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**8/28/2024**

## **LTX HANGAR**

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# 6820EVS

## Emergency Voice System and Fire Alarm Control Panel

The 6820EVS is a fire alarm control panel (FACP) and emergency mass notification system conveniently integrated and housed in one panel, and meets the requirements for mass notification as described in UL 2572. The 6820EVS is a direct replacement for the 5820XL-EVS panel. The 6820EVS can be configured to achieve an overall point capacity of up to 1110 points and connect up to 17 panels in a single communications link.

The 6820EVS has one built-in signaling line circuit (SLC), which can support 159 (SK) System Sensor® sensors and 159 SK modules or 127 (SD) Hochiki® devices per loop. To increase point capability, additional SLC loops can be added using the 6815 SLC expander for SK devices or the 5815XL expander for SD devices, increasing the point capacity to a maximum of 1110 points for SK devices and 635 points for SD devices. Three additional SLCs are needed to reach 1110 points (SK devices). Four additional SLCs are needed to reach 635 points (SD devices).

The common communications and annunciation link allows up to 17 panels to be connected via copper or fiber optic cable. A designated panel is configured as the communicator for all panels in the link for convenient single-point communications. It also has a built-in, dual-line POTs and IP communicator with optional cellular reporting available.

The emergency communication system operations include an onboard supervised microphone, and all-call and non-active call buttons can quickly select all active or all non-active output groups. The system also allows for ECS messages to take priority over fire.

SWIFT® wireless compatibility provides options for wireless detection through a Class A mesh network. It is ideal for hard-to-wire locations,



6820EVS

buildings where new wiring is not allowed, or to provide an easy install fire system for new construction projects. SWIFT devices can be combined with other hard-wired 6820EVS compatible devices.

The 6820EVS has a form-C trouble relay, and two programmable form-C relays, along with powerful features such as drift compensation, pre-trouble maintenance alert, a built-in sensor test to comply with NFPA 72 calibration testing requirements, and calibration trouble alert. The 6820EVS supports a variety of devices, including the 6860, 5860, and 6855 remote annunciators, 5824 serial parallel printer interface module (for printing system reports), the 5496 NAC expander, 5895XL power module, and SK or SD devices.

The panel also has four user-programmable buttons which are ideal for programming simple, complex, and routine tasks.

## FEATURES & BENEFITS

- Up to 1110 points for greater design flexibility. Additional SLCs can be added until maximum point levels are reached
- Connect up to 17 panels on one site with convenient single-point access; compatible with mixed FACP models
- 15 recordable one minute messages can be mapped to eight different EVS buttons
- Built-in USB interface for convenient programming
- Convenient field-upgradeable firmware
- Built-in annunciator with a large 160 character, 4 x40 LCD display
- Four user-programmable buttons minimize time spent executing complex or routine tasks
- 16 built-in speaker group switches; expandable to 32
- JumpStart® auto programming feature for easy programming
- Built-in dual path POTs and IP communications with optional cellular models available for reliable backup reporting
- Programmable date setting for automatic and Daylight Saving Time changes
- Flexput® circuits can be individually programmed to function as notification circuits, auxiliary power outputs, or initiating circuits that support both 2- and 4- wire smoke detectors

## SIGNAL LINE CIRCUIT (SLC)

The 6815 signal line circuit (SLC) supports multiple device types of SK protocol, while the 5815XL signal line circuit (SLC) supports multiple device types of SD protocol. You cannot mix SD and SK SLC devices on a FACP.

The 6820EVS has one built-in signaling line circuit (SLC) which supports multiple devices. Additional points can be added using up to three 6815 SLC expanders to increase overall capacity to 1,110 maximum points (SK devices) or by adding up to four 5815XL SLC expanders to reach 635 maximum points (SD devices). The number of SLCs which can be used within one system is only limited by point count. (See the Manual for additional information.)

The 6820EVS SLC loops support multiple device types, maintenance alerts, and a built-in sensor test to comply with NFPA 72 calibration testing requirements.

## INDICATOR LIGHTS

- **General Alarm (Red):** Flashes if in alarm; solid when alarm is silenced
- **Supervisory (Yellow):** Flashes if a supervisory condition exists; solid when supervisory is silenced
- **System Troubles (Yellow):** Flashes if a trouble condition exists; solid when trouble is silenced
- **System Silenced (Yellow):** On when an alarm, trouble or supervisory condition has been silenced but not yet cleared
- **System Power (Green):** Flashes for AC failure; solid when power systems are normal

## USER INTERFACE

The 6820EVS built-in 4 x 40 annunciator with 160 character LCD display and large easy-to-use tactile touchpad can be used for system operation, programming and maintenance. It has five LEDs for

alarm, supervisory, system trouble, system silenced and system power. System operations include silencing alarms and troubles, resetting alarms and the display of alarm troubles and memory. The system's non-volatile event history buffer stores 1,000 events for viewing from the built-in or remote annunciator. System operations can be initiated with a mechanical firefighter's key or a valid 4- to 7-digit operator's code.

## PROGRAMMING

The 6820EVS system offers several options to simplify and speed-up programming. JumpStart® AutoProgramming minimizes programming required to start a new system. The built-in keypad, or the 6860, 5860 or 6855 remote annunciators give you on-site access to current system programming. Programming can also be accomplished using the Windows®-based Honeywell Fire Software Suite (HFSS) program.

## SOFTWARE TOOLS

**SKST:** Silent Knight Selection Tool provides the installer or design architect with a Windows® software system configuration tool to create a detailed Bill of Material (BOM) and battery calculations.

**HFSS:** Honeywell Fire Software Suite provides communication and panel programming, detector status, event history and additional data. Requires a PC running Microsoft® Windows®.

## ADDITIONAL INFORMATION

Twisted-unshielded pair wire is recommended. The 6820EVS also has 13 preset notification cadence patterns (including ANSI 3.41).

## AGENCY LISTINGS AND APPROVALS

**NFPA 13, NFPA 15, NFPA 16, NFPA 70, NFPA 72:** Central station; remote Signaling; Local Protective Signaling Systems; Auxiliary Protected Premises Unit; Water Deluge releasing service.

Suitable for automatic, manual, waterflow, sprinkler supervisory (DACT non-coded) signaling services.

**UL Listed:** S2766

**CSFM** 7165-0559:0500

**FDNY COA#** 6249

**FM approved**

**UL listed** for Continuous or ANSI 520Hz speaker tones that meet NFPA 72 Low Frequency Signal Requirements for Sleeping Areas when used with the EVS-INT50W or EVS-100W amplifiers and compatible speakers

## ORDERING INFORMATION

**6820EVS:** Emergency Communication System with FACP. (Red cabinet).

## COMPATIBLE ANNUNCIATORS

**6860:** 4x40 LCD remote fire annunciator (4 lines and up to 160 characters) per system; four programmable buttons

**5860:** 4x20 LCD remote fire annunciator. 5860 is gray; 5860R is red

**6855:** 4x20 LCD remote fire annunciator

**5865-3 / 5865-4:** LED annunciators can display up to 30 LEDs (15 red and 15 yellow). The 5865-4 has key switches for silence and reset, and a system trouble LED.

**5880:** The 5880 LED / IO module has 40 programmable LED outputs and eight supervised dry contact inputs which are useful for custom applications. You can use up to eight 5880 modules on one control panel for maximum flexibility.

## 6820EVS COMPATIBLE DEVICES AND ACCESSORIES

See the data sheets listed below for a complete listing of the SK, SD or SWIFT devices.

53623: SK Devices Data Sheet

53624: SD Devices Data Sheet

350614, 350616 & 350618: SWIFT wireless devices

For a complete and current listing of compatible devices and accessories, visit [www.silentknight.com](http://www.silentknight.com)

**Important:** You cannot mix SK and SD devices in the same fire alarm system.

## SK COMPATIBLE ADDRESSABLE DEVICES

**SK-ACCLIMATE:** Multi criteria photoelectric smoke detector with thermal (135°F fixed temperature)

**SK-BEAM:** Reflected beam smoke detector without test feature

**SK-BEAM-T:** Reflected beam smoke detector with test feature

**SK-CONTROL:** Supervised control module

**SK-CONTROL-6:** Six circuit supervised control module

**SK-DUCT:** Photoelectric duct smoke detector with extended air speed range

**SK-FIRE-CO:** Four criteria fire and carbon monoxide detector

**SK-HEAT:** Fixed thermal detector (135°F)

**SK-HEAT-W:** Fixed thermal detector (135°F), white

**SK-HEAT-ROR:** Fixed rate of rise detector (135°F)

**SK-HEAT-ROR-W:** Fixed rate of rise detector (135°F), white

**SK-HEAT-HT:** Fixed high temperature thermal detector (190°F)

**SK-HEAT-HT-W:** Fixed high temperature thermal detector (190°F), white

**SK-ISO:** Fault isolator module

**SK-MINIMON:** Mini monitor module

**SK-MONITOR:** Monitor module

**SK-MONITOR-2:** Dual input monitor module

**SK-MON-10:** 10 input monitor module

**SK-PHOTO:** Photoelectric smoke detector

**SK-PHOTO-W:** Photoelectric smoke detector, white

**SK-PHOTO-T:** Photoelectric smoke detector with thermal (135°F fixed temperature)

**SK-PHOTO-T-W:** Photoelectric smoke detector with thermal (135°F fixed temperature), white

**SK-PHOTOR:** Photoelectric detector with remote test capability

**SK-PHOTO-R-W:** Photoelectric detector with remote test capability, white

**SK-PULL-SA:** Addressable single action pull station

**SK-PULL-DA:** Addressable dual action pull station

**SK-RELAY:** Addressable relay module **SK-RELAY-6:** Addressable Six relay control module

**SK-RELAYMON-2:** Addressable Dual relay/monitor module

**SK-ZONE:** Addressable zone interface module

**SK-ZONE-6:** Six zone interface module

**B300-6(-IV):** 6" base for SK-W Series

**B210LP:** 6" mounting base

**B501(-BL,-IV,-WHITE):** 4" flangeless base

**B501:** 4" Flangeless mounting base

**B200S(-IV,-WH):** Intelligent sounder base

**B200S:** Intelligent sounder base

**B200S-LF(-IV,-WH):** Low-Frequency intelligent sounder base

**B200S-LF:** Low-frequency intelligent sounder base

**B224RB(-IV,-WH):** Relay base

**B224RB:** Relay base

**B224BI(-IV,-WH):** Isolator base

**B224BI:** Isolator base

## SD COMPATIBLE ADDRESSABLE DEVICES

**SD505-6AB:** Addressable 6" base

**SD505-6IB:** Addressable 6" short circuit isolator base

**SD505-6RB:** Addressable 6" relay base

**SD505-6SB:** Addressable 6" sounder base

**SD500-AIM:** Addressable input module (switch input)

**SD500-ANM:** Addressable notification module

**SD500-ARM:** Addressable relay module

**SD505-DTS-K:** Remote test switch and LED indicator for the SD505-DUCTR

**SD505-DUCT:** Addressable Duct Smoke Detector.

**SD505-DUCTR:** Addressable Duct Detector housing with relay base.

**SD505-HEAT:** Absolute temperature heat detector. Trip point range from 135°F–150°F (0°C–37°C).

**SD500-LIM:** Addressable Line isolator module

**SD500-MIM:** Addressable Mini input monitor module (switch input)

**SD505-PHOTO:** Photoelectric smoke detector

**SD500-PS/-PSDA:** Addressable Single or dual action pull station

**SD500-SDM:** Addressable smoke detector module

**AUDIBLE/VISIBLE DEVICES** These AV devices are all 2-wire. Color: "R" indicates red; "W" denotes white. For a complete listing of Silent Knight AV devices go to [www.silentknight.com](http://www.silentknight.com).

**CHSRL/CHSWL:** Wall chime/strobe

**CHSRL/CHSCWL:** Ceiling chime/strobe

**CHRL/CHWL:** Wall chime

**HRL/HWL:** Wall horn

**P2RL/P2WL:** Wall horn/strobe

**PC2RL/PC2WL:** Ceiling horn/strobe

**SRL/SWL:** Wall strobe

**SCRL/SCWL:** Ceiling strobe

**SPSRL/SPSCWL:** Ceiling speaker/strobe

**SPSRL/SPSWL:** Wall speaker/strobe

**SPRL/SPWL:** Wall speaker

**SPCRL/SPCWL:** Ceiling speaker

## SWIFT WIRELESS DEVICES

*SWIFT is only compatible with System Sensor (SK) devices. It is not compatible with Hochiki (SD) devices.*

**WSK-WGI:** Wireless Gateway

**WSK-PHOTO:** Wireless Photoelectric smoke detector

**WSK-PHOTO-T:** Wireless Multi-criteria photoelectric smoke detector with thermal detection (135°F fixed temperature) and B510W 4" base

**WSK-HEAT:** Wireless Heat, (135°F fixed temperature) and B510W 4" base

**WSK-HEAT-ROR:** Wireless heat, ROR (135°F fixed temperature) and B510W 4" base

**WSK-MONITOR:** Wireless monitor module

**WSK-RELAY:** Wireless relay module

**W-USB:** SWIFT Tools USB transceiver used for communication with SWIFT devices

## SBUS ACCESSORIES

**6815:** Each Single Line Circuit allows for an additional 159 SK modules and 159 SK sensors to be added to the system-up to 1,110 total points. Supports System Sensor SK devices only.

**5815XL:** Each Single Line Circuit provides an additional 127 SD devices to be added to the system -for a maximum of 635 points. Supports SD devices only.

**5496:** A 6 amp notification power expander with four power-limited notification appliance circuit outputs.

**5883:** Relay Interface. Provides 10 Form C relays.

**5824:** Serial/Parallel Printer Interface Module for printer connection.

**5895XL:** Power Supply with six Flexput™ circuits, and two Form C relays. Max. 16 per system.

**5815RMK:** Remote mounting kit. Dimensions 10 3/8"W x 10-3/16"H x 3"D

## EVS ACCESSORIES

**EVS-50W:** 50 Watt Amplifier\*

**EVS-125W:** 125 Watt Amplifier\*

**EVS-100W:** 50/100 Watt Amplifier\*

**EVS-100WBU:** External Backup Amplifier

**EVS-INT50W:** 50 Watt Internal Amplifier

**EVS-CE4:** Circuit Audio Expander

**EVS-SW24:** 24 Switch Expander

**EVS-VCN:** Voice Control Module

**EVS-LOC:** Local Operator Console\*\*

\*Support for up to four amplifiers; 500W maximum. Each amplifier has four built-in speaker circuits expandable to eight.

\*\* Supports up to four EVS-LOCs

## COMMUNICATION OPTIONS

**CELL-CAB-SK:** Cellular communicator, metal enclosure with lock/key\*

**CELL-MOD:** Cellular communicator, plastic enclosure\*

\*Sole path, powered by panel.

**IPGSM-4G:** Dual path fire alarm communicator, cellular and/or IP (primary or backup, selectable)

**SK-IP-2:** Remote reporting via the Internet. Requires a VisorAlarm® receiver at the central station



# 6820EVS Technical Specifications

## MISC. ACCESSORIES

**SK-NIC:** Network Interface Card. Provides a common communications link for the 6820EVS. (Panels cannot be linked together for peer-to-peer networking).

**SK-NIC-KIT:** Installation Accessory Kit

**SK-FML:** Fiber-Optic Multi Mode, transmitter and receiver

**SK-FSL:** Fiber-Optic Single Mode RBB: Remote battery box accessory cabinet or batteries that are too large to fit in the FACP cabinet. Dimensions: 16" W x 10" H x 6" D (406mm W x 254mm H x 152mm D).

