SUBMITTAL SHEET

Oelrich Construction, Inc.
22.01.024. - Palms Medical Group Lake City

Project: 22.01.024.
Palms Medical Group Lake City

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Package: Electrical Safety & Security
Date: 8/8/2022 UTC

Submittal Title: Fire Alarm System - Product Data
Submittal Detail:
Response Due By: 8/10/2022 UTC

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Contractor's Stamp

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Architect's Stamp

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Date: 08.03.2022

Spec Section: 28 0000.2 - Fire Alarm System - Product Data

Architect: N/A

Engineer: N/A

Subcontractor: Gator Fire

Supplier: N/A
Manufacturer: Honeywell

Submittal

☑ Approved
☐ Approved as noted
☐ Rejected- Resubmit

This document has been checked for general design construction,size, and conformity to contract documents. The subcontractor/ supplier providing these documents shall verify all dimensions, quantities, and capacities. Approval does not relieve the subcontractor/ supplier from compliance with contract documents.

By: TCS Date: 08.03.2022

ANN-80

80-Character Serial LCD Annunciator

FIRE·LITE ALARMS by Honeywell

General

The ANN-80 annunciator is a compact, backlit, 80-character LCD fire annunciator that mimics the Fire Alarm Control Panel (FACP) display. It provides system status indicators for AC Power, Alarm, Trouble, Supervisory, and Alarm Silenced conditions. The ANN-80 and the FACP communicate over a two-wire serial interface employing the ANN-Bus communication format. Connected devices are powered, via two additional wires, by either the host FACP or a remote UL-listed, filtered power supply. The ANN-80 is red; for white, order ANN-80-W.

The ANN-80 displays English-language text of system point information including device type, zone, independent point alarm, trouble or supervisory status, as well as any custom alpha labels programmed into the control panel. It includes control switches for remote control of critical system functions. (A keyswitch prevents unauthorized operation of the control switches.)

Up to eight ANN-80s may be connected to the ANN-Bus of each FACP. No programming is required, which saves time during system commissioning.

Features

- Listed to UL Standard 864, 9th Edition
- Backlit 80-character LCD display (20 characters x 4 lines)
- Mimics all display information from the host panel
- Control switches for System Acknowledge, Signal Silence, Drill, and Reset
- Control switches can be independently enabled or disabled at the FACP
- Keyswitch enables/disables control switches and mechanically locks annunciator enclosure
- Keyswitch can be enabled or disabled at the FACP
- Enclosure supervised for tamper
- System status LEDs for AC Power, Alarm, Trouble, Supervisory, and Alarm Silence
- Local sounder can be enabled or disabled at the FACP
- ANN-80 connects to the ANN-Bus terminal on the FACP and requires minimal panel programming
- Displays device type identifiers, individual point alarm, trouble, supervisory, zone, and custom alpha labels
- Time-and date display field
- Surface mount directly to wall or to single, double, or 4" square electrical box
- Semi-flush mount to single, double, or 4" square electrical box. Use ANN-SB80KIT for angled view mounting
- Can be remotely located up to 6,000 feet (1,800 m) from the panel
- Backlight turns off during AC loss to conserve battery power but will turn back on if an alarm condition occurs
- May be powered by 24 VDC from the host FACP or by remote power supply (requires 24 VDC)
- Up to eight ANN-80s can be connected on the ANN-Bus

Controls and Indicators

- AC Power
- Alarm
- Trouble

- Supervisory
- Alarm Silenced

Specifications

- **Operating voltage range:** 18 VDC to 28 VDC
- **Current consumption** @ 24 VDC nominal (filtered and non-resettable): 40 mA maximum
- **Ambient temperature:** 32°F to 120°F (0°C to 49°C)
- **Relative humidity:** 93% ± 2% RH (non-condensing) at 32°C ± 2°C (90°F ± 3°F)
- 5.375" (13.65 cm.) high x 6.875" (17.46 cm.) wide x 1.375" (3.49 cm.) deep
- For use indoors in a dry location
- All connections are power-limited and supervised

The ANN-Bus

POWERING THE DEVICES ON THE ANN-BUS FROM AUXILIARY POWER SUPPLY

The ANN-Bus can be powered by an auxiliary power supply when the maximum number of ANN-Bus devices exceeds the ANN-Bus power requirements. See the FACP manual for more information.

ANN-BUS DEVICE ADDRESSING

Each ANN-Bus device requires a unique address (ID Number) in order to communicate with the FACP. A maximum of 8 devices can be connected to the FACP ANN-Bus communication circuit. See the FACP manual for more information.

WIRE REQUIREMENTS: COMMUNICATIONS CIRCUIT

The ANN-80 connects to the FACP ANN-Bus communications circuit. To determine the type of wire and the maximum wiring distance that can be used with FACP ANN-Bus accessory modules, it is necessary to calculate the total worst case current draw for all modules on a single 4-conductor bus. The total worst case current draw is calculated by adding the individual worst case currents for each module.

NOTE: *For total worst case current draw on a single ANN-Bus refer to appropriate FACP manual.*

WIRE REQUIREMENTS: POWER CIRCUIT

- 14 to 18 AWG (0.75 - 2.08 mm^2) wire for 24 VDC power circuit is acceptable. Power wire distance limitation is set by 1.2 volt maximum line drop form source to end of circuit.
- All connections are power-limited and supervised.
- A maximum of eight ANN-80 modules may be connected to this circuit.

Ordering Options

ANN-80: Red 80 character LCD Annunciator.

ANN-80-W: White, 80 character LCD Annunciator.

ANN-SB80KIT-R: Red surface mount backbox with angled wedge.

ANN-SB80KIT-W: White surface mount backbox with angled wedge.

Agency Listings and Approvals

The listings and approvals below apply to the ANN-80. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL:** S2424
- **FM approved**
- **CSFM:** 7120-0075:0211
- **MEA:** 442-06-E

BG-12LX

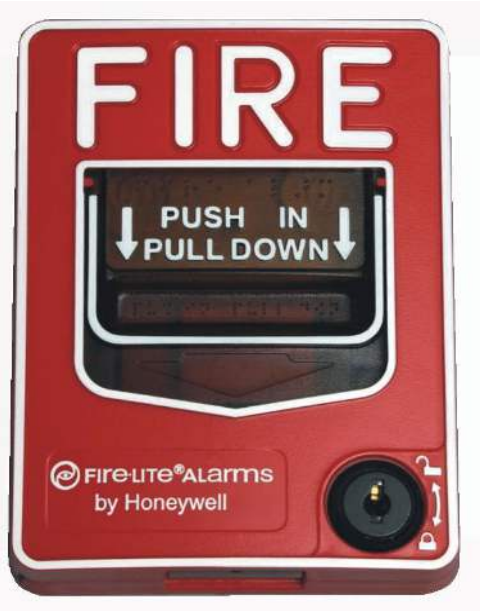
Addressable Manual Pull Station

FIRE·LITE ALARMS by Honeywell

Addressable Devices

General

The Fire·Lite BG-12LX is a state-of-the-art, dual-action (i.e., requires two motions to activate the station) pull station that includes an addressable interface (mounted inside) for Fire·Lite's addressable fire alarm control panels (FACPs) Because the BG-12LX is addressable, the control panel can display the exact location of the activated manual station. This leads fire personnel quickly to the location of the alarm.



FLPullStation.jpg

Features

- Maintenance personnel can open station for inspection and address setting without causing an alarm condition.
- Built-in bicolor LED, which is visible through the handle of the station, flashes in normal operation and latches steady red when in alarm.
- Handle latches in down position and the word "ACTIVATED" appears to clearly indicate the station has been operated.
- Captive screw terminals wire-ready for easy connection to SLC loop (accepts up to 12 AWG/3.25 mm² wire).
- Can be surface mounted (with SB-10 or SB-I/O) or semi-flush mounted. Semi-flush mount to a standard single-gang, double-gang, or 4" (10.16 cm) square electrical box.
- Smooth dual-action design.
- Meets ADAAG controls and operating mechanisms guidelines (Section 4.1.3[13]); meets ADA requirement for 5 lb. maximum activation force.
- Highly visible.
- Attractive shape and textured finish.
- Key reset.
- Includes Braille text on station handle.
- Optional trim ring (BG12TR).
- Meets UL 38, Standard for Manually Actuated Signaling Boxes.

Construction

Shell, door, and handle are molded of durable polycarbonate material with a textured finish.

Specifications

- **Shipping Weight:** 9.6 oz. (272.15 g)
- **Normal operating voltage:** 24 VDC.
- **Maximum SLC loop voltage:** 28.0 VDC.
- **Maximum SLC standby current:** 375 µA.
- **Maximum SLC alarm current:** 5 mA.
- **Temperature Range:** 32°F to 120°F (0°C to 49°C)
- **Relative Humidity:** 10% to 93% (noncondensing)
- **For use indoors in a dry location**

Installation

The BG-12LX will mount semi-flush into a single-gang, double-gang, or standard 4" (10.16 cm) square electrical outlet box, or will surface mount to the model SB-10 or SB-I/O surface backbox. If the BG-12LX is being semi-flush mounted, then the optional trim ring (BG12TR) may be used. The BG12TR is usually needed for semi-flush mounting with 4" (10.16 cm) or double-gang boxes (not with single-gang boxes).

Operation

Pushing in, then pulling down on the handle causes it to latch in the down/activated position. Once latched, the word "ACTIVATED" (in bright yellow) appears at the top of the handle, while a portion of the handle protrudes from the bottom of the station. To reset the station, simply unlock the station with the key and pull the door open. This action resets the handle; closing the door automatically resets the switch.

Each manual station, on command from the control panel, sends data to the panel representing the state of the manual switch. Two rotary decimal switches allow address settings (1 – 159 with Breakaway Tab removed for MS-9600 Series, 1 – 99 and MS-9200UDLS, 1 – 50 for MS-9050UD).

Architectural/Engineering Specifications

Manual Fire Alarm Stations shall be non-coded, with a key-operated reset lock in order that they may be tested, and so designed that after actual Emergency Operation, they cannot be restored to normal except by use of a key. An operated station shall automatically condition itself so as to be visually detected as activated. Manual stations shall be constructed of red-colored polycarbonate material with clearly visible operating instructions provided on the cover. The word FIRE shall appear on the front of the stations in white letters, 1.00 inches (2.54 cm) or larger. Stations shall be suitable for surface mounting on matching backbox SB-10 or SB-I/O; or semi-flush mounting on a standard single-gang, double-gang, or 4" (10.16 cm) square electrical box, and shall be installed

within the limits defined by the Americans with Disabilities Act (ADA) or per national/local requirements. Manual Stations shall be Underwriters Laboratories listed.

Manual stations shall connect with two wires to one of the control panel SLC loops. The manual station shall, on command from the control panel, send data to the panel representing the state of the manual switch. Manual stations shall provide address setting by use of rotary decimal switches.

Product Line Information

BG-12LX: Dual-action addressable pull station. Includes key locking feature. (Listed for Canadian and non-Canadian applications.)

SB-10: Surface backbox; metal.

SB-I/O: Surface backbox; plastic.

BG12TR: Optional trim ring.

17003: Keys, set of two.

Agency Listings and Approvals

In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL/ULC Listed:** S711 (listed for Canadian and non-Canadian applications).
- **MEA:** 67-02-E.
- **CSFM:** 7150-0075:0184.
- **FM Approved.**

Patented: U.S. Patent No. D428,351; 6,380,846; 6,314,772; 6,632,108.

CRF-300 Relay Control Module
Installation Instructions

Specifications

Normal Operating Voltage:	15 to 32 VDC
EOL Resistance:	Not used
Temperature Range:	32˚F to 120˚F (0˚C to 49˚C)
Humidity:	10% to 93% Noncondensing
Dimensions:	4 1/2" H x 4" W x 1 1/4" D (Mounts to a 4" square by 2 1/8" deep box.)
Accessories:	SMB500 Electrical Box; CB500 Barrier

Before Installing

This information is included as a quick reference installation guide. Refer to the control panel installation manual for detailed system information. If the modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect power to the control panel before installing the modules.

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

General Description

The CRF-300 Relay Control Module is intended for use in addressable, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. It allows a compatible control panel to switch discrete contacts by code command. The relay contains two isolated sets of Form-C contacts, which operate as a DPDT switch and are rated in accordance with the table in the manual. Circuit connections to the relay contacts are not supervised by the module. The module also has a panel controlled LED indicator. This module can be used to replace an C304 module that has been configured for Form-C operation.

Compatibility Requirements

To ensure proper operation, these modules shall be connected to listed compatible system control panels only.

Mounting

The CRF-300 mounts directly to 4" square electrical boxes (see Figure 2A). The box must have a minimum depth of 2 1/8". Surface mounted electrical boxes (SMB500) are available.

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations. When using control modules in nonpower limited applications, the CB500 Module Barrier must be used to meet UL requirements for the separation of power-limited and nonpower-limited terminals and wiring. The barrier must be inserted into a 4"x4"x2 1/8" junction box, and the control module must be placed into the barrier and attached to the junction box (Figure 2A). The power-limited wiring must be placed into the isolated quadrant of the module barrier (Figure 2B).

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.
2. Set the address on the module per job drawings.

NOTE: Some panels support extended addressing. In order to set the module above address 99 on compatible systems, carefully remove the stop on the upper rotary switch with thumb in the direction shown in Figure 1.

3. Secure module to electrical box (supplied by installer), as shown in Figure 2A.

Figure 1. Controls and indicators:

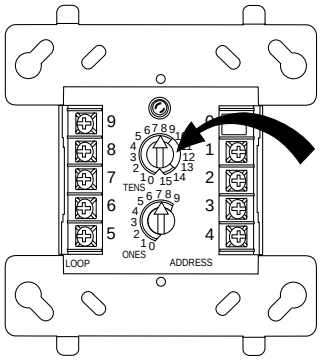


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Figure 2A. Module mounting with barrier:

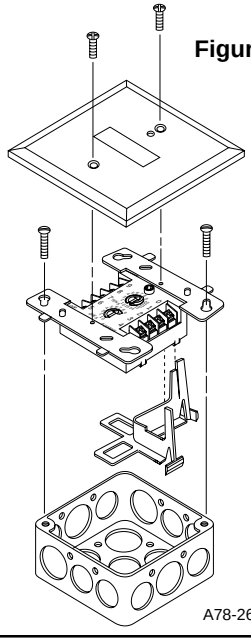

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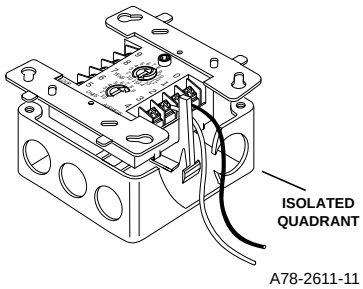
Figure 2B:



