

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that

WEC 98G-16 LLC /Dean & Allyn Inc.

Located at

701 FOREST AVE

PERMIT ID: 2013-00374

CBL: 129 B003001

has permission to **install sprinkler and HVAC supervisory 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 clsoed-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 procured prior to occupancy.

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
THERE IS A PENALTY FOR REMOVING THIS CARD**

PERMIT ID: 2013-00374

Located at: 701 FOREST AVE

CBL: 129 B003001

BUILDING PERMIT INSPECTION PROCEDURES
Please call 874-8703 (ONLY)
or email: buildinginspections@portlandmaine.gov

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.**

REQUIRED INSPECTIONS:

Final - Fire

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.

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 2013-00374	Issue Date:	CBL: 129 B003001
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Location of Construction: 701 FOREST AVE	Owner Name: WEC 98G-16 LLC	Owner Address: PO BOX 3165 HARRISBURG, PA 17105	Phone:
Business Name: Rite Aid	Contractor Name: Dean & Allyn Inc.	Contractor Address: P.O. Box 709, 32 Lewiston Rd Gray ME 04039	Phone: (207) 657-5646
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm System	Zone: B2b
Past Use: Retail pharmacy	Proposed Use: Retail pharmacy	Permit Fee: \$90.00	Cost of Work: \$7,000.00
		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A <i>3/13/13</i>	INSPECTION: Use Group: Type:
Proposed Project Description: Fire Alarm system		Signature: <i>[Signature]</i> EB	Signature:
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: Date:			

Permit Taken By: bjs	Date Applied For: 02/25/2013	Zoning Approval		
<ol style="list-style-type: none"> This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. Building permits do not include plumbing, septic or electrical work. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work.. 		Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MIN <input type="checkbox"/> Date: <i>02/25/13</i>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>[Signature]</i>

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

City of Portland, Maine - Building or Use Permit

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

Permit No: 2013-00374	Date Applied For: 02/25/2013	CBL: 129 B003001
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Location of Construction: 701 FOREST AVE	Owner Name: WEC 98G-16 LLC	Owner Address: PO BOX 3165	Phone:
Business Name: Rite Aid	Contractor Name: Dean & Allyn Inc.	Contractor Address: P.O. Box 709, 32 Lewiston Rd Gray	Phone (207) 657-5646
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm System	

Proposed Use: Retail pharmacy	Proposed Project Description: install sprinkler and HVAC supervisory system.
-----------------------------------------	----------------------------------------------------------------------------------------

Dept: Zoning	Status: Approved	Reviewer: Marge Schmuckal	Approval Date: 02/25/2013
Note:	Ok to Issue: <input checked="" type="checkbox"/>		

Dept: Fire	Status: Approved w/Conditions	Reviewer: Ben Wallace Jr	Approval Date: 03/13/2013
Note: This arrangement was previously allowed in discussions between the installer and FFER Martell.	Ok to Issue: <input checked="" type="checkbox"/>		
<ol style="list-style-type: none"> 1) Supervising Station monitoring for addressable fire alarm systems shall be by point. 2) Records cabinet, FACP, annunciator(s), and pull stations shall be keyed alike. 3) All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP labeled "FIRE ALARM RECORDS". 4) In field installation shall be installed per code as conditions dictate. 5) The fire alarm system shall have a new fire alarm inspection sticker. 6) A 4100 series Knox Box is required. 7) Fire protection systems 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. 8) The fire alarm technician shall be present for the fire inspection. System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule. 9) All smoke detectors shall be photoelectric. 10) The installation shall comply with the following: City of Portland Chapter 10, Fire Prevention and Protection; NFPA 1, Fire Code (2009 edition), as amended by City Code; NFPA 101, Life Safety Code (2009 edition), as amended by City Code; City of Portland Fire Department Rules and Regulations; NFPA 72, National Fire Alarm and Signaling Code (2010 edition), as amended by Fire Department Rules and Regulations; and NFPA 70, National Electrical Code (2011 edition) as amended by the State of Maine 11) Notice: The first scheduled final inspection fee is at no charge. Additional inspections shall be billed at \$75 for each inspector. 12) A master box connection is not authorized for this building. 13) Through-penetrations and membrane penetrations in fire walls, fire barrier walls, and fire resistance rated horizontal assemblies shall be protected by firestop systems or devices in conformance with NFPA 101:8.3.5 (ASTM E 814 or ANSI/UL 1479). Providing firestop labels at each firestop system or device and an onsite manual containing the detail for each firestop system or device used for the project will streamline final inspection approvals. 			



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: 701 Forest Avenue CBL: 129 8003

Exact location: (within structure) Same

Type of occupancy(s) (NFPA & ICC): Drug Store

Building owner: Rite Aid

System Designer (point of contact): Eric Elkanich

Designer phone: 207-657-5646 E-mail: eelkanich@deanandallyn.com

Installing contractor: Dean & Allyn, Inc Certificate of Fitness No: M1033

Contractor phone: Same E-mail: Same

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: \$6,986.00

PERMIT FEE: \$90.00
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

RECEIVED
FEB 22 2013
Dept. of Building Inspections
City of Portland Maine

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: [Signature] Date: 2-14-13



SILENT KNIGHT

5808 Calculations
Version 05 22 09

Global Project File

Project Name: Rite Aid
Project ID: Store #4133
Prepared By: Eric Elkanich
Date: 2/18/2013

Standby Hours: 24
Alarm Min: 5
Drained Cuts: 1.2
Voltage Drop (V):
Threshold: 10

Part ID: 5808
Location: Stock Room

Model: 5808 Addr. Fire Alarm Control Panel
Wiring: 24 VDC
Max NAC Current (Amps):
Max Panel Current (Amps):

