



Wireless keypad

RKB1

Data sheet

Device identification number

1. General Information

The RKB1 wireless keypad with LED indication (hereinafter referred to as the keypad) is designed for controlling Ritm radio channel control panels.

The keypad allows arming and disarming security for system areas using user codes, changing user codes, monitoring zones and areas of the security system, demonstrating the status of areas and zones, and transmitting alarm signals for emergency service units.

The keypad may be powered from either a 12 VDC power source, or an AA 3.6 V battery, and the battery may also be used as a redundant power source when 12 V voltage is used. The keypad has an alarm wake up feature.

2. Manufacturer

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3. Package Contents

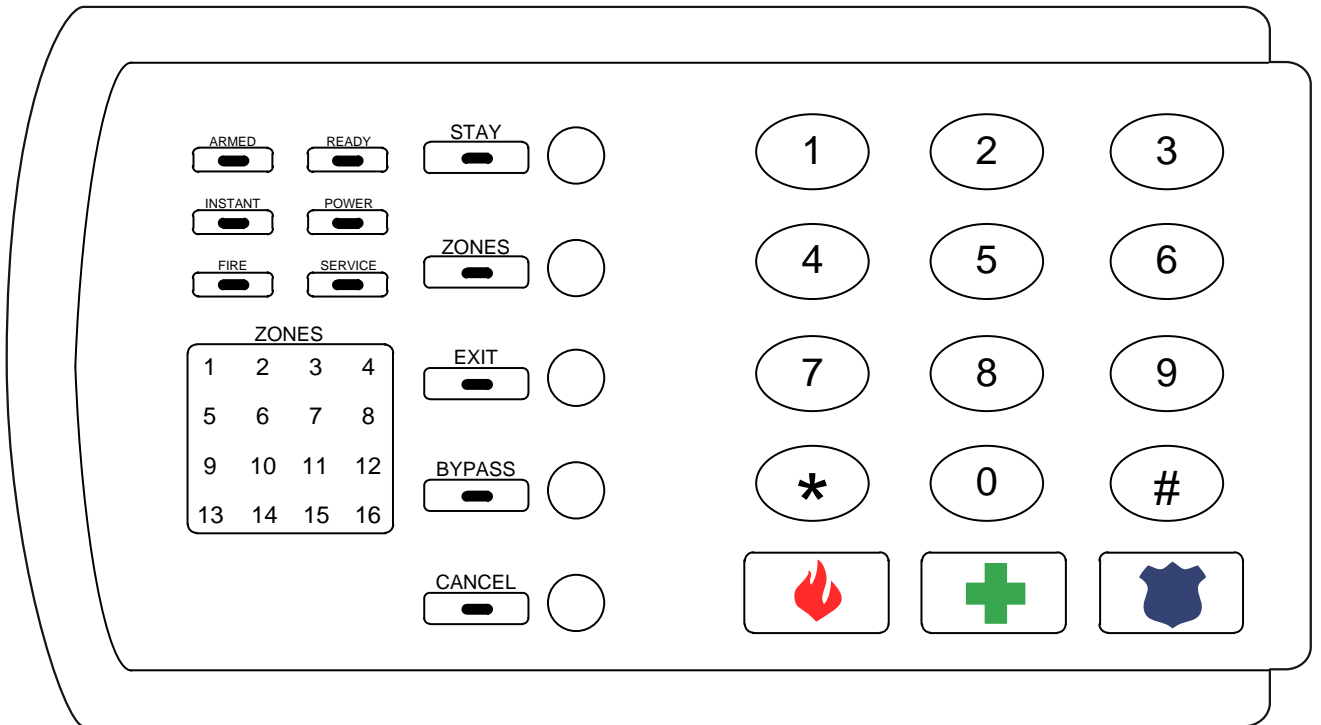
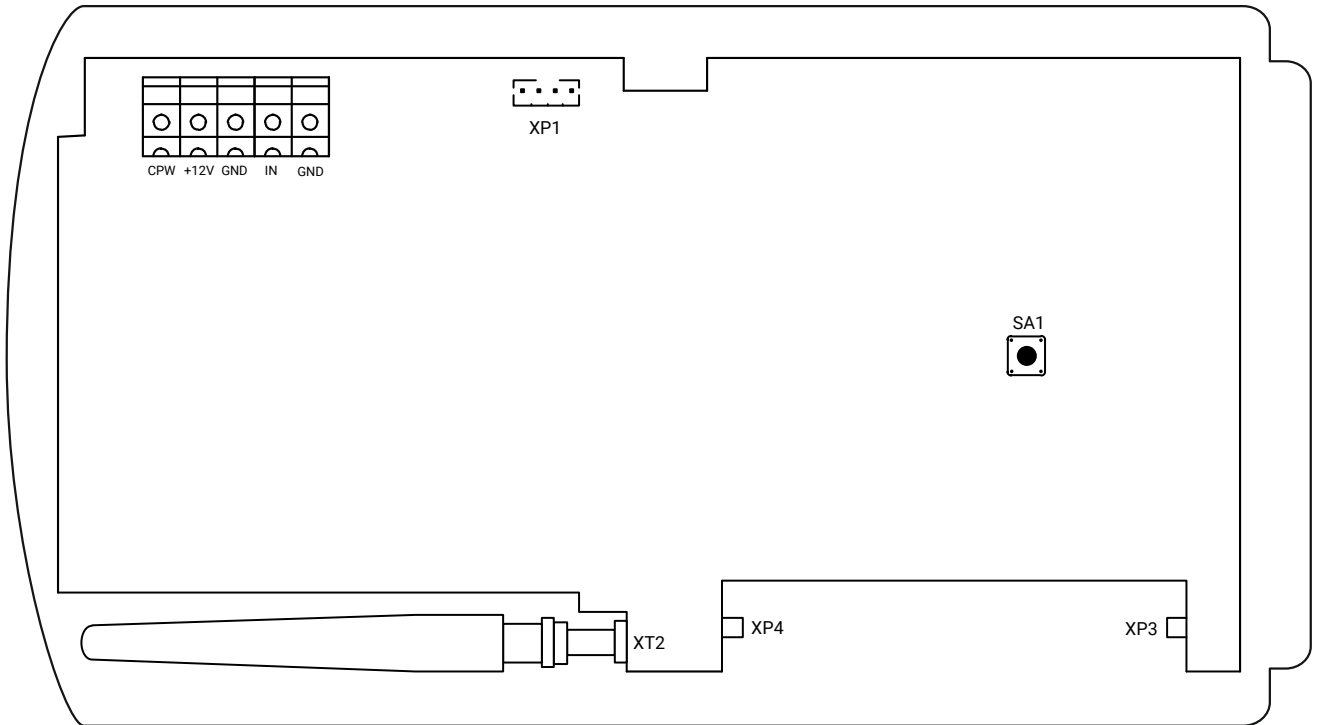
RKB1 wireless (radio channel) keypad	1 pc
433 MHz SMA radio channel antenna	1 pc
Fastening kit	1 pc
AA ER14505 3.6B battery	1 pc
Data sheet	1 pc
Package	1 pc

