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January 13, 2025

Fire Alarm System

Submittals

For

GSMOB
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FIRE ALARM SYSTEMS
LEVEL IV
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Fire Alarm System

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System Sensor	SRL	Multi-Candela Wall Mount Strobe
System Sensor	SCWL	Multi-Candela Ceiling Mount Strobe
System Sensor	P2RK	Multi-Candela Wall Mount Weatherproof Horn/Strobe
System Sensor	SPSWH	Multi-Candela Wall Mount Speaker/Strobe
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Coleman	98420	14-2 FPLR Wire

CODE REFERENCE – NFPA 2019 / IFC 2021

IFP-2100ECS SERIES

Intelligent Fire Alarm Control Panel with Emergency Communication System

The IFP-2100ECS Series panels and accessories provide features to meet the requirements for Mass Notification Systems as described in UL 2572 2nd Edition and UL 864 10th Edition.

IFP-2100ECSB

The IFP-2100ECS and IFP-2100ECSHV (red) and IFP-2100ECSB and IFP-2100ECSHVB (black) are intelligent addressable Fire Alarm Control Panels combined with an Emergency Communication System (ECS) and are direct replacements for the IFP-1000ECS and IFP-2000ECS FACPs. When the ECS features are enabled, they are integrated with the fire alarm and voice evacuation functions of the control panel.

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

The IFP-2100ECS FACPs have one built-in signaling line circuit (SLC), which can support 159 IDP (Intelligent Device Protocol) or SK detectors and 159 IDP or SK modules, or 127 SD protocol devices. Additional SLC loops can be added for a maximum of 2100 (IDP/SK) or 2032 (SD) points per panel.

The built-in digital alarm communicator/transmitter (DACT) is dual technology, IP and POTS. The POTS transmits system status (alarms, troubles, AC loss, etc.) to a Central Station via the public switched telephone network. The IP communicator's internet monitoring capability sends alarm signals over the Internet saving the monthly cost of two dedicated business telephone lines. Although not required, the secondary telephone line may be retained providing backup communication over the public switched telephone line. Optional cellular reporting is available.

The IFP-2100ECS has eight onboard Flexput® circuits that can be configured as notification outputs or auxiliary power. The IFP-2100ECS also 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 a calibration trouble alert.

The IFP-2100ECS has interconnection capability for up to 32 panels. The system has two modes of operation, multiple panels covering one larger building, or multiple independent buildings.

FEATURES AND BENEFITS

- Single enclosure for both fire and emergency control components
- Ability to select ECS messages as priority over fire
- 15 Recordable one-minute messages that can be mapped to eight ECS buttons
- Capable of producing 520 Hz tones to meet NFPA 72 requirements
- Support for up to 15 LOC consoles and 16 addressable amplifiers
- Expandable SLC loops to 2100 (IDP/SK) or 2032 (SD) point capacity
- Eight Flexput circuits for NAC outputs or auxiliary power
- Selectable strobe synchronization for Amseco®, System Sensor®, Wheelock®, and Gentex® devices
- Built-in DACT with IP and optional cellular reporting
- Built-in USB interface for quick and easy programming
- JumpStart® auto programming reduces installation time
- 999 software zones & 999 output groups for flexible design options
- 23 preset notification cadence patterns (including ANSI® 3.41)
- Allows up to 63 SBUS devices
- Four programmable function keys
- Two programmable relays and one fixed trouble relay
- Compatible with SWIFT® wireless devices
- Convenient field-upgradeable firmware
- Network support for up to 32 sites
- Network card allows copper network connection with a multi-mode or single-mode fiber connection
- Real-time clock/calendar with automatic daylight savings control
- History file with 1,000 event capacity

Honeywell

Farenhyt Series

USER INTERFACE

LED INDICATORS

- General Alarm (Red)
- Supervisory (Yellow)
- System Trouble (Yellow)
- System Silenced (Yellow
- System Power (Green)

KEYPAD

- 12-key numeric pad
- Acknowledge
- Alarm Silence
- System Reset
- Drill
- F1-F4 Programmable Function Keys

PROGRAMMING

The IFP-2100ECS system offers several options to simplify and expedite programming. JumpStart® auto programming minimizes programming required to start a new system. The built-in keypad, or the remote annunciators give on-site access to current system programming. System programming can also be accomplished using the Windows®-based Honeywell Fire Software Suite (HFSS).

ORDERING INFORMATION

IFP-2100ECS: Addressable fire alarm control panel with emergency communication system, red

IFP-2100ECSB: Addressable fire alarm control panel with emergency communication system, black

IFP-2100HV: Addressable fire alarm control panel with emergency communication system, red, 240VAC operation

IFP-2100HVB: Addressable fire alarm control panel with emergency communication system, black, 240VAC operation

COMPATIBLE ECS EQUIPMENT

ECS-50W: 50 Watt amplifier

ECS-50WB: 50 Watt amplifier, black

ECS-125W: 125 Watt amplifier

ECS-125WB: 125 Watt amplifier, black

ECS-DUAL50W: 50 Watt dual amplifier

ECS-DUAL50WB: 50 Watt dual amplifier, Black

ECS-INT50W: 50 /Watt internal amplifier

ECS-50WBU: External backup amplifier

ECS-CE4: Provides 4 additional audio circuits

ECS-RVM: Remote voice module

ECS-SW24: 24 switch expander

ECS-VCM: Network voice control module

ECS-NVCM: Network voice control module

ECS-LOC: Local operator console

ECS-LOC2100: Local operators console, red

ECS-LOC2100B: Local operator console, black

ECS-RPU: Remote paging unit. red

COMPATIBLE SBUS DEVICES

RA-2000: 4x40 LCD remote fire annunciator with four programmable buttons, red

RA-2000GRAY: 4x40 LCD remote fire annunciator with four programmable buttons, gray

RA-1000: 4x20 LCD remote fire annunciator, gray

RA-1000R: 4x20 LCD remote fire annunciator, red

RA-100: 4x20 LCD remote fire annunciator, red

5865-3: LED annunciators- display up to 30 LEDs (15 red/15 yellow)

5865-4: LED annunciators- display up to 30 LEDs (15 red/15 yellow). Key switches for silence and reset, and a system trouble LED

5880: LED I/O module with 40 programmable LED outputs and eight supervised dry contact inputs

5883: Relay interface. Provides 10 Form C relays

5824: Serial/Parallel printer interface module for printer connection

SK COMPATIBLE ADDRESSABLE DEVICES

Note: SK and SD devices cannot be mixed in the same fire alarm system.

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

OSI-RI-SK: Reflected beam smoke detector, SK protocol

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-FIRE-CO-W: Four criteria fire and carbon monoxide detector, white

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

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

SK-HEAT-ROR: Fixed rate of rise detector

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

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

SK-HEAT-ROR-W: Fixed rate of rise detector, 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-R: Photoelectric detector with remote test capability

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

SK-PHOTO-T: Photoelectric smoke detector with fixed heat (135°F)

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

SK-PTIR-W: Multi criteria photoelectric smoke detector with thermal 135°F fixed temperature, 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

IDP COMPATIBLE ADDRESSABLE DEVICES

IDP and SD devices cannot be mixed in the same fire alarm system.

IDP-ACCLIMATE: Multi criteria photoelectric smoke detector with thermal 135°F fixed temperature

IDP-BEAM: Reflected beam smoke detector without test feature

IDP-BEAM-T: Reflected beam smoke detector with test feature

OSI-RI-IDP: Reflected beam smoke detector, IDP protocol

IDP-CONTROL: Supervised control module

IDP-CONTROL-6: Six circuit supervised control module

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

IDP-FIRE-CO: Four criteria fire and carbon monoxide detector

IDP-FIRE-CO-W: Four criteria fire/carbon monoxide detector, white

IDP-FIRE-CO-IV: Four criteria fire/carbon monoxide detector, ivory

IDP-HEAT: Fixed thermal detector (135°F)

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

IDP-HEAT-IV: Fixed thermal detector (135°F), ivory

IDP-HEAT-ROR: Fixed rate of rise detector

IDP-HEAT-HT: Fixed high temp thermal detector (190°F)

IDP-HEAT-HT-W: Fixed high temp thermal detector (190°F), white

IDP-HEAT-HT-IV: Fixed high temp thermal detector (190°F), ivory

IDP-HEAT-ROR-W: Fixed rate of rise detector, white

IDP-HEAT-ROR-IV: Fixed rate of rise detector, ivory

IDP-ISO: Fault isolator module

IDP-MINIMON: Mini monitor module

IDP-MONITOR: Monitor module

IDP-MONITOR-2: Dual input monitor module

IDP-MON-10: 10- input monitor module

IDP-PHOTO: Photoelectric smoke detector

IDP-PHOTO-W: Photoelectric smoke detector, white

IDP-PHOTO-IV: Photoelectric smoke detector, ivory

IDP-PHOTO-R: Photoelectric detector with remote test capability

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

IDP-PHOTO-R-IV: Photoelectric detector with remote test capability, ivory

IDP-PHOTO-T: Photoelectric smoke detector with fixed heat (135°F)

IDP-PHOTO-T-W: Photoelectric smoke detector with fixed heat (135°F), white

IDP-PHOTO-T-IV: Photoelectric smoke detector with fixed thermal heat (135°F), ivory

IDP-PTIR-W: Multi criteria photoelectric smoke detector with thermal 135°F fixed temperature, white

IDP-PTIR-IV: Multi criteria photoelectric smoke detector with thermal 135°F fixed temperature, white

IDP-PULL-SA Addressable single action pull station

IDP-PULL-DA: Addressable dual action pull station

IDP-RELAY: Addressable relay module

IDP-RELAY-6: Addressable Six relay control module

IDP-RELAYMON-2: Addressable Dual relay/monitor module

IDP-ZONE: Addressable zone interface module

IDP-ZONE-6: Six zone interface module

SK/IDP BASES

B210LP: 6" mounting base

B501: 4" Flangeless mounting base

B200S: Intelligent sounder base

B200S-LF: Low-frequency intelligent sounder base

B224RB: Relay base

B224BI: Isolator base

SD COMPATIBLE ADDRESSABLE DEVICES

Note: SK and SD devices cannot be mixed in the same fire alarm system.

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/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

SWIFT WIRELESS DEVICES

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

WIDP-WGI: Wireless gateway

WIDP-PHOTO: Wireless photoelectric smoke detector

WIDP-ACCLIMATE: Wireless ACCLIMATE detector

W-SYNC: Wireless sync module

WIDP-HEAT: Wireless, fixed heat detector (135°F)

WIDP-HEAT-ROR: Wireless rate-of-rise heat detector

WIDP-MONITOR: Wireless monitor module

WIDP-RELAY: Wireless relay module

WIDP-PULL-DA: Wireless pull station

B210: Wireless detector base

WAV-RL, WAV-WL, WAV-CRL, WAV-CWL: Wireless AV bases

W-USB: Wireless USB radio/antenna dongle that plugs into the USB port of a PC running SWIFT Tools

SWIFT Tools: Programming and diagnostic utility for the wireless gateway and devices. Available for download from www.farenhyt.com

SYSTEM EXPANDERS

6815: SLC Expander for IDP or SK devices

5815XL: SLC expander for SD devices

RPS-1000: 6A power supply with 6 Flexput circuits & 2 Form C relays

5496: 6 amp NAC power expander with 4 power-limited output ckts

OPTIONAL COMMUNICATORS

CELL-CAB-SK: Cellular communicator, metal enclosure w/lock & key

CELL-MOD: Cellular communicator, plastic enclosure

MISCELLANEOUS ACCESSORIES

SK-NIC: Network Interface Card. Provides a common communications link for the IFP-300

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

SK-SCK: Seismic compliance kit used to fasten batteries to the fire panel

SOFTWARE SOLUTIONS

HFSS: Honeywell Fire Software Suite provides remote and local panel programming, detector status, event history and additional data. Databases can be uploaded/downloaded via the panel's USB port using a flash drive. Requires a PC running Microsoft® Windows®.

IFP-2100ECS SERIES TECHNICAL SPECIFICATIONS

SYSTEM CAPACITY

Intelligent Signaling Line Circuits: 1 (expandable)

Addressable device capacity: 2100 (IDP/SK) or 2032 (SD)

Programmable software zones: 999

Output circuits: 8 (expandable)

SBUS devices: 63 (any combination)

LOC units: 15

Addressable amplifiers (total watts): 16 (2000)

ELECTRICAL

AC Power: 120 VAC, 60 Hz, 5A or 240 VAC, 50/60 Hz, 2.8A

Standby Current: 230 mA

Alarm Current: 415 mA

Flexput Circuits: Terminal block provides connections for (eight Class B or four Class A) NACs or auxiliary power. Power-limited, supervised circuitry. Maximum current per circuit: 3 A. Cannot exceed 9A total for all circuits. End-of-line resistor: 4.7k ohm, ½ watt for Class B NACs

Communication Loop: Supervised and power-limited, Class A or Class B, 32VDC, 150mA

Two Programmable Relays and One Fixed Trouble Relay: Contact rating: 2.5 A @ 27.4 VDC (resistive), Form C

Battery: Cabinet holds maximum of two 18 AH batteries

Battery Charger Capacity: 17-55 AH

PHYSICAL

Dimensions: 21.6" W x 28.1" H x 5.1" D (54.9cm W x 71.4cm H x 13.0cm D)

Weight: 53 lbs. (24 kg.)

Color: Red or Black

TEMPERATURE AND HUMIDITY RANGES

This system meets NFPA requirements for operation at 0 – 49°C (32– 120°F) and at a relative humidity 93% ± 2% RH (non-condensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15 – 27° C/60 – 80°F.

STANDARDS AND CODES

The IFP-2100 complies with the following standards and codes:

NFPA 72

NFPA 13

NFPA 15

NFPA 16

NFPA 70

UL 864 10th Edition

UL2572 2nd Edition

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

AGENCY LISTINGS AND APPROVALS

UL Listed: S2766

CSFM: 7165-0559:0505

FDNY: COA# 6251

FM: Approved

Seismic: (CA) VMA-45894-05C:

Country of origin: USA

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ECS-LOC

Local Operating Console

The ECS-LOC (red) or ECS-LOCB (black) local operator console is a powerful addition to any emergency voice system for mass notification purposes. The console is a combination supervised remote microphone and annunciator which is compatible with the Honeywell Farenhyt Series Emergency Communication System and meets UL requirements for a local operator console (LOC).

The ECS-LOC provides an interface to the ECS series Emergency Communication Systems. It has a supervised on-board microphone for live communications and its annunciator is capable of performing complete operation of the fire alarm system, including silencing and resetting.

The console's emergency communication system operations includes an on-board supervised microphone, and all call and non-active call buttons that can quickly select all active or all non-active output groups. The system also lets you select an ECS message as a priority over fire.

The ECS-CE4 is a useful addition to an ECS-LOC application. It adds four audio circuits to the ECS-50W, ECS-100W or ECS-125W, mappable to 32 buttons controlling selected output groups. It is very useful for extended coverage and requires no additional space as it mounts inside the amplifier cabinet.

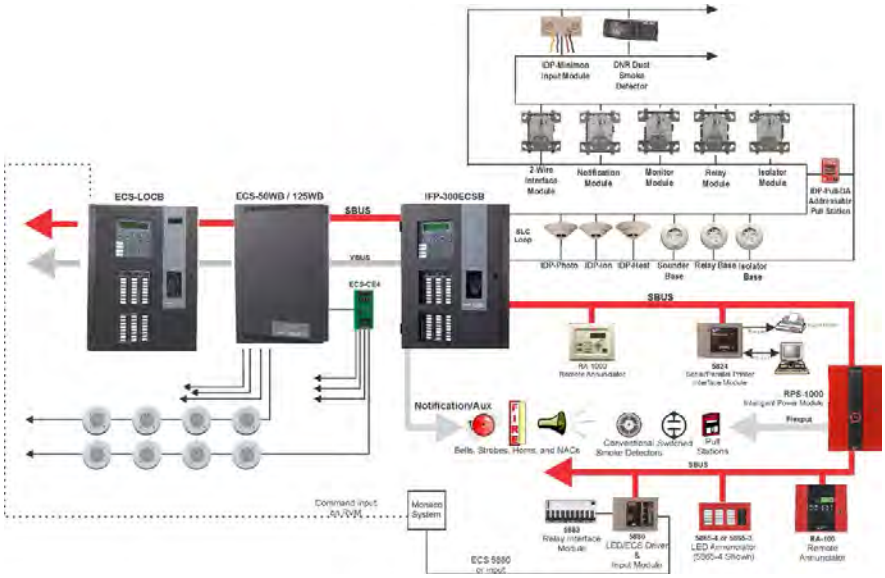
The 5880 LED / IO module can also be used with an ECS-LOC application. The module provides an effective means to customize your remote. annunciation, providing 40 programmable LED outputs and eight supervised dry contact inputs. You can use up to eight 5880 modules on one ECS-LOC control panel for maximum flexibility. Its compact size enables it to be mounted inside the EVS-LOC, or in an accessory cabinet.

ECS-LOCB

FEATURES & BENEFITS

- Provides additional communications and control options that are also available in the ECS primary panel
- Useful for extending system access to additional areas of a building or mass notification network
- Makes access to the communication system easier when immediate and timely communications are essential
- For added fl exibility, it can also accept programmable trigger inputs from external source, such as a Monaco® system, to either the RVM or 5880. Up to eight inputs are available on the 5880 module.
- Up to 32 mappable speaker circuits can be connected on the ECS-LOC using a combination of the ECS-50W, ECS-100W ECS-DUAL50W or ECS-125W amplifiers. This is useful for extended reach during times when urgent emergency communication is required.
- The optional VIP-TR trim ring is useful for creating a visual appealing interface between the panel and mounting wall.

ECS-LOC Technical Specifications



EMERGENCY COMMUNICATION SYSTEM EXAMPLE

PHYSICAL

Overall Dimensions: 20"W x 26.5"H x 5.05"D (50.75 W x 67.3 H x 12.8D cm)
Color: Red or Black

ENVIRONMENTAL

Operating Temperature: 32°F to 120°F (0°C to 49°C)
Humidity: 0 to 93% relative humidity (non condensing)

ELECTRICAL

Standby Current: 105mA
Alarm Current: 175mA

INSTALLATION

The ECS-LOC can be surface or flush mounted.

