

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

This is to certify that FEDERAL CREDITUNION
TRUCHOICE

Located At 270 PARK

City of Portland

CBL: 065 - - E - 004 - 001 - - - -

Job ID: 2010-12-108-FAFS

has permission to install a Fire Alarm System
provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY.

PENALTY FOR REMOVING THIS CAR

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101

Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2010-12-108-FAFS	Applicatin Date: 12/20/2010	CBL: 065 - - E - 004 - 001 - - - - -
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PERMIT ISSUED

Location of Construction: 270 PARK <i>AVE</i>	Owner Name: FEDERAL CREDIT UNION TRUCHOICE	Owner Address: PO BOX 10659 PORTLAND, ME - MAINE 04104 City of Portland	Phone:
Business Name:	Contractor Name: MONITORIN, PROTECTION ONE ALARM	Contractor Address: 10 MANUEL DR PORTLAND ME 04103 PORTLANDMAINE04103	Phone:
Lessee/Buyer's Name:	Phone:	Permit Type:	Zone: <i>R-P</i>
Past Use: <i>Federal C.U</i>	Proposed Use: <i>Federal C.U.</i>	Permit Fee:	Cost of Work:
CEO District:			
Proposed Project Description: <i>Fire Alarm System</i>			
Permit Taken By:	Date Applied For: <i>12/20/10</i>	<i>12/29/2010 / 12/29/2010</i>	



PORTLAND MAINE

PERMIT ISSUED

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

City of Portland

Director of Planning and Urban Development
Penny St. Louis

Job ID: 2010-12-108-FAFS

Located At: 270 PARK

CBL: 065 - - E - 004 - 001 - - - -

Conditions of Approval:

Zoning

1. This property shall remain a credit union/banking facility. Any change of use shall require a separate permit application for review and approval.

Fire

1. The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.
2. This permit is being approved on the basis of the plans submitted. Any deviation from the plans would require amendments and approval.
3. Central Station monitoring for addressable fire alarm systems shall be by point.
4. Fire Alarm system shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.
5. Installation of a Fire Alarm system requires a Knox Box to be installed per city ordinance.
6. A document records cabinet is required.
7. Submit Voltage drop and battery calculations.

Building

1. Fire Alarm systems shall be installed per Sec. 907 of the IBC 2009.
2. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm HVAC systems, heating appliances, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101
Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2010-12-108-FAFS	Applicatin Date: 12/20/2010	CBL: 065 - - E - 004 - 001 - - - - -
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PERMIT ISSUED

Location of Construction: 270 PARK <i>AVE</i>	Owner Name: FEDERAL CREDIT UNION TRUCHOICE	Owner Address: PO BOX 10659 PORTLAND, ME - MAINE 04104 City of Portland	Phone:
Business Name:	Contractor Name: MONITORIN, PROTECTION ONE ALARM	Contractor Address: 10 MANUEL DR PORTLAND ME 04103 PORTLANDMAINE04103	Phone:
Lessee/Buyer's Name:	Phone:	Permit Type:	Zone: <i>R-P</i>
Past Use: <i>Federal C.U</i>	Proposed Use: <i>Federal C.U.</i>	Permit Fee:	Cost of Work:
CEO District:			
Proposed Project Description: <i>Fire Alarm System</i>			
Permit Taken By:	Date Applied For: <i>12/20/10</i>		

12/29/2010 / 12/29/2010

CITY OF PORTLAND, ME
 INSPECTION DIVISION
 309 CONGRESS ST
 ROOM 315
 PORTLAND, ME 04101
 (207)874-8701

Merchant ID: 181880146545

Term ID: 001

Ref #: 003

Phone Order

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

PERMIT ISSUED

City of Portland

XXXXXXXXXXXX9676

MASTERCARD

Entry Method: Manual

Check, Check Number 487390

12/20/10

11:47:20

30

Inv #: 000003

Appr Code: 487390

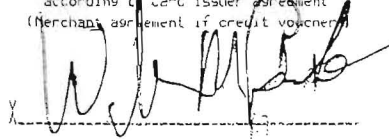
Apprvd: Online

Batch#: 000141

10 12:00:00 AM

Total: \$ 100.00

I agree to pay above total amount
 according to card issuer agreement
 (Merchant agreement if credit voucher)



Merchant Copy
 Thank YOU!

	Fee Code Version:	
	Originator Payment Date	
	Is Waiver in Percentage:	True
Transaction Amount	Charge Amount	100.00
Additional Comments.		

Thank You for your Payment!

PERMIT ISSUED

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

City of Portland

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

1. Close-In (Electrical)
2. Final Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



Fire Alarm Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

Installation address: 272 Park Avenue CBL: _____

Exact location: (within structure) FACP at front vestibule entrance

Type of occupancy(s) (NFPA & ICC): Business

Building owner: TruChoice Credit Union

System Designer (point of contact): Robin Russell
Must be

Designer phone: (207) 347-5327 E-mail: rrussell@protectionone.com

Installing contractor: Protection One Certificate of Fitness No: _____

Contractor phone: (207) 347-5310 E-mail: timothyparent@protectionone.com

This is a new application: YES NO New AES Master Box: YES NO
(Include Master Box approval form)

Amendment to an existing permit: YES NO Permit no: _____

The following documents shall be provided with this application:

- Floor plans
- Wiring diagram
- Annunciator details
- Input/ Output Matrix
- Equipment data sheets
- Electrical Permit Pulled (check alarm/com)
- Scope of Work
- 11 1/2 x 17s
- pdf copy (may be e-mailed)
- Designer qualifications
- Battery/ voltage drop calcs

Master box approval only: YES NO
(If yes check *New AES Master Box* above)

COST OF WORK <u>\$7490.00</u>
PERMIT FEE: _____ <small>(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)</small>

The designer shall be the responsible party for this application. Download a new copy of this application at www.portlandmaine.gov/fire for every submittal. Submit all plans in electronic PDF in addition to readable 11 1/2 x 17s to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire alarm system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with the *City of Portland Technical Standard for Signaling Systems for the Protection of Life and Property*, available at www.portlandmaine.gov/fire.

Applicant signature: Robin Russell Date: 12/20/10



Commercial Scope of Work

Business Name TruChoice Credit Union	Site #	Today's Date 12/20/10
Address Route 272 Park Avenue, Portland Maine 04101	Portland Fire City Box # (if applicable)	Fire Inspections (require the following) Panel Type: Silent Knight 5700 Addressable
Contact Person Phone Number Greg Berry 772-0808		Customer #

. The purpose of this job is to upgrade the existing conventional fire/security alarm system. The fire alarm panel will be replaced with an addressable system; the security equipment (including panel) will be upgraded and completely separated from the fire alarm system. Fire alarm devices will be added to cover the total building.