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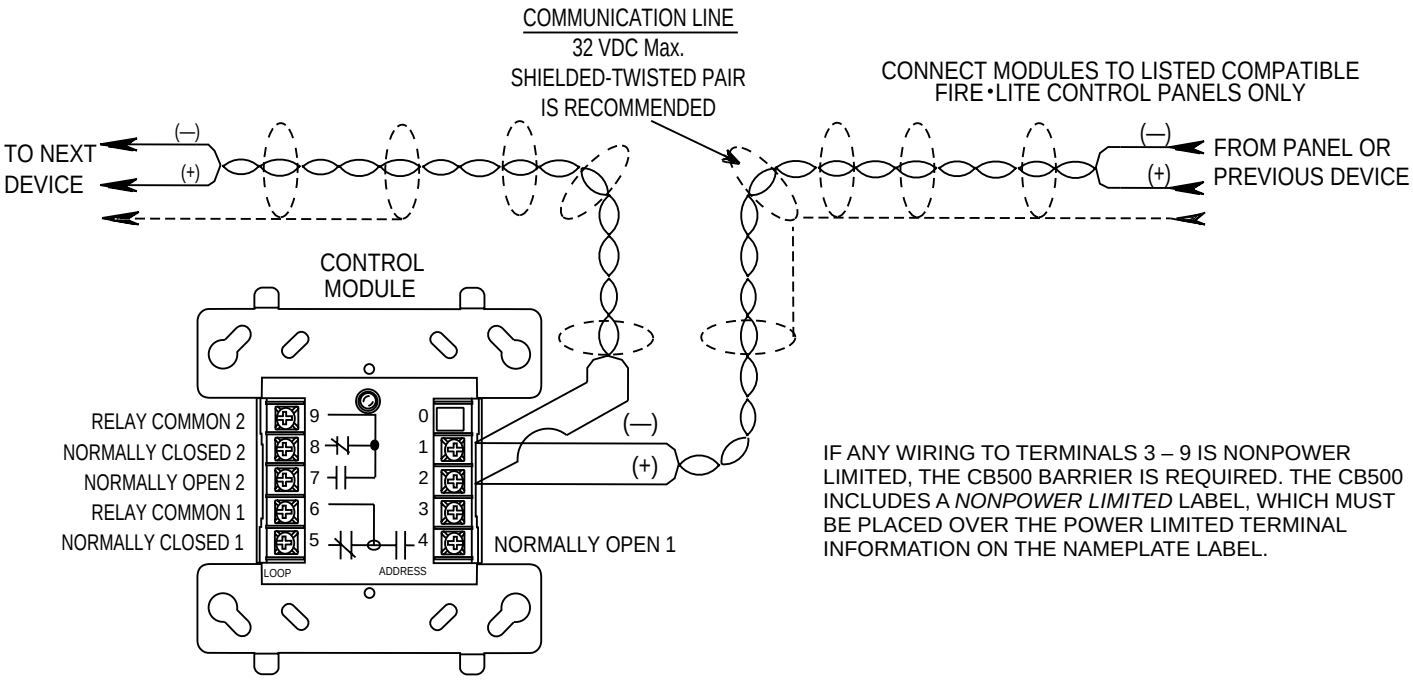
Relay Contact Ratings:

CURRENT RATING	MAXIMUM VOLTAGE	LOAD DESCRIPTION	APPLICATION
3 A	30 VDC	Resistive	Non Coded
2 A	30 VDC	Resistive	Coded
.9 A	110 VDC	Resistive	Non Coded
.9 A	125 VAC	Resistive	Non Coded
.5 A	30 VDC	Inductive (L/R=5ms)	Coded
1 A	30 VDC	Inductive (L/R=2ms)	Coded
.5 A	125 VAC	Inductive (PF=.35)	Non Coded
.7 A	75 VAC	Inductive (PF=.35)	Non Coded

⚠WARNING

All relay switch contacts are shipped as shown in Figure 3, but may have transferred during shipping. To ensure that the switch contacts are in their correct state, modules must be made to communicate with the panel before connecting circuits controlled by the module.

Figure 3. Relay module wiring diagram:



INSTALLATION AND MAINTENANCE INSTRUCTIONS

Innovair flex™

FIRE·LITE® ALARMS by Honeywell

One FireLite Place
Northford, CT 06472
Phone: 203.484.7161

I56-3255-003R

D355PL Duct Smoke Detector

SPECIFICATIONS

Operating Temperature:	–4° to 158°F (–20° to 70°C) 32° to 120°F (0° to 49°C) with module installed in the D355PL
Storage Temperature:	–22° to 158°F (–30° to 70°C)
Humidity:	0% to 93% Relative Humidity Non-condensing
Air Velocity:	100 to 4000 ft./min. (0.5 to 20.3 m/sec.)
Rectangular Footprint Dimensions:	14.38 in L × 5 in W × 2.5 in D (37 cm L × 12.7 cm W × 6.36 cm D)
Square Footprint Dimensions:	7.75 in L × 9 in W × 2.5 in D (19.7 cm L × 22.9 cm W × 6.35 cm D)
Weight:	1.8 pounds; 0.82 kg
Operating Voltage Range:	15 to 32 VDC
Standby Current:	300µA @ 24 VDC (one communication every 5 seconds with LED blink enabled)
Max. Alarm Current (LED on):	6.5 mA @ 24 VDC

ACCESSORY CURRENT LOADS AT 24 VDC

DEVICE	STANDBY	ALARM
RA400Z/RA100Z	0mA	12mA Max.
RTS451/RTS151	0mA	12mA Max.
RTS451KEY/ RTS151KEY	12mA	12mA Max.

NOTE: The D355PL come with the sensor head factory installed, part number SD355R.

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BEFORE INSTALLING

Read the System Sensor Guide for *Proper Use of Smoke Detectors in Duct Applications* (A05-1004), which provides detailed information on detector spacing, placement, zoning, wiring, and special applications. Copies of this manual are available online at www.systemsensor.com. NFPA Standards 72 and 90A should also be referenced for detailed information.

NOTICE: This manual shall be left with the owner/user of this equipment.
IMPORTANT: This detector must be tested and maintained regularly following NFPA 72 requirements. The detector should be cleaned at least once a year.

[1]LIMITATIONS OF DUCT SMOKE DETECTORS

⚠WARNING

The National Fire Protection Association has established that DUCT DETECTORS MUST NOT BE USED AS A SUBSTITUTE FOR OPEN AREA DETECTOR PROTECTION as a means of providing life safety. Nor are they a substitute for early warning in a building's regular fire detection system.

System Sensor supports this position and strongly recommends that the user read NFPA Standards 90A, 72, and 101. The D355PL Air Duct Smoke Detectors are listed per UL 268A.

This device will not operate without electrical power. Fire situations may cause an interruption of power. The system safeguards should be discussed with your local fire protection specialist.

This device will not sense smoke unless the ventilation system is operating and the cover is installed.

For this detector to function properly, it MUST be installed according to the instructions in this manual. Furthermore, the detector MUST be operated within ALL electrical and environmental specifications listed in this manual and the sensor head installation manual. Failure to comply with these requirements may prevent the detector from activating when smoke is present in the air duct.

[2]GENERAL DESCRIPTION

Smoke introduced into this air duct system will be distributed throughout the entire building. Smoke detectors designed for use in air duct systems are used to sense the presence of smoke in the duct.

Model D355PL Air Duct Smoke Detector utilizes photoelectric technology for the detection of smoke. This detection method, when combined with an efficient housing design, samples air passing through the duct and allows detection of a developing hazardous condition. When sufficient smoke is sensed, an alarm signal is initiated at the fire control panel monitoring the detector, and appropriate action can be taken to shut off fans, blowers, change over air handling systems, etc. These actions can facilitate the management of toxic smoke and fire gases throughout the areas served by the duct system.

The D355PL incorporates a sensor cover tamper feature that provides a trouble signal at the panel immediately if the cover is removed or improperly installed. Proper installation of the sensor cover removes the trouble condition.

If programmed with the system control panel, two LEDs on each duct smoke detector light to provide local visible indication.

The D355PL provides a remote alarm output for use with auxiliary devices, such as the RA400Z/RA100Z remote LED annunciator, as well as remote test capability with the RTS451/151 or RTS451KEY/RTS151KEY Remote Test Stations.

[2.1] DETECTOR FEATURE SET

– Utilizes plug-in head, part number SD355R
– Sampling tubes install from front and rear
– Compatible with existing accessories
– Able to address detector per code switches on sensor head.

[3]CONTENTS OF THE DUCT SMOKE DETECTOR KIT

1. Sensor/power board assembly and covers sensor head is factory installed
2. Three #10 sheet metal screws for mounting
3. One test magnet
4. Drilling template
5. One sampling tube end cap
6. One plastic exhaust tube

NOTE: A sampling tube must be ordered to complete the installation. It must be the correct length for the width of the duct where it will be installed. See Table 1 on page 3 to determine the inlet tube required for different duct widths.

[4]DETECTOR INSTALLATION

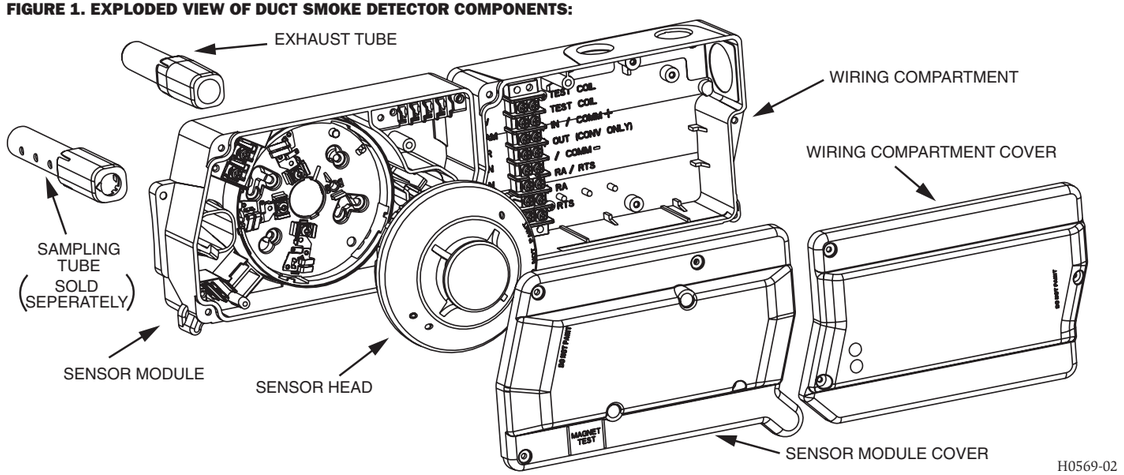
[4.1]VERIFY DUCT AIR FLOW DIRECTION AND VELOCITY

Model D355PL detectors are designed to be used in air handling systems having air velocities of 100 to 4000 feet per minute. Duct widths from 6 inches to 12 feet can be accommodated. Be sure to check engineering specifications to ensure that the air velocity in the duct falls within these parameters. If necessary, use a velocity meter (anemometer) to check the air velocity in the duct.

[4.2]DETERMINE MOUNTING LOCATION AND CONFIGURATION

On ducts wider than 18 inches it is recommended that the detector be mounted downstream of a bend, obstruction in the duct, or the supply or return air inlet.

FIGURE 1. EXPLODED VIEW OF DUCT SMOKE DETECTOR COMPONENTS:

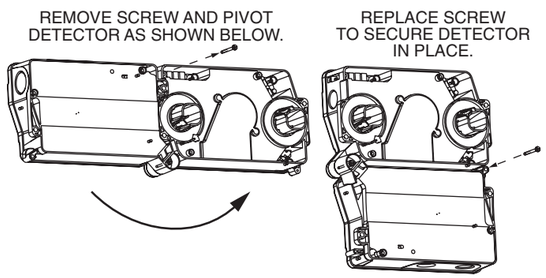


H0569-02

Exception: Installation of duct detectors can be on or within a commercial packaged rooftop heating and air-conditioning system, fire/smoke dampers and economizers. They may be mounted in either the supply and/or return air section as determined by local code.

Once a suitable location is selected, determine if the detector is to be mounted in a side-by-side "rectangular" configuration or a top-over-bottom "square" configuration as shown in Figure 2. If mounting in the square configuration, remove the rear attachment screw, rotate the unit at hinge, and replace the screw into the new attachment hole as shown in Figure 2. Do NOT remove the hinge screw during this process. Final installation approval shall be based upon passing differential pressure and smoke entry tests described in the Measurement Tests section.

FIGURE 2:



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[4.3]DRILL THE MOUNTING HOLES

Remove the paper backing from the mounting template supplied. Affix the template to the duct at the desired mounting location. Make sure the template lies flat and smooth on the duct.

[4.3.1]FOR RECTANGULAR SIDE-BY-SIDE MOUNTING CONFIGURATION:

Center punch at (4) target centers: (2) "A" for sampling tubes and (2) "B" for the rectangular configuration mounting tabs as shown on mounting template. Drill pilot holes at target "A" centers and cut two 1.375 inch diameter holes using a 1 3/8-inch hole saw or punch. Drill .156 inch diameter holes using a 5/32 inch drill at target "B" centers.

[4.3.2]FOR SQUARE TOP-OVER-BOTTOM MOUNTING CONFIGURATION:

Center punch at (4) target centers: (2) "A" for sampling tubes and (2) "C" for the square configuration mounting tabs as shown on mounting template. Drill pilot holes at target "A" centers and cut two 1.375 inch diameter holes using a 1 3/8-inch hole saw or punch. Drill .156 inch diameter holes using a 5/32 inch drill at target "C" centers. If desired, drill an additional .156 inch hole at the location of one of the mounting tabs on the lower housing.

[4.4]SECURE THE DUCT DETECTOR TO THE DUCT

Use two (rectangular configuration) or three (square configuration) of the provided sheet metal screws to screw the duct detector to the duct.

CAUTION: Do not overtighten the screws.

[5]SAMPLING TUBE INSTALLATION

[5.1]SAMPLING TUBE SELECTION

The sampling tube must be purchased separately. Order the correct length, as specified in Table 1, for width of the duct where it will be installed. The sampling tube length must extend at least 2/3 across the duct width for optimal performance.

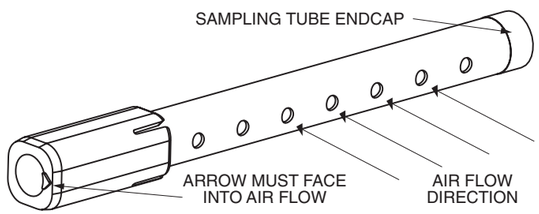
The sampling tube is always installed with the air inlet holes facing into the air flow. To assist proper installation, the tube's connector is marked with an arrow. Make sure the sampling tube is mounted so that the arrow points into the airflow as shown in Figure 3. Mounting the detector housing in a vertical orientation is acceptable provided that the air flows directly into the sampling tube holes as indicated in Figure 3. The sampling tube and exhaust tube can be mounted in either housing connection as long as the exhaust tube is mounted downstream from the sampling tube.

TABLE 1. SAMPLING TUBES RECOMMENDED FOR DIFFERENT DUCT WIDTHS:

Outside Duct Width	Sampling Tube Recommended*
Up to 1 ft.	DST1
1 to 2 ft.	DST1.5
2 to 4 ft.	DST3
4 to 8 ft.	DST5
8 to 12 ft.	DST10 (2-piece)

*Must extend a minimum of 2/3 the duct width

FIGURE 3. AIR DUCT DETECTOR SAMPLING TUBE:



H0551-00

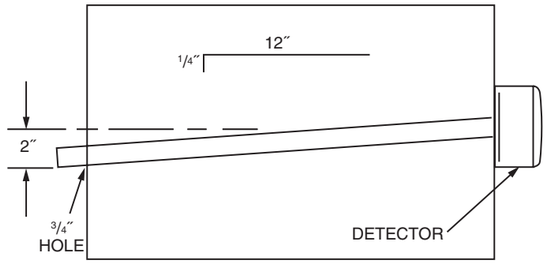
CAUTION: The sampling tube end cap, included with the detector, is critical to proper operation of the duct smoke detector. The end cap is needed to create the proper air flow to the sensor of the duct smoke detector. Once any sampling tube length adjustments are made, plug the end of the sampling tube with the provided end cap.

A plastic exhaust tube is included with the unit to be installed if needed. Install into the housing connection that is downstream from the sampling tube connection. The exhaust tube can be installed from the front of the detector or the back. A longer 1 foot exhaust tube, model ETX, is available as an accessory in cases where the molded exhaust tube does not extend at least 2 inches into the duct.

