ELECTRONIC PANEL LRX 2035 ALARM

Control panel that integrates electronic control for single-phase motor 230 Vac and Alarm System for the supervision of 2 wired zones.
The control panel, equipped with intergrated battery charger and radio receiver, is ideal for automation and safety of garage doors, over head doors and rolling shutters.
The control panel can be used in a combine manner, so that the management of automation and alarm system is reported to a single command, or so that a separate control for automation alone and a control for the alarm system alone.

- Mod. **LRS 2035 Alarm**   : 433,92 Mhz
- Mod. **LRS 2035 SET Alarm**   : 433,92 Mhz "narrow band"
- Mod. **LRH 2035 Alarm**   : 868,3   Mhz "narrow band"

IMPORTANT FOR THE USER
-The device can be used by up to 8-year-old children or persons with reduced physical-psychological abilities or with little knowledge and experience, only if they are supervised or trained on the functioning and the use modalities in a safe way, to better know also the dangers during its use.
- This instructions are available also on the website www.seav.com.
- Do not allow children to play with the device and keep the radio-controls away from their reach.
Frequently examine the plant to detect any signs of damaging. Do not use the device if a repair intervention is necessary.
-Always remember toremove the power source before polish or maintenace works.
-Polish and maintenance works must not be done by children without any supervision.

ATTENTION: *keep this instruction manual and respect the important safety prescriptions contained herein.*
The not compliance with the prescriptions may cause damages and serious accidents.

IMPORTANT FOR THE INSTALLER

1)Before automating the frame, check that it is in good conditions, in compliance with the Machinery Directive and with EN 12604.
2) Control that place, where the installation is situated, respects the Temperature working limits, fixed for the device.
3) The safety for the final installation and the respect of all the rules (EN 12453 – EN 12445) are under responsability of the person, who Assembly all the parts together for building a closing.
4) Use safety disposals which can control their connection to the Electric panel.
5)To be sure of having done a right installation, you should do a coplete check-up (progra-mation of the electric unit and correct installation of safety disposals).
6) In the back side, the shell is equipped with wall fastening set up (holes for fastening by dowels or screws). Consider and implement all Efforts for an installation that does not change the IP degree.

7) The control unit does not have any type of isolating device for the 230 Vac line. It will therefore be the responsibility of the installer to Arrange an isolating device inside the plant. It is necessary to install A monophase switch with over-voltage category III. It must be Positioned where it can protected from accidental closing, according To that prescribed in point 5.2.9. of EN 12453.
8) For what concerning cables for power, you should use flexible Cables under policloroprene insulating sheath of harmonized type (H05RN-F) with 1mm² minimum size of conductor wires.
9) The gearmotor used to move the frame must comply with that prescribed at point 5.2.7 of EN 12453.
10) In compliance with 5.4.2 of EN 12453, it is recommended to use gearmotors equipped with an electric-mechanical release device, so that the door can be moved manually in case of necessity.
11) In compliance with 5.4.3 of EN 12453, use electric-mechanical release systems or similar devices which stop the door safely in the end run position.
12) Wiring of the various electrical components outside of the control unit must be carried out in compliance with that prescribed in Standard EN 60204-1 and its amendments at point 5.2.7 of EN 12453. Cables for power can have a 14 mm Maximum diameter size. Power supply and connection cables must be fixed using the cable "optional" provided. Please Be aware of fixing the cables in order to attach them in a solid Way. Moreover, during the shell drilling phase to let the power and connection cables go through, and the cable glands assembly, warning to Install everything in order to maintain unchanged the IP-degree properties of the box.
13) Mounting of a push button panel for manual control must be done positioning the push button panel where the user is not in a dangerous position.
14) The plastic box is lacking in anti-intrusion Tampere connection In the removable part of the Switch, so it is recommended the Assembly by the installer for a major safety to the Alarm system.
15) The safety function, guaranteed by the electronic unit, operates Only during the closure; so the opening protection must be Guaranteed by independent actions (havens or safety distance) From the control circuit during the installation.
16) For a correct functioning of the radio receiver, if using one or More control units, the installation at a minimum distance of at least 3 metres one from the other is recommended.

