

2012H Direct-Wire Smoke Detector with Built-in Relay and Horn



Model

2012H Photoelectric Detector

Required Accessory

A77-727-01 12 VDC power supply
(required for system to be
UL listed)

2012H
Photoelectric
Smoke Detector



Product Overview

12 VDC operation, 4-wire

Built-in 85dB electronic horn with temporal (3) tone

Built-in, normally open relay can be connected to lights, bells, horns, or remote annunciator

Interconnectable up to 12 units

Visual alarm and power indicator

Ceiling white color

Built-in 8 second delay on relay output

Built-in test switch

Twist-on mounting bracket with tamper option for easy installation

Rugged chamber design for greater stability

3-year warranty

Compact, attractive, and easy to install, the System Sensor 2012H detector is designed to respond to a broad range of fires while providing maximum stability. This model also features low-voltage wiring making it ideal for applications such as apartment buildings and nursing homes.

Features. The System Sensor 2012H photoelectric detector is designed primarily for applications where low-voltage Class 2 wiring may be used. This detector is non-latching and offers an 85dB alarm horn. The 2012H features the NFPA72 required audible emergency evacuation signal referred to as temporal (3) tone. An external push button provides a test of the detector's alarm function. Up to 12 units can be interconnected so that if one detector alarms, all detectors alarm. A normally open auxiliary alarm relay with an 8 second delay is available for controlling external functions. A visible LED indicator flashes once every 30 seconds in standby and rapidly (every 0.5 seconds) in alarm when detecting smoke. The detector offers low-voltage operation and a tamper-proof feature. Screw terminals and a mounting bracket are provided for easy installation.



MEI
approved

MSFM
approved

General Specifications

Size

1.75" H x 5.5" dia.
(44.5 mm h x 140 mm dia.)

Weight

5.3 oz. (150 grams)

Humidity Range

10% to 93% RH, noncondensing

Electrical Ratings

Operating Voltage

12 VDC (nominal)

Relay Contact Rating

1 Form A, .5 A @ 30 VDC

Residential Smoke Detector Placement

As defined in NFPA72 "Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit, including basements and excluding crawlspaces and unfinished attics. In new construction, a smoke detector shall also be installed in each sleeping room".

Standby Current

60 µA maximum average

Temperature Range

32° to 120°F (0° to 50°C)

Alarm Current

20 mA maximum average @ 12 VDC

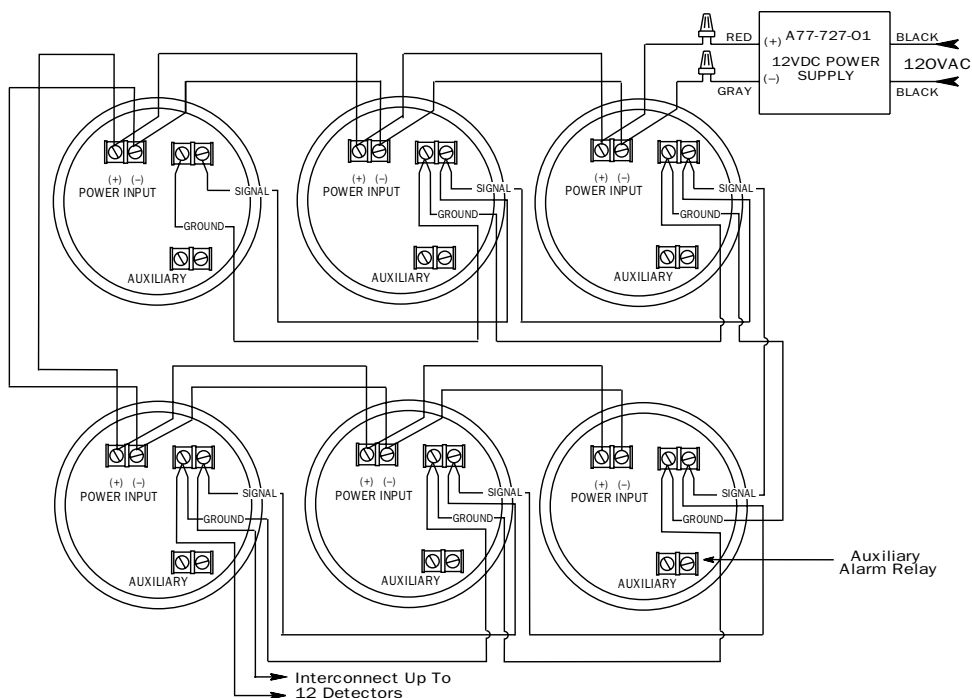
2012H Wiring Diagram

Maximum power bus length (in feet), given number of units (maximum per bus) and wire size.

Wire Gauge	14 AWG	16 AWG	18 AWG
1 Unit	5000	3735	2349
2 Units	2970	1867	1174
3 Units	1980	1245	783
4 Units	1485	933	587
5 Units	1188	747	469
6 Units	990	622	391
7 Units	848	533	335
8 Units	742	466	293
9 Units	660	415	261
10 Units	594	373	234
11 Units	540	339	213
12 Units	495	311	195

Maximum interconnect bus length:
5,000 FT., No. 18AWG or larger dual conductor cable.

All wiring must conform to local electrical codes.



Ordering Information

Part Number

Description

2012H

Photoelectronic smoke detector with relay, 12 VDC, multiple station

A77-727-01

12 VDC power supply, mounts to a 4" square box, 2 1/8" deep

System Sensor Sales and Service

System Sensor Headquarters

3825 Ohio Avenue
St. Charles, IL 60174
Ph: 800-SENSOR2
Fx: 630/377-6495
Documents On Demand
1-800-736-7672 x3
www.systemsensor.com

System Sensor Canada

Ph: 905.812.0767
Fx: 905.812.0771

System Sensor UK

Ph: 011.44.1403.276500
Fx: 011.44.1403.276501

System Sensor in China

Ph: 011.86.29.524.6253
Fx: 011.86.29.524.6259

System Sensor in Singapore

Ph: 011.65.273.2230
Fx: 011.65.273.2610

System Sensor- Far East

Ph: 011.852.2191.9003
Fx: 011.852.2736.6580

System Sensor- Australia

Ph: 011.613.54.281.142
Fx: 011.613.54.281.172