[5.2]SAMPLING TUBE INSTALLATION

1. For tubes shorter than the width of the duct, slide the sampling tube, with installed end cap, into the housing connection that meets the airflow first. Position the tube so that the arrow points into the airflow as shown in Figure 3. Per NFPA sampling tubes over 3 feet long should be supported at the end opposite of the duct detector. In ducts wider than 8 feet, work must be performed inside the duct to couple the other section of the sampling tube to the section already installed using the ½-inch conduit fitting supplied. Make sure that the holes on both sections of the air inlet sampling tube are lined up and facing into the airflow.
2. For tubes longer than the width of the air duct, the tube should extend out of the opposite side of the duct. Drill a ¾-inch hole in the duct opposite the hole already cut for the sampling tube. Ensure that the sampling tube is angled downward from the duct smoke detector to allow for moisture drainage away from the detector. The sampling tube should be angled at least ¼″ downward for every 12″ of duct width per Figure 4. There should be 10 to 12 holes spaced as evenly as possible across the width of the duct. If there are more than 2 holes in the section of the tube extending out of the duct, select a shorter tube using Table 1. Otherwise, trim the tube to leave approximately 1 to 2 inches extending outside the duct. Plug the end with the end cap and tape closed any holes in the protruding section of the tube. Be sure to seal the duct where the tube protrudes.

FIGURE 4.



H0215-00

NOTE: Air currents inside the duct may cause excessive vibration, especially when the longer sampling tubes are used. In these cases, a 3-inch floor flange (available at most plumbing supply stores) may be used to fasten the sampling tube to the other side of the duct. When using the flange/connector mounting technique, drill a 1 to 1¼-inch hole where the flange will be used

[5.3]MODIFICATIONS OF SAMPLING TUBES

There may be applications where duct widths are not what is specified for the installation. In such cases, it is permissible to modify a sampling tube that is longer than necessary to span the duct width.

Use a 0.193-inch diameter (#10) drill and add the appropriate number of holes so that the total number of holes exposed to the air flow in the duct is 10 to 12. Space the additional holes as evenly as possible over the length of the tube.

CAUTION: This procedure should only be used as a temporary fix. It is not intended as a permanent substitute for ordering the correct length tubes.

[5.4]REMOTE SAMPLING TUBE INSTALLATION

The detector arrangement can also incorporate the remote mounting of the sampling tube and/or exhaust tube. In this case both the detector, sampling tube and exhaust tube (if included) should be rigidly mounted to withstand the pressure and vibrations caused by the air velocity. The location of the detector's sampling tube should be such that there is uniform airflow in the cross section area.

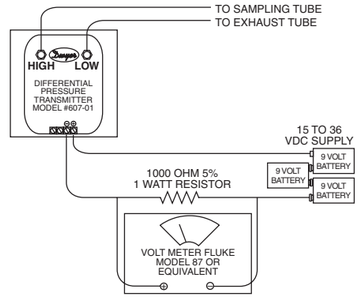
Pressure differential across the sampling and exhaust ports in the detector housing shall be verified to be between 0.01 and 1.11 inches of water. Do so by measuring the pressure difference between the inlet and outlet ports on the detector housing using a manometer as described in the Measurement Tests sectiont of this manual.

[6]MEASUREMENT TESTS

[6.1]AIR FLOW

The D355PL is designed to operate over an extended air speed range of 100 to 4000 FPM. To verify sufficient sampling of ducted air, turn the air handler on and use a manometer to measure the differential pressure between the two sampling tubes. The differential pressure should measure at least 0.01 inches of water and no more than 1.11 inches of water. Because most commercially available manometers cannot accurately measure very low pressure differentials, applications with less than 500 FPM of duct air speed may require one of the following: 1) the use of a current-sourcing pressure transmitter (Dwyer Series 607) or 2) the use of aerosol smoke, see below for test descriptions.

FIGURE 5. PROCEDURE FOR VERIFYING AIR FLOW:



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[6.2]LOW FLOW AIR FLOW TEST USING DWYER SERIES 607 DIFFERENTIAL PRESSURE TRANSMITTER

Verify the air speed of the duct using an anemometer. Air speed must be at least 100 FPM. Wire the Dwyer transmitter as shown in **Figure 5**. Connect the leads of the meter to either side of the 1000Ω resistor. Allow unit to warm up for 15 seconds. With both HIGH and LOW pressure ports open to ambient air, measure and record the voltage drop across the 1000Ω resistor (measurement 1), 4.00 volts is typical. Using flexible tubing and rubber stoppers, connect the HIGH side of the transmitter to the sampling tube of the duct smoke detector housing, and the LOW side of the transmitter to the exhaust tube of the duct smoke detector housing. Measure and record the voltage drop across the 1000Ω resistor (measurement 2). Subtract the voltage recorded in measurement 1 from the voltage recorded in measurement 2. If the difference is greater than 0.15 volts, there is enough air flow through the duct smoke detector for proper operation.

[7]FIELD WIRING; INSTALLATION GUIDELINES

All wiring must be installed in compliance with the National Electrical Code and the local codes 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 prevent wiring mistakes. Improper connections can prevent a system from responding properly in the event of a fire.

For signal wiring (the wiring between detectors or from detector to auxiliary devices), it is usually recommended that single conductor wire be no smaller than 18 gauge. The duct smoke detector terminals accommodate wire sizes up to 12 gauge. Flexible conduit is recommended for the last foot of conduit; solid conduit connections may be used if desired.

Duct smoke detectors and alarm system control panels have specifications for Signaling Line Circuit (SLC) wiring. Consult the control panel manufacturer's specifications for wiring requirements before wiring the detector loop.

Please refer to insert for the Limitations of Fire Alarm Systems

THREE-YEAR LIMITED WARRANTY

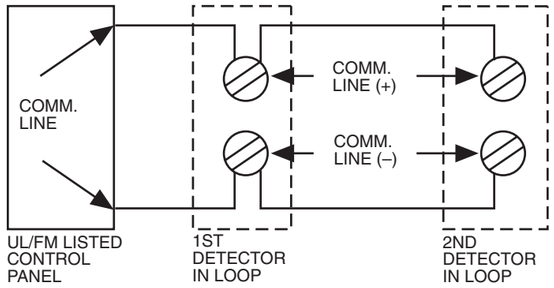
System Sensor warrants its enclosed product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for the enclosed product. No agent, representative, dealer, or employee of 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 replacement of any part of the product 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: System Sensor, Returns Department, RA #_____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to 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.

[7.1]WIRING INSTRUCTIONS

Disconnect power from the communication line before installing the D355PL duct smoke detector.

The D355PL detectors are designed for easy wiring. The housing provides a terminal strip with clamping plates. Wiring connections are made by sliding the bare end under the plate, and tightening the clamping plate screw. See **Figure 6** below for system wiring.

FIGURE 6. SYSTEM WIRING DIAGRAM FOR D355PL:



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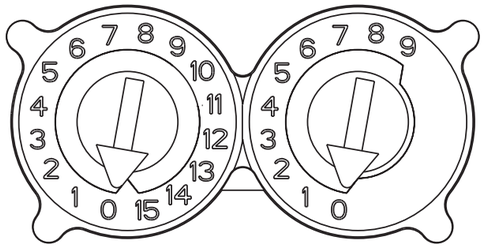
[7.2] SET THE ADDRESS

Set the desired address on the sensor head code wheel switches. on the back of the sensor head.

FIGURE 7. ROTARY ADDRESS SWITCHES



HO112-00

[8] VERIFICATION OF OPERATION

[8.1]INSTALL THE COVER

Install the covers making sure that the cover fits into the base groove. Tighten the seven screws that are captured in the covers. Note that the cover must be properly installed for proper operation of the sensor.

NOTE: Verify sensor cover gasket is properly seated on cover prior to cover installation.

[8.2] POWER THE UNIT

Activate the communication line on terminals COM + and COM –.

[8.3] DETECTOR CHECK

Standby – If programmed by the system control panel, look for the presence of the flashing LEDs through the transparent housing cover. The LED will flash with each communication.

Trouble – If programmed by the system control panel and the detector LEDs do not flash, then the detector lacks power (check wiring, missing or improperly placed cover, panel programming, or power supply), the sensor head is missing (replace), or the unit is defective (return for repair).

[8.4]DUCT SMOKE DETECTOR TEST & MAINTENANCE PROCEDURES

Test and maintain duct smoke detectors as recommended in NFPA 72. The tests contained in this manual were devised to assist maintenance personnel in verification of proper detector operation.

Before conducting these tests, notify the proper authorities that the smoke detection system will be temporarily out of service. Disable the zone or system under test to prevent unwanted alarms.

[8.4.1]TEST THE UNIT

1. M02-04-00 Magnet Test – This sensor can be functionally tested with a test magnet. The test magnet electronically simulates smoke in the sensing chamber, testing the sensor electronics and connections to the control panel.
2. Remote Test Accessory – The use of a remote accessory for visible indication of power and alarm is recommended.

   Verify system control panel alarm status and control panel execution of all intended auxiliary functions (i.e. fan shutdown, damper control, etc.).

   Two LEDs on the sensor are controlled by the panel to indicate sensor status. Coded signals, transmitted from the panel, can cause the LEDs to blink, latch on, or latch off. Refer to the control panel technical documentation for sensor LED operation and expected delay to alarm.

[8.4.2] THE DETECTOR MUST BE RESET BY THE SYSTEM CONTROL PANEL

[8.4.3]SMOKE ENTRY TEST USING AEROSOL SMOKE

This test is intended for low-flow systems (100-500 FPM). If the air speed is greater than 500 FPM, use a conventional manometer to measure differential pressure between the sampling tubes, as described under Measurement Tests on Page 3.

Drill a ¼-inch hole 3 feet upstream from the duct smoke detector. With the air handler on, measure the air velocity with an anemometer. Air speed must be at least 100 FPM. Spray aerosol smoke* into the duct through the ¼-inch hole for five seconds. Wait two minutes for the duct smoke detector to alarm. If the duct smoke detector alarms, air is flowing through the detector. Remove the duct smoke detector cover and blow out the residual aerosol smoke from the chamber and reset the duct smoke detector at the panel. Use duct tape to seal the aerosol smoke entry hole. Remember to replace the cover after the test or the detector will not function properly.

*Aerosol smoke can be purchased from Home Safeguard Industries at homesafeguard.com, model 25S Smoke Detector Tester, and Chekkit Smoke Detector Tester model CHEK02 and CHEK06 available from SDi. When used properly, the canned smoke agent will cause the smoke detector to go into alarm. Refer to the manufacturer's published instructions for proper use of the canned smoke agent.

⚠CAUTION

Canned aerosol simulated smoke (canned smoke agent) formulas will vary by manufacturer. Misuse or overuse to these products may have long term adverse effects on the smoke detector. Consult the canned smoke agent manufacturer's published instructions for any further warnings or caution statements.

[9]DETECTOR CLEANING PROCEDURES

Notify the proper authorities that the smoke detector system is undergoing maintenance, and that the system will temporarily be out of service. Disable the zone or system undergoing maintenance to prevent unwanted alarms and possible dispatch of the fire department.

[9.1]DETECTOR SENSOR

1. Remove the sensor to be cleaned from the system.
2. Remove the sensor cover by pressing firmly on each of the four removal tabs that hold the cover in place.
3. Vacuum the screen carefully without removing it. If further cleaning is required continue with Step 4, otherwise skip to Step 7.
4. Remove the chamber cover/screen assembly by pulling it straight out.
5. Use a vacuum cleaner or compressed air to remove dust and debris from the sensing chamber.
6. Reinstall the chamber cover/screen assembly by sliding the edge over the sensing chamber. Turn until it is firmly in place.
7. Replace the cover using the LEDs to align the cover and then gently pushing it until it locks into place.
8. Reinstall the detector.

[9.2]REINSTALLATION

1. Reinstall the detector in its housing.
2. Restore system power.
3. Perform Detector Check.
4. Notify the proper authorities testing has been completed and the smoke detector system is back in operation.

[10]SENSOR REPLACEMENT

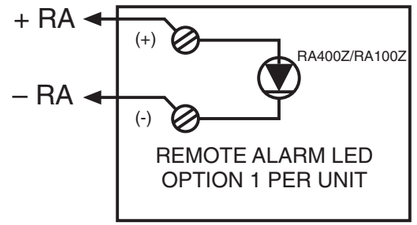
1. Remove the sensor head by rotating counterclockwise.
2. Pull gently to remove it.
3. To replace the sensor head, align the mounting features and rotate clockwise into place.

[11] OPTIONAL ACCESSORIES

Optional accessories include RA400Z/RA100Z, RTS451/RTS151 and RTS451KEY/RTS151KEY.

NOTE: Ensure blue wire always remains connected to RA + on the field connector side of the terminal block.

FIGURE 8. WIRING DIAGRAM FOR D355PL TO RA400Z/RA100Z:



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Note: If using a RA400Z, the tab should be broken for use with the intelligent duct smoke detector. If using RA100Z, ensure that jumper is removed.

The RTS451/RTS151/RTS451KEY/RTS151KEY Remote Test Station facilitates test of the alarm capability of the duct smoke detector. These accessories provide the stimulus to initiate an alarm condition at the detector. The D355PL duct smoke detector must be reset by the system control panel.

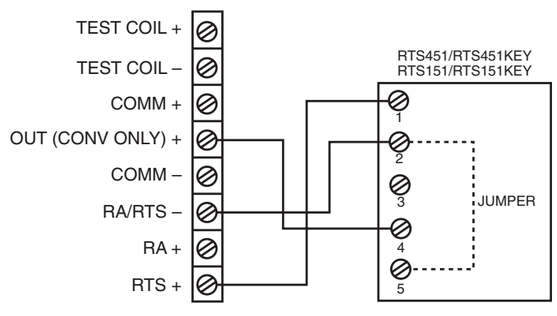
[11.1] OPTION 1:
REMOTE TEST USING SENSOR WITH REMOTE TEST CAPABILITY (WITHOUT A TEST COIL):

A sensor with suffix "R" is available for use inside the D355PL. Suffix "R" represents a head with Remote Test Capability. Using this head inside the D355PL eliminates the need for a test coil when wired to a RTS451/RTS151/RTS451KEY/RTS151KEY Remote Test Station.

To install the RTS451/RTS151/RTS451KEY/RTS151KEY, using the sensor with remote test capability connect the device as shown in **Figure 9**; wire runs must be limited to 25 ohms or less per interconnecting wire.

NOTE: Resistor assembly must be in place between RA + and OUT + inside the D355PL for Remote Test function to operate.

FIGURE 9. RTS451/RTS451KEY/RTS151/RTS151KEY USING SENSOR WITH REMOTE TEST CAPABILITY



H0633-00

[11.2] OPTION 2:
REMOTE TEST USING A TEST COIL:

The use of a remote test station requires the installation of an accessory coil, part number DCOIL, sold separately.

1) Install DCOIL in housing pocket insuring that arrow is pointing toward detector
2) Install DCOIL mounting screw
3) Connect each DCOIL lead to a Test Coil Terminal

See **Figure 10** below for reference.

FIGURE 10. D355PL USING A TEST COIL

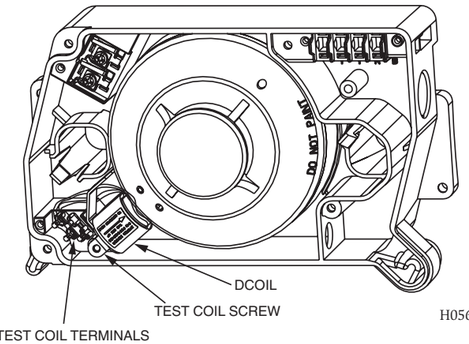


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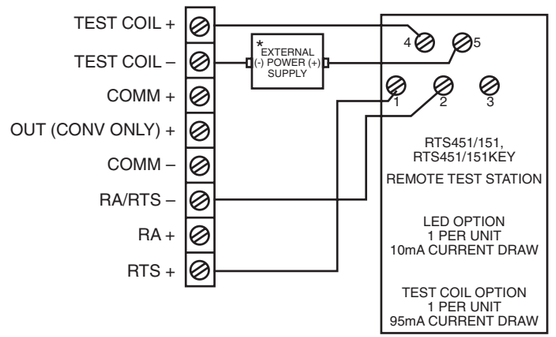
FIGURE 11. WIRING DIAGRAM FROM D355PL TO RTS451/RTS151/RTS451KEY/RTS151KEY USING A TEST COIL:



H0571-07

NOTE: The RTS451/151, RTS451/151KEY test coil circuit requires an external 24 VDC power supply which must be UL listed.