Electronic control unit:

LRS 2035 Alarm
LRS 2035 SET Alarm – LRH 2035 Alarm

Comply with the specifications of the Directives
R&TTE 99/5/EC, EMC 2004/108/EC, LVD 2006/95/EC.

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TECHNICAL DATA:

- Power supply: 230 Vac 50-60Hz 900W (4A) max.
- Flashing light output: 230 Vac 50-60 Hz
                                100W Resistive Load max.
                                50W Inductive Load max.
- Motor output: 230 Vac 50-60Hz 750 W max.
- Buffer battery input: 12 Vdc 2,7 A/h max.
- Alarm light output: 12 Vdc 2 W max.
- Power supply service output: 12 Vdc 5W max.
- Safety and BTcontrols: 12 Vdc
- Working temperature: -10 +55 °C
- Radio receiver: see model
- Op. transmitters: 12-18 Bit or Rolling code
- Max. TX codes in memory: 120 (CODE or CODE ALARM)
- Board dimensions: 140x145 mm.
- Box dimensions: 240x190x110 mm.
- Protection degree: IP 56.

CONNECTIONS OF TERMINAL BOARDS:

CN1 :
1 : 230 Vac input (phase).
2 : 230 Vac input (Neutral).
3 : 230 Vac flash input (Neutral).
4 : 230 Vac flash input (phase).
5 : Opening 230V motor output.
6 : Common 230V motor output.
7 : Closing 230V motor output.

CN2:
1 : Power supply/ Battery charger Alarm signal + 13,8V.
2 : Alarm Control Output (positiv to miss).
3 : Power supply/ Battery charger Alarm signal GND.

CN3:
1 : Positive buffer battery input (+ 12V 2,7Ah max).
2 : Negative buffer battery input (- 12V 2,7Ah max).
3 : Signal light output (+ 12V 2W max).
4 : Signal light output (- 12V 2W max).
5 : AUX control contact output (NC) 30V 1A max.
6 : AUX control contact output (NC) 30V 1A max.

CN4:
1 : Power supply Photocells and Alarm sensors (+ 12V 5W).
2 : Power supply Photocells and Alarm sensors (GND).
3 : Input (Z2) Alarm zone 2 (NC).
4 : Input (Z1) Alarm zone 1 (NC).
5 : Common GND input.
6 : Input (DS) Safety motor Device (NC).
7 : Input (T) Tamper Alarm (NC).
8 : Common GND input.
9 : Input (P) Motor control Button (NA).
10: Ground Antenna input.
11: Hot pole Antenna input.

OPERATING FEATURES:

Using both the memorized radio-control (led CODE on) and the Button (P) with low tension for the operation of doors and windows, You will get the following operation:
The firs input rules the opening till the end of motor time or till the Achievement of opening final run; the second input rules the closure. If you send an input during the opening, before the end of motor time Or the final run achievement, or if you send an input during the Closing, before the end of motor time or the final run achievement, The electronic unit will do the reversal operation. Another input with stationary doors or windows always represents A restart of the reversal operation.

Automatic closing:
The control unit closes the frame automatically without sending other Commands. The choice of this operating mode is described under The instruction for setting the delay period.

D.S.) Safety device (Photocells):
The control unit allows the connection and the control of Photocells, Tyre sensors (NC).
- Input DS (NC):
During opening the operation of photocells is not contemplated, During closing it causes the reversal movement.

Forced Closing:
In case of damage or malfunction of the Safety Device (Input DS), the electronic panel automatically does a voluntary forced closing of The frame. Using both the memorized radio control (led CODE on) and the low tension button, you can do the forced closing In the following way: to keep sending the command for a higher time Of 5 seconds, then the frame starts the closing till the run-end or till The end of motor time, but only having pushing the move command.
With closed frame, the electronic panel turns to the normal function.

