NOTIFIER B610LP Plug-In Detector Base Instruction Manual

B610LP PLUG-IN DETECTOR BASE
INSTALLATION INSTRUCTIONS

FOR USE WITH THE FOLLOWING SMOKE DETECTOR MODELS:
IN US: CP-651, SD-651
IN EUROPE: CP-651E, SD-651E
Before installing detectors, please thoroughly read manual I56-407, Guide for Proper Use of System Smoke Detectors, which provides detailed information on detector spacing, placement, zoning, wiring, and special applications. Copies of this manual are available from Notifier or a Notifier distributor.
NOTICE: This manual should be left with the owner/user of this equipment.
IMPORTANT: The detector used with this base must be tested and maintained regularly following NFPA 72 requirements.
The detector used with this base should be cleaned at least once a year.

Contents

GENERAL DESCRIPTION

The Model B610LP detector base is designed for use with Notifier model SD-651 and SD-651E photoelectronic detector heads and CP-651 and CP-651E ionization detector heads. This two-wire base is equipped with screw

terminals for the connection of power, ground, and an optional remote annunciator.

SPECIFICATIONS

Base Diameter:	6.1 inches (155 mm)
Base Height:	0.95 inches (24 mm)
Weight:	0.3 lb. (137 g)
Mounting:	4-inch square box with or without plaster ring. Min. depth–1.5 inches 3-1/2-inch octagon box.Min. depth–1.5 inches
Operating Temperature Range:	0° to 49°C (32° to 120°F)
Operating Humidity Range:	10% to 93% Relative Humidity, Noncondensing

ELECTRICAL RATINGS – includes base and detector

	12/24 VDC 4 Volts peak-to-peak 0.02 µF Maximum
System Voltage:	8.5 VDC Minimum
Maximum Ripple Voltage:	35 VDC Maximum
Start-up Capacitance:	120 µA Maximum
Standby Ratings:	4.2 VDC Minimum at 10 mA
Alarm Ratings:	6.6 VDC Maximum at 100 mA
Reset Voltage:	(Alarm current must be limited to 100 mA by the control panel.
Reset Time:	If it is used, the RA400Z Remote Annunciator operates within the specified
Start-up Time:	detector alarm currents.) 2.5 VDC Minimum 0.3 Seconds Minimum 34.0 Seconds Maximum

MOUNTING

The detector base mounts directly to 3-1/2 inch and 4-inch octagon boxes and 4-inch square boxes, with or without plaster rings. To mount the base, remove the decorative ring by rotating it in either direction to unhook the snaps before separating the ring from the base. Use the screws supplied with the junction box to attach the base to the box through the appropriate slots in the base.
See Figure 1. Position the decorative ring around the base and rotate it in either direction until the ring snaps into place.

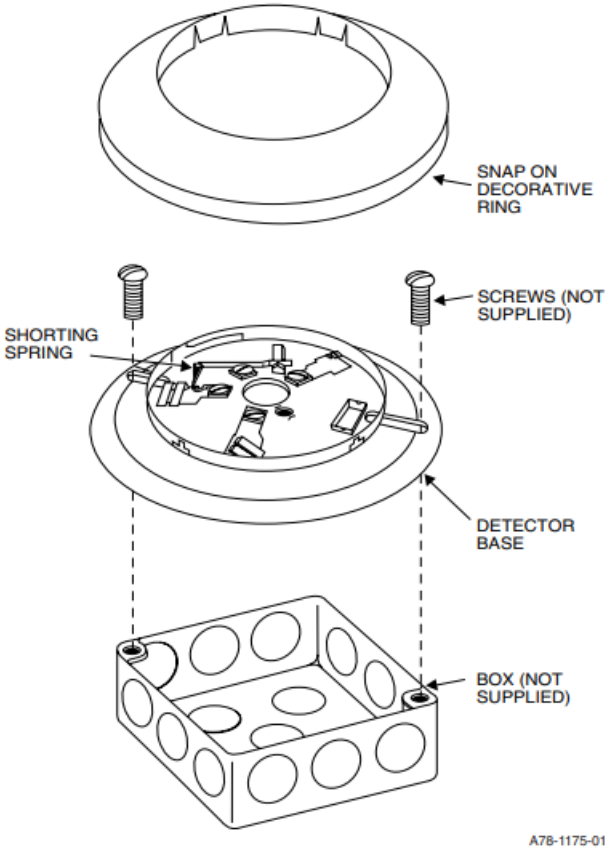

Figure 1. Mounting Base to Box

INSTALLATION GUIDELINES

Allowable loop resistance is an important specification for control panels as well as for smoke detectors and their bases. The alarm system cannot be expected to operate correctly if system components have incompatible allowable loop resistances. Therefore, before beginning installation, refer to the control panel manufacturer's loop resistance specification to ensure that it is listed as compatible with the Notifier base and smoke detector being installed.

All wiring must be installed in compliance with the National Electrical Code and 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 for the power (+ and -) loop is recommended to minimize the effects of electrical interference.

NOTE: To ensure that electrical connections are supervised, do NOT loop wires under terminals 2, 3, and 5 – break the wire at each terminal.

To make electrical connections, strip approximately 3/8″ (1 cm) insulation from the end of each wire. Slide the wires under the clamp plate and tighten the terminal screw.

