RIELTA C.Nord

EAC

WIRELESS ALARM BUTTON

«CN-KeyFob»

Installation Guide

1 Product Overview

1.1 Wireless alarm button «CN-KeyFob» (hereinafter, CN-KeyFob), is designed for hand-operated generation and transmission control commands (messages) via wireless two-way communication by the «CN-Contact-R» protocol with the control panel (hereinafter, CP) ensuring operation by the «CN-Contact-R» protocol.

1.2 CN-KeyFob comprises 3 control buttons for messages transmission.

1.3 CN-KeyFob operates within 433.05 – 434.79 frequency range. The transmitter power does not exceed 10 mW CN-KeyFob.

1.4 CN-KeyFob ensures operation at the main and backup operating frequencies. The changeover to backup operating frequency is fulfilled automatically.

1.5 CN-KeyFob is powered from one lithium power supply battery CR2032, placed inside the CN-KeyFob case.

1.6 The CN-KeyFob status is displayed by two-colored LED indicator.

1.7 The CN-KeyFob controls power battery state and sends the «Low Battery» message when the battery voltage drops lower than $2{,}6_{-0{,}4}$ V.

1.8 The CN-KeyFob provides immunity to electromagnetic interference.

1.9 Industrial interferences created by the CN-KeyFob do not exceed the limits for the facilities used in housing, commercial zones or production areas with low power consumption.

1.10 The CN-KeyFob ensures safe operation under normal climatic conditions (according to Russian National State Boreal Climate Standard: environment temperature within the range +15 °C ...+35 °C, relative humidity in the range of 25 % ... 75 %, atmosphere pressure 86 – 106 kPa).

2 Specifications

Table 1

Parameter	Value
Operating temperature	minus 20 ... +50 °C
Permissible relative humidity at +25 °C without moisture condensation	up to 95 %
Dimensions, maximum	38x67x18 mm
Weight, maximum	0,025 kg
IP rating	IP54
Battery life under normal climatic conditions and overall usage 2 times in 24-hours period, not less	12 months
Average service life, not less	8 years

3 Scope of delivery

The scope of delivery is shown in Table 2.

Table 2

Name and Designation	Quantity
Wireless alarm button «CN-KeyFob»	1 pc.
Power supply battery CR2032	1 pc.
Wireless alarm button «CN-KeyFob» Installation Guide	1 copy

4 CN-KeyFob Design

The outside view is shown in Figure 1.

The main component elements of CN-KeyFob:

Base and cover (1) with PCB (2). The battery holder (3) is located on PCB. LED indicator (4), the control commands transmission key buttons (5,6,7).

In case of joint operation with CP these key buttons can be used as follows:

- key button (5) – for arming;
- key button (6) – for an «Alarm» message transmitting;
- key button (7) – for disarming.

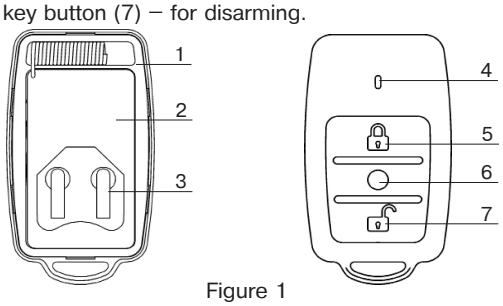

Figure 1

5 LED Indication

The CN-KeyFob generates messages with the following variants of LED indication:

- «Binding» mode indication;
- «Long pressing» LED indication is switched on under pressing of any key for 2 sec or more;
- State LED indication is switched on for 3 sec upon receipt the relevant command from the CP;
- «Communication error» indication is switched on in case of CP reply absence.

The indicator modes in terms of the CN-KeyFob state are listed in Table 3.

Table 3

CN-KeyFob State	LED Indication	Notes
Operation in «Binding» mode	LED indicator blinking green	CN-KeyFob logging in CP
«Binding» mode completed	LED indicator lighting red for 2 – 3 sec	
Long pressing indication	LED indicator lighting red	
State Indication	LED indicator lighting red for 3 sec	Response to the relevant command from CP
	LED indicator periodical blinking red for 3 sec	
	LED indicator lighting green for 3 sec	
	LED indicator periodical blinking green for 3 sec	
No connection with CP	LED indicators alternate lighting green and red for 3 sec	
Communication quality appraisal	See sect. «Communication Quality Appraisal»	

6 Binding with the CP

The binding procedure is intended for logging CN-KeyFob in CP and for service information exchange.

6.1 Take off the cover of the CN-KeyFob. Install CR2032 power supply battery to the holder. Put the cover on its place, close the case.

6.2 Prepare CN-KeyFob to logging in CP in compliance with CP Installation Guide.

6.3 Press and release any key button. The LED indicator would periodically light red for 3 sec, thus conforming the CN-KeyFob is operating in «Binding» operation mode.

6.4 Under the noted indication absence push all tree buttons simultaneously for two or more sec. At this time the LED indicator should light green. Hold the buttons until LED indicator lights red displaying the CN-KeyFob reset. Then repeat operation described in sect. 6.3.

7 Features and Recommendations

7.1 The CN-KeyFob establishes communication with CP only after all buttons are released.

7.2 If three buttons were pushed simultaneously (reset), communication with CP would not been established.

7.3 The CN-KeyFob ensures possibility to send status message after the delay upon the relevant command from CP.

8 Communication Quality Appraisal

For appraising the possibility of CN-KeyFob operation in the particular place, it is necessary:

- Push and release (5) and (7) buttons simultaneously;
- Make sure that the CN-KeyFob does not indicate communication failure with CP;
- Wait for the status LED indication switching off (if correspondent command was transmitted);
- After it the CN-KeyFob displays communication quality with CP in accordance with Table 4.

Table 4

LED Indication	Communication Quality Appraisal	Recommendations
Three green blinks	Excellent	Usage is possible
Two green blinks	Good	
One green blink	Communication established	Usage is not recommended *)
LED indicator alternate lighting red and green	No communication with CP	
* – «CN-Repeater»		

9 Storage and Transportation

9.1 The CN-KeyFob are transported without power supply battery. The CN-KeyFob in their original packaging are resistant to:

- transport jolting with the acceleration up to 30 m/sec^2 at impact frequency range from 10 to 120 per minute or 15 000 strikes;
- ambient temperature range minus 50 ... +50 °C;
- relative air humidity (95 ± 3) % at a temperature +35 °C.

9.2 The CN-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 CN-KeyFob shall be ready to operate after a maximum of six hours.

10 Manufacturer's Guarantees

10.1 «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.

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

10.3 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 is not applied to the power supply batteries.

11 Packing Certificate

Wireless alarm button «CN-KeyFob» has been manufactured in compliance with the active technical documentation and classified as fit for operation and packed by «RIELTA» JSC.

Packing date _____
month, year

Made in Russia

Rev. 3 of 01.02.18
№00425

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