ORDERING INFORMATION

ECS-LOC: Local Operator Console

ACCESSORIES

ECS-SW24: 24 switch expander
VIP-TR: panel trim ring for flush mounting
5880: LED/IO module
ECS-CE4: 4 speaker circuit expander
RA-2000: Keypad annunciator

AGENCY LISTINGS AND APPROVALS

UL 864 and **UL 2572**
Meets the requirements for NFPA 72 Local Protective Signaling Systems & Emergency Communication Systems

- **CSFM:** 7165-0559:0505
- **FDNY** COA # 6245
- **Seismic** (CA) (pending)
- **FM** approved

COMPATIBILITY

The ECS-LOC is compatible with the following ECS FACPs:

- IFP-2100ECS: (max 15 per system)
- IFP-2100ECSB: (max 15 per system)
- IFP-2000ECS: (max 15 per system)
- IFP-1000ECS: (max 7 per system)
- IFP-300ECS: (max 7 per system)
- IFP-100ECS: (max 7 per system)

For more information

Learn more about Honeywell's Farenhyt Series and other products available by visiting www.farenhyt.com

Honeywell Security & Fire
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For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

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 Technical Support, Please call 800-446-6444.

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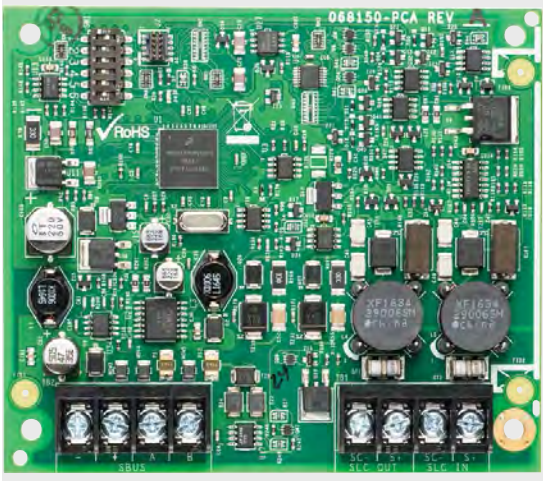
6815

Signaling Line Circuit Expander

The 6815 is a signaling line circuit (SLC) expander for use with the Farenhyt Series IFP-300/ECS or IFP-2100/ECS analog/addressable fire alarm control panel (FACP). Use the 6815 to add more SLC devices of the same protocol to the IFP-2100/ECS or IFP-300/ECS control panel.

Additional 6815;s support 159 IDP or SK devices, and 159 IDP or SK modules for a maximum of 2100 points per IFP-2100/ECS or 300 points per IFP-300/ECS. The number of 6815's used is limited by the number of SBUS devices. 6815 will support IDP, SK or SWIFT devices.

The 6815 communicates with the FACP via an RS 485 system bus. A green LED on the 6815 board blinks to indicate good communication. If an addressable device on a 6815 fails, the loop communicates the failure to the FACP and continues to operate normally



6815

Compatibility

The 6815 is compatible with the following Farenhyt Series FACP's:

- IFP-2100/ECS
- IFP-2100/ECSB
- RFP-2100
- RFP-2100B
- IFP-300/ECS
- FP-300/ECSB

FEATURES & BENEFITS

- Adds support for up to 159 IDP/SK sensors and 159 IDP/SK modules per IFP-300/ECS or IFP-2100/ECS panel
- Communicates with the FACP via RS 485 system bus
- LED indicates good communication
- House up to two 6815s in the IFP-2100/ECS , RFP-2100, IFP-300/ECS, RPS-1000 cabinets, or in the 5815RMK remote mounting kit
- SLC wiring used standard wire. Twisted pair or shield cable are not required
- UL 864 listed, complies with NFPA 72 and 101
- Support for IDP, SK or SWIFT devices

6815 Technical Specifications

SPECIFICATIONS

6815 Physical: 4.2"H x 4.8"" W (10.7 x 12.2 cm)
Shipping Weight: 5.6oz (159 g).

ELECTRICAL

Standby & Alarm Current: 78mA max

ENVIRONMENTAL

Operating Temperature: 32°F to 120°F (0°C to 49°C)
Humidity: 0 to 93% non-condensing

SYSTEM CAPACITY

IFP-2100/ECS FACP supports 63 6815s (but a maximum of 2100 SLC devices per system)
IFP-300/ECS FACP supports 63 5815XLs (but a maximum of 300 SLC devices per system)
6815 Capacity: 159 IDP or SK sensors and 159 IDP or SK modules per loop

ORDERING INFORMATION

6815: Signaling Line Circuit Expander.

ACCESSORIES

RPS-1000: Intelligent Power Module. Cabinet holds two 6815s.
5815RMK: Remote Mounting Kit Cabinet holds two 6815s. Red cabinet
5815RMKB: Remote Mounting Kit Cabinet holds two 6815s. Black cabinet.
SK-NIC-KIT: Remote Mounting Kit Cabinet. holds one 6815. 10-3.8" W x 10-3/16" H x 3" D

AGENCY LISTIINGS AND APPROVALS

NFPA 13, NFPA 15, NFPA 16, NFPA 70, & NFPA 72: Central Station; Remote Signalling; Local Protective Signalling Systems; Auxiliary Protected Premises Unit; & Water Deluge Releasing Service. Suitable for automatic, manual, waterflow, sprinkler supervisory (DACT non-coded) signalling services.
UL listed
CSFM listed
FDNY COA 6245
FM approved

For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

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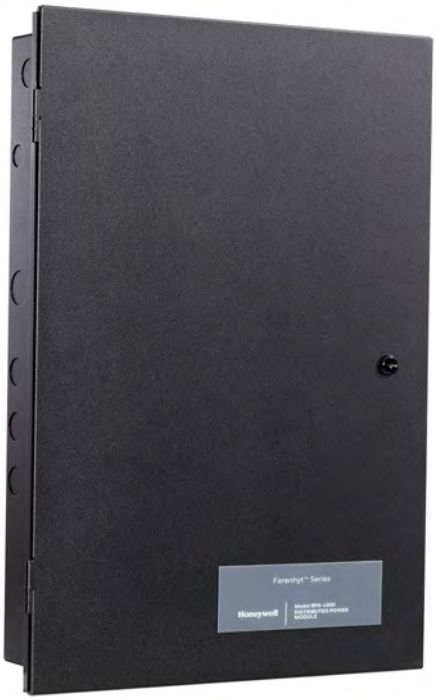
Honeywell

RPS-1000 SERIES

Intelligent Distributed Power Module

The RPS-1000 is an intelligent distributed power module that adds 6.0 amps of power, six Flexput® I/O circuits, and two Form C relay circuits to a compatible Honeywell Farenhyt Series addressable system.



The RPS-1000 is available in a red or a black (RPS-1000B) cabinet for 120VAC operation and in a red cabinet for 240VAC operation (RPS-1000HV).

The RPS-1000 connects to the FACP via the RS-485 system bus allowing up to an additional 6,000 feet of wiring. Each RPS-1000 is optically isolated providing ground loop isolation and transient protection. The RPS-1000 supports its own backup battery and monitors the AC power.

The Flexput circuits can be used as notification appliance circuits, continuous power, resettable power, door holder power, or as conventional initiation circuits that can support both 2- and 4-wire smoke detectors and contact devices (e.g. pull stations).All Flexput circuits and relay outputs are individually mappable from the Farenhyt FACP.

COMPATIBILITY

The RPS-1000 Series is compatible with the following Farenhyt FACPs:

- IFP-2100ECS / IFP-2100ECSB/ IFP-2100ECSHV / IFP-2100ECSHVB (63 max. per panel) IFP-2100 / IFP-2100B / IFP-2100HV / IFP-2100HVB / RFP-2100 / RFP-2100B / RFP-2100HV / RFP-2100HVB (63 max. per panel) IFP-2000, IFP-2000ECS, IFP-2000HV (63 max. per panel)
- IFP-300 / IFP-300B / IFP-300ECS / IFP-300ECSB, (16 max. per panel)IFP-1000 / IFP-1000ECS (8 max. per panel)
- IFP-100 / IFP-100ECS (8 max. per panel)
- IFP-75 (8 max. per panel)

FEATURES AND BENEFITS

- Complies with UL 864 10th Edition and ULS 2572 2nd Edition Standards
- Provides 6.0 amps output power
- Uses Flexput I/O circuits, 3A each, programmable as notification circuits, auxiliary power, circuits, or initiation circuits
- Supports Class A and Class B configuration of the SBUS and Flexput circuits
- Includes Two Form C programmable relays rated at 2.5A @ 24 VDC
- Ground loop isolation and transient protection
- SBUS optical isolation and re-conditions the RS- 485 signal
- Built-in synchronization compatible with appliances from System Sensor®, AMSECO®, Gentex®, and Wheelock®
- Up to 6,000 foot wiring distance from the RPS-1000
- Battery charging capacity is 35AH
- Offers a large cabinet size that can house the following:
  - two 18AH backup batteries
  - RBB accessory cabinet that can house battery sizes larger that 18AH
- Allows space to mount two 6815 or 5815XL SLC expander modules
- Provides transient protection
- SBUS repeater conditions the RS-485 signal RPS-1000
- Six onboard Flexput circuits programmable for the following:
  - Notification appliance circuits (Class B/Class A)
  - Conventional initiation circuits (Class B/ Class A) both 2- and 4-wire
  - Auxiliary power (for door holders, continuous power, or resettable power

Honeywell

Farenhyt Series

RPS-1000 SERIES TECHNICAL SPECIFICATIONS

PHYSICAL

Mounting Dimensions:
14.05"W x 24.75"H x 3.09"D
(36.08 cm W x 62.09 cm H x 9.08 cm D)

Overall Dimensions:
16.01"W x 26.04"H x 4.01"D
(40.6 cm W x 67.0 cm H x 11.8 cm D)

Color: Red or Black

ENVIRONMENTAL

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

Humidity: 10%-93% non-condensing

ELECTRICAL

Primary AC: 120 VRMS, 50 or 60Hz, 2.5A, or 240 VRMS 50 or 60Hz, 1.4A

Total Accessory Load: 6A @ 24VDC

Currents:

Standby: 40mA

Alarm: 160mA

SBUS Standby & Alarm: 10mA

Flexput Circuits:

Notification: 3 amps per circuit (6A system total)

Initiation: 100mA power-limited @ 24VDC

ORDERING INFORMATION

RPS-1000: Intelligent Distributed Power Module, red, 120VAC operation

RPS-1000B: Intelligent Distributed Power Moduleblack, 120VAC operation

RPS-1000HV: Intelligent Distributed Power Module, red, 240VAC operation

Specify 120 VAC or 240 VAC operation when ordering.

ACCESSORIES

RBB: Remote Battery Box Accessory Cabinet. 16" W x 10" H x 6" D
(406 mm W x 254 mm H x 152 mm D)

6815: SLC Expander Module for IDP or SK devices

5815XL: SLC Expander Module for SD devices

SK-SCK: Seismic Compliance Kit

STANDARDS AND CODES

The RPS-1000 complies with the following standards and codes.

- UL 864, 10th Edition: Standard for Control Units for Fire Alarm Systems
- UL 2572, 2nd Edition: Standard for Mass Notification Systems
- NFPA:
  - NFPA 13
  - NFPA 70
  - NFPA 72

AGENCY LISTING AND APPROVALS

- UL Listed: S35111
- FDNY Approved
- FM Approved

Honeywell Fire Solutions
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www.farenhyt.com

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5496

Intelligent Power Module

The 5496 intelligent power module is the most cost-effective power supply available today. It delivers 6 amps of notification appliance circuit power and built-in synchronization for appliances from System Sensor®,Gentex®, AMSECO, and Wheelock®. The 5496's advanced microprocessor design is years ahead of the competition. Its switch mode power supply design is up to 50% more efficient than competitive linear mode power supplies.

The 5496 is a 6 amp notification power expander that provides its own AC power connection, battery charging circuit, and backup battery for use with the Honeywell Farenhyt series fire alarm control panels (FACPs). The 5496 is the cost-effective solution for powering notification appliances required by the Americans with Disabilities Act (ADA). The 5496 has built-in ANSI cadence pattern. The output circuits can be programmed as notification appliance circuits, or as auxiliary power (configurable for constant, resettable, or door holder power).

5496

COMPATIBILITY

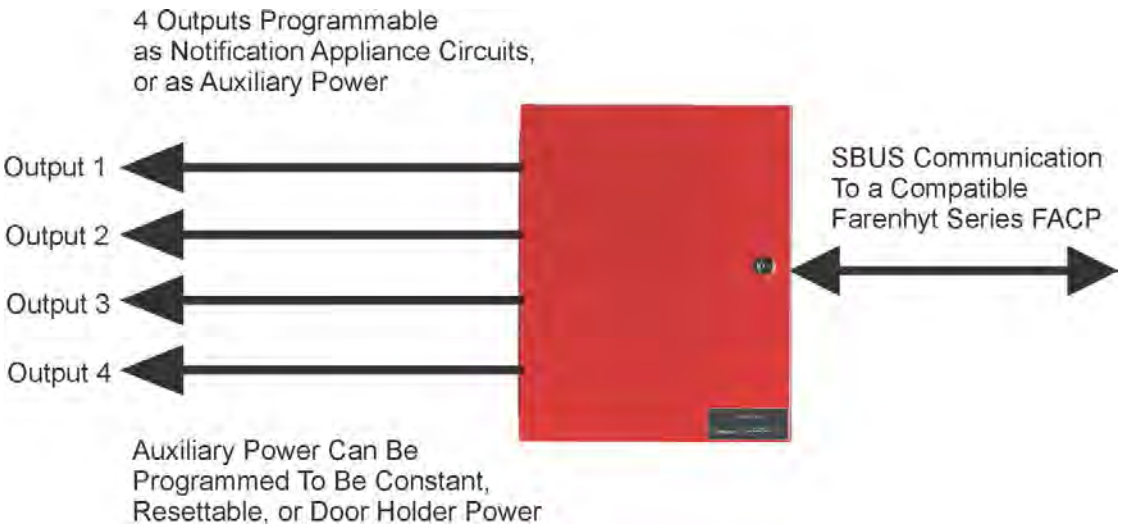
The 5496 is compatible with the following FACPs:

- IFP-2100ECS / IFP-2100ECSB
- IFP-2100 / IFP-2100B / RFP-2100 / RFP-2100B
- IFP-2000 / RPS-2000 / IFP-2000ECS
- IFP-300 / IFP-300B / IFP-300ECS / IFP-300ECSB
- IFP-1000 / IFP-1000ECS
- IFP-100 / IFP-100ECS
- IFP-75
- IFP-50

FEATURES & BENEFITS

- UL Listed for 6 amps of notification power
- Power supply's advanced switch mode design reduces damaging heat and manages power up to 50% more efficiently than other systems
- 24 VDC filtered output voltage
- Built-in synchronization for appliances from Gentex, AMSECO, System Sensor, and Wheelock
- Four power-limited notification outputs; 2 Class A or 4 Class B, or 1 Class A and 2 Class B
- NACs are programmable as notification appliance circuits, or as auxiliary power to be used as constant, resettable, or door holder power
- 3 amps per output circuit
- Ground fault detector
- CSFM approved
- Communicates to the FACP via 4-wire SBUS (wire runs up to 6000 ft)
- AC loss delay option shuts off power to non-essential high current accessories like magnetic door holders
- MEA approved
- Lightweight design adds to ease of installation and reduces shipping costs
- ANSI Cadence pattern output capability built-in
- UL 864 & 1481 listed
- OSHPD (CA) OSP-0065-10 (see accessories)

5496 Technical Specifications



PHYSICAL

Overall Dimensions: 16" H x 12.25" W x 3" D (40.6 x 30.9 x 7.6 cm)

Shipping Weight: 8.7lbs

ENVIRONMENTAL

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

Humidity: 10 to 93% relative humidity (non-condensing)

ELECTRICAL:

AC Input: 120VAC at 2.7A

Output: 24VDC at 6A

Standby & Alarm Current: 10mA

Notification/Aux. Power Circuits: 4

Output Configuration:

2 Class A (Style Z)

4 Class B (Style Y)

1 Class A & 2 Class B

Amps Per Output Circuit: 3.0 (6.0 amps total)

Notification Circuit Output: 20.4 – 27.3VDC @ 3.0A each

End-of-Line Resistance: 4.7k W EOL resistor required on each Class B circuit

Battery Charging Capacity: 7.0 – 35.0AH

ORDERING INFORMATION

5496: Intelligent Power Module

ACCESSORIES

RBB: Remote Battery Box Accessory Cabinet. 16" W x 10" H x 6" D (406 mm W x 254 mm H x 152 mm D)

SK-SCK: Seismic Compliance Kit

AGENCY LISTINGS AND APPROVALS

- CSFM approved
- NFPA 72
- UL listed
- FM approved
- City of NY: 429-90-E Vol XIV

For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

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 Technical Support, Please call 800-446-6444.

For more information

Learn more about Honeywell's Farenhyt Series and other products available by visiting www.farenhyt.com

Honeywell Security & Fire

12 Clintonville Road

Northford, CT 06472

800-328-0103

Doc 350302 | Rev G| 11/17

Honeywell

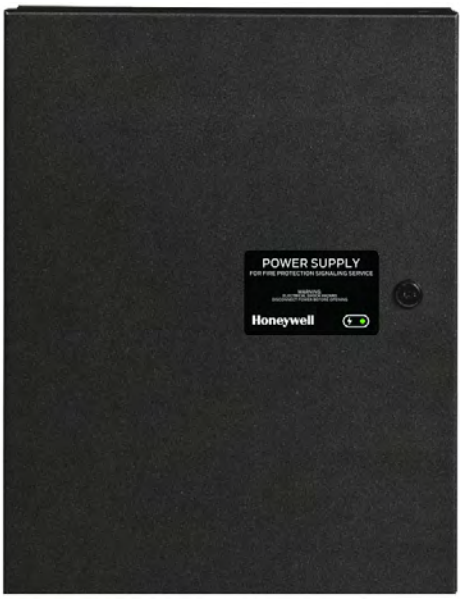
HPF-PS SERIES

6 Amp and 10 Amp, 24 Volt Power Supplies

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

The HPF-PS Series is a remote power supply line from Honeywell and is a direct replacement for the GFPS6/9. The HPF-PS6(B) is a 6 amp and the HPF-PS10(B) is a 10 amp, remote power supplies 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 HPF-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 HPF-PS Series also provides auxiliary power, constant or resettable, suited for detectors, annunciators, door holders, and other fire alarm system peripherals. The HPF-PS Series cabinet can hold two 7 AH or 18 AH batteries and can charge up to 33 AH batteries in a separate cabinet.

HPF-PS6/10



HPF-PS6/10B

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^2) wire
- Works with any UL 864 FACP which utilizes an industry-standard reverse-polarity notification circuit

Honeywell

Gamewell FCI

ORDERING INFORMATION

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

HPF-PS6B: 6.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, black

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

HPF-PS10B: 10.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, black

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

50152254-001: Hardware kit for Canadian applications

17070: Alternate Gamewell-FCI lock set

AOM-2SF: 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.

