

INSTALLATION INSTRUCTIONS FOR B500 SERIES DETECTOR BASES

Before installing bases, please thoroughly read System Sensors Guide to Intelligent Fire Systems, which gives information on detector spacing, placement, zones and applications. Copies are available from System Sensor.

GENERAL DESCRIPTION

B500 Series detector bases are designed for use with all System Sensor 500, 200 and 200+ analogue range detectors and their variants. Please refer to the control panel manufacturer for compatibility information.

B500 SERIES BASE OPTIONS

Name	Description	Diameter (mm)	Height (mm)	Weight (g)	Applications
B501	Standard Detector Base	102	20	53	Normal applications
B501DG	Deep Base	102	25.9	57	For use with cabling in surface mounted conduit
B524HTR	Heater Base	102	36	92	Low temperature applications – Includes anti condensation heater
B524IEFT-1	Short Circuit Isolator Base	See separate Manual D550-27-10			
B524RTE	Relay Base	See separate Manual D550-29-00			

INSTALLATION

Mounting

The detector base should be mounted using pan headed screws, with a maximum diameter of 4mm, and with a maximum head diameter of 8mm. If required, suitable junction boxes may be used. Standard mounting hole centres are 60mm, however 50mm and 70mm are available on some bases.

Wiring

All wiring should be installed in compliance with local codes and standards, and the authority having jurisdiction.

The base terminals are designed to accept cables with cross sectional areas between 0.75mm² and 2.5mm². Reference should always be made to the control panel specifications for acceptable cable parameters.

Note: To ensure supervision of contacts, the wire run must be broken. Do not loop the wire under the terminals.

See diagrams opposite for wiring details.

Tamper Resist Feature

B500 bases also include a tamper resist feature, which when activated prevents removal of the detector head without the use of a tool.

To activate this feature, break off the tab on the detector base prior to installing the detector (figure 1a). To remove the detector once this tamper resist is activated, place a small bladed screwdriver into the slot on the side of the detector base, push the lever away from the detector and rotate the detector anti clockwise (see figure 1b).

Note: Do not activate the feature if a head removal tool is to be used; this feature is not reversible without damaging the base.

REMOTE ANNUNCIATOR UNITS

The RA400Z Remote Annunciator LED is available as an optional accessory. This unit has a rectangular plate, which fits US single gang light switch boxes.

If a different remote annunciator is to be used, ensure that it is suitably rated for operation with System Sensor analogue detectors: 22.5V, 10.8mA at 24VDC supply.

Figure 1a: Activation of Tamper Resist Feature

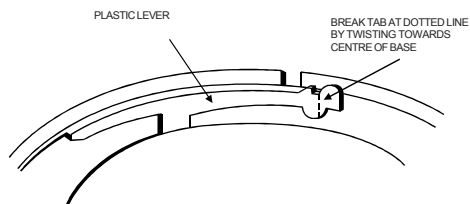
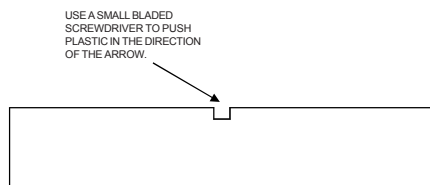
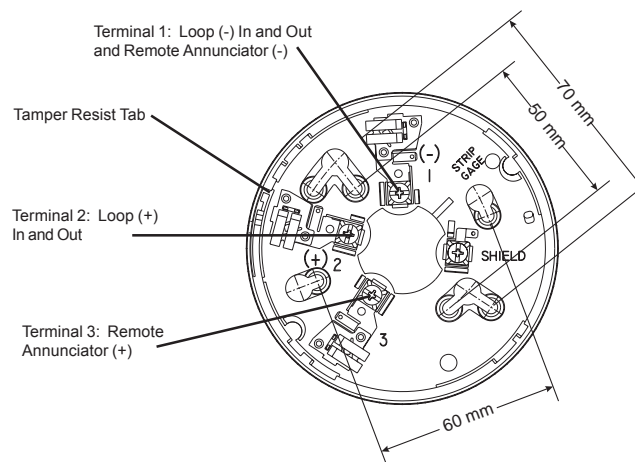


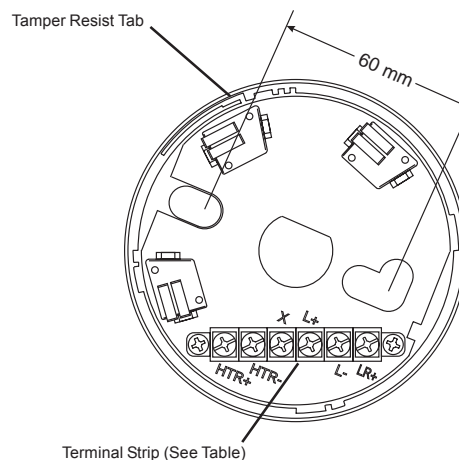
Figure 1b: Removing Detector Head From Base



B501 STANDARD BASE AND B501DG DEEP BASE



B524HTR HEATED BASE



Terminal	PCB Label	Connection
1	HTR+	HTR+: Heater Power Supply
2	HTR-	HTR-: Heater Power Supply
3	X	Not Used (Shield)
4	L+	Loop +
5	L-	Loop -
6	LR+	Remote Annunciator +

B524HTR Specifications:

Maximum Voltage:	32 V (dc or ac)
Power at 24V:	1.9 W
Maximum permissible peak power:	4W
Equivalent heating resistor value:	300 Ohms
Operating temperature:	-30°C to +60°C
Operating humidity range:	10% to 93% Relative Humidity (Non-condensing)

Notes:

- The B524HTR requires an external power supply to drive the heater resistors
- Ensure all terminals are fully screwed home prior to installation of the detector

ADDRESS TAG

A self adhesive address tag is available for use with all System Sensor 500 series bases, which is simply stuck to the side of the base, and labelled as appropriate to allow the detector address to be determined without removal of the detector head.

