

Radio channel receiver

RDK-L

868 MHz

Data sheet

Device ID

1. Overview

The radio channel receiver RDK-L (hereinafter referred to as receiver) is intended for receiving alarms transmitted from connected radio channel panic buttons Contact RC-1L and RBR1-L.

The receiver allows to connect simultaneously up to 32 buttons and assign each of them to the required output.

When an alarm from connected panic buttons is received, the state of the appropriate receiver output changes.

2. Manufacturer

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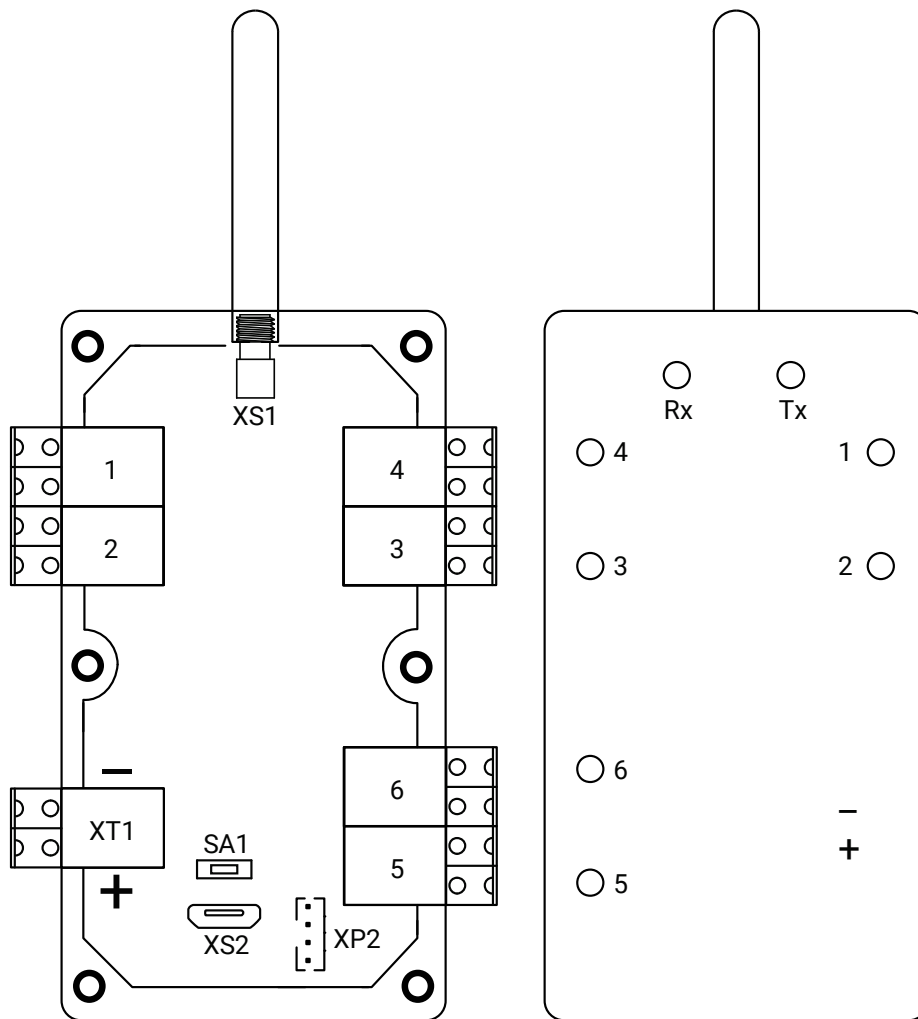
3. Package content

The radio channel receiver RDK-L 868 MHz	1 pc.
868 MHz antenna	1 pc.
Data sheet	1 pc.
Package	1 pc.