Part ID	Circuit Name	Qty	Current Standby	Draw Alarm	Wire AWG & Type	Ohms Per 1000 Ft.	Length (ft) One-Way	Actual Ohms	Voltage Drop (%)	
5808	5808 CTRL Panel	1	0.170	0.325						
SD500-AM	Addr. Input Mod	3	0.003	0.003						
SD500-MM	Mini-Input Module		0.000	0.000						
SD500-AM	Addr. Relay Module		0.000	0.000						
SD500-PS	Addr. Pull Station		0.001	0.001						
SD500-AS	Addr. Ion Smoke Det		0.000	0.000						
SD500-AS	Addr. Heat Detector		0.000	0.000						
SD500-AS	Addr. Photo Smoke Det		0.001	0.001						
SD500-DL	Addr. Duct w/Relay		0.000	0.000						
SD500-DL	Addr. Duct		0.000	0.000						
SD500-NM	Addr. Notification Module		0.000	0.000						
SD500-EM	Addr. LED Module		0.000	0.000						
SD500-SM	Addr. Smoke Det. Mod.		0.000	0.000						
SD500-RE	Addr. Det. Relay Base		0.000	0.000						
SD500-SE	Addr. Det. Sounder Base		0.000	0.000						
SD500-IB	Addr. Det. Isolator Base		0.000	0.000						
SD500-LI	Line Isolation Module		0.000	0.000						
5808	LCD Remote Annunc		0.020	0.025						
5808	Serial/Parallel Module		0.000	0.000						
5808	Power Expander		0.000	0.000						
5808	Power Expander		0.000	0.000						
5808	LED Annunciator (4G)		0.000	0.000						
5808	LED Annunciator (3G)		0.000	0.000						
5808	LED Driver Module		0.000	0.000						
5808	Relay Module		0.000	0.000						
NAC 1	Notification Appl Circuit		0.000	0.185	#16 Solid	4.02	10	0.08	20.39	0.07%
NAC 2	Notification Appl Circuit		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
NAC 3	Notification Appl Circuit		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
NAC 4	Notification Appl Circuit		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
Total Standby Current (Amps)			0.194	0.539	Total Alarm Current (Amps)					
Standby Time in Hours			24	0.083	Alarm Time in Minutes (60 (S Mins))					
Total Standby AH Required			4.656	0.045	Total Alarm AH Required					
Total Combined AH Required			4.701							
Multiply By Inverse Rating Factor				1.20						
Minimum Battery Amp-Hours Required				5.641						

Command Shortcuts

Configure Circuits

Print Page

BATTERY CALC.

INSTALLING 12V-7AMPHR BATTERIES



**SILENT
KNIGHT**

by Honeywell

IntelliKnight® 5808 Single Loop Addressable Fire Alarm Control System

The convenience of an addressable fire alarm control panel in a cost-effective easy to use package.

IntelliKnight Model 5808 is a 127 point class leading single loop addressable fire alarm control/communicator system. 5808 provides you with the revolutionary value and performance of addressable sensing technology combined with exclusive, built-in digital communication, distributed intelligent power, 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 1-800-328-0103.

Description

The basic 5808 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. 5808 supports SD or SK protocol devices. 5808 also features a powerful built-in dual line fire communicator that allows for reporting of all system activity to a remote monitoring location.

Features

- Built-in support for up to 99 SK detectors and 99 SK modules.
- Built in support for 127 SD devices.
- 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 can be configured as 2 Class A (Style Z) or 4 Class B (Style Y), or auxiliary power for resettable, constant, or door holder power.
- Built-in annunciator with 80-character LCD display.
- RS-485 bus provides communication to system accessories.
- Built-in RS-232 and USB interface for programming via a PC.
- Upload or download programming, event history, or detector status via remote or direct connection.
- Improvements in SKSS deliver five times faster upload/downloads.
- Built-in synchronization for appliances from AMSECO, Gentex®, Faraday, System Sensor®, and Wheelock®.
- One Form C trouble relay rated at 2.5A at 27.4 VDC and two Form C programmable relays rated at 2.5A at 27.4 VDC.



Model 5808

- Plex-2 door option combines a dead front cabinet door with a clear window, limiting access to the panel while providing single button operation of the reset and silence functions.
- Integrated dead front panel protects operator from exposure to electrical components.
- The FACP enclosure features a Plexiglass® viewing window to protect annunciator.
- Acknowledge function allows operator to keep track of event status.

Installation

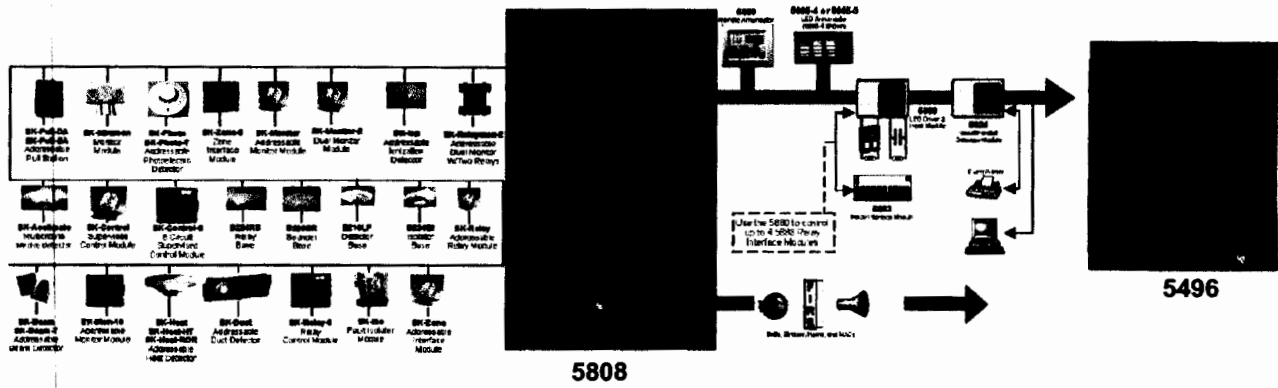
The 5800 can be surface or flush mounted.

Compatibility

The 5808 signal line circuit (SLC) supports multiple device types of the *same* protocol:

- SK (System Sensor)
- SD

You cannot mix SD and SK SLC devices on a FACP.



Specifications

Electrical

Primary AC: 120 VRMS at 50/60 Hz, 2.75A

Total Accessory Load: 6A @ 27.4 VDC

Notification Power: 6A @ 27.4 VDC, power-limited

Standby Current: 170 mA

Alarm Current: 325 mA

Notification & Auxiliary Circuits: 3A @ 27.4 VDC per circuit, power-limited

Battery Charging Capacity: 7.0-35 AH

Battery Size: 18 AH max. allowed in FACP. Larger capacity batteries can be housed in an RBB accessory cabinet

Physical

Flush Mount Dimensions: 14.5" W x 24.75" H x 3.5" D (36.8 W x 62.9 H x 8.73 D cm)

Overall Dimensions: 16" W x 26.4" H x 4.65" D (40.6 W x 67 H x 11.8 D cm)

Weight: 28 lbs. (12.8 kg)

Color: Red

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.

UL Listed
CSFM 7165-0559:0142;
MEA 429-92-E Vol. XIV

S-BUS Accessories

5860/R Remote Fire Annunciator
Features the same 80 character backlit LCD display keypad and firefighter's key switch as the 5808. 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.

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.

5883 Relay Board
Features 10 general purpose Form C relays. Used with 5880 module.

Miscellaneous Accessories

5660 Silent Knight Software Suite
PC-base software for FACP programming. 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.

Plex-2 Door
Dead front cabinet door with clear window to limit access to the FACP.

