

# E2 Series Photoelectric Smoke Detectors



E2 Series  
Photoelectric  
Smoke Detection

## Description

System Sensor E2 series smoke detectors represent significant advancement in conventional detection. The E2 family is founded on two principles: ease installation and next evolution detector .

**Easy Installation:** The E2 line redefines installation ease with its plug-in design. This allows an installer to pre-wire bases (included with heads). The large wire entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of back box mounting methods as well as direct mounting with drywall anchors. To complete the installation, E2 heads plug into the base with a simple Stop-Drop 'N Lock action.

**Next Evolution Detector:** E2 detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the E2 line to minimize nuisance alarms. 2-wire E2 detectors can generate a remote LED indicated maintenance signal when connected to the 2W-MOD2 loop test/maintenance module or a panel equipped with the E2 protocol. The SENS-RDR, a wireless device, displays the sensitivity of E2 detectors in terms of percent-per-foot obscuration.

## Features

- Plug-in detector line, mounting base included
- Large wire entry port
- In-line terminals with SEMS screws
- Mounts to octagonal and single-gang back boxes, 4-square back boxes, or direct to ceiling
- Stop-Drop 'N Lock attachment to base
- Removable detector cover and chamber
- Built-in remote maintenance signaling
- Drift compensation and smoothing algorithms
- Simplified sensitivity measurement
- Loop testing via EZ Walk feature
- Built-in test switch



# Specifications

Operating Voltage Nominal: 12/24 V non-polarized

Minimum: 8.5 V

Maximum: 35 V

Maximum Ripple Voltage: 30% peak to peak of applied voltage

Standby Current: 2400E: 50  $\mu$ A maximum average; 2412/24E: 50  $\mu$ A maximum average

Maximum Alarm Current: 2400E: 130 mA limited by control panel; 2412/24E: 20 mA @12 V, 23 mA @ 24 V

Peak Standby Current: 2400E: 100  $\mu$ A; 2412/24E: n/a

Alarm Contact Ratings: 2400E: n/a; 2412/24E: 0.5 A @ 30 V AC/DC

Dimensions (including base): 5.3 inches (127 mm) diameter; 2.0 inches (51 mm) height

Weight: 6.3 oz (178 g)

Operating Temperature Range: 32°F to 120°F (0°C to 49°C);

Operating Humidity Range: 0 to 95% RH non-condensing

Thermal Sensor: 135°F (57.2°C) fixed

Sensitivity: 2.5%/ft nominal

Input Terminals: 14 to 22 AWG

Mounting: 3½-inch octagonal back box

4-inch octagonal back box

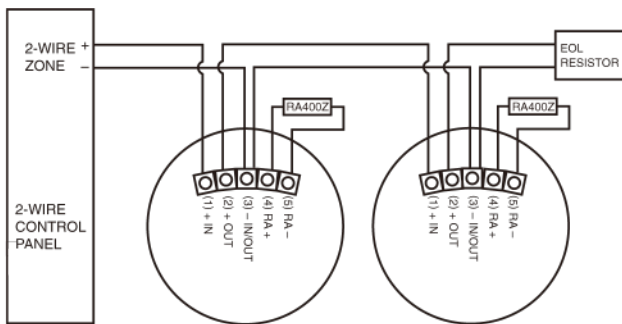
Single-gang back box

4-inch square back box with a plaster ring

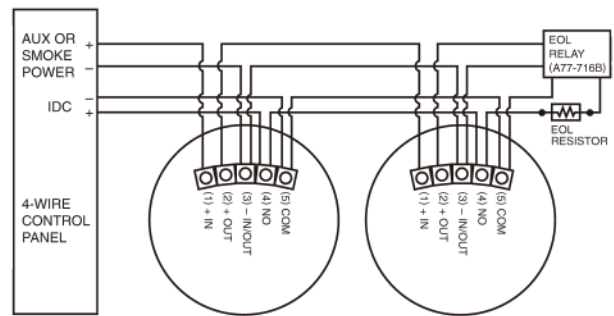
Direct mount to ceiling

# Wiring Modes Of System

## 2400E:



## 2412/24E:



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