

P132A Laser

Addressable Photoelectric Smoke Detector

Installation Instructions

Description

The Tyco P132A Laser is a very high sensitivity smoke detector that utilizes a laser photoelectric sensing chamber. The use of a laser diode provides significant improvements in signal-to-noise ratio compared with an LED light source. The detector is designed to provide open area detection for clean environments, or cubicle detection for high value equipment. It must be used with a compatible control panel. The maximum number of detectors per loop is 99. The detector address is set by rotary decade switches on the back of the detector. Two indicating LEDs can be programmed via the control panel to blink as the detector is polled, and show constant red when in alarm. The P132A Laser mounts to the Z131A base or Z132A Sounder Base, both of which incorporate a tamper resistance feature that can prevent removal of the detector without the use of a tool. Refer to the Base Instructions for more details.

Specifications –Laser/Laser Mk2

Operating Voltage ¹	15-32VDC
Quiescent Current	230µA ²
	330µA ³
Alarm Current (LED on)	6.5mA max
Remote Indicator	Tyco E500 Mk2
Operating Temperature	-10°C to +40°C
Relative Humidity (max, non-condensing)	93%
Weight (without base)	150g
Sensitivity (CIE Selectable) ⁴	0.6 to 8% Obs/m

¹ Tyco 130 Series protocol ² No communication

³ One communication every 5 seconds with LED blink enabled

⁴ As per AS1603.2-1997

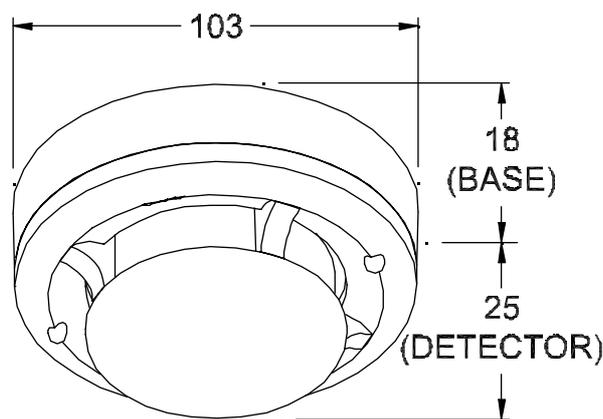


Figure 1. P132A Laser

Location

The P132A Laser is a very high sensitivity device. It should only be used in a clean environment. It is strongly recommended that the P132A be removed prior to commencing any dust producing activity.

Ideal Applications

- Computer Room
- Hospital
- Museum
- Telephone Exchange

Avoid

- Cigarette smoke
- Water vapour
- Cooking fumes
- Vehicle exhaust

Mounting

The Z131A base is fixed by at least 2 screws 4mm diameter max., appropriate to the mounting surface, spaced at 50, 60 or 70mm, depending on the holes used. Cables are introduced through a central hole approximately 22mm diameter.

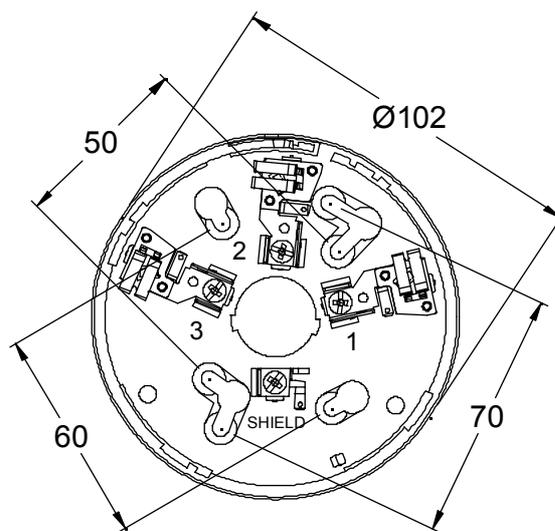


Figure 2. Z131A Mounting

Wiring

- 1 (-) Negative from previous base/CIE
Negative Remote Indicator

Note: a maximum of two cables may be connected at any one terminal; additional cables require the use of suitable crimp terminals.

- 2 (+) Positive from previous base/CIE

- 3 Positive Remote Indicator

Shield Terminate and link the shield where shielded cable is used.

