

B350LP PLUG-IN DETECTOR BASE INSTALLATION INSTRUCTIONS

Before installing detectors, please thoroughly read the system wiring and installation manuals, and manual I56-407, *Guide for Proper Use of System Smoke Detectors*, which provides detailed information on detector spacing, placement, zoning, and special applications. Copies of these manuals are available from Fire•Lite.

GENERAL DESCRIPTION

The B350LP Plug-in Detector Base is used with Fire•Lite models CP350 ionization, SD350 and SD350T photoelectronic detectors, and H350 and H350R heat detectors

The B350LP base is intended for use in a 2-wire addressable system, with screw terminals provided for power (+ and –), and remote annunciator connections. Communication takes place over the power (+ and –) lines.

BASE TERMINALS

| NO. | FUNCTION |
|-----|-----------------------------------|
| 1 | Power (–), Remote Annunciator (–) |
| 2 | Power (+) |
| 3 | Remote Annunciator (+) |

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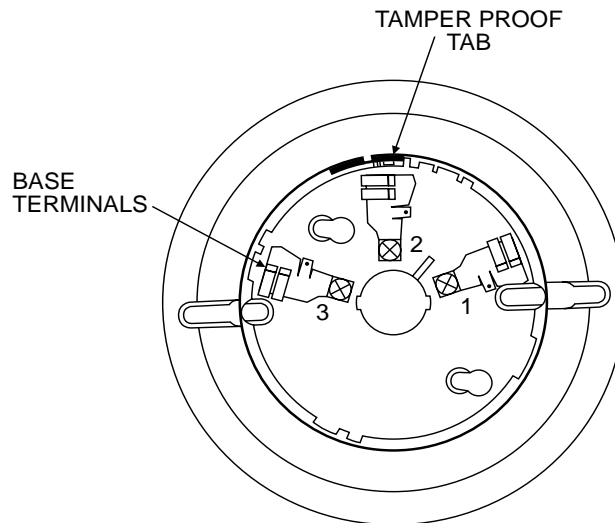


Figure 1. Terminal Layout

SPECIFICATIONS

| | |
|-----------|---|
| Diameter: | 6.1 inches (155 mm) |
| Mounting: | 4 inch (102 mm) square box with or without plaster ring |
| | Min. Depth: 1.5 inches (38 mm) |
| | 4 inch Octagon Box, Min. Depth – 1.5 inches (38 mm) |
| | 3-1/2 inch Octagon Box, Min. Depth – 1.5 inches (38 mm) |
| | Single Gang Box, Min. Depth – 1.5 inches (38 mm) |

MOUNTING

This detector base mounts directly to 3-1/2 inch and 4 inch octagon boxes, 4 inch square boxes (with or without plaster rings) and single gang boxes. To mount, remove the decorative ring by turning it in either direction to unhook the snaps, then separate the ring from the base. Install the base on the box using the screws supplied with the junction box and the appropriate mounting slots in the base. Place the decorative ring on the base and rotate it in either direction until it snaps into place (see Figure 2).

INSTALLATION WIRING GUIDELINES

All wiring must be installed in compliance with all applicable local codes and any special requirements of the authority having jurisdiction, using the proper wire size. The conductors used to connect smoke detectors to control panels and accessory devices should be color-coded to reduce the likelihood of wiring errors. Improper connections can prevent a system from responding properly in the event of a fire.

For signal wiring (the wiring between interconnected detectors), it is recommended that the wire be no smaller than AWG 18. However, the screws and clamping plate in the base can accommodate wire sizes up to AWG 12. The use of twisted pair wiring or shielded cable for the power (+ and -) loop is recommended to minimize the effects of electrical interference.

If shielded cable is used, the shield connection to and from the detector must be continuous by using wire nuts, crimping, or soldering, as appropriate for a reliable connection.

