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KITKEEROLL + KEEALARM

(KEEROLL + RS3 TGL868 + KEEALARM + 2 MUV)

User Manual

EN

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Important safety instructions

Safety instructions for installation

Disconnect the power supply whenever you proceed to the installation, maintenance or repair of the equipment.

- Before installing the panel, remove all unnecessary ropes or chains and disable any equipment such as locks that is not necessary for the automatic operation.
- Before installing the panel, check that the door is in good mechanical condition, correctly balanced and that it opens and closes correctly.
- Install the manual unlocking device at a height lower than 1.8m.
- Install any permanent control next to the door away from any moving part and at a minimum height of 1.5m.
- For permanently connected equipment, an easily accessible power disconnection device must be incorporated into the wiring. It is recommended that this be of the emergency switch type.
- If the control panel is supplied without emergency stop button, this will be incorporated in the installation, connecting it to the STOP terminal.
- For correct use of the security edge, this must never be activated when the door is fully closed. It is wise to install the ends of run before activating the edge.
- This equipment can only be handled by a specialist fitter, by maintenance staff or by a suitably trained operator.
- To connect the power supply and motor wiring, 2.5 mm2 section terminals must be used.
- Use protective goggles when handling the equipment.
- Fuses must only be handled when the appliance is disconnected from the mains.
- The instructions for using this equipment must remain in the possession of the user.
- European door normative EN 12453 and EN 12445 specify the following minimum protection and door safety levels:
  - for single-family dwellings, prevent the door from making contact with any object or limit the force of contact (e.g. safety band), and in the case of automatic closing, it is necessary to complement this with a presence detector (e.g. photocell).
  - for communal and public installations, prevent the door from making contact with any object or limit the force of contact (e.g. safety band), and complement this with a presence detector (e.g. Photocell).

KeeRoll control panel switches automatically to dead man mode when safety devices are active or defective. Therefore, all controls work as “hold-to-run” controls.

WARNING: IN ACCORDANCE WITH THE EN 13241-1 AND EN 12453-1 STANDARD CONCERNING PRESSURE MAINTAINED CONTROL DEVICES:

“The person operating the door must have a direct view of the doorway, must be near the door (5 meters maximum) during movement of the door and should not find itself in a dangerous position”. Any adjustment of the radio range out of these recommendations, undertakes the installer in terms of responsibility for injury or damage.

“Releasing of the pressure maintained control device should stop the door movement before it scrolls 5cm”.

Safety instructions for the use

- Do not allow children to play with the door controls.
- Keep the remote controls out of the reach of children.
- Watch the door movement and keep people away until the door is fully open or closed.
- Precaution when operating the manual unlocking device, as the door may suddenly fall due to the bad condition of the springs or door unbalance. Details on how to use the manual unlocking device must be provided by the manufacturer or the device installer.
- Examine the installation frequently, especially the cables, springs and supports, to detect signs of wear, damage or unbalance. Do not use the door if repair work or adjustments are required, as this may cause damage.

Use of the equipment

Designed for automation of garage doors, in accordance with the general description. Not guaranteed for other uses. The manufacturer reserves the right to alter equipment specifications without prior notification.

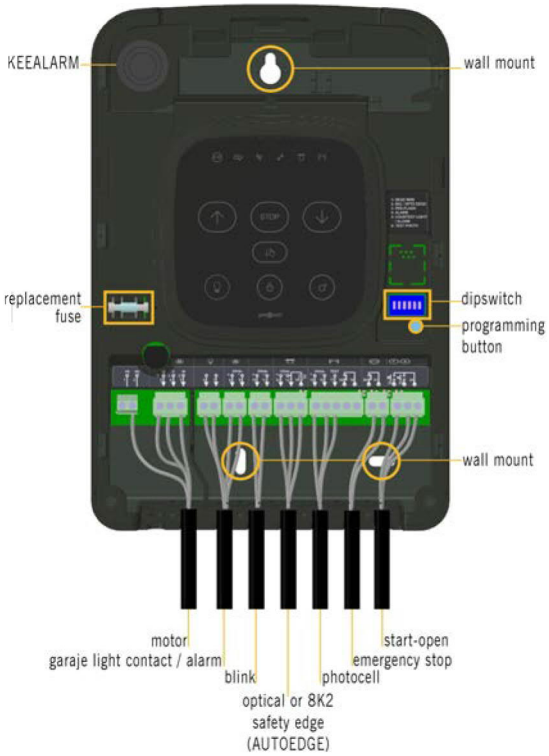
Introduction

General description

Designed for residential aluminium roller shutters, the KEEROLL solution has direct communication with the user and the installer.

