DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING PERMIT

This is to certify that Foley, Lawrence **Located At** 1685 CONGRESS

has permission to First Floor Lobby conected w/ Fire Alarm

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 procured prior to occupancy.

Fire Prevention Officer **Code Enforcement Officer / Plan Reviewer**

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

PERMIT ISSUED

FEB - 8 2011

City of Portland

City of Portland, Maine - Building or Use Permit Application
389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No:	Date Applied:	CBL:	
2011-01-275-FAFS	**1/19/2011**	**219 - - A - 013 - 001 - - - - -**	
Location of Construction: **1685 CONGRESS**	Owner Name: * **1685 CONGRESS LLC**	Owner Address: **202 MAMARONECK AVE WHITE PLAINS, NY - NEW YORK 10601**	Phone:
Business Name:	Contractor Name: **Foley, Lawrence**	Contractor Address:	Phone:
Lessee/Buyer's Name:	Phone:	Permit Type: **FIRE ALARM - Fire Alarm**	Zone: **R-P**
Past Use: **Professional Offices**	Proposed Use: **Same: Professional Offices – to add Fire Alarm System to first floor**	Cost of Work: **4000.000000**	CEO District:
		Fire Dept: ✓ Approved w/conditions ___ Denied ___ N/A Signature: (58)	Inspection: Use Group: Type: Fire Alarm IBC, 2003 Signature:
Proposed Project Description: **1685 Congress First Floor Lobby Fire Alarm System**		Pedestrian Activities District (P.A.D.)	
Permit Taken By:	**Zoning Approval**		

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building Permits do not include plumbing, septic or electrial work.
3. 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.

PERMIT ISSUED

FEB - 8 2011

City of Portland

Special Zone or Reviews	Zoning Appeal	Historic Preservation
___ Shoreland	___ Variance	w. Min ___ Not in Dist or Landmark
___ Wetlands	___ Miscellaneous	___ Does not Require Review
___ Flood Zone	___ Conditional Use	___ Requires Review
___ Subdivision	___ Interpretation	___ Approved
___ Site Plan	___ Approved	___ Approved w/Conditions
___ Maj ___ Min ___ MM	___ Denied	___ Denied
Date: ok with Conditions - S 1/26/11	Date:	Date: Any exterior work requires A Separate permit for review & Approval

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 appication 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 PHON

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: 1685 Congress St CBL: 219-A-13

Exact location: (within structure) First Floor Lobby

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

Building owner: 1685 Congress LLC

System Designer (point of contact): (Must be) Kevin Inman

Designer phone: 207-332-1204 E-mail: kevininman@protection1.com

Installing contractor: Protection One Certificate of Fitness No: 1003

Contractor phone: 207-347-5322 E-mail: johncampbell@protection1.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 ½ 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: 4000-

PERMIT FEE: 60
($10 PER $1,000 + $30 FOR THE FIRST $1,000)

RECEIVED
JAN 18 2011
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 ½ 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: _____ Date: 1-13-11

Job Summary Report
Job ID: 2011-01-275-FAFS

Job Type:	Fire Alarm / Suppression	**Job Description:**	1685 Congress First Floor Lobby	**Job Year:**	2011
Building Job Status Code:	Initiate Plan Review	**Pin Value:**	463	**Tenant Name:**	
Job Application Date:		**Public Building Flag:**	N	**Tenant Number:**	
Estimated Value:	4,000	**Square Footage:**			
Related Parties:		* 1685 CONGRESS LLC		*Property Owner*	
		Protection One - Lawrence Foley		*ELECTRICAL CONTRACTOR*	

Job Charges

Fee Code Description	Charge Amount	Permit Charge Adjustment	Net Charge Amount	Payment Date	Receipt Number	Payment Amount	Payment Adjustment Amount	Net Payment Amount	Outstanding Balance

Location ID: 29182

Location Details

Alternate Id	Parcel Number	Census Tract	GIS X	GIS Y	GIS Z	GIS Reference	Longitude	Latitude
D09650	219 A 013 001		M				-70.31082	43.659646

Location Type	Subdivision Code	Subdivision Sub Code	Related Persons	Address(es)
1				1685 CONGRESS STREET WEST

Location Use Code	Variance Code	Use Zone Code	Fire Zone Code	Inside Outside Code	District Code	General Location Code	Inspection Area Code	Jurisdiction Code
OFFICE & BUSINESS SERVICE		NOT APPLICABLE			Historic District		DISTRICT 6	STROUDWATER

Structure Details

Structure: Commercial Office

Occupancy Type Code:

Structure Type Code	Structure Status Type	Square Footage	Estimated Value	Address
Office & Professional Buildings	0			1685 CONGRESS STREET WEST

Longitude	Latitude	GIS X	GIS Y	GIS Z	GIS Reference

User Defined Property	Value
Alarms Commercial	0
Alarms Commercial	1

Permit #: ELEC-801

Permit Data

R-P Prin / RPZ in Rear within Historic, but Not Front

Location Id	Structure Description	Permit Status	Permit Description	Issue Date	Reissue Date	Expiration Date
29182	Commercial Office	Initiallzed	First Floor Lobby conected w/ Fire Alarm			

Inspection Details

Inspection Id	Inspection Type	Inspection Result Status	Inspection Status Date	Scheduled Start Timestamp	Result Status Date	Final Inspection Flag

Fees Details

Fee Code Description	Charge Amount	Permit Charge Adjustment	Permit Charge Adj Remark	Payment Date	Receipt Number	Payment Amount	Payment Adjustment Amount	Payment Adj Comment
Electric Commercial Permit Fee	$55.00							

Permit #: FIRE ALARM-800

Permit Data

Location Id	Structure Description	Permit Status	Permit Description	Issue Date	Reissue Date	Expiration Date
29182	Commercial Office	Initialized	Install Fire Alarm First Floor Lobby			

Inspection Details

Inspection Id	Inspection Type	Inspection Result Status	Inspection Status Date	Scheduled Start Timestamp	Result Status Date	Final Inspection Flag

Fees Details

Fee Code Description	Charge Amount	Permit Charge Adjustment	Permit Charge Adj Remark	Payment Date	Receipt Number	Payment Amount	Payment Adjustment Amount	Payment Adj Comment
Job Valuation Fees	$60.00							

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.