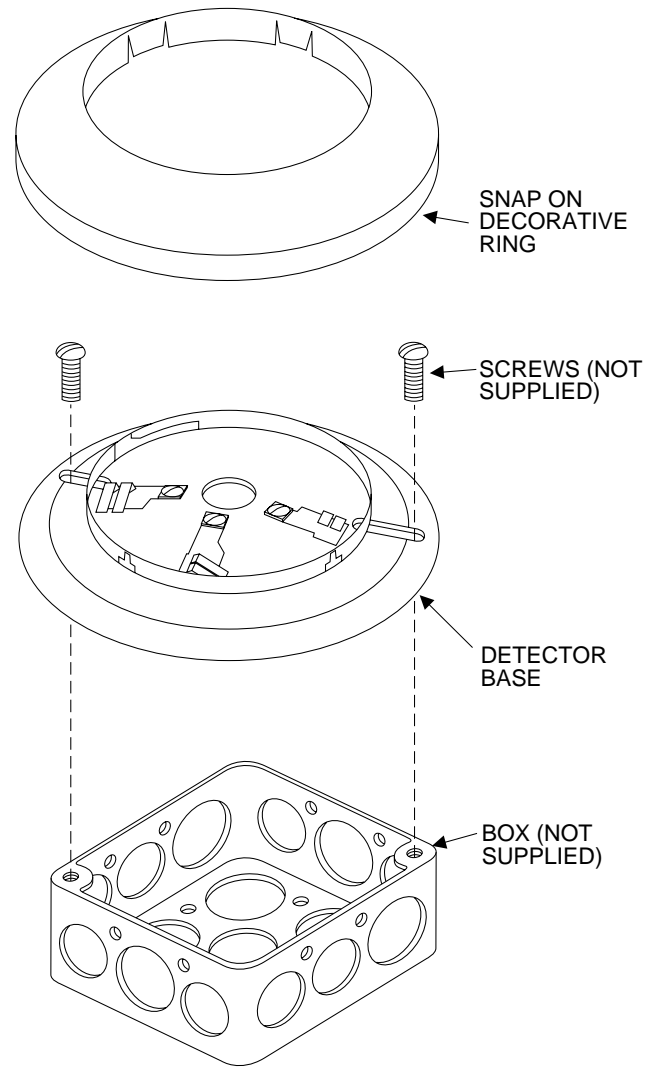


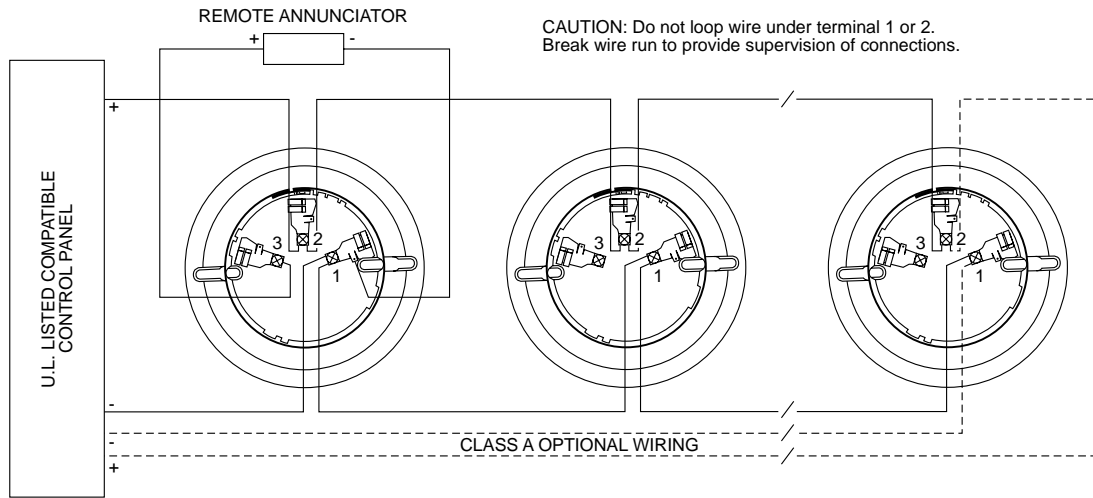
Figure 2. Mounting Detector to Box

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Make electrical connections by stripping about 3/8" (10 mm) of insulation from the end of the wire (use strip gauge molded in base), sliding the bare end of the wire under the clamping plate, and tightening the clamping plate screw. Do not loop the wire under the clamping plate.

