Froula Alarm Systems, Inc.
861 Industry Drive ♦ Tukwila WA 98188-3411
Phone: 206-575-1962 ♦ Fax: 206-575-8168

May 21, 2025

Fire Alarm System

Submittals

For

GSMOB
Ankle & Foot Clinic Tenant Improvement
Suite 4200
1450 – 5th Street SE
Puyallup, Washington 98372

HOWARD WILLIAMSON, SET
NICET #82289
FIRE ALARM SYSTEMS
LEVEL IV

Froula Alarm Systems, Inc.
861 Industry Drive ♦ Tukwila WA 98188-3411
Phone: 206-575-1962 ♦ Fax: 206-575-8168

GSMOB
Ankle & Foot Tenant Improvement

May 21, 2025

Table of Contents

Fire Alarm System

Manufacturer	Model No.	Description
Farenhyt	IFP-2100ECS	Intelligent Fire Alarm Control Panel - EXISTING
Farenhyt	6815	Signaling Line Circuit Expander
Farenhyt	RPS-1000	Intelligent Booster Power Supply
Farenhyt	ECS-125W	Intelligent 125 Watt Amplifier
Farenhyt	IDP-Photo-W	Addressable Smoke Detector
Farenhyt	B300-6	Detector Base
System Sensor	SCWLED	Multi-Candela Ceiling Mount Strobe
System Sensor	SPSCWLED	Multi-Candela Ceiling Mount Speaker/Strobe
Elk	BT-180	12V 18AH Battery
Coleman	81802	18-2 FPLP Wire
Coleman	81402	14-2 FPLP 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:

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 Fire Solutions
12 Clintonville Road
Northford, CT 06472-1610
203.484.7161
www.farenhyt.com

351600 | E | 04/22

THE FUTURE IS WHAT WE MAKE IT

Honeywell

Honeywell
THE POWER OF CONNECTED

Farenhyt™ Series

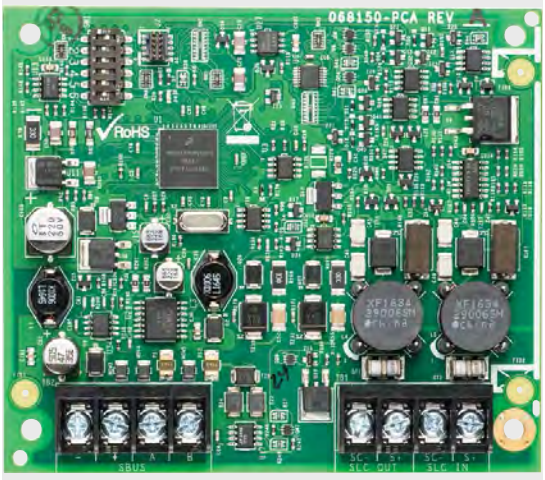
6815

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.

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

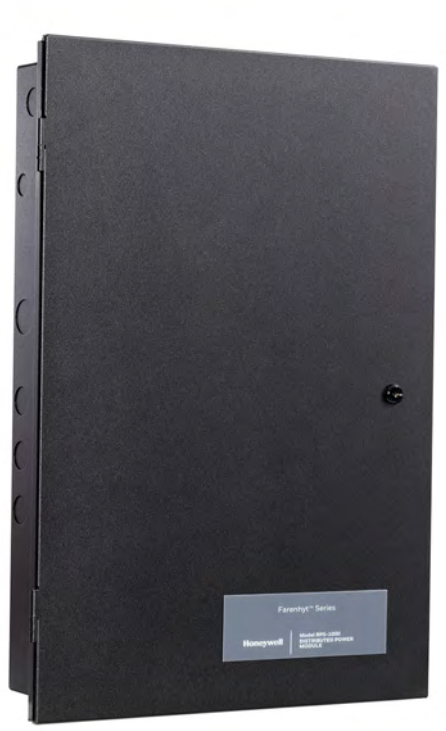
351620 | A | 11/17

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

350070 | M | 04-22

THE FUTURE IS WHAT WE MAKE IT

Honeywell

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

Honeywell Fire Solutions
12 Clintonville Road
Northford, CT 06472-1610
203.484.7161
www.farenhyt.com

350772 | G | 04-22

THE FUTURE IS WHAT WE MAKE IT

Honeywell

Honeywell
THE POWER OF CONNECTED | Farenhyt™ Series

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

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.

