

1. FEATURES

Wireless FireProtect and FireProtect Plus smoke detectors are intended to detect fires, accompanied by appearance of smoke, heat, and carbon monoxide (only FireProtect Plus) high concentrations in the premises. Detectors help to detect fire at an early stage. Detectors work as standalone device or as a part of Ajax security system.

2. SPECIFICATIONS

SPECIFICATION	MEANING
Detector type	Wireless
Use	Indoor
Smoke detection sensitive element	Photoelectric sensor
Temperature alarm signal at	60°C (140°F)
Carbon monoxide (CO) sensor	3 response intervals depending on CO concentration (only FireProtect Plus)
Tamper protection	Available
Alarm type	Sound and Light
Built-in siren volume	85 dB
Radio signal power	20 mW
Communication protocol	Jeweller (868 or 915 MHz depending on the country of distribution)
Maximum distance between detector and central unit	Up to 2000 m (6500 ft) (in open area)
Battery type	2 CR2 batteries, 3V
Additional battery type	CR2032
Battery life	Up to 4 years
Operating temperature range	0°C to + 65°C (32°F to 149°F)
Operating humidity	Up to 80%
Dimensions	132x132x31 mm (5.19 x5.19 x1.22 in)
Weight	216 g (0.47lb)

3. PACKAGE CONTENTS

Smoke detector, 2 batteries CR2 (pre-installed), additional battery CR2032 (pre-installed), manual, installation kit

4. GETTING STARTED

4.1 Before installing the detector, it is required to register it with the Ajax security system. In order to register the sensor, it is necessary to switch the Ajax security system's receiver to «Add Device» mode and switch on detector by pressing power button 3 (PICTURE 1) for 3 seconds. At the moment of switching on detector will flash with green light «1» (PICTURE 1). The registration request is transmitted only at the moment of switching on. In case the registration was not successful, FireProtect blinks 6 times with green LED at the intervals once every second, then detector switches into standalone mode. To repeat registration switch off detector by pressing the power button for 3 seconds, and after a pause of 5 seconds switch it on again. If FireProtect was removed from list of registered devices in security system, it also blinks 6 times with green LED once every second, after that detector switches into standalone mode. Smoke detector always works in the active mode, therefore, when using third party security systems, it is desirable to place it in a constantly active 24-hour security zone of third party security system (panel).

4.2 After successful registration, select optimal location for installation.

▲ IMPORTANT!

Signal level test take some time to start. A certain period of time is necessary for the receiver to send a test request to the sensor, and for the sensor to send a test response.

Test results are displayed in application or a web browser as 3-bar-indicators, as well as on a FireProtect itself. Signal level test results may be as follows:

APPLICATION	FIREPROTECT LIGHT	DESCRIPTION
3 indication bars	lights almost constantly, with short breaks every 1.5 seconds	excellent signal level
2 indication bars	blinks 5 times per second	medium signal level
1 indication bar	blinks twice per second	bad signal level
0 bars	short flashes each 1.5 seconds	no signal

For detector reliable operation signal strength should be no worse than of average level!

5. INSTALLATION

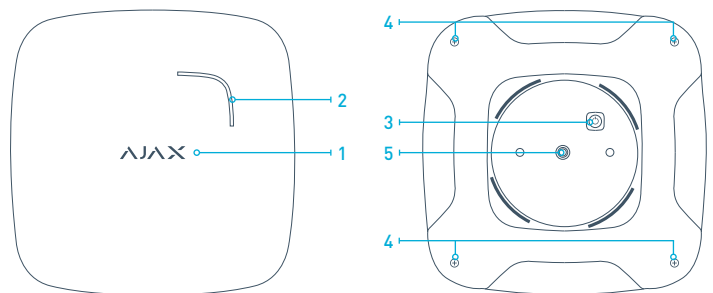
5.1 Smoke detector is designed for indoor use and is not intended to be installed outside. The detector must be installed on the ceiling at its highest point. Remember that in a typical situation, hot air and smoke rise up and they will be concentrated in the highest places of the room. If the ceiling has beams protruding 30 cm from its level, at least one smoke detector must be installed between every two beams.