**SK-SCK:** Seismic Compliance Kit used to securely fasten batteries to the fire panel.

## PHYSICAL

**Overall Dimensions:** 21.59"W x 28.1"H x 5.05"D

**Shipping Weight:** 50 lbs.

**Color:** Red

## ENVIRONMENTAL

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

**Humidity:** 0 to 93% relative humidity (non-condensing)

## ELECTRICAL

**6820EVS Primary AC:** 120AC @ 60Hz, 3.3A Total Accessory Load: 6A @ 27.4VDC power-limited

**Standby Current:** 190mA

**Alarm Current:** 250mA

**Battery Charging Capacity:** 7 to 35AH

**Battery Size:** 18AH max. allowed in control panel cabinet. Larger capacity batteries can be housed in RBB accessory cabinet.

Six conductor wiring: 4 SBUS and 2 Voice Bus

## FLEXPUT® CIRCUITS

**Six programmable circuits which can be programmed individually as:**

**Notification Appliance Circuits:** 3A @ 27.4VDC per circuit, power-limited (with a panel maximum current of 6A)

**Auxiliary Power Circuits:** 3A @ 27.4VDC per circuit, power-limited

**Initiating Circuits (Circuits 5 and 6 Only):** 100mA @ 27.4VDC per circuit, power limited

Supports Class B (Style 4) and Class A (Style 6) configuration for SLC, SBUS, and Flexput circuits

**WIRING:** See the product manual for wiring details

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For Technical Support, call 800-446-6444.

## Honeywell Silent Knight

12 Clintonville Road  
Northford, CT 06472  
800-328-0103  
www.silentknight.com

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## **IntelliKnight® Model EVS-INT50W**

### **Intelligent 50 Watt Internal Amplifier**

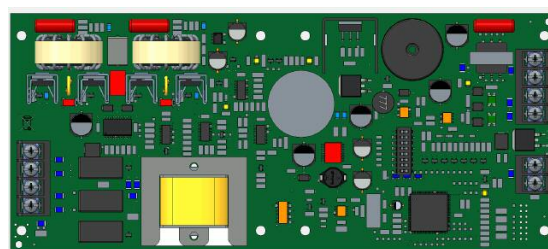
The EVS-INT50W is an intelligent 50 watt amplifier for use with the 5820XL-EVS. It is used to amplify the audio message for distribution throughout the facility. The EVS-INT50W is designed for mounting in the 5820XL-EVS cabinet assembly for convenient installation and access.

For more information about the EVS-INT50W, or to locate your nearest source, please call 800-328-0103.

#### **Description**

The EVS-INT50W is capable of producing 50 watts of audio power on one speaker circuit. It is designed to conveniently mount in the 5820XL-EVS cabinet, making it an ideal solution for small voice evacuation installations.

The EVS-INT50W is powered and supervised from the 5820XL-EVS, eliminating the need for an additional AC source and battery backup.



**Model EVS-INT50W**

#### **Features**

- SBUS addressable
- 50 watts of supervised audio power
- One Class A or Class B speaker circuit
- 25 volt or 70.7 volt operation
- UL 864 and UL 2572
- Easy to install assembly in the 5820XL-EVS cabinet
- Six-wire connection to the EVS system:
  - Two-wires for the Voice BUS
  - Two-wires for the SBUS
  - Two-wires for the 24 VDC power source from an I/O circuit on the 5820XL-EVS programmed for constant auxiliary power
- UL listed for 520Hz signaling when used with compatible System Sensor speakers. See 5820XL-EVS installation manual LS10061-001SK-E for list of compatible speakers

#### **Listings**

Meets the requirements for NFPA 72 Local Protective Signaling Systems & Emergency Communication Systems.

UL 864 and UL 2572

Other Listings: CSFM (pending)

#### **Installation**

The EVS-INT50W mounts in the 5820XL-EVS cabinet.

#### **Compatibility**

The EVS-INT50W is compatible with the 5820XL-EVS.

## Model EVS-INT-50W

### Intelligent 50 Watt Internal Amplifier

#### Engineering Specifications

The contractor shall furnish and install where indicated on the plans, Silent Knight internal amplifier model EVS-INT50W. The amplifier shall be UL listed and compatible with the Silent Knight model 5820XL-EVS.

The amplifier shall provide up to 50 watts of supervised audio power on one speaker circuit. The amplifier shall be capable of 25 or 70.7 VRMS operation. The amplifier shall be capable of a 520Hz tone when used with compatible speakers.

The amplifier shall be mounted and housed in the Silent Knight 5820XL-EVS cabinet. The 5820XL-EVS shall provide the voice bus (VBUS), serial bus (SBUS), and 24 VDC power to the amplifier. The 5820XL-EVS shall control the activation of the amplifier speaker circuit via panel programming.

#### Specifications

##### Physical

Dimensions: 4.5" W x 10" H x 1.81" D  
(11.43 W x 25.4 H x 4.6 D cm)

Shipping weight: 2 lbs.

##### Electrical

Power: 24 VDC

Standby Current: 52 mA

Alarm Current (EVS-INT50W only):

275 mA @ 25V

310 mA @ 70.7V

Full Alarm load current:

2.84 A @ 25V

2.9 A @ 70.7V

Total Power:

50 Watts @ 25 Vrms or 70.7 Vrms

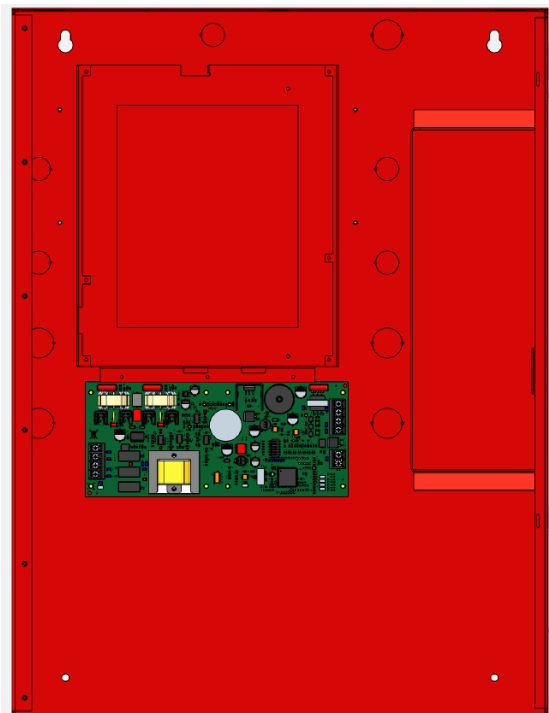
##### Environmental

Operating Temperature: 32°F – 120°F (0°C – 49°C)

Humidity: 10% – 93% non-condensing

#### Ordering Information

EVS-INT50W Intelligent 50 Watt Internal Amplifier



EVS-INT50W installed in 5820XL-EVS cabinet

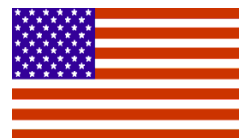


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[www.silentknight.com](http://www.silentknight.com).



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## 5860 Remote Annunciator

**Bring the power to control an IntelliKnight fire alarm control panel to every area within your facility.**

Now you can operate and program your IntelliKnight system from up to eight locations throughout your facility. The 5860 remote annunciator provides the same advanced, easy-to-use interface found on the IntelliKnight panel's built-in annunciator. The 80-character display and ergonomically designed keypad allow for simple and error-free system operation. All operations—including reset, silence, detector status checking, fire drill, and programming—are identical.

Access to the system is through a firefighter's key or an access code. For security, a special installation code is needed for programming functions. The 5860 connects to the IntelliKnight panel via the RS-485 system bus. Wire runs can be up to 6000 feet from the panel.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103.

### Description

Features include an 80-character backlit LCD providing easy-to-understand system messages. The annunciator is ergonomically designed with over-sized buttons for the most frequently used features, like Reset and Silence.

In addition to status messages displayed on the LCD, there are five LEDs for alarm, supervisory, trouble, silence, and AC power status.

The annunciator is available in gray to match virtually any decor and red for applications where the annunciator must stand out. The annunciator enclosure can be surface or flush mounted. A trim ring kit is available for surface mounting.

### Features

- 80-character backlit LCD display (4 lines with 20 characters on each line)
- Tactile and audible feedback
- Accepts user codes or firefighter's key
- Larger keypad buttons for system reset and silence
- Install up to eight 5860s per FACP
- Available in red or light gray
- Support for simultaneous use of

multiple 5860s

- RS-485 interface to panel
- Operation and appearance is identical to 5860 built-in annunciator
- On-board piezo sounder audibly indicates alarms, troubles, and supervisories
- Five status LEDs for alarm, supervisory, trouble, silence and AC power conditions
- Wiring lengths up to 6000 ft. from the FACP (depending on wire gauge and number of devices on SBUS)
- UL listed, complies with NFPA 72
- CSFM approved

### Electrical Specifications

Operating Voltage: 24 VDC

Standby Current: 20 mA max

Alarm Current: 25 mA

Wiring Distance: 6,000 max. from FACP (depending on wire gauge and number of devices on the SBUS)

Max Per System: 8

### Mechanical Specifications

Physical 9.1" W x 7.4" H x 1.5" D (23.1 W x 18.8 H x 3.8 D cm)

Shipping Weight: 2.8 lbs (1.3 kg)

Color

5860R: Red

5860: Gray



**5860**

### Environmental

Operating Temperature: 32°F – 120°F (0°C – 49°C)

Humidity: 10% – 93% non-condensing

### Compatibility

The 5860 is compatible with the following FACP's:

- IntelliKnight 5820XL FACP
- IntelliKnight 5808 FACP
- IntelliKnight 5700 FACP

### Approvals/Listings

NFPA 72; UL Listed;  
CSFM 7170-0559: 135;  
MEA 429-92-E Vol. IX;  
FM Approved



## 5860 Remote Annunciator

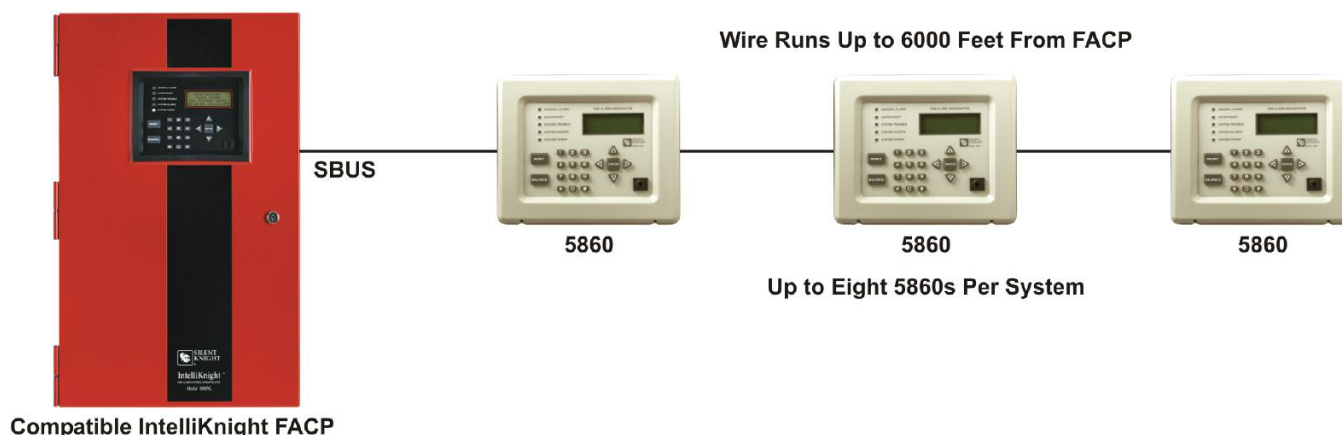
### Engineering Specifications

The main control must have a built-in annunciator and must support up to eight remote annunciators. Remote annunciators shall have the same control and display layout so as to match the appearance of the built-in annunciator. Remote annunciators shall be available in two colors, red or light gray.

Remote annunciators shall have identical functionality and operation as the built-in annunciator. All annunciators must have an 80-character LCD display and must feature five LEDs for: General Alarm, Supervisory, System Trouble, System Silence, and System Power.

All controls and programming keys are silicone mechanical type with tactile and audible feedback. Keys have a travel of .040 inches. No membrane style buttons will be permissible.

The annunciator must be able to silence and reset alarms through the use of a code entered on the annunciator keypad or by using a firefighter's key. The annunciator must have two levels of user codes that will limit the operating system programming to authorized individuals. The control panel must allow all annunciators to accommodate multiple user input simultaneously.



### Ordering Information

- 5860R Remote Annunciator four line LCD annunciator with 20 characters per line. Red.  
 5860 Remote Annunciator. Four line LCD annunciator with 20 characters per line. Gray.

#### Accessories

- 5860TR Red Trim Ring for surface mounting.  
 5860TG Gray Trim Ring for surface mounting.



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FORM# 350224 Rev E  
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# SK-PS6 / SK-PS10

## 6 Amp and 10 Amp, 24 Volt Power Supplies

**The PS Series are independently configurable power supplies, allowing you to pair any input with any output, and feature LED diagnostics for troubleshooting.**

The PS Series is a remote power supply line from Silent Knight and is a direct replacement for the 5495/5499. The SK-PS6 is a 6 amp and the SK-PS10 is a 10 amp, remote power supply with battery charger that may be connected to any 12 or 24 volt fire alarm control panel (FACP) or used as a standalone power supply. The PS Series provides 24 VDC power for NACs (notification appliance circuits) configured as either Class B or Class A (requires the ZNAC-PS option card) with multiple sync protocol options. The PS Series also provides auxiliary power, constant or resettable, suited for detectors, annunciators, door holders, and other fire alarm system peripherals. The PS Series cabinet can hold two 7 AH or 18 AH batteries and can charge up to 33 AH batteries in a separate cabinet.



## FEATURES AND BENEFITS

- Up to five (6 amp model) or seven (10 amp model) independently-configurable, power-limited output circuits for:
  - Class B and/or Class A NACs
  - Class B and/or Class A resettable or non-resettable 24V auxiliary power
  - door holder power
- Converts from Class B to Class A wiring without losing any outputs using the ZNAC-PS converter card (sold separately)
- Optimal for powering four-wire smoke detectors, annunciators, and other system peripherals requiring regulated power
- Optional addressable control, monitor, and relay modules and power-supervision relay (EOLR-1)
- Configurable for ANSI® Temporal 3 or Temporal 4 coded output
- UL-Listed NAC synchronization using System Sensor®, Wheelock®, Gentex®, or AMSECO® appliances
- Synchronization can be triggered from FACP NAC/remote sync outputs, cascaded power supply, or a control module, single or multi, which may be housed within the power supply cabinet
- Ability to cascade up to four power supplies
- Two (6 amp model) or three (10 amp model) fully-isolated input/control circuits which can be programmed to any output
- Two Form C normally-closed trouble relays for AC Trouble and General Trouble
- 6 or 10 amp full load output, respectively, with 3 A maximum/circuit
- Individual NAC power and trouble LEDs for diagnostic efficiency
- Trouble history mode for diagnostic support
- Wide range end-of-line supervision value (normal: 2-27K ohms)
- Selectable earth fault detection (enable or disable)
- AC trouble report delay timer
- Completely configurable via onboard DIP switches, no extra software required
- Self-contained in compact, locking cabinet constructed of heavy gauge steel with a corrosion-resistant powder coat chip and scratch-resistant finish
- Cabinet designed with ten double knockouts and a removable door for ease of installation and wiring
- Includes integral battery charger capable of charging up to 33 AH batteries
- Cabinet can house two 7 AH or 18 AH batteries
- Battery charger may be disabled via DIP switch for applications requiring larger batteries and external battery charger
- Removable terminal blocks accommodate up to 12 AWG (3.1mm<sup>2</sup>) wire
- Works with any UL 864 FACP which utilizes an industry-standard reverse-polarity notification circuit

## ORDERING INFORMATION

**SK-PS6:** 6.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, red

**SK-PS10:** 10.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, red

**ZNAC-PS:** Optional Class A converter card, sold separately

**SK-CONTROL:** Addressable Control Module for one Class B or Class A zone of supervised, polarized Notification Appliances. Notification Appliance Circuit option requires external 24 VDC to power notification appliances.