AOM-2RF: Addressable relay module containing two isolated sets of Form-C contacts, which operate as a DPDT switch

AMM-4F: 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

AMM-2IF: Dual Monitor Module. Same as AMM-4F except it provides two inputs for Class B wiring only

AMM-2RIF: Provides two monitored inputs and two Form-C relays. Functions in Class B wiring only

MMO-6SF: Six-circuit supervised control module

MMO-6RF: 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 HPF-PS Series. Includes bracket and hardware for two 7AH or two 18AH batteries.

HPF-PS SERIES TECHNICAL SPECIFICATIONS

PRIMARY (AC) POWER

HPF-PS6(B): 120 VAC, 50/60 Hz, 5.0A maximum

HPF-PS10(B): 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
- HPF-PS6(B): TB8-TB9 – 1A Regulated, 3A special applications; TB10-TB12 – 0.3A Regulated, 3A special applications
- HPF-PS10(B): TB8-TB11 – 1.5A Regulated, 3A special applications; TB12-TB14 – 0.3A Regulated, 3A special applications
- 6.0 A (HPF-PS6(B)) or 10.0 (HPF-PS10(B)) 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 HPF-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: S24562

CSFM: 7315-1637:0505

FDNY COA:
2022-TMCOAP-002231-AMND

FM Approved

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 Gamewell-FCI
12 Clintonville Road
Northford, CT 06472-1610
203.484.7161
www.gamewell-fci.com

9021-61096 | D | 08-23

ECS-125W SERIES

Intelligent 125 Watt Amplifier

The ECS-125W is an amplifier compatible with the Farenhyt Emergency Communication System. The ECS-125W is used to amplify audio messages for distribution throughout entire facilities.

Since the ECS-125W is designed as a self-contained distributed amplifier, it can be conveniently located near the area of protection to reduce wiring demands. Each ECS-125W is capable of producing 125-watts of audio power. Up to eight ECS-125W amplifiers can be used on the Emergency Communication System. The ECS-125W has its own power supply with battery backup and includes four speaker circuits which can be expanded to eight speaker circuits when used with the optional ECS-CE4. The ECS-125W is fully supervised by the main panel to identify the trouble conditions.

INSTALLATION

The ECS-125W Series can be surface- or flush-mounted.

COMPATIBILITY

The ECS-125W Series is compatible with the following Honeywell Farenhyt Series voice evacuation components:

- IFP-300ECS / IFP-300ECSB
- IFP-2100ECS / IFP-2100ECSB

FEATURES AND BENEFITS

- Complies with UL 864 10th Edition and UL 2572 2nd Edition Standards
- Meets NFPA 72 standards
- Provides SBUS addressable to support up to eight ECS-125W amplifiers per system for a total of 1000 watts
- Each ECS-125W amplifier is supervised and has four onboard audio circuits expandable to eight with the ECS-CE4 expander for a system total of 64 audio circuits
- Uses an easy-to-install wire harness to connect the ECS-CE4 audio circuit expander
- Extends remote installations up to 6,000 feet away from the ECS Series panel
- Includes its own power supply and backup battery
- Selectable for 25V or 70.7V operation
- Available in a red or a black cabinet
- Provides six-wire connection to the ECS System:
  - Two-wires for the voice bus connections
  - Four-wires for the SBUS connections
- Can be surface- or flush-mounted
- Supports 120 VAC or 240 VAC operation

Honeywell

Farenhyt Series

ECS-125W SERIES TECHNICAL SPECIFICATIONS

PHYSICAL

Flush Mount Dimensions:
14.05"W x 24.75"H x 3.04"D
(36.08 W x 62.09 H x 8.07 D cm)

Overall Dimensions:
16.0"W x 26.25"H x 4.01"D
(40.06 W x 66.07 H x 10.05 D cm)

Color: Red or Black

ENVIRONMENTAL

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

Humidity: 10% to 93% relative humidity (non-condensing)

ELECTRICAL

Module	Voltage	Standby Current	*Alarm Current
ECS-125W/B 25V	120V 60 Hz	300mA	2200mA
ECS-125WHV 25V	240V 50Hz	250mA	1250mA

*Fully loaded system

Total Power:

- Circuit 1: 100W max.
- Circuit 2-8: 50W max.

Main ECS Panel SBUS:

Standby Current: 10mA

Alarm Current: 10mA

Battery Charging Capacity: 7 – 35AH

Battery Size: 18AH max. allowed in the cabinet. Use the RBB accessory cabinet for larger batteries up to 35AH per system.

Voice Integration Wiring:

- Six conductor
- Two voice bus
- Four SBUS

ORDERING INFORMATION

ECS-125W: Intelligent 125W Amplifier, red

ECS-125WB: Intelligent 125W Amplifier, black

ECS-125WHV: High Voltage (240V) 125W Amplifier

ACCESSORIES

ECS-CE4: Audio Circuit Expander

RBB: Remote Battery Box accessory cabinet. Use for backup batteries up to 35AH and batteries too large to fit into an ECS-50W cabinet.**SK-SCK:** Seismic Compliance Kit

STANDARDS AND CODES

The ECS-125W Series complies with the following standards and codes.

- UL 864, 10th Edition: Standard for Control Units for Fire Alarm Systems
- UL 864, Local Protective Signaling Systems
- UL 2572, 2nd Edition: Standard for Mass Notification Systems
- UL 1711
- NFPA:
  - NFPA 13
  - NFPA 70
  - NFPA 72

AGENCY LISTINGS AND APPROVALS

- UL Listed: S2766
- CSFM Approved: 7300-0559:0173
- FDNY: Approved

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ECS-CE4

Audio Circuit Expander

Product Installation Document

1 Description

The ECS-CE4 is an Audio Circuit Expander that adds four audio circuits to the ECS-50W or ECS-125W. The ECS-CE4 mounts inside the ECS-50W or ECS-125W cabinet.

NOTE: Installation and wiring of this device must be done in accordance with NFPA 72 and local ordinances.

2 Compatibility

The ECS-CE4 is compatible with the following Honeywell Farenhyt Series FACPs:

- IFP-2100ECS
- IFP-300ECS
- IFP-100ECS
- IFP-1000ECS
- IFP-2000ECS

NOTE: For more information, refer to the *FACP Installation Manual* or *ECS Series Manual* (PN 151455).

3 Specifications

- Standby Current: 20mA
- Alarm Current: 180mA

4 Installation

1. Remove AC power from the ECS-50W or ECS-125W Amplifier and disconnect the backup batteries.
2. Mount the ECS-CE4 in the ECS-50W or ECS-125W cabinet using the four supplied screws.

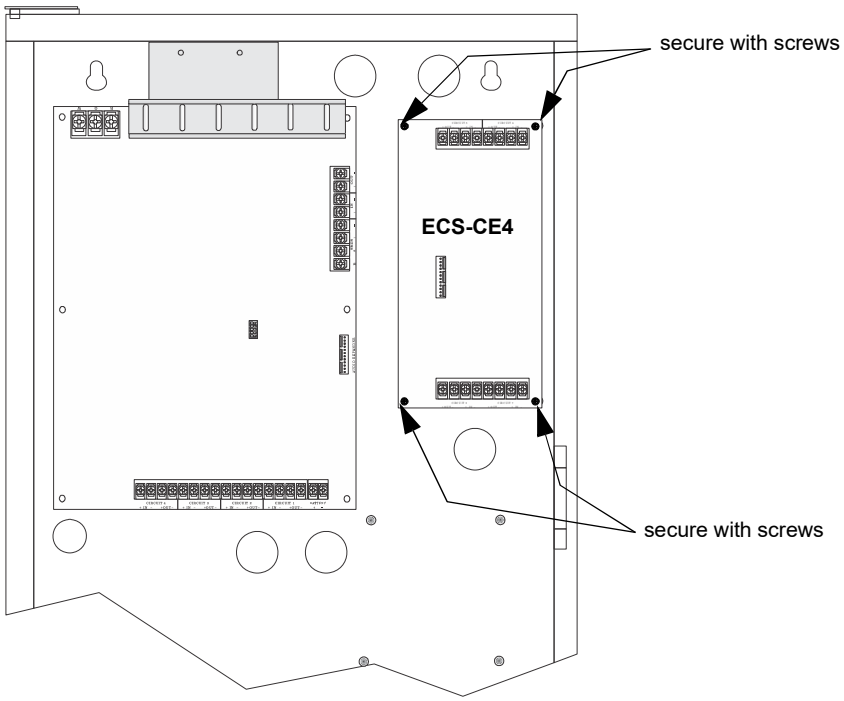

Figure 1 Mounting the ECS-CE4

5 Wiring

1. Connect the supplied audio expander cable harness (PN 130426) from the connector labeled *Audio Expander* on the ECS-50W or ECS-125W to the connector on the ECS-CE4.

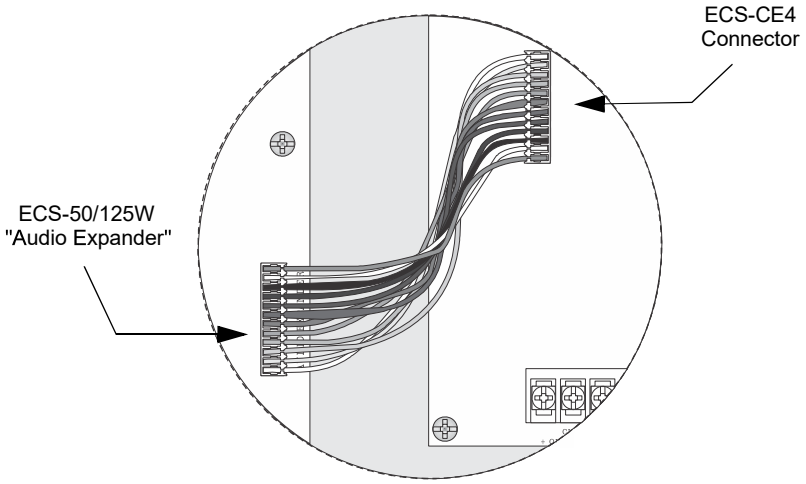

Figure 1.1 Audio Expander Wire Harness Connections

2. Connect the wire speakers for Class B supervision or for Class A as shown in Figure 2.

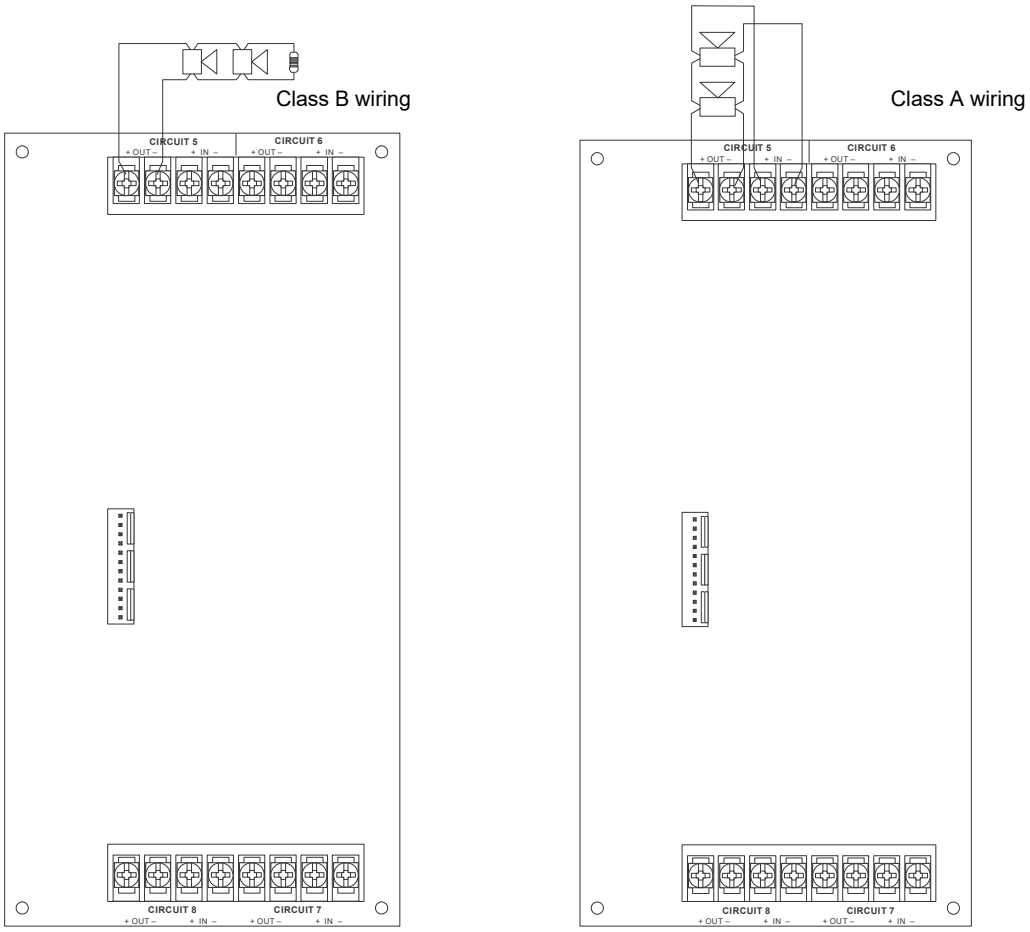

Figure 2 Speaker Wiring Configurations

3. Restore AC power and reconnect backup batteries.

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Farenhyt IDP-PHOTO-W Series

Intelligent Plug-in Photoelectric Smoke Detectors

Honeywell's IDP-PHOTO-W Series intelligent plug-in smoke detectors are designed for both performance and aesthetics. A new modern, sleek, contemporary design and enhanced optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards.

The IDP-PHOTO-W Series detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. Point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for selective maintenance when chamber contamination reaches an unacceptable level.

Dual electronic thermistors add 135°F (57°C) fixed temperature thermal sensing on the IDP-PHOTO-T. The IDP-PHOTO-R is a remote test capable detector for use with DNR Series duct detector housings

IDP-PHOTO-W in B300-6 base

FEATURES & BENEFITS

- New modern profile for improved aesthetics
- Stable communication technique with noise immunity
- Low standby current
- Two-wire SLC connection
- Optional remote, single- gang LED accessory
- Dual LED design provides 360° viewing angle
- Remote test feature from the panel
- Built-in functional test switch activated by external magnet
- Built-in tamper-resistant feature
- Sealed against back pressure
- Expanded color options
- SEMS screws for wiring of the separate base
- Optional relay, isolator, and sounder bases
- Plugs into separate base for ease of installation and maintenance

DETECTOR SPACING AND APPLICATIONS

Honeywell recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceiling, space detectors 30 feet (9m). For specific information regarding detector spacing, placement, and special applications refer to NFPA 72. System Smoke Detector Application Guide, document A05-1003, is available at systemsensor.com

INSTALLATION

The IDP-PHOTO-W Series plug-in detectors use a separate base to simplify installation, service, and maintenance. Installation instructions are shipped with each detector.

Mount base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep.

NOTE:

• Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

• When using relay or sounder bases, consult the installation sheet for device limitations between isolator modules and isolator bases.

ORDERING INFORMATION

NOTE: Detectors must be mounted to one of the Intelligent Bases listed below

IDP-PHOTO-W: White, low-profile intelligent photoelectric sensor.

IDP-PHOTO-IV: Ivory, low-profile intelligent photoelectric sensor.

IDP-PHOTO-T-W: White, same as the IDP-PHOTO-W, but includes a built-in 135°F (57°C) fixed-temperature thermal device.

IDP-PHOTO-T-IV: Same as IDP-PHOTO-T but in Ivory.

IDP-PHOTO-R-W: White, low-profile intelligent photoelectric sensor, remote test capable. For use with DNR/DNRW..

IDP-PHOTO-R-IV: Ivory, low-profile intelligent photoelectric sensor, remote test capable. For use with DNR/DNRW.

INTELLIGENT BASES

B300-6: White, standard flanged low-profile mounting base.

B300-6-BP: Bulk pack of B300-6, package contains 10.

B300-6-IV: Ivory, standard flanged low-profile mounting base.

B501-WHITE: White, standard European flangeless mounting base. UL listed.

B501-BL: Black, standard European flangeless mounting base. UL listed.

B501-IV: Ivory, standard European flangeless mounting base. UL listed.

B200S-WH: White, Intelligent, programmable sounder base.

B200S-IV: Ivory, Intelligent, programmable sounder base.

B200SR-WH: White, Intelligent sounder base for retrofit applications.

B200SR-IV: Ivory, Intelligent sounder base for retrofit applications.

B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base.

B200S-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base.

B200SR-LF: White, Low Frequency Intelligent sounder base for retrofit applications.

B200SR-LF-IV: Ivory, Low Frequency Intelligent sounder base for retrofit applications.

B224RB-WH: White, plug-in System Sensor relay base.

B224RB-IV: Ivory, plug-in System Sensor relay base.

B224BI-WH: White, plug-in System Sensor isolator detector base.

B224BI-IV: Ivory, plug-in System Sensor isolator detector base.

ACCESSORIES

TR300: White, replacement flange for B210LP and B300-6 bases.

TR300-IV: Ivory, replacement flange for B210LP and B300-6 bases.

RA100Z: Remote LED annunciator. 3 – 32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501 and B300(A)-6 bases only.

M02-04-00: Test magnet.

M02-09-00: Test magnet with telescoping handle.

CK300: White, detector color kit. Pack of 10.

CK300-IV: Ivory, detector color kit. Pack of 10.

CK300-BL: Black, detector color kit. Pack of 10.

Farenhyt IDP-PHOTO-W Series Technical Specifications

PHYSICAL

Height: 2.0" (51mm) installed in B300-6 base

Diameter: 6.2" (156mm) installed in B300-6 base 4.1" (104 mm) installed in B501 base

Weight: 3.4 oz (95 g)

ENVIRONMENTAL

Operating Temperature range:

Photo: 32°F to 122°F (0°C to 50°C)

Photo with Thermal: 32°F to 100°F (0°C to 38°C)

Thermal Ratings: Fixed Temperature Set point: 135°F (57°C)

Sensitivity: UL Applications: 0.5% to 4.0% per foot obscuration.

ELECTRICAL RATINGS

Voltage Range: 15 to 32VDC peak

Operating Current @ 24VDC**:** 200µA (one communication every 5 seconds with green LED blink on communication)

Maximum Current: 4.5mA @ 24VDC (one communication every 5 seconds with amber LED solid on).

COMPATIBILITY

The IDP-PHOTO-W series detectors are compatible with the following Farenhyt Series FACPs:

- IFP-2100 / IFP-2100ECS / RFP-2100
- IFP-2000 / IFP-2000ECS / RPS-2000
- IFP-1000 / IFP-1000ECS
- IFP-300 / IFP-300ECS
- IFP-100 / IFP-100ECS
- IFP-75
- IFP-50

AGENCY LISTINGS AND APPROVALS

For exact certification listings for each model, please reference the respective agency Web site.