[11.3] ADDITIONAL MODULE OPTION

The D355PL can also accommodate a relay or control module (sold separately) within the power board side of the housing. The relay or control module must be listed as compatible to the fire alarm control panel.

Physical Module Mounting

1) Remove the breakaway tabs at the four corners of the module
2) Locate the module at right most corner of the power board. The upper left corner mounting hole of the module will align with a screw boss in the housing.
3) Install a #8 × ⅜″ Plastite screw at the screw boss location

Note: See the corresponding module Installation Instructions for general description, control panel compatibility, wiring and ratings.

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

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

Features

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

Agency Listings

SIGNALING UL LISTED
S5512
S4011

FM APPROVED
FM approved except for ALERT models 3057383, 3057072

7125-1653:0504
7135-1653:0503

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

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

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

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

L-Series Specifications

Architect/Engineer Specifications

General

L-Series standard horns, strobes, and horn strobes shall mount to a standard 2 x 4 x 1 7/8-inch back box, 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2 × 4 × 1 7/8-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products for all standard models and a separate universal mounting plate shall be used for mounting wall compact models. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, and 185.

Strobe

The strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

Horn Strobe Combination

The horn strobe shall be a System Sensor L-Series Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize Strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 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 DC or regulated 24 DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Operating Voltage Range MDL3 Sync Module	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Wall-Mount Dimensions (including lens)	5.6˝L × 4.7˝W × 1.91˝D (143 mm L × 119 mm W × 49 mm D)
Compact Wall-Mount Dimensions (including lens)	5.26" L x 3.46" W x 1.91" D (133 mm L x 88 mm W x 49 mm D)
Horn Dimensions	5.6˝L × 4.7˝W × 1.25˝D (143 mm L × 119 mm W × 32 mm D)
Compact Horn Dimensions	5.25" L x 3.45" W x 1.25" D (133 mm L x 88 mm W x 32 mm D)

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

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

		8–17.5 Volts	16–33 Volts	
	Candela	DC	DC	FWR
Candela Range	15	88	43	60
	30	143	63	83
	75	N/A	107	136
	95	N/A	121	155
	110	N/A	148	179
	135	N/A	172	209
	185	N/A	222	257

UL Max. Horn Current Draw (mA RMS)

		8–17.5 Volts	16–33 Volts	
Sound Pattern	dB	DC	DC	FWR
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

UL Max. Current Draw (mA RMS), Wall Horn Strobe, Candela Range (15–185 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15cd	30cd	15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	98	158	54	74	121	142	162	196	245
Temporal Low	93	154	44	65	111	133	157	184	235
Non-Temporal High	106	166	73	94	139	160	182	211	262
Non-Temportal Low	93	156	51	71	119	139	162	190	239
3.1K Temporal High	93	156	53	73	119	140	164	190	242
3.1K Temporal Low	91	154	45	66	112	133	160	185	235
3.1K Non-Temporal High	99	162	69	90	135	157	175	208	261
3.1K Non-Temporal Low	93	156	52	72	119	138	162	192	242
	16–33 Volts								
FWR Input	15cd	30cd	75cd	95cd	110cd	135cd	185cd		
Temporal High	83	107	156	177	198	234	287		
Temporal Low	68	91	145	165	185	223	271		
Non-Temporal High	111	135	185	207	230	264	316		
Non-Temportal Low	79	104	157	175	197	235	283		
3.1K Temporal High	81	105	155	177	196	234	284		
3.1K Temporal Low	68	90	145	166	186	222	276		
3.1K Non-Temporal High	104	131	177	204	230	264	326		
3.1K Non-Temporal Low	77	102	156	177	199	234	291		

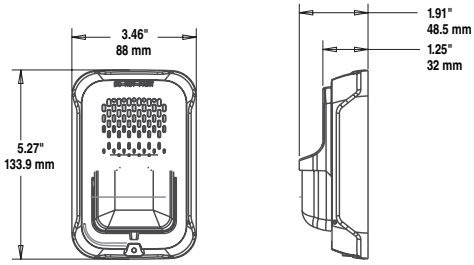
Horn Tones and Sound Output Data

Horn and Horn Strobe Output (dBA)

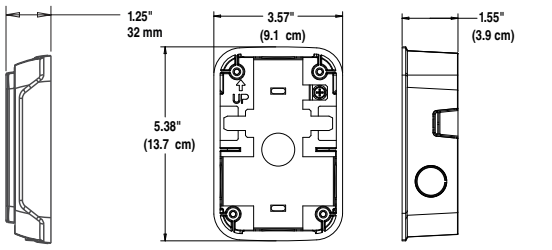
			8–17.5 Volts	16–33 Volts	
Switch Position	Sound Pattern	dB	DC	DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low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

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

L-Series Dimensions

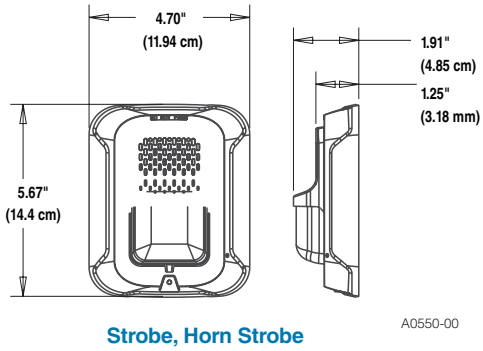


Compact Strobe, Horn Strobe

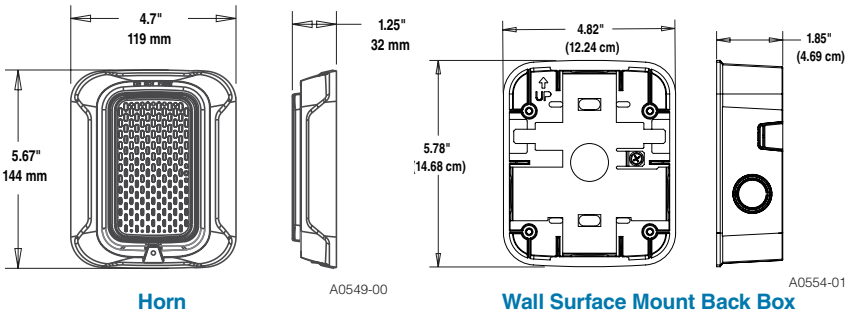


Compact Horn

Compact Wall Surface Mount Back Box SBBGRL, SBBGWL



Strobe, Horn Strobe



Horn

Wall Surface Mount Back Box SBBRL/SBBWL

L-Series Ordering Information

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

Model	Description
Horns*	
HRL*	Horn, Red
HWL*	Horn, White
HGRL*	Compact Horn, Red
HGWL*	Compact Horn, White
Accessories	
TR-2	Universal Wall Trim Ring Red
TR-2W	Universal Wall Trim Ring White
SBBRL	Wall Surface Mount Back Box, Red
SBBWL	Wall Surface Mount Back Box, White
SBBGRL	Compact Wall Surface Mount Back Box, Red
SBBGWL	Compact Wall Surface Mount Back Box, White

Notes:
All -P models have a plain housing (no “FIRE” marking on cover).
All -SP models have “FUEGO” marking on cover.
All -ALERT models have “ALERT” marking on cover.
*Horn-only models are listed for wall or ceiling use.

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

AVDS865-05 • 2/22/2018

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
S5512
S4011

FM APPROVED
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)

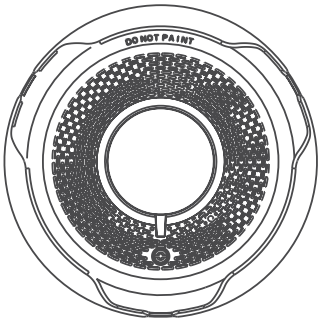
	8–17.5 Volts		16–33 Volts						
DC Input	15cd	30cd	15cd	30cd	75cd	95cd	115cd	150cd	177cd
Temporal High	103	167	71	90	143	165	187	217	254
Temporal Low	96	165	54	71	137	161	185	211	249
Non-Temporal High	106	173	71	90	141	165	187	230	273
Non-Temportal Low	95	166	54	71	124	161	170	216	258
3.1K Temporal High	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

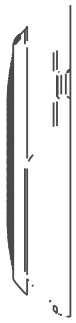
Horn Strobe Output (dBA)

			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



Ceiling-Mount Horn Strobes



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

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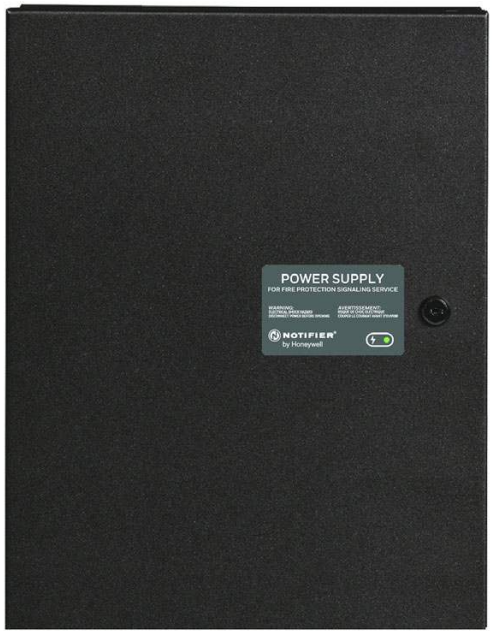
PSE-6/PSE-10 Series 6/10 Amp, 24 Volt Power Supply Expanders

General

The PS Series is a remote power supply line from NOTIFIER. The PSE-6(C)(E) is a 6 amp and the PSE-10(C)(E) is a 10 amp, remote power supply with battery charger that may be connected to any 12 or 24 volt fire alarm control panel (FACP) or used as a standalone power supply. The PS Series provides 24 VDC power for NACs (notification appliance circuits) configured as either Class B or Class A (requires the ZNAC-PS option card) with multiple sync protocol options. The PS Series also provides auxiliary power, constant or resettable, suited for detectors, annunciators, door holders, and other fire alarm system peripherals. The PS Series cabinet can hold two 7 AH or 18 AH batteries and can charge up to 33 AH batteries in a separate cabinet. The PSE-6E and PSE-10E are models rated for 240V operation.

Features

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



- Removable terminal blocks accommodate up to 12 AWG ($3.1mm^2$) wire
- Works with any UL 864 FACP which utilizes an industry-standard reverse-polarity notification circuit
- Optional devices include addressable control, monitor, and relay modules and power-supervision relay (EOLR-1)

Standards and Codes

The PSE Series comply with the following standards:

- **NFPA 72** National Fire Alarm Code
- **UL 864** Standard for Control Units for Fire Alarm Systems (NAC expander mode), 10th Edition
- **UL 1481** Power Supplies for Fire Alarm Systems
- **IBC 2009** (when using SEISKIT-MULTI-1)
- **CBC 2007** (when using SEISKIT-MULTI-1)

Agency Listings and Approvals

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

- **UL Listed:** S635, S674
- **ULC Listed:** S635 (PSE-6/10C)
- **CSFM Approved:** 7315-0028:0513
- **FDNY Approved**
- **FM Approved**

Primary (AC) Power:

- **PSE-6(C):** 120 VAC, 50/60 Hz, 5.0A maximum
- **PSE-10(C):** 120VAC, 50/60 Hz, 6.2 A maximum
- **PSE-6E:** 240 VAC, 50/60 Hz, 2.7A maximum
- **PSE-10E:** 240 VAC, 50/60 Hz, 3.5A maximum
- **Wire Size:** #12-14 AWG with 600 V insulation

Command Input Circuit:

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

Trouble Contact Rating: 4 A at 24 VDC

Output Circuits:

- 24 VDC filtered, regulated
- PSE-6: TB8-TB9 – 1A Regulated, 3A special applications; TB10-TB12 – 0.3A Regulated, 3A special applications
- PSE-10: TB8-TB11 – 1.5A Regulated, 3A special applications; TB12-TB14 – 0.3A Regulated, 3A special applications
- 6.0 A (PSE-6) or 10.0 A (PSE-10) maximum total continuous current for all outputs

Secondary Power (Battery) Charging Circuit:

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

Physical:

- **Dimensions:** 20.0”H x 14.5”W x 3.5”D (cm: 50.8H x 36.83W x 8.9D)
- **Weight:** with two 7Ah batteries is 24 pounds (10.9 kg), with two 18 AH batteries is 39 pounds (17.7 kg)

Ordering Information

PSE-6: 6.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure

PSE-6C: Same as above, ULC-listed model

PSE-6R: Same as PSE-6 with red enclosure

PSE-6E: 6.0 A, 240 VAC remote charger power supply in a lockable, metal enclosure

PSE-10: 10.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure

PSE-10C: Same as above, ULC-listed model

PSE-10R: Same as PSE-10 with red enclosure

PSE-10E: 10.0 A, 240 VAC remote charger power supply in a lockable, metal enclosure

ZNAC-PS: Optional Class A output converter module

FCM-1: Addressable Control Module for one Class B or Class A zone of supervised, polarized Notification Appliances. Notification Appliance Circuit option requires external 24 VDC to power notification appliances.

FRM-1: Addressable relay module containing two isolated sets of Form-C contacts, which operate as a DPDT switch

FMM-1: Addressable Monitor Module for one zone of normally open dry-contact initiating devices. Includes plastic cover plate and end-of-line resistor. Module may be configured for either a Class B or Class A IDC.

FDM-1: Dual Monitor Module. Same as FMM-1 except it provides two inputs for Class B wiring only

FDRM-1: Provides two monitored inputs and two Form-C relays. Functions in Class B wiring only.

XP6-C: Six-circuit supervised control module

XP6-R: Six Form-C relay control module

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

BAT-1270: Battery, 12 volt, 7.0 AH (two required, see BAT Series data sheet DN-6933).

BAT-12180: Battery, 12 volt, 18AH

BAT-12330: Battery, 12 volt, 33AH

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

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ENGINEERING & MANUFACTURING QUALITY SYSTEMS

Country of Origin: USA

NOTIFIER
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www.notifier.com

NOTIFIER® by Honeywell

SD365R and SD365R-IV Intelligent Photoelectric Smoke Sensor with Remote Test Capability in Duct Applications

FIRE·LITE ALARMS by Honeywell
One FireLite Place
Northford, CT 06472
Phone: 203.484.7161

SPECIFICATIONS

Operating Voltage Range:	15 to 32 VDC
Operating Current @ 24 VDC:	200 uA (one communication every 5 seconds with green LED blink on communication)
Maximum Alarm Current:	2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on)
Maximum Current:	4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on)
Operating Humidity Range:	10% to 93% Relative Humidity, Non-condensing
Operating Temperature Range:	32°F to 122°F (0°C to 50°C), -4°F to 158°F (-20°C to 70°C) in duct applications
Air Velocity:	0 to 4000 ft./min. (0 to 1219.2 m/min.)
Height:	2.0″ (51 mm) installed in B300-6 Base
Diameter:	6.2″ (156 mm) installed in B300-6 Base; 4.1″ (104 mm) installed in B501 Base
Weight:	3.4 oz. (95 g)
Isolator Load Rating:	0.0063*

*Please refer to your isolator base/module manual for isolator calculation instructions.