Activation/Deactivation Alarm System (led CODE ALARM):
By manufacturing arragement, the electronic panel starts (15 Minutes after the end of the programmed motor time) and Automatically cuts (immediately) the Alarm system of the close or Open frame. Using the memorized radio control (led CODE ALARM on), you can start or cut the Alarm system as you want. Avoiding false activations or deactivations, the button of the radio Control has to be pushed for at least 5 seconds. Then the flashing Light (on for 3 seconds) and the Alarm light (10 rapid flashes) will Show the choosen movement.

Z1 – Z2) Alarm Devices (zone 1 and zone 2):
It is possible to connect and supply 2 Alarm sensors (NC). They can immediately activate the siren and the OUT AUX Contact (NC).

T) Safety Device (Tampere):
It is possible to do the anti-split connection (Tampere) of the siren and all the other alarm sensors (NC).
This can do the activation of the siren and the OUT AUX contact (NC), even if the alarm system was cut by the CODE ALARM Command.
Important: in case of maintenance, in order to cut the control of The Tampere input, it will be necessary to swich to Installer Mode (see the connected paragraph) before every operation On the Alarm system.

Output (Sirens) from J1:
It is possible to connect standard sirens with supply for battery charge upkeeping. With siren on, the battery supply is stopped Or this can be caused by the related command (positive to miss Default J1=1-2 or negative to miss J1=2-3).

Auxiliary Alarm Output (OUT AUX) from J2:
The electronic panel has an OUT AUX output (normally close NC default J2=2-3 or normally open NA J2=1-2) for the Connection of accessories or other present alarm systems. The activation of the output will be simultaneous to the activation Of the alarm till its switching off.

Light Alarm System:
It is possible to connect a light 12Vdc 2W max. to know the alarm Status of the automation. Light off: alarm off; light on: 10 rapid Flashes for activations and disactivations and rapid light with Lasting alarm for no electrical line, wireless sensor out of Batteries or alarm on (also with time-signal mode).

Buffer Battery 12V 2,7Ah max:
It is possible to connect a buffer battery to make in work only the Alarm system, also with electrical line missing. Moreover it has An incorporated battery charger 13,8V (both for buffer battery And the one in the alarm siren).

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.

SET button: programs the information relative the type of function previously selected with the SEL button.
IMPORTANT: the function of the SET button can also be replaced With radio control if it was programmed before (led CODE on).

MAIN MENU'

The electronic panel is supplied with the possibility to select some important functions.

---------------------- MAIN MENU' -----------------		
LED Reference	**LED Off**	**LED On**
1) CODE	No code	Device activated
2) CODE ALARM	No code	Device activated
3) LAMP./CORT.	Flashing Lamp	Courtesy Light
4) T. MOT.	Programmed 30''	Programmed delay
5) T. PAUSA.	No automatic close	With automatic close

1) CODE: (Programming of radio controls)

Programming of radio control for frame:
The programming of transmission codes of radio control for the Frame operation is done in the following way: push SEL button, LED CODE starts lighting, in the meanwhile send the transmission Code with the related radio control, at this point the LED CODE will Stay on the programming will be completed.

Rule of the first memorized radio control:
In radio controls programming there is the following rule: if the first Memorized radio control is a Rolling Code one, the electronic panel will accept only Rolling Code radio controls, with more anti-Intrusion safety; if instead the first memorized radio control has fixed Code, the receiver will accept both fixed codes and Rolling Code Radio controls.

Radio control already in memory or incompatible:
It is possible to memorize up to 120 radio controls with different Codes. In case of programming devices already in memory or Incompatible, the LED CODE starts flashing rapidly for some instant, Flaging the impossibility and then it will return to programming.

Highest number of memorized devices:
It is possible to memorize up to 120 radio controls with different Codes. In case of the hightest number of memorized devices is Reached, repeating the programming, the electronic panel flags the Error by the flashing of all the leds save the LED CODE, which stays Fixed on. After 10 seconds the electronic panel exits from the Programming mode.

2) CODE ALARM: (Programming of the radio control for the Activation/deactivation of the alarm system).
The method of programming and cancellation is similar to the one Described before, but related to LED CODE ALARM, with the only Difference that it is refered to a button, related to the radio control for Activation and deactivation of the alarm system.

Important: when any Alarm Code was not programmed (CODE ALARM OFF), the panel does not control connections and functions Of the Alarm System.