UL listed: S6173

FM approved

CSFM: 7272-0559:0512

For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

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 Technical Support, Please call 800-446-6444.

For more information

Learn more about Honeywell's Farenhyt Series and other products available by visiting www.farenhyt.com

Honeywell Farenhyt
12 Clintonville Road
Northford, CT 06472
800-328-0103

Doc 351629 | Rev A| 04/18

Honeywell

Honeywell
THE POWER OF CONNECTED | Farenhyt™ Series

Farenhyt IDP-HEAT-W Series

Intelligent Thermal (Heat) Detector

Honeywell IDP-HEAT-W Series intelligent thermal detectors are designed for both performance and aesthetics. A new modern, sleek, contemporary design and advanced thermal technologies make the IDP-HEAT-W Series ideal for both system operation and building design.

The point ID address, set using rotary decimal switches, provide specific detector locations. The series includes a 135°F/57°C fixed temperature, rate-of-rise and a 190°F/88°C fixed high-temperature detectors. These thermal detectors provide effective, intelligent property protection in a variety of applications.

IDP-HEAT-W In B300-6 base

FEATURES & BENEFITS

- Sleek and stylish contemporary design
- Advanced thermal technology for fast response
- Fixed temperature model (SK-HEAT-W) factory preset to 135°F (57°C)
- Rate-of-rise model (IDP-HEAT-W-ROR), 15°F (8.3°C) per minute
- High temperature model (IDP-HEAT-W-HT) factory preset to 190°F (88°C)
- Addressable by device
- Two-wire SLC connection
- Visible LEDs “blink” every time the unit is addressed
- Built-in tamper-resistant feature
- 360°-field viewing angle of the visual alarm indicators (two bi-color LEDs). LEDs blink green in Normal condition and turn on steady red in Alarm.
- Integral communications and built-in device-type identification
- Remote test feature from the panel
- Built-in functional test switch activated by external magnet
- Walk test with address display (an address of 121 will blink the detector LED 12-(pause)-1)
- Low standby current
- Designed for directsurface or electrical box mounting
- Sealed against back pressure
- Plugs into separate base for ease of installation and maintenance
- SEMS screws for wiring of the separate base
- Optional remote, single- gang LED accessory

APPLICATIONS

Use thermal detectors for protection of property. For further information, refer to manual I56-6541, Applications Manual for System Smoke Detectors, which provides detailed information on detector spacing, placement, zoning, wiring, and special applications.

INSTALLATION

The IDP-HEAT-W Series plug-in detectors use a separate base to simplify installation, service, and maintenance. Installation instructions are shipped with each detector.

Mount base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep.

NOTE:

• Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

• When using relay or sounder bases, consult the installation sheet for device limitations between isolator modules and isolator bases.

ORDERING INFORMATION

Note: Detectors must be mounted to one of the Intelligent Bases listed below.

IDP-HEAT-W: White, low-profile intelligent 135°F fixed thermal sensor. Must be mounted to one of the bases listed below.

IDP-HEAT-IV: Ivory, low-profile intelligent 135°F fixed thermal sensor. Must be mounted to one of the bases listed below.

IDP-HEAT-ROR-W: White, low-profile intelligent rateof- rise thermal sensor. Must be mounted to one of the bases listed below.

IDP-HEAT-ROR-IV: Same as IDP-HEAT-ROR-W, but in Ivory.

IDP-HEAT-HT-W: White, low-profile intelligent 190°F fixed thermal sensor. Must be mounted to one of the bases listed below

IDP-HEAT-HT-IV: Ivory, low-profile intelligent 190°F thermal sensor. Must be mounted to one of the bases listed below.

INTELLIGENT BASES

B300-6: White, standard flanged low-profile mounting base.

B300-6-BP: Bulk pack of B300-6, package contains 10.

B300-6-IV: Ivory, standard flanged low-profile mounting base.

B501-WHITE: White, standard European flangeless mounting base. UL listed.

B501-BL: Black, standard European flangeless mounting base. UL listed.

B501-IV: Ivory, standard European flangeless mounting base. UL listed.

B200S-WH: White, Intelligent, programmable sounder base.

B200S-IV: Ivory, Intelligent, programmable sounder base.

B200SR-WH: White, Intelligent sounder base for retrofit applications.

B200SR-IV: Ivory, Intelligent sounder base for retrofit applications.

B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base.

B200S-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base.

B200SR-LF-WH: White, Low Frequency Intelligent sounder base for retrofit applications.

B200SR-LF-IV: Ivory, Low Frequency Intelligent sounder base for retrofit applications.

B224RB-WH: White, plug-in System Sensor relay base.

B224RB-IV: Ivory, plug-in System Sensor relay base.

B224BI-WH: White, plug-in System Sensor isolator detector base.

B224BI-IV: Ivory, plug-in System Sensor isolator detector base.

ACCESSORIES

TR300: White, replacement flange for B210LP and B300-6 bases.

TR300-IV: Ivory, replacement flange for B210LP and B300-6 bases.

RA100Z: Remote LED annunciator. 3 – 32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501 and B300(A)-6 bases only.

M02-04-00: Test magnet.

M02-09-00: Test magnet with telescoping handle.

CK300: White, detector color kit. Pack of 10.

CK300-IV: Ivory, detector color kit. Pack of 10.

CK300-BL: Black, detector color kit. Pack of 10.

Farenhyt IDP-HEAT-W Series Technical Specifications

PHYSICAL

Height: 2.0" (51mm) installed in B300-6 base

Diameter: 6.2" (156mm) installed in B300-6 base 4.1" (104 mm) installed in B501 base

Weight: 3.4 oz (95 g)

ENVIRONMENTAL

Operating Temperature range:

Thermal 135° F fixed: -4°F to 100°F (-20°C to 38°C)

Thermal 135° F rate-of-rise: -4°F to 100°F (-20°C to 38°C)

Thermal 190° F rate-of-rise: -4°F to 135°F (-20°C to 57°C))

Humidity: 10% to 93% non-condensing

Rate-of-Rise Detection: Responds to greater than 15°F/minute or 135°F (8.3°C/minute or 57°C

ELECTRICAL RATINGS

Voltage Range: 15 to 32VDC

Standby Current (@ 24 VDC): 200UA (one communication every 5 seconds with green LED enabled)

Max Alarm Current (max.): 2mA @ 24VDC (one communication every 5 seconds with red LED enabled)

Max Current (max.): 4.5mA @ 24VDC (one communication every 5 seconds with amber LED enabled)

COMPATIBILITY

The IDP-HEAT-W series detectors are compatible with the following Farenhyt Series FACPs:

- IFP-2100 / IFP-2100ECS / RFP-2100
- IFP-2000 / IFP-2000ECS / RPS-2000
- IFP-1000 / IFP-1000ECS
- IFP-300 / IFP-300ECS
- IFP-100 / IFP-100ECS
- IFP-75
- IFP-50

AGENCY LISTINGS AND APPROVALS

For exact certification listings for each model, please reference the respective agency Web site.

UL listed: S2101

FM approved

CSFM: 7270-0559:0511

For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

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For Technical Support, Please call 800-446-6444.

For more information

Learn more about Honeywell's Farenhyt Series and other products available by visiting www.farenhyt.com

Honeywell Farenhyt
12 Clintonville Road
Northford, CT 06472
800-328-0103

Doc 351630 | Rev A| 04/18

Honeywell

B300-6 and B300-6-IV
6" Plug-in Detector Bases

SYSTEM SENSOR®
3825 Ohio Avenue, St. Charles, Illinois 60174
1-800-SENSOR2, FAX: 630-377-6495
www.systemsensor.com

SPECIFICATIONS

Base Diameter:	6.1 inches (155 mm)
Base Height:	0.76 inches (19 mm)
Operating Temperature:	Refer to applicable sensor Operating Temperature Range using the Base/Sensor Cross Reference Chart at systemsensor.com.
Electrical Ratings:	
Operating Voltage:	15 to 32 VDC
Standby Current:	170 µA
Listings: UL268	

BEFORE INSTALLING

Please read the *System Smoke Detectors Application Guide*, which provides detailed information on detector spacing, placement, zoning, wiring, and special applications. Copies of this application guide are available from System Sensor. NFPA 72 guidelines should be observed.

NOTICE: This manual should be left with the owner/user of this equipment.

IMPORTANT: The detector used with this base must be tested and maintained regularly following NFPA 72 requirements. The detector should be cleaned at least once a year.

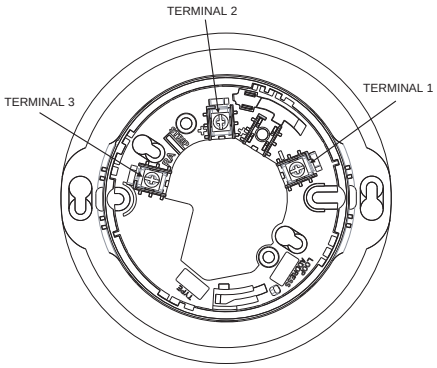
GENERAL DESCRIPTION

The B300-6 and B300-6-IV are plug-in detector bases intended for use in an intelligent system, with screw terminals provided for power (+ and –), and remote annunciator connections. Communication takes place over the power lines (+ and –).

BASE TERMINALS

NO.	FUNCTION
1	Power (–), Remote Annunciator (–)
2	Power (+)
3	Remote Annunciator (+)

FIGURE 1. TERMINAL LAYOUT



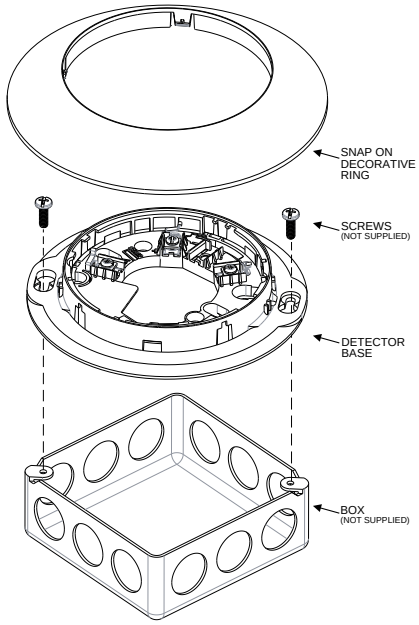
C2252-00

MOUNTING

This detector base mounts directly to 4-inch square (with and without plaster rings), 4-inch octagon, 3 1/2-inch octagon, and single gang junction boxes. To mount, remove the decorative ring by turning it in either direction to unhook the snaps, then separate the ring from the base. Install the base on the box using the screws supplied with the junction box and the appropriate mounting slots in the base.

Place the decorative trim ring on the base and rotate it in either direction until it snaps into place. (See Figure 2.)

FIGURE 2. MOUNTING DETECTOR TO BOX



C2253-00

INSTALLATION AND WIRING GUIDELINES (SEE FIGURE 3)

All wiring must be installed in compliance with all applicable local codes and any special requirements of the authority having jurisdiction. Proper wire gauges should be used. The conductors used to connect smoke detectors to control panels and accessory devices should be color-coded to reduce the likelihood of wiring errors. Improper connections can prevent a system from responding properly in the event of a fire.

For signal wiring (the wiring between interconnected detectors), it is recommended that the wire be no smaller than 18 AWG (0.823 mm²). Wire sizes up to 12 AWG (3.31 mm²) may be used with the base.

Make electrical connections by stripping about 3/8 inch (10 mm) of insulation from the end of the wire (use strip gauge molded in base). Then slide the wire under the clamping plate and tighten the clamping plate screw. Do not loop the wire under the clamping plate. (See Figure 4.)

Check the zone wiring of all bases in the system before installing the detectors. This includes checking the wiring for continuity, correct polarity, ground fault testing and performing a dielectric test.

The base includes an area for recording the zone, address, and type of detector being installed. This information is useful for setting the detector head address and for verification of the detector type required for that location.

Once all detector bases have been wired and mounted, and the loop wiring has been checked, the detector heads may be installed in the bases.

TAMPER-RESIST FEATURE

NOTE: Do not use the tamper-resist feature if a removal tool will be used.

The detector base includes a tamper-resist feature that prevents removal of the detector without using a small screwdriver or similar tool.

To activate this feature, use needle-nose pliers to break the tab on the detector base as shown in Figure 5A. Then, install the detector.

To remove the detector from the base once the tamper-resist feature has been activated, remove the decorative ring by rotating it in either direction and pulling it away from the base. Then, insert a small screwdriver into the notch, as indicated in Figure 5B, and press the plastic lever toward the mounting surface before rotating the detector counterclockwise for removal.

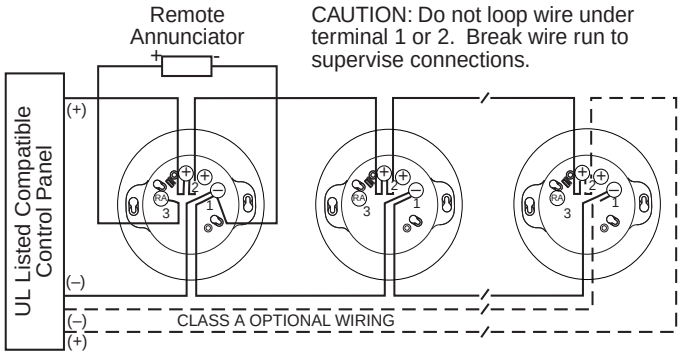
The tamper-resist feature can be defeated by breaking and removing the plastic lever from the base. However, this prevents the feature from being used again.

REMOTE ANNUNCIATOR (RA100Z)

Connect the remote annunciator between terminals 1 and 3 using the spade lug terminal included. The spade lug terminal is connected to the base terminal as shown in Figure 6.

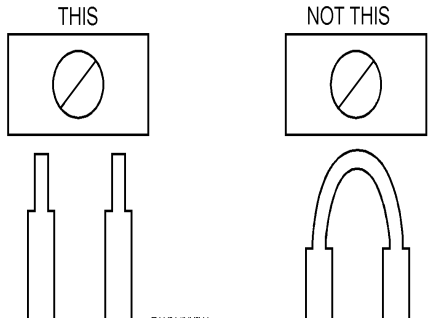
It is not acceptable to have three stripped wires under the same wiring terminal unless they are separated by a washer or equivalent means. The spade lug supplied with the model RA100Z is considered an equivalent means. See Figure 3 for proper installation.

FIGURE 3. TYPICAL WIRING DIAGRAM FOR 2-WIRE LOOP



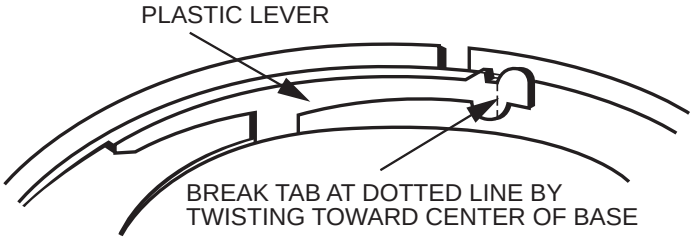
C0129-10

FIGURE 4. TERMINAL WIRE INSTALLATION



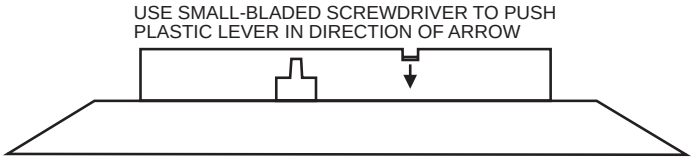
C0473-00

FIGURE 5A. ACTIVATE TAMPER-RESIST FEATURE



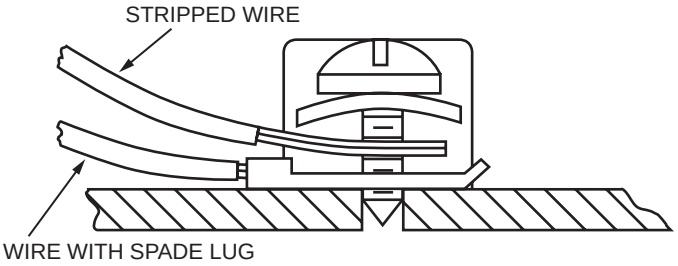
C0130-00

FIGURE 5B. DETECTOR REMOVAL



C0130-00

FIGURE 6. CONNECTION TO REMOTE ANNUNCIATOR TERMINAL



C0116-00

Please refer to insert for the Limitations of Fire Alarm Systems

THREE-YEAR LIMITED WARRANTY

System Sensor warrants its enclosed smoke detector base to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this smoke detector base. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the smoke detector base which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: Honeywell, 12220 Rojas Drive, Suite 700, El Paso TX 79936 USA. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Farenhyt

SILENT KNIGHT
by Honeywell

Intelligent Devices

B224RB

The B224RB is a 6” mounting base with a built-in form C relay contact. The B224RB lets you control a wide variety of normally open and normally closed applications. Because the relay is addressable, the relay device can be located at any point in the signaling line circuit. IDP-series detectors intended for use with Silent Knight IFP-series fire alarm control panel (FACP) plug into the B224RB.

Features

- One form C contact relay
- Support for Class A and Class B wiring
- Fully supervised
- Plug-in mounting provides ease of installation
- Tamper-proof feature prevents removal of the detector without the use of a tool
- Range of mounting options to meet any application
- B501 allows for aesthetically pleasing installation with Recessed Mounting Kit (RMK400)
- UL Listed

Installation

The B224RB can be mounted on a variety of junction boxes as shown in the table below.

Junction Box Selection Guide*

U.S. Junction Boxes			
Single Gang	**3.5” Oct**	**4” Oct†**	**4” Sq**
No	Yes	Yes	Yes
Metric Boxes Junction			
50 mm	**60 mm**	**70 mm**	**75 mm**
No	No	Yes	Yes

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

† With 3.0 mud ring.