Detector functioning check is strongly recommend (refer to p. 5.11)!

5.2 Fireprotect detects smoke using optocoupler made of infrared radiator and photoreceiver, which are mounted in a special smoke chamber. If smoke particles get into the chamber, the photoreceiver detects their presence on infrared ray distortion. If smoke particles concentration becomes more than a certain permissible level, the ray distortion becomes stronger and detector sends a signal about smoke alarm to the security system panel simultaneously switching on an acoustic siren built into detector and a red alarm light.

5.3 Since some materials burn without smoke, additional fire detection system using temperature measurements is integrated to the detector. If temperature exceeds 60°C (140°F), the detector gives an alarm immediately. Also FireProtect will be activated if it detects fast temperature rise, even if it is lower than 60 °C.

5.4 FireProtect Plus detector model is additionally equipped with carbon monoxide (CO) sensor. When certain CO in the air concentration is exceeded, FireProtect Plus generates an alarm. Detector is activated: within 60-90 minutes at carbon monoxide concentration of 50 ppm / 0,005% CO in the air; during 10 - 40 minutes at CO concentration of 100 ppm / 0,01%; within 3 minutes at carbon monoxide concentration of 300 ppm / 0,03%.



PICTURE 1. FireProtect detector

1 - Ajax two-color indication light / touch-sensitive button «Test»
2 - acoustic siren hole

3 - power button
4 - detector cover fixing screws
5 - tamper button

▲ IMPORTANT!

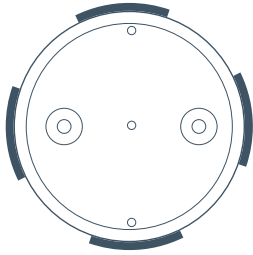
Make sure that in the installation location sensor has a stable radio contact with the receiver! A maximum distance of 2000 m (6552 ft) between the sensor and the receiver is mentioned as a comparison with other devices. This distance was found as a result of open area tests. Connection quality and distance between the sensor and the receiver can vary depending on installation location, walls, compartments, bridgings, as well as the thickness and constructional material. Signal coming through obstacles, loses power. For example, distance range between the sensor and receiver, divided with two reinforced concrete bearing walls, constitutes approximately 30 m (98 ft). Please note that moving the sensor even 10 cm (4 in), it is possible to improve the signal reception considerably. Be sure to check the radio signal level! You can run radio signal test from Ajax mobile application or web browser by clicking on "Signal level test" in the detector settings.

5.5 Alarm activation is accompanied with a sound signal of built-in siren and red light indication. In alarm mode it is possible to switch off sound signal for approximately 10 minutes by pressing the touch-sensitive button «Test» («1», PICTURE 1). It is in the center of AJAX logo. At that alarm light indication is not switched off, no messages come to the receiver in this case and it continues to detect the alarm. If in 10 minutes the smoke level, temperature or CO concentration in the air didn't normalize, the sound signal is reproduced repeatedly.

5.6 For detector installation rotate SmartBracket fastening panel (PICTURE 2) counter clockwise and take it off.

5.7 Fix SmartBracket fastening panel in the ceiling using supplied dowels and screws.

5.8 Fix detector on SmartBracket. Once the detector is fixed on SmartBracket, it must blink with green LED - it means that tamper button is closed on the detector. If detector didn't blink, you should check lid state in receiver settings.



PICTURE 2.
SmartBracket fastening panel

▲ IMPORTANT!

Be careful when installing the fastening panel. Excessive force during its fixation may lead to deformation and, as a consequence, in impossibility to install the detector or insecure fixing. Secure fastening panel only using with supplied mounting tools! Use of other fasteners, such as, large diameter screws, may damage the fastening panel.

