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

December 23, 2022

Fire Alarm System

Submittals

For

GSMOB
4th Floor
Orthopedics & Sports Medicine Clinic
Tenant Improvement
1450 – 5th Street SE
Puyallup, Washington 98372

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

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GSMOB
4th Floor
Orthopedics & Sports Medicine Clinic Tenant Improvement

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Fire Alarm System

Manufacturer	Model No.	Description
Potter	**PSN-106**	**Booster Power Supply**
Farenhyt	**IDP-Photo-W**	**Addressable Smoke Detector**
Farenhyt	**B300-6**	**Detector Base**
System Sensor	**SW**	**Multi-Candela Wall Mount Strobe**
System Sensor	**SCWL**	**Multi-Candela Ceiling Mount Strobe**
System Sensor	**SPSW**	**Multi-Candela Wall Mount Speaker/Strobe**
Interstate	**BSL1075**	**12V 7.2AH Battery**
Coleman	**81802**	**18-2 FPLP Wire**
Coleman	**81402**	**14-2 FPLP Wire**

POTTER
The Symbol of Protection

PSN Series
Power Supplies

Features

- PSN-64 has 6 amps regulated with 4 outputs
- PSN-106 has 10 amps regulated with 6 outputs
- May be configured as up to three class “A” Style “Z” notification circuits
- Two Trouble relays (5A at 30VDC) General System Trouble (programmable for AC delay) Low AC Trouble with optional delay settings
- Diagnostic LED’s Status LED’s for Active NAC and NAC Trouble conditions.
- Quadrasync feature synchronizes strobes from AMSECO, Gentex, Cooper-Wheelock and System Sensor.
- Configurable output circuits (DIP switch sets options for each circuit)
- Reference EOL allows 2K – 27K EOL value to be used
- Pass Thru mode allows the outputs to match the input signal from FACP

SIGNALING
c UL us
LISTED

Description

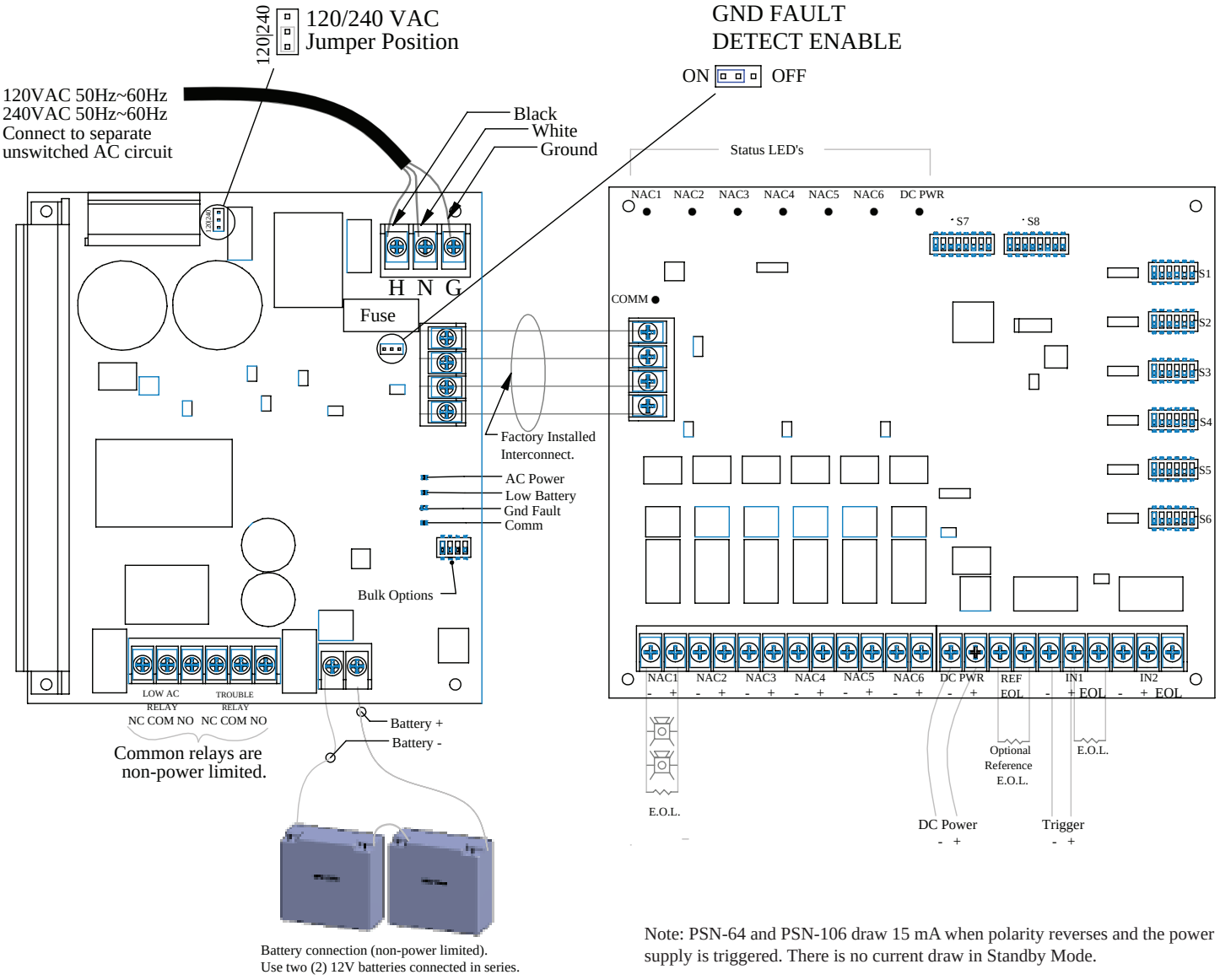
The PSN series of notification power supplies offers reliable notification power with unprecedented versatility. The power supplies offer either 6 or 10 amps of continuous power through 4 or 6 outputs respectively. Each output is rated at 3 amps and it may be used continuously without any derating. The power supply operates on either 120 VAC or 220 VAC power input and has a regulated 24 VDC output. In addition, the power supply can charge up to 55 AH batteries and leads the industry in housing up to 18 AH batteries. The cabinet is constructed out of 18 gauge cold rolled steel and has a durable red powder coat finish. In addition, a key lock is provided for securing the door. Ample electrical knockouts are provided on the sides and the top, allowing the installer options for running wires and maintaining the correct separations.

