



Astra-KTM-S

Sensor keypad

User guide

This user guide is intended to study the principle of operation, proper use, storage and service of the Astra-KTM-S sensor keypad (hereinafter referred to as the keypad) (Figure 1). The manufacturer reserves the right to make changes without notice to improve the keypad. All changes will be included in the new edition of the user guide.

List of abbreviations:

CP – control panel;

TM - Dallas 1-Wire Touch Memory interface.

1 Function

1.1 The keypad is designed to control the Astra-8945 Pro, Astra-812 Pro, Astra-712 / x, Astra-713, the Security Hub controller, as well as Astra-814 Pro, Astra-863 devices by entering PIN codes.

1.2 The scope of the keypad is centralized or standalone protection of facilities for various purposes as part of Astra fire and security alarm systems and other systems.

2 How it works

The keypad is an emulator of the Touch Memory key reader. The keypad converts the entered digital PIN into a Touch Memory code and outputs it to the “КЛЮЧ” terminal. When using the “ВЫХОД ОП.” terminal the keypad displays the status of the control panel (armed/disarmed).

3 Specifications

Supply voltage, V 6 to 14 V
 Max current consumption, mA 50
 TM* line length, m, not more than 100
 Overall dimensions, mm, not more 110×83×14
 Weight, kg, not more 0.08

Operation conditions

Temperature range, °C +5 to +45
 Relative air humidity, % up to 95 at + 40 °C
 without moisture condensation

4 Delivery set

Astra-KTM-S keypad 1 pc.
 Dowel 3 pcs.
 Screw 3 pcs.
 User guide 1 copy

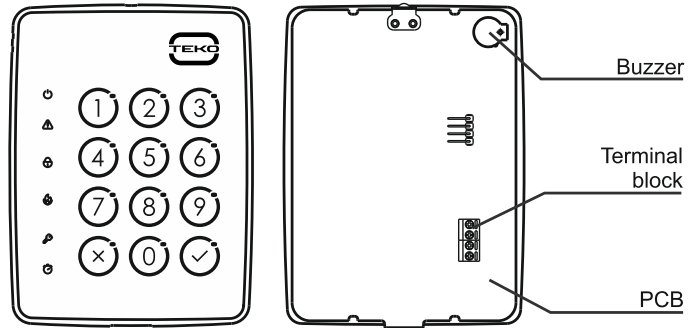
5 Structure

5.1 Structurally, the keypad is made in the form of a block consisting of a removable plastic base and a plastic front panel.

5.2 On the front panel there are LED indicators with graphic designations of the functions performed, as well as 12 backlit touch keys.

5.3 Mounting holes and a hole for supplying power and interface cables are located on the rear surface of the base.

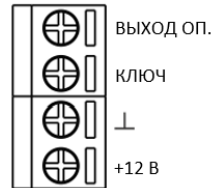
5.4 A printed circuit board with radio elements and a screw terminal block for external connections is mounted inside the block (Figure 1).



Base removed
Figure 1

5.5 The design of the keypad provides for surface mounting on the wall.

6 Terminals



Terminal	Function
ВЫХОД ОП.	ARM_out terminal of the CP
КЛЮЧ	Touch Memory interface
⊥ +12 B	Power supply

7 Keys function

Keys	Function
0 ... 9	PIN codes entry
X	Reset
V	Entering the PIN code to the CP







Pressing the keys is confirmed by a sound signal and a short flash of the indicator of the key that was touched. When entering the code, the indicator lights up green (key).

After pressing **V**:

- **successful** transmission of the code is confirmed by **3 beeps**,
- attempt to send an erroneous code (insufficient or excessive code length) is accompanied by a red flash of the **X key** and an intermittent **trill** is heard.


* When the number of parallel connected keypads is not more than 4.

8 Indication

Indicator	Notification	Indication
	Power and TM line is norm	Lights up green
	Power or TM line failure	Flashes yellow
 (Network)	Supply voltage out of range	Flashes yellow
	Internal error	
 (Lock)	Disarmed	Lights up green (when using ВЫХОД ОП. terminal)
	Armed	Lights up red (when using ВЫХОД ОП. terminal)
 (Fire)	No use	
 (Key)	Code entering	Lights up green
 (Delay)	Entering configuration mode	Flashes green

9 Configuration

In this version of the keypad, it is possible to adjust the volume of the sound signal of the built-in buzzer and select the type of connection, the setting of other parameters is not available.