3) LAMP/CORT: (Selection of the flashing light or the courtesy light).
The control unit has a 230 Vac output, for connection to a flashing light or a courtesy light. The control unit is supplied by the manufacturer with the flashing function even with delay enabled. If you wish to set up the flashing light function, proceed as follows: use the SEL button to navigate to the LAMP/CORT LED when flashing and then press the SET button. The LAMP/CORT button will light up permanently. Repeat the operation if you wish to put the previous configuration Back into operation. If you wish to set up the courtesy light, repeat The operation described above, pressing the SEL button twice instead of once (the LAMP/CORT LED will flash rapidly). Repeat the operation if you wish to put the previous configuration back into Operation.

Flashing Light function even in pause: the 230 Vac output will be Activated each time that the automation is moving, for the duration of the motor time. If the pause time is memorised, the 230Vac output will be active even during the delay.
Flashing function: The 230 Vac output will be activated each time that the automation is moving, for the duration of the motor time.
Functioning of the Courtesy light: The 230 Vac output will be activated for 3 minutes, each time that an opening command is Given.

Important: the flashing/Courtesy light will be activated at the Same time with the Alarm System, till its switching off.

4) T. MOT. (Programming the motor operating time max. 4 Minutes).
The control unit is factory supplied with a predefined working time motor equal to 30 sec. If a reprogramming of the motor operating time is needed, it must be carried out through the closed frame in the following manner: use the SEL button to navigate to the T. MOT LED when flashing, then continuously press the SET button. The rolling shutter will start the opening. When you have reached the required height, release the SET button and at the same time the motor time storage will be completed and the T. MOT. LED will remain lit and fixed.
5) T. PAUSE: (Maximum programmed automatic closing 4 minutes.)
The manufacturer furnishes the control unit with an automatic closure (pause time equal to 15 sec.). If a reprogramming of the automatic closing time is needed, it must be carried out through the closed frame in the following manner: use the SEL button to navigate to the T. PAUSE LED when flashing. Then press and hold down the SET button for a period equal to the Desired pause interval between closing and opening operations. At expiration of the desired time release the SET button. At the same time the memorisation of automatic closing time will be determined and the T. PAUSE LED will remain lit. If you do not want automatic closing, take position on the T. PAUSE LED when flashing. Then press the SET button for less than a second. At the same time the LED will shut off and the operation will be concluded.

EXTENDED MENU' 1

The control unit is supplied by the manufacturer with the option of selecting only the functions listed in the main menu. To Enable the functions of extended menù 1, proceed as follows: press and hold the SET button for 5 seconds; the T. PAUSE LEDs will start flashing as 110-110-110..type. The user then has 30 seconds in which to select the extended menu 1 functions using the SEL and SET buttons. After 30 seconds the control unit returns to the main menu.

LED Reference	LED Off	LED On
--------------------	EXTENDED MENU' 1	-----------------
A) CODE	OUT AUX = Monostable	OUT AUX = Double-Stable
B) CODE ALARM	Code Alarm Part = OFF	Code Alarm Part = ON
C) LAMP/CORT	P = Command Input	P = AUX Input
D) T. MOT.	Lamp Ligth = Info ON	Lamp Light = Info Temp.
E) T. PAUSA.	Menù 1 = Mode Flashing 110-110-110……..	

A) CODE (Selecting output OUT AUX function):
The control unit has a monostable OUT AUX output, which will Be connected to sensors in 1 and 2 zones (only with alarm on) To the connection with other Alarm system.
Moreover it is possible to choose other way of working, Double-Stable or timing (3 series of 1 minute), in order to connect Another alarm system or to control an external acustic signal. The control unit is supplied with the programming of the OUT AUX output in mono-stable way, if you wish to enable the Double-stable function proceed as follows: check that the extended menu 1 is enabled (T. PAUSE LEDs start flashing 110-110-110..type), use The SEL button to navigate to the CODE LED when flashing and press the SET button: the CODE– LED remains lit in a constant manner and programming is complete. Repeat the operation if wanting to restore the previous configuration.
If you wish enable the timing function, repeat the described operation above, pushing twice the SEL button (rapid flashing LED CODE), instead of once.

