

# C.Nord

# WIRELESS SOUNDER «CN-Siren»

#### **Installation Guide**

# 1 Product Overview

- 1.1 Wireless sounder «CN-Siren» (hereinafter, the sounder) is intended for informing people about a fire or other emergencies by generating an audible alarm.
- 1.2 The sounder is intended for operation as a component of a system that is operated by a control panel (hereinafter, CP), supporting «CN-Contact-R» wireless two-way data exchange protocol.
- 1.3 The sounder is switched on and off by means of CP, and it's operation modes are assigned by commands from the CP.
- 1.4 The sounder monitors and transmits messages upon removal from it's base or upon discharge of both main and backup batteries.
- 1.5 The following rates of control radio exchange may be assigned: 10, 15, 30, 60 sec, 5 or 10 min.
- 1.6 The sounder can operate in a continuous or pulsed audible-alarm modes.
- 1.7 Pulse-mode parameters can be set by the user in the process of the sounder adjustment.
- 1.8 The sounder operation mode is displayed by a two-color LED indicator.
- 1.9 Two frequencies in the 433.05 to 434.79 MHz frequency range are used for wireless signal exchange with the CP the main frequency and the reserve one. The sounder swithes to the reserve operating frequency automatically in case of radio-frequency interference on the main one. Transmitter power does not exceed 10 mW.
- 1.10 The sounder is powered by two CR123A batteries, the main and the backup one.
- 1.11 The batteries' respective service-time capacities in a standby mode (with a signal-monitoring interval of at least 30 sec) are as follows:
- main power-supply battery at least 60 months or at least 2 months in continuous operation mode;
  - backup power-supply battery at least 2 months.
- 1.12 The sounder is designed to operate continuously around the clock in closed premises of residential and industrial buildings and structures.
- 1.13 The sounder is resistant to the impact of electromagnetic interference.

#### 2 Principal Technical Characteristics

Table 1

Tuble 1			
Features	Value		
Acoustic pressure level at 1 m distance from the sounder, not less than	85 dB		
Generated alarm signals frequency	2000 to 4000 Hz		
Operating temperature	from minus 20 to +55 °C		
Permissible humidity (at temperature 35 °C):	93 %		
IP rating	IP40		
Dimensions, max	⊘ 121 x 54 mm		
Weight (without power-supply batteries), max	0.2 kg		
Battery life, not less than	10 years		

# 3 Scope of Delivery

Each sounder unit package contains the items listed in Table 2. Table 2

Name	Qty
«CN-Siren» wireless sounder	1 pc.
Screw 3-3x30.016	2 pcs.
Wall plug NAT 5x25 SORMAT	2 pcs.
CR123A lithium power-supply battery	2 pcs.
«CN-Siren» wireless sounder. Installation Guide	1 сору

#### 4 Informativity

The sounder generates and transmits the following messages to the CP via wireless communication:

- «Norm»;
- «Tampering»;
- «Main power-supply low-battery» if power-supply voltage drops below (2.4  $\pm$  0.2) V during a regular communication session;
- «Backup power-supply low-battery» if power-supply voltage drops below (2.4  $\pm$  0.2) V during a regular communication session;

The sounder displays one of it's operation modes as specified in Table 3 (LED indication).

#### **5 Sounder Design**

The sounder outside view is shown in Figure 1.

The sounder consists of a base (1) and case (4). The base comprises the oval holes (2) for it's fastening to the mounting surface. The case is fastened to the base with latches (3).

There is a two-color LED indicator (5) on the front surface of the case. There are contacts (6), the main power-supply battery holder (7) and the backup power-supply battery holder (8).

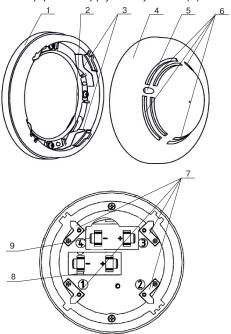


Figure 1

#### **6 LED Indication**

Table 3

Sounder Status	LED Indication
«Binding» mode	LED indicator blinking green
«Binding is completed»	Short-term (2 sec) LED indicator lighting red
«Identification» LED indication	Alternate LED indicator lighting green and red
«Communication Quality Appraisal»	See Table 4

# 7 Switching On and Setting Up

- 7.1 Remove the sounder from it's base.
- 7.2 Install the main power-supply battery and the backup one.
- 7.3 Provide a tmporary connection between the «-» contact of either power-supply battery holder and contact «4» on the sounder base.
  - 7.4 Make sure the LED indicator is blinking green (binding mode).
- 7.5 Perform the procedure of the sounder binding to the CP in accordance with the CP operation manual.
- 7.6 Make sure that the LED indicator blinked red once for a moment.

 ${f Note}$  – The binding mode is active for 100 sec. Sect. 7.3 should be repeated in order to resume the binding procedure.

### 8 Installation Recommendations

- 8.1 Appraise communication quality at the place where you intend to install the sounder (see Sect. 9).
- 8.2 Install the sounder at a place where communication quality is appraised as "excellent" or "good".
  - 8.3 Install the base at the chosen location.
- 8.4 Make sure that the base contacts 2 and 3 are closed with a wire jumper.
- 8.5 Insert the sounder into the base and lock it by turning clockwise to it's fully latched position.

# 9 Communication Quality Appraising

- 9.1 Insert the sounder into the base and lock it by turning clockwise to it's fully latched position. Wait for 3 sec.
- 9.2 Remove the sounder from the base and appraise communication quality by means of LED indication as shown in Table 4.
- **Note** The delay up to 4 sec between tampering and LED indication switching is possible.

LED in	dication	Communication Quality Recommendations		
Color	Mode	Appraisal	necommendations	
Green	Three blinks	Excellent	Install the sounder	
Green	Two blinks	Good	at this place	
Green	One blink	Communication established	Choose another place for installation	
Red	A series of blinks	No communication	or use a repeater*)	
*) - «CN-Repeater»				

#### 10 Features and Recommendations

10.1 The sounder is powered on and off by installation and removal of the main and the backup power-supply batteries.

10.2 In case of main power-supply low-battery, the sounder switches to the backup one. The sounder does not operate when the main power-supply battery is not installed.

10.3 Replace both batteries if any of them is discharged.

10.4 The installed power-supply batteries must be of the same type. The backup battery should be installed first.

In case the CP is disabled for a long time, it is recommended to power off the sounder.

# 11 Storage and Transportation

11.1 The sounders in their original packaging 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.

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

# 12 Manufacturer's Guarantees

12.1 «RIELTA» JSC guarantees conformity of the Detector to it's Technical Specifications if conditions of transportation, storage, assembling and operation are observed. The guaranteed storage period is 63 months since the date of manufacturing the Detector.

12.2 The guaranteed period of operation is 60 months since the date of commissioning within the storage period guaranteed.

12.3 For guaranteed maintenance, please contact:

«C.Nord» STCF

Russia, 190020, St. Petersburg,

Obvodny Channel emb., 199-201, build.13, BC «Obvodny Dvor»

Phone: (812) 327-16-36

E-mail: cnord@cnord.ru, support@cnord.ru, www.cnord.ru

**Note** – Warranty obligations are not applied to the power-supply batteries.

# 13 Packing Certificate

Wireless sounder «CN-Siren» wireless sounder has been manufactured in compliance with the active technical documentation, classified as fit for operation and packed by «RIELTA» JSC.

	Person responsible for accept	otance and packing
QC repre	esentative	
•		Date, month, year