

KEYPAD

«CN-Keypad»

Installation Guide

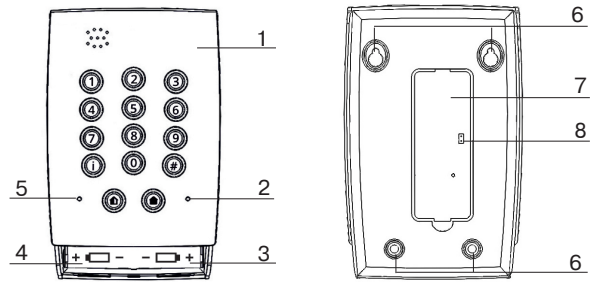


Figure 1

1 General Information

1.1 Keypad «CN-Keypad» (hereinafter, Keypad) works as a component in security and other control and monitoring systems along with corresponding devices which support wireless «CN-Contact-R» exchange protocol. The keypad allows for entry and exchange of information via two-way communication channel as well as for indication of information in accordance with the indication management codes received from the wireless network coordinator.

1.2 The keypad operates within the frequency range 433.05 ... 434.79 MHz. Power emitted by transmitter does not exceed 10 mW. The keypad doesn't require getting permits for purchase, operation and registration.

1.3 To provide radio exchange between the keypad and extension module two operating frequencies: main and reserve are used. The keypad switches to reserve operating frequency automatically.

1.4 The keypad is powered by two lithium batteries CR123A type. One is the main battery the other is the reserve battery.

1.5 The keypad has fourteen keys for entering information.

1.6 Two light indicators (red and green) and one sound emitter are user to indicate the information and modes of operation.

1.7 The keypad generates and transfers the following messages: «Battery Discharge» message if the power supply battery voltage drops lower than 2.4_{-0.1} V and «Reserve battery discharge» message if the reserve power supply battery voltage drops lower than 2.4_{-0.1} V.

1.8 The keys of the keypad have a backlight function.

1.9 The keypad is resistant to the effects of electromagnetic interference.

2 Specifications

Table 1

Parameter	Value
Operating temperature	minus 20 ... +50 °C
Permissible relative humidity +25 °C	up to 90 %
IP rating	IP20
Dimensions, not more than	155 x 100 x 35 mm
Weight (without batteries, not more than)	0.15 kg
Operating period under normal climate conditions at average usage rating 4 times a day, not less than	24 months
Average service life, not less than	8 years

3 Scope of delivery

The keypad scope of delivery is referenced in Table 2.

Table 2

Name	Qty
Keypad «CN-Keypad»	1 pc.
Lithium battery CR123A	2 pcs.
Keypad «CN-Keypad». Installation Guide	1 copy

4 Design

The keypad consists of the housing (1) with the installed printed circuit board (PCB) (7) and battery compartment cover. Keys for information entry, red (5) and green (2) light indicators, main battery holder (3) and reserve battery holder (4) are located on the front side of the keypad. The keypad mounting openings (6) for fixing the keypad to a wall are located on the back cover of the keypad. «Reset» contacts (8) are located in the housing window on PCB.

The keys for the information entry include:

- ten numeric keys from 0 to 9;
- «i» key;
- «#» key;
- «■» key;
- «▶» key.

5 LED indications

LED indication modes are listed in Table 3.