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)

SD and SK Devices
See the specification sheets listed below for a complete listing of the SD and SK devices.

- 53624 SD Devices data sheet
- 53623 SK Devices data sheet

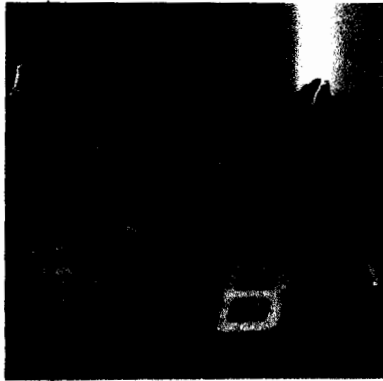
IntelliKnight & JumpStart are Registered Trademarks of Silent Knight Flexput is a Trademark of Silent Knight



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 12 Clintonville Road, Northford, CT 06472-1610. Phone: (800) 328-0103, Fax: (203) 484-7118. www.silentknight.com

MADE IN AMERICA

350386 Rev. J
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Analog/Addressable Devices with Hochiki Protocol



Hochiki Devices

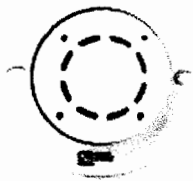
Hochiki devices are intelligent analog/addressable devices for use with the following IntelliKnight addressable fire alarm control panels (FACPs): 5820XL, 5808 and 5700. Hochiki detectors, modules, and accessories communicate to the FACP over the signaling line circuit loop (SLC loop) using a two wire connection. Shielded or twisted wire is not required. Up to 127 addressable Hochiki devices can communicate with the FACP on a single SLC loop. Any combination of addressable Hochiki devices and Hochiki modules can be used on a single SLC loop.

The assortment of Hochiki detectors, modules, and accessories that are compatible with IntelliKnight addressable FACPs are described below. For detailed information on Hochiki devices, see the device specification sheet.

Detectors

SD505-APS

A photoelectric smoke detector. SD505-APS has an LED light source and silicon photo diode receiving element. The detector features automatic drift compensation for contamination and a simple detector calibration test procedure that can be run at the FACP or remotely using 5650/5651 Silent Knight Software Suite.



SD505-APS
(Base not included)

SD505-AHS

A fixed temperature heat detector that uses an externally mounted thermistor with a specially designed cover that protects the thermistor while allowing maximum air flow. SD-505-AHS offers a programmable trip point temperature from 135°F – 150°F (57°C – 65°C). This detector is well suited for environments where smoke detectors cannot be used because of the presence of steam or cooking fumes, such as in a kitchen.



SD505-AHS
(Base not included)

SD505-AIS

An ionization smoke detector that has a sampling chamber and reference chamber for high stability and for a variety of applications where early warning of trouble from super-heated or flaming combustibles is desired. Presence of visible smoke or invisible gases greatly influences the current flow in the sampling chamber, changing the voltage ratio between the chambers. The difference is amplified inside the detector. When reaching a critical level, the detector triggers an alarm.



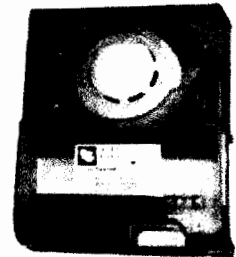
SD505-AIS
(Base not included)

SD505-DUCT

A addressable duct smoke detector that detects smoke and products of combustion present in air moving through an HVAC duct. This duct detector is housed in a heavy duty metal housing with a preinstalled SD505-APS photoelectric smoke detector. SD505-DUCT has an air velocity rating from 300 feet per minute to 4,000 feet per minute. Order SD505-T2, SD505-T5, or SD505-T10 air sampling tubes separately.

SD505-DUCTR

A duct smoke detector that detects smoke and products of combustion present in air moving through an HVAC duct. The SD505-DUCTR provides a fully programmable Form C contact. This duct detector is housed in a heavy duty metal housing with a preinstalled SD505-APS photoelectric smoke detector and relay module. When smoke is detected in a duct, the detector communicates the condition to the FACP. The built-in relay module then turns off fans, blowers, and other devices. SD505-DUCTR has an air velocity rating from 300 feet per minute to 4,000 feet per minute. Order SD505-T2, SD505-T5, or SD505-T10 air sampling tubes separately. Optional SD505-DTS-2 remote test switch available.



SD505-DUCTR



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Modules

SD500-AIM

A dry contact input module that acts as an interface to contact devices, such as waterflow switches and pull stations. The SD500-AIM supports Class B supervised wiring. This module monitors for alarm contact closures and open circuit wiring fault conditions. Mounts in a 4" square box.



SD500-AIM

SD500-MIM

A compact and light weight monitor module that acts as an interface to contact devices, such as waterflow switches and pull stations. The SD500-MIM supports Class B supervised wiring. This module mounts in a single gang box.

SD500-ARM

A relay module that provides one relay with two Form C contacts rated at 2.0A @ 30 VDC or 0.6A @ 120 VAC. The SD500-ARM can control a wide variety of normally open or normally closed applications, including elevator recall, door closing, fan operation, and auxiliary notification.

SD500-ANM

A notification module that lets you add notification circuits wherever they are needed on an FACP SLC loop. The SD500-ANM provides supervised monitoring of wiring to load devices such as bells, horns, and strobes. You can supply power to this module near the signaling appliance to reduce wire gauge requirements or supply power from a main power supply and control it separately by the individual notification modules. The SD500-ANM supports Class B and Class A wiring and all 16 notification patterns available on the FACP.

SD500-SDM

A two-wire interface module that allows an FACP to interface with and monitor two-wire conventional devices. This means you can retrofit an existing building and use existing conventional devices, including two-wire smoke detectors and devices with dry contacts, such as pull stations and heat detectors. The SD500-SDM transmits the status condition (normal, open, or alarm) of one full zone of two-wire devices to the FACP. The SD500-SDM supports Class B and Class A wiring.

SD500-LIM

A line isolator module that isolates a short circuit wiring fault on an SLC loop. When a short occurs on the SLC loop, it is detected as a trouble but all of the SLC devices protected by a SD500-LIM will continue to operate.



SD500-LIM

SD500-LED

An LED driver module that connects to the SLC loop and is capable of driving 80 LEDs. IntelliKnight FACP's support up to 40 SD500-LEDs per SLC loop.

Accessories

SD500-PS/SD500-PSDA

The SD500-PS is a single action pull station requiring only one motion to activate the station. The SD500-PSDA is a dual action pull station requiring two motions to activate the station. Both pull stations feature a rugged metal construction and mount in a single gang box.



SD500-PS

SD505-DTS-2

A remote test switch for use with the SD505-DUCTR that provides remote key operated test function and annunciation of detector alarm.

