

Operational description

EXHIBIT 4

The JA-80S is a component of Jablotron's Oasis 80 alarm system. It is designed to detect the presence of fire inside residential or commercial buildings. It should not be installed in industrial premises. The battery-powered detector communicates via OASIS radio protocol and has a built-in local warning siren.

The detector combines an optical smoke sensor with a heat sensor. Both sensors have their outgoing signals processed digitally, resulting in higher false alarm immunity. The optical sensor works using a light diffusion principle and is very sensitive to the presence of large-sized particles which are characteristic of dense smokes. By contrast, the sensor is less sensitive to small-sized particles which are typical of cleanly burning fires. In particular, the smoke sensor is not capable of detecting the by-products of cleanly-burning fluids such as alcohols, for instance,. This deficiency is compensated for by the built-in heat sensor. This sensor provides a slower reaction when compared to the smoke sensor, but is much better at reacting to fires with rapidly rising heat producing only a little smoke.

Exposing fire conditions to the smoke and heat sensors requires some level of air circulation. It is therefore necessary to install the JA-80S detectors in such a place on the ceiling that (in the case of fire) smoke masses are forced to go in the direction of the detector's position. This can usually be achieved in most buildings. However, the JA-80 is not suitable for installation in outdoor spaces or interiors with an extremely high ceiling where fire by-products would not reach the detector position.

The battery-powered detector communicates via OASIS radio protocol with control panel.

The transmitter is activated by smoke/heat sensors. Under normal conditions the transmitter sends periodically 540 s the data pulse (system integrity test).

Antenna is internal.

Operational frequency : 868,5 MHz

Battery : Lithium battery type CR14505 (AA 3.0V)