jcm tech
technology & imagination

RB3 TGLA868
User Manual

EN

Table of contents

Important safety instructions

> ⚠️ Disconnect the power supply whenever you proceed to the installation or repair of the equipment.

In compliance with the European Low Voltage Directive, we inform you of the following requirements:

- When the devices remain permanently connected, an easily accessible connecting device must be incorporated into the wiring.
- This system must only be installed by qualified professionals that have with automated garage doors and knowledge of the relevant European standards.
- The user instructions for this device must always be in the user's possession.
- The operating frequency of the receiver does not interfere in any way with the 868 MHz remote control systems.

Use of the equipment

This device is designed for applications with an automated garage door. It is not guaranteed for the direct activation of devices other than those specified. The manufacturer reserves the right to change the device specifications without warning.

More tips, interactive demos and online videos.

Introduction

The RadioBand system is designed of domestic, commercial and industrial 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-S7502B and OSE-S7502 optical safety edges.
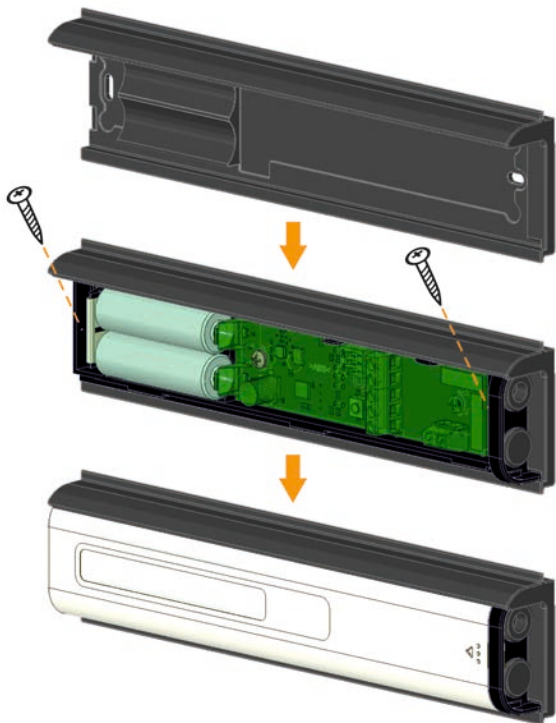
The system complies with EN ISO 13849-1:2015, category 2, PLd.
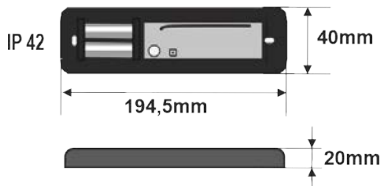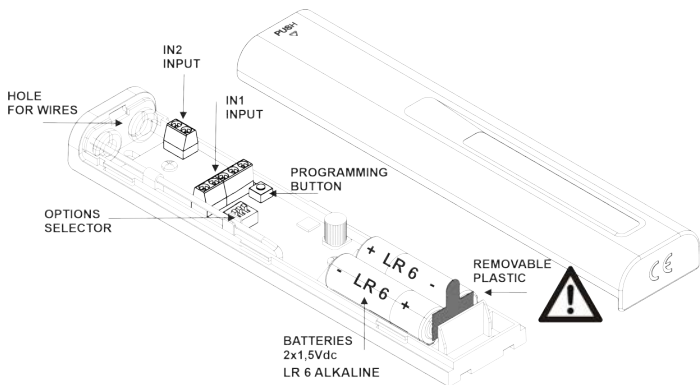
Installation

RUBBER LIP

2x Ø2
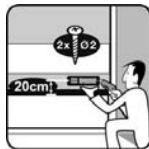
Connection

IN1 Connection	SW1:1	SW1:2
JCM Optical safety edge (OSE-S7502B and OSE-S7502)	OFF	OFF
Standard optical safety edge	ON	OFF
8k2 resistive safety edge	OFF	ON
NC contact*	ON	ON

IN2 Connection	SW1:3
NC contact*	ON
8k2 resistive safety edge	OFF

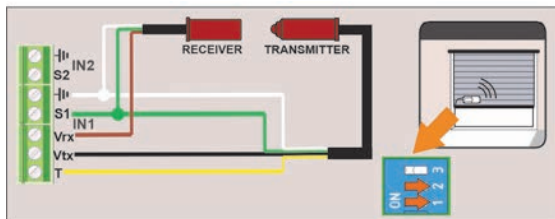*** In order to comply with the EN 12453:2017 safety standard, NC contact input can not be used to connect safety devices.**
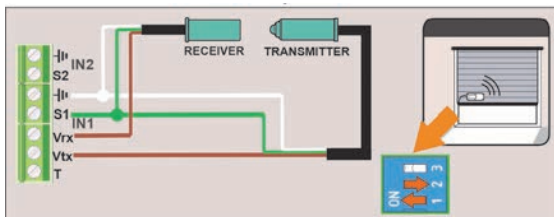
8k2 RESISTIVE SAFETY EDGE / MECHANICAL OR CONTACT DEVICES
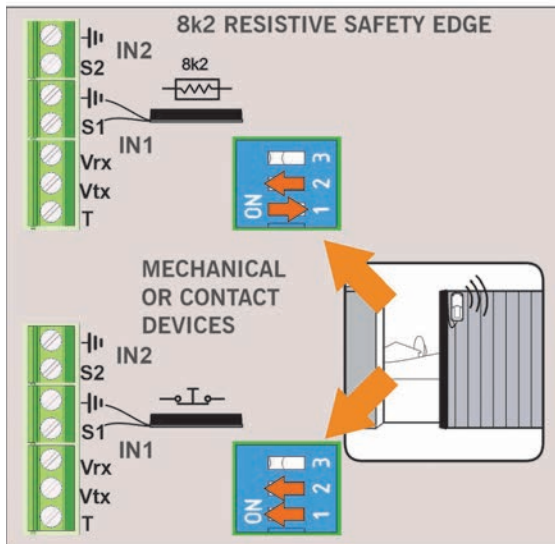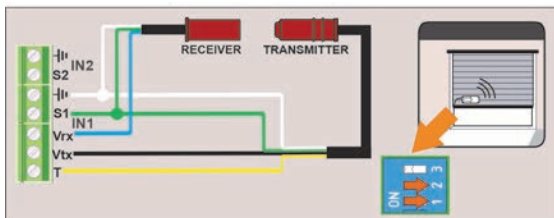

