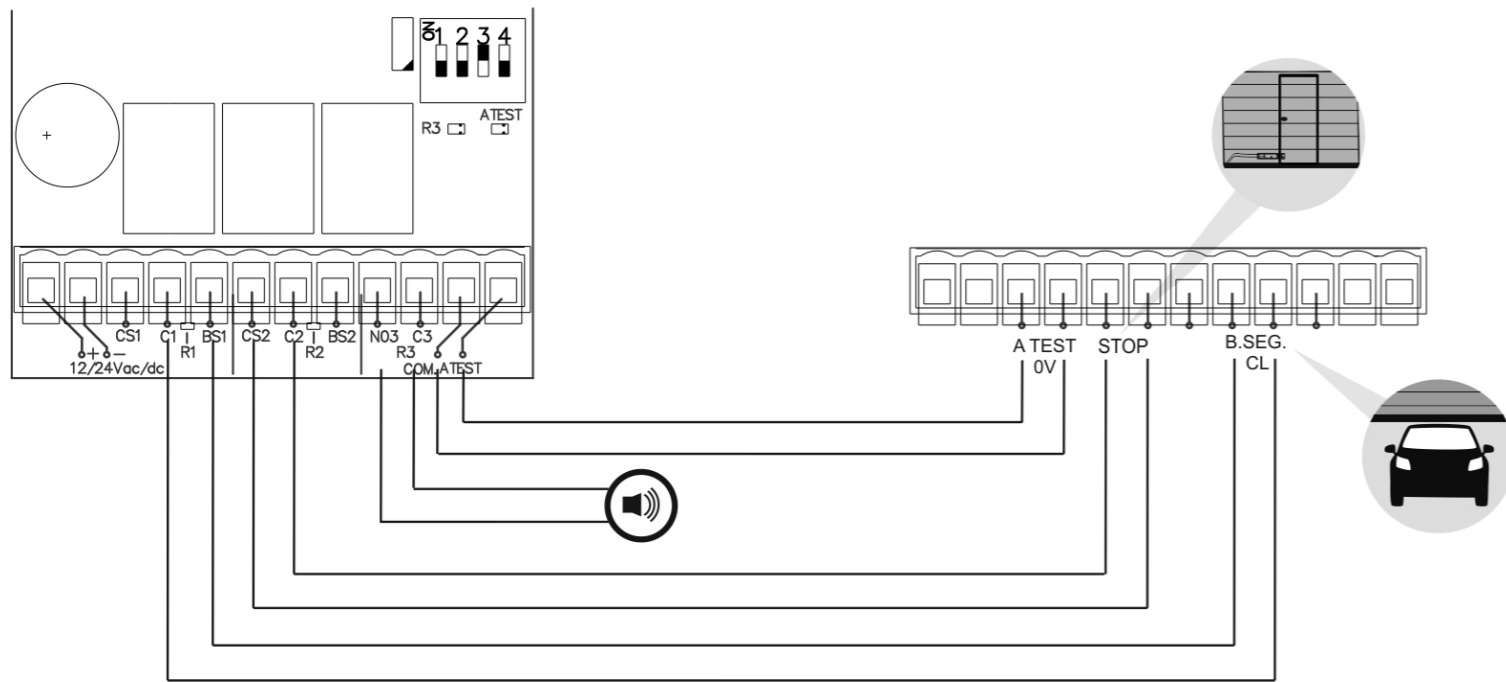


Connection

DOOR WITH 8K2 SAFETY EDGE IN BS1 AND AUXILIARY CONTACT FOR PEDESTRIAN DOOR IN CS2
ATEST POSITIVE POLARITY AND LOW BATTERY INDICATION IN R3



Maintenance

Replacing the transmitter battery

Remove the box cover. Replace the two used batteries with new ones, taking into account the polarity indicated by the connector. **Check that the new batteries support the same temperature range as those they are replacing.**

Replacing a transmitter

If a transmitter becomes damaged the whole system must be reset and replaced, and non-damaged transmitters must then be re-programmed into the receiver.

Use of the system

This equipment is designed to be installed with a safety edge for door and gate installations. It is not guaranteed for directly activating equipment other than that specified. The manufacturer reserves the right to change the specification of the equipment without prior warning.