B) CODE ALARM (Programming Radio control Alarm for
Preliminary Activation/Deactivation with exluded Zone 1):
The electronic unit allows to memorize one dedicated button Of the radio control for the preliminary activation and deactivation Of the alarm system (zone 1 exluded).
If you wish to memorize one dedicated button of the radio control For the preliminary activation and deactivation of the alarm system, Proceed in the following way: enable extended menù 1 (flagging by 110-110-110..flashing of Led T.PAUSA), then place with SEL button On flashing LED CODE ALARM, in the same time push the Dedicated button of the radio control, then the LED CODE ALARM Will switch on permanently and the programming is done.
In this way, by using the memorized radio control, you can preliminary activate or deactivate (with zone 1 excluded) the alarm System as you prefer. To avoid false activations/deactivations, the Radio control button will be pushed for at least 5 seconds. Then the Flashing light and the alarm lamp will flag this status.
Repeat the operation if wanting to restore the previous configuration.

C) LAMP/CORT. (P input = AUX input function):
The control unit is supplied with the command of P input for the Connection of a cyclic command motor button (NA). If you wish to Change (P) input to AUX input for the connection to other alarm System in order to activate (NA) or deactivate (NC) the alarm system Of the frame, proceed in the following way: enable extended menù 1 (flagging by 110-110-110..flashing Led T.PAUSA), then place with SEL button on LED LAMP/CORT flashing, then push SET button: In the same time,

the LED LAMP/CORT will switch on permanently And the programming is done.
Repeat the operation if wanting to restore the previous configuration.

D) T. MOT. (Lamp light function):
The control unit is supplied with permanently flashing lamp light. If you wish to change to timing flashing lamp light, proceed in the Following way: enable extended menù 1 (flagging by 110-110-110..Flashing Led T. PAUSA), the place with SEL button on LED T. MOT. Flashing and push SET button: in the same time the LED T. MOT. Will switch on permanently and the programming is done. In this way
The flashing lamp light will be available during the first 15 seconds Only, of every new information or command for alarm activation/Deactivation, then the lamp light will always do short continuous Flashes.
Repeat the operation if wanting to restore the previous configuration.

EXTENDED MENU' 2

The control unit is supplied by the manufacturer with the option of selecting only the functions listed in the main menu.
To enable the functions of extended menù 2, proceed as follows: access to extended menù 1 (as described in the corresponding paragraph), then press the SET button again and hold for 5 seconds; the 1110-1110-1110.. LED T. PAUSE will flash : the user has 30 seconds within which to select the functions of extended menu 2 using the SEL and SET buttons. Then after a further 30 seconds the control unit returns to the main menu.

LED Reference	LED Off	LED On
--------------------	EXTENDED MENU' 2	-----------------
A) CODE	P e T = default	P = FC. CH e T = FC. AP
B) CODE ALARM	P e T = default	P = UP e T= DOWN
C) LAMP/CORT	User present CH = OFF	User present CH = ON
D) T. MOT.	Not Used	Not Used
E) T. PAUSA.	Menù 2 = Mode Flashing 1110-1110-1110……..	

A) CODE (P and T input = CH and AP end-motion):
The electronic unit is supplied with the P command input for the Connection to a cycle motor command button (NA) and the T input For the anti-split connection (Tampere) of the siren and all the alarm Sensors (NC). If you wish to change the functions of these input, as follows: P = FC: CH (NC input for end-motion closing) And T = FC. AP (NC input for end-motion opening), proceed as Follows: enable extended menù 2 (flagging by 1110-1110-1110..Flashing of Led T. PAUSA), then place with SEL button on LED CODE flashing and push SET button: in the same time LED CODE Will switch on permanently and the programming is done.
Repeat the operation if wanting to restore the previous configuration.