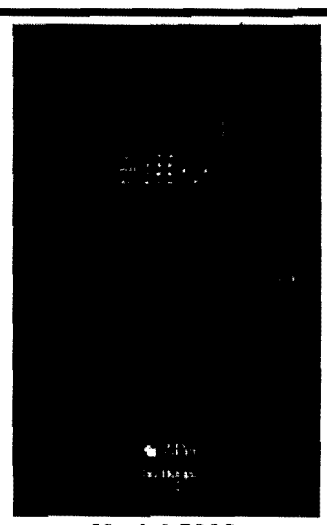
For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103, or in Connecticut, call 203-484-7161.

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 Hochiki 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 127 Hochiki devices or 99 SK detectors *and* 99 SK modules
- 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
- Programmable date setting for Daylight Saving Time
- 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



Model 5808

- 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.

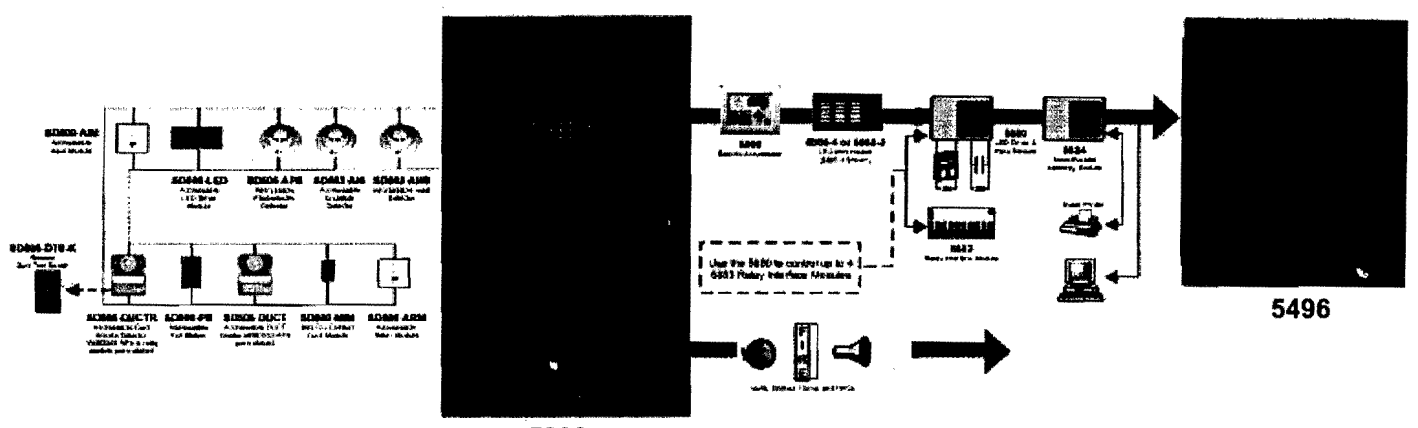
Compatibility

The 5808 SLC supports multiple device types of the *same* protocol:

- Hochiki
- SK

You cannot mix Hochiki and SK devices on a FACP. However, any combination of addressable devices of the same protocol can be used on the 5808.

SILENT KNIGHT



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: 7.0-35.0 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.

Other Approvals: UL Listed;
CSFM 7170-0559: 142;
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)

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

Hochiki and SK Devices

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

53624	Hochiki Devices Specification Sheet
53623	SK Device Protocol Devices Specification Sheet

SILENT KNIGHT by Honeywell

MADE IN AMERICA

350386 Rev. F
ECN 09-520 09/09

SK-Photo and SK-Photo-T

Intelligent Photoelectric Smoke Sensors

The SK-Photo is a photoelectric smoke detector and the SK-Photo-T is a photoelectric smoke detector with thermal. These plug in smoke detectors, with integral communication, provide features that surpass conventional detectors and are for use with Silent Knight IntelliKnight Fire Alarm Control Panels (FACPs).

For more information about the IntelliKnight system, or to locate your nearest source, please call 800-328-0103 or in Connecticut, call (203) 484-7161.

Description

SK-Photo and SK-Photo-T are plug-in type smoke sensors that combine a photoelectric sensing chamber with addressable analog communications. Point ID capability allows each detector's address to be set with rotary address switches, providing exact detector locations for selective maintenance when chamber contamination reaches unacceptable levels.

SK-Photo and SK-Photo-T have a unique optical sensing chamber that is engineered to sense smoke produced by a wide range of combustion sources. In the SK-Photo-T, dual electronic thermistors add 135°F (57°C) thermal technology to maximize detection.