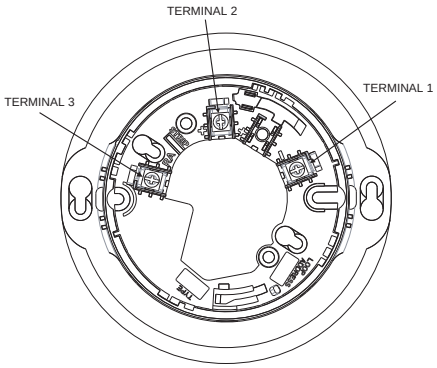
GENERAL DESCRIPTION

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



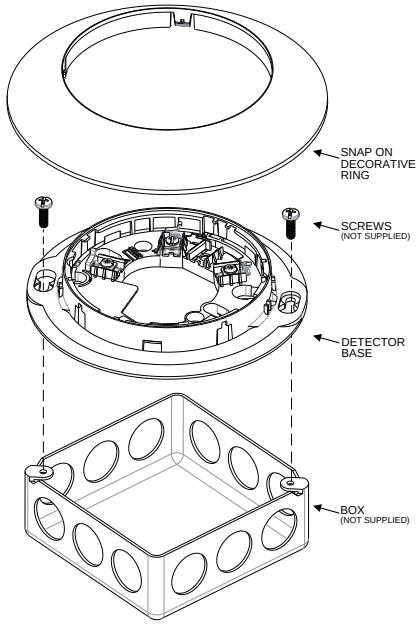
C2252-00

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.

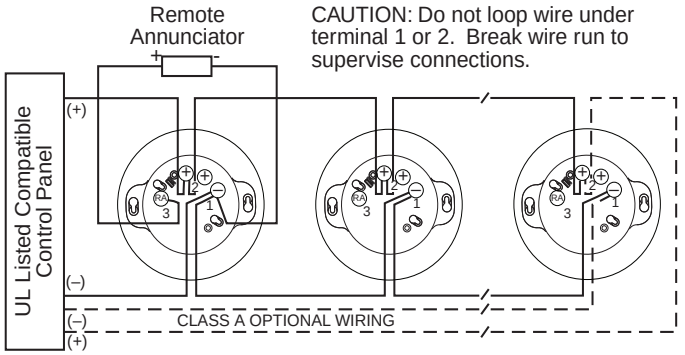
The tamper-resist feature can be defeated by breaking and removing the plastic lever from the base. However, this prevents the feature from being used again.

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.

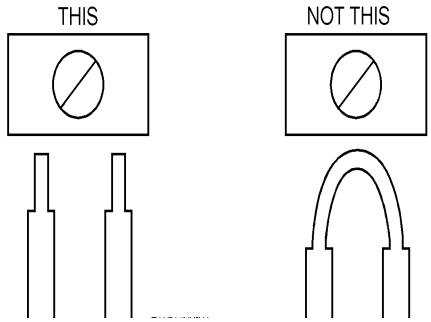
It is not acceptable to have three stripped wires under the same wiring terminal unless they are separated by a washer or equivalent means. The spade lug supplied with the model RA100Z is considered an equivalent means. See Figure 3 for proper installation.