**SK-RELAY:** Addressable relay module containing two isolated sets of Form-C contacts, which operate as a DPDT switch

**SK-MONITOR:** Addressable Monitor Module for one zone of normally open dry-contact initiating devices. Includes plastic cover plate and end-of-line resistor. Module may be configured for either a Class B or Class A

**SK-MONITOR-2:** Dual Monitor Module. Same as SK-MONITOR except it provides two inputs for Class B wiring only

**SK-RELAYMON-2:** Provides two monitored inputs and two Form-C relays. Functions in Class B wiring only

**SK-CONTROL-6:** Six-circuit supervised control module

**SK-RELAY-6:** Six Form-C relay control module

**EOLR-1:** 12/24 VDC end-of-line relay for monitoring four-wire smoke detector power

**BAT-1270-BP:** Battery, 12 volt, 7.0 AH, 5-pack (two required)

**BAT-12180-BP:** Battery, 12 volt, 18AH, 2-pack

**BAT-12330:** Battery, 12 volt, 33AH

**SEISKIT-MULTI-1:** Seismic kit for the PS Series. Includes bracket and hardware for two 7AH or two 18AH batteries.

# SK-PS6 / SK-PS10 TECHNICAL SPECIFICATIONS

## PRIMARY (AC) POWER

**SK-PS6:** 120 VAC, 50/60 Hz, 5.0A maximum

**SK-PS10:** 120VAC, 50/60 Hz, 6.2 A maximum

**Wire Size:** #12-14 AWG with 600 V insulation

## COMMAND INPUT CIRCUIT

**Trigger Input Voltage:** 9 to 32 VDC

**Trigger Current:** 2.0 mA (16 - 32 V); Per Input: 1.0 mA (9 - 16 V)

## RELAY CIRCUITS

**Trouble Contact Rating:** 4 A at 24 VDC

## OUTPUT CIRCUITS

- 24 VDC filtered
- SK-PS6: TB8-TB9 – 1A Regulated, 3A special applications; TB10-TB12 – 0.3A Regulated, 3A special applications
- SK-PS10: TB8-TB11 – 1.5A Regulated, 3A special applications; TB12-TB14 – 0.3A Regulated, 3A special applications
- 6.0 A (SK-PS6) or 10.0 (SK-PS10) maximum total continuous current for all outputs

## SECONDARY POWER (BATTERY) CHARGING CIRCUIT

- Supports lead-acid batteries only
- Float-charge voltage: 27.6 VDC
- Maximum current charge: 1.5 A
- Maximum battery capacity: 18 AH (inside cabinet)
- Maximum battery charging capacity: 33 AH (external cabinet)

## PHYSICAL

**Dimensions:** 20.0"H x 14.5"W x 3.5"D (cm: 50.8H x 36.83W x 8.9D)

**Weight:** with two 7Ah batteries is 24 pounds (10.9 kg), with two 18 AH batteries is 39 pounds (17.7 kg)

## STANDARDS AND CODES

The SK-PS complies with the following standards:

**NFPA 72:** National Fire Alarm Code

**UL 864:** Standard for Control Units for Fire Alarm Systems (NAC expander mode)

**UL 1481:** Power Supplies for Fire Alarm Systems

## AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

**UL Listed:** S3511

**CSFM:** 7315-0559:0522

**FDNY Approved**

**FM Approved**

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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.

Country of origin: USA

## Honeywell Silent Knight

12 Clintonville Road  
Northford, CT 06472-1610  
203.484.7161  
www.silentknight.com



# NP SERIES - NP18-12

## Reliability is your Security

Utilizing the latest advance design Oxygen Recombination Technology, Yuasa have applied their 80 years experience in the lead acid battery field to produce the optimum design of Sealed Lead Acid batteries.

## FEATURES

- Superb recovery from deep discharge.
- Electrolyte suspension system.
- Gas Recombination.
- Multipurpose: Float or Cyclic use.
- Usable in any orientation.
- Superior energy density.
- Lead calcium grids for extended life.
- Manufactured World wide.
- Application specific designs.

## Technical Features

### Sealed Construction

Yuasa's unique construction and sealing technique ensures no electrolyte leakage from case or terminals.

### Electrolyte Suspension System

All NP batteries utilize Yuasa's unique electrolyte suspension system incorporating a microfine glass mat to retain the maximum amount of electrolyte in the cells. The electrolyte is retained in the separator material and there is no free electrolyte to escape from the cells. No gels or other contaminants are added.

### Control of Gas Generation

The design of Yuasa's NP batteries incorporates the very latest oxygen recombination technology to effectively control the generation of gas during normal use.

### Low Maintenance Operation

Due to the perfectly sealed construction and the recombination of gasses within the cell, the battery is almost maintenance free.



### Terminals

NP batteries are manufactured using a range of terminals which vary in size and type. Please refer to details as shown.

### Operation in any Orientation

The combination of sealed construction and Yuasa's unique electrolyte suspension system allows operation in any orientation, with no loss of performance or fear of electrolyte leakage.

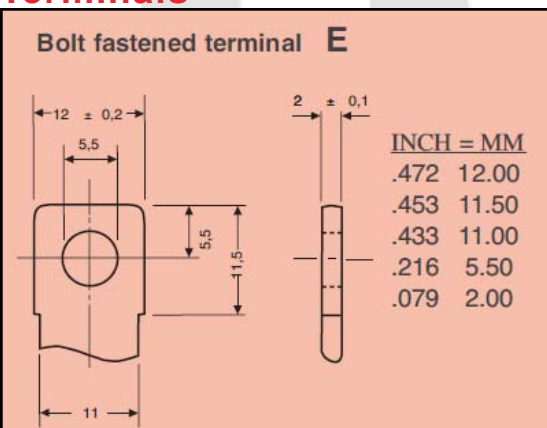
### Valve Regulated Design

The batteries are equipped with a simple, safe, low pressure venting system which releases excess gas and automatically reseals should there be a build up of gas within the battery due to severe overcharge. Note. On no account should the battery be charged in a sealed container.

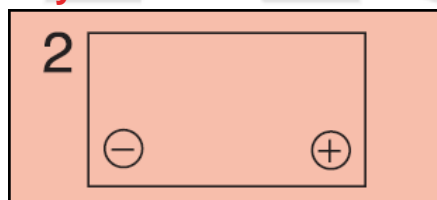
## General Specifications

Nominal Capacity (Ah)	NP18-12
20hr to 1.75vpc 30°C	17.2
10hr to 1.75vpc 20°C	16
5hr to 1.70vpc 20°C	14.5
1hr to 1.60vpc 20°C	10.3
Voltage	12
Energy Density (Wh.L.20hr)	94
Specific Energy (Wh.kg.20hr)	38
Int. Resistance (m.Ohms)	11
Maximum discharge (A)	112
Short Circuit current (A)	500
Dimensions (mm)	
Length	180
Width	76
Height overall	167
Weight (Kg)	6.2
Terminal	E
Layout	2
Terminal Torque Nm	-

## Terminals



## Layout



# NP SERIES - NP18-12

## Data Sheet

### Lead Calcium Grids

The heavy duty lead calcium alloy grids provide an extra margin of performance and life in both cyclic and float applications and give unparalleled recovery from deep discharge.

### Long Cycle Service Life

Depending upon the average depth of discharge, over a thousand discharge/charge cycles can be expected.

### Float Service Life

The expected service life is five years in float standby applications.

### Separators

The use of the special separator material provides a very efficient insulation between plates preventing inter-plate short circuits and prohibiting the shedding of active materials.

### Long shelf Life

The extremely low self discharge rate allows the battery to be stored for extended periods up to one year at normal ambient temperatures with no permanent loss of capacity.

### Operating Temperature Range

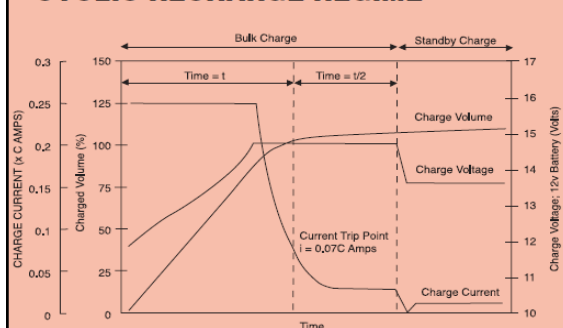
The batteries can be used over a broad temperature range permitting considerable flexibility in system design and location.

Charge – 15°C to 50°C

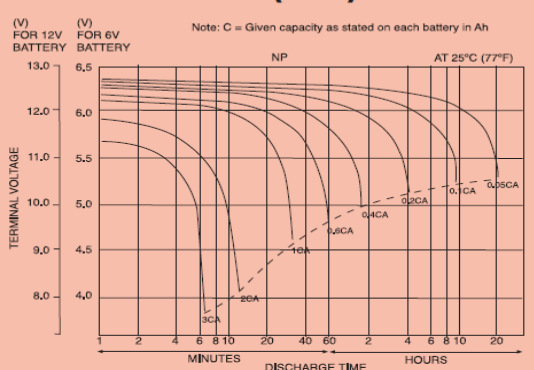
Discharge – 20°C to 60°C

Storage – 20°C to 50°C (fully charged battery)

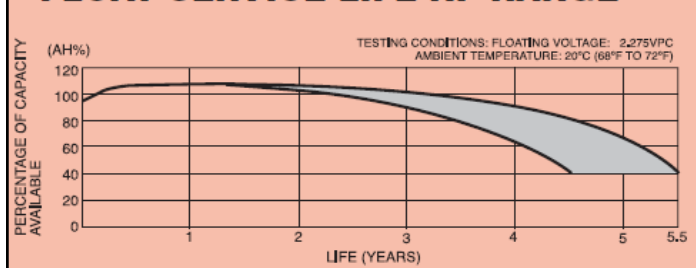
#### CYCLIC RECHARGE REGIME



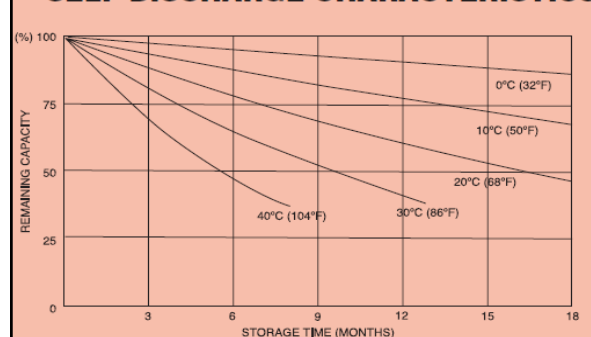
#### NP DISCHARGE CHARACTERISTICS CURVES AT 25°C (77°F)



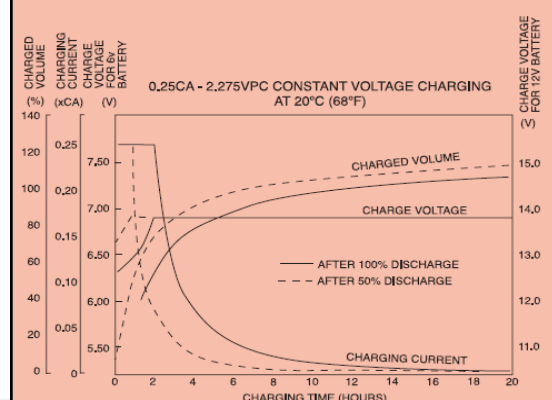
#### FLOAT SERVICE LIFE NP RANGE



#### SELF DISCHARGE CHARACTERISTICS



#### FLOAT CHARGE CHARACTERISTICS

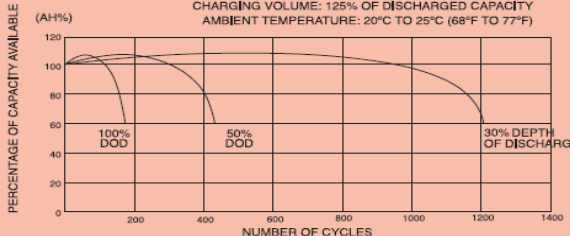


#### TYPICAL DISCHARGE CHARACTERISTICS NP RANGE

##### CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE

TESTING CONDITIONS: DISCHARGE CURRENT: 0.17C Amp. (E.V. 1.7V/CELL)  
CHARGING CURRENT: 0.09C Amp.

CHARGING VOLUME: 125% OF DISCHARGED CAPACITY  
AMBIENT TEMPERATURE: 20°C TO 25°C (68°F TO 77°F)



Yuasa Battery Inc.  
2901 Montrose Ave  
Laureldale, PA 19605  
www.yuasabatteries.com

Registered number 1548820

Cat. No. NP7-12 January 08

Distributed by

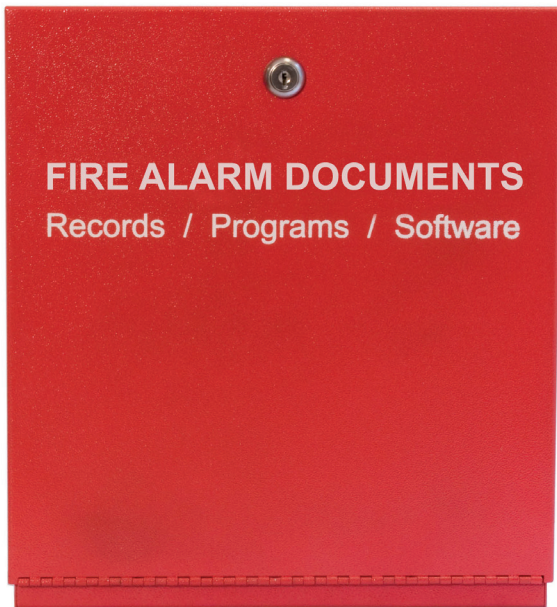


**NO  
EXCUSES!**



# FDB

## FIRE DOCUMENT BOX



The FDB is the perfect fit to meet the demanding code requirements today. SAE's number one goal is to manufacture code compliant solutions and this product allows you to do just that. NFPA 72 2010 section 6.2.2.1 states, "A record of installed software and firmware version numbers shall be maintained at the location of the fire alarm control unit."

This durable 16 gauge steel enclosure with a solid piano hinge and key lock will keep all of your code required documents in one safe place. Along with your fire alarm software you can store your test & inspection documents, service records, manuals & AS built drawings for the system.

The FDB is designed to hold critical manuals and documents with a durable steel retainer. It has designated hooks to organize key rings and hold important business cards for easy access and reference. Inside the cover it has a organized note table that allows for documentation for passwords and other critical system information.

### Standard Features:

- 2 Key ring hooks to hold system keys
- Business card holder for key contacts
- Overall Dimensions are 12" x 13" tall and 2 1/4" deep
- 16 gauge steel box and cover for security
- Durable powercoat baked on finish  
other colors available
- Standard 3/4" cat 30 key lock other lock assemblies available
- Solid stainless steel piano hinge
- Permanently screened white ink 1" high "Fire Alarm Documents"
- Legend sheet for passwords and system information



**ISO 9001  
REGISTERED  
COMPANY**



**ACEBOX**

Space Age Electronics, Inc.  
www.1sae.com  
**800.486.1723** Toll Free  
508.485.0966 Local  
508.485.4740 Fax



## Specifications:

The fire alarm documents box (FDB) shall be constructed of 18 gauge cold rolled steel. It shall have a red powder coat epoxy finish. The cover shall be permanently screened with 1" high lettering "FIRE ALARM DOCUMENTS" with white indelible ink. The access door shall be locked with a 3/4" barrel lock and the hinge shall be a solid width 12" stainless steel piano hinge. The enclosure will supply 4 mounting holes. Inside the enclosure will accommodate standard 8 1/2 x 11 manuals and loose document records that will be protected within the enclosure. A legend sheet will be permanently attached to the door for system required documentation, key contacts and system information. The enclosure shall also provide 2 key ring holders with a location to mount standard business type cards for key contact personnel.