- 1) To enter the setup mode, power on the keypad and immediately after the test beep, press and hold the **X** key for **3 sec**. Confirmation of entering the mode is accompanied by a characteristic sound signal and periodic flickering of the indicator . On the keypad, the keys with the numbers of the menu items begin to be **highlighted in green**.
- 2) To set the sound signal, select the menu item "3", for which press the key 3. When you enter the menu item, the current value is highlighted in **yellow**, the available values are **green**.
- 3) Select the desired signal volume by pressing the keys with numbers **0...9** (the key with number **0** corresponds to mute). When a key is pressed, the buzzer emits a sound at the selected volume, and the selected key is highlighted in yellow.
- 4) Confirm the selected volume by pressing the **V** key. Press the **V** key to return to the setup menu.
- 5) To set the connection type, select the menu item "5", for which press the key 5. When entering the menu item, the current value is highlighted in yellow, the available values are green.
- 6) Next, select the required type of connection by pressing the key with the corresponding number:
 - 1 - Not used;
 - 2 - Touch Memory interface;
 - 3 - Touch Memory interface and "ВЫХОД ОП" terminal.
- 7) Press and hold the **V** key for 3 sec to confirm the changes and exit the setting mode.

The setting mode is exited without changes by pressing the **X** key or by inactivity for 15 sec.

10 Installation

10.1 After transporting the keypad under conditions different from the operating conditions, keep it unpacked under operating conditions for at least 4 hours.

10.2 Installation order

1) Remove the base of the keypad by pressing a slotted screwdriver on the metal latch in the hole at the top of the base (Figure 2).

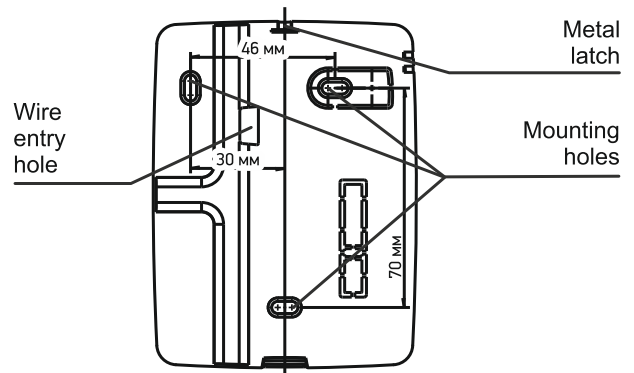


Figure 2

2) At the selected location, make markings for the mounting holes on the attached base. Attach the base to the wall. If it is necessary to exit the cable from the side, remove one of the jumpers in the special base channel with a tool. Fasten the base to the wall using the supplied screws.

3) Pass the wires from the control panel through the wire entry hole to a length of 75-80 mm. If necessary, shorten the cable to the required length. Remove the outer insulation from the cable for a length of at least 16 mm. Remove 3-5 mm of insulation from the cable cores.

4) Place the front panel with the outer side against the base with the protrusion up so that the protrusion of the front panel is at the level of the cable entry hole in the base. Lay the cable without kinks and connect the ends of the cable cores to the keypad connector terminals, tighten the screws with a screwdriver.

The connection diagram is shown using the Astra-712/x control panel as an example (Figure 3).

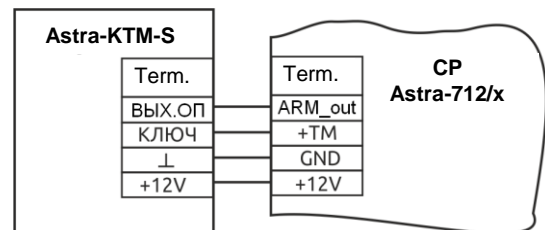



Figure 3

5) Rotate the front panel and insert the protrusion of the front panel into the hole at the bottom of the base. Close the keypad by snapping the metal plate.

6) Power on the keypad.

7) Immediately after power-up, the keypad performs a test, during which the LEDs flash green and red in sequence and a beep sounds to check if it is working. A correctly connected and configured keypad enters standby mode, while the indicator  lights up green, the other indicators are off.

10.3 Registration of the TM to the CP

1) Start registration on the Control Panel according to the instructions on the Control Panel.

2) Enter the code. The code length is up to 7 digits. A complete reset of an incorrectly entered code is carried out by pressing the **X** key.

3) Push **V** at a time less than 1 sec.

In case of unsuccessful registration, it is necessary to repeat the steps of p. 10.3.

11 Compliance with standards

The design of the keypad provides IP31 housing protection.

12 Warranty

12.1 The quality management system is certified for compliance ISO 9001-2015.

12.2 The warranted shelf life is 5 years 6 months from the manufacturing date.

12.3 The warranted service life is 5 years from the commissioning date, but not more than 5 years 6 months from manufacturing date.

12.4 The manufacturer must repair or replace the receiver within the warranty period.

12.5 The warranty does not become effective in the following cases:

- failure to comply with this Operation Manual;
- mechanic damage of the receiver;
- if receiver is repaired by anyone other than the manufacturer.

12.6 The warranty applies only to the receiver. All other equipment of other manufacturers used with the receiver is subject to other manufacturer's warranties.

In no case shall the manufacturer be liable for any death, physical injury or property damage, or any other accidental or intentional loss based on claim that the receiver failed to perform its functions.

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