



# Siren «Ri-S-1i»



Installation guide

### **1 GENERAL INFORMATION**

1.1 Siren «Ri-S-1i» (hereinafter referred to as the Siren) is used to inform people about alarm events by generating sound and light signals.

1.2 The Siren works as part of the RiDom smart home security system,

communicating with the «Ri-HUB-1i» control center (hereinafter referred to as the Hub) using the «Ri-Contact-Ri» radio protocol.

1.3 The Siren does not require any licensing and registration as a radio frequency device.

1.4 The Siren generates and transmits the following notifications over the radio channel:

the normal status - in case of absence of other notifications:

- failure of the main power supply – when the battery supply voltage drops below  $(2.5 \pm 0.2)$  V;

- failure of the backup power supply – when the battery supply voltage drops below  $(2.4 \pm 0.2)$  V;

- turning on the notification – when the notifications are turned on;

operation in the «Linking» mode – when the Siren is registered in the system;

operation in the «Identification» mode - when the identification indication is turned on:

quality of communication – when the «TEST» button is pressed.

1.5 The frequency of regular radio exchange sessions with the transfer of the status data is set by a command from the Hub with the following sequence: 10 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min. Alarm notifications are sent immediately.

1.6 The Siren remains operational in standby mode being powered from the built-in battery up to 10 years or 6 hours of continuous sound and light notification mode.\*

1.7 The Siren is made for continuous round-the-clock operation. The Siren is resistant to electromagnetic interference.

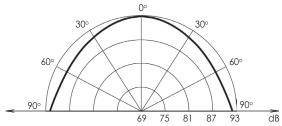
# 2 TECHNICAL SPECIFICATION

Table 1

Parameter	Value			
Frequency range	865867 MHz			
Radiation power	25 mW			
Sound pressure level at 1 m	> 85 bBA			
Beep frequency	2 – 5 kHz			
Average power consumption in standby mode*	< 15 µA			
Average power consumption in light alert mode	< 90 mA			
Protection class	IP41			
Battery type	CR123A, 1 piece			
Overall dimensions	125x75x45			
Weight	0,25 kg			
Average service life	8 years			
Operational conditions				
Operating temperature range	-20 +55 °C			
Permissible air humidity at a temperature of +40 $^{\circ}$ C, without moisture condensation	93%			

<sup>\*</sup> With a broadcast period of at least 60 seconds, no radio interference and normal conditions.

A typical radiation pattern of the siren's sound channel is shown in Figure 1.



Picture 1 - Directional diagram

### **3 SCOPE OF SUPPLY**

Table 2

Name	Qty
Siren «Ri-S-1i»	1 pc.
Screw 3-3x40.016	1 pc.
Dowel (SORTMAT)) NAT 5x25	2 pcs.
Lithium battery CR123A	2 pcs. 1 pc.*
Installation guide for the «Ri-S-1i»	1 сору
* Included	'

### 4 SAFETY MEASURES

There are no life-threatening voltages in the Siren.

The Siren is shown in Picture 2. The Siren consists of:

- red diffuser window (1);

- battery cover (2);

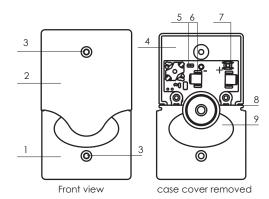
- case base (4) with two holes for fastening to the wall (3); - pin contacts «RESET» (5);

- lithium batteries with holder (6);

- buttons for checking the quality of radio communication «TEST» (7);

- two slides for the battery cover (8);

- red and green LED indicators (9).



Picture 2 - «Ri-S-1i» view

# **5 INDICATION**

Table 3

Siren status	Indication	
«Linking»	Periodic green LED light	
«Linking complete»	Short-term (2 s) turning on of the red LED indicator	
«Identification»	Alternating red and green indicators	
«Connection quality»	See table 4	

# **6 CHOOSING PLACE OF INSTALLATION**

6.1 The Siren should be installed indoor only.

6.2 The distance of radio signals in the conditions of each particular room can vary greatly, therefore, before the final installation of the Siren, it is recommended to evaluate the quality of communication (see paragraph 8).

