



Astra-431 ver. RF
Wireless Heat Detector



User Guide

Manufacturer:
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Made in Russia



Rev. 431rk-v1_5_instr_en

1 FUNCTION

The detector is designed to detect fires by increasing the temperature and the rate of its rise in a protected area, generating a fire notification and transmitting notifications via radio to the Astra-812 Pro control panel directly or through the Astra-WE 433 radio extender and to the Security Hub controller.

2 SPECIFICATIONS

Response time, sec:
at the rate of temperature rise
5 °C/min.....from 120 to 500
10 °C/min.....from 60 to 242
20 °C/min.....from 30 to 130
30 °C/min.....from 20 to 100
Response temperature, °C from 54 to 65
Wireless coverage range
(line-of-sight), m.....300
Operating frequency range, MHz433
Power supply voltage, V.....from 2.1 to 3.0
Overall dimensions, mm..... Ø106 × 60

Operating Conditions

Temperature range, °Cfrom - 30 to + 70
Relative air humidity, %..... up to 93 at + 40 °C
without moisture condensation

3 DELIVERY SET

Delivery set includes: battery, 3.0 V, (CR123A)
- 2 pcs. (installed), protective cover (red) – 1
pcs., user guide – 1 copy.

4 INDICATION

Notification	Indication
Boot time	1x red flash then 1x white led flash
Norm	1x red flash in 60 sec. period
Fire alarm	1x red flash every 2 sec. until the fire factor is eliminated. 2x flashing in a period of 25 sec. when eliminating the fire factor before receiving a command from the controller
Test	1x red flash in every 2 sec. during 30 sec. when receiving the test command from the Astra-942 laser remote control
Failure	3x red flash in 25 sec. period
Power failure	3x red flash in 25 sec. period
Tampering / Restore tampering	1x red flash
Search connection	5x white flash in 1 sec.
No connection	2x white flash in 25 sec. period
Reset	2x white flash in 1-2 sec.

Notes

1 When the message "Power failure" appears, the battery must be replaced within two months.
2 Indication of notifications "Power failure", "No network", "Search for network" goes off 60 minutes after turning on the power supply. The indication turns on again for 60 minutes after receiving the "Test" command from the Astra-942 laser tester.

5 REGISTRATION

- 1) Turn detector counterclockwise.
- 2) Start registration on the Astra-812 Pro, Security Hub mobile or desktop app. Registration starts for 45-60 sec.
- 3) Turn on the detector by pulling out the battery insulator or by installing the battery.
- 4) Detectors led start flashing: 5x white flash in 1 sec.

Make sure that the assigning is successful on the Security Hub mobile or desktop app. If assigning is unsuccessful, repeat the procedure.

6 RESET PROCEDURE

• Removing the detector from the wireless network is carried out via the PKM Astra Pro software or via the menu of the Astra-812 Pro control panel or via Security Hub mobile App.

• To **reset** the detector:

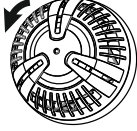
- 1) Turn detector counterclockwise.
- 2) Close the **DEL** contacts and hold for 5 sec. - the red led will turn on.
- 3) After turning off the red led, open the **DEL** contacts within 5 sec.
- 4) The detector generates a notification "No connection" and becomes available for registering to the system.

7 INSTALLATION PLACE

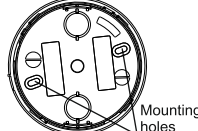
- 1) The distance from the ceiling level to the sensitive element at the place of its installation must be at least 25 mm and not more than 150 mm. When placing the detector at a height of more than 6 m, as well as under raised floors and above false ceilings, an access option for maintenance and repair must be determined.
- 2) It is forbidden to mask the detector: heat fluxes must freely pass through the grille of the detector housing.

8 INSTALLATION PROCEDURE

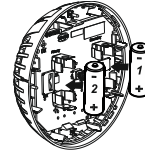
- 1) Remove the electronic unit from the base



- 2) Mount the base



- 3) Install batteries, if they were removed (first the backup "Secondary", then the main "Primary").

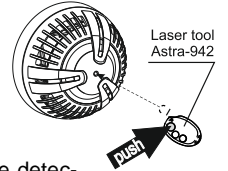


- 4) Assemble the detector.
- 5) Perform detector's testing (see p. 9)



9 TESTING

- 1) To activate the «Test» mode:
 - push the **red button** of the laser tool;
 - irradiate the LED for **1 sec**. LED should turn on in red for 2 sec.



- 2) Normal operation of the detector: led on the detector will start flashing with a period of 2 sec for 30 sec ("Test fire" notification). In the event log of Astra-812 Pro, PKM Astra Pro, the entry "Test fire" will be made.
Note – *WE 433 leds don't display test fire.*

10 WARRANTY

Operational warranty period: 5 years from the date of commissioning, but no more than 5 years 6 months from the date of manufacture and subject to current user guide requirements.