

4348-01

### Brief description

The ZX832-2 multi-sensor represents the next generation of fire detectors that gives an earlier warning of fire or smoke, with the ability to discriminate against false alarms. Fuzzy logic software using multi-criteria sensing forms the basis of this intelligent detector.

The detector consists of integrated high sensitivity smoke and thermal sensors. The system combines the dynamic results of rates of change, patterns, and absolute levels of smoke and heat to identify real fire criteria. Selectable software algorithms allow the response to be matched to each particular hazard. Algorithms can change for day/night operation.

### Specifications

#### General information

Designation	Intelligent multi-sensing fire detector
Specification	EN54 Part 5 (Class P) and EN54 Part 7 - check listing for approved modes.
Model number	ZX832-2
Part number	0626
Compatibility	All ZP analogue systems
Mounting	Plugs into surface or semi recessed base
Sensitivity	Smoke software selectable std = 0.13 dB/m Heat software selectable 58 °C or 75 °C
Area coverage	Smoke element: 100 m <sup>2</sup> , subject to local codes Thermal element: 50 m <sup>2</sup> , subject to local codes

Wiring	2 core loop or spur
Monitoring	Open and short circuit fault. Sensor removal and device type.
Indication	Alarm LED (red)
Addressing method	7 way Dipswitches in head
Detection principle	Smoke: photo electric light scatter; Thermal: thermistor

#### Environmental

Application	Indoor use
Environmental rating	IP32
Temperature range	-20 to +75 °C
Humidity range	20 to 95% RH (non condensing)

#### Primary supply

Operating voltage	Address line pulsed 20 V (19.5 to 20.5 V). Max. line less 4 V
Current (typical)	380 µA
Current (quiescent)	600 µA
Current (alarm)	700 µA

#### Mechanical details

Material	Moulded ABS
Colour	White
Dimensions (from ceiling with base)	ZP7-SB1 surface base - 67 mm ZP7-RB1 recessed based - 45 mm
Weight	105 g (excluding base)

#### Manufacturer traceability

A barcode label is affixed to each product (see example below). This label reflects, amongst other things, the date of manufacture of the product in the form YYDDD.



These numbers are interpreted as follows:

YY = year of manufacture

DDD = day of manufacture

For example the numbers 07134 would indicate that the product was manufactured on the 134<sup>th</sup> day of the year 2007, that is 14<sup>th</sup> May 2007.



## Installation instructions

**Note:** No wiring is required during detector installation. Refer to base datasheet for line wiring installation. All installation should be in accordance with the requirements of the authority having jurisdiction.

Refer to Figure 1. The detector attaches to compatible bases with a plug-and-twist action as follows.

1. Align the detector with the base and turn it slowly until the location lugs and grooves mate, allowing the detector to slide completely into the base.
2. Rotate the detector clockwise until it locks. To remove the unit from the base, perform these steps in reverse order.

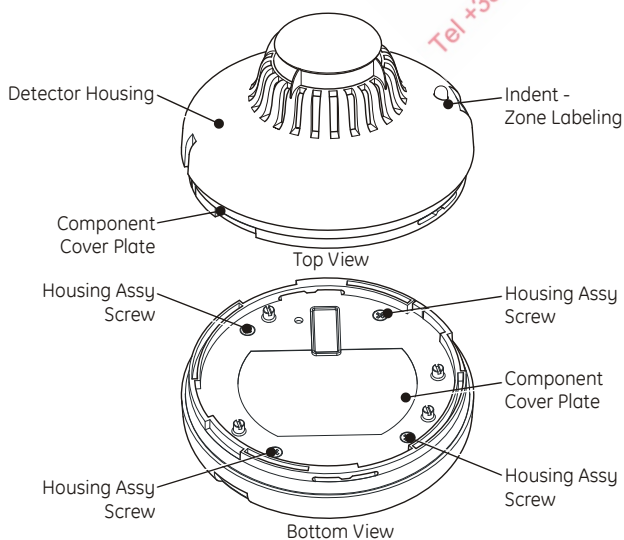
**Notes:** To prevent unauthorized removal, a plastic breakout tab is provided in the detector housing. Once the breakout tab is removed the detector can only be released by use of a special tool.

Prior to initial testing remove the yellow plastic dust cover from the detector and notify the proper authorities that the fire alarm system is undergoing maintenance and will be temporarily out of service.

An indent is provided on the detector exterior for application of Zone number labelling to allow easy zone identification.

For head out continuity, a diode base must be used and zone wiring must be terminated with a suitable end of line (EOL) component. The choice of EOL is dependant on the control panel used (refer to Control Panel datasheet). For Control panels without a head out facility, an active end of line unit may be used.

Figure 1: Installing the detector



**Warnings:** This device should be installed in conjunction with, and in applications where, smoke detectors are likely to give unwanted alarms and should only be used as part of a broad-based life safety system. For further information consult your local fire protection specialist.

**Maintenance should be planned in accordance with the requirements of the authority having jurisdiction.**