Key Ring Hooks

Business Card Holder

For replacement forms order PIN: EA0316 (Qty. 10)

Property Information	Minimum Required Documentation (SIG-FUN)
Name of property: _____	(Reference NFPA-72 2013 Section 7.2.1)
Address: _____	1 Written narrative providing intent and system description
Description of property: _____	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
Occupancy type: _____	2 Riser diagram
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	3 Floor plan layout showing location of all devices and control equipment
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	4 Sequence of operation in either an input/output matrix or narrative form
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	5 Equipment technical data sheets
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	6 Manufacturers published instructions, including operation and maintenance instruction
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	7 Battery calculations (where batteries are provided)
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	8 Voltage drop calculations for notification appliance circuits
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	9 Completed record of inspection and testing in accordance with 7.6.6 and 7.8.2
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	10 Completed record of completion in accordance with 7.5.8 and 7.8.2
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	11 Copy of site specific software, where applicable
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	12 Record (as-built) drawings
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	13 Periodic inspection, testing, and maintenance documentation in accordance with Section 7.6
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	14 Records, record retention, and record maintenance in accordance with 7.7
	<input type="checkbox"/> N/A <input type="checkbox"/> Enclosed <input type="checkbox"/> At Location
	Signed: _____ Date: ____/____/____

Space Age Electronics, Inc. 58 Chocksett Road Sterling, MA 01564 800-486-1723 www.1sae.com LT10644 Rev. 1

Legend sheet for storing system information including contacts, sign-off, maintenance & test information, and alternate locations of additional records.

## Ordering Information:

Part # Description

SSU00672 Fire Document Box RED

SSU00673 Custom screening with your Logo

Check out our Infinity line eFAD single gang 2 Gig digital storage solutions (IAMEFAD)

**ACEBOX**

Space Age Electronics, Inc.  
www.1sae.com  
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508.485.4740 Fax

No Excuses, Just Solutions!

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ED0447

LT10505

Rev.B

2/2





**SILENT  
KNIGHT**

by Honeywell

## SK-Pull-SA and SK-Pull-DA

### Intelligent Pull Stations

The SK-Pull-SA and SK-Pull-DA are a single action or dual action addressable fire alarm pull station for use with Silent Knight's IntelliKnight fire control panel. Extremely easy to operate, the SK-Pull-DA and SK-Pull-SA provide a fast and practical means of manually initiating a fire alarm signal. The IntelliKnight panel recognizes each manual pull station by its specific address saving precious seconds in determining the location of an alarm.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103.

### Description

The SK-Pull-SA is a single action pull station requiring only one motion to activate the station. The SK-Pull-DA is a dual action pull station requiring two motions to activate the station. Both pull stations are designed to work with Silent Knight IntelliKnight series fire alarm control panels (FACPs).

### Features

- Installer can open station without causing an alarm condition
- Dual-color LED is visible through handle of station blinks green to indicate normal operation and remains steady red in an alarm condition
- Key operated test and reset lock using lock plate actuator
- Key matches compatible FACP locks
- Meets the Americans with Disabilities Act Accessibility Guidelines (ADAAG) controls and operating mechanisms guidelines (Section 4.1.3[13])
- Meets ADA requirement for 5 lbs maximum pull force to activate
- Shell, door, and handle molded from durable LEXAN®
- Reliable analog communications for trouble-free operation
- Braille text on station handle
- Handle latches in down position and the word *Activated* appears, clearly indicating the station has been pulled
- Rotary address switches for fast installation
- UL Listed, including UL 38, Standard of Manually Actuated Signaling System



**SK-Pull-SA**



**SK-Pull-DA**

### Compatibility

The SK-Pull-SA and SK-Pull-DA are compatible with the following IntelliKnight FACP's:

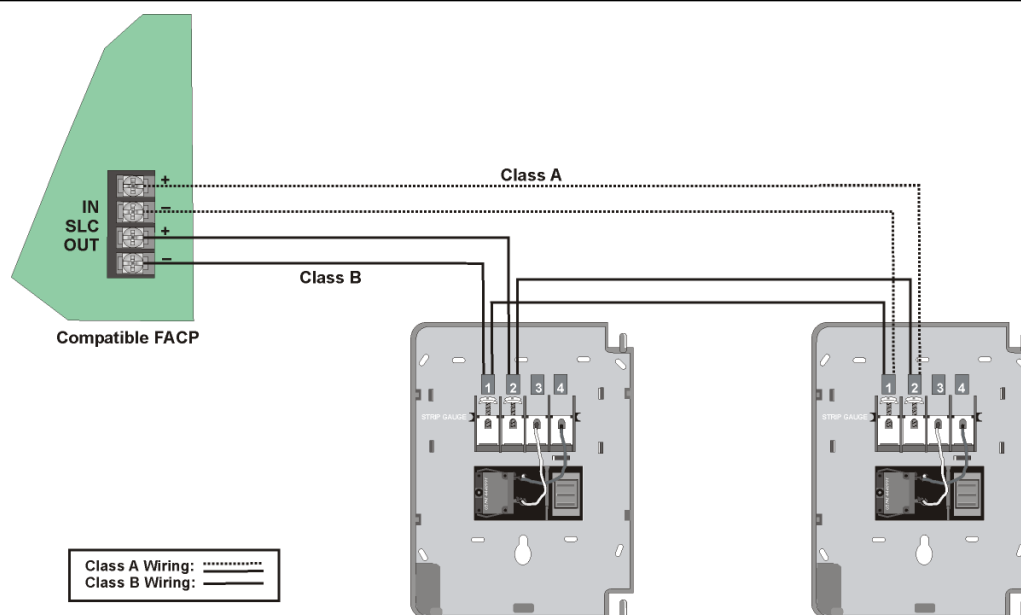
5600  
5700  
5808  
5820XL  
5820XL-EVS

# Model SK-Pull-DA and SK-Pull-SA Intelligent Pull Stations

## Engineering Specifications

The contractor shall furnish and install where indicated on the plans, Addressable Pull Stations, Silent Knight model SK-Pull-SA single action pull station or SK-Pull-DA, dual action pull station.

SK-Pull-DA or SK-Pull-SA meet the ADAAG controls and operating mechanisms guidelines, and the ADA requirements for a 5 lb. maximum pull force to activate the pull station.



Wiring SK-Pull-SA & SK-Pull-DA Pull Stations

## Specifications

### Physical

Height: 5.5" (14 cm)

Width: 4" (10.2 cm)

Depth: 5.4 oz. (3.7 cm)

Housing Material: LEXAN polycarbonate resin

Bi-Colored LED:

Blinking Green: Normal

Steady Red: Alarm

Switch: Single pole, single throw (SPST) normally open (N/O) switch which closes upon activation of the pull station

### Electrical

Operating Voltage: 15–32 VDC

Average Operating Current (LED flashing): 300  $\mu$ A

Wire Gauge: Up to 12 AWG (3.1 mm<sup>2</sup>)

### Environmental

Operating Temperature 32° – 120°F (0°C – 49°C)

Humidity: 10% – 93% non-condensing

### Accessories

BG-TR

Optional trim ring.

SB-I/O

Surface backbox



**SILENT  
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by Honeywell

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**MADE IN AMERICA**

FORM# 350135 Rev C  
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## SS-Series Intelligent Detectors

*The System Sensor SS-Series intelligent photoelectric and thermal detectors with integral communication provide point location for alarm communication and selective maintenance.*



### Features

- UL 268 7<sup>th</sup> Edition, UL 521, and/or UL 268A certified
- New modern profile
- Analog communications
- Low standby current
- Rotary address switches
- Dual LEDs for 360° visibility
- Expanded color options

**SS-Series smoke detectors** are intelligent (addressable) detectors with point ID capability that enable each detector address to be set with rotary address switches providing exact device locations. SS-Series detectors support current SK, LiteSpeed™ and SS Protocol systems. Refer to the Addressable Detector and Sounder Base Compatibility Chart or the Intelligent Control Panel SLC Wiring Manual for specific panel compatibility. Detector sensitivity is continually monitored and reported to the fire alarm control panel. The modern design and expanded color options support contemporary aesthetic demands. In addition, each detector is constructed for exceptional installation and maintenance efficiency.

The System Sensor **SS-PHOTO** photoelectric detector's re-designed optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards. The sensitivity of SS-Series detectors can be programmed using the control panel software to suit the environment. The **SS-PHOTO-R** photoelectric detector is also remote test capable for use with a DNR (DNRW) duct smoke detector. The **SS-PHOTO-T** multi-sensor detector offers either photoelectric detection or thermal detection through dual electronic thermistors at 135°F (57°C) fixed temperature thermal sensing.

SS-Series thermal detectors provide cost-effective, intelligent property protection with a UL 521 listing: the **SS-HEAT** offers 135°F (57°C) fixed thermal detection; the **SS-HEAT-ROR** offers 135°F (57°C) fixed and rate-of-rise thermal detection; the **SS-HEAT-HT** provides fixed high-temperature detection at 190°F.

### Agency Listings



SS-PHOTO Series: S911  
SS-HEAT Series: S2101



SS-PHOTO Series:  
7272-1653:0529  
SS-HEAT Series:  
7270-1653:0528

## SS-Series Intelligent Detector Specifications

Physical/Operating Specifications	
Height	2.0 inches (51 mm)
Diameter	6.2 inches (156 mm) installed in B300-6 base; 4.1 inches (104 mm) installed in B501-WHITE/-IV/-BL base
Shipping Weight	3.4 oz (95 g)
Operating Temperature Range	Photo: 32°F to 122°F (0°C to 50°C) Photo with Remote Test: 32°F to 122°F (0°C to 50°C); -4°F to 158°F (-20°C to 70°C) in duct applications Photo with Thermal: 32°F to 115°F (0°C to 47°C) Heat - Fixed-temperature: -4°F to 115°F (-20°C to 47°C) Heat - Rate of Rise (ROR): -4°F to 115°F (-20°C to 47°C) Heat - High Temperature: -4°F to 150°F (-20°C to 66°C)
UL-Listed Velocity Range	Photo, Photo with Thermal, Photo with Remote Test: 0 to 4,000 fpm (0 to 1,219 m/minute) (suitable for installation in ducts)
Operating Humidity Range	10% to 93% non-condensing
Thermal Ratings	Fixed Temperature Setpoint: 135°F (57°C) Rate-of-Rise Detection: 15°F/min. (8.3°C/min.) High Temperature Heat: 190°F (88°C)
Sensitivity Range	SS-PHOTO, SS-PHOTO-R, SS-PHOTO-T: Open area 2.86–5.0%/FT. Special Application 0.5–2.86%/FT.
Electrical Specifications	
Voltage Range	15 to 32 VDC peak
Operating Current @ 24 VDC	200 uA (one communication every 5 seconds with green LED blink on communication)
Maximum Current	4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on)
Maximum Alarm Current	2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on)

## Ordering Information

Part No.			Description
White	Ivory	Black	
SS-PHOTO	—	—	Photoelectric smoke detector
SS-PHOTO-R	—	—	Photoelectric smoke detector, remote test capable, for use with DNR(W) duct smoke detectors
SS-PHOTO-T	—	—	Photoelectric smoke detector with thermal
SS-HEAT	—	—	Fixed temperature thermal detector
SS-HEAT-ROR	—	—	Fixed temperature and Rate-of-rise thermal detector
SS-HEAT-HT	—	—	High temperature thermal detector
Bases			
B501-WHITE	B501-IV	B501-BL	4" Mounting base
B501-WHITE-BP	—	—	4" Mounting base, bulk pack (10)
B300-6	B300-6-IV	—	6" Flanged mounting base
B300-6-BP	—	—	6" Flanged mounting base, bulk pack (10)
B200S-WH	B200S-IV	—	Intelligent addressable sounder base
B200S-LF-WH	B200S-LF-IV	—	Intelligent addressable sounder base, low-frequency
B200SR	B200SR-IV	—	Intelligent sounder base
B200SR-LF	B200SR-LF-IV	—	Intelligent sounder base, low frequency
B224RB	B224RB-IV	—	Relay base
B224BI	B224BI-IV	—	Isolator base
Accessories			
—	SMB600	—	Surface Mounting Kit (flanged)
TR300	TR300-IV	—	Trim ring
CK300	CK300-IV	CK300-BL	Color Kit (includes cover and trim ring)
—	RA100Z	—	RA100Z Remote LED annunciator
M02-04-00	Detector test magnet		
M02-09-00	Telescoping test magnet		

## Accessories

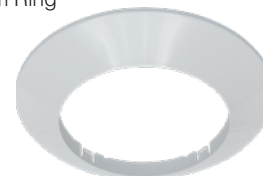
**RA100Z**  
Remote LED  
Annunciator



**CK300-BL**  
Color Kit



**TR300**  
Trim Ring



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for current product information, including the latest version of this data sheet.  
SPDS-62165 Rev. B • 5/8/2024





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## SK-Monitor-2

### Intelligent Dual Monitor Module

The SK-Monitor-2 module is capable of monitoring two separate Class B circuits simultaneously, making it ideal for waterflow tamper switch and flow switch monitoring.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103.

#### Description

The SK-Monitor-2 is an addressable monitor module with two initiating circuits for use with Silent Knight IntelliKnight series fire alarm control panels (FACPs). The SK-Monitor-2 acts as an interface to contact devices, such as waterflow switches and pull stations.

The SK-Monitor-2 supports Class B supervised wiring to the load device. Conventional 4-wire smoke detectors can be monitored for alarm and trouble conditions.

#### Features

- Monitor two circuits, with unique addresses, simultaneously
- Support for Class B wiring
- Fully supervised
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Attractive ivory cover plate
- Rotary address switches for fast installation
- SEMS screws for easy wiring
- UL Listed



**SK-Monitor-2**

#### Installation

SK-Monitor-2 mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor® part number SMB500) is available from Silent Knight.

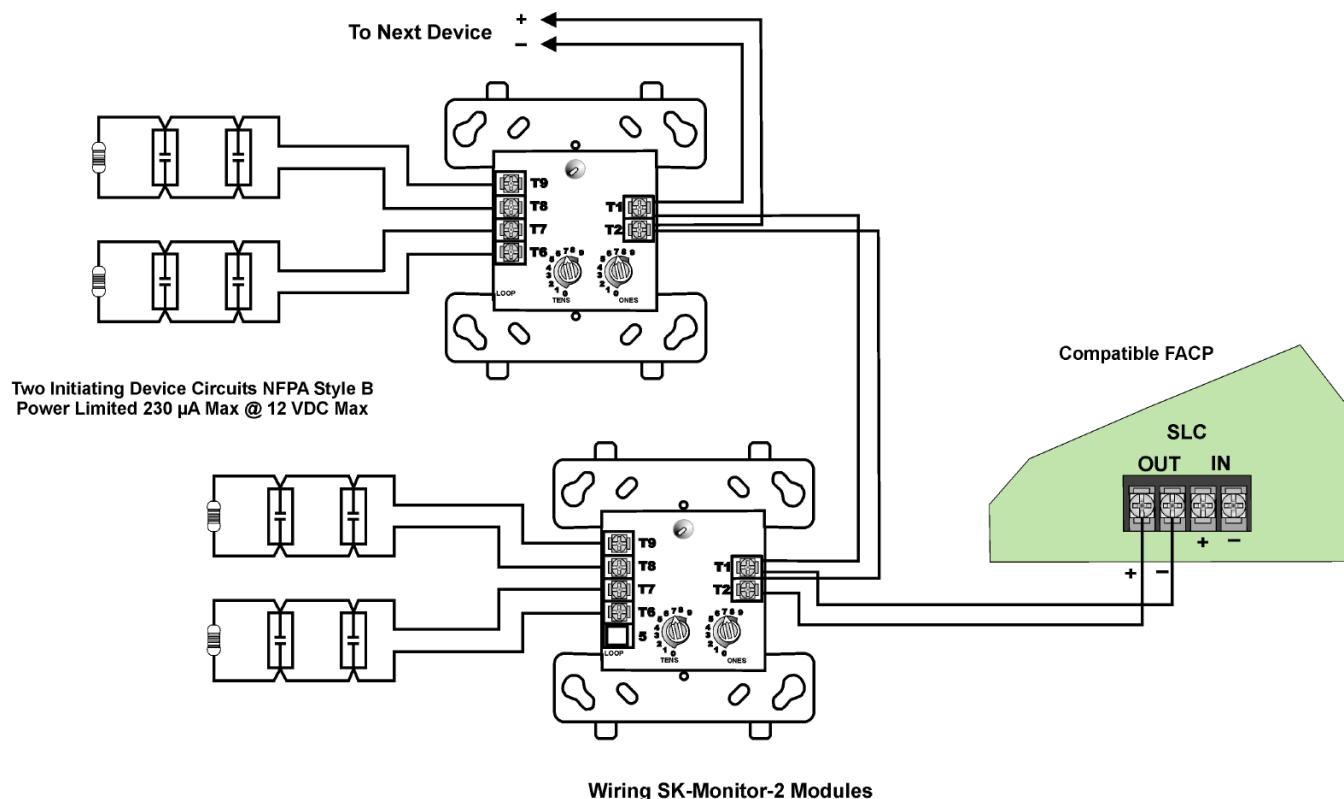
#### Compatibility

The SK-Monitor-2 is compatible with the following IntelliKnight FACP's:

5700  
5808  
5820XL  
5820XL-EVS

# Model SK-Monitor-2

## Intelligent Dual Monitor Module



### Specifications

#### Physical

Height: 4.5" H x 4" W x 1.25" D

Shipping Weight: 6.3 oz (196 g)

#### Electrical

Operating Voltage: 15 – 32 VDC

Current Draw (LED on): 6.4 mA max

Operating Current (LED flashing): 750 µA

End-of-Line Resistance: 47K  $\Omega$

Max IDC wiring resistance: 1,500 $\Omega$

SLC Line Loop Resistance: 40 $\Omega$  max.