*****When working with existing and older systems we may encounter additional problems that we can't foresee which may require additional Parts and cost. . We will not know if any other devices have been damaged or are inoperable, until we can get a working Fire Panel in place.***

By: Robin Russell

Title: CSC

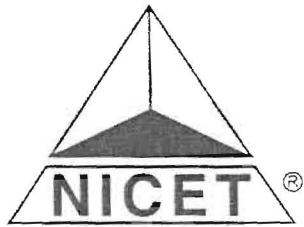
BR106-B 03/2005

Construction Information:

- 1) New Construction Y / N 2) Open Basement Y / N 3) Drop ceiling in Basement Y / N
- 4) Sheetrock Basement Y / N 5) Open Attic Y / N 6) Conduit Required Y / N If yes – EMT or Rigid
- 7) Number of Floors 1st and basement 8) A/C power Y / N Location: 9) Lift required Y / N
- 10) Plenum wire required Y / N 11) Pre-wire required No 12) Permit required Y / N

System Information:

- 1) Control Panel location: Parking Lot Vestibule
- 2) Are telephone lines available Y / N. Is there dial tone Y / N
- 3) Date Installation requested. 12/27/10



**NATIONAL INSTITUTE FOR CERTIFICATION
IN ENGINEERING TECHNOLOGIES®**

Providing Certification Programs Since 1961

BE IT KNOWN THAT

Robin L. Russell

IS HEREBY AWARDED CERTIFICATION AT

LEVEL II

**IN FIRE PROTECTION ENGINEERING TECHNOLOGY
FIRE ALARM SYSTEMS**

BASED UPON SUCCESSFUL DEMONSTRATION OF REQUISITE KNOWLEDGE,
EXPERIENCE AND WORK PERFORMANCE AS SET FORTH BY THIS INSTITUTE.

Certification Valid through April 1, 2013

CERTIFICATION NUMBER 110826

CHAIRMAN OF THE NICET BOARD OF GOVERNORS

A DIVISION OF THE NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS



IntelliKnight® Model 5700 Single Loop Addressable Fire Alarm Control System



The affordable addressable fire alarm control panel solution.

IntelliKnight Model 5700 is a 50 point class leading single loop addressable fire alarm control/communicator system. 5700 provides you with the revolutionary value and performance of addressable sensing technology combined with exclusive, built-in digital communication,

distributed intelligent power, that includes an easy to use interface. Powerful features such as drift compensation and maintenance alert are delivered in this powerful FACP from Silent Knight.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-446-6444, or in Minnesota, call 763-493-6435.

Description

5700 performs drift compensation and calibration checks on each of the sensors in the system.

The basic IntelliKnight 5700 system can be enhanced by adding modules such as 5860 remote annunciator, 5824 serial/parallel printer interface module (for printing system reports), and 5496 intelligent power module. 5700 also features a powerful built-in dual line fire communicator that allows for reporting of all system activity to a remote monitoring location.

Features

- Up to 50 addressable points
- Up to 125 zones and 125 output groups
- Uses standard wire—no shielded or twisted pair required
- Built-in digital communicator.
- Central station reporting by point or by zone
- Supports Class B (Style 4) and Class A (Style 6 or 7) configuration for SLC
- Distributed, intelligent power
- Drift compensation
- 13 pre-programmed output cadences (including ANSI-3.41) and 4 programmable outputs
- Notification circuits configurable as 1 Class A (Style Z) or 2 Class B (Style Y), or auxiliary power for resettable, constant, or door holder power
- Built-in synchronization for AMSECO, Gentex®, Faraday, System Sensor® and Wheelock® appliances
- Built-in annunciator with 80-character LCD display

- RS-485 bus provides communication to system accessories
- Upload or download programming, event history, or detector status onsite or from a remote location using a PC and 5660 Silent Knight Software Suite (SKSS)
- Improvements in SKSS deliver five times faster upload/downloads
- Built-in RS-232 interface for programming via PC
- Built-in Form C trouble relay rated at 2.5A at 27.4 VDC
- Two built-in Form C programmable relays rated at 2.5A at 27.4 VDC
- Programmable date setting for Daylight Saving Time

Electrical Specifications

Primary AC: 120 VAC, 60 Hz, 1.5A
 Total Accessory Load: 2.5A @ 27.4 VDC
 Notification Power: 2.5A @ 27.4 VDC, power-limited
 Standby Current: 200 mA
 Alarm Current: 325 mA
 Notification/Aux Power Circuits: 2.5A @ 27.4 VDC per circuit, power-limited
 Battery Charging Capacity: 7.0-35.0 AH
 Battery Size: 7 AH max. allowed in FACP cabinet. Larger capacity batteries can be housed in an RBB accessory cabinet.

Mechanical Specifications

Dimensions:
 12.75" W x 15.2" H x 3.4" D
 (32.39 W x 38.42 H x 8.57 D cm)
 Weight: 11.5 lbs. (5.2 kg)
 Color: Red



Model 5700

Telephone Requirements:
 FCC Part 15 and Part 68 approved
 Type of Jack: RJ31X (two required)

Approvals

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

Other Approvals: UL Listed;
 CSFM 7170-0559: 144;
 MEA 429-92-E Vol. XVI.



SLC Detectors

SD505-APS

Addressable photoelectric smoke detector.

SD505-AIS

Addressable ionization smoke detector.

SD505-AHS

Absolute temperature heat detector that goes into alarm immediately if the temperature exceeds the programmable trip point. Trip point range from 135°F–150°F (0°C–37°C).

SD505-6AB

Six inch base for use with detector heads SD505-APS, SD505-AIS and SD505-AHS.

SD505-4AB

Four inch base for use with detector heads SD505-APS, SD505-AIS, and SD505-AHS.

SD505-6SB

Six-inch sounder base for use with existing sensor and base. Operates in single and multi-station modes and/or as a system sounder. Requires 2 additional wires for power.

SD505-6IB

Short circuit isolator base for SD505-AHS, SD505-APS, and SD505-AIS detectors.

SD505-6RB

Six-inch relay base for use with existing sensor and base. Provides one Form C contact.

SD505-ADH

Duct housing that detects smoke in HVAC ducts.

SD505-ADHR

Duct detector base with relay. Provides Form C alarm contact. For use with SD505-APS and SD505-AIS sensors. Compatible with SD505-DTS remote test switch.

SD500-PS/SD500-PSDA

SD500-PS is a single action pull station and SD500-PSDA is a dual action pull station.

SLC Modules

Model SD500-AIM

Dry contact input module for use with normally open dry contacts. It features an indicator LED to show alarm status.

SD500-MIM

Mini dry contact input module is a small version of the SD500-AIM. For use with pull stations and other normally open dry contact inputs.

SD500-ANM

Addressable notification module providing a single Class A or Class B notification circuit on the SLC.

SD500-ARM

Addressable relay module that features two Form C output relays. Provides indicator LED to show output status.

SD500-SDM

Two-wire detector input module. Allows for the connection of conventional 2-wire detectors on the SLC loop. Requires two additional wires for power.

SD500-LIM

A short circuit isolator module for SLC devices. When a short occurs on the SLC loop, it is detected as a trouble, but all SLC devices protected by the isolator module continue to operate.

SD500-LED

An LED driver capable of driving 80 LEDs through the SLC loop. Up to 40 SD500-LEDs can be used per system.

S-BUS Accessories

5860/R Remote Fire Annunciator

Features the same 80 character backlit LCD display keypad and firefighter's key switch as the 5700. The system can be fully programmed and operated from any 5860. 5860 is gray and 5860R is red.