The power supply offers an industry leading Quadrasync function that allows for multiple strobe circuits of different brands to be synchronized to flash at the same time. The power supply can have four different brands each connected to its own circuit and all the strobes flash together. Each output can independently be configured to provide one of four synchronizations or steady power. This provides unequivocal flexibility in new and retrofit installations. The power supply can be configured to synchronize AMSECO®, Gentex®, Wheelock® and System Sensor® strobe devices. Each output can be configured to the same sync protocol or set independently. In addition, the power supply has an input Pass Thru mode which allows the outputs to follow the input signal from a non-supported synchronization protocol. The power supply will recognize the type of input being supplied and pass this through to the outputs with the same pattern. This input pass through can be selected on each output independently. The power supply contains simple dipswitch programming and LED indicators providing the installer the ability to correct any possible faults. A Trouble Memory is provided to allow an installer to review past troubles and make the necessary repairs. Each output has an LED to pinpoint the exact circuit where a trouble may have occurred. Relays are provided for monitoring the general system and AC failure. Each output and be independently configured for various applications and installations. Each output can be independently configured for Class A or Class B operation, constant power, ANSI Temporal Code 3, Single, Multiple or Combo Inputs or Door Holder Power.

Technical Specifications

Size (H x W x D)	16 1/8” W x 16 ¾” W x 3 ½” D
Enclosure	Eighteen (18) gauge sheet steel with hinged, locked door
Power Input	120VAC @ 60Hz 220/240VAC @ 50Hz 5.1 Amps @ 120 VAC 2.5 Amps @ 240 VAC
Current	75mA Standby & Alarm (no external load)
Input Voltage Trigger	15mA @ 8 – 33 VDC
Terminals	18-12 AWG
Temperature	32° F to 120°F (0°C to 49°C) with a maximum humidity of 93% non-condensing
NAC Output	3 Amp max per NAC, Regulated
Battery Charging	27.3 @ 1A, can support 7 – 55Ah batteries

PSN-106 Wiring Diagram



Battery connection (non-power limited).
Use two (2) 12V batteries connected in series.

Note: PSN-64 and PSN-106 draw 15 mA when polarity reverses and the power supply is triggered. There is no current draw in Standby Mode.