Features

- Sleek, low-profile design
- Base included
- Reliable analog communications for trouble-free operation
- Age resistant polymer housing
- Dual electronic thermistor design on the SK-Photo-T
- Superior EMI resistance for reliability
- Simple field cleaning for code compliance
- Variety of mounting options to meet any application
- Dual LED indicators for 360° visibility
- Detector transmits signal to indicate maintenance is required
- Optional remote LED annunciator (System Sensor® PN RA100Z)
- Plug-in mounting provides ease of installation
- Tamper-proof feature available on mounting bases
- Listed for use in duct applications
- Rotary address switches for fast installation
- UL Listed
- FM Approved

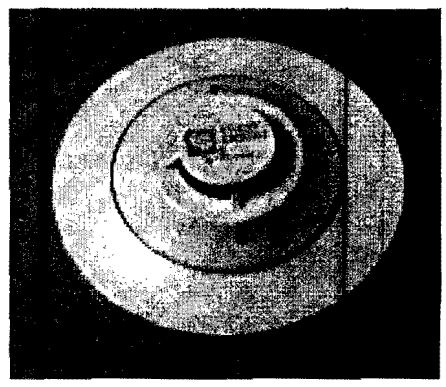
Specifications

Physical
Height: 2.0" (5.0 cm)
Diameter: 4.1" (10.4 cm)
Shipping Weight: 5.2 oz. (147 g)

Electrical
Operating Voltage: 15–32 VDC
Standby Current:
300 µA @ 24 VDC Maximum
Alarm Current: 6.5 mA @ 24 VDC max (with LED on)

Environmental
Operating Temperature
SK-Photo: 32° – 120°F (0°C – 49°C)
SK-Photo-T: 32° – 100°F (0°C – 38°C)
Humidity: 10% – 93% non-condensing

Other Ratings
SK-Photo-T Thermal: Fixed temperature set point 135°F (57°C)
Velocity: 0 – 4000 fpm (0 – 20 m/sec)
SK-Photo Insect Screen Hole Size: 0.016" (0.41 mm) nominal



SK-Photo (Base included)

Compatibility

The SK-Photo and SK-Photo-T are compatible with the following IntelliKnight FACPs:
5700
5808
5820XL

SK-Photo and SK-Photo-T are compatible with the following detector bases:

B210LP	(included) 6" base
B501	2 wire base
B501BHT-2	Temporal base
B224RB	Relay base
B224BI	Isolator base
B501BH-2	Sounder base

SILENT KNIGHT
by Honeywell

Model SK-Photo and SK-Photo-T Intelligent Photoelectric Smoke Sensors

Engineering Specifications

The contractor shall furnish and install where indicated on the plans, Intelligent photoelectric smoke sensors Silent Knight SK-Photo or SK-Photo-T with thermal. The combination detector head, and twist-lock base, shall be UL listed and compatible with Silent Knight's IntelliKnight fire control panels.

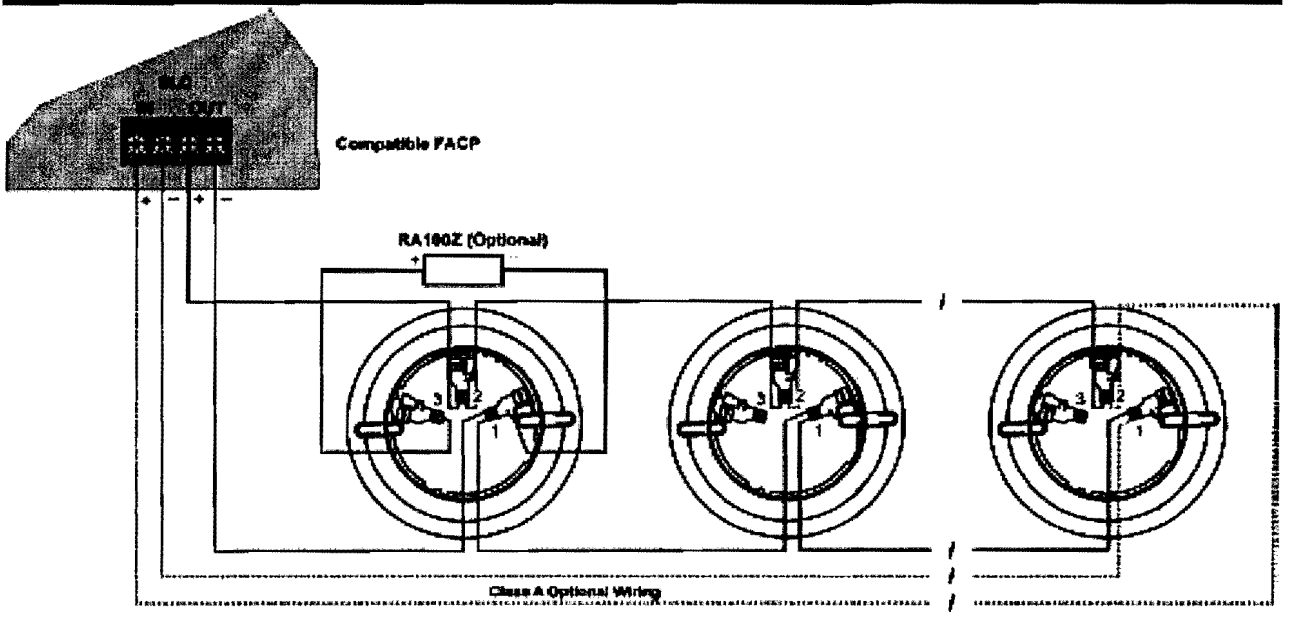
The base shall permit direct interchange with SK-Photo or SK-Photo-T. Base shall be the appropriate twist-lock base part number B210LP (included).

The smoke detector shall have a flashing status LED for visual supervision. When the detector is actuated, the flashing LED will latch on steady. The detector may be reset by actuating the control panel reset switch.

The calibration of the detector shall be capable of being selected and measured by the control panel without the need for external test apparatus.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field selectable as required.

The SK-Photo shall automatically perform a functional test of the detector. The test method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.