4. Technical specifications

Parameter		Value
Frequency range, MHz		868.7-869.2
Maximum receiver emitting power, mW		25
Alarm message delivery acknowledgement		+
Maximum range of stable communication, km, up to	Restrained urban conditions	1
	Medium urban conditions	2
	Open territory	8
	Line-of-sight range	20
Number of panic buttons, up to		32
Number of optoisolated outputs. It's able to switch up to 60 V 100 mA		6
Power supply voltage, V		12±15%
Maximum useful current, mA, up to	Standby mode	30
	Data transmission	100
Dimensions (without antenna), mm		25×70×81
Weight, g, up to		80
Operating temperature range, °C		-40... +60

5. Unit designation



Picture 1. Receiver

Unit	Designation
XS1	Connector for radio channel antenna installation.
XS2	MicroUSB connector.
XP2	Special cable connector for communication with PC USB1 or USB2.
XT1	Connector for power source 12 V connection. Polarity of power source connection is shown on the picture 1 and on the receiver enclosure.
1 ... 6	Optoisolated outputs.
SA1	Button for changing operating modes.

6. Visual indication

Indicator	State	Value
1 ... 6	Flashes	The appropriate output is closed.
	Not flashes	The appropriate output is open.
Rx+Tx	Flash for 1 second	Signal transmitted by the button is received.
	Blinks synchronously every 6 seconds	Work mode of the device (external power is connected).

7. Operation modes

Receiver operation mode is set by the button SA1.

Button	Pressing duration time	Operating mode
SA1 (inside the enclosure)	At least 2 seconds	Mode for adding radio channel panic buttons to the receiver radio system.
	Short pressing	Testing of operational performance of receiver outputs (outputs close for 5 seconds).

8. Receiver setting-up procedures

1. Preselect the appropriate place for receiver installation. The selected place should be away from massive metallic objects, power sources and radio signal sources.
2. Open the receiver enclosure.
3. Connect external devices, to which receiver signals will be transmitted, to outputs **1 ... 6** if necessary.
4. Connect radio channel antenna to the connector **XS1**.
5. Connect power source to the receiver connector **XT1**.
6. Switch the receiver and panic buttons (one-by-one) to the mode for adding to the radio system (see section 7) and add buttons to the receiver radio system.
7. Press the panic button (see panic button manuals) and ensure that the alarm is delivered to the receiver (see section 6).

Detailed information on receiver configuration and operation with panic buttons Contact RC-1L and RBR1-L see in the receiver operating manual.

9. Receiver configuration

Configure the receiver before field installation.

To do this:

1. Connect to the receiver using the general purpose configuration software Ritm.conf¹ or Ritm Configure with the help of cable MicroUSB (connector **XS2**) or "Special cable for PC connection "USB1/USB2" (connector **XP2**).
2. If necessary, add radio channel panic buttons to the receiver radio system. To do this go to the section "Panic buttons" of the receiver configuration software, one-by-one switch buttons to the mode for adding and click the link "Add".
3. Configure the behavior of receiver outputs in the section "Outputs" of the configuration software.
4. Configuring the receiver follow the operating manual available on the official website www.ritm.ru/en.

¹ <http://tiny.cc/ejtj5y>

10. Maintenance

On a regular basis but at least twice a year check safety of contacts and if necessary dress bonding pads.

11. Safety measures

All works related to installation, configuration and maintenance of the receiver should be performed in accordance with the Electrical installation code and by qualified personnel. The receiver is a safe device, the maximum power supply voltage level is 12 V.

12. Transportation and storage

The receiver should be transported in a package, in closed vehicles. Conditions of storage and transportation should follow storage conditions 3 according to the GOST 15150. Storage areas should be free from current-conducting dust, acid and alkali fumes as well as active gases able to corrode isolation.

13. Manufacturer warranty

The manufacturer warrants conformity of the receiver to the specification requirements provided the transportation, storage, mounting and operation conditions are observed by the consumer.

Warranty operating life – 12 months from the date of commissioning, but no more than 18 months from the date of manufacture.

Warranty shelf life – 6 months from the date of manufacture.

The manufacturer reserves the right to make changes, not deteriorated of receiver functionality without previous notice of consumers.

14. Reclamation details

In case of receiver failure or defect in the warranty period take a fault report stating the date of device manufacture and commissioning, nature of a defect.

Send the faulty receiver with the fault report to the purchase address or to the manufacturer.

Notes

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