Ordering Information

Model	Description	Stock No.
PSN-106	10 A Power Supply, 6 NAC Circuits, Red Enclosure	3006437
PSN-106B	10 A Power Supply, 6 NAC Circuits, Black Enclosure	3006446
PSN-64	6 A Power Supply, 4 NAC Circuits, Red Enclosure	3006436

Engineering Specifications

The contractor shall supply and install the Potter PSN power supply. The power supply shall operate on either 120 or 240 VAC input. The panel shall be capable of continuous load power without any degradation to the main supply or the distribution board. The cabinet shall be capable of housing up to 18AH batteries and the panel shall be capable of charging up to 55 AH batteries in an external cabinet.

The panel shall have dip switches for simplistic configuration of the system and LEDs to provide visual indication to the installer of the status of the system. The dip switches shall allow for AC power delay selection, Class A/B operation per output, Door Holder Power options, constant auxiliary power, trigger input type, ANSI Code 3 Temporal Code, Pass Thru (input tracking), AMSECO® sync, Gentex® Sync, System Sensor® Sync or Wheelock® sync. The LEDs shall provide indication of communication between the power supply and distribution circuit assemblies. The LEDs shall have distinct flash patterns to provide further indication of the troubles present. The panel shall have selectable Trouble Memory to provide the installer an indication that a past trouble existed on a circuit for diagnostic purposes.

Each output of the power supply shall be capable of 3 amps of continuous power without degradation overtime. The power supply shall provide for multiple circuits of strobe appliances. The power supply shall synchronize the flashes of any of the above listed strobe appliances on a per circuit basis. Up to four different strobe circuits may be connected and all the strobes shall flash in unison as required by UL 864. In addition to this Quadrasync feature, the panel shall allow any of the four above mentioned sync patterns as an input and pass this signal through and synchronize the outputs to match the input flash pattern.

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.

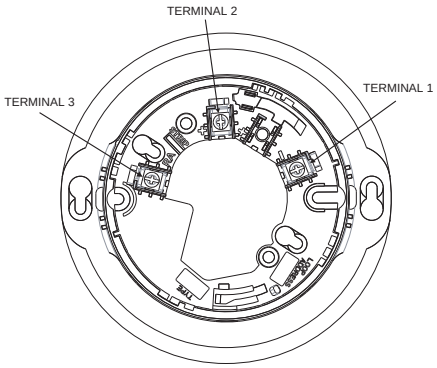
GENERAL DESCRIPTION

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



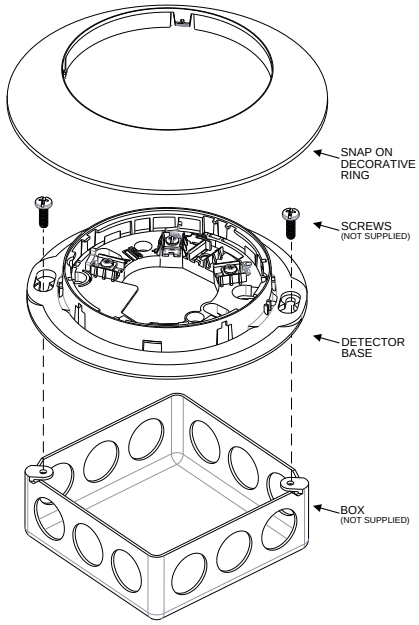
C2252-00

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.

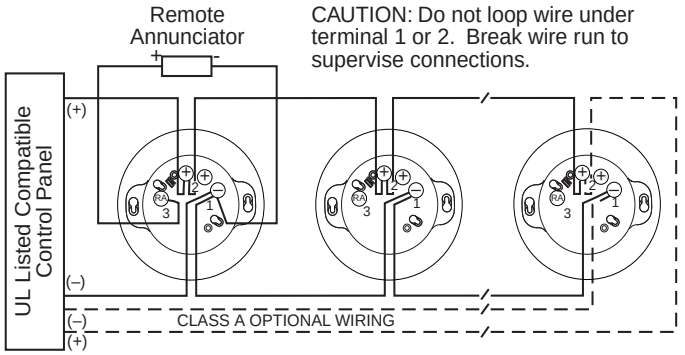
The tamper-resist feature can be defeated by breaking and removing the plastic lever from the base. However, this prevents the feature from being used again.