Important Annex

- Disconnect the power supply whenever you proceed to the installation or repair of the control panel.
- In accordance with the European low voltage directive, you are informed of the following requirements:
 - For permanently connected equipment, an easily accessible connection device must be incorporated into the cabling.
 - This system must only be installed by a qualified person that has experience with automatic doors/gates and knowledge of the relevant EU standards.
 - The instructions for use of this equipment must always remain in the possession of the user.
 - Terminals with a maximum section of 3.8mm² must be used to connect the cables.
 - The frequency of the **WBAND3-TX** system does not interfere in any way with the 868 MHz remote control systems.

ELSON ELECTRÓNICA, S.A. declares herewith that the product **WBAND3-TX** complies with the requirements of the 1999/5/ CEE R&TTE Directive, and complies with the fundamental requirements of the 2006/42/CE Machine Directive, 2004/108/EC Directive on electromagnetic compatibility and 2006/95/EC on low voltage, insofar as the product is used correctly.



WBAND3 - RX

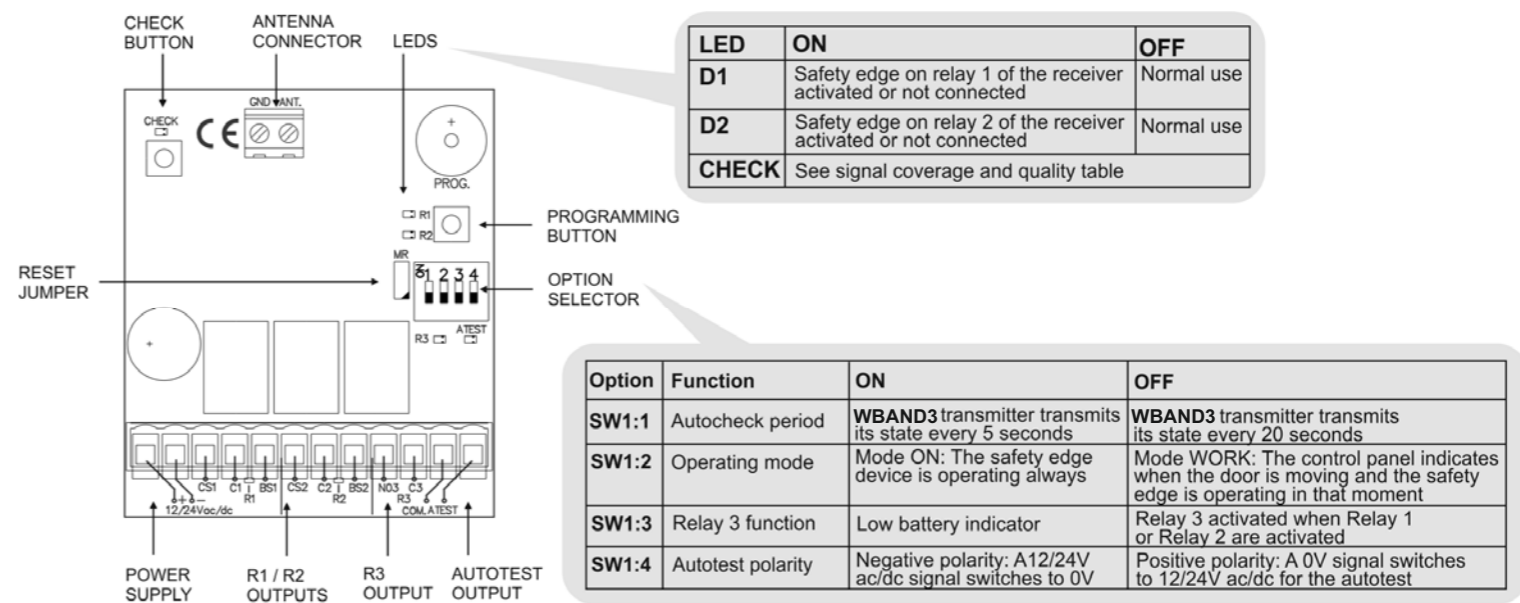
User's Manual

Introduction

The **WBAND3-RX** system is designed of Commercial and Domestic door applications where a safety edge is used. The system provides a wireless system replacing spiral cables or energy chain systems to provide the safety signal to the door or gate control panel. The receiver monitors the status of transmitters connected to it. Up to three transmitters per output can be connected to the receiver. There are two outputs on each receiver that can be connected to the control panel as 8k2 or NC contact. The transmitter is compatible with 8K2 monitored safety edges or electromechanical safety edges (NC contact), and also with standard low voltage optical safety edges and OSE-S7502 optical safety edges. The system complies with EN ISO 13849-1, category 2, PLc.