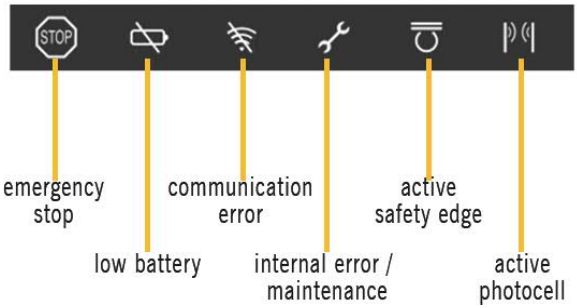
Its capacitive front with illuminated keys provides comfort and security. The door can be opened and closed by any person without the need for technical know-how. The installer requires no initial training in the product.

The control panel can incorporate the most advanced system for detecting obstacles via radio, without wires. Ready to work with RadioBand3 or RadioSens3 to comply with all safety regulations. It's clean, quick and straightforward.

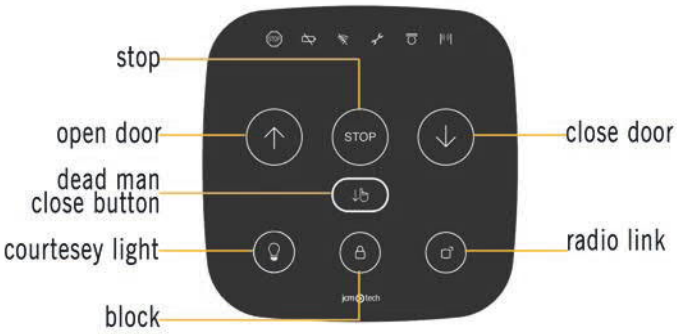


The system complies with standard EN ISO 13849-1: 2008, category 2, PLc.

Indicators



Actions



	Press to open, stop and close the door.
	Press to close the door in dead man mode.
	Block function: KEEROLL control panel incorporates a block button on the cover to prevent the door from being opened accidentally. Press to block the door, key lights ON. The control panel will not be able to move the door neither to receive any transmitter. Useful function to block the door during the night or when going on holiday.
	Adjust courtesy light activation time: The user can set the desired time to leave the courtesy light at on simply by pressing a button on the cover.

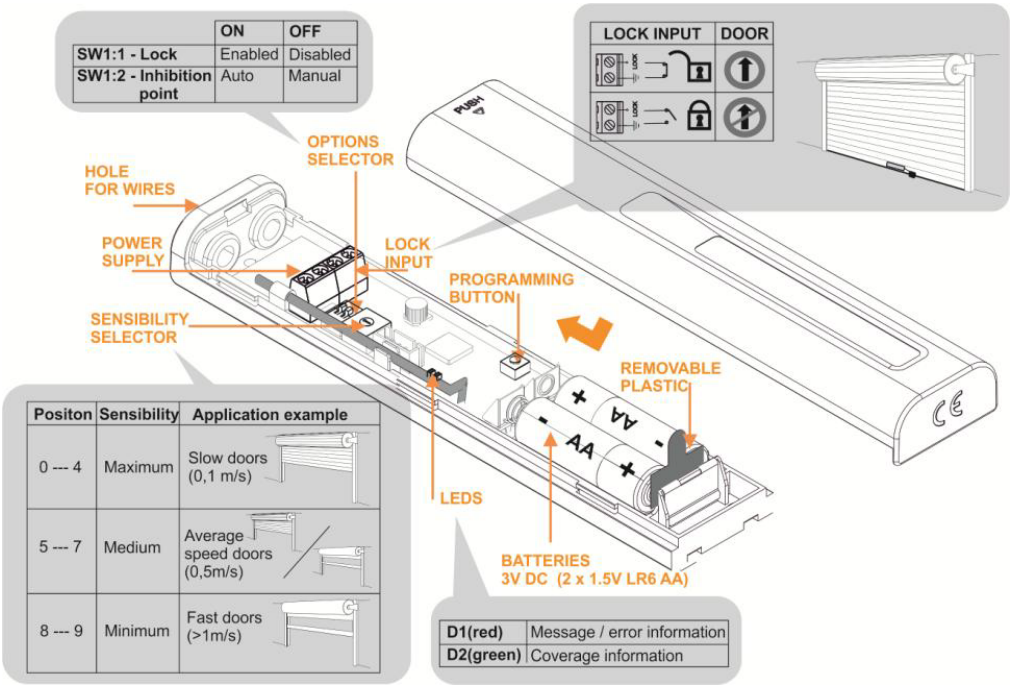
Frontal light	Activation time
1 flash	Manoeuvre time + 1 minute
2 flashes	Manoeuvre time + 5 minute
3 flashes	Manoeuvre time + 10 minute
Fast flashes	Manoeuvre time + 1 second

	New transmitters: The user can program new transmitters simply by pressing a button on the cover (deleting transmitters is an action that is only allowed in installer mode). Door must be in closed position to program new transmitters.
ALARM device is necessary to activate this function	**Alarm function:** With the ALARM accessory it is possible to detect unwanted openings of the door (robbery), enabling the control panel's sound alarm to be activated, or even connecting it to the alarm system already present in the home. Dipswitch 4 at ON. With door totally closed, if someone tries to move it manually, the alarm will be activated. Door must be closed normally for alarm to be set. If closed in deadman alarm may not be set properly. To stop the alarm, press any button of a programmed transmitter.