Wiring SK-Series Detector Mounting Bases

SILENT KNIGHT by Honeywell

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# 350118 Rev A,

SK-Minimon

Intelligent Mini Monitor Module

The SK-Minimon addressable mini monitor modules for use with Silent Knight IntelliKnight fire alarm control panels (FACP). The SK-Minimon is designed to be used with pull stations, water flow switches, and other applications requiring dry contact alarm initiation devices.

For more information about the IntelliKnight system, or to locate your nearest source, please call 800-328-0103 or in Connecticut, call (203) 484-7161.

Description

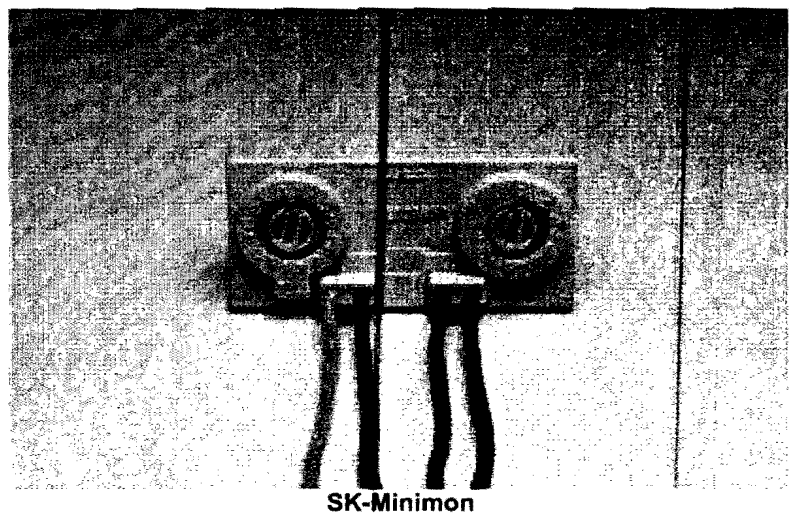
The SK-Minimon is an addressable monitor modules for use with the IntelliKnight fire alarm control panels (FACPs). The SK-Minimon acts as an interface to contact devices, such as waterflow switches and pull stations.

The SK-Minimon supports Class B supervised wiring to the load device. Conventional 4-wire smoke detectors can be monitored for alarm and trouble conditions

The SK-Minimon can be mounted in a single gang junction box directly behind the monitored device. Its small size and light weight allow it to be installed without rigid mounting requirements.

Features

- Single contact monitor
- SK-Minimon support for Class B (Style B) contact monitor wiring
- Small and lightweight size allows for flexible mounting options
- Rotary address switches for fast installation
- UL listed



SK-Minimon

Specifications:

Electrical
Standby Current: 400 uA max @ 24 VDC with comm.
Voltage Range: 15 - 32 VDC
End of Line Resistance: 47 k Ohms

Physical
Dimensions:
2.75" W x 1.3" H x 0.5" D
Weight: 1.2 oz (37 g)

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

Humidity:
10% – 93% non-condensing

Compatibility

The SK-Minimon is compatible with the following IntelliKnight FACP's:

5700
5808
5820XL

Approvals
UL approved
CSFM
FM Approved

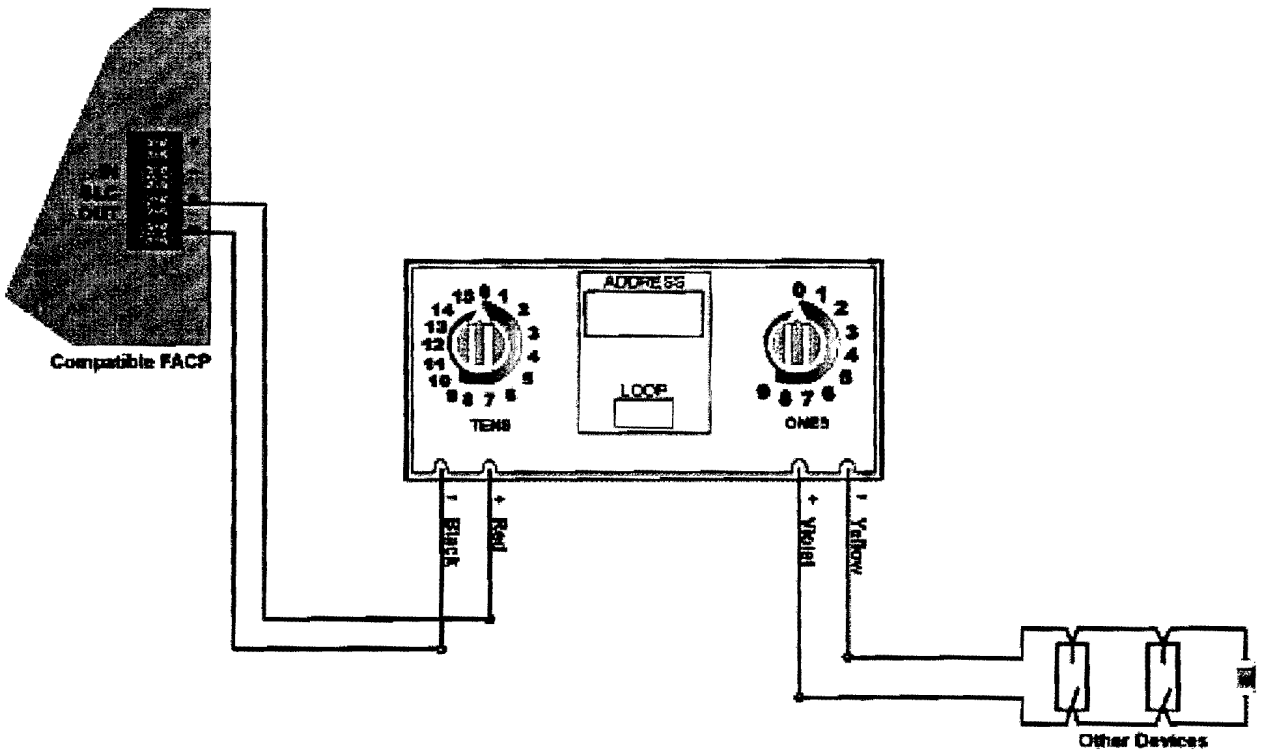
SILENT KNIGHT
by Honeywell

SK-Minimon Intelligent Monitor Module

Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable monitor modules Silent Knight SK-Minimon. The modules shall be UL listed and compatible with Silent Knight's IntelliKnight FACPs. The device shall be capable of Styles A and B supervised wiring to the load device.

The SK-Minimon shall be installed inside a single gang junction box directly behind the monitored unit.



Wiring the SK-Minimon

SILENT KNIGHT by Honeywell

MADE IN AMERICA

FORM# 350133 Rev A

Lower Current Draw!!

GENTEX CORPORATION

Commander4 Series Selectable Ceiling Mount Strobe and Horn Strobe

GCS/GCC 24VDC SERIES

Applications

The GCS/GCC Series is a ceiling mount strobe or horn/strobe combination that offers dependable audible and visual alarms and the lowest current available.

The GCS/GCC offers tamperproof field selectable candela options of 15, 30, 75, 95, 115 and 150 candela.

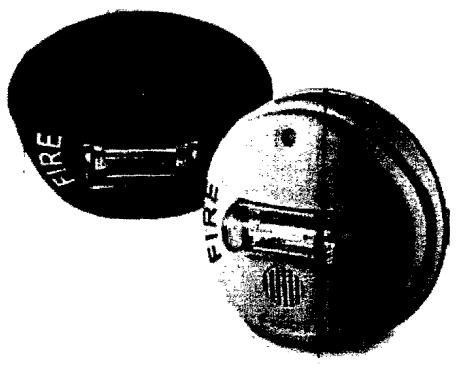
The GCC horn offers a continuous or synchable temporal three in 2400Hz or mechanical tone. These tones are easy for the professional to change in the field by using switches. The models are shipped from the factory in the temporal three alarm mode.

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

The Commander4 Series comes standard with the 4" mounting plate which incorporates the popular Super-Slide® feature that allows the installer to easily test for supervision.

The Commander4 also features the patented Checkmate® - Instant Voltage Verification feature which allows the installer to check the voltage without removing the signal.

The GC Series appliances are UL 464 and UL 1971 listed for use with fire protective systems and are warranted for three years from the date of purchase.



Standard Features

- Nominal Voltage 24VDC
- Tamperproof Field Selectable Candela options of 15, 30, 75, 95,115 & 150
- Super-Slide® Bracket - Ease of Supervision Testing
- Checkmate® - Instant Voltage Verification (Patented)
- **Unit Dimensions:** 6" x 2.6"
- Synchronize GC Series by using Gentex Series Control Module
- Prewire Entire System, then Install Your Signals
- Input Terminals 12 to 18 AWG
- Switch Selection for High or Low dBA
- Switch Selection for 2400Hz or Mechanical Tone
- Switch Selection for Continuous or Temporal 3
- Tamperproof Re-entrant Grill
- Surface Mount with the GCSB (Gentex Ceiling Surface Mount Box).
- Silence Horn While Strobes Remain Flashing
- Wide Voltage Range 16-33 VDC or FWR
- Faceplate Available in Red or Off-White

Product Listings

SIGNALING UL LISTED · FM APPROVED

- UL 464 and UL 1971 Listed
- FM Approved
- CSFM: 7135-0569:122 (GCC)
  7125-0569:123 (GCS)
- BS+A/MEA #285-91-E
- BFP (City of Chicago)

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 · ASSEMBLED IN THE USA

GCS Series 24 Volt Ceiling Mount Selectable Strobe

Model Number	Part Number	Nominal Voltage	Candela
GCS24CR	904-1213-002	24VDC	15, 30, 75, 95, 115, 150
GCS24CW	904-1215-002	24VDC	15, 30, 75, 95, 115, 150
GCS24PCR	904-1214-002	24VDC	15, 30, 75, 95, 115, 150
GCS24PCW	904-1216-002	24VDC	15, 30, 75, 95, 115, 150

GCC Series 24 Volt Ceiling Mount Selectable Horn/Strobe

Model Number	Part Number	Nominal Voltage	Candela	Reverberant dBA @ 10ft. Per UL 464	In Anechoic Room dBA @10ft.
GCC24CR	904-1209-002	24VDC	15, 30, 75, 95, 115, 150	81-86	90
GCC24PCR	904-1210-002	24VDC	15, 30, 75, 95, 115, 150	81-86	90
GCC24CW	904-1211-002	24VDC	15, 30, 75, 95, 115, 150	81-86	90
GCC24PCW	904-1212-002	24VDC	15, 30, 75, 95, 115, 150	81-86	90

