# The JA-80S wireless fire detector

The JA-80S is a component of Jablotron's Oasis 80 alarm system. It is designed to detect the presence of fire inside a building. It reacts to visible smoke or exceeding a critical temperature in a room. The battery-powered detector communicates via OASIS radio protocol and has a built-in local warning siren.



### Installation

Installation shall only be undertaken by technicians holding a certificate issued by an authorized distributor. The detector is usually installed on the ceiling at least 60 cm from walls. It can cover up to 50 m<sup>3</sup>. For corridors longer than 9 metres, install at least two detectors, one positioned at each end. Avoid installing the JA-80S in locations where:

- air does not flow naturally (wall recesses, corners, apexes of roof attics)

- there is dust, cigarette smoke, or steam,

- air changes rapidly such as close to fans or air conditioning outlets, or above heaters

In kitchens it should not be installed above cookers, as steam, smoke and oily vapours can greatly reduce the sensitivity of the detector.

Keep the detector away from metal objects which could interfere with radio communication.

Warning: The most frequent cause of false alarms is bad detectorpositionina.

#### Installation:

- 1. Open the detector (rotate the rear cover)
- 2. Screw the rear cover onto the desired location
- Leave the battery disconnected and the cover open and then 3 follow the control panel or receiver manual.
- 4. The basics of enrollment are:
  - 1. Enter enrollment mode on the control panel by keying in "1" in Service mode.
  - 2. Install a battery into the detector to activate enrollment and selfcalibration (20 secs) which should be done in clean air without smoke or fumes at a temperature of about +20°C.
  - 3. Exit enrollment mode by pressing "#"

To enroll a detector after having already connected a battery, first disconnect the battery, and press and release the test button to discharge any remaining charge to ready the device for enrollment

After closing the detector, check that the two halves of the 4. housing are securely together.

After installing a battery into the detector, allow one minute for stabilisation. During this minute the LED is continuously lit.

## Jumpers



SIREN ON / OFF allows the built-in siren to be disabled (OFF = disabled)

FIRE / INST selects what the natural reaction of the control panel to the detector signal will be.

Jumper position = FIRE = the control panel responds with a fire alarm, no matter if the system is armed or not.

Jumper position = INST = the control panel responds with a fire alarm only if the system is armed. This feature is useful if the user wishes to allow smoke in a room from e.g. smoking or a fireplace, while the control panel is disarmed when authorized people are present in the building.

Warning: In the INST position, while the system is disarmed, it is not protecting against fire. The FIRE / INST jumper only has an effect if the detector has a natural reaction assigned to its address in the Oasis control panel. It also has no effect when used with a UC-8x or AC-8x receiver. Whenever the detector cover is opened, a tamper signal is sent.

## Testing the detector

The functioning of the detector can be tested by pressing and holding the test button (e.g. for 1 sec). This activates the siren and the LED flashes. The strength and quality of detector signals can be measured by the control panel in Service mode. During testing by the test button, the detector transmits signals which can not trigger fire alarms in the control panel. Warning: Never start a fire in a building to test the detector. Instead, use smoke-simulating aerosols for realistic testing.

#### Silencing the siren during an alarm

During a fire alarm, the detector LED flashes and the built-in siren sounds. Under these conditions the siren can be silenced by pressing the test button, but the LED will continue to flash until the smoke clears from the room.

#### Alarm memory in the detector

Normally the detector's fire-alarm condition lasts until the smoke clears from the room and the fire-alarm information is stored in the control panel's memory. If desired, a local memory in the detector can be enabled by pressing and holding the test button during battery installation. If this function is enabled, after detecting fire, the detector's fire alarm mode continues until the test button is pressed.

#### Fault indication

The detector performs regular self-testing. If a fault is detected in the detector , its LED will start to flash rapidly. In such a case, disconnect the battery from the detector, and after about 20 secs, re-connect it. If after a minute the LED still flashes, then send the detector off for repair.

#### **Battery replacement**

The detector monitors its battery voltage and if too low, a transmission is sent to the control panel to inform the installer or user. The detector continues to function but with a short LED flash every minute. Battery replacement should not be delayed by more than two weeks. This should be done by a qualified technician with the control panel in Service mode.

After battery replacement, test the functioning of the detector using its test button. Expired batteries should not be thrown into the garbage, but disposed of according to local regulations.

#### Removing the detector from the system

If a detector is removed, the control panel announces the removal. The detector has to be deleted in the control panel before intentional removal.

## **Technical parameters**

Voltage:	Lithium battery type CR14505 (AA 3.0V)
Typical battery lifetime	approx. 3 years
Communication band	868 MHz, Oasis protocol
Smoke detection	optical, light dispersion
Smoke sensor sensitivity	m = 0.11 ÷ 0.13 dB/m to EN 54-7
Temperature detection	class A2 to EN 54-5
Fire-alarm temperature	+60 °C to+ 70 °C
Acoustic power of the built-in siren	80 dB/m A
Operational temperature range	-10°C to +55 °C
Dimensions	diameter: 126 mm, height:65 mm
Complies with EN 54-7, EN 54-5, prEN and EN 55022	1 54-25, ETSI EN 300220, EN 50130-4,
Can be operated according to	VO-R/10/05.2006-22

Jablotron Ltd. hereby declares that the JA-80S is in compliance with the

use.

1999/5/EC. The original of the conformity assessment can be found at www.jablotron.com, Technical Support section Note: Although this product does not contain any harmful materials we

essential requirements and other relevant provisions of Directive

suggest you return the product to the dealer or directly to the producer after Pod Skalkou 33 466 01 Jablonec n.N.



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