5496 Intelligent Power Module

A 6 amp notification power expander that provides four additional power-limited notification appliance circuit outputs.

5880 LED/IO Module

Features 40 LED outputs, 8 normally open dry contact inputs and one piezo output.



5865-3 and 5865-4 Remote LED Annunciator

Features 30 Programmable LED (15 red and 15 yellow) outputs and a piezo sounder. The 5865-4 adds a silence and reset switch to the package.

5883 Relay Board

Features 10 general purpose Form C relays. Used with 5880 module.

5824 Serial/Parallel Printer Interface Module

Provides one parallel and one RS-232 serial port for connecting a printer to 5808. Use to print a real-time log of system events, detector status reports, and event history. Interfaces with building control system.

Miscellaneous Accessories

5660 Silent Knight Software Suite

User-friendly Windows software for remote programming of 5700s using a PC. Upload and view panel account information, event history, and detector status.

5670 Silent Knight Software Suite

End-user facility management software allows viewing of detector status and event history via modem or direct connection.

RBB

Remote Battery Box Accessory Cabinet. Use if backup batteries are too large to fit into FACP cabinet. Dimensions: 16" W x 10" H x 6" D (406 mm W x 254 mm H x 152 mm D)

SD505-DTS

Remote test switch that provides remote key operated test function and annunciation of detector alarm with SD505-ADHR.



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 7550 Meridian Circle Suite 100, Maple Grove, Mn 55369-4927. Phone: (800) 328-0103, Fax: (763) 493-6475.

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MADE IN AMERICA

FORM# 350392 Rev. D, 04/06

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5600 Series Mechanical Heat Detectors

System Sensor's 5600 series mechanical heat detectors offer a low-cost means for property protection against fire, and for non-life-safety installations where smoke detectors are inappropriate.



Features

- Multiple configurations for installations:
 - Single- and dual-circuit models
 - Fixed temp and combination fixed- temp/rate-of-rise 135°F or 194°F ratings.
- Plain housing for residential installations (Model 5601P)
- Easy-to-use terminal screws
- A broad range of back box mounting options:
 - Single gang
 - 3.5" and 4" Octagonal
 - 4" square with square to round plaster ring
- Reversible mounting bracket

Multiple configurations. The 5600 series offers a full-line of configurations to accommodate a broad range of applications. Both single- and dual-circuit models are available for low- and high-temperature ratings with either fixed temperature or combination fixed temperature/rate-of-rise (ROR) activation. The ROR element of the fixed/ROR models is restorable to accommodate field-testing.

Installation flexibility. To satisfy a variety of installation needs, the 5600 series easily mounts to single-gang and octagonal back boxes. And these models accommodate four-square back boxes, when used with a square to round plaster ring. The reversible mounting bracket permits both flush- and surface-mount back box installations.

Visual identification. The 5600 series provides clear markings on the exterior of the unit to ensure that the proper detector is being used. Alphanumeric characters identify the activation method, as well as the temperature rating, in Fahrenheit and Celsius degrees. Fixed temperature models are identified FX, while combination fixed/rate-of-rise units are marked FX/ROR. The 5600 series also provides a post-activation indicator in the form of a collector. When the detector is activated, the collector drops from the unit, making it easy to identify the unit in alarm.

Agency Listings



Specifications

Architectural/Engineering Specifications

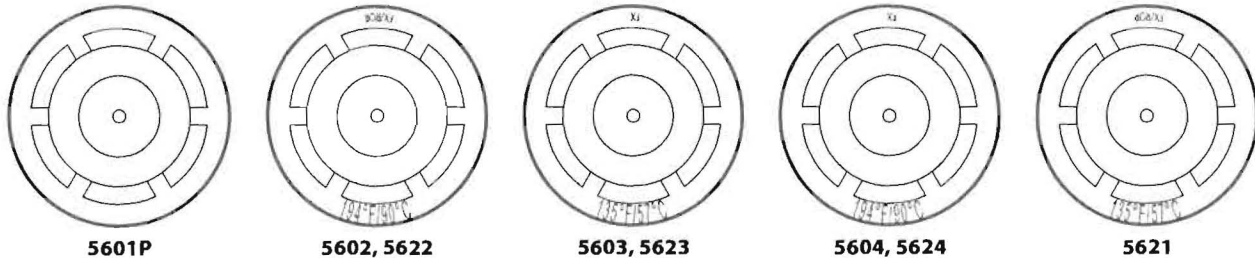
Mechanical heat detector shall be a System Sensor 5600 series model number _____, listed to Underwriters Laboratories UL 521 for Heat Detectors for Fire Protective Signaling Systems. The detector shall be either a single-circuit or a dual-circuit type, normally open. The detector shall be rated for activation at either 135°F (57°C) or 194°F (90°C), and shall activate by means of a fixed temperature thermal sensor, or a combination fixed temperature/rate-of-rise thermal sensor. The rate-of-rise element shall be activated by a rapid rise in temperature, approximately 15°F (8.3°C) per minute. The detector shall include a reversible mounting bracket for mounting to 3½-inch and 4-inch octagonal, single gang, and 4-inch square back boxes with a square to round plaster ring. Wiring connections shall be made by means of SEMS screws that shall accommodate 14–22AWG wire. The detector shall contain alphanumeric markings on the exterior of the housing to identify its temperature rating and activation method. The rate-of-rise element of combination fixed temperature/rate-of-rise models shall be restorable, to allow for field-testing. The detectors shall include an external collector that shall drop upon activation to identify the unit in alarm.

Physical/Operating Specifications

Maximum Installation Temperature	5601P, 5603, 5621, and 5623: 100°F (38°C) 5602, 5604, 5622, and 5624: 150°F (65.6°C)
Operating Humidity Range	5 to 95% RH non-condensing
Dimensions with mounting bracket	Diameter: 4.57 inches (11.6cm) Height: 1.69 inches (4.3cm)
Alarm Temperature	5601P, 5603, 5621, and 5623: 135°F (57°C) 5602, 5604, 5622, and 5624: 194°F (90°C)
Weight	6 oz. (170 grams)
Rate-of-Rise Threshold	15°F (8.3°C) rise per minute (models 5601P, 5602, 5621, and 5622 only)
Mounting	3½-inch octagonal back box 4-inch octagonal back box Single gang back box 4-inch square back box with a square to round plaster ring

Electrical Specifications

Operating Voltage / Contact Ratings	6–125VAC / 3A 6–28VDC / 1A 125VDC / 0.3A 250VDC / 0.1A
Input Terminals	14–22 AWG



Ordering Information

Model	Circuit	Identification Method on Exterior	Temperature Rating	Activation	UL Protected Spacing – 10 Foot Ceiling*
5601P	Single	None	135°F (57°C)	Fixed Temperature / Rate-of-Rise	50 feet x 50 feet (15.24m x 15.2m)
5602	Single	Lettering	194°F (90°C)	Fixed Temperature / Rate-of-Rise	50 feet x 50 feet (15.24m x 15.2m)
5603	Single	Lettering	135°F (57°C)	Fixed Temperature	25 feet x 25 feet (7.62m x 7.62m)
5604	Single	Lettering	194°F (90°C)	Fixed Temperature	25 feet x 25 feet (7.62m x 7.62m)
5621	Dual	Lettering	135°F (57°C)	Fixed Temperature / Rate-of-Rise	50 feet x 50 feet (15.24m x 15.2m)
5622	Dual	Lettering	194°F (90°C)	Fixed Temperature / Rate-of-Rise	50 feet x 50 feet (15.24m x 15.2m)
5623	Dual	Lettering	135°F (57°C)	Fixed Temperature	25 feet x 25 feet (7.62m x 7.62m)
5624	Dual	Lettering	194°F (90°C)	Fixed Temperature	25 feet x 25 feet (7.62m x 7.62m)

*NOTE: Refer to NFPA72 guidelines for spacing reductions when ceiling heights exceed 10 feet.



