



March 24, 2005

DN-4924 • I-75

# SD-651 and CP-651 Low-Profile Conventional Detectors

Section: Conventional Initiating Devices

## GENERAL

NOTIFIER's 600 Series Plug-in Smoke Detectors offer superb performance and reliability in a profile just 1.66" (4.22 cm) deep. Model CP-651 (ionization sensor) and Model SD-651 (photoelectric sensor) share the same sleek low-profile design and can be used with many different adapter bases in a variety of wiring configurations and voltages. Other features include low current draw, stable performance in high air velocities, built-in tamper resistant base design, remote LED option, removable cover, and built-in test switch.

The 600 Series is designed to meet the performance criteria designated by UL/ULC and EN-54. Their sensing chambers are sealed from back-pressure air flow, dirt, and insects. This chamber is protected by a fine mesh screen which can be cleaned or replaced. Additional key features include interchangeable ion and photo heads, a variety of mounting bases, and a full line of accessories.

## FEATURES

- Identical appearance to standard NOTIFIER low-profile intelligent detectors. Sleek, low-profile design.
- Same base for both ion and photo models.
- Compatible with all System Sensor 400 Series products.
- Two LEDs blink in standby and turn on steady in alarm.
- Lower standby current.
- Field sensitivity metering of detector to meet NFPA 72 Chapter 7 requirements.
- Broad range of adapter bases available.
- Dual LEDs provide 360° visibility.
- Designed to meet the requirements of UL 268.

## SPECIFICATIONS

**Operating voltage:** mounting base dependent (*see chart on page 2*).

**Standby current:** 100 Microamps maximum.

**Sensitivity: Ion:** 1.9% ± 0.62%/ft.; **Photo:** 3% ± 0.7%/ft.

**Weight:** 3.67 oz. (104 g).

**Size:** 1.66" (4.22 cm) high; **unflanged base** 4.0 (10.16 cm) diameter; **flanged base** 6.2" (15.75 cm) diameter.

**Construction:** flame-retardant thermoplastic.

**Operating temperature:** 32°F to 120°F (0°C to 49°C).

**European models:**

**Humidity range:** 10% to 93% RH noncondensing.



California State Fire Marshal

**CP-651:**  
7271-0028:176

**SD-651:**  
7272-0028:175

**MEA**  
205-94-E

**MARYLAND**  
State Fire Marshal  
Permit 2008



**SD-651 pictured in B401 Base**

## IONIZATION

All 600 Series ionization smoke detectors contain a unique single source chamber detection design which will sense the presence of smoke particles produced by fast combustion as well as slow smoldering fires. This chamber exhibits its increased stability, significantly reduces nuisance alarms, and provides better performance at higher air velocities.

## PHOTOELECTRIC

All 600 Series photoelectric smoke detectors contain a unique optical sensing chamber designed to sense the presence of smoke particles produced by a wide range of combustion sources. A custom integrated circuit incorporates signal processing to reduce false alarms.

NOTIFIER® is a Honeywell company.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact NOTIFIER. Phone: (203) 484-7161 FAX: (203) 484-7118



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## MOUNTING BASE SELECTION GUIDE

Base Model Number	Version	Loop Type	Current Limit Resistor	Alarm Contact Type	Nominal Voltage	Current Draw on Alarm (mA)
<b>B610LP</b>	UL/ULC	2-wire*	No	—	12/24 VDC	10 – 100**
<b>B612LP</b>	UL/ULC	4-wire	Yes	Form A & C	24 VDC	14 – 39
<b>B401†</b>	UL/EN-54	2-wire*	No	—	12/24 VDC	10 – 100**

4924base.tbl

\*Functionality contingent on panel compatibility.

\*\* Must be limited by control panel.

**Relay Contact Ratings:** Resistive or Inductive (60% power factor) load.

**Form A:** 2.0 A at 30 VAC/DC

**Form C:** 0.6 A at 110 VDC, 2.0 A at 30 VDC

1.0 A at 125 VAC, 2.0 A at 30 VAC

† Flangeless base.

\* Box depth contingent on base and wire size.  
Refer to National Electrical Code or local applicable codes for appropriate recommendations.

## JUNCTION BOX SELECTION GUIDE\*

	Single-Gang	3-1/2" OCT	4" OCT	4" SQ	500 MM	60 MM	75 MM
<b>B401/B401R</b>	NO	NO	NO	NO	YES	YES	NO
<b>B610LP</b>	YES	YES	YES	YES	NO	NO	NO
<b>B612</b>	YES	YES	YES	YES	YES	YES	YES

4924box.tbl

## ORDERING INFORMATION

### Part No. Description

**CP-651** Low-profile ionization detector. Must be mounted to one of the B600 Series or B401 Series bases listed in Mounting Base Guide.

**SD-651** Low-profile photoelectronic detector. Must be mounted to one of the B600 Series or B401 Series bases listed in Mounting Base Guide.

### Accessories...

**BCK-200** Black detector conversion kit. Includes ten black trim rings and ten black detector housings.

**F110** Retrofit replacement flange for B400 Series flanged bases.

**RA400Z** Remote annunciator for two- or four-wire systems, 3 – 32V. Use with ion and photo plug-in detectors. Fits standard U.S. single-gang electrical box.

**B601BH** Sounder base for systems using B401 or B401R. Requires an external 24 VDC power supply. Mounts to 4" (10.16 cm) square electrical box (1.5" [3.81 cm] minimum depth).

**MOD400R** Detector sensitivity test tool. Use with most analog or digital multimeters. Satisfies requirement of NFPA 72E for sensitivity testing.

**RMK400** Recessed mounting kit. *For use with B401 base only.*

**SMK400** Surface mounting kit provides for entry of surface wiring conduit. *For use with B401 base only.*

**A77-716B** End-of-line relay for power supervision, 12/24 VDC systems.

**C58-213-00** Replacement protective dust cover for plug-in 600 Series.

**M02-04-01** Test magnet.

**XR-2** Detector removal tool. Allows installation and/or removal of 600 Series detector heads from base in high ceiling installations.

**XP-4** Extension pole for XR-2. Comes in three 5-ft. (1.524 m) sections.