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

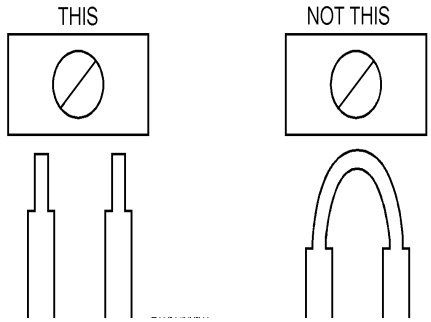


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FIGURE 5A. ACTIVATE TAMPER-RESIST FEATURE

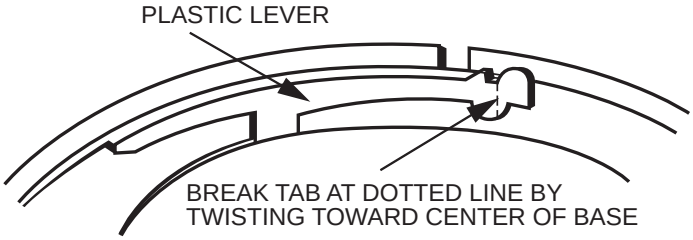

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FIGURE 5B. DETECTOR REMOVAL

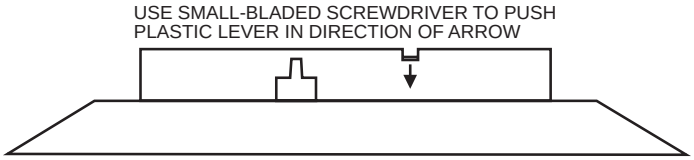

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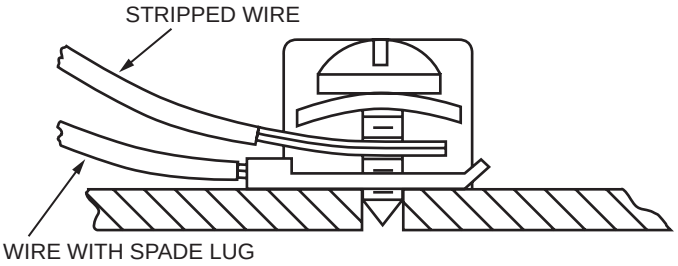
FIGURE 6. CONNECTION TO REMOTE ANNUNCIATOR TERMINAL



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.

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

SPECTRAlert ADVANCE from System Sensor

SpectrAlert® Advance audible visible notification products are rich with features guaranteed to cut installation times and maximize profits.

Features

- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Field-selectable candela settings on wall units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and three volume selections
- Universal mounting plate for wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically Compatible with legacy SpectrAlert devices
- Compatible with MDL3 sync module
- Listed for ceiling or wall mounting

The SpectrAlert Advance series offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry. With white and red plastic housings, wall and ceiling mounting options, and plain and FIRE-printed devices, SpectrAlert Advance can meet virtually any application requirement.

Like the entire SpectrAlert Advance product line, 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, SpectrAlert Advance utilizes a universal mounting plate 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 three volume selections.

Agency Listings

SIGNALING UL LISTED
S4011 (chimes, horn strobes, horns)
S5512 (strobes)

FM APPROVED
3023572

MEA approved
MEA452-05-E

7125-1653:186 (indoor strobes)
7125-1653:188 (horn strobes, chime strobes)
7135-1653:189 (horns, chimes)

SpectrAlert Advance Specifications

Architect/Engineer Specifications

General

SpectrAlert Advance horns, strobes, and horn strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. Two-wire products shall also 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. 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 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 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, 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.

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 are set by a multiple position switch. On four-wire products, the strobe shall be powered independently of the sounder. 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 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/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)
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 × 2.5″D (142 mm L × 119 mm W × 64 mm D)
Horn Dimensions	5.6″L × 4.7″W × 1.3″D (142 mm L × 119 mm W × 33 mm D)
Wall-Mount Trim Ring Dimensions (sold as a 5 pack) (TR-HS)	5.7″L × 4.8″W × 0.35″D (145 mm L × 122 mm W × 9 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

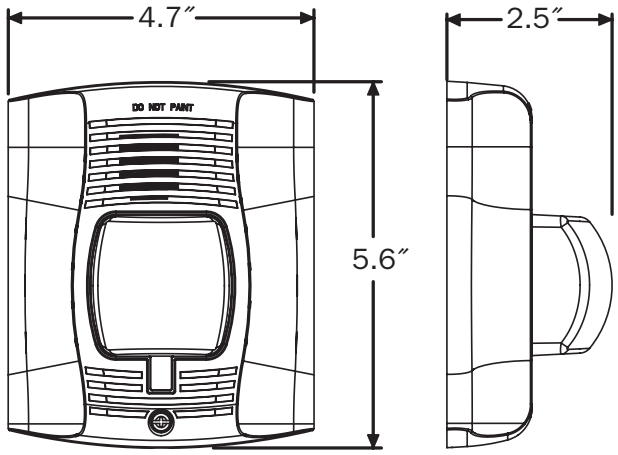
Horn Tones and Sound Output Data

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	75	75	80	80	86	86	96	96
3	Temporal	Low	71	71	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	73	74	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	74	75	81	81	88	85	96	92

