input, which is labelled as normally closed (NC), must be bonded if not used!!*

OPERATING CHARACTERISTICS:

Automatic operation:

By using either the radio control (led CODE on) 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 until time expiry of the timing motor or until the gate is fully opened, 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 operation:

By using either the radio control (led CODE on) 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 until time expiry of the timing motor or until the gate is fully opened, 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 **halted** whether engaged in opening or closing operations.

Automatic closing:

The control board may be set up automatically to close the gates.

The set-up procedure is described under the instruction 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 wing :

If selected (led PED\ANTA S is on), using the radio command (led CODE PED is on) and the low tension button panel (PED) to activate the lock will mean that only motor 1 used with regard to normal functioning.

Access block:

The centre allows for the connection of block buttons (NC). The motor will stop at any stage of operation if used. Another motor command will be accepted only when the access block is disactivated, and in any case, will signal the start of the closing phase with flashing lights for 5 seconds. If not used, the terminals must be jumped.

Safety device 1 :

The control board allows for the connection and control of Photocells, Tyre sensors (NC). The interruption is only possible during the closing process provoking the inversion of the motor. If not used the terminals must be jumped.

Safety device 2 :

The control board allows for the connection and control of Photocells, Tyre sensors (NC). Interruption during the opening process will lead to the momentary halting of the lock. Once released the centre will continue the opening phase. Interruption during the closing process will cause the inversion of the motor. If not used the terminals must be jumped.

Warning light :

The centre allows the connection of a 24V light to show the state of the automation process. Light off automation closed, access open, slow flashing motor open, fast flashing motor closing.

Electronic clutch:

The control is equipped with an adjustable electronic clutch, using Trimmer VR1. To adjust, move Trimmer VR1 until the device moves, but can still be blocked by an obstacle (for example, the test can be carried out by blocking the device with the hands).

Functioning of the Flasher:

The panel board is powered by an output for the use of a flasher 230 VAC. Its function is conditioned by the movement of the motor, by the function of the inserted flasher and the automatic closure that if inserted enables the flash even during a pause.

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 the type of function previously selected with the SEL button.

6) PED/ANTA S.	Pedestrian	Single wing
7) MANT. PRESS.	Disabled	Enabled
8) SERR. ON PED.	Disabled	Enabled
9) RALLENAM.	Disabled	Enabled
10) SPUNTO INIZ.	Disabled	Enabled
11) COLPO ARIETE	Disabled	Enabled
12) PRELAMP.	Disabled	Enabled
13) T. MOT.	Unlimited timing	Programmed delay
14) T. PAUSA.	No automatic close	With automatic close
15) RIT. ANTE AP	No wing delay	Programmed delay
16) RIT. ANTE CH	No wing delay	Programmed delay
17) POWER	Central ON	Central OFF

1) 1 – 2 MOTORS:

For installation, the centre has 2 preinstalled configurations for the automation of 1 or 2 motors.

The default configuration offers control of one motor (sliding gate for example). If needed, predefined control of 2 motors is set in the following way: set the SEL button on the 1-2 MOTORS flashing Led, then press MODE button, and Led 1-2 MOTORS will remain lit and the operation will be completed. Follow this procedure to return the previous setting.

2) Automatic\Step by step:

The centre in its default setting shows the automatic working function set (Led AUT/P-P is off). To set the step by step function (Led AUT/P-P is on): set the SEL button on the AUT/P-P flashing Led, then press the MODE button. Led AUT/P-P will remain lit. Repeat the operation to return to the previous setting.

3) 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 SEL 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 SET button and the CODE Led will be turned off and the cancellation will be completed.

Led Reference	Led off	Led on
1) 1-2 MOTORI	1 motor automated	2 Motors automated
2) AUT / P-P	Automatic	Step by step
3) CODE	No code	Code activated
4) CODE PED.	No code	Code activated
5) INB.CMD.AP	Disabled	Enabled

4) CODE PED:(Radio control code Ped. / Anta S.)

The programming procedure is as above, simply use Led Code PED

5) INB. CMD. AP: (Interrupting commands during opening and pauses, if set)

The option to interrupt commands during opening and pauses, if inserted, is used when the automation is detected by the loop detector. The centre, during the opening phase and pauses, does not receive commands from the loop detector at every crossing.

The central in its default setting, offers the interruption of commands when the gate is opening and during the pause period. To activate, proceed in the following way: set the SEL button on the INB.CMD.AP flashing Led, then press the MODE button and Led INB.CMD.AP will remain lit. Repeat the process to return to the previous setting.

