NOTIFIER B612LP Plug In Detector Base Instruction Manual

Contents

B612LP Plug-in Detector Base Installation Instructions

FOR USE WITH THE FOLLOWING SMOKE DETECTOR MODELS:
IN US: CP-651,SD-651
IN CANADA: CP-651A,SD-651A
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 the 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.

GENERALDESCRIPTION

The Model B612LP detector base is designed for use with Notifier model SD-651, SD-651A, and SD651E photo electronic detector heads and CP-651, CP-651A, 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

System Voltage:	24 VDC
Maximum Ripple Voltage:	4 Volts peak-to-peak
Start-up Capacitance:	0.02µF Maximum
Standby Ratings:	20 VDC Minimum 29 VDC Maximum 120 µA Maximum
Alarm Ratings:	17 mA Minimum 36 mA Maximum
Reset Voltage:	1.4 VDC Minimum
Reset Time:	0.3 Seconds Maximum (The optional RA400Z operates within specified detector alarm currents.)
Startup Time:	34.0 Seconds Maximum
Relay Contact Ratings Resistive or Inductive (60% Power Factor) Form A:	2.0 A @ 30 VAC/DC
Form C:	2.0 A @ 30 VAC/DC 0.6 A @ 110 VDC 1.0A @125VAC

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.

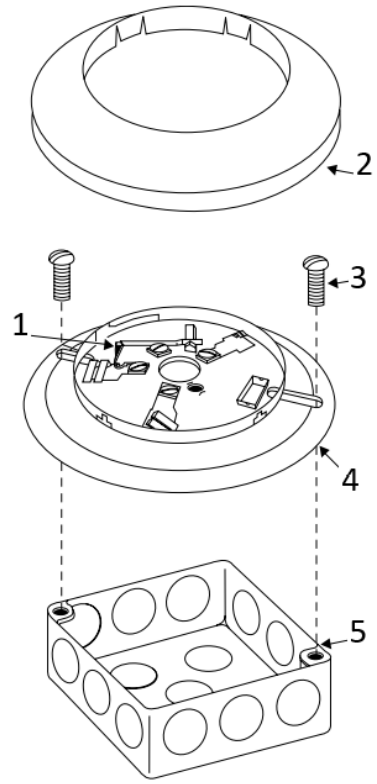


Figure 1. Mounting Base to Box

1. SHORTING SPRING
2. SNAP ON DECORATIVE RING
3. SCREWS (NOT SUPPLIED)
4. DETECTOR BASE
5. BOX (NOT SUPPLIED)

INSTALLATION GUIDELINES

NOTE: Refer to the releasing device manufacturer's instructions for connection instructions.

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 base and smoke detector being installed.

All wiring must be installed in compliance with the National Electrical Code, 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.

WIRING

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.

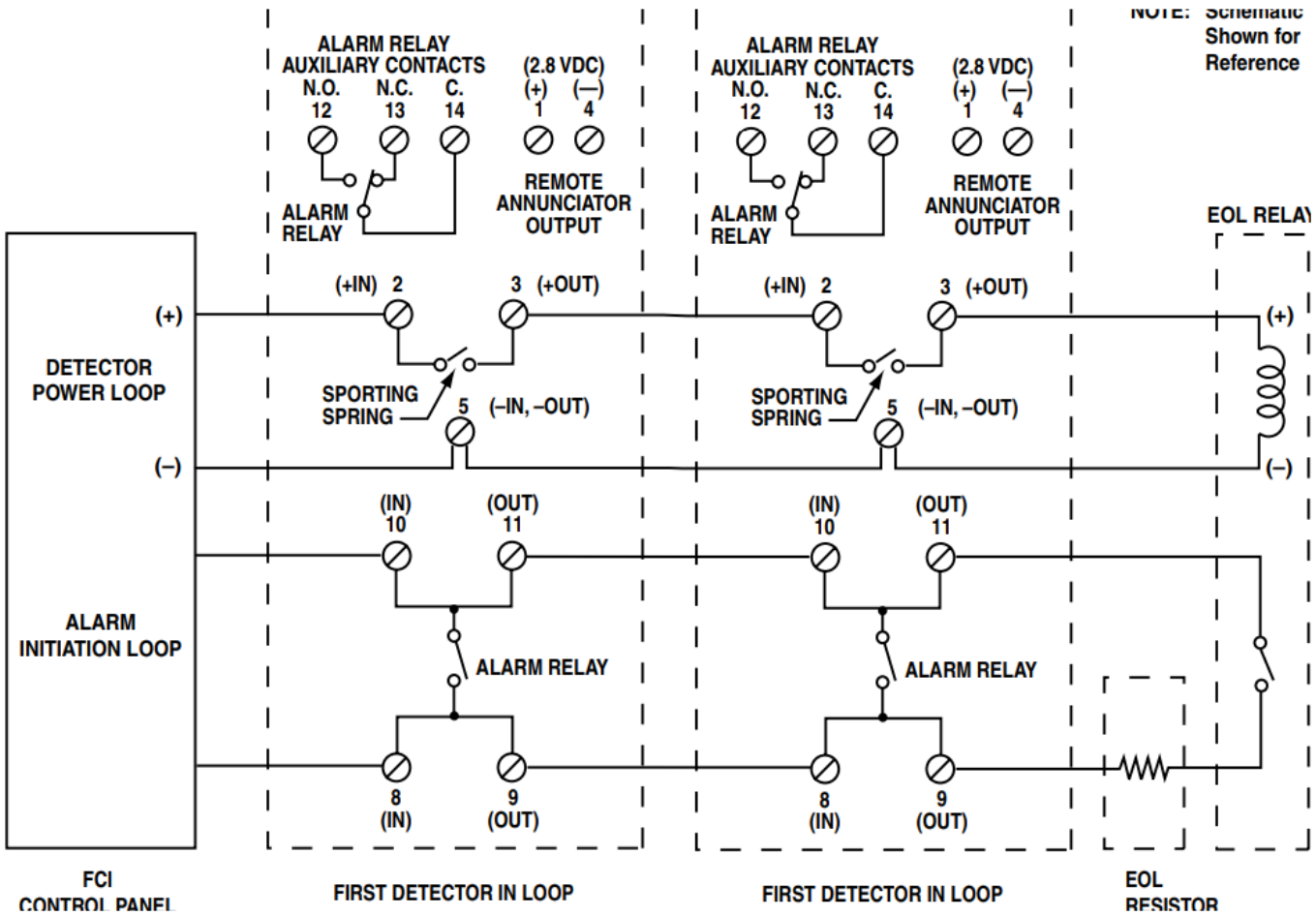
If the base is being installed in a zoned system, check the zone wiring before installing the smoke detector head. The built-in shorting spring makes it convenient to do this. After the detector base is wired and attached to the electrical box, position the shorting spring against terminal 3. Use the 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,