Check the zone wiring before installing the smoke detector head. The built-in shorting spring makes it convenient to do this. After the detector base is wired and attached to the electrical box, position the shorting spring against terminal 3.

Use the slot in the retaining clip to hold the spring against the terminal, as shown in Figure 1. This shorts the negative-in and negative-out leads so that loop wiring can be tested for continuity.

The shorting spring in the base will disengage automatically when the detector head is removed from the base. DO NOT remove the shorting spring since it reengages as the detector head is turned into the base, completing the circuit.

NOTE: IF A REMOTE ANNUNCIATOR IS NOT USED, POLARITY OF THESE TERMINALS MAY BE REVERSED.

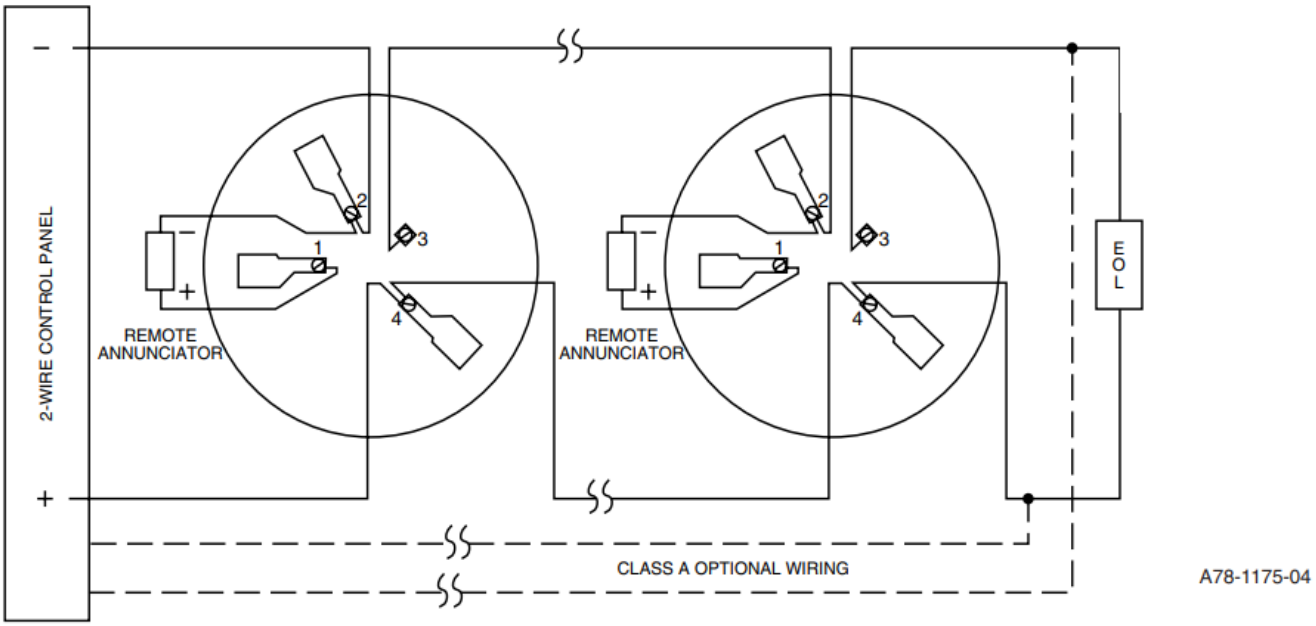

Figure 2. Wiring Diagram for a Typical 2-Wire Detector System.

TAMPER-RESISTANCE FEATURE

NOTE: DO NOT use the tamper-resistance feature if the XR2 Removal Tool will be used to remove detectors from the base.

This detector base can be made tamper resistant so that the detector cannot be detached without the use of a tool. To make the base tamper-resistant, break off the smaller tab at the scribed line on the tamper resistant tab located on the detector mounting bracket (see Figure 3A), before installing the detector.

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 3B, and press the plastic lever toward the mounting surface before rotating the detector counterclockwise for removal.

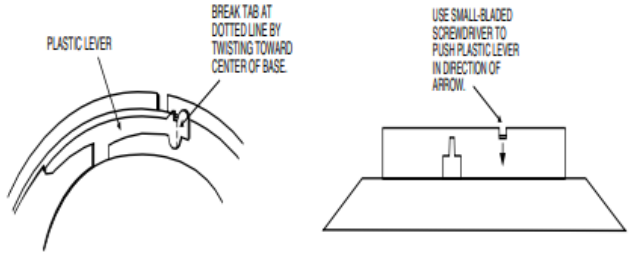

Figure 3A. Activating Tamper-resistance Feature

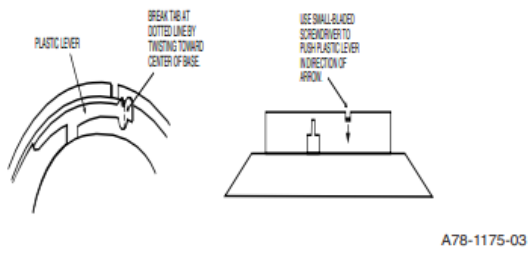

Figure 3B. Removing Detector Head from Base

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Documents / Resources

	**NOTIFIER B610LP Plug-In Detector Base** [pdf] Instruction Manual B610LP Plug-In Detector Base, B610LP, Plug-In Detector Base, Detector Base, Base

References

- **Fire Alarm Resources | Download fire alarm documents**