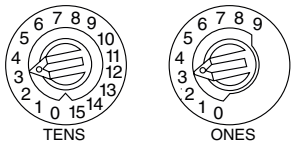
UL268A listed for Duct Applications

This sensor must be installed in compliance with the control panel system installation manual. The installation must meet the requirements of the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when installed in compliance with the National Fire Protection Association (NFPA); see NFPA 72.

GENERAL DESCRIPTION

Models SD365R and SD365R-IV are plug-in type smoke sensors that combines a photoelectronic sensing chamber with addressable-analog communications. When used in duct applications with a DNR(W), testing can be done remotely using approved System Sensor test accessories, eliminating the need for a test coil. The sensors transmit an analog representation of smoke density over a communication line to a control panel. Rotary dial switches are provided for setting the sensor's address.

FIGURE 1. ROTARY ADDRESS SWITCHES:



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Two LEDs on the sensor are controlled by the panel to indicate sensor status. An output is provided for connection to an optional remote LED annunciator (P/N RA100Z).

Note: Only System Sensor approved accessories may be used with the SD365R and SD365R-IV.

Fire-Lite panels offer different features sets across different models. As a result, certain features of the photoelectric sensors may be available on some control panels, but not on others. SD365R will support only LiteSpeed® protocol mode. SD365R-IV will support either LiteSpeed or CLIP (Classic Loop Interface Protocol) mode. The possible features available in the SD365R and SD365R-IV, if supported by the control panel are:

1. The sensor's LEDs can operate in three ways—on, off, and blinking–and they can be set to red, green, or amber. This is controlled by the panel.
2. The remote output may be synchronized to the LED operation or controlled independent of the LEDs.
3. Devices are point addressable up to 159 addresses.

Please refer to the operation manual for the UL listed control panel for specific operation. The SD365R and SD365R-IV require compatible addressable communications to function properly. Connect these sensors to listed-compatible control panels only.

SPACING

Fire-Lite recommends spacing sensors in compliance with NFPA 72. In low air flow applications with smooth ceilings, space sensors 30 feet apart (9.1 m). For specific information regarding sensor spacing, placement, and special applications, refer to NFPA 72 or the System Smoke Detector Application Guide, available from Fire-Lite.

Duct Applications: SD365R and SD365R-IV are listed for use in ducts. See Duct Smoke Detectors Applications Guide HVAG53 for details on pendant mount applications. **NOTE:** SD365R and SD365R-IV are also listed for use inside DNR(W) duct smoke detectors.

WIRING GUIDE

All wiring must be installed in compliance with the National Electrical Code, applicable local codes, and any special requirements of the Authority Having Jurisdiction. Proper wire gauges should be used. The installation wires should be color-coded to limit wiring mistakes and ease system troubleshooting. Improper connections will prevent a system from responding properly in the event of a fire.

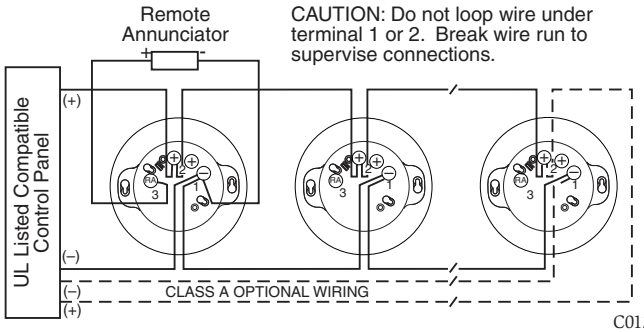
Remove power from the communication line before installing sensors.

1. Wire the sensor base (supplied separately) per the wiring diagram, Figure 2.
2. Set the desired address on the sensor address switches, see Figure 1.
3. Install the sensor into the sensor base. Push the sensor into the base while turning it clockwise to secure it in place.
4. After all sensors have been installed, apply power to the control panel and activate the communication line.
5. Test the sensor(s) as described in the TESTING section of this manual.

⚠CAUTION

Dust covers provide limited protection against airborne dust particles during shipping. Dust covers must be removed before the sensors can sense smoke. Remove sensors prior to heavy remodeling or construction.

FIGURE 2. WIRING DIAGRAM:



C0129-10

TAMPER-RESISTANCE

Models SD365R and SD365R-IV include a tamper-resistant capability that prevents their removal from the base without the use of a tool. Refer to the base manual for details on making use of this capability.

TESTING

Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted alarms.

All sensors must be tested after installation and periodically thereafter. Testing methods must satisfy the Authority Having Jurisdiction (AHJ). Sensors

offer maximum performance when tested and maintained in compliance with NFPA 72.

The sensor can be tested in the following ways:

A. Functional: Magnet Test (P/N M02-04-01 or M02-09-00)

This sensor can be functionally tested with a test magnet. The test magnet electronically simulates smoke in the sensing chamber, testing the sensor electronics and connections to the control panel.

1. Hold the test magnet in the magnet test area as shown in Figure 3.
2. The sensor should alarm the panel.

Two LEDs on the sensor are controlled by the panel to indicate sensor status. Coded signals, transmitted from the panel, can cause the LEDs to blink, latch on, or latch off. Refer to the control panel technical documentation for sensor LED status operation and expected delay to alarm.

B. Smoke Entry

Sensitivity readings are available through the FACP. Refer to the manufacturer's published instructions for proper use.

Additionally, canned aerosol simulated smoke (canned smoke agent) may be used for smoke entry testing of the smoke detector. Tested and approved aerosol smoke products are:

Manufacturer	Model
HSI Fire & Safety	25S, 30S (PURCHECK)
SDi	SMOKE CENTURIAN, SOLOA4, SMOKESABRE, TRUTEST
No Climb	TESTIFIRE 2000

When used properly, the canned smoke agent will cause the smoke detector to go into alarm. Refer to the manufacturer's published instructions for proper use of the canned smoke agent.

⚠CAUTION

Canned aerosol simulated smoke (canned smoke agent) formulas will vary by manufacturer. Misuse or overuse of these products may have long term adverse effects on the smoke detector. Consult the canned smoke agent manufacturer's published instructions for any further warnings or caution statements.

C. Remote Test.

SD365R and SD365R-IV can be remotely tested using the RTS151 or RTS151KEY test accessories. Refer to the DNR(W) manual for wiring diagrams. Maximum test response time may be up to two communications from the panel.

A sensor that fails any of these tests may need to be cleaned as described under CLEANING, and retested. When testing is complete, restore the system to normal operation and notify the proper authorities that the system is back in operation.

CLEANING

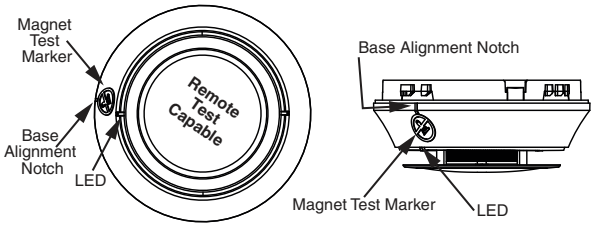
Before removing the detector, notify the proper authorities that the smoke detector system is undergoing maintenance and will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent unwanted alarms.

1. Remove the sensor to be cleaned from the system.
2. Remove the sensor cover by pressing firmly on each of the four removal tabs that hold the cover in place.
3. Vacuum the screen carefully without removing it. If further cleaning is required continue with Step 4, otherwise skip to Step 7.
4. Remove the chamber cover/screen assembly by pulling it straight out.
5. Use a vacuum cleaner or compressed air to remove dust and debris from the sensing chamber.
6. Reinstall the chamber cover/screen assembly by sliding the edge over the sensing chamber. Turn until it is firmly in place.
7. Replace the cover using the LEDs to align the cover and then gently pushing it until it locks into place.
8. Reinstall the detector.
9. Test the detector as described in TESTING.
10. Reconnect disabled circuits.
11. Notify the proper authorities that the system is back on line.

SPECIAL NOTE REGARDING SMOKE DETECTOR GUARDS

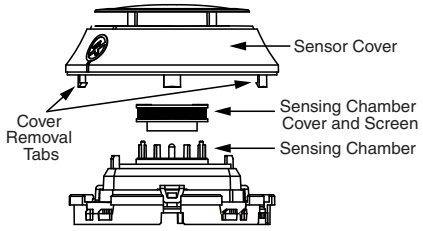
Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

FIGURE 3: FEATURES OF THE PHOTO DETECTOR



C2021-01

FIGURE 4: CLEANING THE PHOTO DETECTOR



C2022-00

SPECIAL APPLICATION

When configured at the fire alarm control panel, this detector is capable of operating in a special application mode such that it has a higher sensitivity than is normally allowed by UL 268 for areas where early warning is important. In this mode, the detector does not comply with the Cooking Nuisance Smoke Test. Detectors (Sampling ports) set to the special application mode are not suitable for use in areas where cooking appliances may be used. If cooking appliances are used within the protected space, a normal application detector or normal application mode must be used for that area.

Special application mode is not for general use and the detector may be more prone to false alarms if used in unsuitable environments. While no list is all-inclusive, some examples of unsuitable environments for special application mode are areas with airborne particulate or aerosols including sawing, drilling, and grinding operations, textile or agricultural processing, or areas with engines that are not vented to the outside. A complete list of aerosol and particulate sources is available in the Annex of NFPA 72.

Suitable environments for special application mode could include early warning for hospitals, museums, assisted living and other areas that do not have airborne particulate or aerosols.

Refer to the fire alarm control panel documentation for information on how to configure the detector for special application mode.

Please refer to insert for the Limitations of Fire Alarm Systems

FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

DEVICE AND SYSTEM SECURITY

Before installing this product ensure that the tamper seal on the packaging is present and unbroken and the product has not been tampered with since leaving the factory. Do not install this product if there are any indications of tampering. If there are any signs of tampering the product should be returned to the point of purchase.

It is the responsibility of the system owner to ensure that all system components, i.e. devices, panels, wiring etc., are adequately protected to avoid tampering of the system that could result in information disclosure, spoofing, and integrity violation.

SD365 Series

Addressable Photoelectric Smoke Detectors

FIRE·LITE ALARMS by Honeywell

Addressable Devices

The Fire•Lite® Alarms SD365(A), SD365R(A), and SD365HT(A) intelligent plug-in smoke detectors are designed for both performance and aesthetics, and are direct replacements for the SD355 Series. 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.

Exclusively for use with Fire•Lite's addressable fire alarm control panels, the SD365(A) Series point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for emergency personnel to quickly locate a fire during its early stages, potentially saving precious rescue time while also reducing property damage. Two LEDs on each sensor light to provide a local, visible sensor indication.

The SD365(A) Series also offers 135°F (57°C) fixed temperature thermal sensing on the SD365T(A) and a remote test capable detector on the SD365R(A) for use with DNR(A)/DNRW duct smoke detector housings.

Features

SLC LOOP:

- Two-wire SLC loop connection
- Unit uses base for wiring
- Compatible with LiteSpeed™ and CLIP protocol systems
- Stable communication technique with noise immunity

ADDRESSING:

- Addressable by device
- Rotary, decimal addressing
  (Refer to the *Fire•Lite panel manuals* for device capacity.)

ARCHITECTURE:

- Sleek, low-profile, stylish design
- Unique single-source design to respond quickly and dependably to a broad range of fires
- Integral communications and built-in device-type identification
- Built-in tamper resistant feature
- Remote test feature from the panel
- Walk test with address display (an address on 121 will blink the detector LED: 12-[pause]-1 *(LiteSpeed systems only)*
- Built-in functional test switch activated by external magnet
- Removable cover and insect-resistant screen for simple field cleaning
- Expanded color options

OPERATION:

- Designed to meet UL 268 7th Edition
- Factory preset at 1.5% nominal sensitivity for panel alarm threshold level
- LED "blinks" when the unit is polled (communicating with the fire panel) and latches in alarm.
- Low standby current

MECHANICALS:

- Sealed against back pressure
- SEMS screws for wiring of the separate base
- Designed for direct-surface or electrical-box mounting
- Plugs into separate base for ease of installation and maintenance
- Separate base allows interchange of photoelectric, ionization and thermal sensors

OPTIONS:

- Optional relay, isolator, and sounder bases

Installation

SD365 Series plug-in intelligent smoke detectors use a detachable base to simplify installation, service and maintenance. Installation instructions are shipped with each detector.

Mount detector base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep. For a chart of compatible junction boxes, see *DF-60059.*

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 Class "B" wiring only.*
When using relay or sounder bases, consult the I300(A) installation sheet I56-3626 for device limitations between isolator modules and isolator bases.

Construction

These detectors are constructed of fire-resistant plastic. The SD365 Series plug-in intelligent smoke detectors are designed to commercial standards and offer an attractive appearance.

Operation

Each SD365 Series detector uses one of the panel's addresses (total limit is panel dependent) on the Fire•Lite Signaling Line Circuit (SLC). It responds to regular polls from the control panel and reports its type and the status. If it receives a test command from the panel (or a local magnet test), it stimulates its electronics and reports an alarm. It blinks its LEDs when polled and turns the LEDs on when commanded by the panel. The SD365 Series offers features and performance that represent the latest in smoke detector technology.

Detector Sensitivity Test

Each detector can have its sensitivity tested (required per NFPA 72, Chapter 14 on *Inspection, Testing and Maintenance*) when installed/connected to an Fire•Lite addressable fire alarm control panel. The results of the sensitivity test can be printed for record keeping.

Product Line Information

***NOTE:** "-IV" suffix indicates CLIP and LiteSpeed device.*

***NOTE:** "A" suffix indicates Canadian version.*

SD365: White, low-profile intelligent photoelectric sensor, LiteSpeed only

SD365A: Same as SD365 but with ULC listing

SD365-IV: Ivory, low-profile intelligent photoelectric sensor

SD365A-IV: Same as SD365-IV but with ULC listing

SD365T: White, same as **SD365** but includes a built-in 135°F (57°C) fixed-temperature thermal device, LiteSpeed only

SD365TA: Same as SD365T but with ULC listing

SD365T-IV: Ivory, same as SD365T but includes a built-in 135°F (57°C) fixed-temperature thermal device

SD365TA-IV: Same as SD365T-IV but with ULC listing

SD365R: White, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW, LiteSpeed only

SD365RA: Same as SD365R but with ULC listing, for use with DNRA

SD365R-IV: Ivory, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW

SD365RA-IV: Same as SD365R-IV but with ULC listing, for use with DNRA

INTELLIGENT BASES

***NOTE:** For details on intelligent bases, see DF-60059.*

B300-6: White, 6" base, standard flanged low-profile mounting base *(CSFM: 7300-1653:0109)*

B300-6-IV: Ivory,6" base, standard flanged low-profile mounting base *(CSFM: 7300-1653:0109)*

B300A-6: Same as B300-6, ULC listed

B300A-6-IV: Ivory, 6" standard flanged low-profile mounting base, ULC listed

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

B501-WHITE: White, 4" standard European flangeless mounting base. UL/ULC listed *(CSFM: 7300-1653:0109)*

B501-BL: Black, 4" standard European flangeless mounting base. UL/ULC listed *(CSFM: 7300-1653:0109)*

B501-IV: Ivory color, 4" standard European flangeless mounting base. UL/ULC listed *(CSFM: 7300-1653:0109)*

B501-WHITE-BP: Bulk pack of B501-WHITE contains 10

B224RB-WH: White, relay base (*CSFM: 7300-1653:0216)*

B224RB-IV: Ivory, relay base (*CSFM: 7300-1653:0216)*

B224RBA-WH: White, relay base, ULC listing

B224RBA-IV: Ivory, relay base, ULC listing

B224BI-WH: White, isolator detector base (CSFM: 7300-1653:0216)

B224BI-IV: Ivory isolator detector base (CSFM: 7300-1653:0216)