6) Pedestrian/Single wing:

The central's default setting has pedestrian access enabled (Led PED/ANTA S. is off). To set single wing opening (Led PED/ANTA S. is on): use the SEL button to light the Led PED/ANTA S., then press the MODE button. Led PED/ANTA S. will remain lit. Repeat the process to return to the previous setting.

7) MAINTAINING HYDRAULIC MOTOR PRESSURE :

This option is used to compensate for the loss of pressure with time. The centre sends a the lock command to close for 2 seconds every 2 hours.

The option is disabled in the default configuration. To active it, use the SEL button to light Led MANT. PRESS. Then press MODE. Led MANT. PRESS. Will remain lit. Repeat the operation to return to the previous setting.

8) Electric lock "ON" button:

The electric lock "on" button is used when available, for example with a sliding door and a pedestrian door attached. In this mode it is possible to open the gate or door through with button commands.

The default setting is lock ON with button input disabled. To enable it use the SEL button to light the Led SER. ON PED, then press MODE. Led SER. ON PED with light. Repeat the operation to return to the previous setting.

9) Slowing-down: (Program. Slowing time 15 sec. max.)

The function slowing the motor is used for shutter gates to prevent the gates coming together at too high a speed during the opening and closing phases.

The centre will start to reduce the motor's velocity for the set slowing period.

During the closing phase, when the slowing-down is finished, the centre sends a close signal to facilitate the electric locking. If electric locking ON with pedestrian input is enabled the ultimate closing signal will not be executed.

The slowing function is disabled when the centre is in its default setting. To activate it, use the SEL button to select the RALLENAM Led, then press the MODE button for the desired period. At this point the Led will light. TO disable to function use the SEL button to select the RALLENAM Led and press MODE for less than one second. The Led will go out and the operation will be complete.

You are advised to program this setting after you have programmed the motors.

10) INITIAL MOTOR PICK-UP :

This function is used when a notable reduction in engine power from the electric clutch is needed. However, this means that the motor will not have sufficient power to start, and the engine pick up helps the engine during this initial 3-second phase, helping the engine to full power.

The engine pick-up option is disabled in the default setting. To activate it, press the SEL button to select the Led SPUNTO, then press MODE: the Led will remain lit. Repeat the procedure to return to the previous setting.

11) HAMMER OPENING :

This function used with closing gates with closing gates with an electric lock and helps the unlocking of the gate during the opening phase. Before starting the opening phase the unit sends a closing signal for 2 seconds.

In the default setting this option is disabled. To enable it, use the SEL button to light Led C.ARIETE, then press MODE. The Led C.ARIETE will remain lit. Repeat the operation to return to the original setting.

12) WARNING LIGHT :

This function is used when it is necessary to show in advance that automated movement will begin.

Before the motor starts, the centre will always light the light for 3 seconds.

In the default setting this option is disabled. To enable it, use the SEL button to light Led PRELAMP, then press MODE. The Led PRELAMP will remain lit. Repeat the operation to return to the original setting.

13) T. MOT: (Programming motor work time, max. 4 mins)

The centre is supplied with a preset motor time of 30 seconds.

If it is necessary to reset the time you must close the units in the following manner: use the SEL button to light Led TMOT. Then keep the MODE button pressed. Motor1 will start the opening phase, and at the desired point release the MODE button. When Led TMOT flashes rapidly keep the MODE button pressed. Motor 2 will start the opening phase. Release the MODE button at the desired point. The work time of the 2 motors is now set: Led TMOT will remain lit and the centre will return the motors to their original position. If the centre is programmed for 1 motor, Led 1-2 MOTOR OFF, the programmed work time for Motor2 will not be followed.

For infinite work time use the SEL button to light Led TMOT then press the MODE button for less than 1 second. Led TMOT will go out and the operation will be complete.

14) T. PAUSE: (Maximum programmed automatic wing closing 4 minutes)

The manufacturer furnishes the board with an automatic closure (pause time equal to 15 sec.). If a reprogramming of the automatic closing time is needed, it must be effected in closed frame in the following manner: press the SELL button until the T. PAUSE led flashes, then press and hold down the MODE button for a period equal to the desired pause interval between closing and opening operations, at the expiry of the desired time leave the MODE button, at the same time the memorisation of automatic closing time will be determined and the Led T. PAUSE will be lit.

If decided not to have the automatic closing, take position on the flash of the Led T. PAUSE after press the MODE task for

less than a second, at the same time the Led will shut off and the operation will be concluded.

15) DELAY IN WING OPENING: (programmed wing delay 15 sec. max.)

The manufacturer furnishes the panel if chosen the automation of 2 motors with a delay in wing opening equal to 3 seconds (del. MOTOR 2).