#### Environmental

Operating Temperature: 32°F – 120°F (0°C – 49°C)

Humidity: 10% – 93% non-condensing

#### Accessories

SMB500 4" Square Surface Mount Electrical Box



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 Silent Knight 12 Clintonville Road, Northford, CT 06472-1610  
Phone: (800) 328-0103, Fax: (203)484-7118. For Tehnical Support, Please call 800-446-6444. [www.silentknight.com](http://www.silentknight.com)

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## SK-Relay

### Intelligent Relay Module

The SK-Relay Module is intended for use in intelligent, two-wire systems where the individual address of each module is selected using the built in rotary switches.

For more information about the IntelliKnight system, or to locate your nearest source, please call 800-328-0103.

#### Description

The SK-Relay is an addressable relay module for use with Silent Knight IntelliKnight series fire alarm control panels (FACPs).

The SK-Relay allows a Silent Knight FACP to switch discrete contacts by code command. The relay contains two isolated sets of Form C contacts, which operate as a DPDT switch. No supervision is provided for the notification appliance circuit.

The SK-Relay contacts can be used for virtually any normally open or normally closed application. Each SK-Relay is programmed with a unique signaling line circuit (SLC) loop address. When an event occurs that controls the SK-Relay, the relay is triggered by the FACP.

#### Features

- Two sets of Form C contacts
- Rotary address switches for fast installation
- Contacts are rated for a variety of amps (see Specifications)
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Relay programming is completely flexible—can be mapped to zone conditions
- Polling LED visible through the cover plate
- Attractive ivory cover plate
- SEMS screws for easy wiring
- UL Listed



**SK-Relay**

#### Installation

The SK-Relay mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor® PN SMB500) is available from Silent Knight.

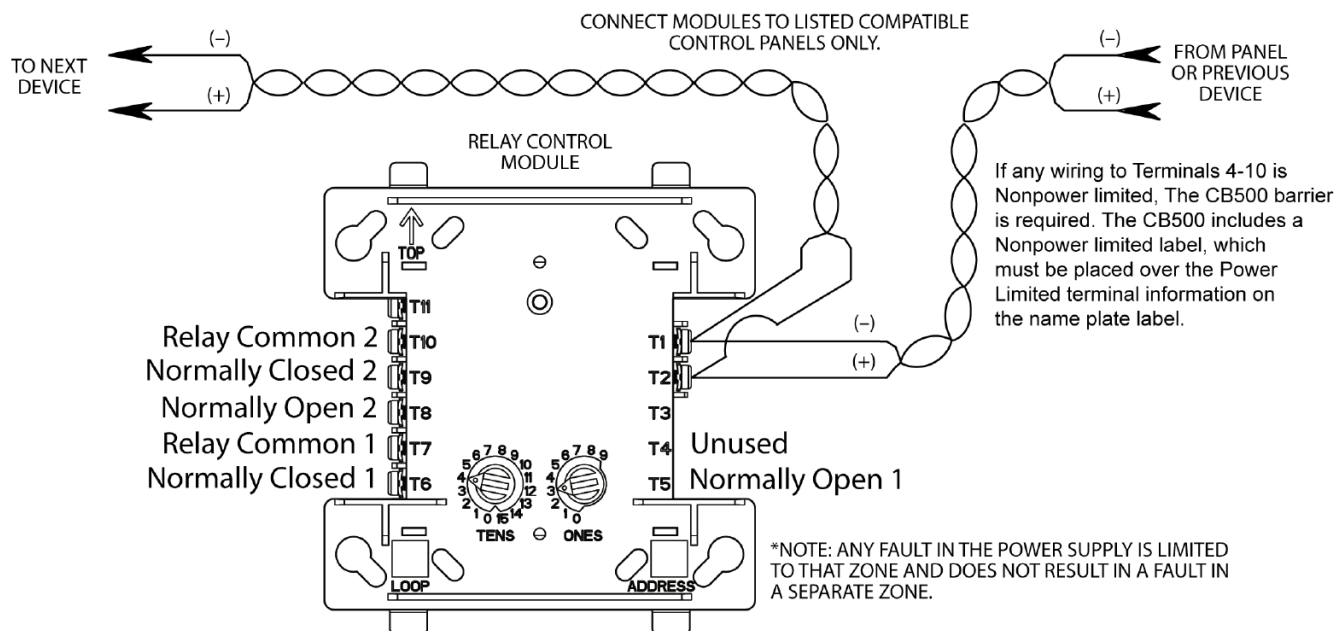
#### Compatibility

The SK-Relay is compatible with the following IntelliKnight FACP's:

5820XL  
5820XL-EVS  
5808  
5700  
5600 (Rev 2.0 or higher)

# Model SK-Relay

## Intelligent Relay Module



Wiring the SK-Relay Module

### Specifications

#### Physical

4.675" H x 4.275" W x 1.4" D

Shipping Weight: 6.3 oz (196 g)

#### Environmental

Operating Temperature: 32°F – 120°F (0°C – 49°C)

Humidity: 10% – 93% non-condensing

#### Electrical

Operating Voltage: 15 – 32 VDC

End-of-Line Resistance: Not used

SLC Standby &amp; Alarm Current: .255mA max @ 24 VDC (one communication every 5 sec with LED enabled)

### Ordering Information

SK-Relay      Relay Module

### Accessories

SMB500      4" Square Surface Mount Electrical Box

CB500      Module Barrier

### Relay Contact Ratings

3.0A @ 30 VDC resistive

0.9A @ 110 VDC resistive

0.9A @ 125 VAC resistive

0.5A @ 125 VAC inductive (PF = .35)

0.7A @ 75 VAC inductive (PF = .35)


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## **SK-DUCT** **Intelligent Air Duct** **Smoke Detector**

**Detect smoke in air handling systems and air handling equipment with Silent Knight's addressable duct smoke detector**

The SK-Duct Intelligent air duct smoke detector is used with SK-PhotoR (included) for detecting smoke and products of combustion present in air moving through an HVAC air handling system. When smoke is detected in a duct, the unit communicates the condition to the IntelliKnight control panel. The panel, in turn, depending on programming and wiring, turns off fans, blowers, and other devices. The duct housing allows for mounting of SK-Relay addressable relay module. Now there's even more power and flexibility available to the IntelliKnight family of products!

### **Description**

The Model SK-Duct Air Duct Smoke Detector utilizes photoelectric technology for the detection of smoke. It provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial and Industrial applications.

The SK-Duct is in a heavy duty gray steel back box with a clear cover. It features a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct. It installs quickly and easily.

The unit senses smoke in the most challenging conditions, operating in airflow speeds of 100 to 4000 feet per minute, temperatures of -4°F to 158°F, and a humidity range of 0 to 95 percent (non-condensing).

### **Features**

- Versatile mounting options: square or rectangular configuration
- New Cover tamper signal
- LED alarm indication and communication on sensor head
- Detects and limits the spread of smoke
- Rugged steel back box with clear plastic cover
- Easy to clean
- Large terminal connection screws
- Transparent cover for convenient visual inspection
- Patented sampling tube installs from front or back of the detector with no tools required
- Available space within housing to accommodate mounting of relay module
- UL listed



**SK-DUCT**

### **Specifications**

#### **Physical**

(Rectangular): 14.38 in (37 cm) Length;  
5in (12.7 cm) Width; 2.5 in (6.6 cm) Depth

(Square): 7.75 in (19.7cm) Length;  
9 in (22.9cm) Width; 2.5 in (6.35cm) Depth

Weight: 1.6lb (0.73kg)

#### **Environmental**

Operating Temperature: -4°F – 158°F  
(-20°C – 70°C)

Humidity: 0% – 95% (non-condensing)

#### **Air Velocity**

100 to 4000 ft/min (0.5 – 20.3 m/sec.)

#### **Electrical (using SK-Photo or SK-PhotoR)**

Operating Voltage: 15–32 VDC

Standby Current: 300 µA @ 24 VDC max.

Alarm Current: 6.5 mA @ 24 VDC max  
(with LED on)

# Model SK-DUCT

## Air Duct Smoke Detector

### Engineering Specifications

The air duct smoke detector shall be a SK-Duct photoelectric duct smoke detector. The detector housing shall be UL listed per UL 268A specifically for use in air handling systems. The flexible housing of the duct smoke detector fits both square and rectangular footprints. The detector shall operate at air velocities of 100 ft/min to 4000 ft/min (0.5 m/sec to 20.32 m/sec).

The unit shall be capable of providing a trouble signal in the event that the sensor cover is removed or improperly installed. It shall be capable of local testing via magnetic switch or remote testing using the RTS151KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 12–18AWG wiring.

The unit housing shall be capable of mounting a relay module.

### Ordering Information

SK-Duct	Intelligent non-relay duct smoke detector	M02-04-00	Test Magnet
SK-Photo	Addressable Photo Detector	P48-21-00	Replacement End Cap for Metal Sampling Tube
SK-PhotoR	Addressable Photo Detector with remote test capability (included with SK-Duct)	APA151	Remote annunciator with piezo alarm
SK-Relay	Addressable Relay Module, must be added if relay function is required, (fits in housing)		

#### Accessories†

DST1	Metal Sampling Tube Duct Width up to 1'
DST1.5	Metal Sampling Tube Duct Widths 1' - 2'
DST3	Metal Sampling Tube Duct Widths 2' – 4'
DST5	Metal Sampling Tube Duct Widths 4' – 8'
DST10	Metal Sampling Tube Duct Widths 8' – 12'
DH400OE-1	Weatherproof Enclosure
ETX	Metal Exhaust Tube Duct width 1'
RA100Z	Remote LED Annunciator
DCOIL	Duct accessory coil, required if using with SK-Photo and not SK-PhotoR (included) with SK-Duct
RTS151	Magnetic Remote Test station
RTS151KEY	Key-Activated Remote Test station

#### Important Notes:

- The use of either RTS151 or RTS151KEY requires the installation of an accessory coil, DCOIL, sold separately. Please refer to the SK-Duct installation instructions for more information
- The RTS151/RTS151KEY test coil circuit requires an external 24VDC power supply which must be UL listed.

Accessory Current Loads at 24 VDC		
Device	Standby	Alarm
RA100Z	0mA	12mA Max.
RTS151	0mA	12mA Max.
RTS151KEY	12mA	12mA Max.



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## Duct Smoke Detector Accessories

*Expand the versatility of the InnovairFlex™ line of duct smoke detectors with System Sensor notification and test accessories.*



### Available Accessories

APA151	Piezo Annunciator
MHR	Mini-Horn, Red
MHW	Mini-Horn, White
RA100Z/RA100ZA	Remote Annunciator
RTS151	Remote Test Station
RTS151KEY	Remote Test Station with Key
RTS2	Multi-Signaling Accessory
AOS	Add-On Strobe
RTS2-AOS	Multi-Signaling Accessory

**Duct smoke detector accessories** add functionality to the duct smoke detection system by allowing quick, convenient inspections at eye level and effective audible and visible notification options. All System Sensor duct smoke detectors and accessories are UL listed.

The **APA151** piezo annunciator, which replaces the APA451 with a new, improved look, provides an audible alarm signal, a red LED to indicate alarm status, and a green LED to indicate power status. It is intended for use with System Sensor 4-wire conventional duct smoke detector applications without a system control panel, to comply with NFPA 90A.

The **MHR and MHW** SpectrAlert® Advance mini-horns feature temporal or continuous tones at high and low volume settings. Their small footprint allows mounting to single-gang back boxes for applications where a small device is desired.

The **RA100Z and RA100ZA** remote annunciators are designed for both conventional and intelligent applications. Their red LED provides visual indication of an alarm condition.

The **RTS151 and RTS151KEY** remote test stations are automatic fire detector accessories designed to test duct smoke detectors from a convenient location. For 4-wire detectors, the RTS151KEY test station features a multi-colored LED that alternates between steady green and red. For 2-wire detectors, the LED illuminates red for alarm.

The **RTS2 and RTS2-AOS** multi-signaling accessories are designed to work with InnovairFlex 4-wire conventional duct smoke detectors. These accessories include a key switch that can be used to select one of two connected sensors to be tested, reset, or both by a push button switch. They also enable sensitivity measurements using the SENS-RDR sensitivity reader (sold separately). The AOS (Add-On Strobe) is an optional accessory included with the RTS2-AOS model.

### Agency Listings



## Specifications, Duct Smoke Detector Accessories

APA151 Piezo Annunciator	
Voltage	Regulated 24 VDC
Operating Voltage	16 to 33 VDC
Maximum Alarm Current	30 mA
Temperature Range	0°C to 49°C (32°F to 120°F)
Relative Humidity	10 to 93% non-condensing
Wire Gauge	12 to 18 AWG
Dimensions	4.6" H x 2.9" W x .45" D

MHR/MHW SpectraAlert® Advance Mini-Horns	
Voltage	Regulated 12 DC or FWR (Full Wave Rectified) or Regulated 24 VDC or FWR
Sounder Current Draw	22 mA RMS max. at 8 to 17.5 Volts DC 29 mA RMS max. at 16 to 33 Volts DC
Temperature Range	0°C to 49°C (32°F to 120°F)
Humidity Range	10 to 93% non-condensing
Nominal Sounder Frequency	3 kHz
Wire Gauge	12 to 18 AWG
Dimensions	4.6" H x 2.9" W x 0.45" D

RA100Z/RA100ZA Remote Annunciator	
Voltage Range	Conventional System: 3.1 to 32 VDC Intelligent System: 18 to 32 VDC
Maximum Alarm Current	10 mA
Dimensions	4.6" H x 2.8" W x 1.3" D

RTS151 Remote Test Station	
Power Requirements	Alarm LED: 2.8 to 32 VDC, 12 mA max. Total Current: 105 mA max.
Test Switch	10 VA @ 32 VDC
Reset Switch	10 VA @ 32 VDC
Alarm Response Time	40 seconds max.
Temperature Range	-10°C to 60°C (14°F to 140°F)
Relative Humidity	95% non-condensing
Wire Gauge	14 to 18 AWG
Dimensions	4.8" H x 2.90" W x 1.4" D

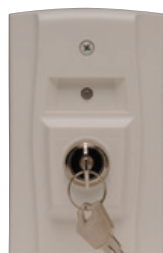
RTS151KEY Remote Test Station with Key	
Power Requirements	Power LED (Green): 14 to 35 VDC, 12 mA max. Alarm LED (Red): 2.8 to 32 VDC, 12 mA max. Total Current: 105 mA max.
Alarm Response Time	40 seconds max.
Temperature Range	-10°C to 60°C (14°F to 140°F)
Relative Humidity	95% non-condensing
Wire Gauge	14 to 18 AWG
Dimensions	4.6" H x 2.75" W x 1.8" D

RTS2 and RTS2-AOS Multi-signaling Accessory	
Voltage	20 to 29 VDC
Power Requirements	Standby: 3.0 mA max. Trouble: 16.0 mA max. Alarm without strobe: 30 mA max. Alarm with strobe: 55 mA max.
Sounder	85 dBA at ten feet
Temperature Range	-10°C to 60°C (14°F to 140°F)
Relative Humidity	95% non-condensing
Wire Gauge	14 to 22 AWG
Dimensions	4.8" W x 5.3" H x 1.6" D

For the very latest product specifications and listing information, please visit the System Sensor Web site at [www.systemsensor.com](http://www.systemsensor.com).