RadioSens3 System description

RadioSens3 is an impact detection system installed at the last slat of the roller shutter. It detects the obstacle and reopens without causing any damage.

The communication system between the RS3 T868 and the KEEROLL is permanently monitored (two-way link via radio).



Options and sensibility selectors must be set before programming.
Any later change will have no effect.

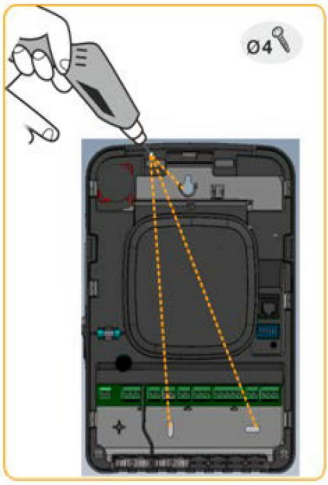
Battery life

Table Battery life in days	Manoeuvres / day			
Manoeuvre time (s)	25	10	5	4
10	320	410	440	450
15	275	375	425	435
20	250	350	410	420
25	220	325	285	410
30	200	300	375	390

Installation

Control panel fixations

Remove the front cover of the control panel. Install the bottom part on the wall in a vertical position, at least 1,5 meters over the ground and in accordance with the assembly instructions below.



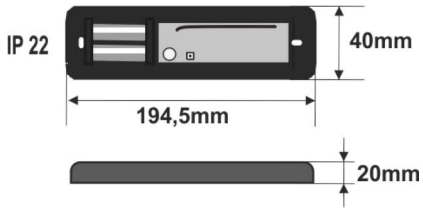
RadioSens3 fixations

Install the transmitter following the steps and recommendations below. Pass the cables through the holes indicated (only if you use the lock connection).

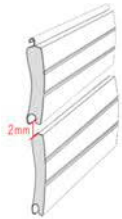
Install the transmitter in a horizontal position, at the middle of the last slat (it must have a tolerance of minimum 2mm of movement). Avoid placing metallic surfaces between the receiver and the transmitter.

It is recommended to use limit switches in the installation and to have them properly connected, or to assure that the door will stop always at the same point. The speed of the door must be uniform.

Options and sensibility selectors must be set before programming. Any later change will have no effect.



The last slat must have a tolerance of minimum 2mm of movement.



First, place the visor on the surface of the door to use it as template to make the holes in the door.

Then place the bottom part of the device. Screw the two pieces together.

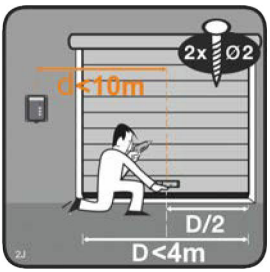
Finally close the equipment with the top cover.

Control panel detects automatically the limit switches in the tubular motor. An adjustment of the limit switches before RadioSens3 installation is requested.

