RS3 T868 User's Manual

Introduction

RADIOSENS system is designed for Fast doors and Flat-slat rolling shutters in an Industrial, Commercial or Residential environment. RADIOSENS is an impact detection system installed at the principal edge of the door. It works detecting any obstacle before the strength exceeds regulations limits and then inverting door movement.

RADIOSENS is a wireless system based on an RF transmitter and a receiver card plugged in the control panel which permanently monitors the status of the transmitter programmed.

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

Technical data

Frequency	Multifrequency system auto-adjustable 868 MHz
Standby / Operating consumption	0,1 mA / 12mA
Radiated power	< 1mW
Range (in open field)	50m
Battery life (approx.)	See battery life table





Table Battery life in days	Manoeuvres / day							
Manoeuvre time (s)	300	200	100	50	25	10	5	4
3	180	230	300	370	420	450	470	475
5	130	170	250	330	380	430	460	470
10	(n.r.)	104	170	250	320	410	440	450
15	(n.r.)	(n.r.)	125	200	275	375	425	435
20	(n.r.)	(n.r.)	(n.r.)	170	250	350	410	420
25	(n.r.)	(n.r.)	(n.r.)	145	220	325	385	410
30	(n.r.)	(n.r.)	(n.r.)	(n.r.)	200	300	375	390

(n.r.) = not recommended

(guide values, not tested, with alkaline batteries and at an ambient temperature of 25°C).

Starting up

Mechanical installation

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

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.



Memorizing transmitter into receiver

Receiver only keeps a RS3 transmitter in memory at the same time. This is memorized always as security on closing.



PRESS RPROG PUSHBUTTON





LED TURNS ON

PROG

PRESS TRANSMITTER PROG



LED TURNS OFF AND END PROG



System programming

After memorizing of the desired transmitter, perform the programming of the control panel with the security element memorized. See **programming** section on control panel user's manual.

Note: If you change the position of transmitter RS3, you must perform the system programming again, otherwise RS3 will indicate a safety error, and the door will not work properly.

Maintenance

Table of message/error indication beeps and leds

At power on the equipment, leds D1 and D2 make a flash to indicate the correct power supply.

Equipment	D1 red led	D2 green	Check	Beeps	Message / error	Solution	
RS3 transmitter	Flash at beginning of opening	OFF			Control panel asks RS3 correct signal transmitter to start the manoeuvre		
RS3 transmitter	Flash at beginning of closing	OFF			Indicates calibration failure of RS3 transmitter in open door status	Reprogram the manoeuvre until no calibration failure.	
RS3 transmitter	ON	OFF			Indicates that the door is passing through the inhibition zones. It is only indicated in the first 25 manoeuvres		
RS3 transmitter	OFF	ON			Indicates very good coverage		
RS3 transmitter	OFF	Flash			Indicates regular coverage	Align parallel the RS3 transmitter antenna and REC3 antenna.	
RS3 transmitter	OFF	OFF			Indicates poor coverage or no coverage	Align parallel the RS3 transmitter antenna and REC3 antenna or change equipments location.	
RSEC3	OFF	OFF	OFF	4 beeps every 20 seconds	RS3 transmitter low battery	Verify the batteries of the transmitter	
RSEC3	OFF	OFF	OFF	4 beeps every 20 seconds	Communication failure between RSEC3 and RS3 transmitter.	Verify the radio signal with the Check function.	

Replacing transmitter battery

Remove the box cover. Replace the two used batteries with new ones, considering the polarity indicated by the connector. Check that new batteries support the same temperature range as the replaced ones.

Use of the system

RADIOSENS is designed to be installed in Fast doors and Flat-slat rolling shutters. Other applications than specified are not guaranteed.

Manufacturer reserves the right to change the equipment specification without prior warning

Important annex

Disconnect power supply whenever you proceed any installation or repair of the control panel.

- In accordance with the European low voltage directive, the following requirements are informed:
 - For permanently connected equipments, an easy-access connection device must be provided.
 - This system must only be installed by qualified persons with experience in automatic doors/gates installations and with knowledge of the applicable EU standards.
 - The instructions for use of this equipment must always remain in the possession of the user.
 - RADIOSENS system's work frequency does not interfere with the 868 MHz remote control systems.

JCM TECHNOLOGIES, S.A. declares herewith that the product RS3 T868 complies with the relevant fundamental requirements as per Article 3 of the R&TTE Directive 1999/5/EG, and complies with the relevant fundamental requirements of the 2006/42/CE Machinery Directive, as well as with the ones of the 2004/108/CE Electromagnetic Compatibility Directive and 2006/95/CE Low Voltage Directive, insofar as the product is used correctly.

EC Declaration of conformity See website www.jcm-tech.com