FIGURE 3. TYPICAL WIRING DIAGRAM FOR 2-WIRE LOOP



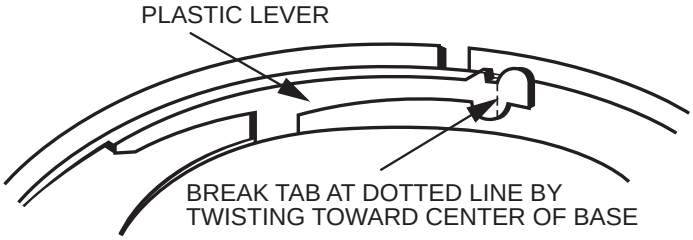
C0129-10

FIGURE 4. TERMINAL WIRE INSTALLATION



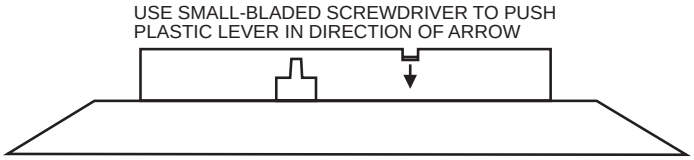
C0473-00

FIGURE 5A. ACTIVATE TAMPER-RESIST FEATURE



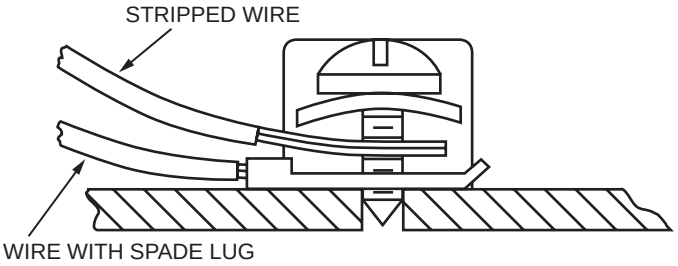
C0130-00

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.

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

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

Features

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

Agency Listings

SIGNALING c UL us LISTED	SIGNALING UL LISTED	ULC LISTED	FM APPROVED	
Horn Strobes and Strobes: S5512, S4011	Horns: S4011	Horns: S4011	3057072 FM23FPUS0195	7300-1653:0525 7135-1653:0503 7135-1653:0526

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

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

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

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

L-Series and L-Series with LED Specifications

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

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

UL/ULC Maxmimum Strobe Current Draw (mA)

	Candela Rating	16–33 Volts Wall	16–33 Volts Ceiling
Candela Range	15	18	18
	30	22	22
	75	70	70
	95	75	75
	110	85	—
	115	—	90
	135	105	—
	150	—	110
	177	—	115
	185	120	—

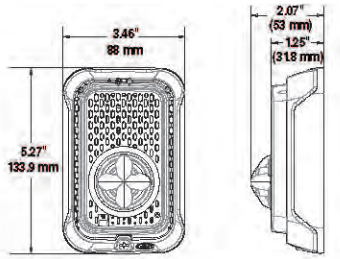
UL/ULC Maxmimum Horn Current Draw (mA RMS)

		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/ULC Maximum Horn Strobe Current Draw (mA) and Sound Output (dBA)

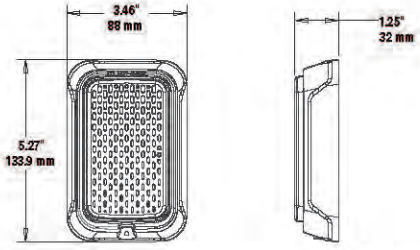
			Current Draw (mA RMS), Horn Strobe, Candela Range (15-185 cd)										Sound Output (dBA)
			16-33 Volts										16-33V
Switch Pos.	Sound Pattern	Volume Setting	15cd	30cd	75cd	95cd	110cd WALL	115cd CEILING	135cd WALL	150cd CEILING	177cd CEILING	185cd WALL	DC
1	Temporal 3	High	35	38	87	92	94	120	189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

L-Series with LED Dimensions: Wall-Mounted Equipment



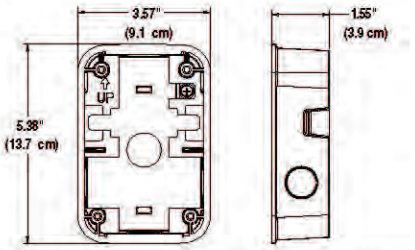
A0617-00

Compact Strobe, Horn Strobe for Wall



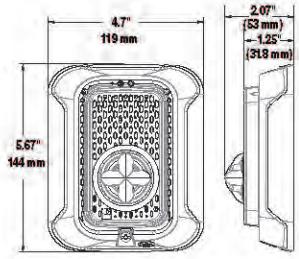
A0547-00

Compact Horn



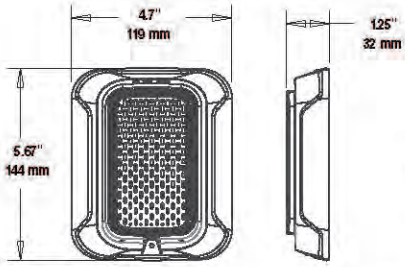
A0557-00

Compact Surface Mount Back Box for Walls (SBBGRL, SBBGWL)