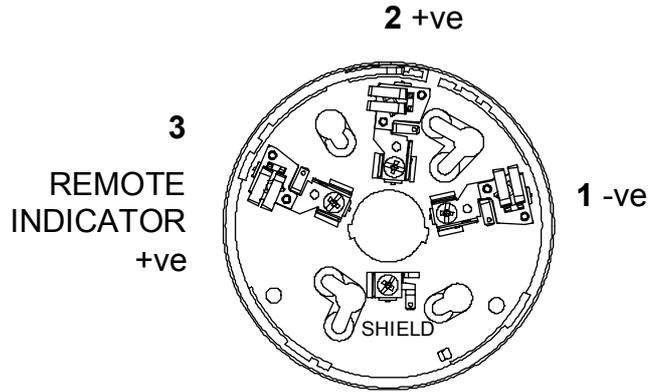


Figure 3. Z131A Terminals

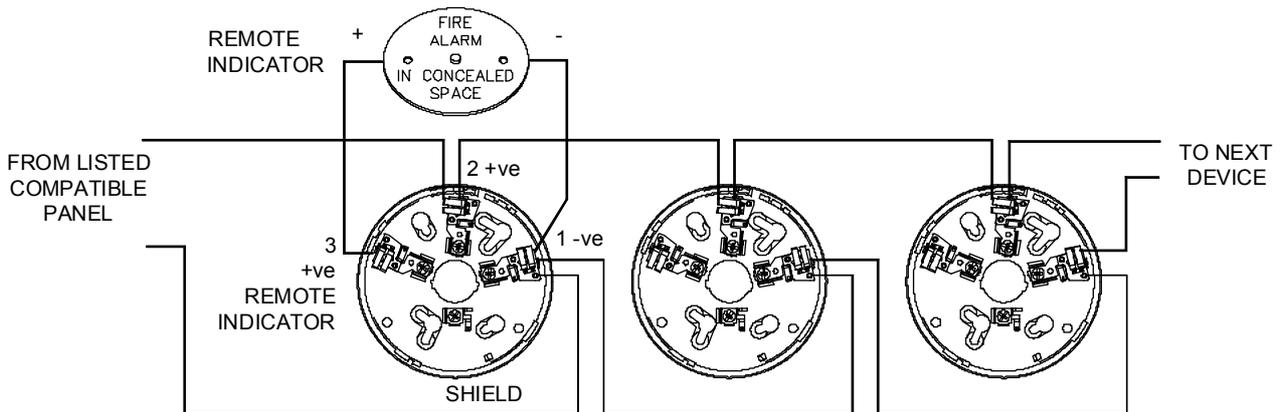


Figure 4. Z131A Typical Wiring

Address Setting

The P132A Laser Photoelectric Smoke Detector has on the back two rotary decade switches to enable the address for that device to be selected. The switch on the left is used for setting the tens; the switch on the right controls the units. Figure 5 shows the left switch at 3 and the right switch at 6; the address therefore is 36.

Laser Safety Information

This smoke detector does not produce any hazardous radiation and is certified as a Class 1 laser product under the US Department of Health and Human Services Radiation Performance Standard according to the Radiation Control or Health and Safety Act 1968. Any radiation emitted inside the smoke detector is completely within the protective housings and external covers. The laser beam cannot escape from the detector during any phase of operation.

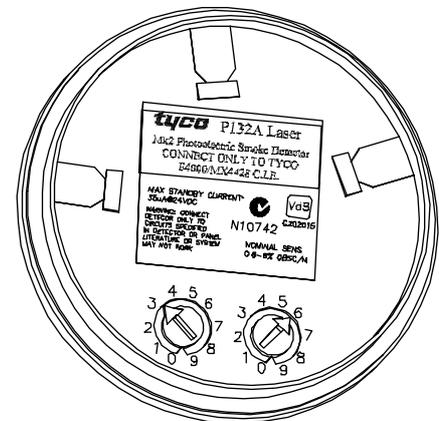


Figure 5. P132A Back View

Service

Tyco Services Detector Clean & Calibrate, Wollongong, provide a fast, efficient Clean, Calibrate and Repair service for all types of detectors. All work is done to a fixed price and carries a 6 month guarantee. A special change-over service is available in Australia.

For all sales and inquiries, contact:

www.tycosafetyproducts-anz.com

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Products

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