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

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Product specifications subject to change without notice. Visit www.systemsensor.com for current product information, including the latest version of this data sheet.
A06-0351-002 • 1/06 • #16/06



SD500-PS and SD500-PSDA Addressable Pull-Station



IntelliKnight's addressable pull stations combine fast response with pin-point location ID.

The SD500-PS and SD500-PSDA are a single action or dual action addressable manual fire alarm pull station for use with Silent Knight's IntelliKnight fire control panel. Extremely easy to operate, the SD500-PS/PSDA provides a fast and practical means of manually initiating a fire alarm signal. The IntelliKnight panel recognizes each manual pull station by its specific address saving precious seconds in determining the location of an alarm. The SD500-PS/PSDA mounts to a single gang box and features a rugged metal construction that lasts and lasts.

Combine all this with the features you've come to expect from Silent Knight - easy installation and stable operation - and it adds up to a flexible solution for all your fire protection needs.

Model SD500-PS & SD500-PSDA Addressable Pull Station

The SD500-PS is a single action addressable fire pull station, and the SD500-PSDA is a dual action addressable fire pull station. The SD500-PS/PSDA feature rugged metal construction. A terminal strip on back of the pull station allows interconnection of the pull station to the SLC of an IntelliKnight control panel. The SD500-PS/PSDA is designed for indoor use in non-explosive environments. The normally open initiating point contacts are gold-plated to avoid risk of corrosion. The SD500-PS/PSDA has been tested by UL for compliance to the requirements of the Americans with Disabilities ACT (ADA).

Features

- UL Listed
- CSFM listed
- ADA compliant
- Key reset (Same key as Silent Knight enclosures)
- Surface mount back box available
- Terminals - accept up to 14 gauge wire

- Extremely easy to operate
- Corrosion-resistant gold-plated contacts.
- Reflective label makes it easier to locate in low light

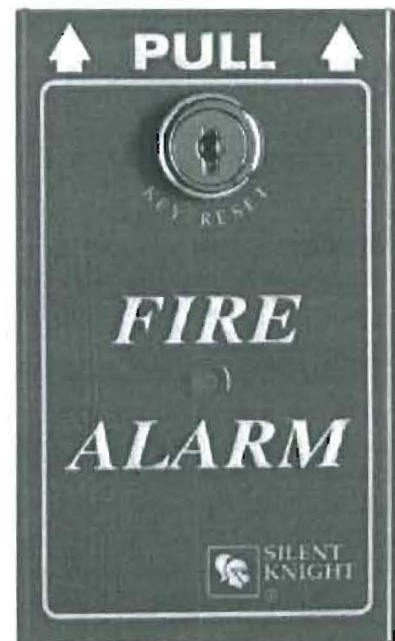
Operation

The SD500-PS/PSDA single action pull stations are operated by a pull on the front pull cover of the station. A plunger switch, wired to a self contained addressable module, is released as the pull station opens to initiate the alarm. Once operated, the cover hangs down and can be seen up to 100 feet away. The pull station is reset by returning the front cover to the normal upright position and relocking the station with a reset key. The reset keys are the same keys used on Silent Knight enclosures.

The SD500-PS/PSDA includes a status LED which blinks, indicating that the addressable module is communicating with the loop. The status LED lights continuously during an alarm. A dip switch on the addressable module is used to set the unique address.

Specifications

Operating Voltage:	24VDC
Standby Current:	.55mA
Alarm Current:	.55mA



SD500-PS

Ambient Temperature:	32°F to 120°F (0°C to 49°C)
Mounting:	Single gang box -
Optional Red Surface Mount Box PS-SMBB	