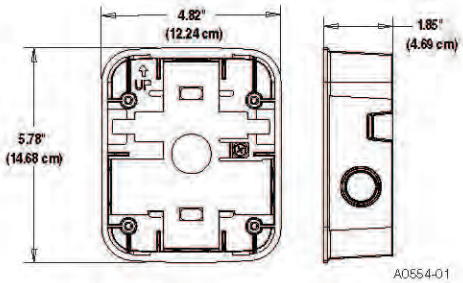
A0613-00

Strobes, Horn Strobes for Walls



A0549-00

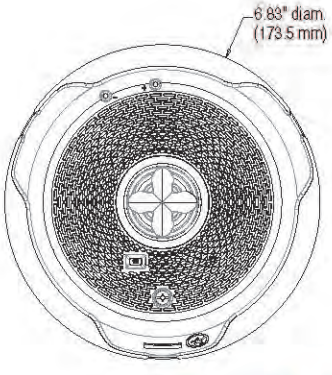
Horn



A0554-01

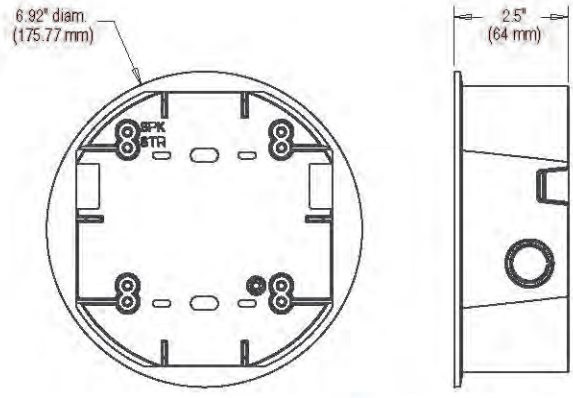
Surface Mount Back Box for Walls (SBBRL/SBBWL)

L-Series with LED Dimensions: Ceiling-Mounted Equipment



A0608-00

Strobes and Horn Strobes for Ceilings



A0546-00

Surface Mount Back Box for Ceilings (SBBCRL, SBCWL)

L-Series with LED: Ordering Information

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

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

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

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

Notes for L-Series Horns:

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

Notes for Bezels:

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

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

3333 Unity Drive, Mississauga, ON L5L 3S6 Canada
Phone: 800-SENSOR2 • Fax: 905-812-0771
www.systemsensor.ca

AVDS916-01 • 10/03/2023

L-Series Speakers and L-Series with LED Speaker Strobes

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

Features

- LED technology provides lower current draw
- Digital Volt Meter (DVM) diagnostic test points for Speaker Strobes
- Common aesthetics across the L-Series platform
- Tamper-resistant construction
- Field-selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, and 185
- Field-selectable candela settings on ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Rotary switches for candela, speaker voltage (25 and 70.7 Vrms) and power settings (¼, ½, 1, and 2 watts)
- Mounting plate provides plug-in design for easier installation and shorting springs to check wiring continuity
- Electrically compatible with legacy SpectrAlert, SpectrAlert Advance and L-series devices at 16-33 VDC
- Synchronization through use of UL approved power supplies that support System Sensor Sync protocol or System Sensor MDL Sync Module
- Speakers and Speaker strobes listed for wall or ceiling use
- No extension ring required
- Speakers offer high fidelity and high volume sound output
- 520 Hz capable with compatible Fire alarm control panel (FACP)

Agency Listings

SIGNALING c UL us LISTED
Speaker-Strobes: S4048

UL LISTED
Speakers: S4048

SIGNALING c UL us LISTED
Speakers: S4048

FM APPROVED
3057383
3057493

7125-1653:0533
7135-1653:0532
7320-1653:0505

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

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

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

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

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

Product Specifications

Physical / Electrical Specifications	
Standard Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Power	¼, ½, 1, 2 Watts
Frequency Range	400 to 4000 Hz
Maximum Supervisory Voltage (Speakers)	50 VDC
Maximum Supervisory Voltage (Strobe)	33 VDC
Strobe Flash Rate	1 Flash Per Second
Nominal Voltages, Speakers	25 Volts or 70.7 Volts (nominal)
Nominal Voltage, Strobe	Regulated 24 VDC
Operating Voltage Range, Strobe	16 to 33 VDC
Input Terminal Wire Gauge	12 to 18 AWG