SD505-6SB

A 6" mounting base adds an audible output function to SD505-APS, SD505-AIS, and SD505-AHS. The SD505-6SB can be used as a single station, multi-station, or as a system sounder.

SD505-6RB

A 6" mounting base with one Form C relay contact. The SD505-6RB lets you control a wide variety of normally open and normally closed applications, including elevator recall, door closing, fan operation, and auxiliary notification. Because this relay is addressable, the relay device can be located at any point on the SLC loop.

SD505-6IB

A 6" mounting base with a built-in isolator for SD505-APS, SD505-AIS, and SD505-AHS detectors. When the SD505-6IB is connected to the SLC loop, a short, open, or ground fault occurring on the SLC loop is detected as a trouble but all SLC devices continue to operate. SD505-6IB fits under SD505-6AB detector base (included).



SD505-6IB Isolator Base

SD505-6AB

A 6" mounting base is for use with SD505-APS, SD505-AIS, and SD505-AHS.

SD505-4AB

A 4" mounting base is for use with SD505-APS, SD505-AIS, and SD505-AHS.



by Honeywell

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www.silentknight.com

MADE IN AMERICA
PN 53624 Rev A
ECN 09-520 09/09

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**Lowest
Current Draw
Available!!**

**GENTEX
CORPORATION**

Commander³ Series Selectable Candela Evacuation Signals

Applications

The Commander³ Series is a low profile strobe and horn/strobe combination that offers dependable audible and visual alarms and the absolute lowest current available.

The GE3 Series 24VDC offers tamperproof field selectable candela options of 15, 30, 60, 75, and 110 candela. The 12VDC offers tamperproof field selectable candela options of 15, 30, 60, and 75 candela.

The Commander³ Series horn offers a continuous or synchable temporal three in 2400Hz and mechanical tone, a chime and whoop tone. All tones are easy for the professional to change in the field by using switches.

The GE3 Series has a minimal operating current and has a minimum flash rate of 1Hz regardless of input voltage.

The Commander³ Series is shipped with a standard 4" metal mounting plate which incorporates the popular Super-Slide[®] feature that allows the installer to easily test for supervision. The product also features a locking mechanism which secures the product to the bracket without any screws showing.

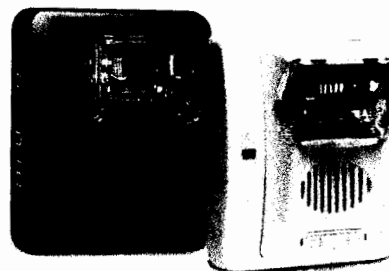
The Commander³ also features the patented Checkmate[®] - Instant Voltage Verification feature which allows the installer to check the voltage drop draw and match it to the blueprint.

The GE3 Series appliances are ANSI/UL 464 and ANSI/UL 1971, listed for use with fire protective systems and are warranted for three years from date of purchase.

Standard Features

- Nominal voltage 12VDC and 24VDC
- 24VDC units have field selectable candela options of 15, 30, 60, 75 & 110
- 12VDC units have field selectable candela options of 15, 30, 60 & 75
- GEH horn is available in 12VDC or 24VDC
- Super-Slide[®] Bracket - Ease of Supervision Testing
- Checkmate[®] - Instant Voltage Verification
- Unit Dimensions: 5" (12.7 cm) high x 4.5" (11.43 cm) wide x 2.5" (6.35 cm) deep
- Synchronize strobe and/or horn with Gentex AVSM Control Module
- Prewire entire system, install mounting bracket, then install signals
- Documented lower installation and operating costs
- Input terminals accept 12 to 18 AWG
- Switch selection for high or low dBA
- Switch for chime, whoop, mechanical and 2400Hz tone
- Tamperproof re-entrant style grill
- Switch for continuous or temporal 3 tone (not available on whoop tone)
- Surface mount with the GSB (Gentex Surface Mount Box)
- Silence horn while strobes remain flashing
- Faceplate available in red or off-white

GEC3/GES3 12 & 24 VDC S E R I E S



Product Listings

SIGNALING



LISTED



- ANSI/UL 464 & ANSI/UL 1971 Listed
- CSFM: 7135-0569:122 (GEC3-24 & GEH-24)
7125-0569:123 (GES3-24)
7125-0569:129 (GES3-12)
7135-0569:130 (GEC3-12 & GEH-12)
- MEA: 285-91-E (GEC3-24 & GES3-24)
580-06-E (GEC3-12 & GES3-12)

Patents

- 7,375,617 May 20, 2008

Product Compliance

- NFPA 72
- Americans with Disabilities Act (ADA)
- Quality Management System is certified to: ISO 9001:2008

NEMA
MEMBER



GEH 12VDC or 24VDC Low Profile Evacuation Horn

Model Number	Part Number	Nominal Voltage	Reverberant dBA @ 10ft., per ANSI/UL 484	In Anechoic Room dBA @ 10ft.
GEH12-R	904-1239-002	12VDC	62-82	100
GEH12-W	904-1241-002	12VDC	62-82	100
GEH24-R	904-1205-002	24VDC	62-82	100
GEH24-W	904-1207-002	24VDC	62-82	100

GES3 12VDC or 24VDC Selectable Candela, Low Profile Evacuation Strobe

Model Number	Part Number	Nominal Voltage	Candela (ANSI/UL 1971)
GES3-12WR	904-1235-002	12 VDC	15, 30, 60, 75
GES3-12WW	904-1237-002	12 VDC	15, 30, 60, 75
GES3-24WR	904-1321-002	24 VDC	15, 30, 60, 75, 110
GES3-24WW	904-1319-002	24 VDC	15, 30, 60, 75, 110

Model Designations:

W = Wall mount
R = Red Faceplate W = White Faceplate

All units are available in plain (no lettering).

Plain units are non-returnable.