If a reprogramming of the delay is needed in relation to its opening, it must be effected during close frame in the following manner: take position on the SEL, task when the led WING DELAY OP. is flashing, then press in continuous manner the MODE task for as long as the time desired, release the MODE task, at the same time the memorisation of the delay will be determined and the Led DELAY WING OP. will be fixed. If desired not to have a delay in wing opening, take position on the Led DELAY WING OP. then press MODE task for less than a second, at the same time the Led will shut off and the operation will conclude.

continuously, all the **RED** LEDs will flash at once

DIAGNOSTIC :

In corrspondence to all input commands in low tension, the centre uses Led signals for every input command to allow rapid status control. Logic of function: a lit Led means input closed, an unlit light means input open.

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16) DELAY IN WING CLOSING: (programmed wing delay 15 sec. max.)

The manufacturer furnishes the panel if chosen the automation of 2 motors with a delay in wing closing equal to 3 seconds (del. MOTOR 1).

If a reprogramming of the delay is needed in relation to its closing, it must be effected during close frame in the following manner: take position on the SEL, task when the led WING DELAY CL. is flashing, then press in continuous manner the MODE task for as long as the time desired, release the MODE task, at the same time the memorisation of the delay will be determined and the Led DELAY WING CL. will be fixed. If desired not to have a delay in wing closing, take position on the Led DELAY WING CL. then press MODE task for less than a second, at the same time the Led will shut off and the operation will conclude.

DECLARATION OF CONFORMITY

SEAV s.r.l. declares that the products:
Electronic exchange LG 2145 - LRS 2145
Conforms with all of the requirements laid out in the EC directive number: 99/5 which are based on the following standards:

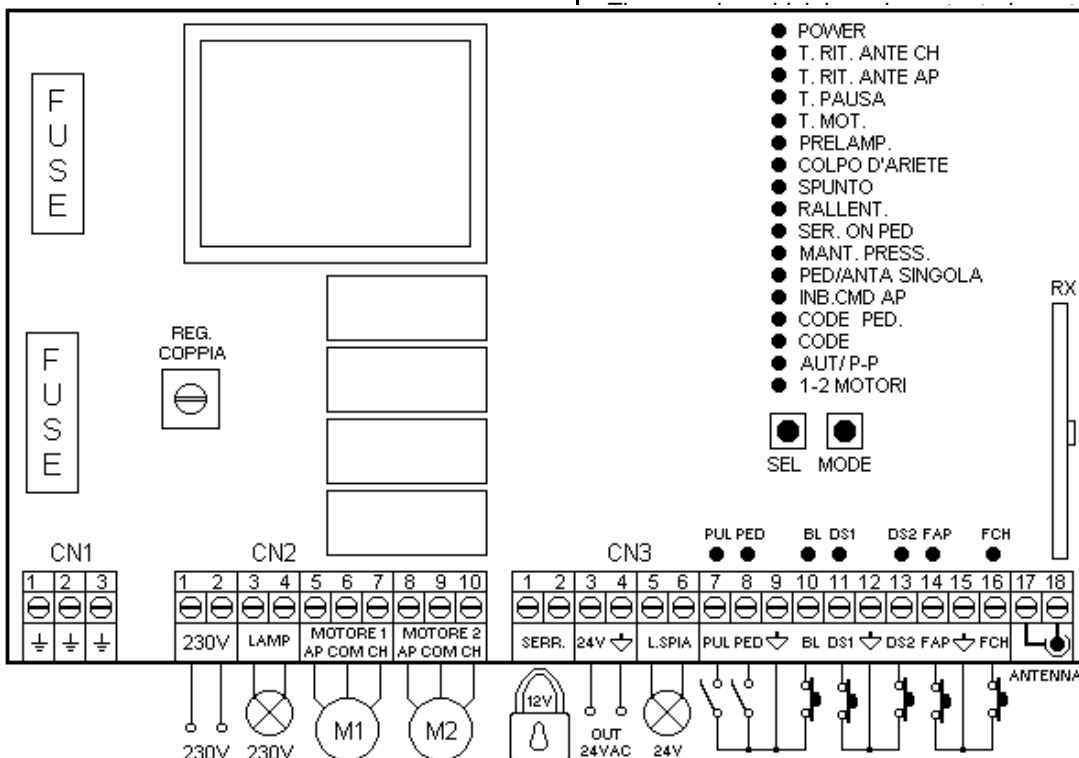
- EN 301 489-3 ;
- EN 300 220-3 ;
- EN 60335-1.

17) POWER:

Central feed, Led POWER on.

RESET :

If it necessary to reset the program board to its default values, that is with no memorised data, press both SEL and MODE buttons



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on the