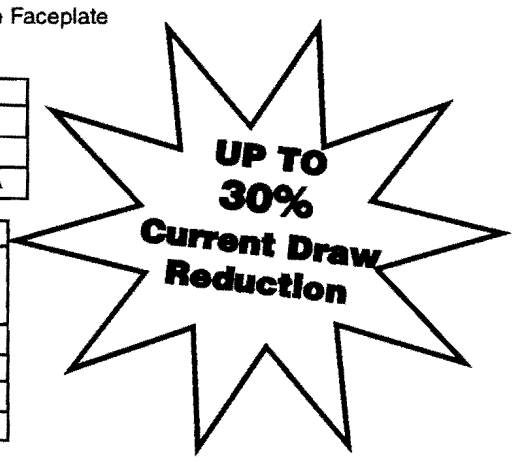
Notes:
- The GC Series is not listed for outdoor use.
- Operating temperature: 32°to 120°F (0° to 49° C)
- For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power, see installation manual.
- **Gentex does not recommend using a coded or pulsing signaling circuit with any of our strobe products (see technical bulletin number 014 for more information).**

Model designations:

"P" = Plain (no lettering) "C" = Ceiling Mount, "R" = Red Faceplate "W" = Off-White Faceplate

GC Series Product Strobe Current Ratings						
Candela	15cd	30cd	75cd	95cd	115cd	150cd
24VDC	72mA	101mA	167mA	200mA	214mA	286mA
UL Max[1]	120mA	120mA	200mA	220mA	290mA	321mA

GC Series Product Horn Current Ratings			
Horn Mode	Minimum dBA @ 10ft. per UL 464 (HIGH)	Minimum dBA @ 10ft. per UL 464 (LOW)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	83	75	23
Temp 3 Mechanical	81	73*	22
Continuous 2400Hz	86	78	23
Continuous Mechanical	84	76	22



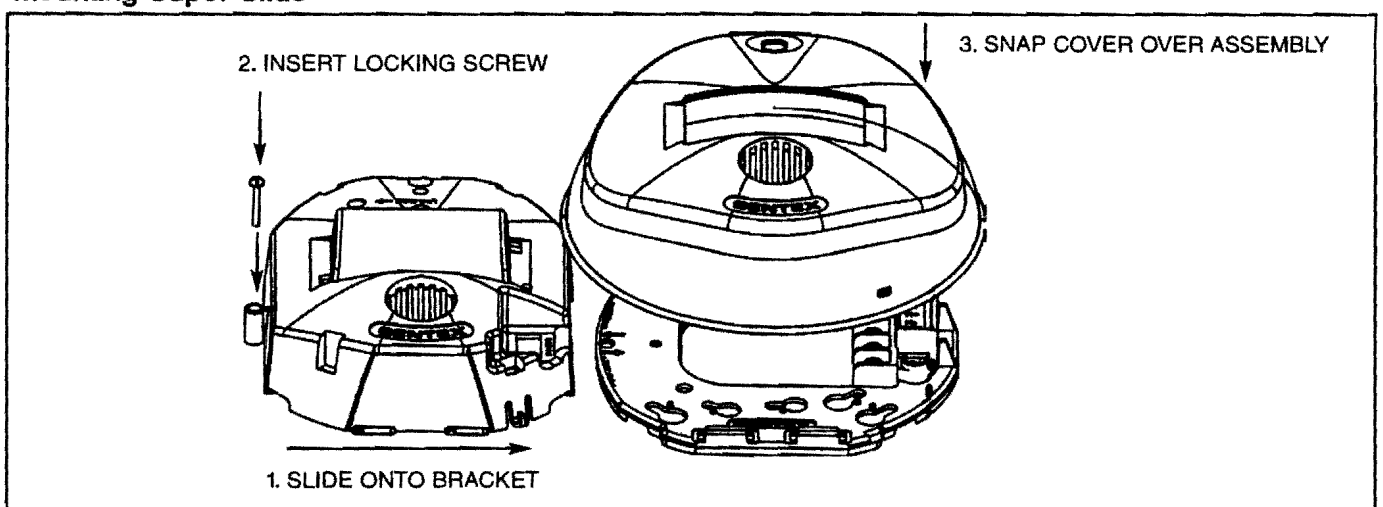
*Operating the horn in this mode at this voltage will result in not meeting the minimum UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application.

Notes: 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.

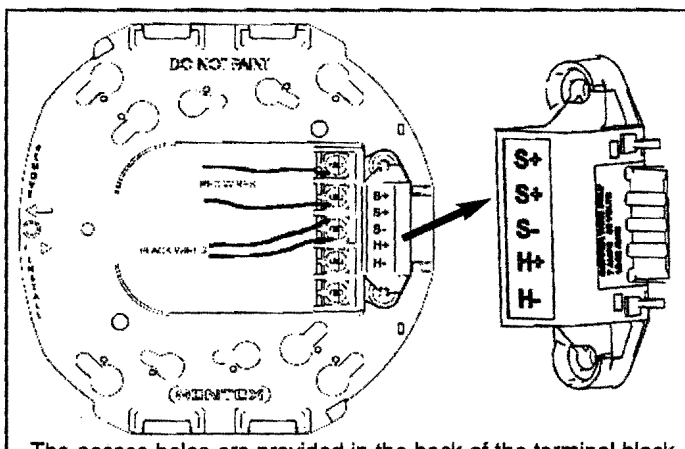
To obtain the horn/strobe current draw, add the strobe current draw and the horn current draw.