SWIPE TO OPEN COVER

REMOVE COVER

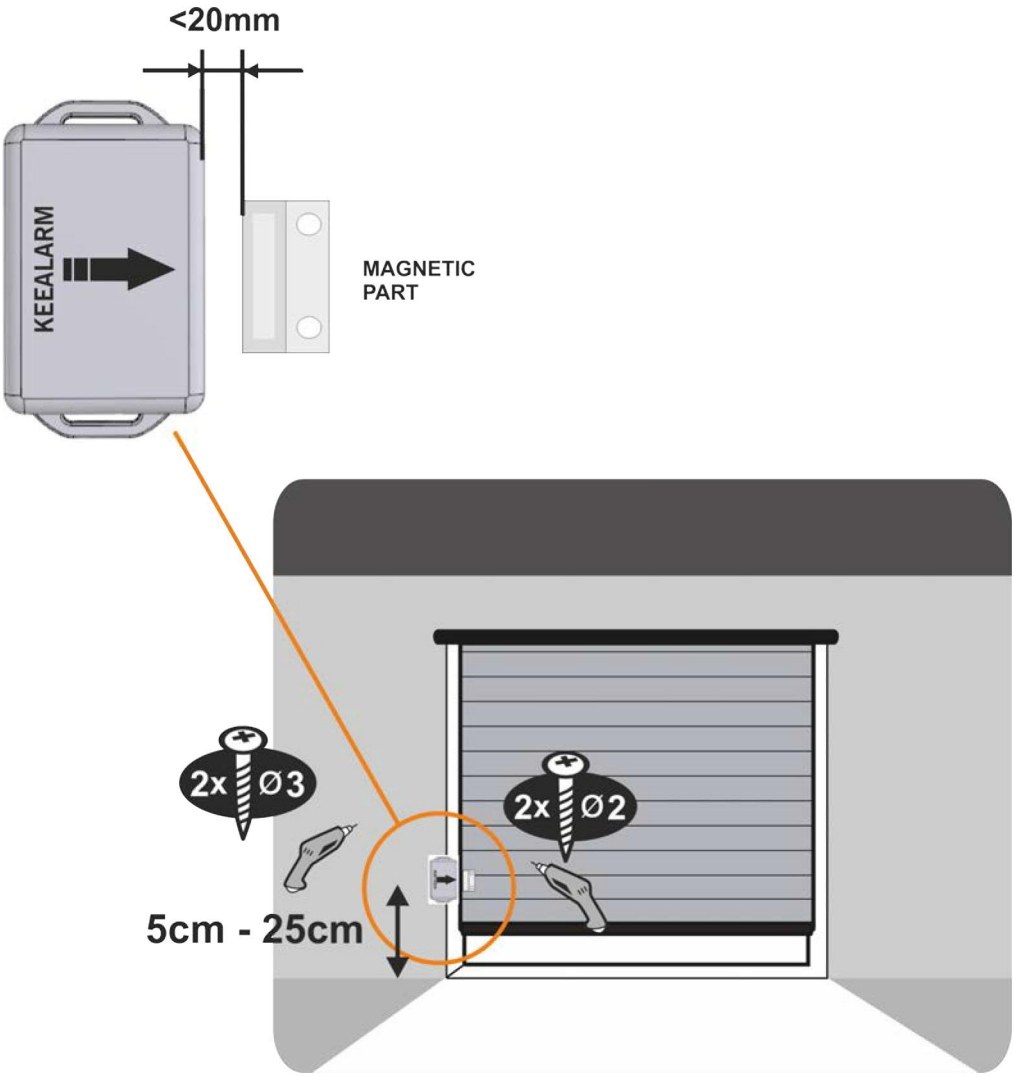
DRILL DOOR



Maximum width of the door: 4 m. Recommended door speed: 0.1m/s or higher (and 17 rpm motors).

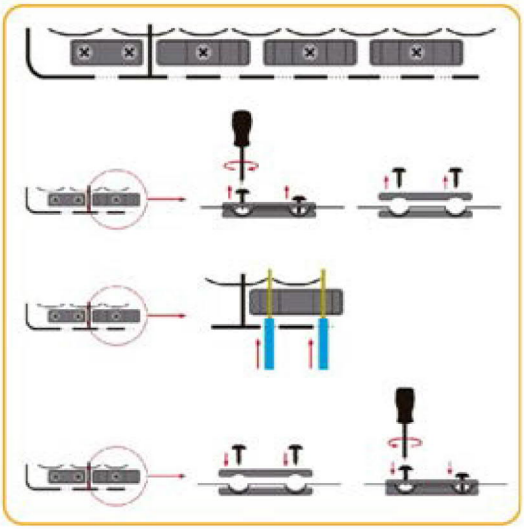
KEEALARM fixations

Before installing the KEEALARM it must be programmed. See " Programming -> KEEALARM programming"

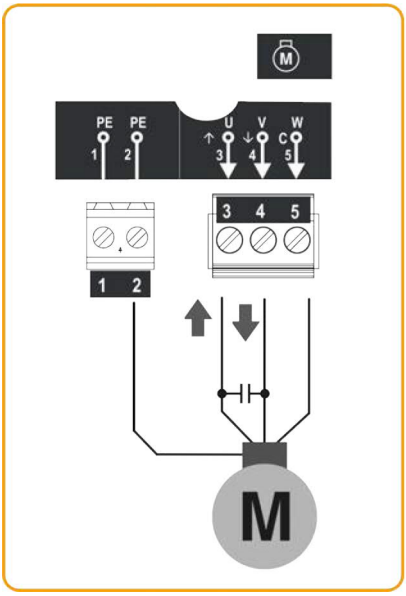


Connections

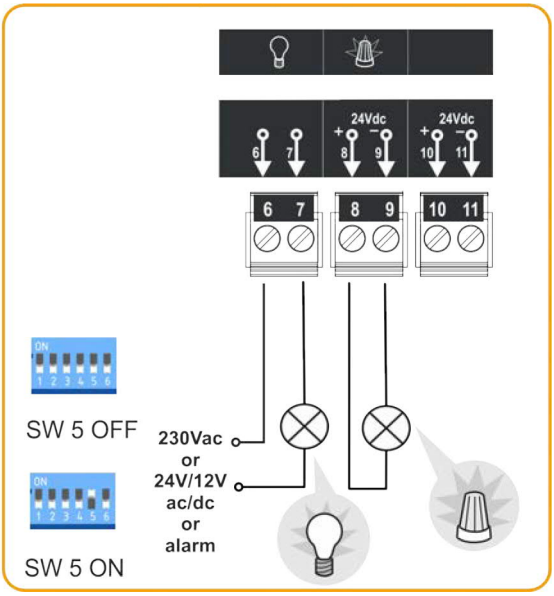
To prevent electric shocks, the equipment must be disconnected from the power supply and all the electrical connections.