5.9 The detector is installed!

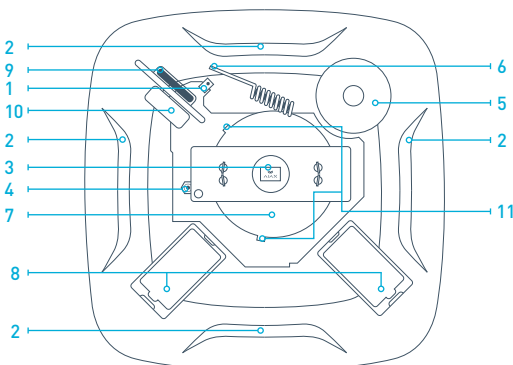
5.10 Ensure that elements of interior, furniture, curtains, house plants, decorative design, wires or other objects don't cover detector.

▲ IMPORTANT!

Don't install the detector:

- near the points places of fast air circulation (ventilations units, open windows or doors);
- near metal objects, causing radio signal attenuation;
- In the rooms with temperature and humidity exceeding the appropriate levels.

5.11 Before installation be sure to run a test to check smoke detector operability. When the detector is switched on and in work mode (without alarm) put finger on the touch-sensitive button «Test» on the detector's body in the center of AJAX logo («1», PICTURE 1) for up to 10 seconds. It will switch the detector to self-test mode for about 5 seconds. In self-test mode, smoke chamber operability is checked, electronic simulation of smoke presence is made, and if smoke chamber is OK – sound signal is generated.



PICTURE 3. Detector construction.

- | | |
|--|---|
| 1 – body opening tamper button | 7 – smoke chamber |
| 2 – smoke chamber apertures | 8 – CR2 batteries |
| 3 – «Test» button | 9 – additional battery CR2032 |
| 4 – «Chamber is dirty» signal reset button | 10 – Carbon monoxide detector (only in FireProtectPlus) |
| 5 – siren | 11 – smoke chamber latches |
| 6 – antenna | |

6. MAINTENANCE

6.1 Maintenance is done once every 6 months. The sensor's board must be cleared of dust, spider web and other impurities.

6.2 If too much dust entered the smoke chamber it can be perceived as smoke, and detector can give a false alarm. Regularly, at least once in 6 months, get rid of the dust, cleaning the detector. If detector is installed in a dusty premises, you need to clean it more often.

6.3 The detector can compensate smoke chamber dustiness before certain level reach. If it was exceeded the message about the necessity to clean the detector will be sent to the receiver (panel). In case of dustiness or smoke chamber failure, the detector gives a long sound signal every minute and a half. Blow the detector with vacuum cleaner or compressor to clean it.

6.4 In case of carbon monoxide (CO) detector failure, the detector similarly gives one long sound signal every minute and a half!

6.5 Never rub the sensor with substances containing alcohol, acetone, petrol and other solvents.

6.6 Replace the batteries up to date. If the battery level is low, the sensor sends signal to the alarm system receiver unit. Detector also signals about low battery with sound signals: one short sound signal – main batteries CR2 are discharged; two short sound signals – additional CR2032 battery is discharged; three sound signals – both batteries are discharged.

To replace the batteries, switch off FireProtect with power button, unscrew screws «4» (PICTURE 1) and remove detector cover. Detector has elements that blocks cover assembly without installed the main set of batteries. Change batteries with new ones, following polarity. Switch on FireProtect with power button.

▲ IMPORTANT!

Duration of detector autonomous operation depends on batteries quality and quantity of alarms triggered. At the average batteries works for about 4 years. It is not possible to switch on detector with additional battery only, main batteries must be always installed.

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

WARNING! When a battery has reached the end of its useful life, do not dispose of the battery in general household waste.

7. WARRANTY

7.1 The warranty period for the detector is 24 months. Warranty does not apply to the batteries!