RTS151 UL S4011



RTS151KEY UL S2522



APA151 UL S4011



RTS2-AOS UL S2522



RA100Z UL S2522



MHW UL S4011



MHR UL S4011



AOS



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HVDS20202 • 8/13



# Indoor Selectable-Output Speaker Strobes and Dual Voltage Evacuation Speakers for Ceiling Applications

*System Sensor L-Series selectable-output speaker strobes and dual-voltage evacuation speakers can reduce ground faults and enable faster installation with lower current draw and modern aesthetics.*

## Features

- Plug-in design and protective cover reduce ground faults
- Universal mounting plate with an onboard shorting spring tests wiring continuity before installation
- No extension ring required
- Field selectable candela settings on ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Rotary switch simplifies field selection of speaker voltage (25 and 70.7 Vrms) and power settings (¼, ½, 1 and 2 watts)
- Speakers offer high fidelity and high volume sound output
- 520 Hz capable with compatible FACP
- Compatible with System Sensor synchronization protocol
- Electrical compatibility with existing SpectrAlert and SpectrAlert Advance products
- Tamper-resistant construction
- Updated modern aesthetics

## Agency Listings



7320-1653:0505



**System Sensor L-Series** of speakers and speaker strobes reduce costly ground faults using a plug-in design and universal mounting plate that allow the installer to pre-wire mounting plates, dress the wires, and confirm wiring continuity before plugging in the speakers. In addition, a protective plastic cover prevents nicked wires by covering exposed speaker components.

These devices also enable faster installations by providing instant feedback to ensure that wiring is properly connected, rotary switches to select voltage and power settings, and 7 field-selectable candela settings for both wall and ceiling speaker strobes.

The low total harmonic distortion of the SP speaker offers high fidelity sound output while still offering high volume sound output for use in high ambient noise applications.

### L-Series makes installation easy

- Attach a universal mounting plate to a 4 × 4 × 21/8 inch back box. Flush-mount applications do not require an extension ring.
- Connect the notification appliance circuit or speaker wiring to the terminals on the mounting plate.
- Attach the speaker or speaker strobe to the mounting plate by inserting the product tabs into the mounting plate grooves. Hinge the device into position to lock the product pins into the mounting plate terminals. The device will temporarily hold in place with a catch until it is secured with a captured mounting screw.



# L-Series Speaker and Speaker Strobe Specifications

## Architectural/Engineering Specifications

### General

L-Series speaker and speaker strobes shall mount to a 4 × 4 × 2 1/8-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit and amplifier wiring shall terminate at the universal mounting plate. Also, L-Series speaker strobes, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32°F and 120°F from a regulated DC, or full-wave rectified, unfiltered power supply. Speaker strobes shall have field-selectable candela settings including 15, 30, 75, 95, 115, 150, 177.

### Speaker

The speaker shall be a System Sensor L-Series model \_\_\_\_\_ dual-voltage transformer speaker capable of operating at 25.0 or 70.7 nominal Vrms. It should be listed to UL 1480 and shall be approved for fire protective service. The speaker shall have a frequency range of 400 to 4,000 Hz and shall have an operating temperature between 32°F and 120°F. The speaker shall have power taps and voltage that are selected by rotary switches.

### Speaker Strobe combination

The speaker strobe shall be a System Sensor L-Series model \_\_\_\_\_ listed to UL1480 and UL 1971 and be approved for fire protective signaling systems. The speaker shall be capable of operating at 25.0 or 70.7 nominal Vrms selected via rotary switch, and shall have a frequency range of 400 to 4,000 Hz. The speaker shall have power taps that are selected by rotary switch. The strobe shall comply with the NFPA 72 requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

### Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1 Hz. The module shall mount to a 4 1/16 × 4 1/16 × 2 1/8-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

## Physical Specifications

<b>Operating Temperature</b>	32°F to 120°F (0°C to 49°C)	
<b>Humidity Range</b>	10 to 93% non-condensing	
<b>Dimensions, Ceiling-Mount</b>	<b>Diameter</b>	<b>Depth</b>
<b>SPC Speaker</b>	6.8 in, 173 mm	1.0 in, 25 mm
<b>With Surface Mount Back Box</b>	6.9 in, 176 mm	3.5 in, 89 mm
<b>SPSC Speaker Strobe</b>	6.8 in, 173 mm	2.8 in, 73 mm
<b>With Surface Mount Back Box</b>	6.9 in, 176 mm	5.37 in, 136 mm

## Electrical/Operating Specifications

<b>Nominal Voltage (speakers)</b>	25 Volts or 70.7 Volts (nominal)
<b>Maximum Supervisory Voltage (speakers)</b>	50 VDC
<b>Strobe Flash Rate</b>	1 flash per second
<b>Nominal Voltage (strobes)</b>	Regulated 12 VDC or regulated 24 VDC/FWR <sup>1,2</sup>
<b>Operating Voltage Range (includes fire alarm panels with built in sync)</b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
<b>Operating Voltage with MDL3 Sync Module</b>	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
<b>Frequency Range</b>	400 to 4,000 Hz <sup>3</sup>
<b>Power</b>	1/4, 1/2, 1, 2 watts

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

2. Strobe products will operate at 12 V nominal only for 15 and 30 cd.

3. 520Hz capable with compatible FACP.

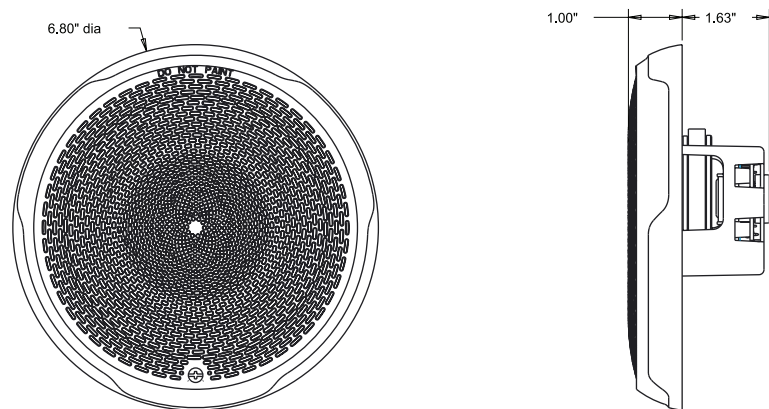
# UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)			
	8 to 17.5 Volts	16 to 33 Volts	
Candela	DC	DC	FWR
15	87	41	60
30	153	63	86
75	NA	111	142
95	NA	134	164
115	NA	158	191
150	NA	189	228
177	NA	226	264

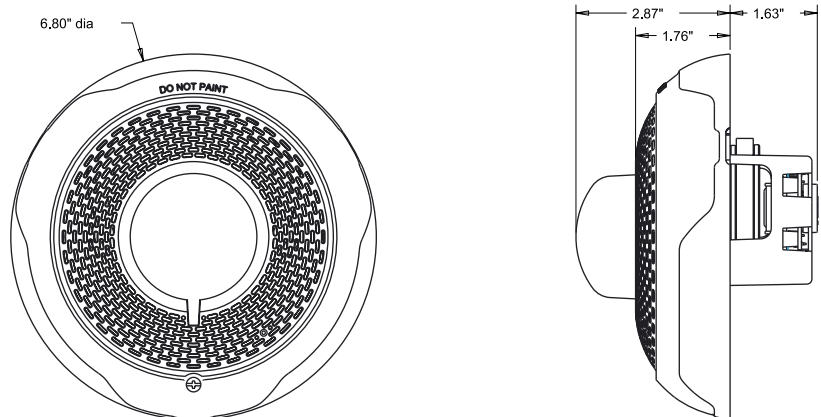
Ceiling-Mount Speaker Sound Output		
Setting	UL Reverberant (dBA @10 ft)	UL Anechoic (dBA @10 ft)
1/4 W	79	79
1/2 W	82	82
1 W	85	85
2 W	88	88

Ceiling-Mount Speaker Strobe Sound Output		
Setting	UL Reverberant (dBA @10 ft)	UL Anechoic (dBA @10 ft)
1/4 W	77	77
1/2 W	80	80
1 W	83	83
2 W	86	86

# L-Series Dimensions

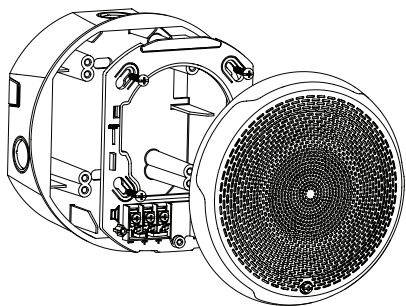


Ceiling Speaker

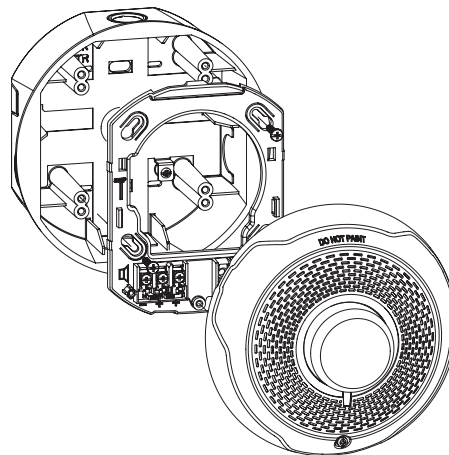


Ceiling Speaker Strobe

## Surface Mounting



Ceiling Speaker with Surface Mount Back Box



Ceiling Speaker Strobe with Surface Mount Back Box

## L-Series Ordering Information

Ceiling Mount		
White	Red	Description
SPCWL	SPCRL	Speaker only
SPSCWL	SPSCRL	Speaker Strobe
SPSCWL-P	—	Plain, Speaker Strobe
SPSCWL-SP	—	Fuego, Speaker Strobe
SPSCWL-CLR-ALERT	—	Alert, Speaker Strobe, Clear Lens
Accessories		
White	Red	Description
SBBCWL	SBBCRL	Universal Ceiling Surface Mount Back Box
TRC-2W	TRC-2	Universal Ceiling Trim Ring



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AVDS86601 • 03/17



# Indoor Selectable-Output Speaker Strobes and Dual Voltage Evacuation Speakers for Wall Applications

*System Sensor L-Series selectable output speaker strobes and dual-voltage evacuation speakers can reduce ground faults and enable faster installation with lower current draw and modern aesthetics.*

## Features

- Plug-in design and protective cover reduce ground faults
- Universal mounting plate with an onboard shorting spring tests wiring continuity before installation
- No extension ring required
- Field selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, 185
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Rotary switch simplifies field selection of speaker voltage (25 and 70.7 Vrms) and power settings ( $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 and 2 watts)
- Speakers offer high fidelity and high volume sound output
- 520 Hz +/- 10% square wave tone capable with compatible FACP
- Compatible with System Sensor synchronization protocol
- Electrical compatibility with existing SpectrAlert and SpectrAlert Advance products
- Tamper-resistant construction
- Updated modern aesthetics

## Agency Listings



7320-1653:0505



**The System Sensor L-Series** of speakers and speaker strobes reduce costly ground faults using a plug-in design and universal mounting plate that allow the installer to pre-wire mounting plates, dress the wires, and confirm wiring continuity before plugging in the speakers. In addition, a protective plastic cover prevents nicked wires by covering exposed speaker components.

These devices also enable faster installations by providing instant feedback to ensure that wiring is properly connected, rotary switches to select voltage and power settings, and 7 field-selectable candela settings for wall speaker strobes.

The low total harmonic distortion of the speaker offers high fidelity sound output while still offering high volume sound output for use in high ambient noise applications.

### System Sensor L-Series makes installation easy

- Attach a universal mounting plate to a 4 x 4 x 2 $\frac{1}{8}$  inch back box. Flush-mount applications do not require an extension ring.
- Connect the notification appliance circuit or speaker wiring to the terminals on the mounting plate.
- Attach the speaker or speaker strobe to the mounting plate by inserting the product tabs into the mounting plate grooves. Hinge the device into position to lock the product pins into the mounting plate terminals. The device will temporarily hold in place with a catch until it is secured with a captured mounting screw.

# L-Series Speaker and Speaker Strobe Specifications

## Architectural/Engineering Specifications

### General

L-Series speaker and speaker strobes shall mount to a 4 × 4 × 2<sup>1</sup>/<sub>8</sub>-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit and amplifier wiring shall terminate at the universal mounting plate. Also, L-Series speaker strobes, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32°F and 120°F from a regulated DC, or full-wave rectified, unfiltered power supply. Wall-mount speaker strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, 185.

### Speaker

The speaker shall be aSp System Sensor L-Series model \_\_\_\_\_ dual-voltage transformer speaker capable of operating at 25.0 or 70.7 nominal Vrms. It should be listed to UL 1480 and shall be approved for fire protective service. The speaker shall have a frequency range of 400 to 4,000 Hz and shall have an operating temperature between 32°F and 120°F. The speaker shall have power taps and voltage that are selected by rotary switches.

### Speaker Strobe combination

The speaker strobe shall be a System Sensor L-Series model \_\_\_\_\_ listed to UL1480 and UL 1971 and be approved for fire protective signaling systems. The speaker shall be capable of operating at 25.0 or 70.7 nominal Vrms selected via rotary switch, and shall have a frequency range of 400 to 4,000 Hz. The speaker shall have power taps that are selected by rotary switch. The strobe shall comply with the NFPA 72 requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

### Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize strobes at 1 Hz. The module shall mount to a 4<sup>11</sup>/<sub>16</sub> × 4<sup>11</sup>/<sub>16</sub> × 2<sup>1</sup>/<sub>8</sub>-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

## Physical Specifications

<b>Operating Temperature</b>	32°F to 120°F (0°C to 49°C)		
<b>Humidity Range</b>	10 to 93% non-condensing		
<b>Dimensions, Wall-Mount</b>	<b>Length</b>	<b>Width</b>	<b>Depth</b>
<b>SPL Speaker</b>	6.5 in, 165 mm	5 in, 127 mm	0.97 in, 23 mm
<b>With Surface Mount Back Box</b>	6.6 in, 168 mm	5.1 in, 130 mm	3.2 in, 82 mm
<b>SPSL Speaker/Strobe (including lens and speaker)</b>	6.5 in, 165 mm	5.0 in, 127 mm	2.3 in, 58 mm
<b>With Surface Mount Back Box</b>	6.6 in, 168 mm	5.1 in, 130 mm	4.5 in, 116 mm

\*When using 12AWG, 14 AWG, or adding extra wires in the box, a deeper box or extension ring is recommended.