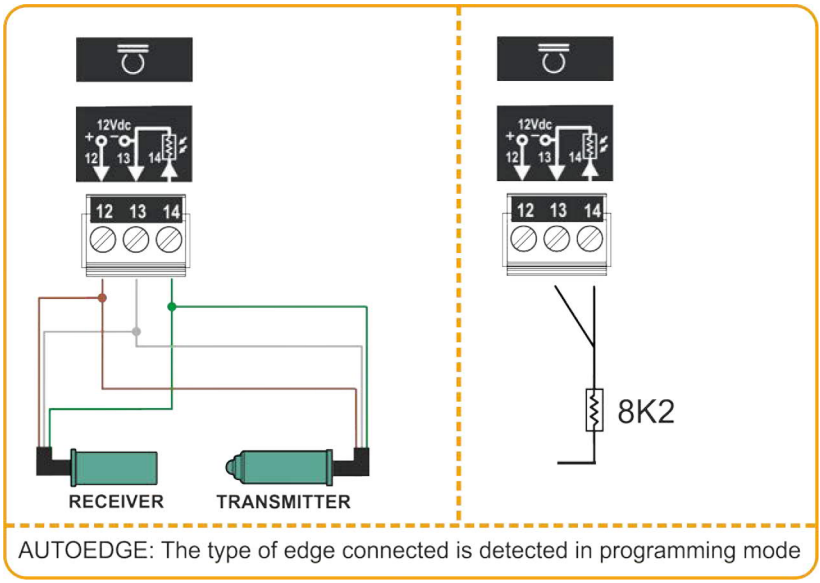
230VAC MONOPHASE MOTOR



OUTPUTS

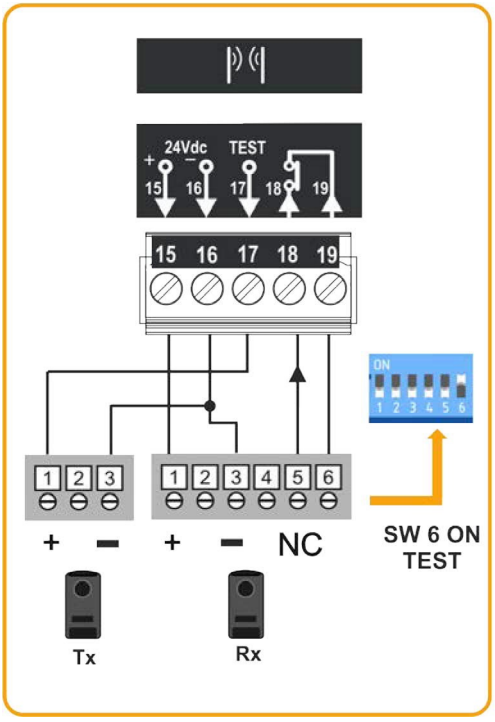


OPTO SAFETY EDGE / 8k2 SAFETY EDGE INPUT (AUTOEDGE)

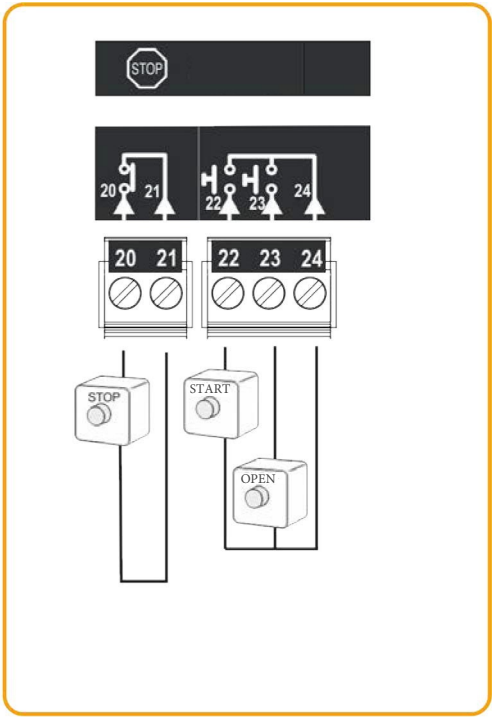


AUTOEDGE: The type of edge connected is detected in programming mode

PHOTOCELL INPUT



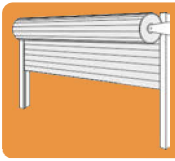
PUSHBUTTONS INPUTS



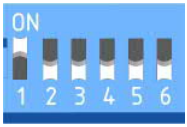
Configuration / Starting up

Connect the power supply

Adjusting limit switch

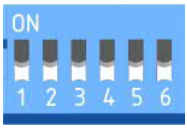


Door MUST BE AT HALFWAY position before starting the limit switch adjusting



Dipswitch 1 at ON. Door will move in dead man mode. Keep pressed or to move the door up and down.