4. Technical Specifications

Parameter	Value
Communication channels band, MHz	433.075–434.775
Number of channels in the range	7
Transmitter radiated power, mW	Not exceeding 10
Maximum distance for strong signal, m	Up to 1200 (with external antenna)
Arming/disarming of radio system areas	+
Supply voltage, V	12 ± 2 DC; 3.6 VDC (ER14505 AA battery)
Visual indication of panel operation	+
Audio indication of panel operation	+
Enclosure break-in tamper	+
Dimensions, mm	160×100×30
Weight, g	218
Operating temperature range ¹ , °C	-30...+55

¹ Without regard to battery characteristics.

5. Designation of Elements



Element	Designation
XP1	Connector for cable for connection with computer. Used to change the firmware from the PC
XP3, XP4	AA 3.6 V battery connectors
XT2	Antenna connector
SA1	Enclosure break-in tamper
GND, +12V, CPW	12 V DC power connector (CPW terminal not used)
IN, GND	Not used

6. Visual Indication



Please note that the indication is dependent on the type of control panel you are using.

In the general case (Contact GSM-14, Contact 15 and Contact GSM-16) the indication is represented in the table:


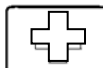

Indicator	State	Designation
ARMED	On	Any of security areas is armed
	Blinking	Alarm in any area
	Off	All areas are disarmed
READY	On	All zones in non-armed areas are normal
	Off	At least on zone in non-armed areas is not normalized or all areas are armed
FIRE	On	Risk of fire
	Blinking	Fire alarm
	Off	Normal
INSTANT	On	Device keypad configuration mode
	Blinking	Remote configuration mode or configuration cable mode
	Off	Device in operating mode
POWER	On	220 V main power supply available
	Blinking	Device operates at redundant power or no signal in CPW
	Off	No power
SERVICE	On	There is no connection with the control panel
	Blinking	There are unsent events
	Off	Control panel is connected
ZONES	On	The indicator will be on in the following cases: <ul style="list-style-type: none"> • Alarm in zone; • Area is armed.
	Blinking	The indicator will blink in the following cases: <ul style="list-style-type: none"> • Alarm in area; • Loop failure.
	Off	The indicator will be off in the following cases: <ul style="list-style-type: none"> • Zone is normal; • Area is disarmed.