Agency Listings

Compatibility

The B224RB is compatible with the following IDP-series detectors:

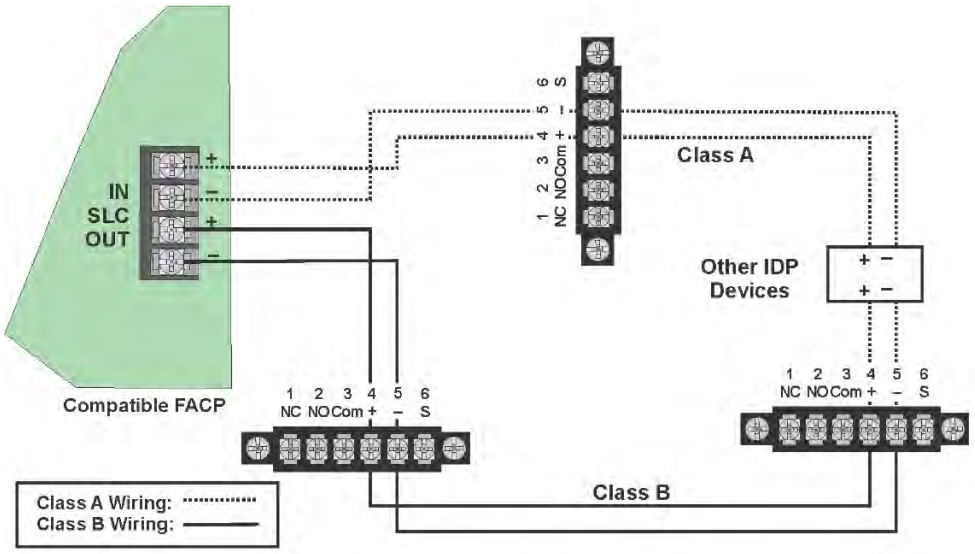
- IDP-Photo Photoelectric Smoke Detector
- IDP-Photo-T Photoelectric Smoke Detector with Thermal
- IDP-Acclimate Multicriteria Photoelectric Smoke Detector
- IDP-Ion Ionization Smoke Detector
- IDP-Heat Fixed Temperature Thermal Detector
- IDP-Heat-ROR Rate-of-Rise Detector with Thermal
- IDP-Heat-HT Fixed High Temperature Thermal Detector

The B224RB is compatible with the following FACPs:

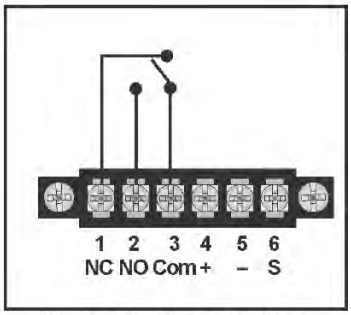
- IFP-2000 / RPS-2000 Intelligent Fire Panel
- IFP-1000 / ECS Intelligent Fire Panel
- IFP-100 / ECS Intelligent Fire Panel
- IFP-50 Intelligent Fire Panel

B224RB Relay Base (Detector Not Included)

P/N 350299 Rev E



Wiring B224RB Relay Bases to the FACP



Wiring Auxilary Devices to the B224RB

Specifications

Physical

Height: 1.2” (3.1 cm)

Diameter: 6.1” (15.5 cm)

Electrical

Wire Gauge: 18–14

Operating Voltage: 15 – 32 VDC

Standby Current: 500 µA max @ 24 VDC

Environmental

Operating Temperature: 32ºF – 120ºF (0ºC – 49ºC)

Humidity: 10% – 93% non-condensing

Relay Characteristics

Coil: 2 coil latching

Contact Type: 1 form C

Resistive: 2A @ 30 VDC

Inductive: 300 mA @ 100 VDC(with 0.35 PF or greater)
300 mA @ 120 VAC (with 0.35 PF or greater)
1A @ 30 VDC (with 0.6 PF or greater)

Accessories

RMK400	Recessed Mounting Kit. Provides low profile for use with B501.
XR2B	Detector Removal Tool. A removal and replacement tool for IDP plug-in detectors. Includes the T55-127-000.
M02-04-01	Detector Test Magnet.
M02-09-00	Test Magnet with Telescoping Handle.
XP-4	Extension Pole for XR2B. Extends from 5 – 15 ft.
T55-127-000	Detector Removal Head
BCK-200B	Black Detector Kit. For IDP-series detectors.

Ordering Information

B224RB	6” Relay Base

SILENT KNIGHT
by Honeywell

Farenhyt

SILENT KNIGHT by Honeywell

Addressable Single Action and Dual Action Pull Stations

IDP-Pull-SA & IDP-Pull-DA

The IDP-Pull-SA is a single action pull station requiring only one motion to activate the station. The IDP-Pull-DA is a dual action pull station requiring two motions to active the station. Both pull stations are designed to work with Silent Knight IFP-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 active
- 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

Installation

The IDP-Pull-SA and IDP-Pull-DA can be surface mounted to an SB-I/O surface back box or semi-flush mounted on a standard single-gang with a minimum depth of 2.13”(5.40 cm) or double-gang or 4” (10.61 cm) square electrical box. You can also use the optional (System Sensor® PN BG-TR) trim ring if the station is being semi-flush mounted.

Compatibility

The IDP-Pull-SA and IDP-Pull-DA are compatible with the following FACPs:

- IFP-2000 / RPS-2000 Intelligent Fire Panel
- IFP-2000ECS Emergency Communication System with Fire Panel
- IFP-1000 / ECS Intelligent Fire Panel

Agency Listings

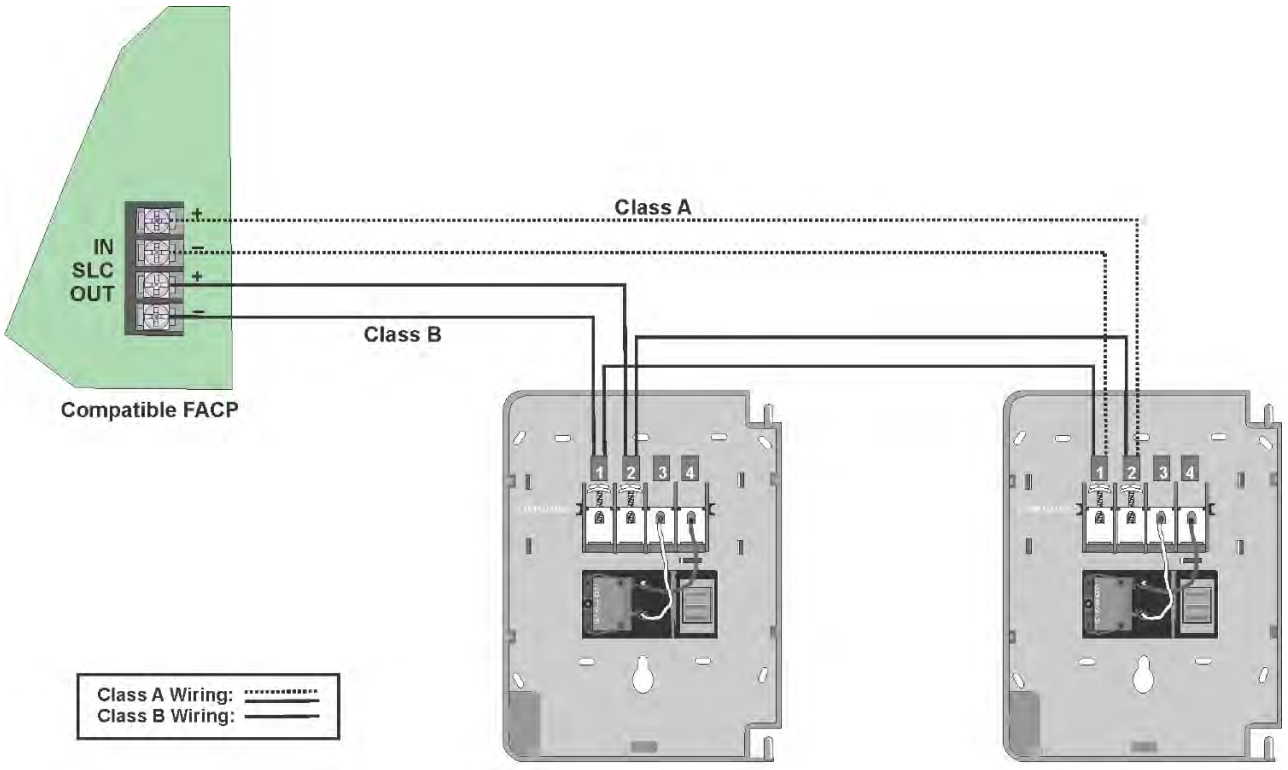
MEA
67-02-E Vol. IX
For IDP-Pull-DA

IDP-Pull-SA

IDP-Pull-DA

- IFP-100 / ECS Intelligent Fire Panel
- IFP-50 Intelligent Fire Panel

P/N 350286 Rev G



Wiring IDP-Pull-SA & IDP-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

SLC Standby and Alarm Current: 350 µA

Wire Gauge: Up to 12 AWG (3.1 mm^2)

Environmental

Operating Temperature 32º – 120ºF (0ºC – 49ºC)

Humidity: 10% – 93% non-condensing

Ordering Information

IDP-Pull-SA	Single Action Pull Station
IDP-Pull-DA	Dual Action Pull Station

Accessories

BG-TR	Optional trim ring.
SB-I/O	Surface backbox, indoor/outdoor.

* Unless otherwise noted, specifications apply to IDP-Pull-SA and IDP-Pull-DA.

SILENT KNIGHT by Honeywell

Farenhyt

SILENT KNIGHT by Honeywell

Intelligent Device

Addressable Monitor Module

IDP-Monitor

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

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

Features

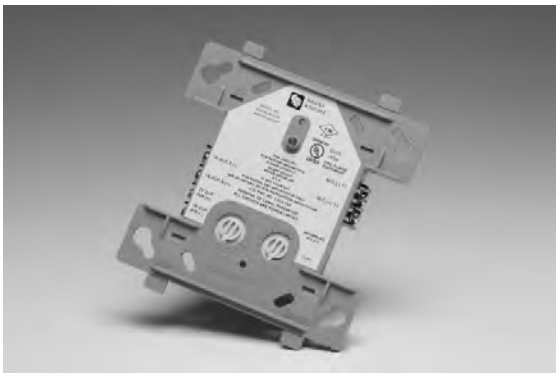
- Single contact monitor
- Support for Class A and Class B wiring
- Fully supervised
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Attractive ivory cover plate
- Rotary address switches for fast installation
- SEMS screws for easy wiring
- UL Listed

Installation

The IDP-Monitor 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.

Agency Listings

MEA 386-0-E-Vol 2



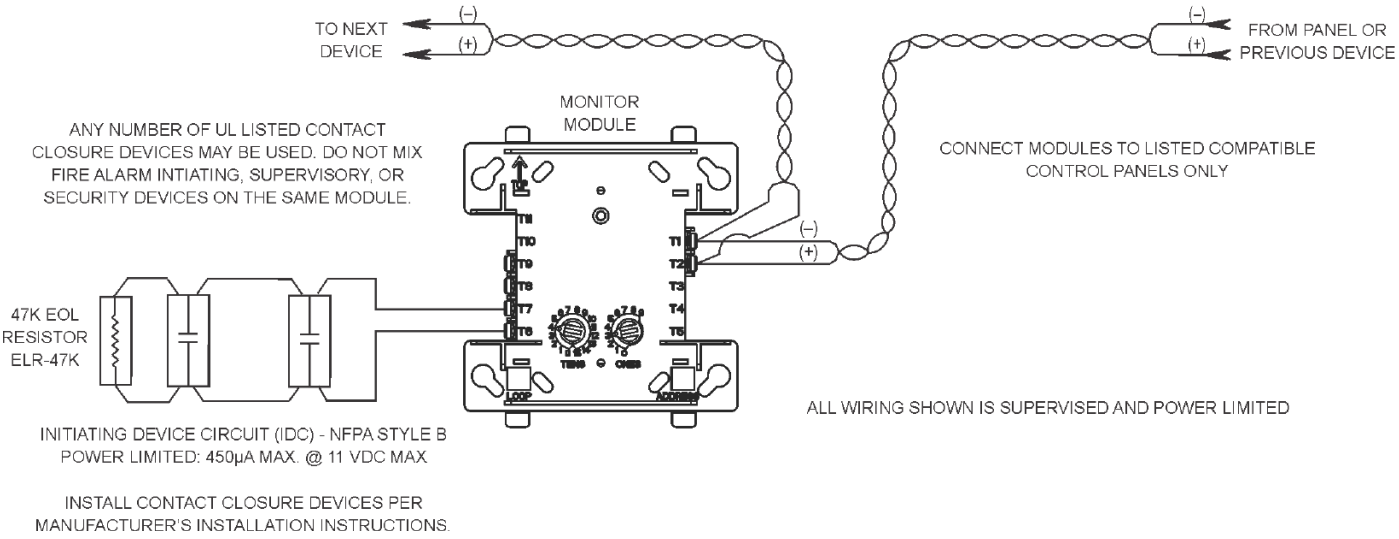
IDP-Monitor

Compatibility

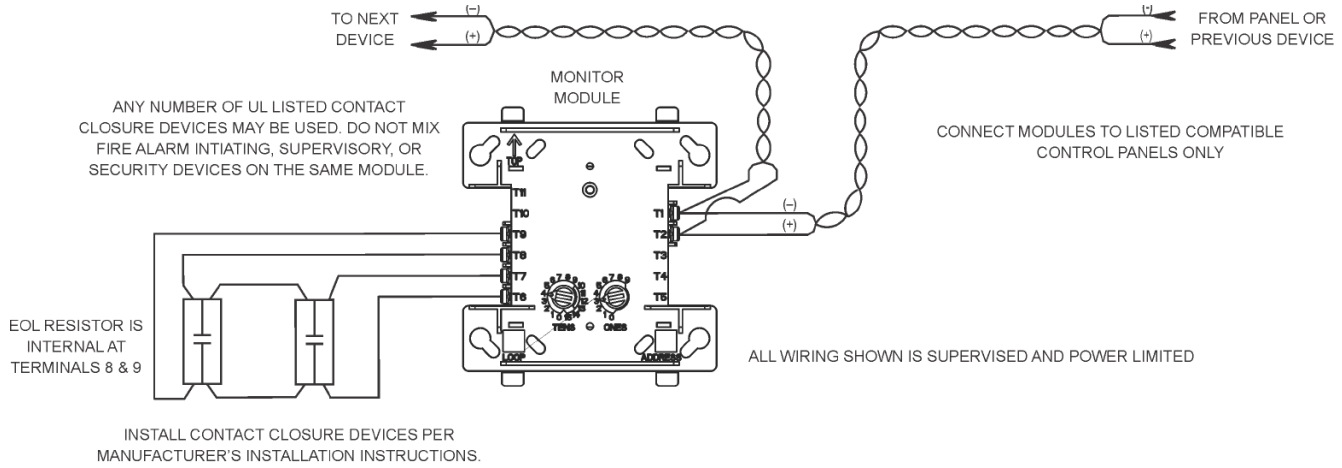
The IDP-Monitor is compatible with the following FACPs:

- IFP-2000 / RPS-2000 Intelligent Fire Panel
- IFP-2000ECS Emergency Communication System with Fire Panel
- IFP-1000 / ECS Intelligent Fire Panel
- IFP-100 / ECS Intelligent Fire Panel
- IFP-50 Intelligent Fire Panel

P/N 350288 Rev J



Typical Wiring for IDP-Monitor Module, NFPA Style B



Typical Wiring for IDP-Monitor Module, NFPA Style D

Specifications

Physical

Height: 4.5” (11.4 cm)

Width: 4” (10.2 cm)

Depth: 1.25” (3 cm)

Shipping Weight: 6.3 oz (196 g)

Electrical

Operating Voltage: 15 – 32 VDC

SLC Standby and Alarm Current Draw: 350 µA

End-of-Line Resistance: 47K Ω

Max. IDC wiring resistance: 1,500 Ω

Max. IDC Voltage: 11 Volts

Max. IDC Current: 450 µA

SLC Loop Resistance: 40 Ω max.

Environmental

Operating Temperature: 32ºF – 120ºF (0ºC – 49ºC)

Humidity: 10% – 93% non-condensing

Ordering Information

IDP-Monitor Monitoring Module

Accessories

SMB500 4” Square Surface Mount Electrical Box

Farenhyt

SILENT KNIGHT
by Honeywell

Addressable Relay Module

IDP-Relay

The IDP-Relay is an addressable relay module for use with Silent Knight IFP-series fire alarm control panels (FACPs). The
IDP-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 IDP-Relay contacts can be used for virtually any normally open or normally closed application. Each IDP-Relay is programmed with a unique signaling line circuit (SLC) loop address. When an event occurs that controls the IDP-Relay, the relay is triggered by the FACP.

Features

- Two sets of Form C contacts
- 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
- Rotary address switches for fast installation
- SEMS screws for easy wiring
- UL Listed

Relay Contact Ratings

Current Rating	Max Voltage	Load Description	Application
3 A	30 VDC	Resistive	Noncoded
2 A	30 VDC	Resistive	Coded
0.7 A	70.7 VDC	PF = 0.35	Noncoded
0.9 A	125 VAC	Resistive	Noncoded
0.46 A	30 VDC	L/R = 20 ms	Noncoded
0.5 A	125 VAC	PF = 0.75	Noncoded
0.3 A	125 VAC	PF = 0.35	Noncoded
2 A	25 VAC	PF= 0.35	Noncoded

Agency Listings

MEA
386-02-E Vol II

IDP-Relay

Compatibility

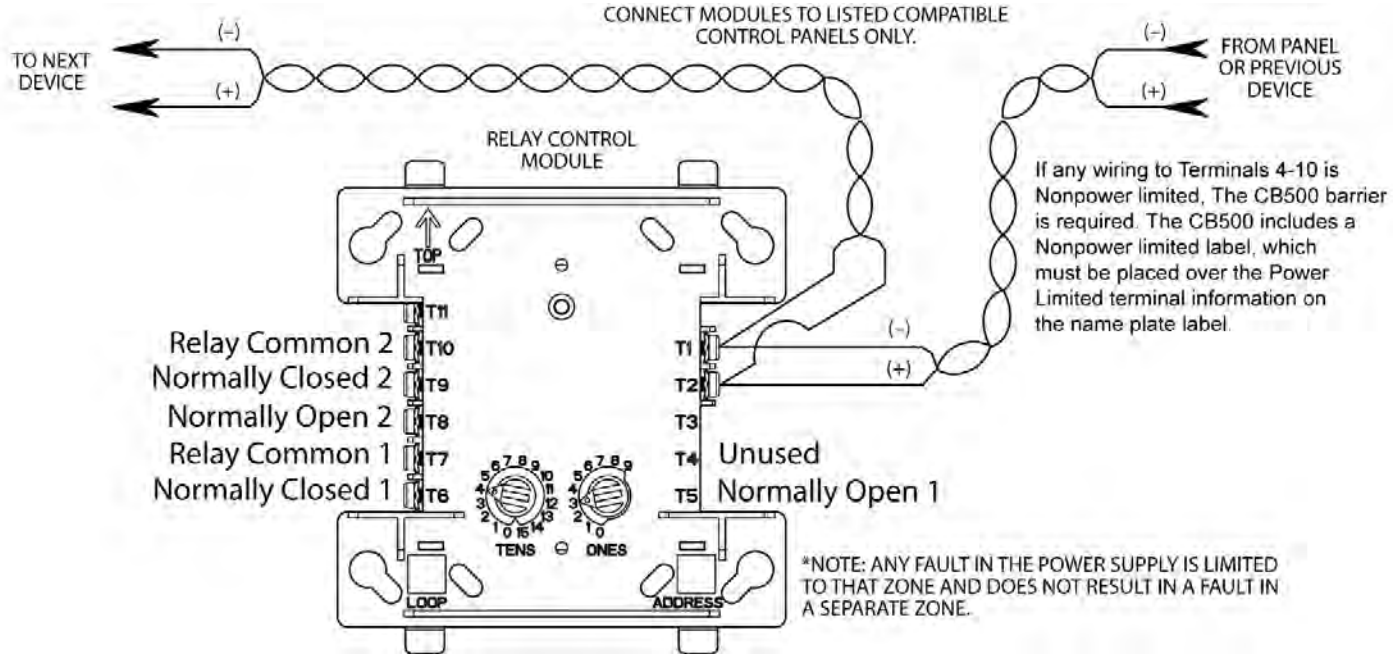
The IDP-Relay is compatible with the following FACPs:

- IFP-2000 / RPS-2000 Intelligent Fire Panel
- IFP-2000ECS Emergency Communication System with Fire Panel
- IFP-1000 / ECS Intelligent Fire Panel
- IFP-100 / ECS Intelligent Fire Panel
- IFP-50 Intelligent Fire Panel
- IFP-25 Intelligent Fire Panel

Installation

The IDP-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.