The zone wiring of the detector base should be checked before the detector heads are installed in them. The wiring should be checked for continuity and polarity in the base, and dielectric tests should be performed.

The base includes a label for recording the zone, address, and type of detector being installed. This information is important to set the address of the detector head that will later be plugged into the base and to verify the type required for that location.



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Figure 3. Typical Wiring Diagram for 2-wire loop

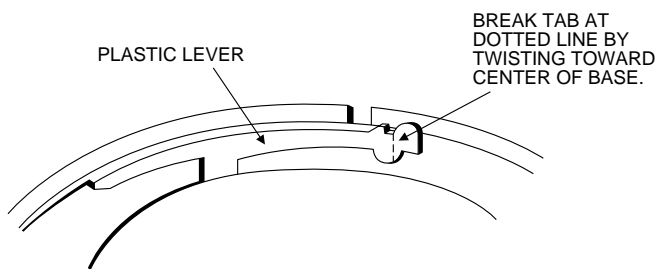
TAMPER-RESISTANCE

Note: Do NOT use the tamper-resistant capability if the XR2 Removal Tool will be used.

The Tamper Resistant Tab, in the Detector Mounting Bracket, can make the detector tamper-resistant by making it necessary to use a small screwdriver or similar tool to detach the detector from the base.

To make the detector tamper-resistant, use needle-nose pliers to break the smaller tab at the scribed line on the tamper resistant tab. Figures 1 and 4A show the location of this tab on the detector mounting bracket.

To remove the detector from the base after it has been made tamper resistant, remove the decorative ring by rotating it in either direction and pulling it away from the base. Then, insert a small screwdriver into the notch, as indicated in Figure 4B, and press the plastic lever toward the mounting surface before rotating the detector counterclockwise for removal.



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Figure 4A. Enabling the Tamper-Resistant Capability

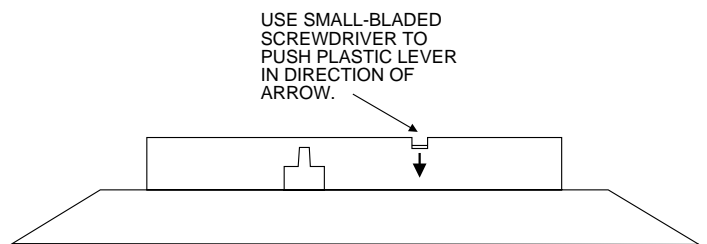
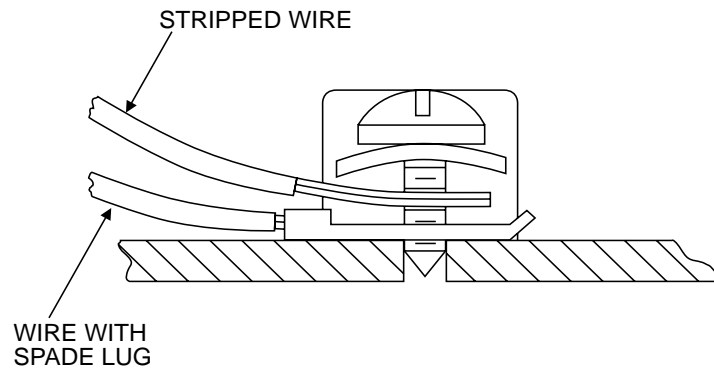


Figure 4B. Removing the Detector Head from the Base

REMOTE ANNUNCIATOR, MODEL RA400Z

Connect the remote annunciator between terminals 1 and 3 using the spade lug terminal included. The spade lug terminal is connected to the base terminal as shown in Figure 5.

It is not acceptable for three stripped wires to be under the same wiring terminal unless they are separated by a washer or a lug like the spade lug supplied with the model RA400Z. See Figure 5 for installation.



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Figure 5. Connection to Remote Annunciator Terminal.

Please refer to insert for the Limitations of Fire Alarm Systems