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

SpectrAlert Advance Dimensions



Wall-mount horn strobes

SpectrAlert Advance Ordering Information

Model	Description
Wall Horn Strobes	
P2R	2-Wire Horn Strobe, Standard cd, Red
P2R-P	2-Wire Horn Strobe, Standard cd, Red, Plain
P2R-SP	2-Wire Horn Strobe, Standard cd, Red, “FUEGO”
P2RH	2-Wire Horn Strobe, High cd, Red
P2RH-P	2-Wire Horn Strobe, High cd, Red, Plain
P2W	2-Wire Horn Strobe, Standard cd, White
P2W-P	2-Wire Horn Strobe, Standard cd, White, Plain
P2WH	2-Wire Horn Strobe, High cd, White
P2WH-P	2-Wire Horn Strobe, High cd, White, Plain
P4R	4-Wire Horn Strobe, Standard cd, Red
P4R-P	4-Wire Horn Strobe, Standard cd, Red, Plain
P4RH	4-Wire Horn Strobe, High cd, Red
P4W	4-Wire Horn Strobe, Standard cd, White
Wall Strobes	
SR	Strobe, Standard cd, Red
SR-P	Strobe, Standard cd, Red, Plain
SR-SP	Strobe, Standard cd, Red, “FUEGO”

Model	Description
Wall Strobes (cont.)	
SRH	Strobe, High cd, Red
SRH-P	Strobe, High cd, Red, Plain
SRH-SP	Strobe, High cd, Red, “FUEGO”
SW	Strobe, Standard cd, White
SW-P	Strobe, Standard cd, White, Plain
SWH	Strobe, High cd, White
SWH-P	Strobe, High cd, White, Plain
Horns	
HR	Horn, Red
HW	Horn, White
Accessories	
TR-HS	Trim Ring, Wall, Red
SBBR	Indoor Surface Mount Back Box, Red
SBBW	Indoor 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
“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.

SYSTEM SENSOR®
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www.systemsensor.com

AVDS10201 • 1/14

Indoor Selectable-Output Strobes and Horn Strobes for Ceiling 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

- 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 ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Universal mounting plate for ceiling units
- Mounting plate shorting spring feature checks wiring continuity before device installation
- Electrically Compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- Listed for ceiling mounting only

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, wall and ceiling mounting options, System Sensor L-Series can meet virtually any application requirement.

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 further 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.

Agency Listings

SIGNALING UL LISTED	FM APPROVED	
S5512 S4011	FM approved except for ALERT models 3057383	7125-1653:0504 7135-1653:0503

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 double-gang back box. Two-wire products shall also 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. 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 L-Series 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/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 VDC 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)	8.5 to 17.5V (12 V nominal) or 16.5 to 33 V (24V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Ceiling-Mount Dimensions (including lens)	6.8" diameter × 2.5" high (173 mm diameter × 64 mm high)
Ceiling-Mount Surface Mount Back Box Skirt Dimensions (SBBCRL, SBBCWL)	6.9" diameter x 3.4" high (175 mm diameter x 86 mm high)

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 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	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. 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), Ceiling Horn Strobe, Candela Range (15–177 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15cd	30cd	15cd	30cd	75cd	95cd	115cd	150cd	177cd
Temporal High	103	167	71	90	143	165	187	217	254
Temporal Low	96	165	54	71	137	161	185	211	249
Non-Temporal High	106	173	71	90	141	165	187	230	273
Non-Temportal Low	95	166	54	71	124	161	170	216	258
3.1K Temporal High	111	164	69	94	147	163	184	229	257
3.1K Temporal Low	103	163	54	88	143	155	185	212	252
3.1K Non-Temporal High	111	172	69	94	144	164	202	229	271
3.1K Non-Temporal Low	103	169	54	88	131	155	187	217	259