OSE-S7502 "ALWAYS ON" OPTICAL SAFETY EDGE

STANDARD OPTICAL SAFETY EDGE (Only used with ATEST function)

OSE-S7502B "ALWAYS ON" OPTICAL SAFETY EDGE

OSE-S7502B "ALWAYS ON" OPTICAL SAFETY EDGE AND WICKET DOOR CONTACT
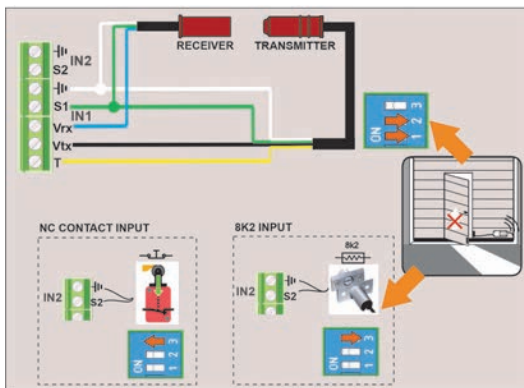
Programming
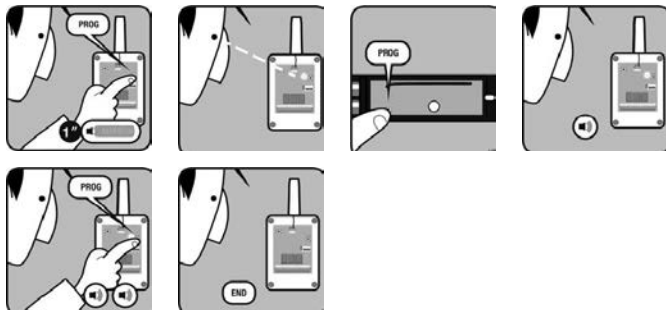
Starting up

IN1 and IN2 connections

See Table IN1 CONNECTION. * These two configurations are supported only if working in WORK mode in the receiver.

In programming mode, the receiver will warn us that it cannot support these configurations, emitting 6 continuous beeps and leaving programming mode.

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	Led R1	Led R2
4	Safety edge in IN1 activates relay 1 and safety edge in IN2 activates relay 2	Flashing	Flashing

Check the correct operation

It is recommended to verify the installation while the leds are active. Each press of PROG button activates the leds for 5 minutes.

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

The status of leds is shown during 5 minutes after pressing PROG button or during the Check function. The rest of the time they are turned off.

IN1/IN2 LED	Beeps	Equipment	Message	Solution
ON	No beeps	transmitter	Safety edge activated	---
OFF	No beeps	RB3 transmitter	Safety edge connection and operating correctly	---
ON	No beeps	RB3 transmitter	Connection/ Configuration error	Check if safety edge is pressed, if not review the connections and configuration and reprogram again
Intermittent	No beeps	RB3 transmitter	The safety edge does not operates well (it is not connected or not programmed)	Connect properly or program the safety edge transmitter on the receiver
OFF	4 beeps every 20 seconds	RB3 receiver	RB3 transmitter low battery	Verify the batteries of the transmitter
ON	No beeps	RB3 receiver	Communication failure between RB3 R and RB3 T	Verify the radio signal with the Check function

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.**

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

Notes

Technical data

Parameter	Value
Frequency	Multifrequency system 868 MHz auto-adjustable
Operating consumption	12mA
Radiated power	< 25mW
Minimum / Maximum range (in open field)	0,20m / 50m
Battery life (aprox)	1,5 Years (standard use with optical safety edge: 4 manoeuvres of 30s a day)
Reaction time (typical)	35ms
Maximum reaction time when interferences	265ms
Operating temperature	-20 ºC to 55 ºC

Regulatory Data

EU Declaration of conformity

JCM TECHNOLOGIES, S.A. hereby declares that the product **RB3 TGLA868** 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.

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

JCM TECHNOLOGIES, SA
C/COSTA D'EN PARATGE, 6B
08500 VIC (BARCELONA)
SPAIN

The system complies with EN ISO 13849-1:2015, category 2, PLd. Certified by TÜV NORD CERT GmbH.