Technical data

Frequency	Multifrequency system 868 MHz auto-adjustable	Channels	Frequency bands (MHz)
		Channel 1 (*)	868,700 – 869,200
		Channel 2	868,000 – 868,600
		Channel 3	869,400 – 869,650
		Channel 4	869,700 – 870,000
Memory	6 transmitters (3 on relay 1, 3 on relay 2)		
Relay numbers	3 relays		
Power supply	12/24V ac/dc		
Power supply range	9-35V dc 8-28V ac		
Relay contacts	1A		
Consumption standby/operating	Max 255mA		
Autotest signal input	One 12/24V ac/dc input with selectable polarity		
Radiated power	< 25mW		
Operating temperature	-20°C a +85°C		
Seal	IP54 (with IP65 cable glands)		
Box size	82 x 190 x 40mm		
Range	100 metres		



Starting up

Mechanical installation

Fix the back of the box to the wall, using the wall plugs and screws supplied. Install the receiver, close to the door and avoid metal surfaces between the receiver and the transmitter. The transmitter and receiver antenna must be parallel to each other for optimum signal reception. Pass the cables through the bottom of the receiver. Connect the power cables to the terminals of the printed circuit, following the indications of the connections diagram. Store transmitters. Fix the front of the receiver to the back with the screws supplied for the purpose.

Programming transmitter to receiver

The receiver allows programming 6 transmitters (3 for Relay 1 and 3 for Relay 2). Each safety edge transmitter must be learnt into the appropriate channel of the safety edge receiver. A transmitter should only be connected to one receiver.

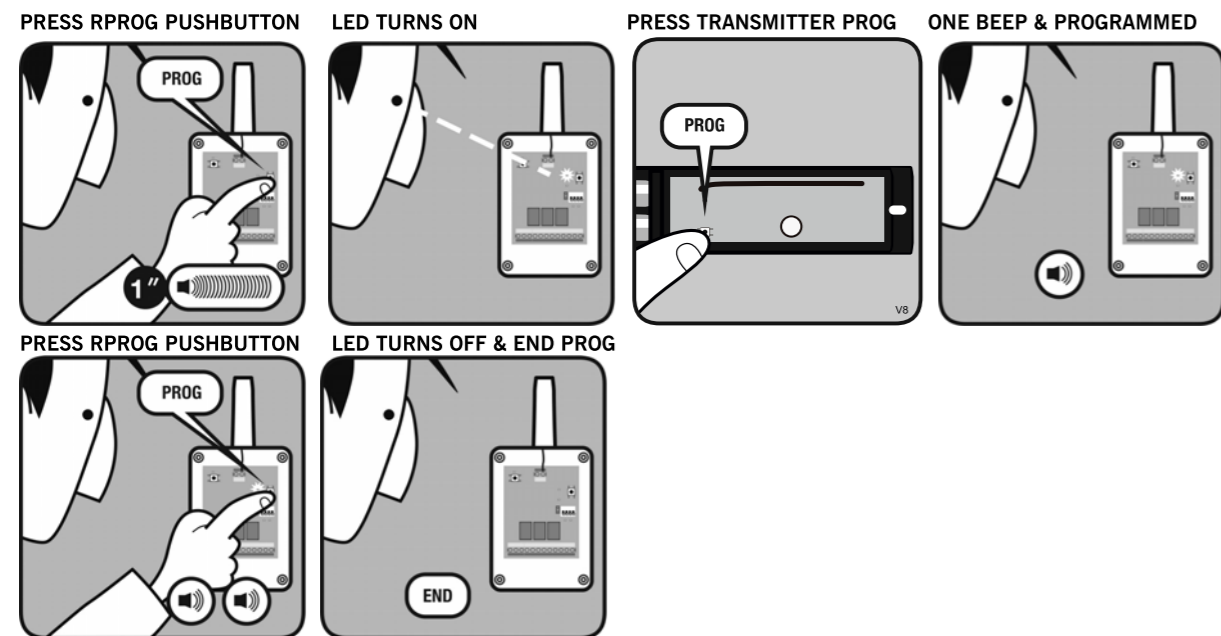
Press PROG button and keep pressed until desired mode selected.