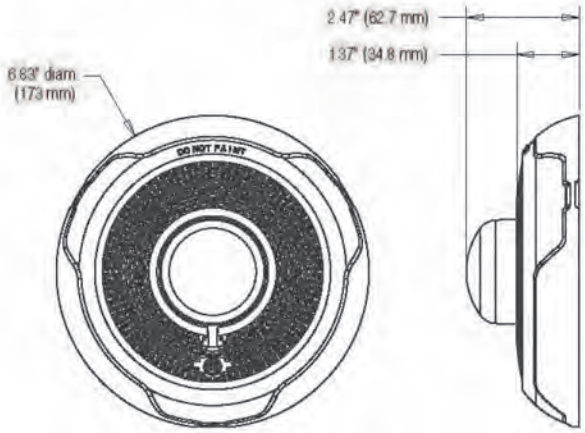
	16–33 Volts						
FWR Input	15cd	30cd	75cd	95cd	115cd	150cd	177cd
Temporal High	107	135	179	198	223	254	286
Temporal Low	78	101	151	172	199	229	262
Non-Temporal High	107	135	179	198	223	254	286
Non-Temportal Low	78	101	151	172	199	229	262
3.1K Temporal High	108	135	179	200	225	255	289
3.1K Temporal Low	79	101	150	171	196	229	260
3.1K Non-Temporal High	108	135	179	200	225	255	289
3.1K Non-Temporal Low	79	101	150	171	196	229	260

Horn Strobe Tones and Sound Output Data

Horn Strobe Output (dBA)

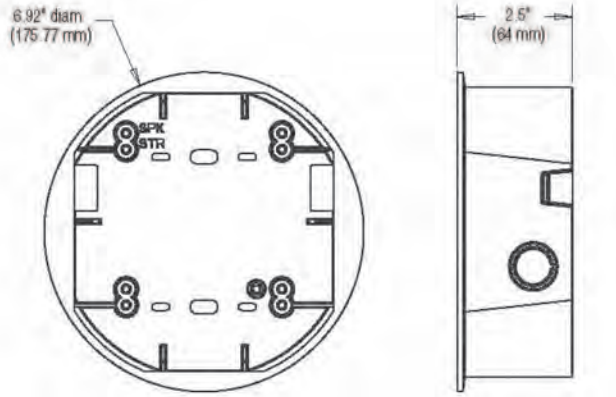
			8–17.5 Volts	16–33 Volts	
Switch Position	Sound Pattern	dB	DC	DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low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

L-Series Dimensions



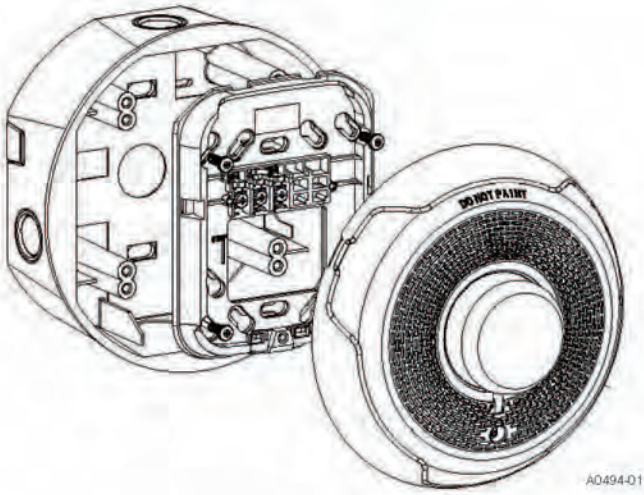
A0545-00

Ceiling-Mount Horn Strobes



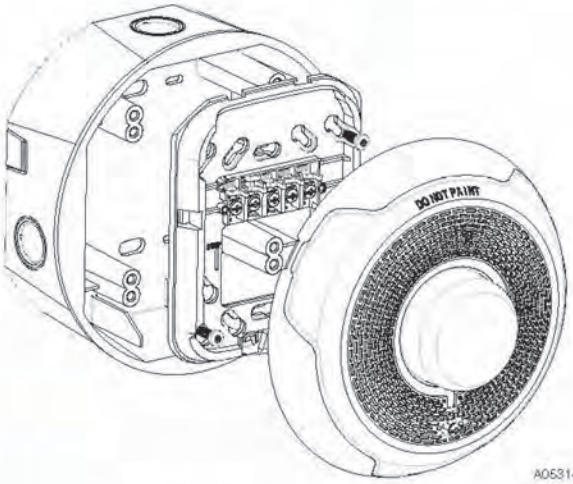
A0546-00

Ceiling Surface Mount Back Box



A0494-01

2-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Back Box



A0531-01

4-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Back Box

L-Series Ordering Information

Model	Description
Ceiling Horn Strobes	
PC2RL	2-Wire, Horn Strobe, Red
PC2WL	2-Wire, Horn Strobe, White
PC4RL	4-Wire, Horn Strobe, Red
PC4WL	4-Wire, Horn Strobe, White

Model	Description
Ceiling Strobes	
SCRL	Strobe, Red
SCWL	Strobe, White
SCWL-CLR-ALERT	Strobe, White, ALERT
Accessories	
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

For a ceiling-listed horn-only device, see AVDS865 "Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications".