B) CODE ALARM (P and T input = DOWN and UP buttons):
The electronic unit is supplied with the P command input for the Connection to a cycle motor command button (NA) and the T input For the anti-split connection (Tampere) of the siren and all the alarm Sensors (NC).
If you wish to change the function of these inputs, P = DOWN (NA Input for command drop button) and T = UP (NA input for command Climb button), proceed as follows: enable extended menù 2 (flagging by 1110-1110-1110..flashing of Led T. PAUSA), then place with SEL button on LED CODE ALARM flashing and push SET button: in the same time LED CODE ALARM will switch on permanently and the programming is done.
Repeat the operation if wanting to restore the previous Configuration.

C) LAMP/CORT (User present while closing function):
The control unit is supplied by the manufacturer with the user

present while closing function disabled. If you wish to enable the function, proceed as follows: check that the extended menu 2 is enabled (flagging by 1110-1110-1110.. flashing T. PAUSE LEDs start flashing simultaneously), use the SEL button to navigate to the LAMP/CORT LED when flashing and press the SET button: the LAMP/CORT LED remains lit in a constant manner and programming is complete. In this manner the control unit while operate in User present while closing mode. The input controls for Ascent (P = Step by step) and Descent (D.S. = User present) will be modified with the Normally Open operation.
Repeat the operation if wanting to restore the previous configuration.

D) T. MOT. (Not Used):

RESET :

To reset the default configuration of the control unit, press the SEL and SET buttons simultaneously; all RED indicator LEDs will switch on and then off again immediately.
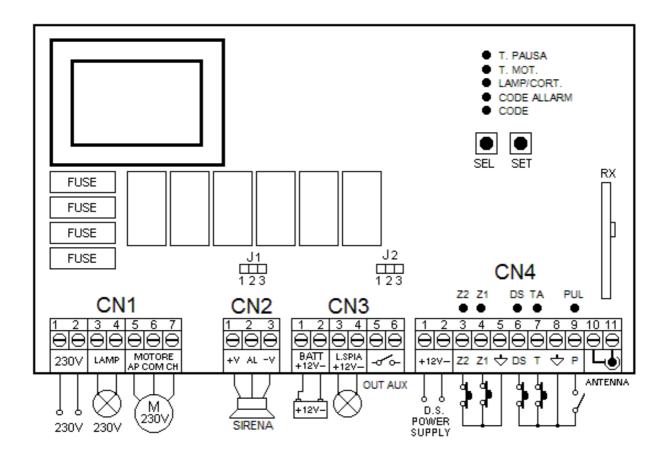

INSTALLER ACTIVATION MODE:

In case of maintenance of the alarm system, it is necessary to Activate the installer mode in order to deactive de alarm system And the Tampere control input, if you wish this mode, proceed as Follows: disconnect and reconnect the 230 Vac supply line to the Unit, keeping pushing for at least 10 seconds the memorized CODE ALARM Button of the radio control, at the same time You get a short flash of all the leds and the simultaneous Activation of Lamp light output for 3 seconds, so the programming Is done. Automatically the installer mode is deactivated at the First cycle of normal functioning of frame or at the activation of the Alarm system.

DIAGNOSTICS :

In correspondence to each low voltage input command, the control unit uses LED signals allowing rapid status control. Functioning logic: a lit LED means input closed, an unlit LED means input open.

MANAGEMENT OF PROGRAMMING LEDS:

After 3 minutes of inactivity during the programming, the unit Automatically turns off the programming leds for saving energy. With a pressure of SEL or SET buttons, or a moving delivery Command, the LEDs will turn on, basing on memorized Programming.

● T. PAUSA
● T. MOT.
● LAMP/CORT.
● CODE ALLARM
● CODE

SEL SET

RX

FUSE
FUSE
FUSE
FUSE

J1
1 2 3

J2
1 2 3

CN4

Z2 Z1 DS TA PUL

CN1
1 2 3 4 5 6 7
230V LAMP MOTORE
AP COM CH

CN2
1 2 3
+V AL −V

CN3
1 2 3 4 5 6
BATT L.SPIA
+12V− +12V−

1 2 3 4 5 6 7 8 9 10 11
+12V− Z2 Z1 ▽ DS T ▽ P

OUT AUX

230V 230V
M 230V

SIRENA

+12V

D.S.
POWER
SUPPLY

ANTENNA

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