B224BIA-WH: White, isolator detector base, ULC listing

B224BIA-IV: Ivory isolator detector base, ULC listing

B200S-WH: White, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone. Uses LiteSpeed protocol. *(CSFM: 7300-1653:0213)*

B200S-IV: Ivory, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone. Uses LiteSpeed protocol. *(CSFM: 7300-1653:0213)*

B200SA-WH: Same as B200S-WH, ULC listing

B200SA-IV: Same as B200S-IV, ULC listing

B200SCOA-WH: White, Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with CO Series detector applications

B200SCOA-IV: Ivory Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with CO Series detector applications, ULC listing

B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. (*CSFM: 7300-1653:0238)*

B200S-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. (*CSFM: 7300-1653:0238)*

B200SR-WH: White, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications. *(CSFM: 7300-1653:0213)*

B200SR-IV: Ivory, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications. *(CSFM: 7300-1653:0213)*

B200SRA-WH: Same as B200SR-WH with, ULC listing

B200SRA-IV: Same as B200SR-IV in Ivory color, ULC listing

B200SR-LF-WH: White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (*CSFM: 7300-1653:0238)*

B200SR-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (*CSFM: 7300-1653:0238)*

MOUNTING KITS AND ACCESSORIES

TR300: White, replacement flange for B210LP(A) base

TR300-IV: Ivory, replacement flange for B210LP(A) base

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

M02-04-00: Test magnet

M02-09-00: Test magnet with telescoping handle

CK300: Color Kit (includes cover and trim ring), white, 10-pack

CK300-IV: Color Kit (includes cover and trim ring), ivory, 10-pack

CK300-BL: Color Kit (includes cover and trim ring), black, 10-pack

SYSTEM SPECIFICATIONS

Sensitivity:

- UL Applications: 0.5% to 4.0% per foot obscuration.
- ULC Applications: 0.5% to 3.5% per foot obscuration

Size: 2.0" (51mm) high; base determines diameter

  – **B300-6:** 6.1" (15.6 cm) diameter

  – **B501:** 4" (10.2 cm) diameter

For a complete list of detector bases see DF-60983

Shipping weight: 3.4 oz. (95 g)

Operating temperature range:

- SD365: 32°F to 122°F (0°C to 50°C)
- SD365T Series: 32°F to 100°F(0°C to 38°C)
- SD365R Series installed in a DNR/DNRW, -4°F to 158°F (-20°C to 70°C)

UL/ULC Listed Velocity Range: 0-4000 ft/min. (1219.2 m/min.), suitable for installation in ducts

Relative humidity: 10% – 93% non-condensing

Thermal ratings: fixed-temperature set point 135°F (57°C), rate-of-rise detection 15°F (8.3°C) per minute, high temperature heat 190°F (88°C)

ELECTRICAL SPECIFICATIONS

Voltage range: 15 - 32 volts DC peak

Standby current (max. avg.): 200µA @ 24 VDC (o ne communication every 5 seconds with LED enabled)

Max current: 4.5 mA @ 24 VDC (“ON”)

DETECTOR SPACING AND APPLICATIONS

Fire•Lite recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceiling, space detectors 30 feet (9.1m). For specific information regarding detector spacing, placement, and special applications refer to NFPA 72. A *System Smoke Detector Application Guide*, document SPAG91, is available at **www.systemsensor.com.**

Listings and Approvals

Listings and approvals below apply to the SD365 Series detectors. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL/ULC Listing: S1059
- FM Approved
- CSFM: 7272-0075:0502

For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX:(877) 699-4105.
www.firelite.com

Country of Origin: Mexico

Comments

Tyler Springer (Oelrich Construction, Inc.)

August 3, 2022 at 12:45 PM UTC

IN REVIEW: Please see the attached submittal for your review. Thank you.

SUBMITTAL SHEET

Oelrich Construction, Inc.
22.01.024. - Palms Medical Group Lake City

Project: 22.01.024.
Palms Medical Group Lake City

,

Spec Section Num: 28 0000.1
Submittal: 54
Revision: 0
Package: Electrical Safety & Security
Date: 9/16/2022 UTC

Submittal Title: Fire Alarm System - Shop Drawing
Submittal Detail:
Response Due By: 9/19/2022 UTC

Contractor:
Tyler Springer
Oelrich Construction, Inc.

Contractor's Stamp

Architect:
Jim Miller
Palms Medical Group - Trenton

Architect's Stamp

Response: Approved
Comment:

OELRICH CONSTRUCTION INC.

Oelrich Construction, Inc
275 NW 137th Drive, Suite A
Jonesville, FL 32669
352-745-7877

Project: 22.01.024 - Palms Medical Group - Lake City
Address: 173 NW Albritton Lane
Lake City, FL 32055

Date: 09.12.2022

Spec Section: 28 0000.1 - Fire Alarm System - Shop Drawing

Architect: N/A

Engineer: N/A

Subcontractor: Gator Fire

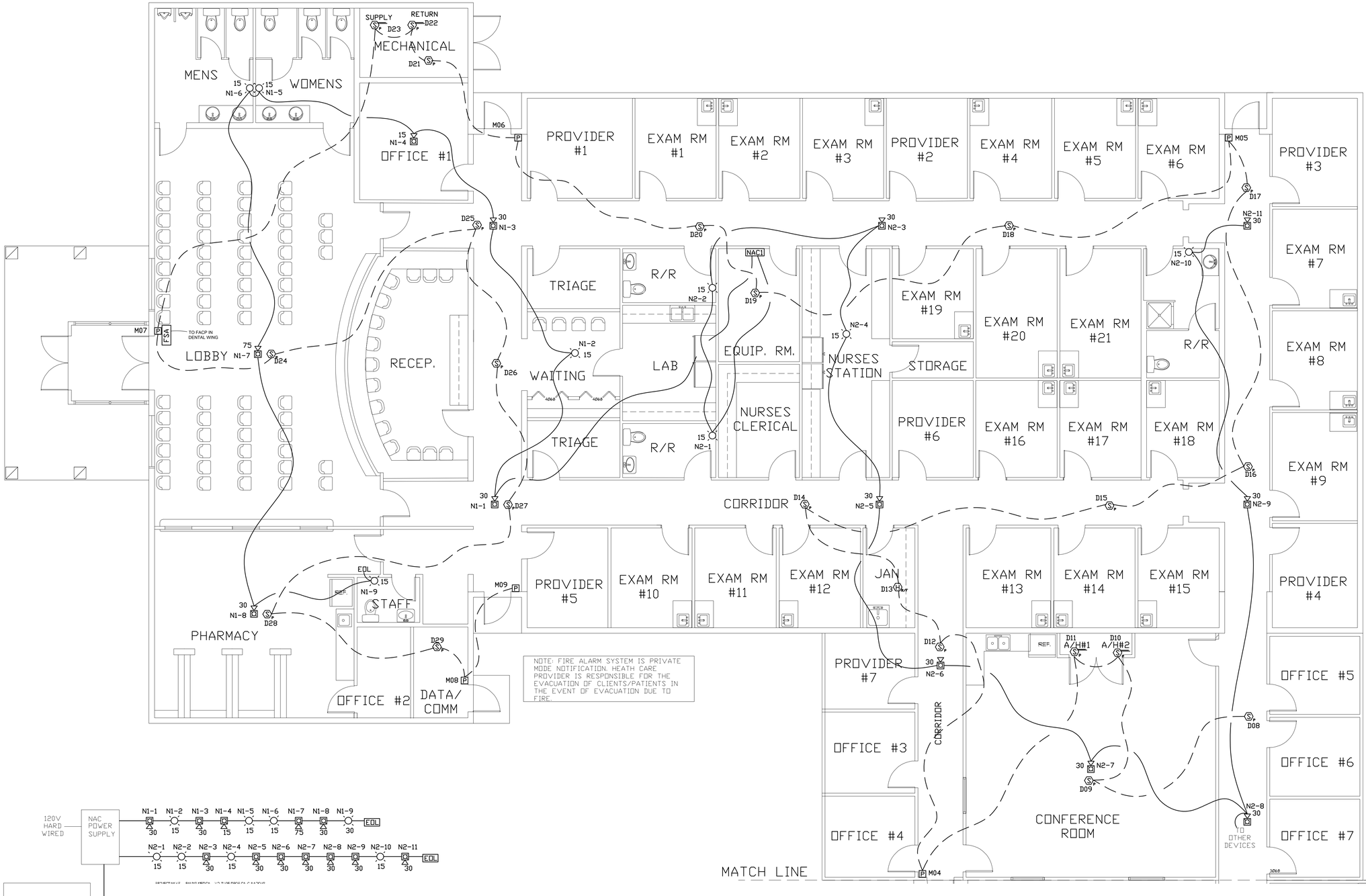
Supplier: Honeywell
Manufacturer: Honeywell

Submittal

☑ Approved
☐ Approved as noted
☐ Rejected- Resubmit

This document has been checked for general design construction,size, and conformity to contract documents. The subcontractor/ supplier providing these documents shall verify all dimensions, quantities, and capacities. Approval does not relieve the subcontractor/ supplier from compliance with contract documents.

By: TCS Date: 09.12.2022



FIRE ALARM RISER DIAGRAM
NTS

FIRE ALARM FLOOR PLAN
1/4" = 1'-0"

ADVANCE PRINT FOR REVIEW PENDING RESPONSE TO RFI - CURRENTLY DESIGNED AS PRIVATE MODE SYSTEM. 7-28-22

GATOR FIRE EQUIPMENT COMPANY
1032 SOUTH MAIN STREET
GAINESVILLE, FL 32601
PHONE 352-373-1738
FAX 352-338-1079

gatorFIRE EQUIPMENT COMPANY

REVISIONS:
1 9-10-22 REVISED SYMBOLS
2 xx/xx/xx xxxxxxxxxxxxx
3 xx/xx/xx xxxxxxxxxxxxx
4 xx/xx/xx xxxxxxxxxxxxx
5 xx/xx/xx xxxxxxxxxxxxx
6 xx/xx/xx xxxxxxxxxxxxx

JOB NAME: PALMS MEDICAL GROUP EAST
LAKE CITY, FLORIDA

SHEET NAME: FIRE ALARM FLOOR PLAN AND RISER

DRAWN BY: REC
DATE: 07/14/22
JOB #: 22130
SCALE (UNO): 3/16" = 1'-0"
AHJ: CITY OF LAKE CITY
SHEET NO: FA1

FIRE ALARM LEGEND

SYMBOLS	DESCRIPTION & MOUNTING	BACK BOX
FACP	FIRE ALARM CONTROL PANEL W/DIALER (1000 PT. MAX.) - WALL MOUNTED SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL	ROUGH-IN DIMS. 28"H.X15.75"W.X3.85"D. (ADD 3/4" TO ALL SIDES IF USING TRIM KIT.)
CCIS	ADDRESSABLE SINGLE INPUT SIGNAL CONTROL MODULE W/SYNCHRO.	4"SQ. 2-1/8" DEEP OR MOUNT INSIDE BPS CABINET
HP	120 VAC HARDWIRED SURGE PROTECTOR	MOUNT IN 4"SQ. 2-1/8" D. J-BOX
FAA#1	L.C.D. FIRE ALARM REMOTE ANNUNCIATOR - WALL MOUNTED, SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL - DENOTES ANNUNCIATOR PANEL NUMBER	4"SQ. 2-1/8" DEEP
NAC#1	FIRE ALARM REMOTE 10 AMP SIGNAL BOOSTER POWER SUPPLY SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL - DENOTES BOOSTER PANEL NUMBER	DIM. 13"W. X 17"H. X 3.375"D.
P	ADDRESSABLE DUAL ACTION PULL STATION - WALL MOUNTED 48" A.F.F. TO TOP OF DEVICE	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
P_{WP}	WEATHER PROOF DUAL ACTION PULL STATION WITH EST SIGA-CT1 ADDRESSABLE SINGLE INPUT MONITORING MODULE	SIGCOM SG-WP
AM	ADDRESSABLE SINGLE INPUT MONITORING MODULE	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
S_P	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR W/STANDARD BASE- CEILING MOUNTED.	4"SQ. 2-1/8" DEEP
H_{RT}	ADDRESSABLE 135° COMBINATION RATE OF RISE/FIXED TEMP. HEAT DETECTOR W/ STD. BASE - CEILING MOUNTED. IF LOCATED IN ELEVATOR EQUIPMENT ROOM OR ELEVATOR SHAFT/PIT, MOUNT WITHIN 3'-0" OF SPRINKLER HEADS.	4"SQ. 2-1/8" DEEP
S_P	ADDRESSABLE DUCT MOUNTED SMOKE DETECTOR - REFER TO MECHANICAL PRINTS AND NFPA90A FOR INSTALLATION AND LOCATION. (P) - PHOTOELECTRIC (S) - MOUNT TO SUPPLY DUCT; (R) - MOUNT TO RETURN DUCT	4"SQ. FLEX TO DUCT HOUSING
RTS	REMOTE TEST W/ ALARM INDICATOR LIGHT FOR DUCT DETECTOR. WALL MOUNTED 48" A.F.F. BELOW DUCT DETECTOR LOCATION. LABEL COVERPLATE PER ASSOCIATED AHU.	SINGLE GANG BOX - 2-1/8" DEEP
CM	ADDRESSABLE HIGH POWER CONTROL RELAY MODULE. IF FOR ELEVATOR OR AHU CONTROL, MOUNT WITHIN 3'-0" OF DEVICE TO CONTROL *CONTACTS RATED AT - 240V,3.0a - 24V,6a	4"SQ. 2-1/8" DEEP
CM	ADDRESSABLE CONTROL RELAY MODULE. IF FOR ELEVATOR OR AHU CONTROL, MOUNT WITHIN 3'-0" OF DEVICE TO CONTROL	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
M_2	ADDRESSABLE DUAL INPUT MONITOR MODULE	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
R	24 VDC SHUTDOWN/SHUNT TRIP CONTROL RELAY MOUNT WITHIN 3'-0" OF DEVICE TO CONTROL	MOUNT IN 4" SQ. JUNCTION BOX
M_2	ADDRESSABLE WATERFLOW/TAMPER MONITOR MODULE	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
	FIRE ALARM MULTI-SELECTABLE CANDELA STROBE SIGNAL DEVICE - WALL MOUNTED NO LESS THAN 80" A.F.F. FROM THE BOTTOM OF STROBE DEVICE. MOUNT BOX AT 82" A.F.F. TO BOTTOM SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
	FIRE ALARM LOW FREQUENCY HORN SIGNAL DEVICE - WALL MOUNTED NO LESS THAN 80" A.F.F. FROM THE BOTTOM MOUNT BOX AT 82" A.F.F. TO BOTTOM SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
	FIRE ALARM MULTI-SELECTABLE CANDELA HORN/STROBE SIGNAL DEVICE - WALL MOUNTED NO LESS THAN 80" A.F.F. FROM THE BOTTOM OF STROBE DEVICE. MOUNT BOX AT 82" A.F.F. TO BOTTOM SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL	4" SQ. - 2-1/8" DEEP WITH SINGLE GANG PLASTER RING.
	FIRE ALARM 110 CD WEATHERPROOF HORN/STROBE SIGNAL DEVICE - WALL MOUNTED NO LESS THAN 80" A.F.F. FROM THE BOTTOM OF STROBE DEVICE. MOUNT BOX AT 85" A.F.F. TO CENTER OF DEVICE 'C' INDICATED DEVICE IS CEILING MOUNTED - USE LKC-1 LENSE MARKING KIT	EST 449 WEATHERPROOF BOX EST 449 WEATHERPROOF BOX
	FIRE ALARM CEILING OR WALL MOUNTED MULTI-SELECTABLE HIGH CANDELA HORN/STROBE SIGNAL DEVICE	4"SQ. 2-1/8" DEEP
WALL MOUNTED CEILING MOUNTED	FIRE ALARM 110 CD WEATHERPROOF STROBE SIGNAL DEVICE - WALL MOUNTED NO LESS THAN 80" A.F.F. FROM THE BOTTOM OF STROBE DEVICE. MOUNT BOX AT 85" A.F.F. TO CENTER OF DEVICE SEE WALL MOUNTED EQUIP. ELEVATION MOUNTING HEIGHTS DETAIL	EST 449 WEATHERPROOF BOX EST 449 WEATHERPROOF BOX
EOL	END OF LINE RESISTOR	MOUNT BEHIND LAST DEVICE ON CIRCUIT
WF	WATERFLOW SWITCH FOR SPRINKLER SYSTEM.	
TS	TAMPER SWITCH FOR SPRINKLER SYSTEM.	
JB	TYPICAL JUNCTION BOX - AS NEEDED TO FIT WIRES.	
CD	COMBINATION SPEAKER/VISIBLE WALL MOUNT CD=CANDELLA RATING, W=WATTAGE	
CD	COMBINATION SPEAKER/VISIBLE CEILING MOUNT CD=CANDELLA RATING, W=WATTAGE	
AMP	VOICE AMPLIFIER	

##

24 VDC FIRE ALARM CIRCUIT RUNS. '##' - DENOTES CABLE TYPE

120VAC CIRCUIT. SLASH LINES DENOTES NUMBER OF CONDUCTORS.