The keyboard has the following system indication:



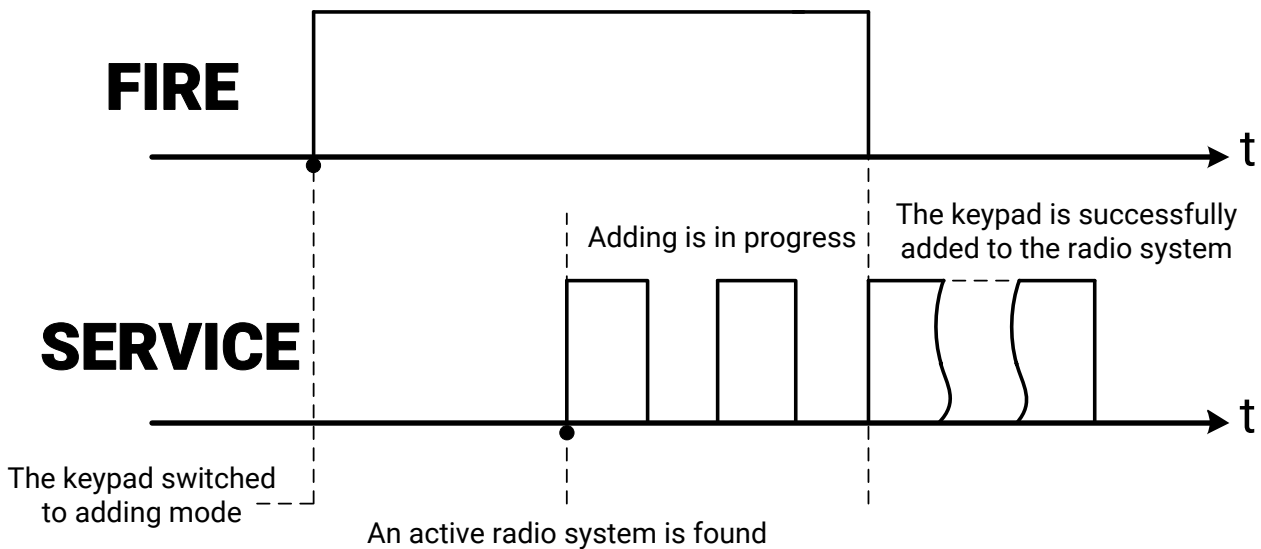
- **Indication of the keyboard battery discharge** – indicators “Service” and “Power” blinks synchronously each 5 seconds.
- **Indication of the keyboard open tamper** – indicators “Service” and “Power” blinks alternately 1 time per second. After the tamper is closed indicators “Service” and “Power” sequentially on for 1 second.