[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). For strobes the UL max current is usually at the minimum listed voltage (16VDC for 24VDC units). For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Mounting Super-Slide®

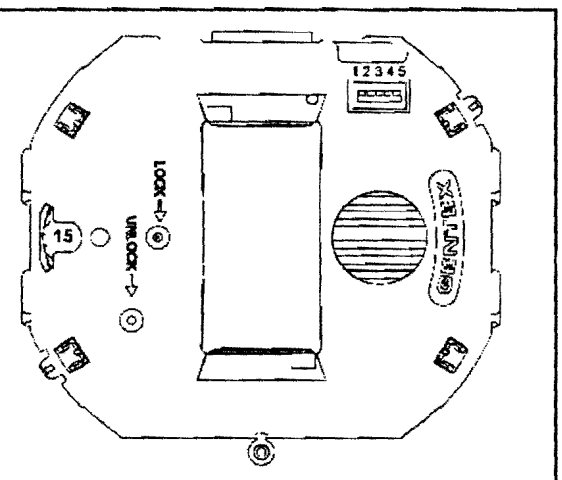


Checkmate® Instant Voltage Verification (Patented)



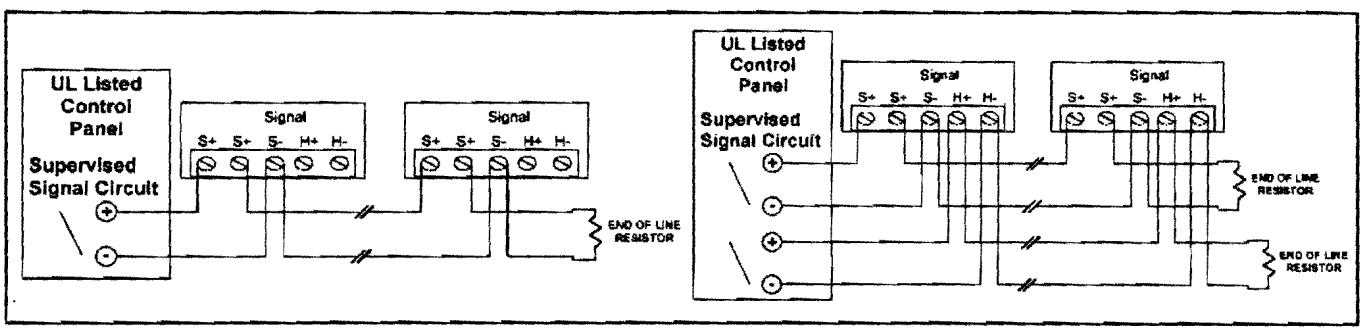
The access holes are provided in the back of the terminal block to allow the voltage to be measured directly without removing the device. Typically this would be done at the end of the line to confirm design criteria. Most measurements will be taken using the S+ and S- locations although access is provided to other locations. **NOTE: Care should be taken to not short the test probes.**

Switch Locations Locations

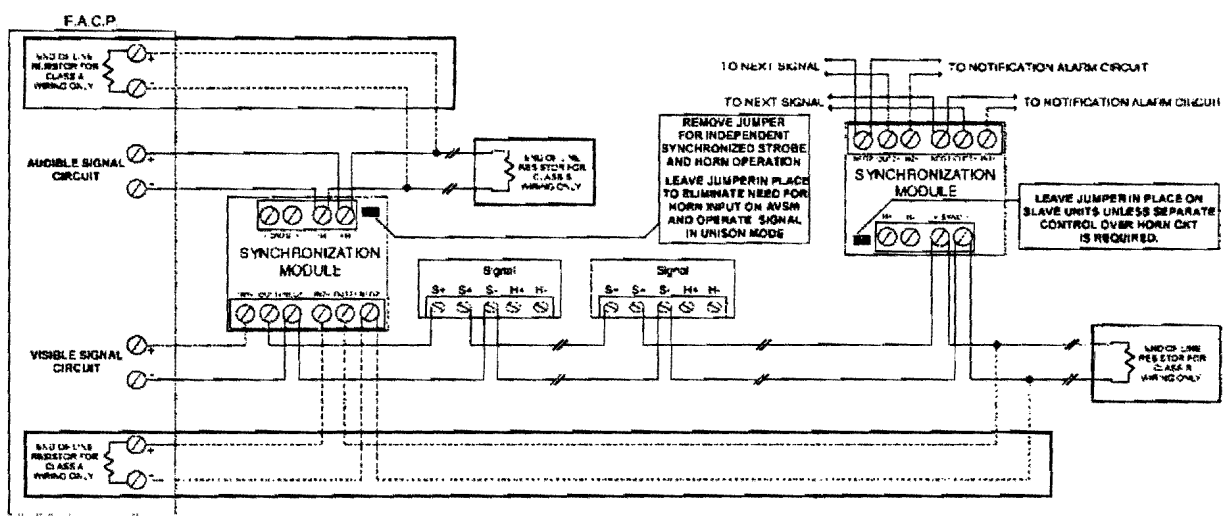


Switch positions 1 and 2 in the down position to select isolated horn and strobe power inputs. Switch 3 selects between temporal or non-temporal tone. Up is temporal. Switch 4 selects between mechanical or high frequency tone. Up is mechanical. Switch 5 selects between high or low dBA. Up is high dBA.

Conventional GC Series Wiring Diagrams



Wiring Diagram GCS/GCC Series with Gentex Synchronization Module



Note: See Technical Bulletin 015 for proper synchronization module for application.

Architect & Engineering Specifications

The visible and audible/visible signal shall be Gentex model GCS or GCC or approved equal and shall be listed by Underwriters Laboratories Inc. per UL 1971 for the GCS and also UL 464 for the GCC. 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 units only) shall produce a peak sound output of 90dBA or greater 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.

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 appliance shall have an operating current of 72mA or less at 24VDC for the 15 candela 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 with barriers for input/output wiring and be able to mount to a single gang or double gang box or double workbox with 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.

The appliance shall be capable of test supervision without disconnecting wires. Also the appliance shall be capable of mounting to a surface box. The unit shall also be able to verify voltage at the unit without removing unit.