NOTE: STANDARD BACK BOXES AND CONDUITS ARE PROVIDED BY ELECTRICAL CONTRACTOR

A.F.F.=ABOVE FINISHED FLOOR EST=EDWARDS SYSTEM TECHNOLOGY J.S.C.=JAX SOUND & COMMUNICATIONS FBO=FURNISHED BY OTHERS

ADDRESSABLE DEVICE'S SUBSCRIPT NOTES:

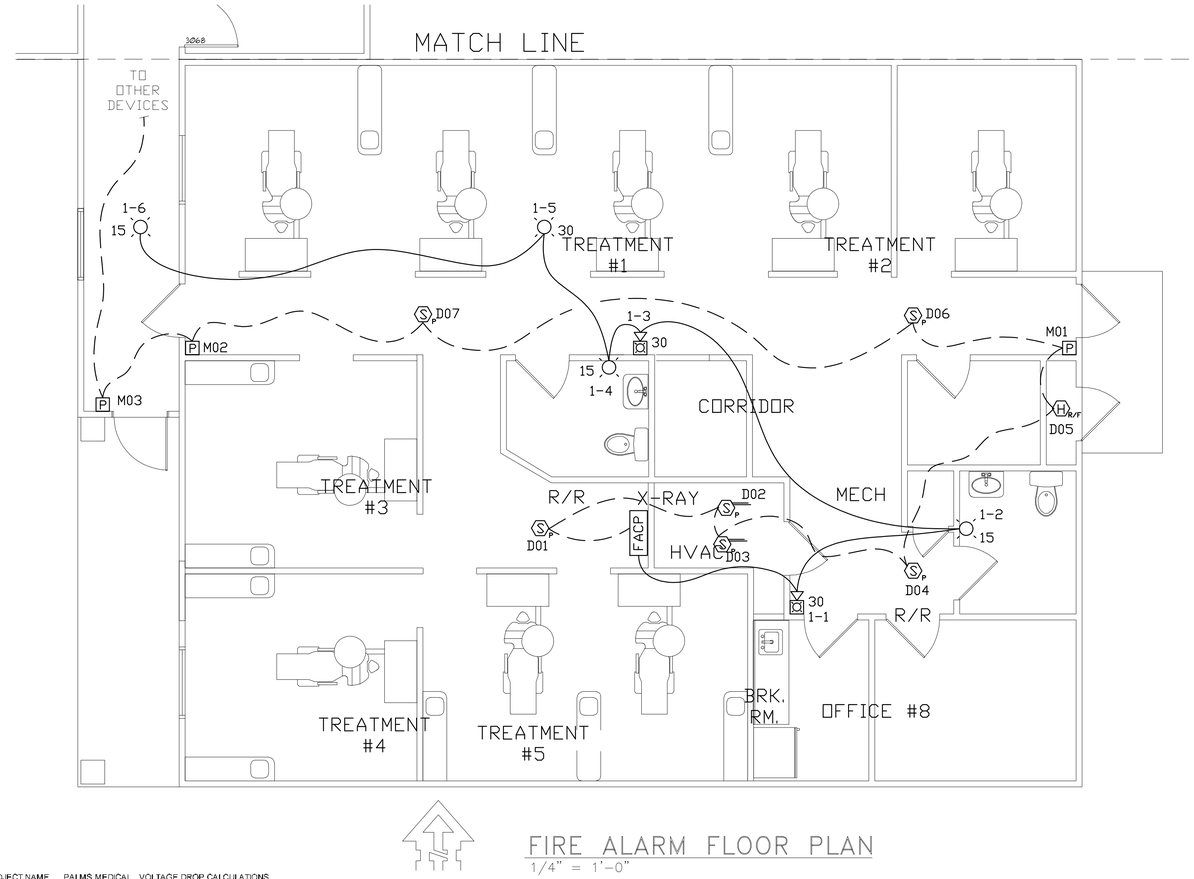
F M#### S D#### — TYPICAL INITIATING DEVICE; TYPICAL DEVICES NUMBER; "####" - DENOTES DEVICES ADDRESS NUMBER; "M" DENOTES MODULE TYPE; "D" DENOTES DETECTOR TYPE

NOTE:
DETECTORS FROM 001 THRU 125
MODULES & PULL STATIONS FROM 126 THRU 250

NOTIFICATION SIGNAL DEVICE'S SUBSCRIPT NOTES:

15 H## - ? HORN/STROBE — DEVICE NUMBER TIED TO HORN/STROBE CIRCUIT; DENOTES HORN/STROBE SIGNAL CIRCUIT NUMBER; DENOTES STROBE CANDELA SETTING

15 H## - ? STROBE — DEVICE NUMBER TIED TO HORN/STROBE CIRCUIT; DENOTES HORN/STROBE SIGNAL CIRCUIT NUMBER; DENOTES STROBE CANDELA SETTING



FIRE ALARM FLOOR PLAN
1/4" = 1'-0"

PROJECT NAME PALMS MEDICAL VOLTAGE DROP CALCULATIONS
ADDRESS LAKE CITY

VOLTAGE DROP BASED ON 24V
#14 FIRE ALARM CABLE
2.5 OHMS/1000FT
SYSTEM VOLTA 24
MIN VOLTAGE 20

NAC CKT 1	TOT LENGTH	127	STAND BY	ALARM	TOTAL	TOTAL
DEVICE	PART NO	NO. OF DEVICES	CURRENT/DEV	CURRENT/DEV	STANDBY	ALARM
HORN STROBE	P2R15	4	0.00	0.069	0	0.276
HORN STROBE	P2R30	8	0.00	0.09	0	0.72
HORN STROBE	P2R75	1	0.00	0.135	0	0.135
STROBE	STR15			0.043	0	0
STROBE	STR30			0.063	0	0
					0	0
					0	0
					0	0
					0	0
TOTAL NAC 1					0.00	1.131
TOTAL VOLTAGE DROP NAC CKT 1			0.72			
		END VOLTAGE	23.28	OK		

NAC CKT 2	TOT LENGTH	151	STAND BY	ALARM	TOTAL	TOTAL
DEVICE	PART NO	NO. OF DEVICES	CURRENT/DEV	CURRENT/DEV	STANDBY	ALARM
HORN STROBE	P2R15	0	0.00	0.069	0	0
HORN STROBE	PWR30	6	0.00	0.09	0	0.54
HORN STROBE	P2R75	0	0.00	0.201	0	0
STROBE	STR15	4	0.00	0.043	0	0.172
STROBE	STR30	0	0.00	0.063	0	0
					0	0
					0	0
					0	0
					0	0
TOTAL NAC 2	TOT LENGTH	151			0	0.712
TOTAL VOLTAGE DROP NAC CK''			0.54			
		END VOLTAGE	23.46	OK		

EX50X CKT 1	TOT LENGTH	60	STAND BY	ALARM	TOTAL	TOTAL
DEVICE	PART NO	NO. OF DEVICES	CURRENT/DEV	CURRENT/DEV	STANDBY	ALARM
HORN STROBE	P2R15	1	0.00	0.069	0	0.069
HORN STROBE	PWR30	1	0.00	0.09	0	0.09
HORN STROBE	P2R75	0	0.00	0.201	0	0
STROBE	STR15	3	0.00	0.043	0	0.129
STROBE	STR30	1	0.00	0.063	0	0.063
					0	0
					0	0
					0	0
					0	0
TOTAL NAC 2	TOT LENGTH	60			0	0.351
TOTAL VOLTAGE DROP NAC CK''			0.11			
		END VOLTAGE	23.89	OK		

FIRE ALARM SYSTEM NOTES

1. PROVIDE AN ADDRESSABLE FIRE ALARM SYSTEM PER NFPA AND ALL STATE AND LOCAL CODE REQUIREMENTS. COMPLY WITH NFPA 72 AND ADA REQUIREMENTS. STATE CERTIFIED AND LICENSED FIRE ALARM CONTRACTOR SHALL PREPARE AND SUBMIT SIGNED AND SEALED DRAWINGS FOR THE LOCAL AUTHORITY HAVING JURISDICTION/ FIRE MARSHALL. ALL FIRE ALARM EQUIPMENT IS TO BE NEW, UL LISTED FOR FIRE SERVICE, AND SHALL BE COMPATIBLE WITH THE SYSTEM BEING USED.
2. ALL WIRING AND CONDUIT IS TO CONFORM TO NEC ARTICLE 760. WIRING SHALL BE UL LISTED, MINIMUM 300V TYPE FPLP PLENUM RATED SOLID COPPER OR STANDARD COPPER WITH MAXIMUM 19 STRANDS.
3. LOW VOLTAGE CONDUCTORS: PROVIDE CONDUCTORS IN ACCORDANCE WITH NFPA 70 AND NFPA 72, AND AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER. CONDUCTORS SHALL BE COPPER, MINIMUM NO. 14 AWG, TWISTED SHIELDED PAIR.
4. MANUAL PULL STATIONS ARE TO BE INSTALLED AT 42" TO BOTTOM OF DEVICE AND NO HIGHER THAN 48" TO HANDLE ABOVE FINISHED FLOOR.
5. BETWEEN EACH FIRE ALARM DEVICE AND FROM DEVICE TO PANEL SHALL BE FREE PULLED FA CABLE CONCEALED IN WALLS OR CEILING. ANY CABLE WHICH WOULD BE EXPOSED SHALL BE INSTALLED IN EMT CONDUITE TO FACP UNLESS OTHERWISE NOTED.
6. FIRE ALARM CONTROL PANEL AND EXTENDED POWE SUPPLY PANELS SHALL BE PROVIDED WITH DEDICATED 120V CIRCUIT WITH EQUIPMENT GROUND CONNECTION PER MANUFACTURER'S RECOMMENDATIONS AND ARTICLE 760 OF THE NEC. PROVIDE MINIMUM #12 AWG FOR GROUND CONNECTION. NOTE: PANEL NEUTRAL OR CONDUIT GROUND IS NOT ACCEPTABLE. 120V CIRCUIT SHALL BE FROM LIFE SAFETY BRANCH WHERE AVAILABLE.
7. ALL FIRE ALARM POWER CIRCUITS SHALL HAVE A DEDICATED 120V 20A BREAKER THAT SHALL BE RED IN COLOR AND MECHANICALLY PROTECTED (LOCKABLE IN THE "ON" POSITION), MARKED AS "FIRE ALARM CIRCUIT".
8. SECONDARY BACK-UP POWER SHALL BE PROVIDED BY INTEGRAL BATTERIES WITHIN THE FIRE ALARM CONTROL PANEL TO SUPPLY POWER TO THE SYSTEM UNDER QUIESCENT LOAD FOR A MINIMUM OF 24 HOURS, AND THEN BE CAPABLE OF AN ADDITIONAL 15 MINUTES ALARM OPERATION AT MAXIMUM CONNECTED LOAD.
9. A SUPERVISORY SIGNAL SHALL BE ANNUNCIATED UPON ANY TAMPER SWITCH ACTIVATION. FAILURE OR REMOVAL OF ANY DETECTION OR MANUAL DEVICE SHALL ACTIVATE A TROUBLE SIGNAL.
10. A CERTIFICATION OF COMPLETION AND UL LISTING SHALL BE ISSUED AND INSTALLED ON THE FIRE ALARM CONTROL PANEL.
11. MINIMUM CANDELA RATING OF STROBES IS AS INDICATED ON THE DRAWINGS AND RISER. PROVIDE SYNCHRONIZATION OF STROBES IN ALL ADJACENT AREAS WHERE STROBES ARE VISIBLE TO EACH OTHER.
12. ALL STROBES SHALL ACTIVATE UPON INITIATION OF THE GENERAL ALARM.
13. ALL STROBES SHALL BE INSTALLED PER ADA MOUNTING HEIGHT REQUIREMENTS. WALL MOUNTED STROBES SHALL BE INSTALLED SO THAT THE BOTTOM OF THE STROBE LENS IS 80" AFF.
14. STROBES SHALL BE INSTALLED WITHIN 15' OF THE ENDS OF ALL CORRIDORS.
15. SPEAKER/STROBES, HEAT DETECTORS OR MANUAL PULL STATIONS INSTALLED OUTSIDE OR IN AREAS OPEN TO THE EXTERIOR SHALL BE WEATHERPROOF DEVICES IN APPROVED BACKBOXES.
16. SMOKE DETECTORS SHALL BE PHOTO-ELECTRIC ADDRESSABLE TYPE.
17. SMOKE DETECTORS ARE TO BE INSTALLED PER NFPA 72. WALL MOUNTED SMOKE DETECTORS SHALL BE MOUNTED 4"-12" BELOW THE CEILING AND AWAY FROM CORNERS.
18. ALL SMOKE DETECTORS SHALL BE INSTALLED A MINIMUM OF 36" AWAY FROM ANY SUPPLY OR RETURN AIR VENTS OR DIFFUSERS.
19. SMOKE DETECTORS LOCATED IN ELEVATOR LOBBIES, ELEVATOR HOISTWAYS AND ELEVATOR MACHINE ROOMS SHALL INITIATE ELEVATOR RECALL, ACTIVATE ELEVATOR WARNING LIGHTS AND CAUSE SEPARATE AND DISTINCT VISIBLE ANNUNCIATION AT THE FIRE ALARM CONTROL PANEL AND FIRE ALARM ANNUNCIATORS.
20. DUCT DETECTORS SHALL BE PHOTO-ELECTRIC ADDRESSABLE TYPE, AND RATED FOR VELOCITIES UP TO 5000 FT/MIN.
21. HEAT DETECTORS SHALL BE ADDRESSABLE, FIXED AND RATE OF RISE TYPE @ 135 DEG F, UNLESS OTHERWISE NOTED.
22. WHERE THERE IS A GENERATOR ON THE PROJECT, CIRCUIT THE REMOTE GENERATOR ANNUNCIATOR PANEL ALARM OUTPUTS TO FIRE ALARM CONTROL PANEL PER AUTHORITY HAVING JURISDICTION REQUIREMENTS.
23. FIELD VERIFY LOCATION OF AREA SMOKE DETECTORS AND HEAT DETECTORS. DO NOT LOCATE WITHIN 36" OF AN HVAC DIFFUSER (SUPPLY OR RETURN), IN DIRECT AIR FLOW PATH, OR WITHIN 36" OF A SPRINKLER HEAD UNLESS NOTED OTHERWISE. SMOKE DETECTORS FOR DOOR RELEASE SHALL BE LOCATED ON THE CENTERLINE OF THE DOOR AND A MAXIMUM OF FIVE FEET FROM THE DOOR. THE MINIMUM DISTANCE FROM THE DOOR SHALL BE THE DEPTH OF THE WALL SECTION ABOVE THE DOOR, BUT NOT LESS THAN 12".
24. PROVIDE LABELS FOR REMOTE ALARM INDICATORS FOR DUCT MOUNTED SMOKE DETECTORS (I.E., AHU-1 SUPPLY, AHU-2 RETURN, FIRE/SMOKE DAMPER, ETC.). DUCT DETECTORS SHOULD BE LOCATED WITHIN 6 TO 10 EQUIVALENT DIAMETERS OF STRAIGHT, UNINTERRUPTED DUCTWORK. DUCT DETECTORS FOR FIRE/SMOKE DAMPERS SHOULD BE LOCATED BETWEEN THE LAST INLET OR OUTLET UPSTREAM OF THE DAMPER AND THE FIRE INLET OR OUTLET DOWNSTREAM OF THE DAMPER, AND WITHIN FIVE FEET OF THE FIRE/SMOKE WALL.
25. EQUIPMENT SHUT DOWN FIRE ALARM RELAYS SHALL BE LOCATED WITHIN THREE (3) FEET OF THE EQUIPMENT CONTROLS AND THE WIRING TO THE RELAY SHALL BE MONITORED BY THE FIRE ALARM SYSTEM.
26. ALL NOTIFICATION APPLIANCES SHALL BE RED IN COLOR UNLESS OTHERWISE NOTED.
26. FIRE ALARM CIRCUITS SHALL BE CLASS "B", STYLE "C" FOR INITIATION DEVICE CIRCUITS (IDC) AND CLASS "B" STYLE "Y" FOR NOTIFICATION DEVICE CIRCUITS (NAC), UNLESS OTHERWISE NOTED.
27. NOTIFICATION DEVICES SHALL BE ADDRESSABLE ELECTRIC-VIBRATING-POLARIZED HORNS, SELECTABLE FOR HIGH OR LOW dBA OUTPUT. THEY SHALL HAVE A SOUND PRESSURE LEVEL OF 90dBA MEASURED 10 FEET FROM HORN, USING CODED SIGNAL PER NFPA 72.
28. CONTRACTOR/VENDOR SHALL PREPARE FLORIDA LICENSE P.E. WORKING DRAWINGS INCORPORATING THE FIRE ALARM CRITERIA DESIGN AND CONFIRMING TO AHJ REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL MATERIAL REQUIRED PER AHJ AND DESIGN CRITERIA FOR A FULLY FUNCTIONING AND PERMITTABLE FIRE ALARM SYSTEM. SUBMIT TO DESIGN PROFESSIONAL AS A SHOP DRAWING FOR REVIEW. SUBMIT COMPLETE SIGNED & SEALED DRAWINGS TO PERMITTING AGENCY AND FOR CERTIFICATE OF OCCUPANCY. COMPLETED FIRE ALARM CERTIFICATION SHALL BE PROVIDED TO OWNER AT COMPLETION OF CONSTRUCTION.
29. FIRE ALARM DESIGN IS IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 61G15-32. WHERE A FIRE ALARM RISER IS INDICATED, IT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO REPRESENT A COMPLETE WIRING AND DEVICE DISPLAY. ALL WIRING AND DEVICES SHALL BE IN ACCORDANCE WITH SELECTED VENDOR'S POINT-BY-POINT WIRING DIAGRAM. REFER TO FLOOR PLAN FOR DESIGN INTENT AND PROPOSED QUANTITY OF FIRE ALARM SYSTEM COMPONENTS.