Table 3

State	LED Indication	Notes
Operation in «Binding» mode	Periodic activation of the green indicator light	Detector registration in CP
«Binding» mode finishing	Service LED indicator lighting red for – 3 seconds	
Confirmation of any key pressing, Power supply is OK	Single green light indicator short flashing and sound indicator*	
Confirmation of any key pressing, Power battery require changing	Single green light indicator short flashing and sound signal*	
Key sequence identification failure	Periodic short flashing of the red indicator and sound indicator* for 0.6 sec	
No connection to CP	Alternating flashing of of red and green indicators, as well as periodic activation of the sound indicator* for 1.6 seconds	
Keypad settings changed	Flashing of red and green indicators, as well as a sound indicator * for 0.6 seconds	After the commands «Enable or disable sound indication» or «Enable or disable the built-in key illumination»
Object or section status «Security activated»	Red indicator is ON	After command «report status of object or section»
Object or section status «security deactivated»	Green indicator id ON	
Security activation successful	Red indicator is ON	After command «activate security of object or section»
Security activation failed	Tree flashes of red indicator and sound indicator *	
Exit delay in progress	Periodic flashing of the red indicator and sound indicator*	
Security deactivation successful	Green indicator id ON	After command «deactivate security of object or section»
Security deactivation failed	Tree flashes of green indicator and sound indicator*	
Entrance delay in progress	Red indicator is ON, periodic activation of sound indicator*	
«Alarm button» confirmation	Flashing of red and green indicators for 1 second, periodic activation of sound indication* for 1 second	After command «Transmit Alarm button»
«Alarm button» is prohibited in settings	Tree flashes of red and green indicators and sound indicator*	
Communication quality apprising	See section «Communication quality apprising»	
«Norm»	Turned off	

*) – if sound indication is allowed

6 Binding with the CP

«Binding» mode is provided for the keypad logging in the CP and for service information exchange.

6.1 Prepare the CP for the keypad logging in accordance to the CP Installation Guide.

6.2 Open the battery cover of the keypad, install the reserve battery into the holder (4) and main battery into the holder (3).

6.3 LED indicator periodically flashes green. This means that the keypad is in the process of binding.

6.4 In case of no service LED indication, close the «Reset» contacts for 2 – 3 seconds.

6.5 After successful logging red indicator turns on for 2 – 3 seconds.

6.6 The time allocated for the «Binding» mode is limited to 100 sec. To renew the «Binding» mode, the «Reset» contacts should be closed for 2 – 3 seconds.

7 Operation Aspects

All operational keys combinations and corresponding commands are given in table 4.

Table 4

Command	Keys combination
Report object status	Press «i» key
Report section status	Enter the section number and press «i»
Activate object security	Press key «▲» and your code
Activate section security	Press key «▲», enter section number, press key «#» and enter your code
Deactivate object security	Enter your code
Deactivate section security	Enter the section number, press «#» key and enter your code
Transmit «Alarm button»	Simultaneously press and hold keys «▲» and «■» for 3 seconds
Enable or disable sound indication	Simultaneously press and hold keys «#» and «9» for 3 seconds
Enable or disable keypad backlight	Simultaneously press and hold keys «#» and «0» for 3 seconds
Report on CP communication quality	Simultaneously press and hold keys «#» and «▲»

8 Communication Quality Appraising

8.1 In order to determine the keypad and CP communication quality it is recommended to do the following:

- insert main and reserve batteries in corresponding holders;
- install the keypad in the proposed mounting place;
- press «#» and «▲» keys simultaneously.

8.2 The keypad shall indicate the communication with CP quality in accordance with Table 5.

Table 5

Indication	Communication quality appraising	Recommendations
Tree short flashing of green light indicator and sound indicator activation*	Perfect	Install the keypad in this place
Two short flashing of green light indicator and sound indicator activation*	Good	
One short flashing of green light indicator and sound indicator activation*	Communication can be established	Choose other place of installation or use repeater**
Systematic flashing of green and red indicators and sound indicator activation* for 1.6 seconds	No communication	
*) – if sound indication is allowed **) – «CN-Repeater»		

9 Storage and Transportation

9.1 The keypad in original packing and without installed battery can withstand the following conditions during transportation:

- transport jolting with the acceleration 30 m/sec² with impact frequency from 10 to 120 impacts/sec or 15000 impacts with the same acceleration;
- ambient temperature minus 50 ... +50 °C;
- relative air humidity (95 ± 3) % at the ambient temperature +35 °C.

9.2 The keypad in it's original manufacturer's packing may be shipped by any means of transportation in covered vehicles at any distances in compliance with the rules of goods transportation valid for corresponding type of transportation.

9.3 After transportation under the conditions different to operation conditions the keypad shall be ready to operate after a maximum of 6 hours.

10 Manufacturer's Guarantees

«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.

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

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 do not apply to the power supply batteries.

11 Packing Certificate

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

Packing date _____
month, year