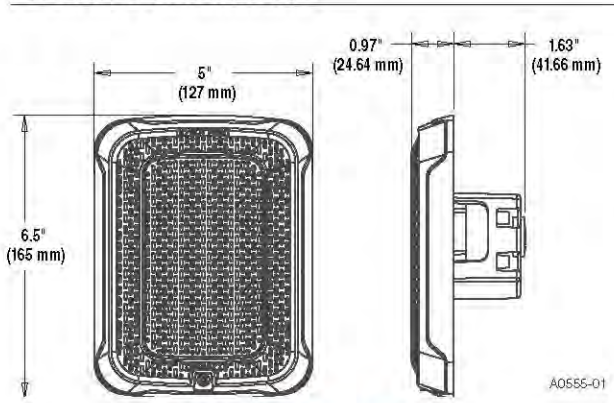
Dimensions	
Wall Speaker Strobes (including lens)	6.5"L x 5.00" W x 2.3" D (165.1mm L x 127mm W x 58.4mm D)
Wall Speaker Strobes (including lens) with SBBSPRL/WL Surface Mount Back Box	6.62" L x 5.12" W x 4.55" D (168.1mm L x 130mm W x 115.5mm D)
Ceiling Speaker Strobes (including lens)	6.8" diameter x 2.33" D (172.7mm x 59.2mm)
Ceiling Speaker Strobes (including lens) with SBBCRL/WL Surface Mount Back Box	6.9" diameter x 4.83" D (176mm x 122.7mm)
Wall SPL Speakers	6.5"L x 5.00" W x 0.97" D (165.1mm L x 127mm W x 23mm D)
Wall Speakers with SBBSPRL/WL Surface Mount Back Box	6.62" L x 5.12" W x 3.2" W (168.1mm x 130mm x 81.2mm)
Ceiling SPC Speakers	6.8" diameter x 1.0" D (173mm x 25mm)
Ceiling Speakers with SBBCRL/WL Surface Mount Back Box	6.9" diameter x 3.5" D (176mm x 89mm)
NOTE: SBBSPRL/WL Surface Mount Back Box intended for speaker strobes and speakers.	

Minimum Speaker Strobe Sound Output				
	¼ W	½ W	1 W	2 W
UL Reverberant (dBA @10 ft)	76	79	82	83
UL Anechoic (dBA @10 ft)	76	79	82	83
Minimum Speaker Only Sound Output				
	¼ W	½ W	1 W	2 W
UL Reverberant (dBA @10 ft)	79	82	85	88
UL Anechoic (dBA @10 ft)	79	82	85	88

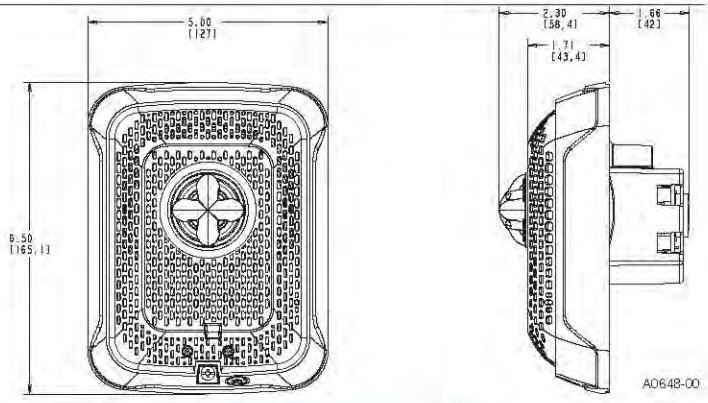
UL / ULC Maximum Strobe Current Draw (mA)