## Electrical/Operating Specifications

<b>Nominal Voltage (speakers)</b>	25 Volts or 70.7 Volts (nominal)
<b>Maximum Supervisory Voltage (speakers)</b>	50 VDC
<b>Strobe Flash Rate</b>	1 flash per second
<b>Nominal Voltage (strobes)</b>	Regulated 12 VDC or regulated 24 DC/FWR <sup>1,2</sup>
<b>Operating Voltage Range (includes fire alarm panels with built in sync)</b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
<b>Operating Voltage with MDL3 Sync Module</b>	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
<b>Frequency Range</b>	400 to 4000 Hz <sup>3</sup>
<b>Power</b>	¼, ½, 1, 2 watts

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

2. Strobe products will operate at 12 V nominal only for 15 and 30 cd

3. 520 Hz +/- 10% square wave tone capable with compatible FACP.



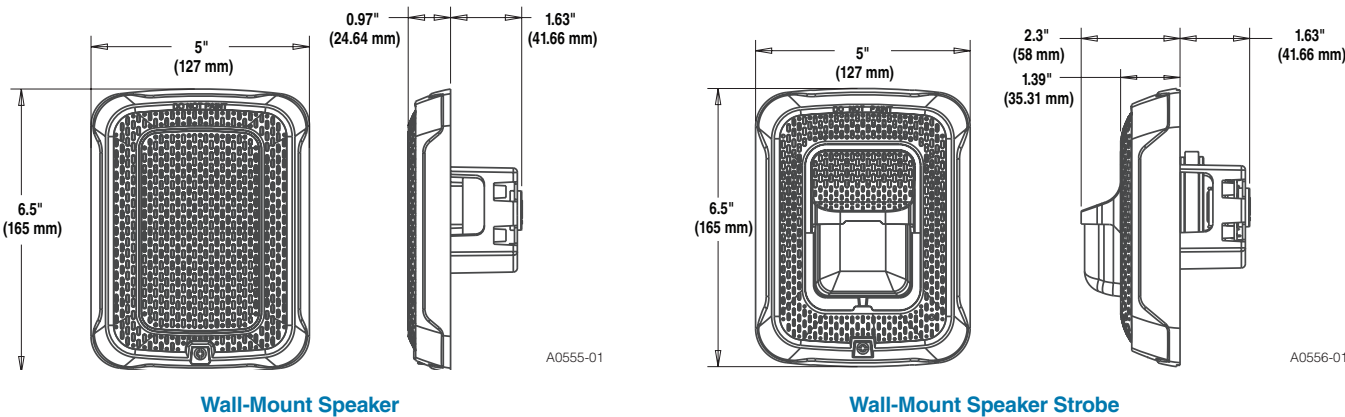
# UL Current Draw Data

UL Max Strobe Current Draw (mA RMS)			
	8 to 17.5 Volts	16 to 33 Volts	
Candela	DC	DC	FWR
15	88	43	60
30	143	63	83
75	N/A	107	136
95	N/A	121	155
110	N/A	148	179
135	N/A	172	209
185	N/A	222	257

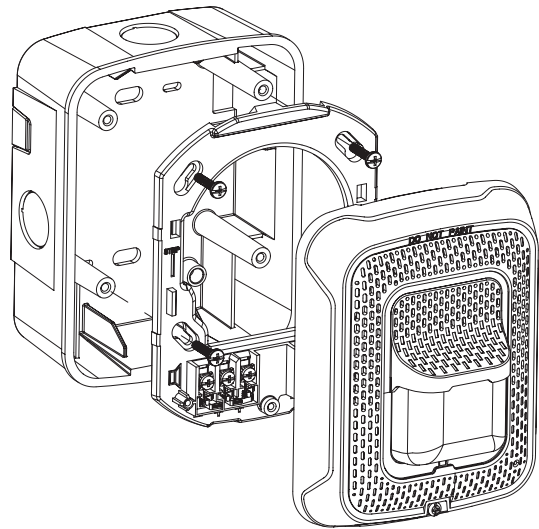
Sound Output Speaker Strobe				
	¼ W	½ W	1 W	2 W
UL Reverberant (dBA @10 ft)	77	80	83	86
UL Anechoic (dBA @10 ft)	77	80	83	86

Sound Output Speaker				
	¼ W	½ W	1 W	2 W
UL Reverberant (dBA @10 ft)	79	82	85	88
UL Anechoic (dBA @10 ft)	79	82	85	88

# L-Series Dimensions



# Surface Mounting



A0523-01

Wall-Mount Speaker Strobe  
with SBBSPRL/ SBBSPWL Surface Mount Back Box

## L-Series Ordering Information

Wall Mount		
White	Red	Description
SPWL	SPRL	Speaker only
SPSWL	SPSRL	Speaker Strobe
SPSWL-P	SPSRL-P	Plain Speaker Strobe
SPSWL-ALERT	—	Speaker Strobe, Amber Lens
SPSWL-CLR-ALERT	—	Speaker Strobe Clear Lens
—	SPSRL-SP	Speaker Strobe, Fuego

Accessories		
White	Red	Description
RFPW	RFP	7 in × 9.5 in Retrofit Plate
SBBSPWL	SBBSPRL	Surface Mount Back Box for Speakers and Speaker Strobes
TR-2W	TR-2	Wall Mount Trim Ring

### Notes:

All -P models have a plain housing (no "FIRE" marking on the cover)



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AVDS867-03 • 6/6/2019



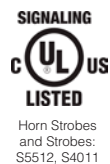
# L-Series and L-Series with LED Indoor Selectable Horns, Strobes and Horn Strobes

*System Sensor L-Series and L-Series with LED audible visible notification products are rich with features guaranteed to cut installation times and maximize profits with lower current draw and modern aesthetics.*

## Features

- LED technology provides lower current draw
- Digital Voltage Meter (DVM) diagnostic test points for Horn Strobes and Strobes
- Common aesthetics across the L-Series platform
- Standard and compact sizes
- Tamper-resistant construction
- Field-selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, and 185
- Field-selectable candela settings on ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Rotary switches for candela, tone and volume selections
- Mounting plate provides plug-in design for easier installation and shorting springs to check wiring continuity
- Electrically compatible with legacy SpectrAlert, SpectrAlert Advance and L-series devices
- Synchronization through use of UL approved power supplies that support System Sensor Sync protocol or System Sensor MDL3 Sync Module
- Horns, Strobes and Horn Strobes listed for wall or ceiling use

## Agency Listings



## The System Sensor L-Series and L-Series with LED

**platform** offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draw and modern aesthetics. LED lighting technology offers significantly lower current draw compared to older Xenon bulbs across a full candela range. This improves design flexibility for notification appliance circuits (NACs) while also reducing power supply requirements allowing for simpler and lower cost installations.

Flexible design options meet virtually any application requirement: wall or ceiling mount, standard or compact sizes, red or white color choices, bezel kits for alternate markings and languages, and LED color lenses for distinctive visual signaling. In addition, installers can easily adapt devices using field selectable candela, tone and volume settings using rotary switches.

The L-Series and L-Series with LED line is developed to simplify installation. All devices feature plug-in designs with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time-consuming ground faults. The universal mounting plate includes an onboard shorting spring, so installers can test wiring continuity before the device is installed.

In addition, the System Sensor L-Series with LED notification appliances offer a new diagnostic test point feature that allows you to measure device voltage with a digital voltage meter (DVM) without removing the appliance from the wall or ceiling. The DVM test points are discreetly located on the face of the notification appliance which enable faster troubleshooting and end of line (EOL) voltage checks while greatly reducing the risk of misplacing or damaging appliances during troubleshooting.

# L-Series and L-Series with LED Specifications

Physical/Electrical Specifications	
Standard Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Strobe Flash Rate	1 flash per second
Nominal Voltage, LED Strobes and Horn Strobes	Regulated 24 VDC
Nominal Voltage, Horns	Regulated 12 VDC or regulated 24 DC/FWR
Operating Voltage Range, LED Strobes and Horn Strobes	16 to 33 V (24 V nominal)
Operating Voltage Range, Horns	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG

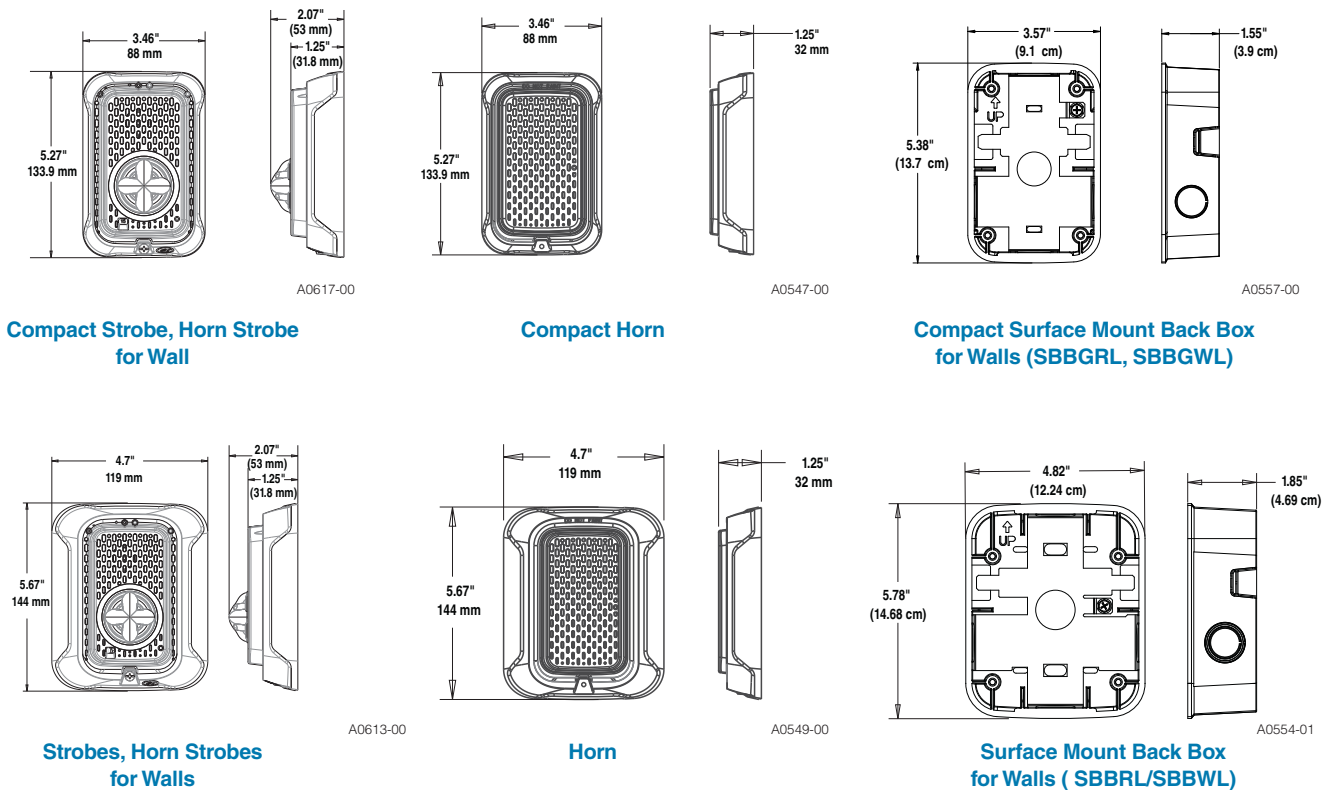
## UL/ULC Current Draw Data, Horn Tones, and Sound Output Data

UL/ULC Maximum Strobe Current Draw (mA)			
Candela Range	Candela Rating	16–33 Volts	
		Wall	Ceiling
	15	18	18
	30	22	22
	75	70	70
	95	75	75
	110	85	—
	115	—	90
	135	105	—
	150	—	110
	177	—	115
	185	120	—

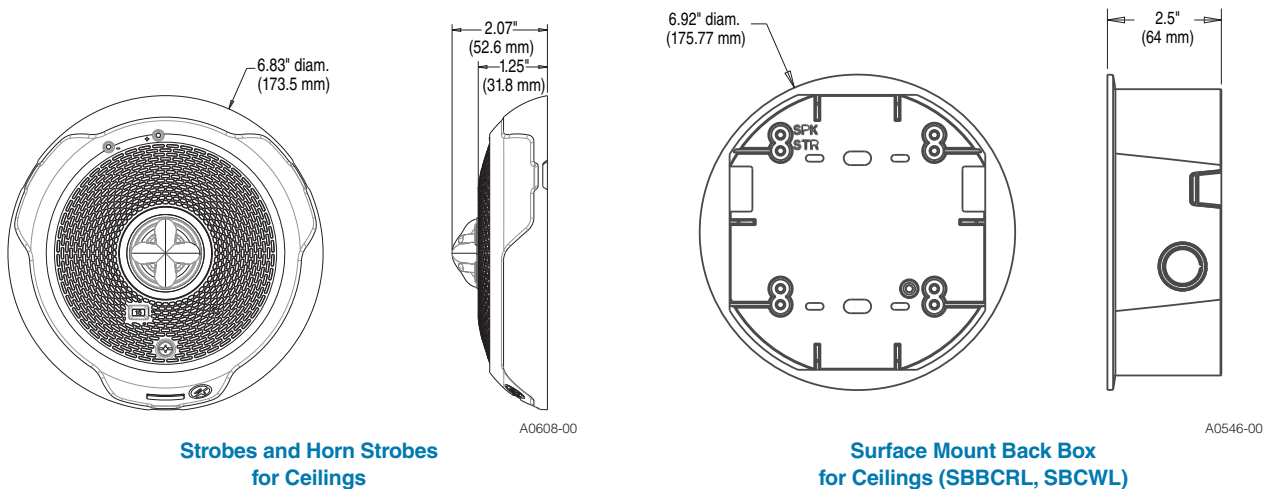
UL/ULC Maximum Horn Current Draw (mA RMS)				
Sound Pattern	dB	8–17.5 Volts	16–33 Volts	
		DC	DC	FWR
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

UL/ULC Maximum Horn Strobe Current Draw (mA) and Sound Output (dBA)													
Switch Pos.	Sound Pattern	Volume Setting	Current Draw (mA RMS), Horn Strobe, Candela Range (15-185 cd)										Sound Output (dBA)
			16-33 Volts										16-33V
			15cd	30cd	75cd	95cd	110cd	115cd	135cd	150cd	177cd	185cd	DC
			WALL	CEILING	WALL	CEILING	WALL	CEILING	WALL	CEILING	CEILING	WALL	
1	Temporal 3	High	35	38	87	92	94	120	189	189	190	190	87
2	Temporal 3	Low	35	38	87	92	94	120	135	135	145	145	79
3	Non-Temporal	High	50	52	87	92	94	120	127	127	135	135	87
4	Non-Temporal	Low	35	38	87	92	94	120	125	125	130	130	79
5	3.1KHz Temporal 3	High	35	38	87	89	91	115	155	155	165	165	86
6	3.1KHz Temporal 3	Low	35	38	87	89	91	115	128	130	135	135	80
7	3.1KHz Non-Temporal	High	40	42	87	89	91	115	125	125	135	135	86
8	3.1KHz Non-Temporal	Low	35	38	87	89	91	115	120	120	130	130	80