SYSTEM SENSOR

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AVDS868-02 • 12/01/2017

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.

SPECTRAlert ADVANCE from System Sensor

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
- Optional tamper resistant Torx head screw included
- 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. Rotate 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 × 21⁄8-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, 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 nine and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 17 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

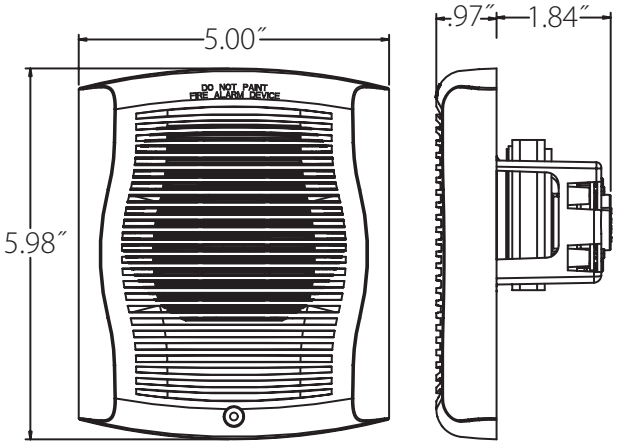
The module shall be a System Sensor Sync•Circuit model MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize
SpectrAlert strobes at 1 Hz. The module shall mount to a 411⁄16 × 411⁄16 × 21⁄8-inch back box. The module shall also control two Style Y (class B) 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 Specifications	
Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Dimensions, Wall-Mount	
SPS Speaker Strobe	6.0 in L × 5.0 in W × 4.7 in D (including lens and speaker)
SPSV Speaker Strobe	6.0 in L × 5.0 in W × 4.9 in D (including lens and speaker)
SP Speaker	6.0 in L × 5.0 in W × 2.8 in D
SPSV Speaker	6.0 in L × 5.0 in W × 2.9 in D
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 MDL Sync Module	9 to 17.5 V (12 V nominal) or 17 to 33V (24 V nominal)
Frequency Range	400 to 4000 Hz
Power	¼, ½, 1, 2 watts