P/N 350290 Rev J



Specifications

Physical

4.675" H x 4.275" W x 1.4" D

Shipping Weight: 6.3 oz (196 g)

Environmental

Operating Temperature: 32ºF – 120ºF (0ºC – 49ºC)

Humidity: 10% – 93% non-condensing

Electrical

Operating Voltage: 15 – 32 VDC

End-of-Line Resistance: Not used

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

Ordering Information

IDP-Relay	Relay Module

Accessories

SMB500	4” Square Surface Mount Electrical Box
CB500	Module Barrier

SILENT KNIGHT by Honeywell

Assembled in the U.S.A.

Farenhyt

SILENT KNIGHT
by Honeywell

Intelligent Non-Relay Duct Detector

DNR/DNRW

The DNR Intelligent non-relay photoelectric duct smoke detector housing and DNRW watertight non-relay photoelectric duct smoke detector housing (head not included) are for use with Silent Knight IFP-series fire alarm control panels (FACPs).

The DNR and DNRW feature a pivoting housing that is flexible enough to fit configurations from square to rectangular. They feature low-flow technology that enables duct smoke detection throughout a broad range of airflow environments. Many difficult to solve HVAC applications occur in low airflow duct applications where reliable smoke detection is critical. These duct detectors can detect smoke at air speed velocities of 100 feet per minute or greater, while continuing the same reliable performance to 4000 feet per minute.

By sampling air currents passing through a duct and giving dependable performance for shutdown of fans, blowers, and air conditioning systems, the DNR and DNRW prevent the spread of toxic smoke and fire gases through the protected area.

The intelligent duct detectors communicate and are continuously monitored through the FACP signaling line circuit (SLC) loop. Detector sensitivity changes caused by dirt, temperature, or humidity are reported to the FACP, allowing compensation algorithms to maintain the detector's set sensitivity. An advanced indication at the panel identifies the detector address, allowing for selected maintenance to be performed as needed.

Features

- Photoelectric, integrated low-flow technology (IDP-Photo or IDP-PhotoR detector head sold separately)
- Air velocity rating from 100 to 4000 feet per minute (0.5 to 20.32 meters per second)
- Support for Class B or Class A wiring
- 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
- Provides trouble signal in the event the sensor cover is removed or improperly installed
- Easy to clean
- Easily accessible code wheels on sensor head (IDP-Photo sold separately)
- UL recognized field replaceable power and sensor boards
- Transparent cover for convenient visual inspection
- UL listed
- Remote testing capability
- DNRW is listed as a watertight enclosure allowing for use in the most extreme environments.

Agency Listings

MEA
225-02-E Vol. V

DNR

Installation

The DNR and DNRW are designed for use in air handling systems that have air velocities or 100 to 4000 feet per minute (0.5 – 20.3 m/s).

Compatibility

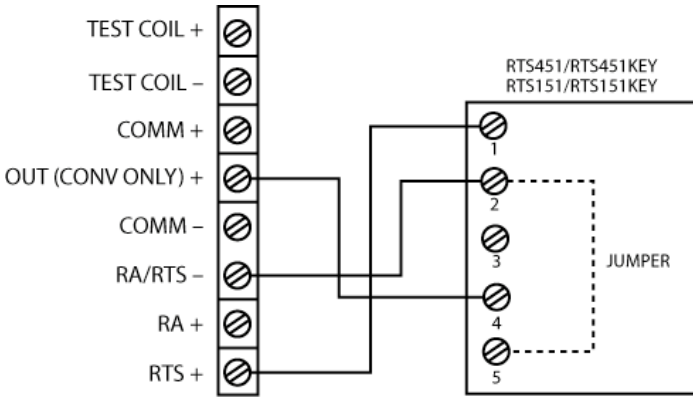
The DNR and DNRW are compatible with the following FACPs:

- IFP-2000 / RPS-2000 Intelligent Fire Panel
- IFP-1000 Intelligent Fire Panel
- IFP-100 Intelligent Fire Panel
- IFP-50 Intelligent Fire Panel
- IFP-25 Intelligent Fire Panel

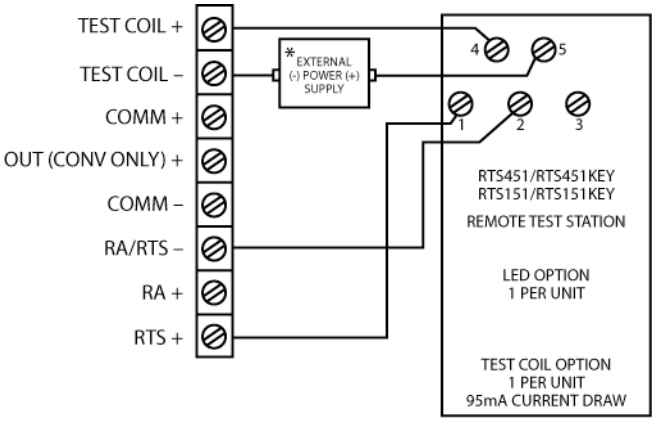
P/N 350085 Rev E

Wiring for Intelligent Non-Relay Duct Smoke Detector

DNR to RTS451/RTS451KEY/RTS151/RTS151KEY with"R" Remote test capable detector head option:



DNR to RTS451/RTS451KEY/RTS151/RTS151KEY with DCOIL option *: (Non remote test capable housing)



***Important Notes:**

(for non remote test capable housing)

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

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: -4ºF – 158ºF (-20ºC – 70ºC)

Humidity: 0% – 95% non-condensing

Air Velocity

100 to 4000 ft/min (0.5 – 20.3 m/s)

Electrical

Please see detector head installation manual for electrical specifications

Ordering Information

DNR	Intelligent non-relay duct smoke detector
DNRW	Watertight non-relay duct smoke detector
IDP-PhotoR	Addressable Photoelectric Detector with remote test capability (not included with DNR)
IDP-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
EXT	Metal Exhaust Tube Duct width 1'
RA100Z	Remote LED Annunciator
DCOIL	Duct Accessory Coil. (see important note for detail)
RTS151	Magnetic Remote Test station
RTS151KEY	Key-Activated Remote Test station
M02-04-00	Test Magnet
P48-21-00	Replacement End Cap for Metal Sampling Tube

SILENT KNIGHT by Honeywell

Made in the U.S.A.

Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications

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

Features

- Updated Modern Aesthetics
- Small profile devices for Horns and Horn Strobes
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, and 185
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Mounting plate for all standard and all compact wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- Strobes and Horn Strobes listed for wall mounting only
- Horns listed for wall or ceiling use

Agency Listings

SIGNALING UL LISTED
S5512
S4011

FM APPROVED
FM approved except for ALERT models 3057383, 3057072

7125-1653:0604
7135-1653:0603

The System Sensor L-Series offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draws and modern aesthetics. With white and red plastic housings, standard and compact devices, and plain, FIRE, and FUEGO-printed devices, System Sensor L-Series can meet virtually any application requirement.

The L-Series line of wall-mount horns, strobes, and horn strobes include a variety of features that increase their application versatility while simplifying 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.

To further simplify installation and protect devices from construction damage, the L-Series utilizes a universal mounting plate for all models with an onboard shorting spring, so installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to a suit a wide range of application requirements using field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for horn tones with two volume selections.

L-Series Specifications

Architect/Engineer Specifications

General

L-Series standard horns, strobes, and horn strobes shall mount to a standard 2 x 4 x 1⁷/₈-inch back box, 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2 × 4 × 1⁷/₈-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products for all standard models and a separate universal mounting plate shall be used for mounting wall compact models. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, 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 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, and 185.

Strobe

The strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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.

Horn Strobe Combination

The horn strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

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 and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4¹¹/₁₆ × 4¹¹/₁₆ × 2¹/₈-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/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	Regulated 12 DC or regulated 24 DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Operating Voltage Range MDL3 Sync Module	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Wall-Mount Dimensions (including lens)	5.6˝L × 4.7˝W × 1.91˝D (143 mm L × 119 mm W × 49 mm D)
Compact Wall-Mount Dimensions (including lens)	5.26" L x 3.46" W x 1.91" D (133 mm L x 88 mm W x 49 mm D)
Horn Dimensions	5.6˝L × 4.7˝W × 1.25˝D (143 mm L × 119 mm W × 32 mm D)
Compact Horn Dimensions	5.25" L x 3.45" W x 1.25" D (133 mm L x 88 mm W x 32 mm D)

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 cd and 30 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

		8–17.5 Volts	16–33 Volts	
	Candela	DC	DC	FWR
Candela Range	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

UL Max. Horn Current Draw (mA RMS)

		8–17.5 Volts	16–33 Volts	
Sound Pattern	dB	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 Max. Current Draw (mA RMS), Wall Horn Strobe, Candela Range (15–185 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15cd	30cd	15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	98	158	54	74	121	142	162	196	245
Temporal Low	93	154	44	65	111	133	157	184	235
Non-Temporal High	106	166	73	94	139	160	182	211	262
Non-Temportal Low	93	156	51	71	119	139	162	190	239
3.1K Temporal High	93	156	53	73	119	140	164	190	242
3.1K Temporal Low	91	154	45	66	112	133	160	185	235
3.1K Non-Temporal High	99	162	69	90	135	157	175	208	261
3.1K Non-Temporal Low	93	156	52	72	119	138	162	192	242

	16–33 Volts						
FWR Input	15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	83	107	156	177	198	234	287
Temporal Low	68	91	145	165	185	223	271
Non-Temporal High	111	135	185	207	230	264	316
Non-Temportal Low	79	104	157	175	197	235	283
3.1K Temporal High	81	105	155	177	196	234	284
3.1K Temporal Low	68	90	145	166	186	222	276
3.1K Non-Temporal High	104	131	177	204	230	264	326
3.1K Non-Temporal Low	77	102	156	177	199	234	291

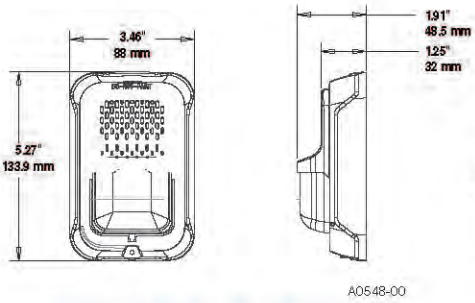
Horn Tones and Sound Output Data

Horn and Horn Strobe Output (dBA)

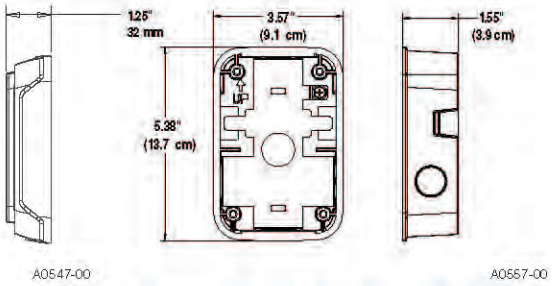
Switch Position	Sound Pattern	dB	8–17.5 Volts DC	16–33 Volts DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83
9*	Coded	High	85	90	90
10*	3.1 KHz Coded	High	84	89	89

* Settings 9 and 10 are not available on 2-wire horn strobes. Temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output remains constantly on.

L-Series Dimensions

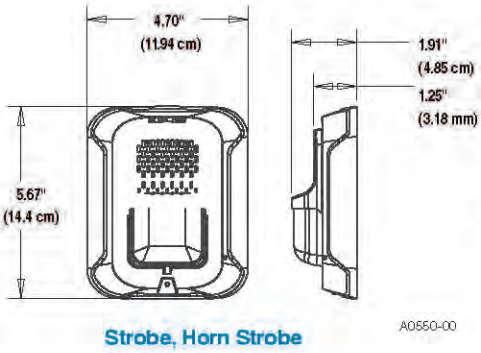


Compact Strobe, Horn Strobe

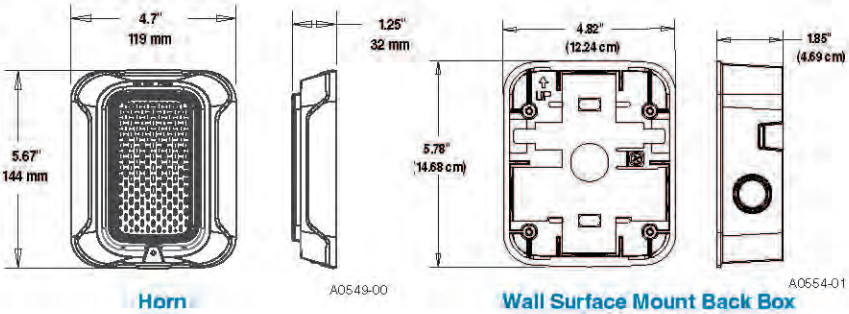


Compact Horn

Compact Wall Surface Mount Back Box SBBGRL, SBBGWL



Strobe, Horn Strobe



Horn

Wall Surface Mount Back Box SBBRL/SBBWL

L-Series Ordering Information

Model	Description
Wall Horn Strobes	
P2RL	2-Wire, Horn Strobe, Red
P2WL	2-Wire, Horn Strobe, White
P2GRL	2-Wire, Compact Horn Strobe, Red
P2GWL	2-Wire, Comp 2 fils act Horn Strobe, White
P2RL-P	2-Wire, Horn Strobe, Red, Plain
P2WL-P	2-Wire, Horn Strobe, White, Plain
P2RL-SP	2-Wire, Horn Strobe, Red, FUEGO
P2WL-SP	2-Wire, Horn Strobe, White, FUEGO
P4RL	4-Wire, Horn Strobe, Red
P4WL	4-Wire, Horn Strobe, White
Wall Strobes	
SRL	Strobe, Red
SWL	Strobe, White
SGRL	Compact Strobe, Red
SGWL	Compact Strobe, White
SRL-P	Strobe, Red, Plain
SWL-P	Strobe, White, Plain
SRL-SP	Strobe, Red, FUEGO
SWL-CLR-ALERT	Strobe, White, ALERT

Model	Description
Horns*	
HRL*	Horn, Red
HWL*	Horn, White
HGRL*	Compact Horn, Red
HGWL*	Compact Horn, White
Accessories	
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

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

SYSTEM SENSOR
3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495
www.systemsensor.com

AVDS865-05 • 2/22/2018

Honeywell
THE POWER OF CONNECTED

Farenhyt™ Series

L-Series Indoor Strobes, and Horn Strobes for Ceiling Applications

The L-Series audible visible notification products offer the most versatile and easy-to-use product line of horns, strobes, and horn strobes in the industry. This product includes lower current draws and modern aesthetics design which reduces installation times and maximizes profit. In adition, the L-Series offers white and red plastic housings, and wall and ceiling mounting options.

The entire L-Series product line of ceiling-mount strobes and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature a plug-in design with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time consuming ground faults.

To simplify installation, the L-Series utilizes a universal mounting plate so installers can mount them to a wide array of back boxes. With an onboard shorting spring, installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to a suit a wide range of application requirements using field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for horn tones with two volume selections.

FEATURES & BENEFITS

- Listed for ceiling mounting only
- Features a plug-in design with minimal intrusion into the back box
- Designed with tamper-resistant construction
- Rotary switch for horn tone and two volume selections
- Tamper-resistant construction
- includes a universal mounting plate for ceiling units
- Produces horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on ceiling units: 15, 30, 75, 95, 115, 150, 177
- Contains a mounting plate with a shorting spring feature checks wiring continuity before device installation
- Compatible with System Sensor synchronizaiton protocol
- Supports electrically Compatible with legacy SpectrAlert and SpectrAlert Advance devices

L-SERIES SPECIFICATIONS ARCHITECT / ENGINEER SPECIFICATIONS

GENERAL

L-Series ceiling-mount strobes and horn strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box, or doublegang back box. Two-wire products shall also mount to a single-gang 2 × 4 × 1 7/8-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, 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 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Ceiling strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 115, 150, and 177.

STROBE

The strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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.