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 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-resistance tab on the detector mounting bracket (see Figure 3A) before installing the detector.



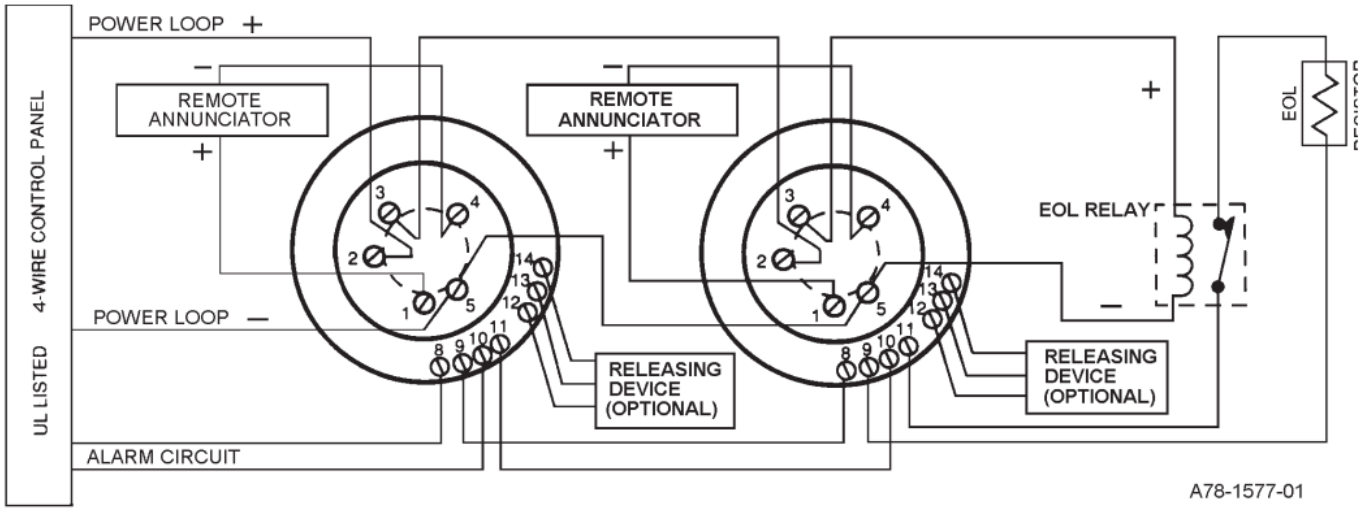


Figure 2. Typical Wiring Diagram

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

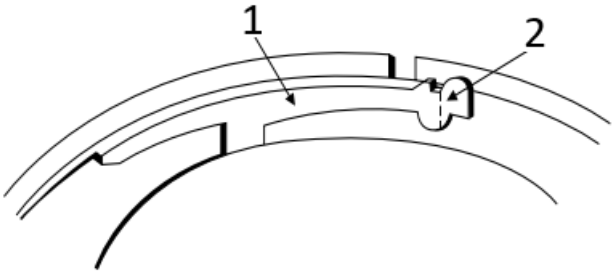


Figure 3A. Activating the Tamper-resistant Feature

1. PLASTIC LEVER
2. BREAK TAB AT DOTTED LINE BY TWISTING TOWARD CENTER OF BASE.

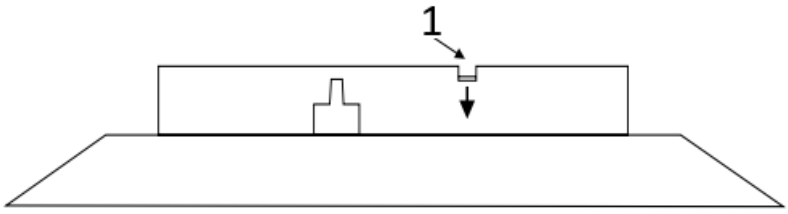


Figure 3B. Removing Detector Head from Base

1. USE SMALL-BLADED SCREWDRIVER TO PUSH PLASTIC LEVER IN DIRECTION OF ARROW.

Please refer to insert for the Limitations of Fire Alarm Systems

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I56-635-03R

Documents / Resources

	NOTIFIER B612LP Plug In Detector Base [pdf] Instruction Manual B612LP, B612LP Plug In Detector Base, Plug In Detector Base, Detector Base

References

- Fire Alarm Resources | Download fire alarm documents