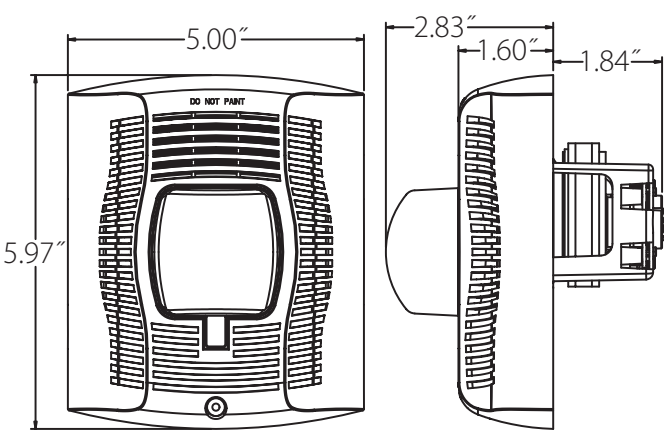
UL Current Draw Data

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

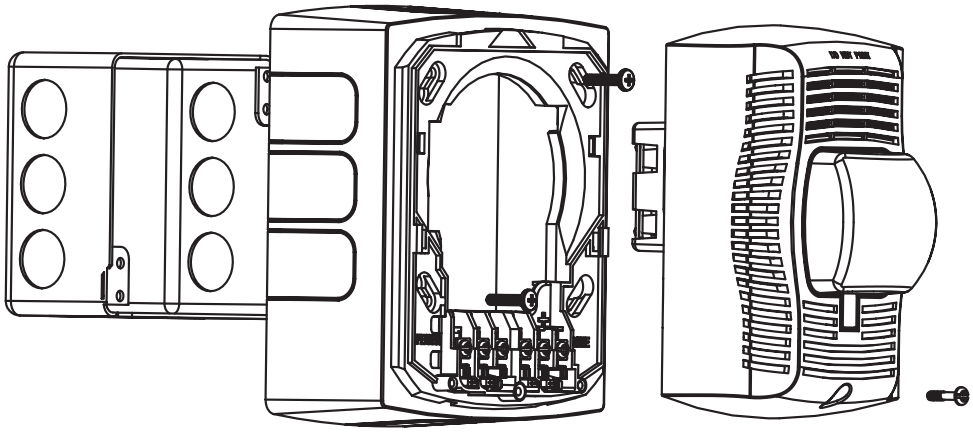


Wall-Mount SP Speaker



Wall-Mount SPS Speaker Strobe

Surface Mounting



Wall-Mount Speaker Strobe with SPBBS 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-ALERT	—	Speaker Strobe, Standard cd, Amber Lens
SPSW-CLR-ALERT	—	Speaker Strobe, Standard cd, Clear Lens
SPSWH*	SPSRH*	Speaker Strobe, High cd
SPSWV*	SPSRV*	Speaker Strobe, Standard cd, High dB
Accessories		
White	**Red**	**Description**
RFPW	RFP	7 in × 9.5 in Retrofit Plate
SPBBSW	SPBBS	Wall Mount Back Box Skirt
TRW	TR	Wall Mount Trim Ring

Notes:

* Add -P to model number for plain housing (no “FIRE” marking on the cover) e.g. SPSW-P

‡ “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.

SYSTEM SENSOR®

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

AVDS00801 • 3/12

Specification Sheet

Sealed Lead-Acid Batteries

BSL1075

(PC1270)

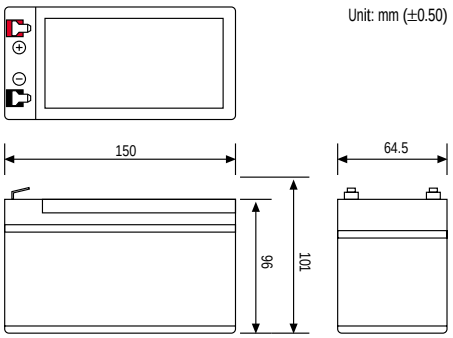
Capacity Specifications

Cut-off Voltage	20 Hr Rate (0.36 A)		7.2 Ah
1.75 v/c @ 25°C	10 Hr Rate (0.65 A)		6.5 Ah
1.70 v/c	5 Hr Rate (1.14 A)		5.7 Ah
1.55 v/c	1 Hr Rate (4.1 A)		4.1 Ah
		Bloc	Per Cell
Charge Voltage *(constant)*	Float	13.5~13.8	2.25~2.30
	Cycle	14.4~14.7	2.40~2.45
Discharge Current Amps *(5 seconds maximum)*	80		
Discharge Current Amps *(maximum continuous)*	50		
Max. Charge Current		2.16 A	
Approx Final Charge Current *(2.25 v/c Float)*		0.014 (14 mA)	
Approx Final Charge Current *(2.45 v/c Cycle)*		0.07 (70 mA)	
Terminal Type		Type A / (G optional)	
Self Discharge		9 months @ 21°C	
Case Material		ABS – Gray* or Black	

Due to changes in the manufacturing processes, specifications may change without notice.
*Gray option is Flame Retardant ABS.

Technical Specifications

Nominal Voltage		12V
Nominal Capacity		7.2 Ah (20 Hr Rate)
Dimensions	Length:	150 mm
	Width:	64.5 mm
	Height:	95 mm
Total Height/Terminal:		101 mm
Weight		Approx 2.75 Kg



Actual Wattage / Ampere Capacity at Various Discharge Times (Volt per Cell @ 25°C)

Cut Off Voltage \ Time		5 Min.	10 min.	15 min.	30 min.	45 min.	60 min.
1.75 v/c	W	45.4	30.77	23.28	12.9	10.31	8.07
25°C	A	25.94	17.58	13.3	7.37	5.89	4.61
1.67 v/c	W	47.76	31.4	23.9	13.09	10.04	8.07
25°C	A	28.6	18.8	14.31	7.84	6.01	4.83
1.60 v/c	W	49.28	31.52	24.0	13.3	9.3	7.79
25°C	A	30.8	19.7	15.0	8.31	5.81	4.87

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