



## INSTALLATION INSTRUCTIONS FOR B400 SERIES PLUG IN DETECTOR BASES FOR USE WITH SERIES 100, 300 AND 400 DETECTORS AND VARIANTS

Before installing bases, please thoroughly read the System Sensor's "Guide to Conventional Fire Systems", which provides information on detector spacing, placement, zoning, wiring, and applications. Copies of this manual are available at no charge from System Sensor.

### GENERAL DESCRIPTION

B400 series plug in detector bases are designed for use with System Sensor Series 100, 300 and 400 smoke and heat detectors and their variants. Several base options are available permitting System Sensor heads to be used with a variety of 2-wire fire systems. The panel manufacturer should be consulted to ensure that the correct base option is selected.

Base Name	Diameter (mm)	Height (mm)	Weight (g)	Resistor (Ω)	Schottky Diode
B401	102	20	53	-	-
B401R	102	20	55	470	-
B401R1000	102	20	55	1000	-
B401SD	102	20	56	-	Yes
B401RSD	102	20	57	470	Yes
B401DG	102	25.9	57	-	-
B401DGR	102	25.9	59	470	-
B401DGR1000	102	25.9	59	1000	-
B401DGSD	102	25.9	60	-	Yes

### BASE OPTIONS

### SPECIFICATIONS

Operating Voltage: Nominal 12 / 24VDC  
 Current: See detector specifications.  
 Operating temperature range: See detector specifications.  
 Operating humidity range: See detector specifications.

### INSTALLATION

#### Mounting

The detector base should be mounted using pan head screws, with a maximum thread diameter of 4mm, and maximum head diameter of 8mm. If required, suitable junction boxes may be used. Mounting centres are shown in figure 1.

If Series 300 (or variant) single indicator detectors are to be used, the position of the detector indicator LED when installed will be in line with terminal 4 on the base.

#### Wiring

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

The bases should be wired in accordance with figure 2b for bases fitted with resistors, and figure 2a for all other bases.

The base terminals are designed to accept cables between 0.75mm<sup>2</sup> and 2.5mm<sup>2</sup>, however reference should be made to the panel specifications for acceptable cable resistance and capacitance.

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

To permit continuity testing of the wiring circuit prior to installation of the detector heads, the bases contains a shorting spring, which acts to connect terminals 2 (negative in) and 3 (negative out) see figure 1. To activate, gently push the spring toward the centre of the detector until it clips into place. The short will automatically disengage when the detector is installed.

#### Tamper Resist Feature

The detector base also includes a feature, which when activated prevents the removal of the detector without the use of a tool.

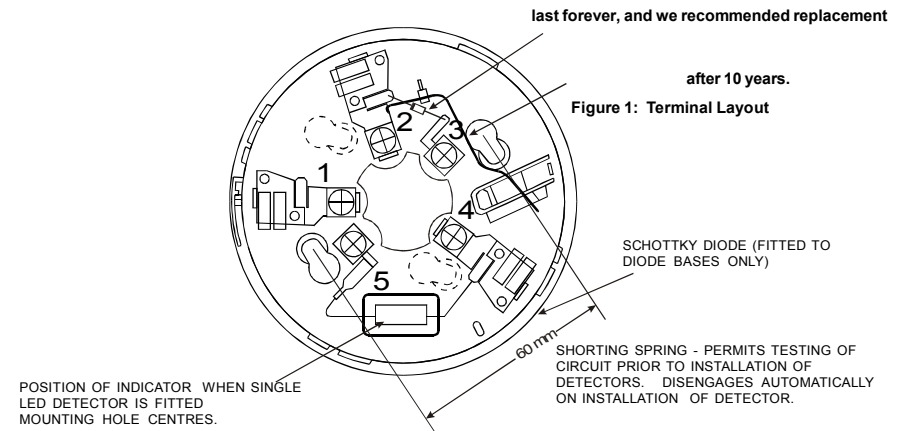
To activate this feature, break off the tab on the detector base prior to installing the detector (See figure 3a). To remove a detector once the tamper resist feature has been activated, place a small bladed screwdriver into the small hole on the side of the base, push the lever away from the detector and rotate the detector anti-clockwise (see figure 3b).

Note: Do not activate the tamper resist feature if a removal tool is to be used - this feature is not reversible.

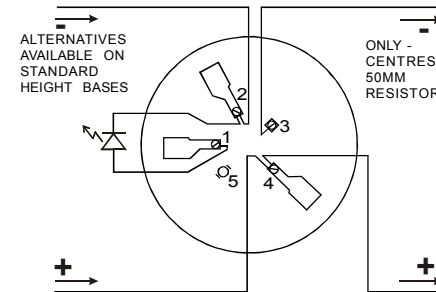
### REMOTE ANNUNCIATOR UNITS

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

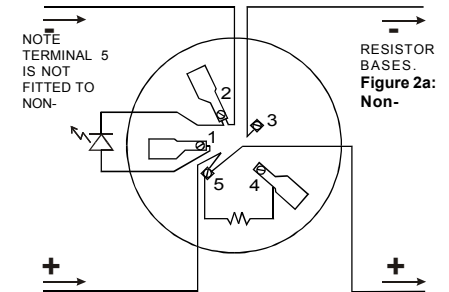
Smoke detectors cannot



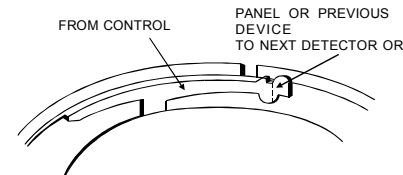
NOTE - DASHED MOUNTING HOLES ARE



(RESISTOR BASES ONLY)

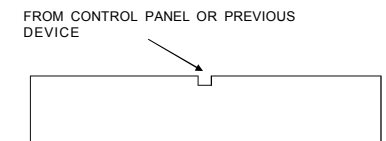


### Resistor Base Wiring



END OF LINE DEVICE

### Figure 2b: Resistor Base Wiring



If a different type of remote annunciator is used, it should be rated for 5mA at 3.0V

### WARNING

### LIMITATIONS OF FIRE DETECTORS

**Smoke detectors will only work when connected to a functioning, compatible control panel.**

**Smoke detectors have sensing limitations. They will not sense fires where smoke does not reach the sensor, and different types of detector will respond differently to various smoke types.**