Press , to change the phase of the motor in case the door is not moving in the proper sense.



Dipswitch 1 at OFF to exit dead man mode.

Options selection

Dipswitch function	OFF	ON
1- DEADMAN	Normal operation	Dead man operation
2- AUTOCLOSE	Do not close automatically	Close automatically
3- PRE-FLASH	Pre-flash disabled	3s pre-flash enabled
4- ALARM* (KEEALARM needed)	Alarm function disabled	Alarm function enabled
5- COURTESY LIGHT / ALARM	Courtesy light output	External alarm output
6- TEST PHOTO	Test photocell disabled	Test photocell enabled

*** Optional alarm. JCM can provide you KEEALARM**

Programming

Transmitter programming

Press , key lights ON, a beep will be heard. (Door must be in closed position).

Keep pressed key until reach the desired channel configuration (see below sequence for the different configurations).

Front light	Indication
1 flash	Press the desired transmitter button to activate open / stop / close
2 flashes	Press the desired transmitter button to close the door in deadman mode
3 flashes	Press to activate the courtesy light
4 flashes	Press the desired transmitter button to activate the alarm (KEEALARM needed)
Fast continuous flashes	Multichannel

Press each transmitter button to be programmed, a beep will be heard each time a transmitter is programmed.

Press again to exit radio programming, lights OFF.

Safety elements programming

Enter Installer Mode: Press , the maintenance indictor lights ON, a beep will be heard.

Press the PROG button of RadioSens3 or RadioBand3 transmitters, a beep will be heard once it is programmed. The safety element will be programmed on the first channel of the receiver.

Press again to exit Installer mode, key lights OFF and two beeps will be heard.

Both systems (RadioSens3 and RadioBand 3) cannot be programmed at the same time. Only one of them will be operative.

Manoeuvre programming

Door MUST BE TOTALLY CLOSED before starting the manoeuvre programming.

Enter Installer mode: Press , the maintenance indicator lights ON, a beep will be heard. Select dipswitch 2 at ON:

1-

Press , with the door totally closed, on cover and the control panel will initiate and auto-programming sequence.

2-

Door opens 2 seconds.

3-

Door closes automatically.

4-

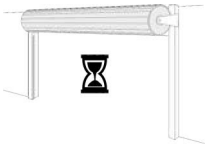
Door stops.

5-

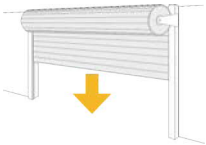
Door opens automatically.

6-

Door stops.

7- 

Autoclose time.

8- 

Press on cover and door closes.

9-

Door stops.

10-

Door opens automatically.
***Only with RadioSens3**

11-

Door closes automatically.
***Only with RadioSens3**

12-

Maintenance indicator lights off. End programming.

By default, RadioSens3 system adds an inhibition zone of maximum 4cm at the end of the closing movement.
To modify the inhibit point: SW1:2 in the OFF position. (Image page 8)

It is possible to change the inhibition zone pushing on when the door is closing (step 11). From this point, RadioSens3 will be inhibited.

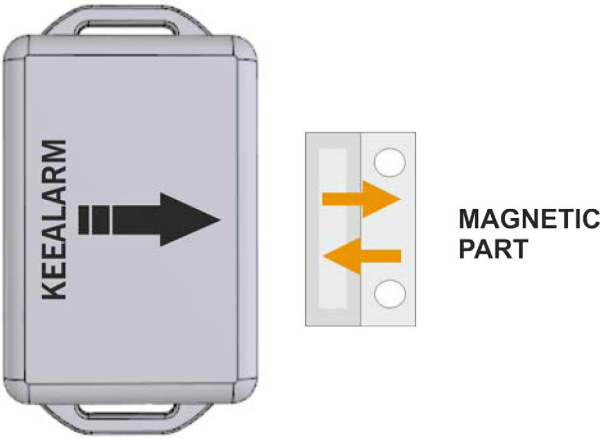
STOP button aborts the programming sequence.

KEEALARM programming

Press , key lights ON, a beep will be heard.

Keep pressed key until reach the 4th channel configuration ("Transmitter programming" table for the different configurations).

In channel 4 configuration (4 flashes), slide the Keealarm device in front of the magnetic part to activate the alarm. A beep will be heard to indicate that the device is programmed.