7. Designation of Keys

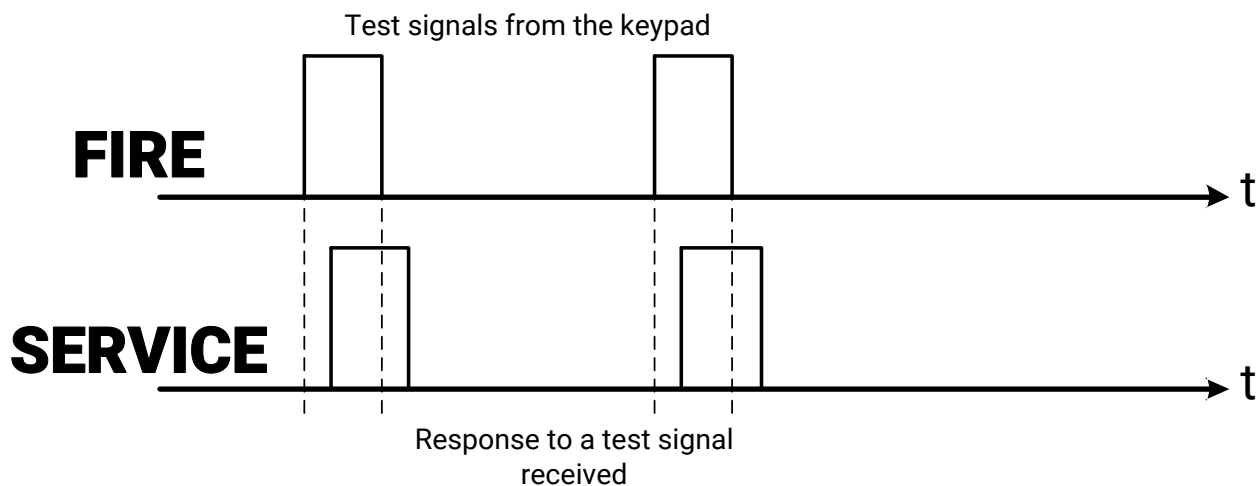
Key	State	Designation
STAY	On	All areas mapped to the 'perimeter' button are armed
	Blinking	Alarm in any perimeter area
	Off	Perimeter areas are not armed or no areas mapped to perimeter
EXIT	On	Incoming delay countdown
	Blinking	Outgoing delay countdown
	Off	No delay countdown
ZONES	On	Statuses of zones 1–16 are shown
	Blinking	Statuses of zones 17–32 are shown
	Off	Statuses of areas 1–16 are shown
BYPASS	Not in use	
CANCEL	Cancels all earlier entered symbols	
0...9, *, #	Entry of corresponding symbol	
	"Fire alarm" signal generation	
	"Medical alarm" signal generation	
	"Panic button" signal generation	

8. Getting Ready for Operation

- 8.1. The keypad should be installed on a vertical surface, and not in the vicinity of EMI sources, large metal objects and structures, power cable runs.
- 8.2. Loosen the retaining screw and open the enclosure cover.
- 8.3. Observing the polarity, install the AA 3.6 V battery into the holders XP3 and XP4.
- 8.4. If necessary, run 12 V DC power cables through the enclosure base opening.
- 8.5. Connect the power circuit to the GND, +12V connector (power source positive terminal to +12V terminal, negative terminal to GND terminal).
- 8.6. Switch the control panel to the radio keypad addition mode.
- 8.7. Press and hold the key "1" on the keypad until the indicators "Fire" and "1" light up in the "Zones" field. Indication at the moment of connecting to a panel is shown in Figure below.



- 8.8. Press and hold the “Cancel” key until all keypad indicators go off, which would mean switching to the standby mode.
- 8.9. Directly prior to installation at the supposed installation location of the keypad, verify its connection to the panel. To do this, switch the keypad to the radio channel test mode.
- 8.10. Press and hold the key “3” until the indicators “Service” and “3” light up in the “Zones” field. The testing procedure is illustrated in the Figure below. 2–3 missed responses are OK for 10 transmitted messages.



- 8.11. Press and hold the “Cancel” key until all keypad indicators go off, which would mean switching to the standby mode.
- 8.12. Secure the enclosure base on the surface. If the tamper should be triggered in case a keypad is torn off from the surface, fasten the platform, on which the tamper support is located, using a self-tapping screw.
- 8.13. Install the enclosure cover with the board to the enclosure base. Please note that the SA1 tamper spring rests on the tamper support.
- 8.14. Close the cover firmly and fasten the retaining screw.

9. Keypad Operation

Codes for arming and disarming areas are set up during configuration of a control panel, to which the keypad is mapped.

Pressing the 'Cancel' key activates the keypad visual indication showing the status of system areas.

10. Replacing Battery

If necessary, clean the bonding pads and replace the battery.

11. Transportation and Storage

The device should be transported in packaging in closed vehicles. Storage premises should be free of current-conducting dust, acid and alkaline fumes, corrosive gases and gases harmful to insulation.

12. Maintenance and Safety Measures

All set-up and maintenance activities applied to the device should be performed by duly qualified personnel.

13. Manufacturer's Warranties

The manufacturer guarantees that the device complies to requirements of the technical specifications, provided the client ensures compliances to conditions of transportation, storage, installation and operation.

Although **the warranty period** is 12 months from the commissioning date, it may not exceed 18 months from the production date.

The warranty storage period is 6 months from the production date.

The warranty does not cover the battery.

The manufacturer reserves the right for modification of the device in any way that does not degrade its functional characteristics without prior notice.

14. Information on Claims

In case of a device failure or defect during the warranty period, please fill in a malfunction report specifying the dates of issue and commissioning of the device and nature of the defect and submit it to the manufacturer.