**SILENT
KNIGHT**

A Honeywell Company

SD500-PS and SD500-PSDA Addressable Pull-Station

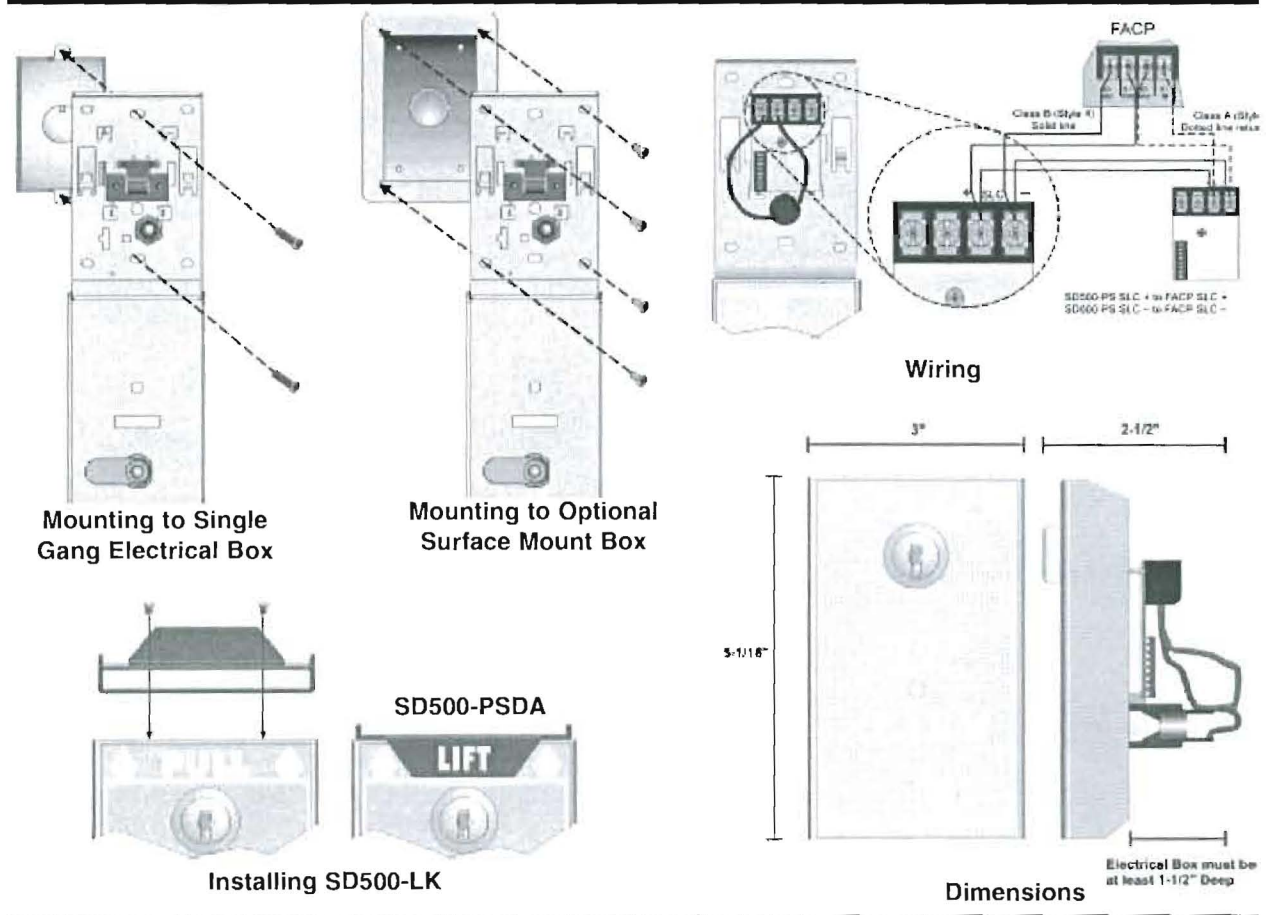


Engineering Specifications

Manual pull station shall be addressable Module SD500-PS/SD500-PSDA. Equipment shall be made of 14 gauge C.R.S.(Cold Rolled Steel), painted with a red enamel . The label shall contain the words Fire Alarm and be made of a reflective material embossed text 3/8 inches tall. Operating instruction shall be clearly visible on the same label. Manual station shall contain a key operated test and reset lock using a lock plate actuator, the key shall match the control panel.

Manual station shall contain four terminal blocks with two connected to the addressable module and two connect to the SLC loop. Manual station shall provide data to the control panel with an ID address programmed by dip switch settings .

Manual stations shall be Underwriters Laboratories Inc. listed and installed within the limits defined in the American Disabilities Act.



7550 Meridian Circle, Maple Grove, MN 55369-4927
800-446-6444 or in Minnesota 763-493-6435
 FAX: 763-493-6475
 World Wide Web: <http://www.silentknight.com>

MADE IN AMERICA
 FORM# 350342, Rev. 09/03
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Selectable Output Horns, Strobes, and Horn/Strobes

SpectrAlert® Advance selectable-output horns, strobes, and horn/strobes are rich with features guaranteed to cut installation times and maximize profits.

The **SpectrAlert Advance series** of notification appliances is designed to simplify installations, with features such as plug-in designs, instant feedback messages to ensure correct installation of individual devices, and 11 field-selectable candela settings for wall and ceiling strobes and horn/strobes.

When installing Advance products, first attach a universal mounting plate to a four-inch square, four-inch octagon or double-gang junction box. The two-wire mounting plate attaches to a single-gang junction box.

Next, connect the notification appliance circuit wiring to the SEMS terminals on the mounting plate.

Finally, attach the horn, strobe or horn/strobe to the mounting plate by inserting the product's tabs in the mounting plate's grooves. The device will rotate into position, locking the product's pins into the mounting plate's terminals. The device will temporarily hold in place with a catch until it is secured with a captured mounting screw.

The SpectrAlert Advance series includes outdoor notification appliances. Outdoor strobes and horn/strobes (two wire and four wire) are available for wall or ceiling. Outdoor horns are available for wall only. All System Sensor outdoor products are rated between minus 40 degrees Fahrenheit and 151 degrees Fahrenheit in wet or dry applications.



SPECTRAlert
ADVANCE
From System Sensor

Features

- Electrically compatible with existing SpectrAlert products
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Plug-in design
- Field selectable candela settings on wall and ceiling units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185
- Same mounting plate for wall- and ceiling-mount units
- Shorting spring on mounting plate for continuity check before installation
- Tamper resistant construction
- Outdoor wall and ceiling products rated from -40°F to 151°F
- Design allows minimal intrusion into the back box
- Horn rated at 88+ dbA at 16 volts
- Rotary switch for horn tone and three volume selections
- Outdoor products UL listed to UL 1638 (strobe) and UL 464 (horn) outdoor requirements
- Outdoor products rainproof per UL 50 (NEMA 3R)
- Compatible with MDL sync module

Agency Listings

SIGNALING



54011
55112
53593



3023522

MEA
approved

ME4442-09-E



7125-1653 186 (indoor strobes)
7100-1653 182 (outdoor strobes)
7125-1653 188 (horn/strobes,
chime/strobes)
7135-1653 189 (horn, chimes)

SpectrAlert Advance Specifications

Architect/Engineer Specifications

General

SpectrAlert Advance horns, strobes and horn/strobes shall mount to a standard 4 x 4 x 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 x 4 x 1½-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, when used with the Sync-Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync-Circuit Module, 12-volt rated notification appliance circuit outputs shall operate between nine and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 17 and 33 volts. Indoor SpectrAlert Advance products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC, or full-wave rectified, unfiltered power supply. Strobes and horn/strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185.

Strobe

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

Horn/Strobe Combination

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

Outdoor Products

SpectrAlert Advance outdoor horns, strobes and horn/strobes shall be listed for outdoor use by UL and shall operate between minus 40 degrees and 151 degrees Fahrenheit. The products shall be listed for use with a System Sensor outdoor/weatherproof back box with half inch and three-fourths inch conduit entries.

Synchronization Module

The module shall be a System Sensor Sync-Circuit model MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1Hz 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 4½" x 4½" x 2½" 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)
K Series Operating Temperature	-40°F to 151°F (-40°C to 66°C)
Humidity Range	10 to 93% non-condensing (indoor products)
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12DC/FWR or regulated 24DC/FWR ¹
Operating Voltage Range ²	8 to 17.5 V (12V nominal) or 16 to 33 V (24 nominal)
Input terminal wire gauge	12 to 18 AWG
Ceiling mount dimensions (including lens)	6.8" diameter x 2.5" high (173 mm diameter x 64 mm high)
Wall mount dimensions (including lens)	5.6"L x 4.7"W x 2.5"D (142 mm L x 119 mm W x 64 mm D)
Horn dimensions	5.6"L x 4.7"W x 1.3"D (142 mm L x 119 mm W x 33 mm D)
Wall-mount back box skirt dimensions (BBS-2, BBSW-2)	5.9"L x 5.0"W x 2.2"D (151 mm L x 128 mm W x 56 mm D)
Ceiling-mount back box skirt dimensions (BBSC-2, BBSCW-2)	7.1" diameter x 2.25" high (180 mm diameter x 57 mm high)
Wall-mount weatherproof back box dimensions (SA-WBB)	5.7"L x 5.1"W x 2.0"D (145 mm L x 130 mm W x 51 mm D)
Ceiling-mount weatherproof back box dimensions (SA-WBBC)	7.1" diameter x 2.0" high (180 mm diameter x 51 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 15/75 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)						UL Max. Horn Current Draw (mA RMS)					
	Candela	8-17.5 Volts		16-33 Volts		Sound Pattern	dB	8-17.5 Volts		16-33 Volts	
		DC	FWR	DC	FWR			DC	FWR	DC	FWR
Standard Candela Range	15*	123	128	66	71	Temporal	High	57	55	69	75
	15/75*	142	148	77	81	Temporal	Medium	44	49	58	69
	30*	NA	NA	94	96	Temporal	Low	38	44	44	48
	75*	NA	NA	158	153	Non-temporal	High	57	56	69	75
	95*	NA	NA	181	176	Non-temporal	Medium	42	50	60	69
	110	NA	NA	202	195	Non-temporal	Low	41	44	50	50
High Candela Range	115	NA	NA	210	205	Coded	High	57	55	69	75
	135	NA	NA	228	207	Coded	Medium	44	51	56	69
	150	NA	NA	246	220	Coded	Low	40	46	52	50
	177	NA	NA	281	251						
	185	NA	NA	286	258						