# L-Series with LED Dimensions: Wall-Mounted Equipment



# L-Series with LED Dimensions: Ceiling-Mounted Equipment





## L-Series with LED: Ordering Information

Model	Description
<b>L-Series with LED Horn Strobes</b>	
P2RLED	2-Wire, Horn Strobe, Wall, Red
P2RLED-B	2-Wire, Horn Strobe, Wall, Red, Bilingual
P2WLED	2-Wire, Horn Strobe, Wall, White
P2WLED-B	2-Wire, Horn Strobe, Wall, White, Bilingual
P2GRLED	2-Wire, Compact Horn Strobe, Wall, Red
P2GRLED-B	2-Wire, Compact Horn Strobe, Wall, Red, Bilingual
P2GWLED	2-Wire, Compact Horn Strobe, Wall, White
P2GWLED-B	2-Wire, Compact Horn Strobe, Wall, White, Bilingual
P2RLED-P	2-Wire, Horn Strobe, Wall, Red, Plain
P2WLED-P	2-Wire, Horn Strobe, Wall, White, Plain
P2RLED-SP	2-Wire, Horn Strobe, Wall, Red, FUEGO
P2WLED-SP	2-Wire, Horn Strobe, Wall, White, FUEGO
PC2RLED	2-Wire, Horn Strobe, Ceiling, Red
PC2RLED-B	2-Wire, Horn Strobe, Ceiling, Red, Bilingual
PC2WLED	2-Wire, Horn Strobe, Ceiling, White
PC2WLED-B	2-Wire, Horn Strobe, Ceiling, White, Bilingual
<b>L-Series with LED Strobes</b>	
SRLED	Strobe, Wall, Red
SRLED-B	Strobe, Wall, Red, Bilingual
SWLED	Strobe, Wall, White
SWLED-B	Strobe, Wall, White, Bilingual
SGRLED	Strobe, Compact, Wall, Red
SGRLED-B	Strobe, Compact, Wall, Red, Bilingual
SGWLED	Strobe, Compact, Wall, White
SGWLED-B	Strobe, Compact, Wall, White, Bilingual
SRLED-P	Strobe, Wall, Red, Plain
SWLED-P	Strobe, Wall, White, Plain
SRLED-SP	Strobe, Wall, Red, FUEGO
SWLED-CLR-ALERT	Strobe, Wall, White, ALERT
SWLED-ALERT	Strobe, Wall, White, ALERT, Amber Lens
SCRLED	Strobe, Ceiling, Red
SCRLED-B	Strobe, Ceiling, Red, Bilingual
SCRLED-P	Strobe, Ceiling, White, Plain
<b>SCWLED</b>	<b>Strobe, Ceiling, White</b>
SCWLED-B	Strobe, Ceiling, White, Bilingual
SCWLED-P	Strobe, Ceiling, White, Plain
SCWLED-CLR-ALERT	Strobe, Ceiling, White, ALERT
<b>L-Series Horns</b>	
HRL*	Horn, Red
HRLA*	Horn, Red, Plain, ULC
HWL*	Horn, White
HWLA*	Horn, White, Plain, ULC
HGRL*	Compact Horn, Red
HGRLA*	Compact Horn, Red, Plain, ULC
HGWL*	Compact Horn, White
HGWLA*	Compact Horn, White, Plain, ULC

Model	Description
<b>LED Lenses</b>	
LENS-A3	Lens LED Amber Wall/Ceiling
LENS-B3	Lens LED Blue Wall/Ceiling
LENS-G3	Lens LED Green Wall/Ceiling
LENS-R3	Lens LED Red Wall/Ceiling
<b>Accessories</b>	
TR-2	Universal Wall Trim Ring Red
TR-2W	Universal Wall Trim Ring White
SBBRL	Wall Surface Mount Back Box, Red
SBBWL	Wall Surface Mount Back Box, White
SBBGRL	Compact Wall Surface Mount Back Box, Red
SBBGWL	Compact Wall Surface Mount Back Box, White
TRC-2	Universal Ceiling Trim Ring, Red
TRC-2W	Universal Ceiling Trim Ring, White
SBBCRL	Ceiling Surface Mount Back Box, Red
SBBCWL	Ceiling Surface Mount Back Box, White
<b>Bezels†</b>	
BZR	Wall Red Bezel Kit
BZW	Wall White Bezel Kit
BZGR	Compact Wall Red Bezel Kit
BZGW	Compact Wall White Bezel Kit
BZRC	Horn Strobe Ceiling Red Bezel Kit
BZWC	Horn Strobe Ceiling White Bezel Kit

### Notes for L-Series With LED Horn Strobes and Strobes:

All -P models have a plain housing (no "FIRE" marking on cover).  
 All -SP models have "FUEGO" marking on cover.  
 All -ALERT models have "ALERT" marking on cover.  
 All -B models have "FIRE/FEU" marking on cover for use in Canadian applications.  
 Amber lenses are not for use in Canadian applications

### Notes for L-Series Horns:

\*Horn-only models are listed for wall or ceiling use.

### Notes for Bezels:

†Each bezel pack ships in a package of 5.  
 Add one of the following extensions for print/language options: -F (FIRE), -AL (ALERT), -EV (EVAC), -AG (AGENT), -P (Plain), -FR (FEU), -PG (FOGO), -SP (FUEGO), -SPE (FUEGO/FIRE).

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 AVDS916-01 • 10/03/2023



# Outdoor, Selectable-Output Speaker Strobes and Dual-Voltage Evacuation Speakers for Wall Applications

*SpectrAlert® Advance outdoor, selectable-output speaker strobes and dual-voltage evacuation speakers meet virtually any outdoor application requirement.*

## Features

- Weatherproof per NEMA 4X, IP56
- Rated from -40°F to 151°F
- Plug-in design reduces ground faults
- Universal mounting plate with onboard shorting spring that tests wiring continuity before devices are installed
- Field-selectable candela settings: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Rotary switch for speaker voltage (25 and 70.7 Vrms) and power settings (1/4, 1/2, 1 and 2 watts)
- Compatible with System Sensor synchronization protocol and legacy SpectrAlert products
- Tamper-resistant construction
- Listed for ceiling or wall mounting

## Agency Listings



**SPECTRAlert®**  
**ADVANCE**  
from System Sensor

**SpectrAlert Advance** offers the broadest line of outdoor speakers and speaker strobes in the industry. From metal and plastic outdoor back boxes, to white and red plastic housings, to wall and ceiling mounting options, SpectrAlert Advance can meet virtually any application requirement.

Wall-mount outdoor speakers and speaker strobes can be used indoors or outdoors in wet or dry applications, and can provide reliable operation from -40°F to 151°F. These speakers provide a broad frequency response range, low harmonic distortion and maintain a high sound pressure level at all tap settings to provide accurate and intelligible broadcast of evacuation messages.

Like the entire SpectrAlert Advance line, wall-mount outdoor speakers and speaker strobes include a variety of features that increase application flexibility and simplify installation. First, field-selectable settings, including candela, speaker voltage and power settings, and automatic selection of 12- or 24-volt operation enable installers to easily adapt devices to meet requirements.

Next, these devices use a universal mounting plate with an onboard shorting spring that ensures wiring continuity before devices are installed, so installers can verify proper wiring without mounting the devices and exposing them to potential construction damage. Once the plates are mounted, all SpectrAlert Advance devices utilize a plug-in design with a single captured screw to speed installation and virtually eliminate costly ground faults.

Outdoor devices ship with weatherproof plastic back boxes (metal back boxes are available separately) that accommodate in-and-out wiring for daisy chaining devices. Plastic back boxes feature removable side flanges and improved resistance to saltwater corrosion. Knock-outs located on the back eliminate the need to drill holes for screw-in mounting. Plastic and metal weatherproof back boxes come with 3/4-inch top and bottom conduit entries and 3/4-inch knock-outs at the back. A screw-in NPT plug with an O-ring gasket for a watertight seal is included with each back box.

# SpectrAlert® Advance Outdoor Speaker and Speaker Strobe Specifications

## Architectural/Engineering Specifications

### General

SpectrAlert Advance outdoor speakers and speaker strobes shall mount to a weatherproof back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit and amplifier wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance speaker strobes, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Outdoor SpectrAlert Advance products shall operate between –40°F and 151°F from a regulated DC, or full-wave rectified, unfiltered power supply.

### Speaker

Speaker shall be a System Sensor SpectrAlert Advance Model \_\_\_\_\_ dual-voltage transformer speaker capable of operating at 25.0 or 70.7 nominal Vrms. Speaker shall be listed to Underwriters Laboratories Standard S4048 for outdoor fire protective signaling systems. Speaker shall have a frequency range of 400 to 4,000 Hz and shall have an operating temperature from –40°F to 150.8°F. Speaker shall have power taps and wattage settings that are selected by rotary switches. The speaker must be installed with its weatherproof back box in order to remain outdoor approved per UL listing S4048. The speaker shall be suitable for use in air handling spaces and wet environments.

### Speaker Strobe Combination

The speaker strobe shall be a System Sensor Model \_\_\_\_\_ listed to UL 1638 and UL 1480 and be approved for fire protective signaling systems. Speaker shall be capable of operating at 25.0 or 70.7 nominal Vrms and shall have a frequency range of 400 to 4,000 Hz. Speaker shall have power taps that are selected by rotary switch. The strobe shall consist of a xenon flash tube with associated lens/reflector system and operate on either 12 or 24 volts. The strobe shall also feature selectable candela output, providing options for 15 or 15/75 candela when operating on 12 volts and 15, 15/75, 30, 75, 110, 115, 135, 150, 177 or 185 candela when operating on 24 volts. The strobe shall comply with the Americans with Disabilities Act requirement for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The speaker strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The speaker strobe shall be suitable for use in wet environments.

## Physical Specifications

<b>Operating Temperature</b>	–40°F to 151°F (–40°C to 66°C)
------------------------------	--------------------------------

### Dimensions, Wall-Mount

<b>SPS Speaker Strobe</b>	6.0" L x 5.0" W x 4.7" D (including lens and speaker)
---------------------------	---

<b>SP Speaker</b>	6.0" L x 5.0" W x 2.9" D
-------------------	--------------------------

<b>Dimensions, Wall-Mount Weatherproof Back Box</b>	6.5" L x 5.5" H x 2.9" D
---	--------------------------

## Electrical/Operating Specifications

<b>Nominal Voltage (speakers)</b>	25 V or 70.7 V (nominal)
-----------------------------------	--------------------------

<b>Maximum Supervisory Voltage (speakers)</b>	50 VDC
---	--------

<b>Strobe Flash Rate</b>	1 flash per second
--------------------------	--------------------

<b>Nominal Voltage (strobes)</b>	Regulated 12 VDC/FWR or regulated 24 DC/FWR
----------------------------------	---

<b>Operating Voltage Range (includes fire alarm panels with built in sync)</b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
--	---

<b>Operating Voltage with MDL3 Sync Module</b>	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
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<b>Frequency Range</b>	400 to 4,000 Hz
------------------------	-----------------

<b>Power</b>	¼, ½, 1, 2 watts
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# UL Current Draw Data

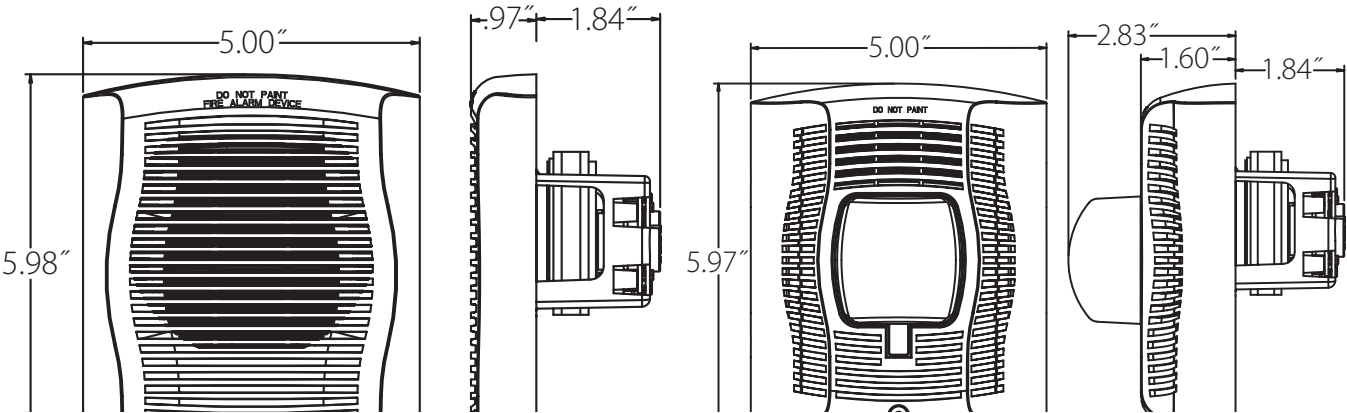
UL Max. Strobe Current Draw (mA RMS)					
	Candela	8 to 17.5 Volts		16 to 33 Volts	
		DC	FWR	DC	FWR
Standard Candela Range	15	123	128	66	71
	15/75	142	148	77	81
	30	NA	NA	94	96
	75	NA	NA	158	153
	95	NA	NA	181	176
	110	NA	NA	202	195
	115	NA	NA	210	205
High Candela Range	135	NA	NA	228	207
	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258
Sound Output					
UL Reverberant (dBA @ 10 ft.)		2W	1W	½ W	¼ W
Outdoor Speaker		90	87	84	81
Outdoor Speaker/Strobe		89	86	83	80

# Candela Derating

For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.

Strobe Output (cd)	
Listed Candela	Candela rating at -40°F
15	Do not use below 32°F
15/75	
30	
75	44
95	70
110	110
115	115
135	135
150	150
177	177
185	185

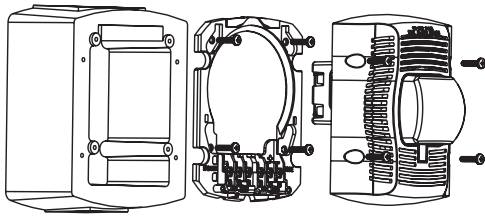
# Dimensions



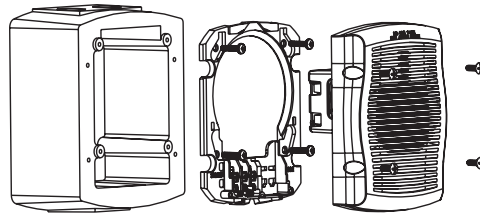
Wall-Mount Outdoor Speaker

Wall-Mount Outdoor Speaker Strobe

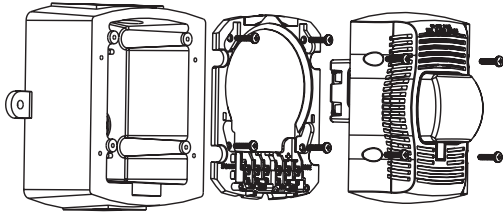
## Surface Mounting



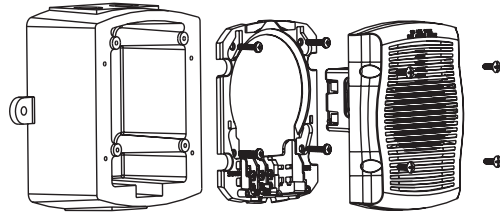
Wall-Mount Speaker Strobe with Plastic Weatherproof Back Box



Wall-Mount Speaker with Plastic Weatherproof Back Box



Wall-Mount Speaker Strobe with Metal Weatherproof Back Box



Wall-Mount Speaker with Metal Weatherproof Back Box

## Ordering Information for SpectrAlert® Advance Outdoor Speakers and Speaker Strobes

Wall Mount		
White	Red	Description
SPWK	SPRK	Outdoor Speaker (includes plastic weatherproof back box)
SPWK-R	SPRK-R	Outdoor Speaker (does not include plastic weatherproof back box)
SPSWK	SPSRK	Outdoor Speaker Strobe, Standard cd (includes plastic weatherproof back box)
SPSWK-P	SPSRK-P	Plain Outdoor Speaker Strobe, Standard cd (includes plastic weatherproof back box)
SPSWK-R	SPSRK-R	Outdoor Speaker Strobe, Standard cd (does not include weatherproof back box)
SPSWK-CLR-ALERT	—	Outdoor Speaker Strobe, Standard cd, Clear Lens, ALERT Printed (includes plastic weatherproof back box)
—	SPSRHK	Outdoor Speaker Strobe, High cd (135, 150, 177, 185) (includes plastic weatherproof back box)
Accessories		
White	Red	Description
MWBBW	MWBB	Wall, Metal Weatherproof Back Box

### Notes:

All -P models have a plain housing (no "FIRE" marking on cover)

"Standard cd" refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd" refers to strobes that include 135, 150, 177, and 185 candela settings. **When replacing standard outdoor units, both the device and back box must be replaced.**



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