UL/ULC Max Strobe Current Draw (mA RMS)	
Candela Rating	16 to 33 Volts DC
15	18
30	22
75	70
95	75
110	85
115	90
135	105
150	110
177	115
185	120
FCP*	(future)
*FCP Fire Control Panel, future use	

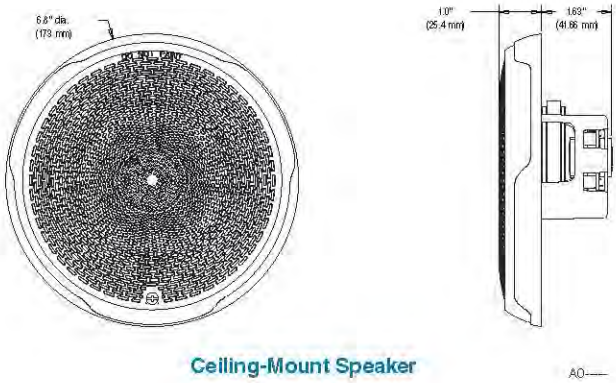
L-Series Dimensions



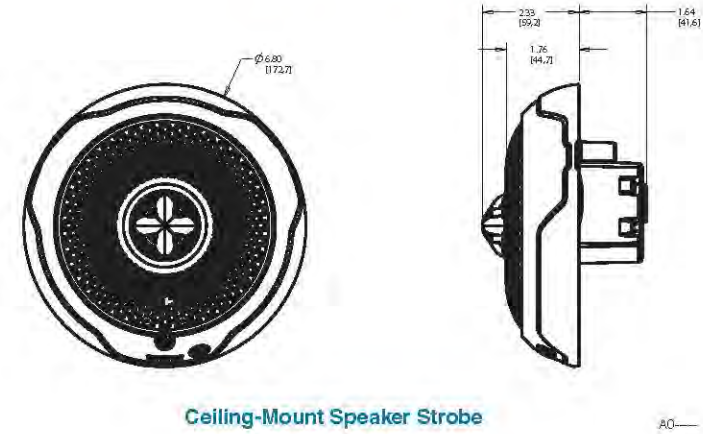
Wall-Mount Speaker



Wall-Mount Speaker Strobe

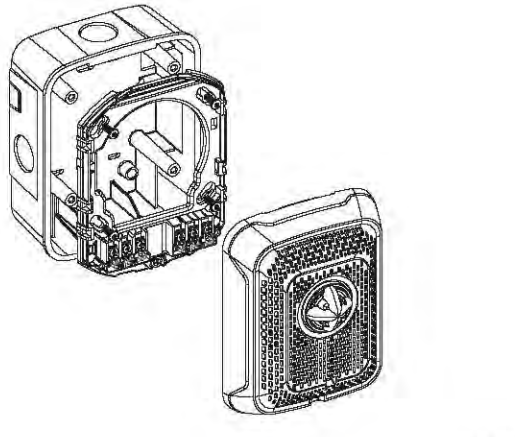


Ceiling-Mount Speaker

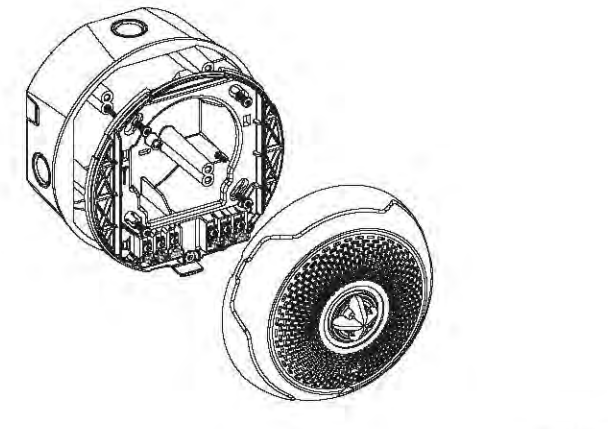


Ceiling-Mount Speaker Strobe

L-Series with LED: Surface Mount Back Box



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



Ceiling-Mount Speaker Strobe with
SBBCRL/SBCWL Surface Mount Back Box

L-Series with LED: Ordering Information

Model	Description
L-Series with LED Speaker Strobes	
SPSCRLED	2-WIRE, SPEAKER STROBE LED RED CEILING
SPSCRLED-B	2-WIRE, SPEAKER STROBE LED RED CEILING BILINGUAL
SPSCRLED-BT	2-WIRE, SPEAKER STROBE LED RED CEILING BILINGUAL WITH TRIM
SPSCWLED	2-WIRE, SPEAKER STROBE LED WHITE CEILING
SPSCWLED-B	2-WIRE, SPEAKER STROBE LED WHITE CEILING BILINGUAL
SPSCWLED-BT	2-WIRE, SPEAKER STROBE LED WHITE CEILING BILINGUAL WITH TRIM
SPSCWLED-T	2-WIRE, SPEAKER STROBE LED WHITE CEILING WITH TRIM
SPSCWLED-TP	2-WIRE, SPEAKER STROBE LED WHITE CEILING PLAIN WITH TRIM
SPSCWLED-CLR-ALERT	2-WIRE, SPEAKER STROBE LED WHITE CEILING ALERT CLEAR LENS
SPSCWLED-P	2-WIRE, SPEAKER STROBE LED WHITE CEILING PLAIN
SPSCWLED-SP	2-WIRE, SPEAKER STROBE LED WHITE CEILING FUEGO
SPSRLED	2-WIRE, SPEAKER STROBE LED RED WALL
SPSRLED-B	2-WIRE, SPEAKER STROBE LED RED WALL BILINGUAL
SPSRLED-P	2-WIRE, SPEAKER STROBE LED RED WALL PLAIN
SPSRLED-SP	2-WIRE, SPEAKER STROBE LED RED WALL FUEGO