UL Max. Current Draw (mA RMS), 2-wire Horn/Strobe, Standard Candela Range (15-115 cd)										
DC Input	8-17.5 Volts		16-33 Volts		30	75	95	110	115	
	15	15/75	15	15/75						
Temporal High	137	147	79	90	107	176	194	212	218	
Temporal Medium	132	144	69	80	97	157	182	201	210	
Temporal Low	132	143	66	77	93	154	179	198	207	
Non-temporal High	141	152	91	100	116	176	201	221	229	
Non-temporal Medium	133	145	75	85	102	163	187	207	216	
Non-temporal Low	131	144	68	79	96	156	182	201	210	
FWR Input										
Temporal High	136	155	88	97	112	168	190	210	218	
Temporal Medium	129	152	78	88	103	160	184	202	206	
Temporal Low	129	151	76	86	101	160	184	194	201	
Non-temporal High	142	161	103	112	126	181	203	221	229	
Non-temporal Medium	134	155	85	95	110	166	189	208	216	
Non-temporal Low	132	154	80	90	105	161	184	202	211	

UL Max. Current Draw (mA RMS), 2-wire Horn/Strobe, High Candela Range (135-185 cd)										
DC Input	16-33 Volts				FWR Input	16-33 Volts				
	135	150	177	185		135	150	177	185	
Temporal High	245	259	290	297	Temporal High	215	231	258	265	
Temporal Medium	235	253	288	297	Temporal Medium	209	224	250	258	
Temporal Low	232	251	282	292	Temporal Low	207	221	248	256	
Non-temporal High	255	270	303	309	Non-temporal High	233	248	275	281	
Non-temporal Medium	242	259	293	299	Non-temporal Medium	219	232	262	267	
Non-temporal Low	238	254	291	295	Non-temporal Low	214	229	256	262	

Candela Derating

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

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

Horn Tones and Sound Output Data

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

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



SD500-AIM & SD500-MIM Addressable Input Modules



IntelliKnight's addressable contact monitor modules combine fast response with pinpoint location ID. A combination that saves lives and property.

The SD500-AIM and SD500-MIM are addressable input modules for use with Silent Knight IntelliKnight fire alarm control panels (FACP). The SD500-AIM and SD500-MIM are designed to be used with pull stations, water flow switches, and other applications requiring dry contact alarm initiation devices.

The SD500-AIM addressable input module mounts to a 4"-square box. The SD500-MIM mini input module fits inside a single gang box. The modules are supervised, single input contact monitors. Using an EOL resistor, they monitor for alarm contact closures and for open circuit wiring fault conditions.

The SD500-AIM and SD500-MIM offer a compact design for adaptability and pleasing aesthetics as well as easy installation and stable operation—a flexible solution for all your fire protection needs.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-446-6444, or in Minnesota, call 763-493-6435.

Description

The SD500-AIM and SD500-MIM are addressable input modules for use with the IntelliKnight fire alarm control panels (FACPs). The SD500-AIM addressable input module mounts to a 4"-square box. The SD500-MIM mini input module fits inside a single gang box. Both input modules are designed to be used with pull stations, water flow switches, and other applications requiring dry contact alarm initiation devices.

These modules are supervised, single input contact monitors. Using an EOL resistor, they monitor for alarm contact closures and for open circuit wiring fault conditions. If a fault occurs in the wiring, the module alerts the FACP. Each addressable input module is programmed with a unique signal line circuit (SLC) loop address.

Features

- Single contact monitor
- SD500-AIM supports Class A (Style D) or Class B (Style B) contact monitor wiring
- SD500-MIM support for Class B (Style B) contact monitor wiring
- Attractive ivory cover plate with the SD500-AIM
- Small and lightweight size allows for flexible mounting options with the SD500-MIM

- DIP switch programmable for fast installation
- Up to 2500 ft wiring distance from either input module to contact
- Use up to 14 gauge wire
- UL listed

Electrical Specifications

Standby Current: 0.55 mA

Alarm Current: 23 mA max for one device; 46 mA max for two devices; 0.55 mA for each additional device

Line Resistance: 50Ω max

Mechanical Specifications

SD500-AIM Physical Description

Dimensions:
4.9" W x 4.9" H x 1" D
(12.4 W x 12.4 H x 2.5 D cm)
Weight: 3.6 oz (120.1 g)
Color: Ivory cover plate

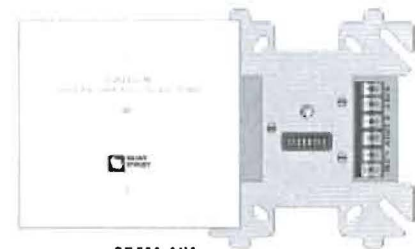
SD500-MIM Physical Description

Dimensions:
1.5" W x 2.5" H x 0.7" D
(3.8 W x 6.4 H x 1.8 D cm)
Weight: 1.6 oz (45.4 g)

Environmental

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

Humidity:
10% – 93% non-condensing



SD500-AIM



SD500-MIM

Approvals

NFPA 71 & NFPA 72
UL 864
CSFM 7300-0559: 132
MEA 429-92-E Vol. IX
FM Approved for use with the 5820XL





SD500-PS and SD500-PSDA Addressable Pull-Station



IntelliKnight's addressable pull stations combine fast response with pin-point location ID.

The SD500-PS and SD500-PSDA are a single action or dual action addressable manual fire alarm pull station for use with Silent Knight's IntelliKnight fire control panel. Extremely easy to operate, the SD500-PS/PSDA provides a fast and practical means of manually initiating a fire alarm signal. The IntelliKnight panel recognizes each manual pull station by its specific address saving precious seconds in determining the location of an alarm. The SD500-PS/PSDA mounts to a single gang box and features a rugged metal construction that lasts and lasts.

Combine all this with the features you've come to expect from Silent Knight - easy installation and stable operation - and it adds up to a flexible solution for all your fire protection needs.

Model SD500-PS & SD500-PSDA Addressable Pull Station

The SD500-PS is a single action addressable fire pull station, and the SD500-PSDA is a dual action addressable fire pull station. The SD500-PS/PSDA feature rugged metal construction. A terminal strip on back of the pull station allows interconnection of the pull station to the SLC of an IntelliKnight control panel. The SD500-PS/PSDA is designed for indoor use in non-explosive environments. The normally open initiating point contacts are gold-plated to avoid risk of corrosion. The SD500-PS/PSDA has been tested by UL for compliance to the requirements of the Americans with Disabilities ACT (ADA).