Programming of one safety transmitter (IN1 input)

Mode	Configuration of transmitter programming in the receiver.	Led R1	Led R2
1	Safety edge activates relay 1 on the receiver	ON	OFF
2	Safety edge activates relay 2 on the receiver	OFF	ON
3	Safety edge activates the two relays 1 and 2 at the same time	ON	ON

Programming of two safety transmitters (IN1 and IN2 input)

Mode	Configuration of transmitter programming in the receiver.	Led R1	Led R2
4	Safety edge in IN1 activates relay 1 and safety edge in IN2 activates relay 2	Flashing	Flashing



Autotest signal

Whilst the RadioBand receiver monitors the **WBAND3-TX** transmitter every autocheck period, the system must be tested once each door cycle. This test is done with the autotest signal.

The autotest signal ensures that all of the parts of the safety edge system are ok before the door/gate can operate.

The autotest signal is sent from the door/gate control panel and activates the output from the **WBAND3-TX** receiver. When the door/gate control panel receives this output it allows the door/gate to start.

In **Mode WORK**, this autotest signal is used also to activate/ deactivate the safety edge device.

In order to comply with the EN ISO 13849-1 safety standard, it is necessary to connect the autotest signal.

Check the correct operation

Press each safety edge connected to assure that the appropriate relay on the receiver is activated.

If not, see the Leds and Beeps indication table, to check what is happening and how to solve it.

Maintenance

Leds and beeps indication table

R1/R2 Led	R3 Led		Check Led	Autotest Led	Beeps	Equipment	Message / error	Solution
	SW1:3 OFF	SW1:3 ON						
ON	ON	OFF	OFF	OFF	No beeps	RB3 T	Detection of the safety edge	Verify that the IN1/IN2 led of the RB3 T is at ON when you press PROG button of RB3 T, to check the correct operation.
		ON	OFF	ON	No beeps	RB3 R	Communication failure between RB3 R and RB3 T	Verify the radio signal with the Check function.
ON	ON	OFF	OFF	ON	No beeps	RB3 R	WORK state. The control panel is asking that the output puts in safety state.	---
OFF	OFF	ON	OFF	OFF	4 beeps each 20 seconds	RB3 R	RB3 T low battery	Verify the batteries of the transmitter
ON	ON	ON	OFF	OFF	4 beeps each 20 seconds	RB3 R	RB3 T only one battery connected	Verify and connect the second battery.
OFF	OFF	OFF	ON	OFF	No beeps	RB3 R	Check function. See coverage and signal quality table.	---

System Check

This function has to be used to check the operation and range of all the devices once the installation has been carried out. Press the receiver's **CHECK** button for at least 1 second to enter check mode. The indicator light will come on and four beeps will be heard.

Perform a complete door opening and closing manoeuvre. During the system check a beep will be heard every 1,5 seconds.

CORRECT OPERATION OF THE SYSTEM

If no other acoustic signal is heard on completing the manoeuvre, the system is operating correctly. Either press the **CHECK** button again or wait 5 minutes and the receiver will exit checking automatically, indicating with two beeps that the check has been correct. The check indicator light will go out.

DETECTION OF TRANSMISSION FAILURE

If the communication with a transmitter fails during checking, or the communication is deficient (for instance, too many communication retries or poor coverage), the receiver emits three consecutive beeps, indicating that an error has occurred. Halt the door manoeuvre and press the safety edges installed to detect what has failed.

- If a single beep is heard on pressing a safety edge, this means that the safety edge is correct.
- If three consecutive beeps are heard on pressing the safety edge, this means that the safety edge has failed.

In this event, it is recommended changing the orientation of the transmitting-receiving aerials or installing an AED-868 or FLAT-868 outdoor aerial to ensure the desired range.

On exiting check mode, seven consecutive beeps will be heard and the indicator light will flash continuously.

Perform another system check until the result is correct.

Signal coverage

After pressing one of the installed safety edges, continuous flashes, ranging from 1 to 5, indicate the signal coverage for this safety edge at the time it was pressed.

Number of check LED flashes	Coverage	Result of check
1	Very weak	Safety edge failure
2	Weak	OK
3	Normal	OK
4	Good	OK
5	Very good	OK

Total reset

In programming mode, keep the programming **PROG** button pressed down and make a bridge with the "MR" reset jumper for 3s. The receiver will emit 10 warning sound signals and then more at a faster frequency, indicating that the operation has been carried out. The receiver will stay in programming mode.

If 10 seconds pass without programming a transmitter, the receiver will exit the programming mode, emitting two 1 sec beeps.