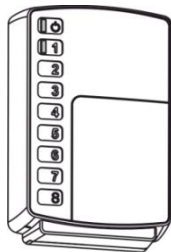# Astra-824
Relay unit

User guide

Manufacturer:
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Made in Russia

1 FUNCTION

Signal relay unit (RU) is designed to receive notifications from Control Device (CD) via the RS-485 wired interface and to issue notifications to the relay outputs. It is possible to connect the relay unit to the RS-485 ring interface of the Control Panel using isolators Astra-ILS compatible with control panel and Relay unit of 5.5 versions.

The relay unit is controlled with Control Panels Astra-812 Pro and Astra-8945 Pro, radio extender Astra-WE 433 (WE-433).

Sources of notifications for the relay unit are sections of the Control Panel or detectors registered in the WE-433.

The RU has two independent power supply inputs: U1 and U2, and a Zone input for monitoring the serviceability of power supplies.

2 SPECIFICATION

Power supply voltage, V .... 10 - 27
Maximum interface length RS-485, m…………......1000
Relay quantity…………………………………...……8
Max. amperage switched by relay, A………….……0.1
Max. switched voltage relay, V………….…………..100
Zone input resistance, kOm,
Norm…………………………………………………from 3 to 5
Violation ……………….……..from 0 to 3 or more than 5
Dimensions, mm………………….………… 121x80x31

Operating Conditions

Temperature, °C..................................from - 30 to + 55
Relative air humidity, %......................up to 93 at +40°C
without moisture condensation

3 DELIVERY SET

Delivery set includes: resistor 3.9 kOm – 1, fastening parts (dowels - 4, screws - 4), user guide – 1.

4 INDICATION

Condition	LED ⏻	LED 1
Power supply (norm)	Green	-
Main power failure	Green blinking 1 time per sec.	-
Backup power failure	Yellow blinking 2 times per sec.	-
Power failure	Yellow blink 1 time per sec.	-
Software change	Red	off
Not registered	-	off
Interface - norm	-	Green
interface malfunction	-	Yellow blinking 2 times per sec.

5 TERMINALS FUNCTION

Terminal	Function
485A, 485B	Interface line RS-485
U1, GND	Main power supply input
U2, GND	Backup power supply input
Zone, GND	Input for monitoring the serviceability of power supplies
Relay1 – Relay8	Relay outputs

6 JUMPERS FUNCTION

Plug		Mode
F1	F2	
[▣ ▪]	[▣ ▪]	Standby mode
[▪▪]	[▣ ▪]	Software change
close for **1-2 s**, then press the button for **5-10s**	[▣ ▪]	Reset registration
[▣ ▪]	[▪▪]	Blocking the operation of the opening button

7 SETTING UP

7.1 Connect the power cables to the relay unit, main power goes to U1, GND and backup power goes to U2, GND.

7.2 Connect to the terminals Zone, GND the outputs for monitoring the health from the power supply (if available) or the terminating resistor 3.9 kOhm from the delivery set.

7.3 Connect the relay unit to the Control Panel via the RS-485 interface (terminals 485A and 485B).

7.4 Register the relay unit in the control unit according to the method of clause 8.

7.5 Set the relay operating modes using the same program that was used for registration (PKM Astra Pro, Pconf-Pro or Pconf-RR) in the "System outputs" menu.

7.6 Functions available for customization:
- Binding a relay to a specific Zone number
- Operating mode of each relay

Note!
- Different types of Zones (itrusion, fire) must be assigned to different relays.
- It is recommended to link failure notifications (power failure, sabotage, loss of connection, etc.) to separate relays that are not related to the alarm/fire notification processing.

8   REGISTRATION OF THE RELAY UNIT IN THE CONTROL PANEL

1) Check plug F1 (should not be closed).

2) Turn on the power. The indicator will turn green.

3) Launch the program on the PC (Settings module from the Astra Pro, Pconf-Pro or Pconf-RR PKM kit, located on the website www.teko.biz).

4) From the program menu, start the registration mode by calling the context menu with the right mouse button (in the Astra Pro PKM - in the menu item "Equipment" / "List of devices", in the registration line of the BRS; in Pconf-RR - in the line "PP", in Pconf-Pro - in the "Hardware" window).

If the registration is successful, the entry "BR" will appear in the list of registered devices in the program window.

If the registration is unsuccessful, it is necessary to repeat the registration, having previously reset the registration according to clause 6.

5) After registration, indicator "1" will display the current state of the RS-485 interface in accordance with the table p.4

7 INSTALLATION PLACE

The relay block is installed on the walls or other structures of the protected premises in places protected from the effects of precipitation, mechanical damage and access by unauthorized persons.

8 INSTALLATION PROCEDURE

1) Push the base latches out of the slots in the cover. Remove the cover.
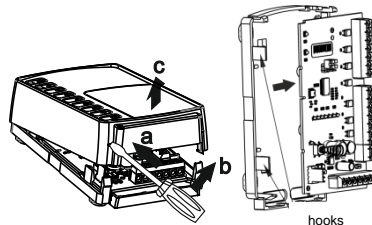
hooks

2) Bend the hooks on the base, remove the printed circuit board.

3) On a flat surface mark the mounting on the base of the relay unit

4) Squeeze out the plugs of the selected holes for entering the wires in the base of the relay block.

5) Pass wires from power sources, RS-485 interface, relay outputs through the wire entry hole.

6) Fasten the base of the relay unit to the supporting surface

7) Install the printed circuit board.

8) Carry out electrical installation.

9) Replace the cover (until it clicks).

9 WARRANTY

The operation warranty period is 5 years from the date of operation start-up, but no longer than 5 years 6 months from the date of manufacturing subject to the requirements of User guide.