SPSWLED	2-WIRE, SPEAKER STROBE LED WHITE WALL
SPSWLED-B	2-WIRE, SPEAKER STROBE LED WHITE WALL BILINGUAL
SPSWLED-ALERT	2-WIRE, SPEAKER STROBE LED WHITE WALL ALERT AMBER LENS
SPSWLED-CLR-ALERT	2-WIRE, SPEAKER STROBE LED WHITE WALL ALERT CLEAR LENS
SPSWLED-P	2-WIRE, SPEAKER STROBE LED WHITE WALL PLAIN
L-Series Speaker	**Description**
SPCRL	2-WIRE, SPEAKER RED CEILING
SPCWL	2-WIRE, SPEAKER WHITE CEILING
SPRL	2-WIRE, SPEAKER RED WALL
SPWL	2-WIRE, SPEAKER WHITE WALL
Accessories	**Description**
SBBSPRL	BACK BOX, WALL, SPEAKER, RED
SBBSPWL	BACK BOX, WALL, SPEAKER, WHITE
SBBCRL	BACK BOX, CEILING, SPEAKER, RED
SBBCWL	BACK BOX, CEILING, SPEAKER, WHITE
TR-2	TRIM RING, WALL, RED
TR-2W	TRIM RING, WALL, WHITE
TRC-2	TRIM RING, CEILING, RED
TRC-2W	TRIM RING, CEILING, WHITE
LED Lenses	**Description**
LENS-A3	Lens LED Amber Wall/Ceiling
LENS-B3	Lens LED Blue Wall/Ceiling
LENS-G3	Lens LED Green Wall/Ceiling
LENS-R3	Lens LED Red Wall/Ceiling
Bezels	**Description**
BZSPR	WALL RED BEZEL KIT
BZSPW	WALL WHITE BEZEL KIT
BZSPRC	CEILING RED BEZEL KIT
BZSPWC	CEILING WHITE BEZEL KIT

Notes for Bezels:

†Each bezel pack ships in a package of 5.

Add one of the following extensions for print/language options: -F (FIRE), -AL (ALERT), -EV (EVAC), -AG (AGENT), -P (Plain), -FR (FEU), -PG (FOGO), -SP (FUEGO), -SPE (FUEGO/FIRE)

Bezels for use only with Speaker Strobes

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

3333 Unity Drive, Mississauga, ON L5L 3S6 Canada
Phone: 800-SENSOR2 • Fax: 905-812-0771
www.systemsensor.ca

AVDS-62174:A • 08/29/2024

POTTER
The Symbol of Protection

ELK SERIES
BATTERIES

UL Recognized

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