ADVANCE PRINT FOR REVIEW PENDING RESPONSE TO RFI - CURRENTLY DESIGNED AS PRIVATE MODE SYSTEM. 7-28-22

GATOR FIRE EQUIPMENT COMPANY
1032 SOUTH MAIN STREET
GAINESVILLE, FL 32601
PHONE 352-373-1738
FAX 352-338-1079

gatorFIRE EQUIPMENT COMPANY

REVISIONS:	
1	9-10-22 REVISED SYMBOLS
2	xx/xx/xx xxxxxxxxxxxxx
3	xx/xx/xx xxxxxxxxxxxxx
4	xx/xx/xx xxxxxxxxxxxxx
5	xx/xx/xx xxxxxxxxxxxxx
6	xx/xx/xx xxxxxxxxxxxxx

JOB NAME: PALMS MEDICAL GROUP EAST
LAKE CITY, FLORIDA

SHEET NAME: FIRE ALARM FLOOR PLAN

DRAWN BY:	REC
DATE:	07/14/22
JOB #:	22130
SCALE (UNO):	3/16" = 1'-0"
AHJ:	CITY OF LAKE CITY

SHEET NO:
FA2

FIRE-LITE ALARMS by Honeywell

ES-50X Battery Calculation

Secondary Power Source Requirements

	Standby Current (amps)					Secondary Alarm Current (amps)				
Device	Qty		Current Draw		Total	Qty		Current Draw		Total
Main Circuit Board	1	x	0.141000	=	0.141000	1	x	0.257000	=	0.257000
IPOTS-COM Communicator	1	x	0.040000	=	0.040000	1	x	0.041000	=	0.04100
4XTMF	0	x	0.005000	=		0	x	0.011000	=	
EOLR-1	0	x	0.020000	=		0	x	0.020000	=	
CELL-MOD-FL / CELL-CAB	0	x	0.055000	=		0	x	0.100000	=	
ANN-BUS Devices										
ANN-SEC Card	0	x	0.003000	=		0	x	0.003000	=	
ANN-80(-W)	0	x	0.015000	=		0	x	0.040000	=	
ANN-100	0	x	0.020000	=		0	x	0.025000	=	
ANN-(R)LED	0	x	0.028000	=		0	x	0.068000	=	
ANN-RLY	0	x	0.015000	=		0	x	0.075000	=	
ANN-I/O	0	x	0.035000	=		0	x	0.200000	=	
ANN-I/O LED	0	x	0.000000	=		0	x	0.010000	=	
ANN-S/PG	0	x	0.045000	=		0	x	0.045000	=	
Addressable Devices										
BEAM355	0	x	0.002000	=						
BEAM355S	0	x	0.002000	=						
CP355	0	x	0.000300	=						
SD365CO	0	x	0.002000							
SD355CO	0	x	0.000300	=						
SD355	0	x	0.000300	=						
SD365	27	x	0.000200	=	0.005400					
SD355T	0	x	0.000300	=						
SD365T	0	x	0.000200	=						
H355	0	x	0.000300	=						
H365	0	x	0.000200	=						
H355HT	2	x	0.000300	=	0.000600					
H365HT	0	x	0.000200	=						
H350R	0	x	0.000300	=						
H355R	0	x	0.000300	=						
H365R	0	x	0.000200	=						
D350RPL	0	x	0.000300	=						
D355PL	0	x	0.000300	=						
MMF-300	0	x	0.000375	=						
MMF-300-10	0	x	0.003500	=						
MDF-300	0	x	0.000750	=						
MMF-301	0	x	0.000350	=						
MMF-302	0	x	0.000270	=						
MMF-302-6	0	x	0.002000	=						
BG-12LX	8	x	0.000375	=	0.003000					
CMF-300	0	x	0.000390	=						
CMF-300-6	0	x	0.002250	=						
CRF-300	0	x	0.000255	=						
CRF-300-6	0	x	0.001450	=						
CDRM-300	0	x	0.001300	=						
I300	0	x	0.000400	=						

ISO-6	0	x	0.002700	=							
B501BH-2	0	x	0.001000	=							
B501BHT-2	0	x	0.001000	=							
B224RB	0	x	0.000500	=							
B224BI	0	x	0.000450	=							
W-GATE	0	x	0.024000	=							
Maximum alarm draw for all Addressable devices ---------->											0.20000
Resettable Power											
4-Wire Smoke Detectors	0	x	0.000000	=		0	x	0.000000	=		
SWIFT Wireless											
W-GATE	0	x	0.040000	=		0	x	0.040000	=		
Auxiliary Power											
CMF-300 (Aux. Power)	0	x	0.001700	=		0	x	0.007000	=		
CMF-300-6 (Aux. Power)	0	x	0.008000	=		0	x	0.020000	=		
MMF-302 (Aux. Power)	0	x	0.012000	=		0	x	0.090000	=		
MMF-302-6 (Aux. Power)	0	x	0.050000	=		0	x	0.270000	=		
B200SR (Aux. Power)	0	x	0.000500	=		0	x	0.035000	=		
B200SR-LF (Aux. Power)	0	x	0.001000	=		0	x	0.125000	=		
Miscellaneous Devices											
MDL3R	0	x	0.120000	=		0	x	0.180000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
Output Circuits											
NAC/Output #1			0.048000	=	0.048000			0.400000	=		0.400000
NAC/Output #2			0.000000	=				0.000000	=		
FCPS (remote Sync)	1	x	0.000000	=	0.000000	1	x	0.021700	=		0.021700
Total Standby Load					**0.238000**	**Total Alarm Load**					**0.919700**

FIRE-LITE ALARMS by Honeywell

ES-50X Battery Calculation

Calculation in Total Sheet

		Required Standby Time in Hours			
		24 Hours			
Total Standby Current	**0.2380 Amps**	x	24	=	5.712 AH
		Required Alarm Time in Minutes			
		5 Minutes			
Total Alarm Load	**0.9197 Amps**	x	0.084	=	0.077 AH
				Total Current Load	**5.789 AH**
			Multiply by the Derating Factor	=	x 1.20
				Total Ampere Hours Required	**6.95 AH**

NOTIFIER by Honeywell

System Power Requirements

FCPS-24s8 Power Supply

Protected Premises:	Palms Medical Groupl East		Date: 8/22/2022
Address:			
City:	Lake City	State: Florida	Zip:
Prepared By:	GATOR FIRE EQUIPMENT CO		Phone: 3523731738
Address:	1032 S MAIN ST		Email:
City:	GAINESVILLE	State: FLORIDA	Zip: 32601

AC Branch Current Requirements

3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load

0.09 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load

2.03 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements

2.08 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time 24 hours	1.56
Secondary Alarm Load 2.025 A	x	Required Alarm Time (hours) 0.084 hours	0.17
		Total Secondary Load	1.73
		Derating factor	x 1.2
		Secondary Load Requirements	**2.08** AH

Battery Selection

7 Amp Hours

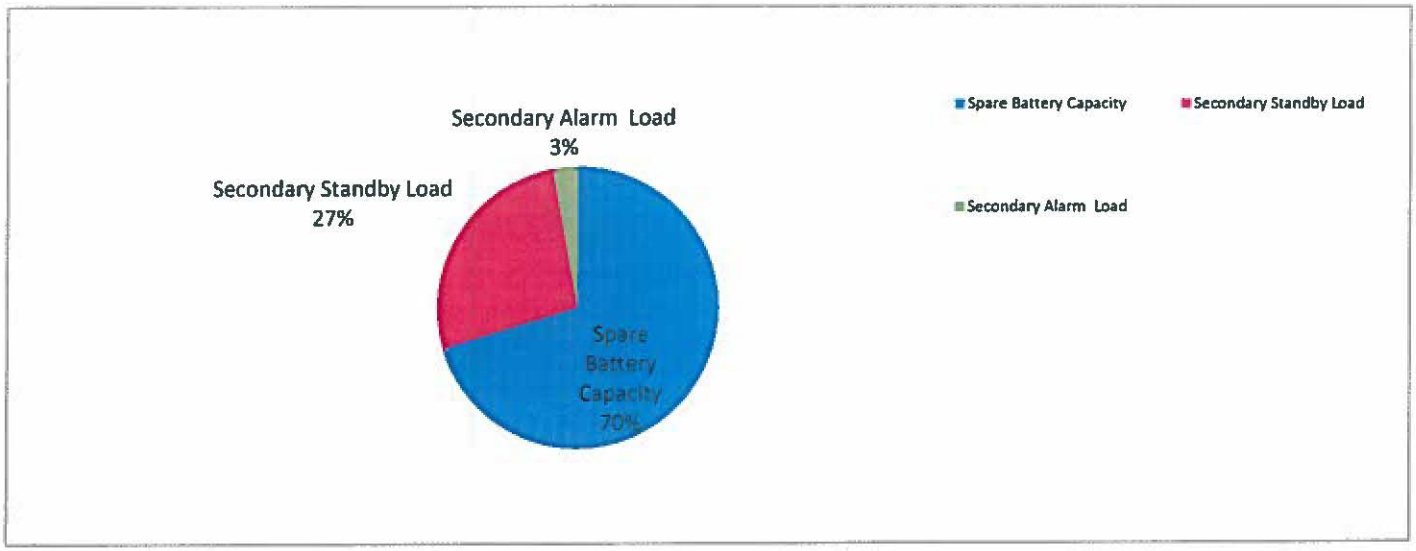
Select batteries from the list below.

7 AH BAT-1270 Battery (12 volt)

(•) Two ( ) Four (two 12VDC sets in parallel)

Battery Distribution Chart

Shows amp-hour distribution of your selections.



Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	4.92	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.20	Secondary Alarm Load (AH) * Derating Factor

NOTIFIER by Honeywell

AC Branch Current

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

Note: These selections only determine the AC branch current. If these devices will affect the battery requirements, you need to select them on the System Current Draw sheet.

◉ 120 VAC ○ 220/240 VAC

Device	Qty		Current	Total
FCPS-24S8	1	x	3.20 A	3.20 A
			AC Branch Required:	**3.20 A**

NOTIFIER by Honeywell

System Current Draw - FCPS-24s8

Total Current	
C1	0.091 A
C2	2.025 A
C3	0.065 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500
STR15	7	x	0.00000	0.00000	7	x	0.05700	0.39900	7	x	0.00000	0.00000
STR30	2	x	0.00000	0.00000	2	x	0.08500	0.17000	2	x	0.00000	0.00000
P2R15	1	x	0.00000	0.00000	1	x	0.09100	0.09100	1	x	0.00000	0.00000
P2R30	9	x	0.00000	0.00000	9	x	0.11600	1.04400	9	x	0.00000	0.00000
P2R75	1	x	0.00000	0.00000	1	x	0.17600	0.17600	1	x	0.00000	0.00000
			Total Non-Alarm Load:	**0.091**			**Total Alarm Load:**	**2.025**			**Total Standby Load:**	**0.065**

NOTIFIER by Honeywell

Device Current Draw

FCPS-24s8 Power Supply

Quantity x [device current draw] = total current draw per device (in amps)

Part Number	Qty	Primary Non-Alarm	Primary Alarm	Secondary Non-Alarm
FCPS-24S8 Main Circuit Board	1	x [0.09100] = 0.09100	x [0.14500] = 0.14500	x [0.06500] = 0.06500
STR15	7	x [0.00000] = 0.00000	x [0.05700] = 0.39900	x [0.00000] = 0.00000
STR30	2	x [0.00000] = 0.00000	x [0.08500] = 0.17000	x [0.00000] = 0.00000
P2R15	1	x [0.00000] = 0.00000	x [0.09100] = 0.09100	x [0.00000] = 0.00000
P2R30	9	x [0.00000] = 0.00000	x [0.11600] = 1.04400	x [0.00000] = 0.00000
P2R75	1	x [0.00000] = 0.00000	x [0.17600] = 0.17600	x [0.00000] = 0.00000
Total (Amperes):		**0.0910 A**	**2.0250 A**	**0.0650 A**

Fire Alarm System - Shop Drawing
Oelrich Construction, Inc.
22.01.024. - Palms Medical Group Lake City

Comments

Tyler Springer (Oelrich Construction, Inc.)

September 12, 2022 at 9:14 PM UTC

IN REVIEW: Please see the attached submittal for your review. Thank you.