HORN STROBE COMBINATION

The horn strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

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 and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4 11/16 × 4 11/16 × 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

Ceiling-Mount Dimensions (including lens): 6.8" diameter × 2.5"H (173 mm diameter × 64 mm high)

Ceiling-Mount Surface Mount Back Box Skirt Dimensions (SBBCR, SBBCW): 6.9" diameter x 3.4"H (175 mm diameter x 86 mm

ELECTRICAL

Nominal Voltage: Regulated 12 DC or regulated 24 DC/FWR1

Operating Voltage Range[2]: 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)

Operating Voltage Range MDL3 Sync Module: 8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)

Input Terminal Wire Gauge: 12 to 18 AWG

ENVIRONMENTAL

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

Humidity Range: 10 to 93% non-condensing

AGENCY LISTINGS AND APPROVALS

UL: Listed

FM: Approved

CSFM: Listed

Notes:

1. Full Wave Rectifi ed (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12V nominal only for 15 and 30 cd

UL MAX STROBE CURRENT DRAW (mA RMS)

CANDELA	8-17.5V DC	16-33V DC	FWR
15	87	41	60
30	153	63	86
75	N/A	111	142
95	N/A	134	164
115	N/A	158	191
150	N/A	189	228
177	N/A	226	264

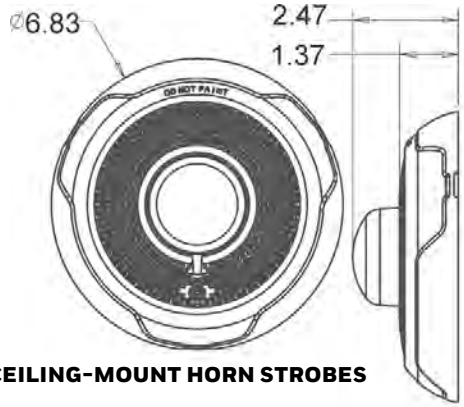
UL MAX CURRENT DRAW (mA RMS), 2-WIRE HORN STROBE

	8 VDC		16 VDC						
CANDELA	**15**	**30**	**15**	**30**	**75**	**95**	**115**	**150**	**177**
EM Temp Hi	103	167	71	90	143	165	187	217	254
EM Temp Low	96	165	54	71	137	161	185	211	249
EM Cont Hi	106	173	71	90	141	165	187	230	273
EM Cont Low	95	166	54	71	124	161	170	216	258
3.1K Temp Hi	111	164	69	94	147	163	184	229	257
3.1K Temp Low	103	163	54	88	143	155	185	212	252
3.1K Cont Hi	111	172	69	94	144	164	202	229	271
3.1K Cont Low	103	169	54	88	131	155	187	217	259
	16V FWR								
CANDELA	**15**	**30**	**75**	**95**	**115**	**150**	**177**		
EM Temp Hi	107	135	179	198	223	254	286		
EM Temp Low	78	101	151	172	199	229	262		
EM Cont Hi	107	135	179	198	223	254	286		
EM Cont Low	78	101	151	172	199	229	262		
3.1K Temp Hi	108	135	179	200	225	255	289		
3.1K Temp Low	79	101	150	171	196	229	260		
3.1K Cont Hi	108	135	179	200	225	255	289		
3.1K Cont Low	79	101	150	171	196	229	260		

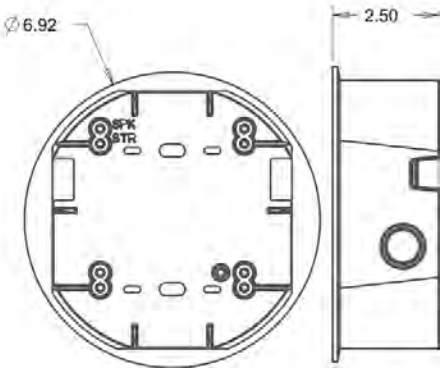
HORN AND HORN STROBE OUTPUT (DBA)

SWITCH POSITION	SOUND PATTERN	DB	8-17.5V DC	16-33V DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83

SL-SERIES DIMENSIONS



CEILING-MOUNT HORN STROBES



CEILING BACK BOX SURFACE MOUNT BACK BOX

ORDERING INFORMATION

CEILING HORN STROBES

PC2RL: 2-Wire, Horn Strobe, Red
PC2WL: 2-Wire, Horn Strobe, White

CEILING STROBES

SCRL: Strobe, Red
SCWL: Strobe, White
SCWL-CLR-ALERT: Strobe, White, ALERT

ACCESSORIES

TR-2: Universal Wall Trim Ring Red
TR-2W: Universal Wall Trim Ring White
SBBCRL: Ceiling Surface Mount Back Box, Red
SBBCWL: Ceiling Surface Mount Back Box, White

For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

For Technical Support, call 800-446-6444.

For more information

Learn more about Honeywell's Farenhyt Series and other products available by visiting www.farenhyt.com

Honeywell Farenhyt
12 Clintonville Road
Northford, CT 06472
800-328-0103

Doc 351575 | Rev B | 02/18

Honeywell

SYSTEM SENSOR

Outdoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications

SPECTRAlert ADVANCE from System Sensor

SpectrAlert® Advance outdoor audible visible products are rich with features that cut installation times and maximize profits.

Features

- Weatherproof per NEMA 4X, IP56
- Listed to UL 1638 (strobe) and UL 464 (horn)
- Compatible with System Sensor synchronization protocol and legacy SpectrAlert products
- 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 horn tone and three volume selections
- Horn rated at 88+ dBA at 16 volts
- Rated from –40°F to 151°F
- Universal mounting plate with an onboard shorting spring that tests wiring continuity before devices are installed
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Listed for ceiling or wall mounting

Agency Listings

SIGNALING UL LISTED
S4011 (chimes, horn strobes, horns)
S3593 (outdoor and alert strobes)

FM APPROVED
3023572

MEA approved
MEA452-05-E

7300-1653-187 (outdoor strobes)
7125-1653-188 (horn strobes, chime strobes)
7135-1653-189 (horns, chimes)

SpectrAlert Advance offers the broadest line of outdoor horns, strobes, and horn strobes in the industry. With white or red plastic housings, wall or ceiling mounting options, and plain or FIRE-printed devices, SpectrAlert Advance can meet virtually any application requirement, including indoor, outdoor, wet, and dry applications in temperatures from –40°F to 151°F.

Like the entire SpectrAlert Advance line, outdoor horns, strobes, and horn strobes for wall applications include a variety of features that increase application flexibility and simplify installation. First, field-selectable settings, including candela, automatic selection of 12- or 24-volt operation, horn tones, and three volume options enable installers to easily adapt devices to meet requirements.

Next, SpectrAlert Advance devices use a universal mounting plate for both wall and ceiling applications. This mounting plate includes 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 ¾-inch top and bottom conduit entries and ¾-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 Horn, Strobe, and Horn Strobe Specifications

Architect/Engineer Specifications

General

SpectrAlert Advance outdoor horns, strobes, and horn 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 wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, 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 9 and 17.5 volts, 24-volt-rated notification appliance circuit outputs shall operate between 17 and 33 volts. Outdoor SpectrAlert Advance products shall operate between –40 and 151 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185.

Strobe

The strobe shall be a System Sensor SpectrAlert Advance Model _____ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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. The strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The strobe shall be suitable for use in wet environments.

Horn Strobe Combination

The horn strobe shall be a System Sensor SpectrAlert Advance Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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. The horn shall have three audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options shall be set by a multiple position switch. On four-wire products, the strobe shall be powered independently of the sounder. The horn or horn strobe models shall operate on a coded or non-coded power supply. The horn strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The horn strobe shall be suitable for use in wet environments.

Physical/Electrical Specifications

Operating Temperature	–40°F to 151°F (–40°C to 66°C)
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12 DC/FWR or regulated 24 DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Wall-Mount Dimensions (including lens)	5.6"L x 4.7"W x 2.5"D (142 mm L x 119 mm W x 64 mm D)
Horn Dimensions	5.6"L x 4.7"W x 1.3"D (142 mm L x 119 mm W x 33 mm D)
Wall-Mount Weatherproof Back Box Dimensions (SA-WBB)	5.7"L x 5.1"W x 2.0"D (145 mm L x 130 mm W x 51 mm D)

Notes:

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. P, S, PC, and SC products will operate at 12 V nominal only for 15 and 15/75 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

		8–17.5 Volts		16–33 Volts	
	Candela	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

UL Max. Horn Current Draw (mA RMS)

		8–17.5 Volts		16–33 Volts	
Sound Pattern	dB	DC	FWR	DC	FWR
Temporal	High	57	55	69	75
Temporal	Medium	44	49	58	69
Temporal	Low	38	44	44	48
Non-Temporal	High	57	56	69	75
Non-Temporal	Medium	42	50	60	69
Non-Temporal	Low	41	44	50	50
Coded	High	57	55	69	75
Coded	Medium	44	51	56	69
Coded	Low	40	46	52	50

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15–115 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15	15/75	15	15/75	30	75	95	110	115
Temporal High	137	147	79	90	107	176	194	212	218
Temporal Medium	132	144	69	80	97	157	182	201	210
Temporal Low	132	143	66	77	93	154	179	198	207
Non-Temporal High	141	152	91	100	116	176	201	221	229
Non-Temporal Medium	133	145	75	85	102	163	187	207	216
Non-Temporal Low	131	144	68	79	96	156	182	201	210
FWR Input									
Temporal High	136	155	88	97	112	168	190	210	218
Temporal Medium	129	152	78	88	103	160	184	202	206
Temporal Low	129	151	76	86	101	160	184	194	201
Non-Temporal High	142	161	103	112	126	181	203	221	229
Non-Temporal Medium	134	155	85	95	110	166	189	208	216
Non-Temporal Low	132	154	80	90	105	161	184	202	211

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, High Candela Range (135–185 cd)

	16–33 Volts					16–33 Volts			
DC Input	135	150	177	185	FWR Input	135	150	177	185
Temporal High	245	259	290	297	Temporal High	215	231	258	265
Temporal Medium	235	253	288	297	Temporal Medium	209	224	250	258
Temporal Low	232	251	282	292	Temporal Low	207	221	248	256
Non-Temporal High	255	270	303	309	Non-Temporal High	233	248	275	281
Non-Temporal Medium	242	259	293	299	Non-Temporal Medium	219	232	262	267
Non-Temporal Low	238	254	291	295	Non-Temporal Low	214	229	256	262

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

Horn Tones and Sound Output Data

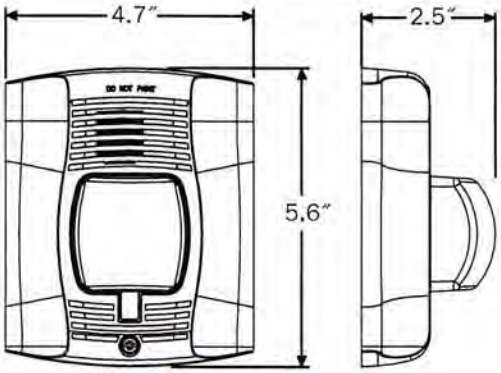
Horn and Horn Strobe Output (dBA)

			8–17.5 Volts		16–33 Volts		24-Volt Nominal			
							Reverberant		Anechoic	
Switch Position	Sound Pattern	dB	DC	FWR	DC	FWR	DC	FWR	DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	89
4	Non-Temporal	High	82	82	88	88	93	92	100	100
5	Non-Temporal	Medium	78	78	85	85	90	90	98	98
6	Non-Temporal	Low	75	75	81	81	88	84	96	92
7†	Coded	High	82	82	88	88	93	92	101	101
8†	Coded	Medium	78	78	85	85	90	90	97	98
9†	Coded	Low	75	75	81	81	88	85	96	92

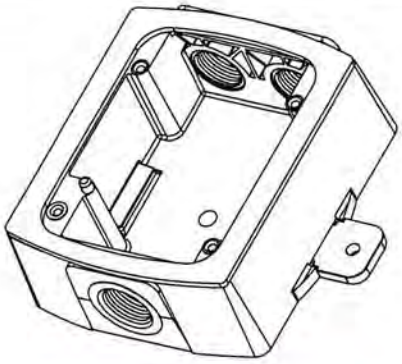
†Settings 7, 8, and 9 are not available on 2-wire horn strobe.

AVDS01201

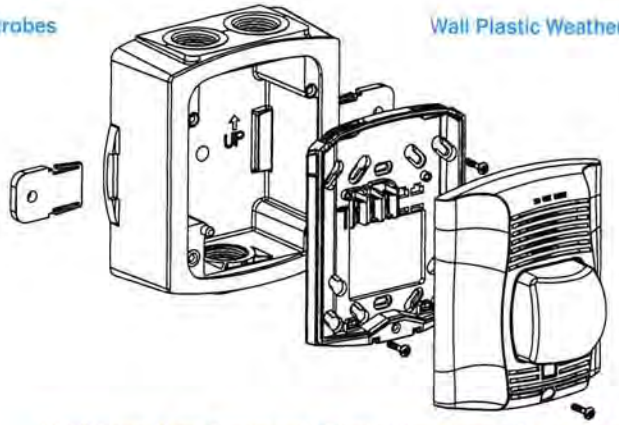
SpectrAlert Advance Diagrams



Wall-Mount Horn Strobes



Wall Plastic Weatherproof Back Box



Wall-Mount Horn Strobe with Plastic Weatherproof Back Box

SpectrAlert Advance Ordering Information

Model	Description
Wall Horn Strobes	
P2RK*†	2-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
P2RHK*†	2-Wire Horn Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
P2WK*†	2-Wire Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
P2WHK*†	2-Wire Horn Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
P4RK†	4-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
P4WK	4-Wire Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
P2RHK-120	2-Wire Horn Strobe, High cd, Red, Outdoor, 120 V (includes plastic weatherproof back box)
Wall Strobes	
SRK*†	Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
SRHK*†	Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
SWK*†	Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
SWHK*†	Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
Horns	
HRK†	Horn, Red, Outdoor (includes plastic weatherproof back box)
Accessories	
SA-WBB	Red, Metal Weatherproof Back Box
SA-WBBW	White, Metal Weatherproof Back Box

Notes:

* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2RK-P.

† Add "-R" to model number for weatherproof replacement device (no back box included), only for use with weatherproof outdoor flush mounting plate, WTP and WTPW. "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.**

SYSTEM SENSOR

3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495

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

The SpectrAlert® Advance selectable output speaker strobes and dual-voltage evacuation speakers can reduce ground faults and enable faster installation.

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:
  Standard: 15, 15/75, 30, 75, 95, 110, 115
  High: 135, 150, 177, 185
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Rotary switch simplifies field selection of speaker voltage (25 and 70.7 Vrms) and power settings (¼, ½, 1 and 2 watts)
- SP speakers offer high fidelity sound output
- SPV speakers offer high volume sound output
- Compatible with System Sensor synchronization protocol
- Electrical compatibility with existing SpectrAlert products
- Tamper-resistant construction
- Listed for ceiling or wall mounting

Agency Listings

SIGNALING UL LISTED S4048

7320-1653:201

FM APPROVED

MEA approved 10-08-E

The SpectrAlert Advance 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 11 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 the SPV speaker offers high volume sound output for use in high ambient noise applications.

SpectrAlert Advance 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.

SpectrAlert Advance Speaker and Speaker Strobe Specifications

Architectural/Engineering Specifications

General

SpectrAlert Advance speaker and speaker strobes shall mount to a 4 × 4 × 2⅛-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, 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. Indoor SpectrAlert Advance 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, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185.

Speaker

The speaker shall be a System Sensor SpectrAlert Advance 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 SpectrAlert Advance 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

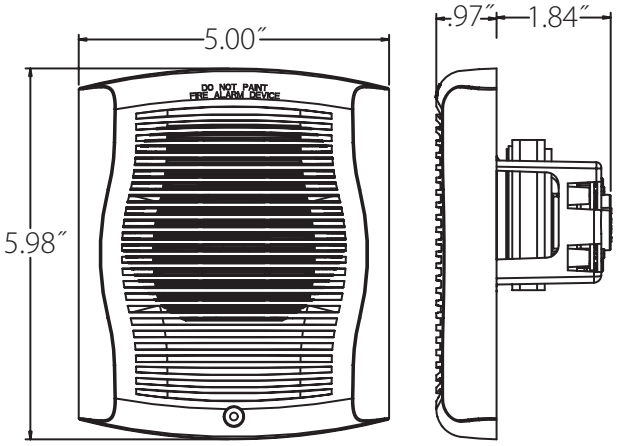
The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1 Hz. The module shall mount to a 411⁄16 × 411⁄16 × 2⅛-inch back box. The module shall also control two Style Y (class B) 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			
Operating Temperature	32°F to 120°F (0°C to 49°C)		
Humidity Range	10 to 93% non-condensing		
Dimensions, Wall-Mount	**Length**	**Width**	**Depth**
SP Speaker	6 in, 152 mm	5 in, 127 mm	2.8 in, 71 mm
SPV Speaker	6 in, 152 mm	5 in, 127 mm	2.9 in, 74 mm
With Surface Mount Back Box	6 in, 152 mm	5.1 in, 130 mm	3.4 in, 86 mm
SPS Speaker/Strobe (including lens and speaker)	6 in, 152 mm	5.1 in, 127 mm	4.7 in, 119 mm
With Surface Mount Back Box	6 in, 152 mm	5.1 in, 130 mm	5.325 in, 135 mm
Electrical/Operating Specifications			
Nominal Voltage (speakers)	25 Volts or 70.7 Volts (nominal)		
Maximum Supervisory Voltage (speakers)	50 VDC		
Strobe Flash Rate	1 flash per second		
Nominal Voltage (strobes)	Regulated 12 VDC/ FWR or regulated 24 DC/FWR		
Operating Voltage Range (includes fire alarm panels with built in sync)	8 to 17.5 V (12 V nominal) or 16 to 33V (24 V nominal)		
Operating Voltage with MDL3 Sync Module	8.5 to 17.5 V (12 V nominal) or 16.5 to 33V (24 V nominal)		
Frequency Range	400 to 4000 Hz		
Power	¼, ½, 1, 2 watts		

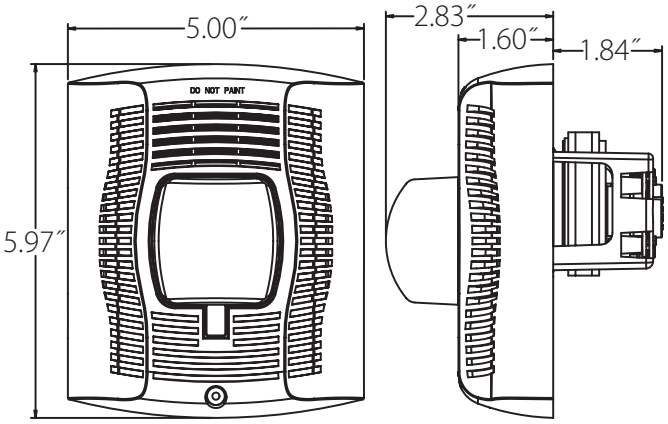
UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)					
		8 to 17.5 Volts		16 to 33 Volts	
	Candela	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
Wall-Mount SP Series		86	83	80	77
Wall-Mount SPV Series		90	87	84	81
Wall-Mount SPS Series		85	82	79	76
Wall-Mount SPSV Series		89	86	83	80

Dimensions

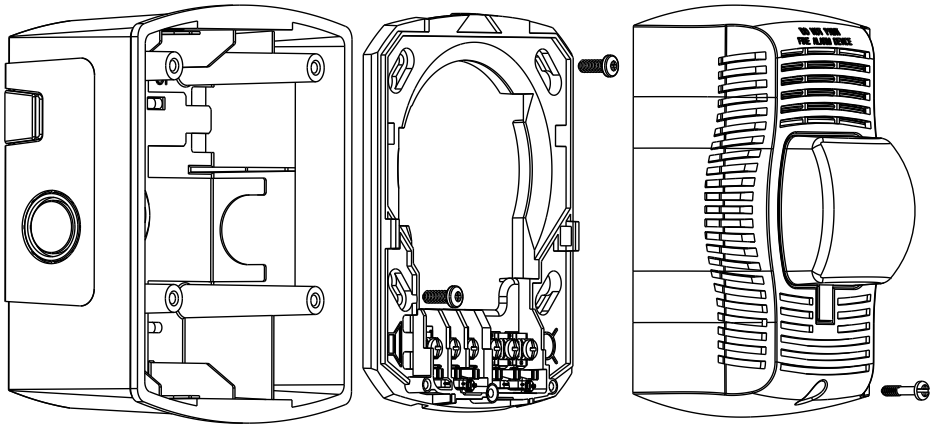


Wall-Mount SP Speaker



Wall-Mount SPS Speaker Strobe

Surface Mounting



Wall-Mount Speaker Strobe with SBBSPR Surface Mount Back

Ordering Information for SpectrAlert® Advance Speakers and Speaker Strobes

Wall Mount		
White	**Red**	**Description**
SPW	SPR	Speaker only
SPWV	SPRV	Speaker only, High dB
SPSW	SPSR	Speaker Strobe, Standard cd
SPSW-P	SPSR-P	Plain Speaker Strobe, Standard cd
SPSW-ALERT	—	Speaker Strobe, Standard cd, Amber Lens
SPSW-CLR-ALERT	—	Speaker Strobe, Standard cd, Clear Lens
SPSWH	SPSRH	Speaker Strobe, High cd
SPSWH-P	—	Plain Speaker Strobe, High cd
SPSWV	SPSRV	Speaker Strobe, Standard cd, High dB
SPSWV-P	SPSRV-P	Plain Speaker Strobe, Standard cd, High dB
Accessories		
White	**Red**	**Description**
RFPW	RFP	7 in × 9.5 in Retrofit Plate
SBBSPW	SBBSPR	Surface Mount Back Box for Speakers and Speaker Strobes
TRW	TR	Wall Mount Trim Ring

Notes:

All -P models have a plain housing (no “FIRE” marking on the 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.