Features

- UL Listed
- CSFM listed
- ADA compliant
- Key reset (Same key as Silent Knight enclosures)
- Surface mount back box available
- Terminals - accept up to 14 gauge wire

- Extremely easy to operate
- Corrosion-resistant gold-plated contacts.
- Reflective label makes it easier to locate in low light

Operation

The SD500-PS/PSDA single action pull stations are operated by a pull on the front pull cover of the station. A plunger switch, wired to a self contained addressable module, is released as the pull station opens to initiate the alarm. Once operated, the cover hangs down and can be seen up to 100 feet away. The pull station is reset by returning the front cover to the normal upright position and relocking the station with a reset key. The reset keys are the same keys used on Silent Knight enclosures.

The SD500-PS/PSDA includes a status LED which blinks, indicating that the addressable module is communicating with the loop. The status LED lights continuously during an alarm. A dip switch on the addressable module is used to set the unique address.

Specifications

Operating Voltage:	24VDC
Standby Current:	.55mA
Alarm Current:	.55mA



SD500-PS

Ambient Temperature:	32°F to 120°F (0°C to 49°C)
Mounting:	Single gang box -
Optional Red Surface Mount Box PS-SMBB	



**SILENT
KNIGHT**

A Honeywell Company

SD500-PS and SD500-PSDA Addressable Pull-Station

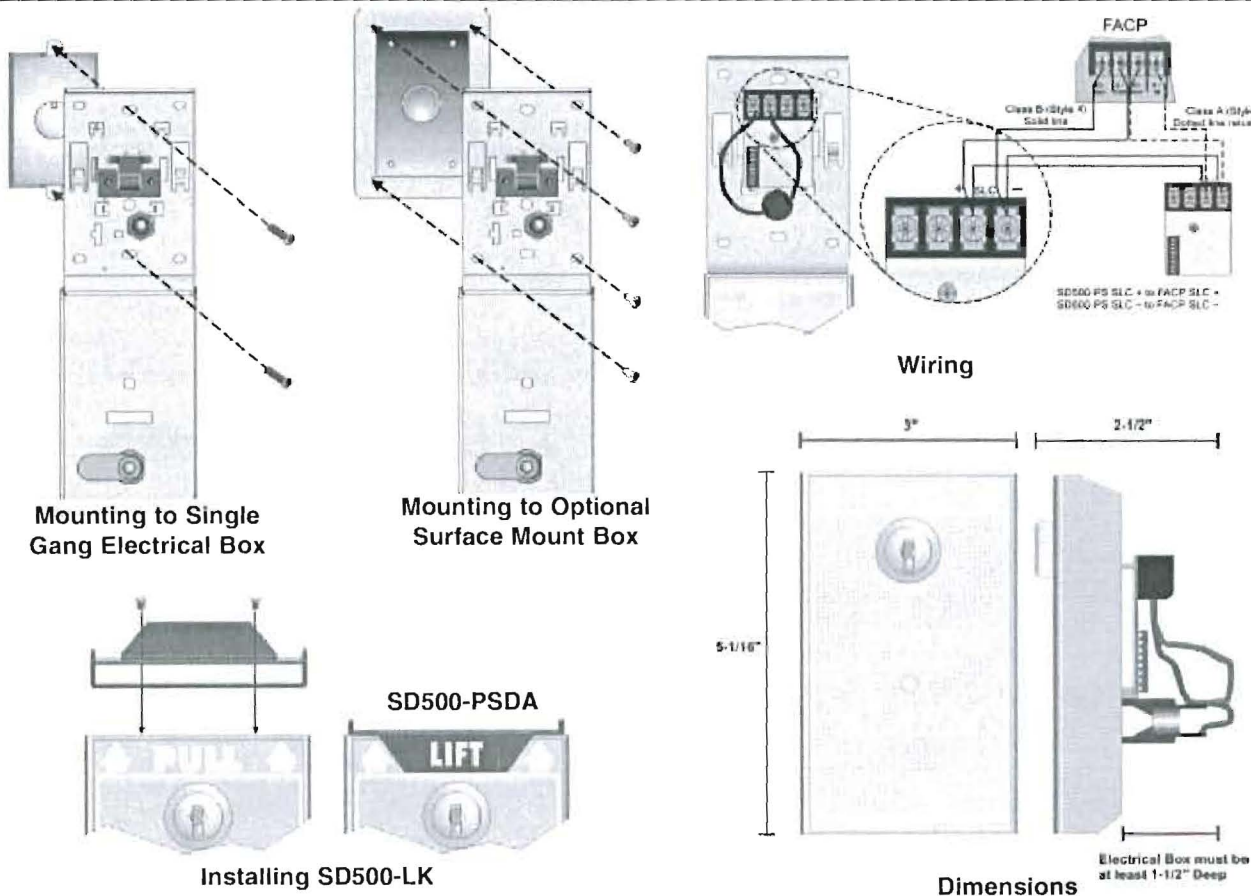


Engineering Specifications

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SILENT KNIGHT

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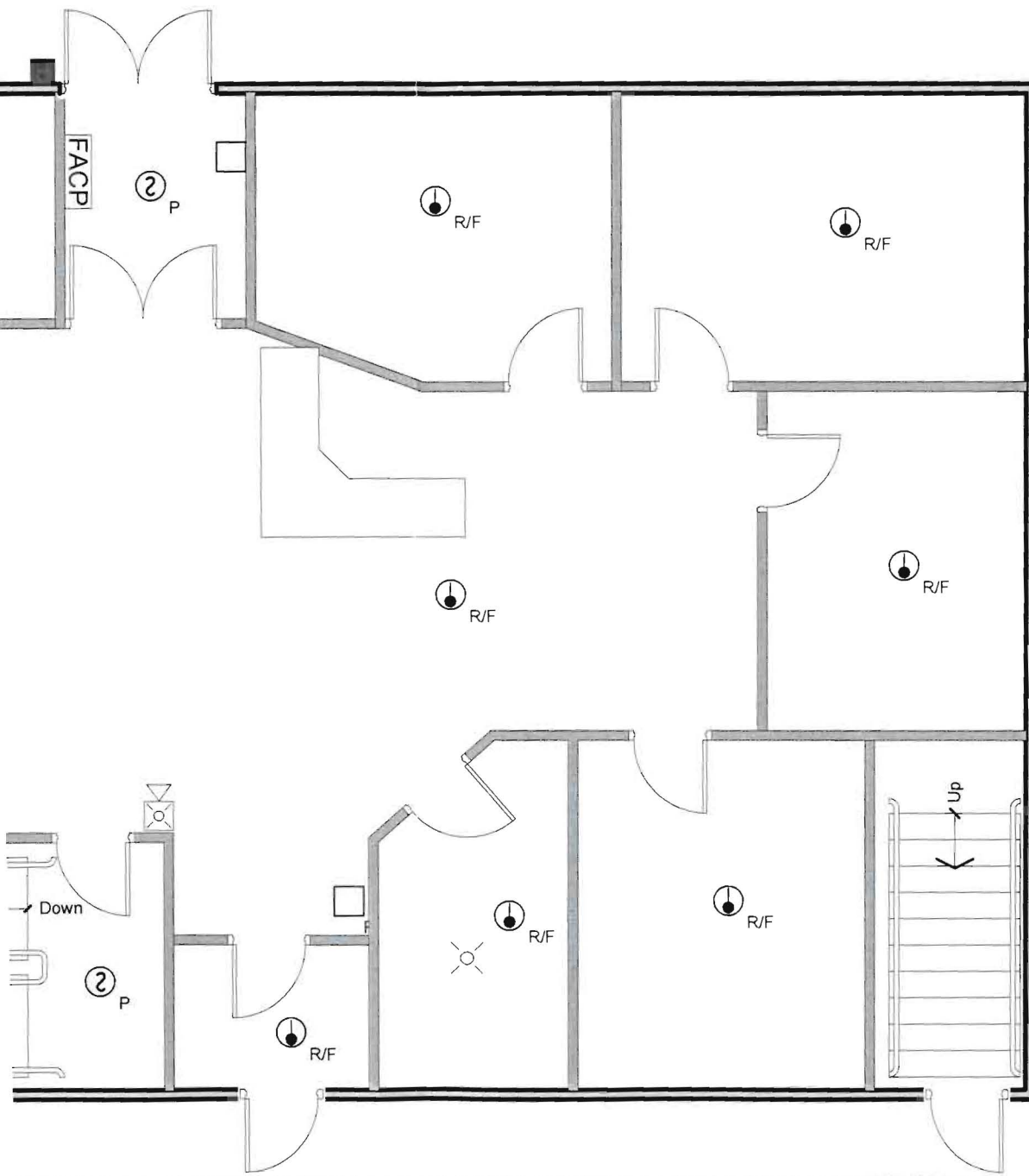
FORM# 350342, Rev. 09/03

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Zoning Comments
270 PARK AVE

1. This property shall remain a credit union/banking facility. Any change of use shall require a separate permit application for review and approval.

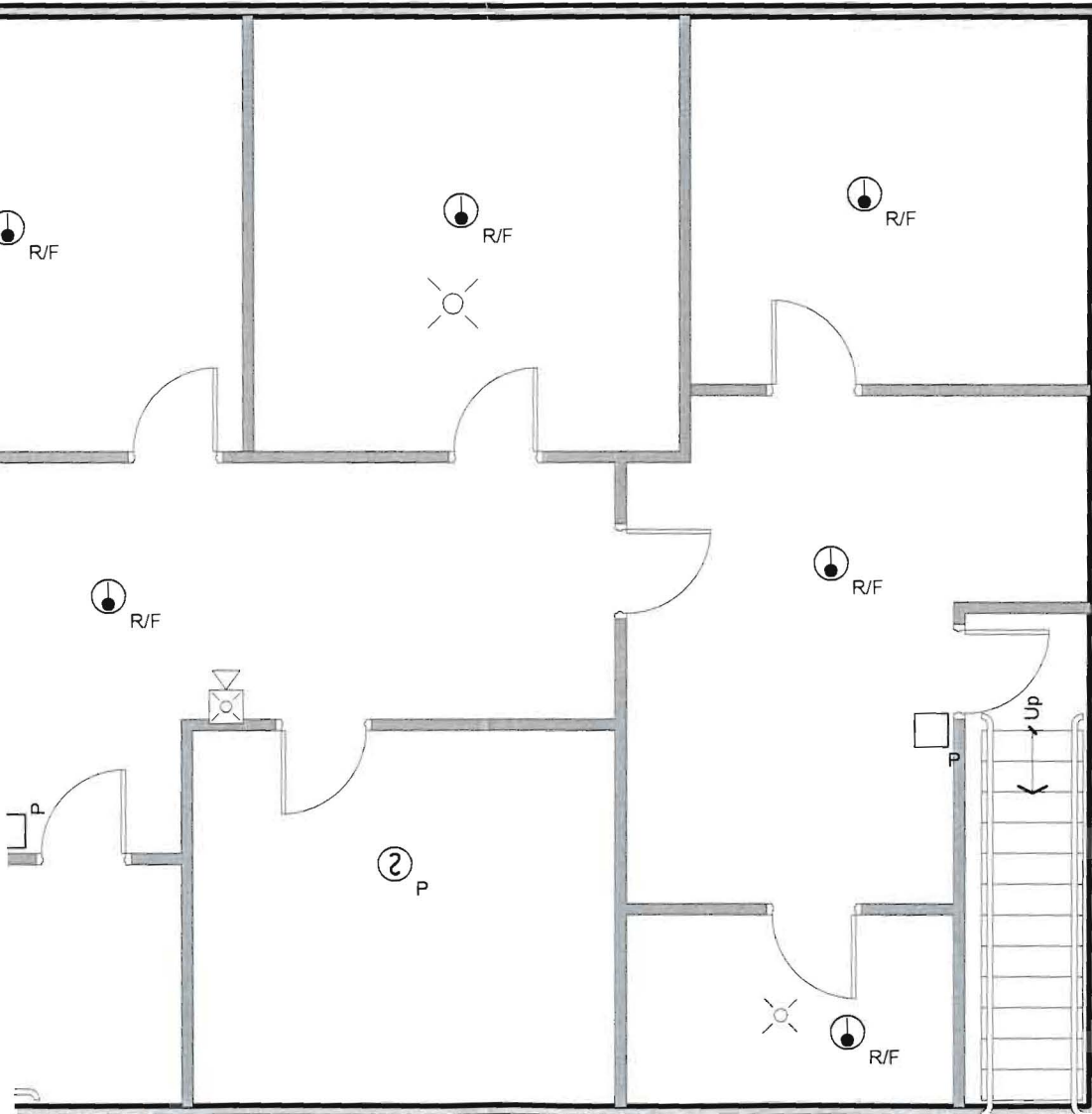
**CHOICE FEDERAL CREDIT UNION
 AVENUE, PORTLAND, MAINE 04101**



Fire Alarm System Legend		
1 st Floor Plan		
Symbol	Count	Description
	9	Heat Detector
	1	Fire Alarm Control Panel
	1	Key Box
	2	Smoke Detector

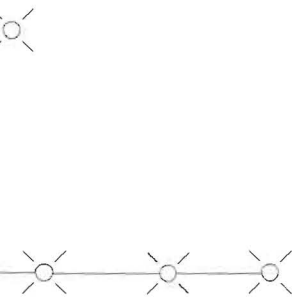
Robin Russell, Certified Engineering Technician, NICET Cert. # 110826





Fire Alarm System Legend		
Basement		
Symbol	Count	Description
	1	Horn w/ Light
	3	Light
	8	Heat Detector
	1	Smoke Detector
	2	Manual Station





Fire Alarm System		
Riser Diagram		
Symbol	Count	Description
②	3	Smoke Detector
□	4	Manual Station
⊙	17	Heat Detector
☒	2	Horn w/ Light
⊗	4	Light