ALERT bezel available AGENT bezel available

GEC3 12VDC or 24VDC Selectable Candela, Low Profile Evacuation Horn/Strobe

Model Number	Part Number	Nominal Voltage	Candela (ANSI/UL 1971)	Reverberant dBA @ 10ft., per ANSI/UL 484	In Anechoic Room dBA @ 10ft.
GEC3-12WR	904-1231-002	12 VDC	15, 30, 60, 75	62-82	100
GEC3-12WW	904-1233-002	12 VDC	15, 30, 60, 75	62-82	100
GEC3-24WR	904-1317-002	24 VDC	15, 30, 60, 75, 110	62-82	100
GEC3-24WW	904-1315-002	24 VDC	15, 30, 60, 75, 110	62-82	100

GE3 Product Strobe Current Ratings (mA)				
	12VDC (8-17.5 Volts)		24VDC (16-33 Volts)	
Candela	12VDC	UL Max ¹	24VDC	UL Max ¹
15cd	106mA	92mA	30mA	42mA
30cd	131mA	141mA	35mA	58mA
60cd	186mA	260mA	66mA	97mA
75cd	237mA	312mA	80mA	116mA
110cd			103mA	161mA



GE3-12 Product Horn Current Ratings			
Horn Mode	Minimum dBA @ 10ft., per UL 484 (HIGH)	Minimum dBA @ 10ft., per UL 484 (LOW)	Regulated 12VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	76	69*	29
Temp 3 Mechanical	75	68*	26
Temp 3 Chime	62*	60*	13
Continuous 2400Hz	79	74*	29
Continuous Mechanical	78	72*	26
Continuous Chime	63*	61*	13
Whoop	78	71*	55

GE3-24 Product Horn Current Ratings			
Horn Mode	Minimum dBA @ 10ft., per UL 484 (HIGH)	Minimum dBA @ 10ft., per UL 484 (LOW)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	78	71*	28
Temp 3 Mechanical	76	70*	25
Temp 3 Chime	70*	66*	15
Continuous 2400Hz	81	74*	28
Continuous Mechanical	80	72*	25
Continuous Chime	70*	66*	15
Whoop	82	69*	56

NOTES:

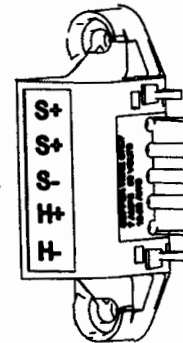
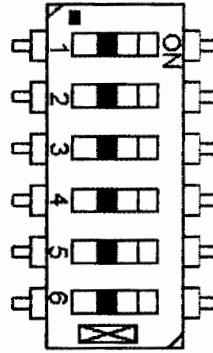
- Operating temperature: 32° to 120°F (0° to 49°C). The GEC3 and GES3 Series is not listed for outdoor use.
The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.
- For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power, see installation manual. 12VDC models are DC only.
- Operating the horn in this mode at this voltage will result in not meeting the minimum ANSI/UL 484 reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application (not applicable when using the chime tone. The chime tone is always private mode).
- ¹ RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33VDC for 24VDC units) (8-17VDC for 12VDC units). For strobes the UL max current is usually at the minimum listed voltage (16VDC for 24VDC units) (8VDC for 12VDC units). For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Tone Switch Locations

TONE	SWITCH POSITION		
	3	4	5
Mechanical Temporal 3	ON	ON	ON
Mechanical - Continuous	OFF	ON	ON
2400Hz - Temporal 3	ON	OFF	ON
2400Hz - Continuous	OFF	OFF	ON
Chime - Temporal 3	ON	ON	OFF
Chime - Continuous	OFF	ON	OFF
Whoop	ON	OFF	OFF
Whoop	OFF	OFF	OFF

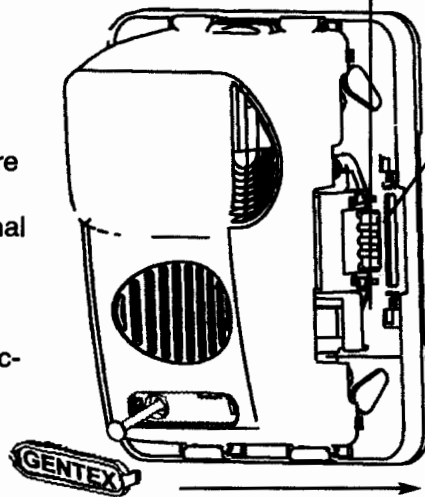
NOTE:

- Switch Positions 1 and 2 in the OFF position to select isolated horn and strobe power inputs
- Switch Position 6 ON = HIGH dBA
- Switch Position 6 OFF = LOW dBA



Gentex Super-Slide® Mounting Bracket

Allows the installer to pre-wire the system, test for system supervision, remove the signal head until occupancy, switch out Gentex signals without changing mounting brackets and has locking edge connector for snap-in-place installation.



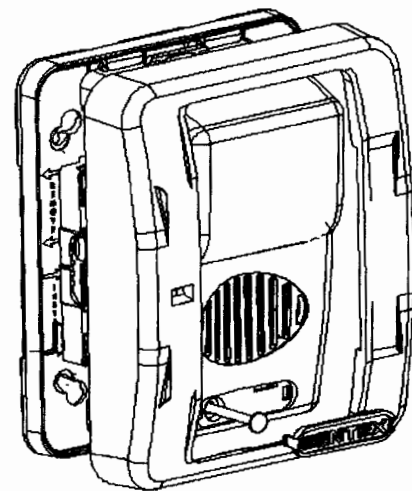
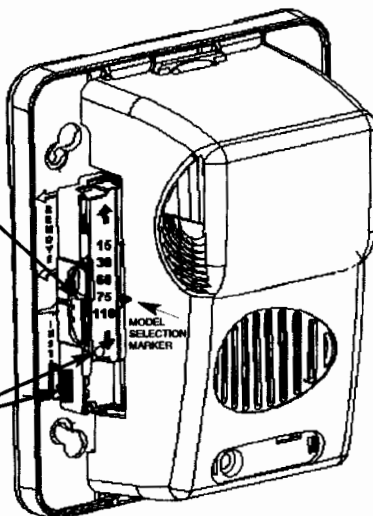
Gentex Checkmate® Instant Voltage Verification

It is often necessary to confirm the voltage drop along a line of devices. The access holes are provided in the back of the terminal block to allow the voltage to be measured directly without removing the device. Typically this would be done at the end of the line to confirm design criteria. Most measurements will be taken using the S+ and S- locations although access is provided to other locations.

NOTE: Care should be taken to not short the test probes.

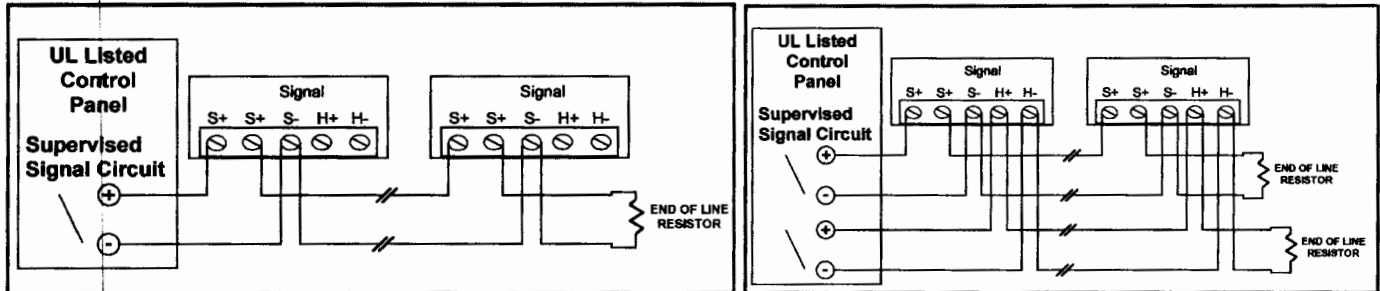
Candela selection slider switch. Depress center and slide switch to desire brightness level.