Verification

Verify that the control panel is working properly

Once the control panel is correctly wired and programmed, check that all the system (accessories included) is working properly.

Transmitter

Press the transmitter button and check that the door opens. Press again, and check that the door stops/closes.

Safety edge

Check that the LED is at OFF.

If it is activated when the door's moving, the LED will turn at ON, indicating the activation of the safety edge.

Photocell

Check that the LED is at OFF.

If it is activated when the door's moving, the LED will turn at ON, indicating the activation of the photocell.

RadioSens3 or RadioBand3 system

Check that the LED is at OFF.

If it is activated when the door's moving, the LED will turn at ON, indicating the activation of the safety element.

KEEALARM

Make sure that the LEDs are OFF

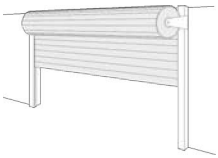
If it is activated when the door's moving, the LEDs will remain at OFF, indicating the activation of the KEEALARM.

Communication's quality

To ensure that the radio communication is good enough, check that the LED is at OFF. If is permanently activated, please check RadioSens3/RadioBand3.

Impact detection adjustment

To adjust the impact detection of the RadioSens3 system, change the sensibility selector between 0 and 4.

Position	Sensibility	Application example
0---4	Maximum	Slow doors (0,1 m/s) 

If the position of the sensibility selector is changed, it is necessary to reprogram the RadioSens3 transmitter on control panel as safety elements programming (not the manoeuvre).

Maintenance

Enter Installer mode: Press , the maintenance indicator lights ON, a beep will be heard.

The following functions can be done inside this maintenance mode.

Program maintenance manoeuvres

Maintenance warning: By entering Installer mode you can set the number of manoeuvres for the maintenance warning.

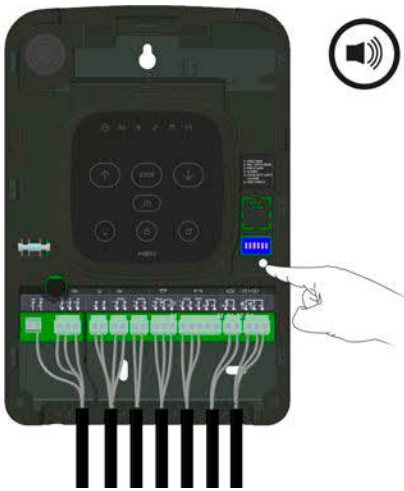
Keep pressing to set up the maximum number of manoeuvres:

Frontal light	Indication
1 flash	2.000 manoeuvres (or one year)
2 flashes	3.000 manoeuvres (or one year)
3 flashes	5.000 manoeuvres (or one year)

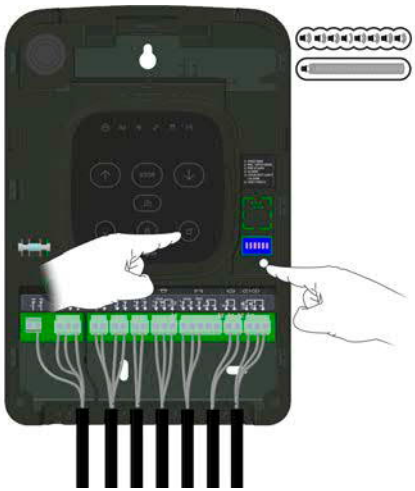
Reset manoeuvres counter

If the maintenance alarm is activated, when you press a few quick flashes will light ON and the number of operations will be set to 0.

Reset transmitters

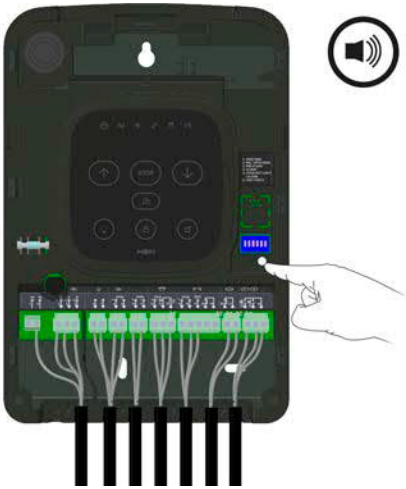


Press and keep pressed until and keys starts flashing, a beep will be heard.

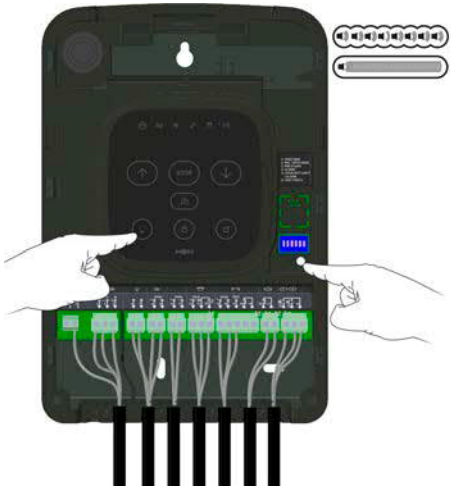


Keep pressed and press , to erase transmitters, some beeps will be heard followed by a long beep.