# Do not install the Siren under the following conditions:

In close proximity to electrical wiring.

- 2. Near metal objects and mirrors that cause fading of the radio signal or shield it.
- 3. Closer than 1 m from power lines and metal water and gas pipes;
- 3. Outdoors.
- 4. In rooms with temperature and humidity outside the allowable.

# **7 CONNECTING THE SIREN TO THE SYSTEM**

7.1 Open the RiDom application and click in the My Devices tab. Then press Add device button. Select the «Ri-S-1 i» Siren from the list of devices and follow the prompts in the application.

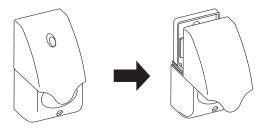
7.2 Remove the battery section cover of the Siren by holding the diffuser and pulling the cover up (see Picture 3).

7.3 Remove the insulator as prompted by the application.

7.4 Close the «RESET» contacts on the board with a screwdriver until the indication «Linking» appears.

7.5 Perform linking. Upon successful connection to the Hub, the indicator on the Siren will turn red for 2-3 seconds, then you can see the Siren in the application, as well as all the essential information about it.

The linking mode time is limited to 100 seconds, after which the Siren goes into sleep mode. To resume the «Linking» mode it is necessary to briefly close the ((RESET)) contacts with a screwdriver for 2-3 seconds.



Picture 3

### **8 CONNECTION QUALITY ASSESSMENT**

- 8.1 Bring the Siren to the place of installation.
- 8.2 Press the «TEST» button for 1 second.
- 8.3 Check the quality of communication between the Siren and the Hub indicated by the LEDs (see Table 4).

Table 4 - Indication of the results of communication quality control

	Indication Connection Recommende		Recommendations	
Color	Mode	quality	kecommendations	
Green	Three blinks	Perfect	Installation in this	
Green	Two blinks	Good	location is allowed	
Green	One blink	Weak	Choose a different installation location or use a repeater	
Red	Multiple blinks	No connection		
* «Ri-R-1i»				

### 9 MOUNTING

- 9.1 After selecting the installation location for the Siren, make markings on the place of installation for easier mounting. The case can be used for marking (see picture 2).
- 9.2 Install the battery cover. In order to install the cover, hold the diffuser, insert the cover into the guides (8) and press until it stops (see picture 3).
- 9.3 Fasten the Siren in the selected location with screws using the mounting holes (3).

# **10 DISPOSAL INFORMATION**

- 10.1 The Siren does not contain precious metals, hazardous or toxic substances capable of harming 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 Siren can be disposed of in accordance with the rules for the disposal of general industrial waste.
- 10.3 Dispose of batteries by handing over the used batteries to a trade organization, service center, equipment manufacturer or an organization that accepts used batteries and accumulators.

# 11 STORAGE AND TRANSPORTATION

- 11.1 The Siren in the package should withstand the following conditions during transportation:
- transport shaking with an acceleration of 30 m/s<sup>2</sup> at a frequency of impacts from 10 to 120 per minute or 15,000 impacts with the same acceleration:
- ambient air temperature from minus 50 to +55  $^{\circ}$ C;
- relative air humidity 95±3% at temperature +35 °C.
- 11.2 The Siren in the shipping package of the manufacturer may be transported by any mode of transport in covered vehicles for any distance, in accordance with the rules for the carriage of goods for the respective modes of transport.
- 11.3 During the storage of the Siren, lithium batteries must be removed from the holders or the insulators must be installed.
- 11.4 The activation time of the Siren after transportation in conditions different from the operating conditions is at least 6 hours.

### 12 MANUFACTURER WARRANTY

- $12.1\,\text{LLC}$  NPP RIELTA guarantees that the Siren meets the requirements of technical specifications within 39 months from the date of manufacture, subject to the conditions of transportation, storage, installation and operation.
- 12.2 Warranty period of operation of the Siren is 36 months from the date of commissioning within the warranty period of storage.
- 12.3 If during the warranty period the Siren, 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.

Note - Lithium batteries are not covered by the warranty.

### 13 DATE OF MANUFACTURE

month, year	



Made in Russia

v10.2