Break off pin and insert into hole at the bottom of the selector to lock candela setting. Signal must be removed from bracket and pin pushed forward from backside out of hole to change candela.



To remove bezel, grip both sides of bezel and pull in a downward and outward motion.

Conventional Wiring Diagrams for Emergency Notification Evacuation Series



NOTES:

- All strobes are designed to flash as specified with continuous applied voltage. Strobes should not be used on coded or pulsing signaling circuits. However, use of the Gentex AVSM control module or Gentex synchronization protocol is permitted to synchronize the strobe, horn and/or mute the horn. See Technical Bulletin 014 for additional information.
- FOR SYNCHRONIZATION WIRING INFORMATION, REFERENCE AVSM CONTROL MODULE DATA SHEET (551-0031) AND/OR AVSM CONTROL MODULE MANUAL (550-0284) FOR SYNCHRONIZATION MODULE WIRING DIAGRAMS. AVSM CONTROL MODULE DATA SHEET AND MANUAL CAN BE OBTAINED AT <http://www.gentex.com> OR CALL GENTEX CORPORATION AT 1-800-436-8391.
- When synchronizing the GE3 12VDC Series, the Gentex AVSM control module or Gentex synchronization protocol **MUST** be used.

Architect & Engineering Specifications

The audible and/or visible signal shall be Gentex GEH, GES3, GEC3 Series or approved equal and shall be listed by Underwriters Laboratories, Inc. per ANSI/UL 1971 and/or ANSI/UL 464. The notification appliance shall also be listed with the California State Fire Marshal (CSFM) and the Bureau of Standards and Appeals (NYC).

The notification appliance (combination audible/visible) shall produce a peak sound output of 100dBA or greater at 12VDC or 24VDC as measured in an anechoic chamber. The signaling appliance shall also have the capability to silence the audible signal while leaving the visible signal energized with the use of a single pair of power wires. Additionally, the user shall be able to select either continuous or temporal tone output with the temporal signal having the ability to be synchronized.

Unit shall be capable of being installed so that any unauthorized attempt to change the candela setting will result in a trouble signal at the fire alarm control panel.

The audible/visible and visible signaling appliance shall also maintain a minimum flash rate of 1Hz or up to 2Hz regardless of power input voltage. The strobe appliance shall have an operating current of 42mA or less at 24VDC for the 15Cd strobe circuit and 92mA or less at 12VDC for the 15Cd strobe circuit.

The appliance shall be polarized to allow for electrical supervision of the system wiring. The unit shall be provided with a mounting bracket with terminals and barriers for input/output wiring and be able to mount to a single gang or double gang box or double workbox without the use of an adapter plate. The unit shall have an input voltage range of 16-33 volts with either direct current or full wave rectified power for 24VDC models or a voltage range of 8-17.5 volts for 12VDC models.

The appliance shall be capable of testing supervision without disconnecting wires, verify voltage without removing unit and be capable of mounting to a surface back box.

24 units per carton
28 pounds per carton

GENTEX CORPORATION

Fire Protection Products Group • www.gentex.com
10985 Chicago Drive • Zeeland, Michigan 49464
616.392.7195 • 1.800.436.8391 • 616.392.4219 Fax

Gentex Corporation reserves the right to make changes to the product data sheet at their discretion.

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551-0050-05

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**SILENT
KNIGHT**

by Honeywell

5860 Remote Annunciator

Bring the power to control an IntelliKnight fire alarm control panel to every area within your facility.

Now you can operate and program your IntelliKnight system from up to eight locations throughout your facility. The 5860 remote annunciator provides the same advanced, easy-to-use interface found on the IntelliKnight panel's built-in annunciator. The 80-character display and ergonomically designed keypad allow for simple and error-free system operation. All operations—including reset, silence, detector status checking, fire drill, and programming—are identical.

Access to the system is through a firefighter's key or an access code. For security, a special installation code is needed for programming functions. The 5860 connects to the IntelliKnight panel via the RS-485 system bus. Wire runs can be up to 6000 feet from the panel.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103.

Description

Features include an 80-character backlit LCD providing easy-to-understand system messages. The annunciator is ergonomically designed with over-sized buttons for the most frequently used features, like Reset and Silence. In addition to status messages displayed on the LCD, there are five LEDs for alarm, supervisory, trouble, silence, and AC power status.

The annunciator is available in gray to match virtually any decor and red for applications where the annunciator must stand out. The annunciator enclosure can be surface or flush mounted. A trim ring kit is available for surface mounting.

Features

- 80-character backlit LCD display (4 lines with 20 characters on each line)
- Tactile and audible feedback
- Accepts user codes or fire fighter's key
- Larger keypad buttons for system reset and silence
- Install up to eight 5860s per FACP
- Available in red or light gray
- Support for simultaneous use of

multiple 5860s

- RS-485 interface to panel
- Operation and appearance is identical to 5860 built-in annunciator
- On-board piezo sounder audibly indicates alarms, troubles, and supervisories
- Five status LEDs for alarm, supervisory, trouble, silence and AC power conditions
- Wiring lengths up to 6000 ft. from the FACP (depending on wire gauge and number of devices on SBUS)
- UL listed, complies with NFPA 72
- CSFM approved

Electrical Specifications

Operating Voltage: 24 VDC

Standby Current: 20 mA max

Alarm Current: 25 mA

Wiring Distance: 6,000 max. from FACP (depending on wire gauge and number of devices on the SBUS)

Max Per System: 8

Mechanical Specifications

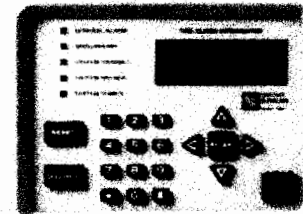
Physical 9.1" W x 7.4" H x 1.5" D (23.1 W x 18.8 H x 3.8 D cm)

Shipping Weight: 2.8 lbs (1.3 kg)

Color

5860R: Red

5860: Gray



5860

Environmental

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

Humidity: 10% – 93% non-condensing

Compatibility

The 5860 is compatible is the following FACP's:

- IntelliKnight 5820XL FACP
- IntelliKnight 5808 FACP
- IntelliKnight 5700 FACP

Approvals/Listings

NFPA 72; UL Listed;
CSFM 7170-0559: 135;
MEA 429-92-E Vol. IX;
FM Approved

5860 Remote Annunciator

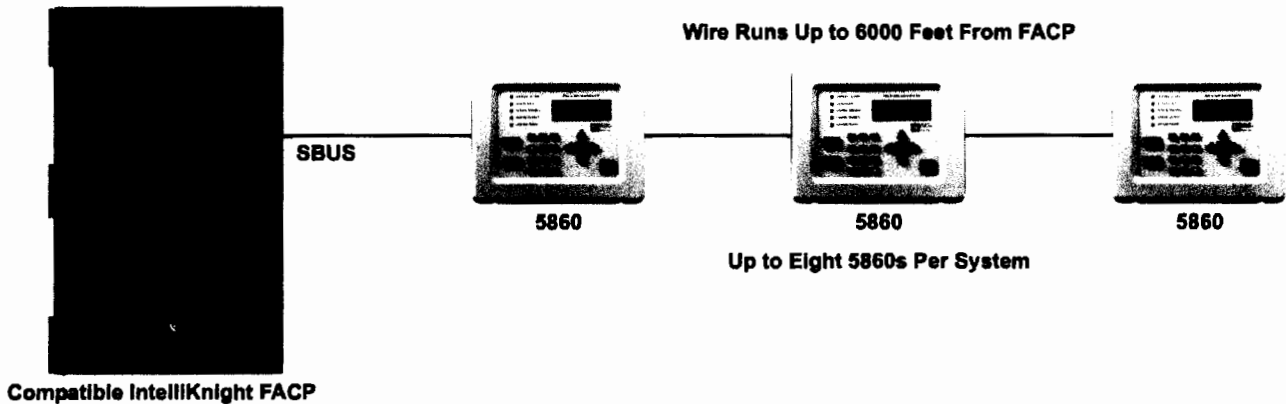
Engineering Specifications

The main control must have a built-in annunciator and must support up to eight remote annunciators. Remote annunciators shall have the same control and display layout so as to match the appearance of the built-in annunciator. Remote annunciators shall be available in two colors, red or light gray.

Remote annunciators shall have identical functionality and operation as the built-in annunciator. All annunciators must have an 80-character LCD display and must feature five LEDs for: General Alarm, Supervisory, System Trouble, System Silence, and System Power.

All controls and programming keys are silicone mechanical type with tactile and audible feedback. Keys have a travel of .040 inches. No membrane style buttons will be permissible.

The annunciator must be able to silence and reset alarms through the use of a code entered on the annunciator keypad or by using a firefighter's key. The annunciator must have two levels of user codes that will limit the operating system programming to authorized individuals. The control panel must allow all annunciators to accommodate multiple user input simultaneously.



Ordering Information

- 5860R Remote Annunciator four line LCD annunciator with 20 characters per line. Red.
- 5860 Remote Annunciator. Four line LCD annunciator with 20 characters per line. Gray.

Accessories

- 5860TR Red Trim Ring for surface mounting.
- 5860TG Gray Trim Ring for surface mounting.



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 12 Clintonville Road, Northford, CT 06472-1610. Phone: (800) 328-0103, Fax: (203) 484-7118. www.silentknight.com

MADE IN AMERICA

FORM# 350224 Rev E
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Input / Output Matrix

Device	1	2	3	4	5	6
Waterflow Switch	X	X	X			X
Control Valve Tamper Switch				X		X
Duct Smoke Detector				X	X	X
Manual Pull Station	X	X	X			X
Panel Smoke Detector	X	X	X			X

- 1) Sound Store Horn / Strobe
- 2) Report to Monitoring Center as an Alarm Condition
- 3) Monitoring Center to dispatch PFD
- 4) Initiate a Supervisory Condition at the Monitoring Station and Monitoring Center to notify building Manager
- 5) Shut down HVAC Unit
- 6) Activate signal & display alarm description at the front entry Annunciator panel

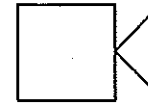
Scope Of Work

Install a new addressable Silent Knight 5808 fire alarm control unit (FACU) to monitor the existing fire sprinkler system and duct smoke detectors. Additionally, (1) smoke detector, (1) manual pull station, (1) horn / strobe appliance and (1) annunciator panel to be installed. This system is to be monitored 24/7 by AMCEST monitoring center.

General Notes

- Electrical contractor to install 120vac power to this new panel
- All wiring below 7' to be run within conduit or armored flex
- Existing duct smokes will be re-programmed to activate a Supervisory signal at the new FACU
- All fire alarm wiring to be 16/2 U.N.O.
- All lockable devices to be keyed alike

Drawing Legend



Interior Horn / Strobe



Addressable Monitor Module



Addressable Manual Pull Station



Addressable Smoke Detector



Annunciator



Addressable Fire Alarm Control Unit



Document Cabinet

DEAN & ALLYN, INC.