Reset safety elements



Press and keep pressed until and keys starts flashing, a beep will be heard.



Keep pressed and press , to erase safety elements, some beeps will be heard followed by a long beep.

In case of erasing safety elements, the manoeuvre has to be reprogrammed again. See Programming chapter.

Fuse replacement

When you power supply the equipment, if the frontal panel does not light, remove the front cover and replace the fuse with another fuse with the same characteristics. You have a fuse available on the middle cover for the first time.

RadioSens3

Batteries replacement

If the led is at ON, the RadioSens3 connected is in a low battery state.

Proceed to replace the two batteries for new ones, taking care of the polarity marked on the connector. Check that the new batteries support the same range of temperature that the ones replaced. Do not mix new and old batteries. Battery duration: 2 years approximately.

Battery type: 2 x 1,5VDC LR6 AA

Before throwing away the device, the batteries must be removed and deposited in a collection point.

Technical Data

Technical Data: KEEROLL

Parameter	Value
Power supply range	230 V CA +/-10%
Stand-by / operating consumption	<60 mA / 200 mA
Maximum power supported	1,2 kW
Motor fuses	6 A
Operating temperature	-20 ºC to 55 ºC
Watertighness	IP42
Size (L/W/H)	180,0 x 277,4 x 57,5 mm

Technical Data: Safety elements

Parameter	Value	
	Incorporated receiver	RS3 TGL868
Operating frequencies	Multifrequency system 868 MHz auto-adjustable (Channel 1: 868,700 869,200MHz, Channel 2: 868,000 -868,600MHz; Channel 3: 869,400 869,650MHz; Channel 4: 869,400 -869,650MHz)	
Memory	RBAND3: 3 transmitters or RSENS3: 1 safety element	---
Standby / Operating consumption	---	0,1mA / 12mA
Radiated power	<1mW	
Range (in open field)	50m	
Battery life (approx)	---	See battery life table
Compatible equipments	RB3 T868, RB3 TGL868 and RB3 TGLA868 or RS3 T868, RS3 TGL868	Incorporated receiver
Watertighness	---	IP22
Reaction time (typical)	18 ms (max 48 ms)	
Maximum reaction time when interferences	466ms	
Operating temperature	-20ºC to +55º	

Technical Data: Transmitters

Parameter	Value
	MUV2-HP
Operating frequency	868MHz
Power supply	1x3V CR2032 Battery
Consumption	12mA
Battery life	Approx 2years
Range	100 metres

Troubleshooting

KEEROLL

INDICATOR	ON	SOLUTION
	Emergency stop input activated	
	Low battery detection	Verify the batteries of the safety transmitter
	Radio communication error	Verify the radio signal. Check the batteries, reprogram again or change equipments location.
	ON: Installer mode Flashing: Maintenance warning	See Maintenance chapter
	ON: Closing photocell activation error Flashing: Indicates the reversed movement after a safety detection	
	ON: RS3 / Safety edge activation Flashing: Indicates the reversed movement after a safety detection	
	Flashing: KEEALARM is not sending the signal correctly	Check the batteries, verify that the installation or the programming is ok

In case of any safety error, the door can be moved keeping pressed the or or or any other input controls.

D1 red led	D2 green led	Message / issue	Solution
Flash at beginning of opening	OFF	Control panel asks RS3 correct signal transmitter to start the manoeuvre	---
Flash at beginning of closing	OFF	Indicates calibration failure of RS3 transmitter in open door status	Reprogram the manoeuvre until no calibration failure
ON	OFF	Indicates that the door is passing through the inhibition zones. It is only indicated in the first 25 manoeuvres	
OFF	ON	Indicates very good coverage	
OFF	Flash	Indicates very regular coverage	Align parallel the RS3 transmitter antenna and REC3 antenna
OFF	OFF	Indicates poor coverage or no coverage	Align parallel the RS3 transmitter antenna and REC3 antenna or change equipments location

Notes

Notes

Regulatory Data

EU Declaration of conformity

JCM TECHNOLOGIES, S.A. hereby declares that the product **KEEROLL and RS3 TGL868** complies with the relevant fundamental requirements of the RED Directive 2014/53/EU, as well as with the Machine Directive 2006/42/EC whenever its usage is foreseen; and with the 2011/65/EU RoHS Directive.

The manufacturer **JCM TECHNOLOGIES, S.A.** declares that the products **KEEALARM and MUV2** complies with the relevant fundamental requirements of the RED Directive 2014/53/EU and of the RoHS Directive 2011/65/EU.

See website www.jcm-tech.com/declarations/

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