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AVDS11602 • 2/15

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 +/- 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

S4048

FM approved except for ALERT models 3057493

7320-1652:0505

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 × 2⅛ 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 11/16 × 4 11/16 × 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

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

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

Electrical/Operating Specifications

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

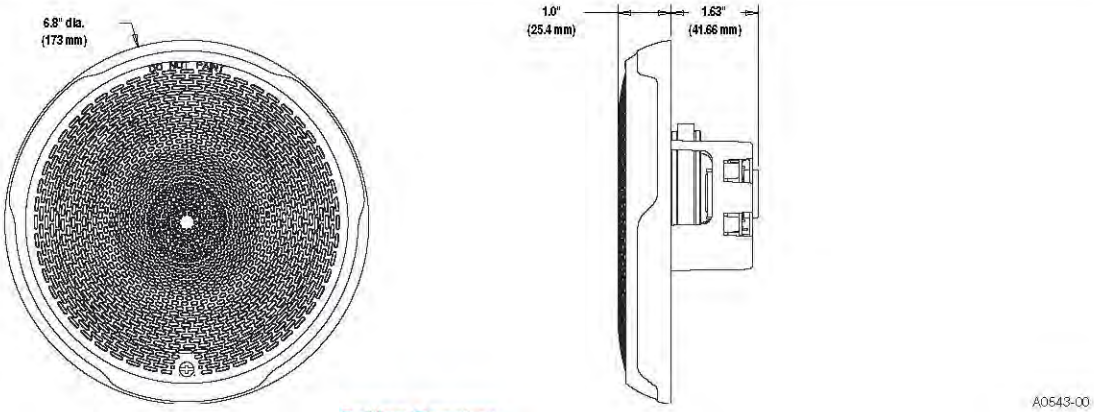
UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)			
	8 to 17.5 Volts	16 to 33 Volts	
Candela	DC	DC	FWR
15	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

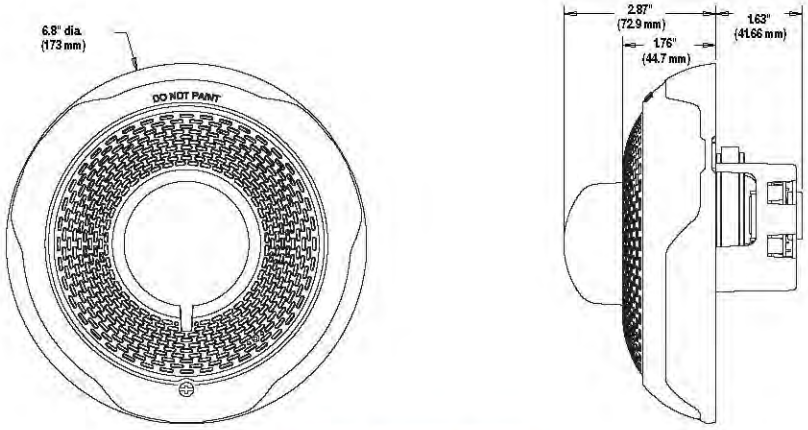
Ceiling-Mount Speaker Strobe Sound Output		
Setting	UL Reverberant (dBA @10 ft)	UL Anechoic (dBA @10 ft)
1/4 W	77	77
1/2 W	80	80
1 W	83	83
2 W	86	86

L-Series Dimensions



A0543-00

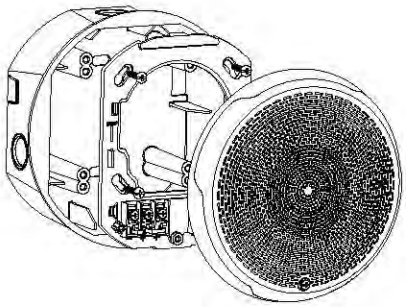
Ceiling Speaker



A0544-00

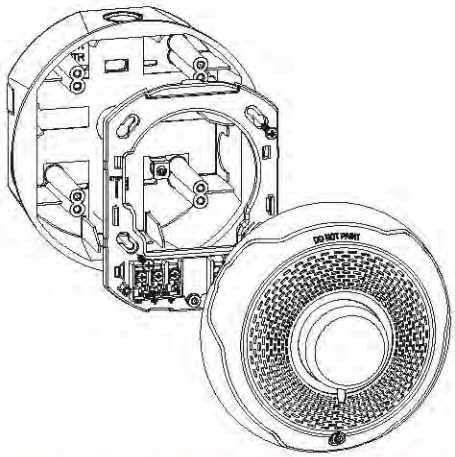
Ceiling Speaker Strobe

Surface Mounting



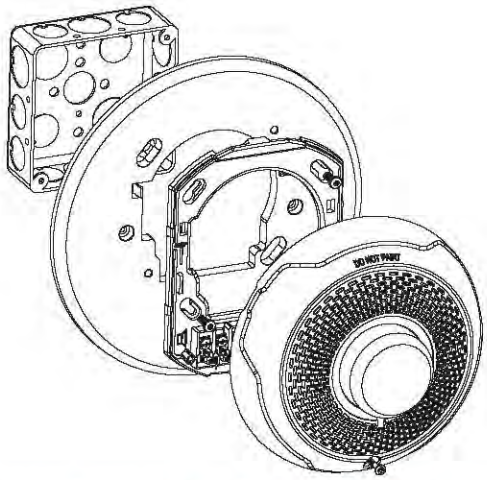
A0504-01

Ceiling Speaker with Surface Mount Back Box



A0520-01

Ceiling Speaker Strobe with Surface Mount Back Box



A0542-00

Ceiling Speaker Strobe with Trim Ring and 4" Square Electrical 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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Features

- 24 month free replacement
- Long service life
- Maintenance free
- High power-to-weight ratio
- Wide operating temperature rating
- Ease of shipment
- No leakage -- sealed lead acid

Stock Number	Model Number	Volts	AH	Length	Width	Height	Weight
5130080	BT-6	6	5.0	2.75	1.85	4.17	1.98
5130095	BT-10	12	1.2	3.82	1.77	2.24	1.28
5130092	BT-40	12	4.5	3.50	2.75	4.17	3.75
5130084	BT-80	12	8.0	5.94	2.56	3.98	6.25
5130090	BT-120	12	12.0	5.94	3.90	3.94	8.82
5130086	BT-180	12	18.0	7.12	2.99	6.57	13.67
5130097	BT-260	12	26.0	6.53	6.89	4.96	20.06

Specifications

BT6-4
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 6.75V ~ 6.90V
  - Initial current: < 1.5A
- Cyclic use:
  - Voltage regulation: 7.2V ~ 7.50V
  - Initial current: < 1.5A

BT-10
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 13.50V ~ 13.80V
  - Initial current: < .39A
- Cyclic use:
  - Voltage regulation: 14.40V ~ 15.0V
  - Initial current: < .39A

BT-40
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 13.50V ~ 13.80V
  - Initial current: < 1.2A
- Cyclic use:
  - Voltage regulation: 14.40V ~ 15.0V
  - Initial current: < 1.2A

BT-80
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 13.50V ~ 13.80V
  - Initial current: < 2.3A
- Cyclic use:
  - Voltage regulation: 14.40V ~ 15.0V
  - Initial current: < 3.6A

BT-120
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 13.50V ~ 13.80V
  - Initial current: < 3.6A
- Cyclic use:
  - Voltage regulation: 14.40V ~ 15.0V
  - Initial current: < 3.6A

BT-180
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 13.50V ~ 13.80V
  - Initial current: < 5.4A
- Cyclic use:
  - Voltage regulation: 14.40V ~ 15.0V
  - Initial current: < 5.4A

BT-260
Constant voltage use at 20°C
- Standby use:
  - Voltage regulation: 13.50V ~ 13.80V
  - Initial current: < 7.8A
- Cyclic use:
  - Voltage regulation: 14.40V ~ 15.0V
  - Initial current: < 7.8A

Toll-Free (800) 323-9355 Wiring The World Fax: (847) 689-1192

PRODUCT DATA SHEET

PART NUMBER: 81802
DESCRIPTION: 18/2 SOLID FPLP FT6 CABLE
CONSTRUCTION: This cable consists of two bare copper insulated conductors and an overall jacket.
APPROVALS: UL Standard 1424, NEC Article 760.
APPLICATION: Fire Alarm Power Limited Circuit Cable Used in Plenum Applications

Construction Parameters:

Cable Cross-Section

Conductor	18 AWG Bare Copper
Stranding	Solid
Insulation Material	Polymer Alloy
Insulation Thickness	0.006" Nom.
Insulated Conductor Diameter	0.052" Nom.
Number of Conductors	2
Lay Length	1.75" Nom.
Jacket Material	Low Smoke PVC
Jacket Thickness	0.016" Nom.
Overall Cable Diameter	0.136" Nom.
Approximate Cable Weight	17.4 Lbs/1M' Nom.
Flame Rating	UL 910 Steiner Tunnel Smoke and Flame Test

Electrical Properties:

Temperature Rating	-20^{O}C to 75^{O}C
Operating Voltage	300 V RMS Max.
Capacitance Between Conductors @ 1 KHz	50 pF/ft Nom.
Capacitance Between Conductors to Shield @ 1 KHz	-----
DC Resistance per Conductor @ 20^{O}C	6.32 Ohms/1M' Nom.

Insulation Colors	Black Red
Jacket Color	Red (Other colors available for minimum order)
Legend (Surface Ink Print)	E100315 * 18 AWG 2/C (UL) TYPE FPLP 75C -- C(UL) TYPE CMP FT6

On special orders, the customer will accept all factory lengths and +/- 10 percent of total order requested.
The jacket is sequentially footmarked.
The information presented here is, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise.

Customer Name_____

Customer Approval _____

Specification Issue Date: January 19, 2001

Toll-Free (800) 323-9355 Wiring The World Fax: (847) 689-1192

PRODUCT DATA SHEET

PART NUMBER: 81402
DESCRIPTION: 14/2 SOLID FPLP METRO CABLE
CONSTRUCTION: This cable consists of two bare copper insulated conductors and an overall jacket.
APPROVALS: UL Standard 1424, NEC Article 760.
APPLICATION: Fire Alarm Power Limited Circuit Cable Used in Plenum Applications

Construction Parameters:

Cable Cross-Section

Conductor	14 AWG Bare Copper
Stranding	Solid
Insulation Material	Polymer Alloy
Insulation Thickness	0.009" Nom.
Insulated Conductor Diameter	0.082" Nom.
Number of Conductors	2
Lay Length	1.75" Nom.
Jacket Material	Low Smoke PVC
Jacket Thickness	0.020" Nom.
Overall Cable Diameter	0.204" Nom.
Approximate Cable Weight	37.4 Lbs/1M' Nom.
Flame Rating	UL 910 Steiner Tunnel Smoke and Flame Test

Electrical & Enviromental Properties:

Temperature Rating	-20^{O}C to 75^{O}C
Operating Voltage	300 V RMS Max.
Capacitance Between Conductors @ 1 KHz	54 pF/ft Nom.
Capacitance Between Conductors to Shield @ 1 KHz	-----
Inductance	0.07 uH/ft Nom.
DC Resistance per Conductor @ 20^{O}C	2.54 Ohms/1M' Nom.

Insulation Colors	Black Red
Jacket Color	Red (Other colors available for minimum order)
Legend (Surface Ink Print)	E100315 * 14 AWG 2/C (UL) TYPE FPLP 75C

On special orders, the customer will accept all factory lengths and +/- 10 percent of total order requested.
The information presented here is, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise.

Customer Name_____ Date Signed _____

Customer Approval _____

Specification Issue Date: August 13, 2001

Toll-Free (800) 323-9355 Wiring The World Fax: (847) 689-1192

PRODUCT DATA SHEET

PART NUMBER: 98820
DESCRIPTION: 18/2 SOLID FPLR/CMG FT4 CABLE
CONSTRUCTION: This cable consists of two bare copper insulated conductors and an overall jacket.
APPROVALS: UL Standard 1424 and 444, NEC Articles 760 and 800.
APPLICATION: Power Limited Fire Alarm Cable and Communications Cable For Riser Applications

Construction Parameters:

Cable Cross-Section

Conductor	18 AWG Bare Copper
Stranding	Solid
Insulation Material	Foam Polypropylene
Insulation Thickness	0.006" Nom.
Insulated Conductor Diameter	0.052" Nom.
Number of Conductors	2
Lay Length	3.00" Nom.
Jacket Material	PVC
Jacket Thickness	0.014" Nom.
Overall Cable Diameter	0.132" Nom.
Approximate Cable Weight	16.0 Lbs/1M' Nom.
Flame Rating	UL 1666 Riser Flame Test

Electrical Properties:

Temperature Rating	-20^{O}C to 60^{O}C
Operating Voltage	300 V RMS Max.
Capacitance Between Conductors @ 1 KHz	26 pF/ft Nom.
Capacitance Between Conductors to Shield @ 1 KHz	-----
DC Resistance per Conductor @ 20^{O}C	6.32 Ohms/1M' Nom.

Insulation Colors	Black Red
Jacket Color	Red (Other colors available for minimum order)
Legend (Surface Ink Print)	E100315 * 18 AWG 2/C (UL) TYPE FPLR SUN RES -- C(UL) TYPE CMG FT4

On special orders, the customer will accept all factory lengths and +/- 10 percent of total order requested.
The jacket is sequentially footmarked.
The information presented here is, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise.

Customer Name_____ Date Signed _____
Customer Approval _____

Specification Issue Date: February 25, 2000

Toll-Free (800) 323-9355 Wiring The World Fax: (847) 689-1192

PRODUCT DATA SHEET

PART NUMBER: 98804
DESCRIPTION: 18/4 SOLID FPLR/CMG FT4 CABLE
CONSTRUCTION: This cable consists of four bare copper insulated conductors and an overall jacket.
APPROVALS: UL Standard 1424 and 444, NEC Articles 760 and 800.
APPLICATION: Power Limited Fire Alarm Cable and Communications Cable For Riser Applications

Construction Parameters:

Cable Cross-Section

Conductor	18 AWG Bare Copper
Stranding	Solid
Insulation Material	Foam Polypropylene
Insulation Thickness	0.006" Nom.
Insulated Conductor Diameter	0.052" Nom.
Number of Conductors	4
Lay Length	4.00" Nom.
Jacket Material	PVC
Jacket Thickness	0.014" Nom.
Overall Cable Diameter	0.154" Nom.
Approximate Cable Weight	29.8 Lbs/1M' Nom.
Flame Rating	UL 1666 Riser Flame Test

Electrical Properties:

Temperature Rating	-20^{O}C to 60^{O}C
Operating Voltage	300 V RMS Max.
Capacitance Between Conductors @ 1 KHz	25 pF/ft Nom.
Capacitance Between Conductors to Shield @ 1 KHz	-----
DC Resistance per Conductor @ 20^{O}C	6.32 Ohms/1M' Nom.

Insulation Colors	Black Red Green Yellow
Jacket Color	Red (Other colors available for minimum order)
Legend (Surface Ink Print)	E100315 * 18 AWG 4/C (UL) TYPE FPLR SUN RES -- C(UL) TYPE CMG FT4

On special orders, the customer will accept all factory lengths and +/- 10 percent of total order requested.
The jacket is sequentially footmarked.
The information presented here is, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise.

Customer Name_____

Customer Approval _____

Specification Issue Date: April 15,1999

Toll-Free (800) 323-9355 Wiring The World Fax: (847) 689-1192

PRODUCT DATA SHEET

PART NUMBER: 98420
DESCRIPTION: 14/2 SOLID FPLR RED CABLE
CONSTRUCTION: This cable consists of two bare copper insulated conductors and an overall jacket.
APPROVALS: UL Standard 1424, NEC Articles 760.
APPLICATION: Power Limited Fire Alarm Cable For Riser Applications

Construction Parameters:

Cable Cross-Section

Conductor	14 AWG Bare Copper
Stranding	Solid
Insulation Material	Foam Polypropylene
Insulation Thickness	0.010" Nom.
Insulated Conductor Diameter	0.084" Nom.
Number of Conductors	2
Lay Length	3.00" Nom.
Jacket Material	PVC
Jacket Thickness	0.017" Nom.
Overall Cable Diameter	0.202" Nom.
Approximate Cable Weight	35.1 Lbs/1M' Nom.
Flame Rating	UL 1666 Riser Flame Test

Electrical Properties:

Temperature Rating	-20^{O}C to 60^{O}C
Operating Voltage	300 V RMS Max.
Capacitance Between Conductors @ 1 KHz	25 pF/ft Nom.
Capacitance Between Conductors to Shield @ 1 KHz	-----
Inductance	0.07 uH/ft Nom.
DC Resistance per Conductor @ 20^{O}C	2.54 Ohms/1M' Nom.

Insulation Colors	Black Red
Jacket Color	Red (Other colors available for minimum order)
Legend (Surface Ink Print)	E100315 * 14 AWG 2/C (UL) TYPE FPLR SUN RES

On special orders, the customer will accept all factory lengths and +/- 10 percent of total order requested.
The information presented here is, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise.

Customer Name_____ Date Signed _____

Customer Approval _____

Specification Issue Date: August 13, 2001