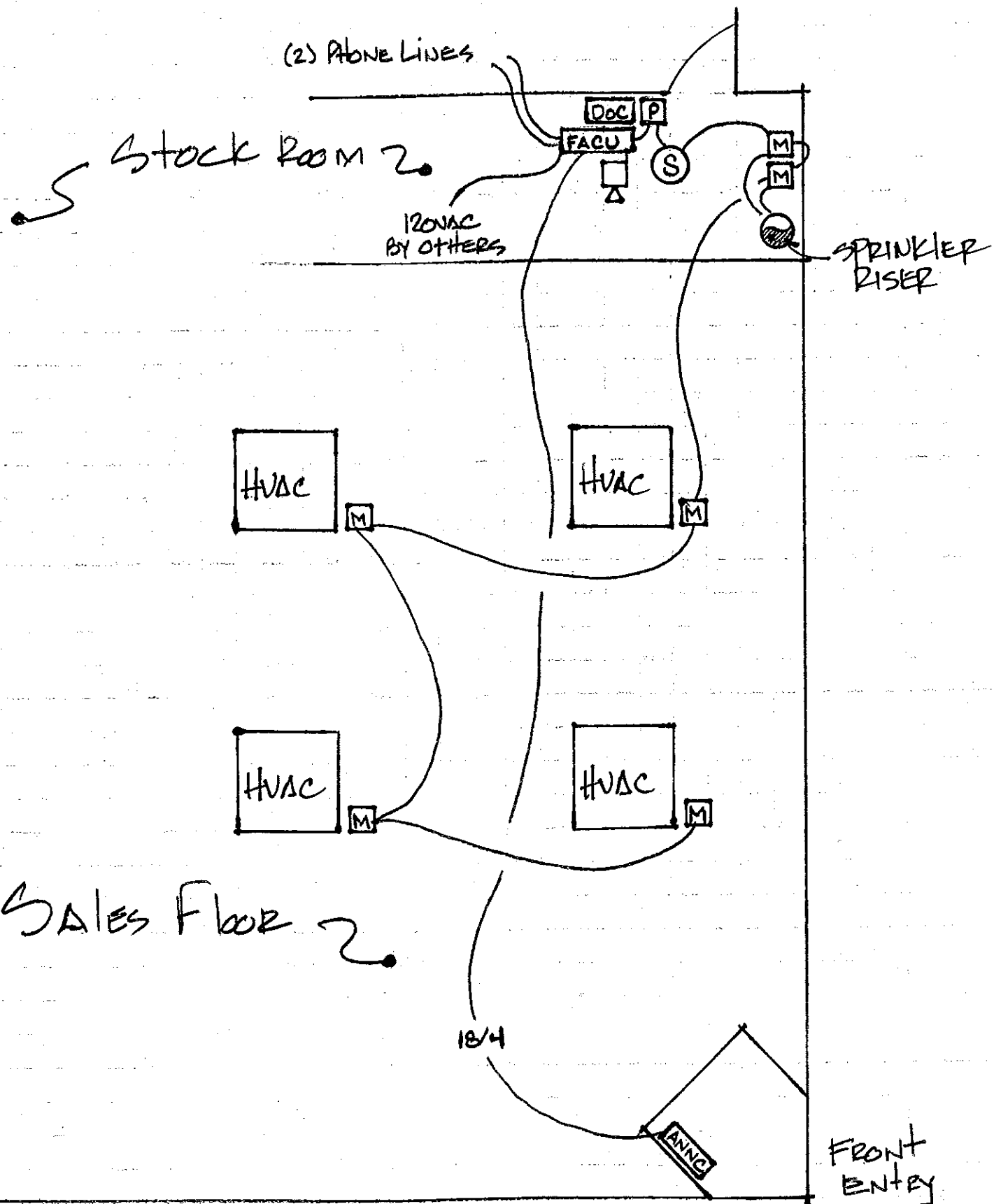
FIRE PROTECTION • SPECIAL HAZARD

P.O. Box 709

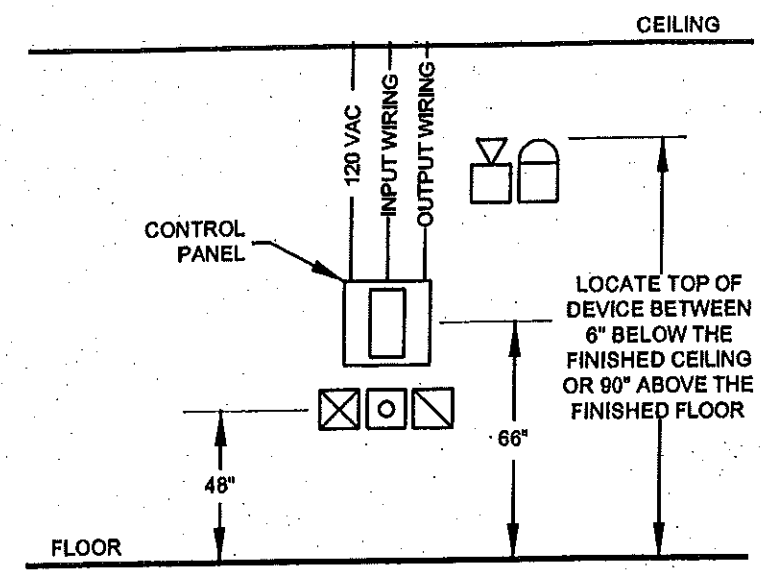
Gray, ME 04039-0709

207/657-5646 • fax 657-5647

Job: W07265
PAGE 2 OF 2



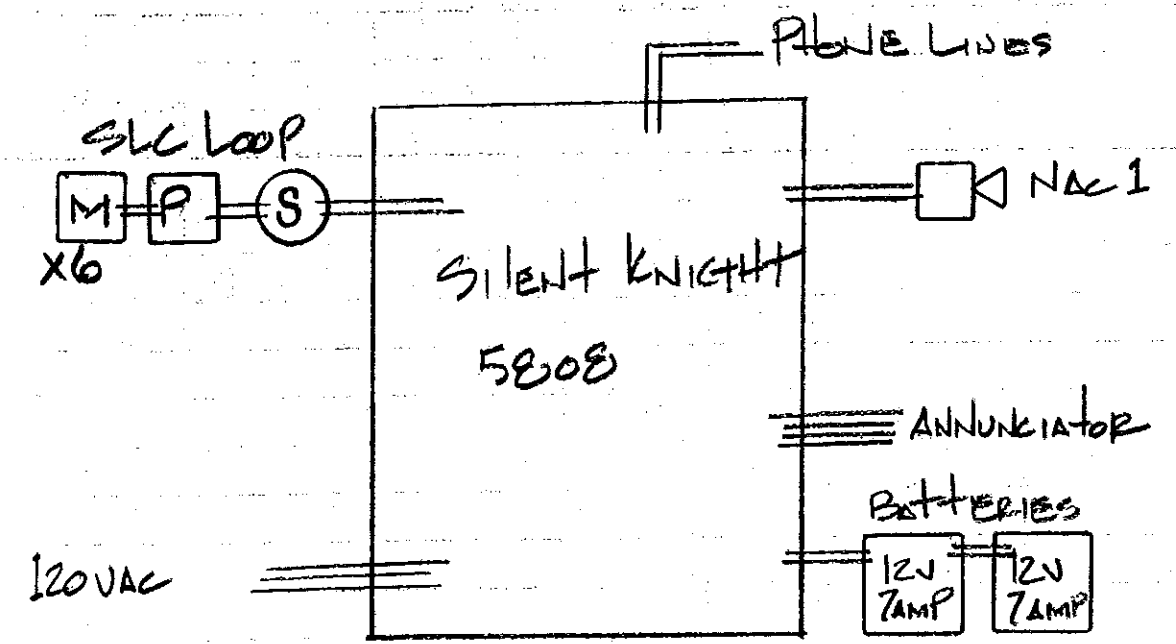
RITE AID ~ 701 FOREST AVE.
#4133



NOTE:
DETAIL PROVIDED TO INDICATE
ALLOWABLE ELEVATIONS FOR
CONTROL EQUIPMENT ONLY.

**CONTROL EQUIPMENT
ELEVATION DETAIL**

SCALE: NONE



RISER DIAGRAM

DEAN & ALLYN, INC.
FIRE PROTECTION - SPECIAL HAZARD
P.O. Box 709
Gray, ME 04039-0709
207/657-5646 • fax 657-5647

Job: W07205
PAGE 1 OF 2