RiDom

Keyfob «Ri-Key-1i»

Installation guide

1 GENERAL INFORMATION

1.1 The «Ri-Key-1i» control keyfob (hereinafter referred to as the Keyfob) is used in the RiDom smart home security system for the manual generation of control commands and notifications as well as their transmission via a bidirectional radio channel in accordance with the «Ri-Contact-Ri» protocol.

1.2 The Keyfob operates as part of the RiDom smart home security system, communicating with the «Ri-HUB-1» control center (hereinafter referred to as the Hub), which supports the «Ri-Contact-Ri» radio channel exchange protocol.

1.3 The Keyfob does not require any registration or licensing as a radio frequency device.

1.4 The Keyfob has three buttons for transmission of control commands.

1.5 The Keyfob work status is shown by a two-color LED indicator.

1.6 In case if the battery voltage drops below 2.4-0.4 V, the Keyfob ensures the transmission of the notification «Battery Discharge» over the radio channel.

1.7 The Keyfob is resistant to electromagnetic interference.

2 SPECIFICATIONS

Table 1

| Parameter	Value
Frequency range	865...867 MHz
Radiation power, no more	25 mW
Protection class	IP54
Battery type	CR2450, 1 pc
Duration of operation of the keyfob under normal climatic conditions and at an average frequency of use at least twice a day	12 months
Dimensions	38x67x18 mm
Weight	25 g
Average service life	8 years
Operational conditions	
Operating temperature range	-20... +55 °C
Permissible air humidity at a temperature of +25 °C, without moisture condensation	Up to 98 %

3 SCOPE OF SUPPLY

Table 2

Name	Qty.
Keyfob «Ri-Key-1i»	1 pc.
Lithium battery CR2450	1 pc.
Installation guide for the «Ri-Key-1i»	1 copy

4 VIEW AND DESIGN

The Keyfob consists of the following parts (see Picture 1): case base and case cover (1) with a printed circuit board (2) mounted inside. The battery holder (3) is located on the printed circuit board. There are three the following elements of the case cover: LED indicator (4), buttons for the control commands transmission (5,6,7).

When working together with the control panel, the buttons for control commands transmission can be used as follows:
- button 🔒 (5) is used to arm the security system;
- button ◯ (6) is used to transmit the «Alarm» signal;
- button 🔓 (7) is used to disarm the security system.
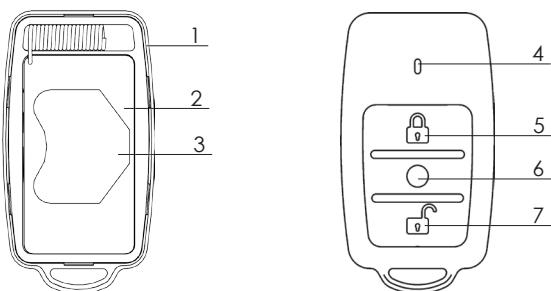
Picture 1 – «Ri-Key-1i» view

5 INDICATION

The Keyfob generates the following types of indication signals:
- «Linking» mode indication (registration of the key fob in the hub);
- «long pressing» indication turns on when any button is held down for 2 seconds or more;
- «status» indication turns on for 3 seconds upon receiving of the appropriate command from the Hub;
- «Alarm memory» mode indication turns on for 15 minutes after pressing the button for transmitting the «Alarm» notification, provided that this notification is successfully delivered to the Hub;
- «No communication with the Hub» indication turns on for 3 seconds if the Hub does not respond to messages from the Key fob;

The indication modes showing the status of the Keyfob operation are listed in Table 3.

Table 3

Key fob status	Indication	Notes
«Linking» mode	Intermittent green light LED	Registration of the Keyfob in the Hub
«Linking» mode completion	Turning on the indicator light in red for 2–3 s	
«Long pressing» indication	Turning on of red-light LED	
Long button press indication	Turning on of the red LED indicator	
Button click was delivered	Turning on of the red LED indicator light for 3 seconds	
«Alarm memory» mode indication	Periodic red light LED every 15 seconds for 15 minutes	Alarm signal was sent to the HUB
No communication with the Hub	Alternately turning on the red and green light LED for 3 s	
Connection quality assessment	See section «CONNECTION QUALITY ASSESSMENT»	

6 CONNECTING THE KEYFOB TO THE SYSTEM

6.1 Open the RiDom application. In the My Devices tab, click ➕ and then press **Add device** button. Select the «Ri-Key-1i» from the list of devices and follow the prompts of the application.

6.2 Open the Keyfob case, install the battery in the holder, close the case.

6.3 Make sure that when you press any of the buttons, the indication turns on.

6.4 Press and release any button, the Keyfob will periodically turn on the green indicator; this shows that it is in the «Linking» mode. The Keyfob stays in the «Linking» mode for 3 seconds.

6.5 In the absence of the any indication, press and hold all three buttons together for 2 seconds or more; the indicator should turn green after that. Hold the buttons until the indicator turns red.

7 OPERATION SPECIFICS

7.1 The Keyfob contacts the Hub only after releasing all pressed buttons.

7.2 If three buttons are pressed at the same time, the Keyfob will not communicate with the Hub.

8 CONNECTION QUALITY ASSESSMENT

In order to determine if it is possible to use the Keyfob in a given location, it is recommended to do the following:
- simultaneously press and release buttons (5) and (7);
- make sure that the Keyfob has not generated an indication of the lack of communication with the Hub;
- wait for the completion of the status indication, if the corresponding command has been transmitted.

After that, the Keyfob will display the quality of radio communication with the Hub in accordance with table 4.

Table 4 - Communication quality assessment

Indication		Connection quality	Recommendations
Color	Mode		
Green	Three blinks	Perfect	Can be used
Green	Two blinks	Good	
Green	One blink	Weak	
Red Green	Alternate switching	No connection	Use a repeater

9 STORAGE AND TRANSPORTATION

9.1 The Keyfob in their original packaging are resistant to:
- transport jolting with the acceleration up to 30 m/sec² at impact frequency range from 10 to 120 per minute or 15 000 strikes;
- ambient temperature range minus 50 ... +55 °C;
- relative air humidity (95 ± 3) % at a temperature +35 °C.

9.2 The Keyfob in original package may be transported by any means of transportation in closed vehicles over any distances in compliance with the existing shipping rules concerning the respective means of transportation.

9.3 After transportation under the conditions different to exploitation conditions the Keyfob shall be ready to operate after a maximum of six hours.

9.4 During storage period lithium batteries should be removed from the holders or isolators should be installed.

Note: The storage premises should not contain any current-conducting dust, acid and alkali fumes, or corrosive or destroying insulation gases.

10 DISPOSAL INFORMATION

10.1 The Keyfob does not contain precious metals, hazardous or toxic substances that can harm human health or the environment, and does not pose a danger to life, human health and the environment at the end of its service life.

10.2 In this regard, the disposal of the Keyfob can be carried out according to the rules for the disposal of general industrial waste.

11 MANUFACTURER WARRANTY

11.1 LLC NPP RIELTA guarantees that the Keyfob meets the requirements of technical specifications within 39 months from the date of manufacture, subject to the conditions of transportation, storage, installation and operation.

11.2 Warranty period of operation of the Keyfob is 36 months from the date of commissioning within the warranty period of storage.

11.3 If during the warranty period the Keyfob, which is subject to the rules of transportation, installation and operation, is found to be inconsistent with the requirements of the technical specifications, it is to be replaced or repaired by the manufacturer.

12 DATE OF MANUFACTURE

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month, year

ridom.ru

Made in Russia

v10/v10R