24 units per carton
29 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

551-0051-04

Printed on Recycled Paper

Protection One Branch 11660

10 Manual Drive, Portland, ME 04103 PH# 1-800-310-5011

System Outputs: Control Unit Annunciation | Notification | Safety Control | Supplementary

System Inputs

		Actuate common alarm signal indicator	Actuate audible alarm system	Actuate common supervisory signal indicator	Actuate audible supervisory signal	Actuate common trouble signal indicator	Actuate audible common alarm signal indicator					Actuate 1st flooor evacuation signals	Actuate 2nd flooor evacuation signals	Actuate 3rd floor evacuaton signals	Transmit fire alarm signal to supervising station	Transmit supervisory signal to supervising station	Transmit trouble signal to supervising station	Actuate Elevator recall	Safety Control	Supplementary
Pull Stations 1st flr		X	X									X	X	X	X					
Pull Stations 2nd flr		X	X									X	X	X	X					
Pull Stations 3rd flr		X	X									X	X	X	X					
FACP Smoke Detector Lobby		X	X									X	X	X	X					
FACP AC Loss						X	X										X			
FACP Low Battery						X	X										X			
FACP Ground Fault						X	X										X			
Phone Line #1 Fail						X	X										X			
Phone Line #2 Fail						X	X										X			
Smoke Detectors 1st flr		X	X									X	X	X	X			X		
Smoke Detectors 2nd flr		X	X									X	X	X	X			X		
Smoke Detectors 3rd flr		X	X									X	X	X	X			X		
1685 Congress LLC 1685 congress St. Portland, Me																				

Protection One
10 Manuel Dr
Portland, ME, 04103
207-347-5318 Phone
207-772-7355 Fax

Project Name: 1685 Congress St
Project Number:
Designer: Kevin Inman
Date: 1/13/11

Circuit Summary

Circuit Number	Circuit Name	Supply Voltage (VDC)	Alarm Current	Wire Type	Ohms / 1000 ft.	Length (Feet)	Total Resistance (Ohms)	Voltage Last Device	Voltage Drop %
0	First floor left	20.4	1.145	#14AWG Solid	3.19	150	0.96	19.30	0.00%
1	First floor Right	20.4	0.950	#14AWG Solid	3.19	150	0.96	19.49	0.00%
2	Second floor-unused	20.4	0.000	#14AWG Solid	3.19	0	0.00	20.40	0.00%
3	Third floor	20.4	1.457	#14AWG Solid	3.19	250	1.60	18.08	0.00%

Notes:

1.) Wire resistance is taken from Chapter 9 Table 8 of the National Electric Code (NFPA70). Resistance shown is calculated at 75 degrees Centigrade (167 degrees Farenheit)

2.) Formula used for calculation: Total Resistance = (Length x 2) / 1000 x Ohms Per 1000 Ft.
Voltage Last Device = Supply Voltage - (Alarm Current x Total Resistance)

3.) Calculations are based on average current draw of devices using a regulated power supply only.

Protection One
10 Manuel Dr
Portland, ME, 04103
207-347-5318 Phone
207-772-7355 Fax

Project Name: 1685 Congress St
Project Number:
Designer: Kevin Inman
Date: 1/13/11

Circuit Devices

Circuit Number	Circuit Name	Qty.	Device	Current Each (Amps)	Current Total (Amps)
0	**First floor left**	3	Gentex GCC24 75Cd Horn/Strobe	0.295	0.885
		2	Gentex GCS24 30Cd Strobe	0.130	0.260
				Total Circuit Current:	**1.145**
1	**First floor Right**	2	Gentex GCC24 75Cd Horn/Strobe	0.295	0.590
		3	Gentex GCS24 15Cd Strobe	0.120	0.360
				Total Circuit Current:	**0.950**
3	**Third floor**	3	Gentex GCC24 75Cd Horn/Strobe	0.295	0.885
		4	Gentex GCCR24 15Cd Horn/Strobe	0.143	0.572
				Total Circuit Current:	**1.457**

SILENT KNIGHT

5808 Calculations

Version 12.30.10

	1685 Congress LLC
	Kevin Inman
	1/13/2011

	24
	5
	1.2
	10

	5808
	1685 Congress St Lobby

Qty	Device Name	Ckt	Current Draw (Amps) Standby	Current Draw (Amps) Maximum	Wire AWG & Type	Ohms Per 1000 Ft	Distance One-Way	Allowed Ohms	Voltage Drop
1	5808 CTRL Panel		0.170	0.325					
5	Photo, Photo-T		0.001	0.001					
	Ion		0.000	0.000					
	Heat, Heat-HT		0.000	0.000					
	Heat ROR		0.000	0.000					
	Beam, Beam-T		0.000	0.000					
	Duct		0.000	0.000					
	Acclimate		0.000	0.000					
	Control		0.000	0.000					
	Control-6		0.000	0.000					
3	Monitor, Minimon		0.003	0.003					
	Monitor-2		0.000	0.000					
	Monitor-10		0.000	0.000					
	Pull-SA, Pull-DA		0.000	0.000					
	Relay		0.000	0.000					
	Relay-6		0.000	0.000					
	Zone		0.000	0.000					
	Zone-6		0.000	0.000					
	Isolator Module		0.000	0.000					
	Isolator Base		0.000	0.000					
	Sounder Base		0.000	0.000					
	Relay Base		0.000	0.000					
	Magnetic Remote Test		0.000	0.000					
	Key Activated Test		0.000	0.000					
	Remote LED		0.000	0.000					
	LCD Remote Annunc		0.000	0.000					
	Serial/Parallel Module		0.000	0.000					
	Power Expander		0.000	0.000					
	Power Expander		0.000	0.000					
	LED Annunciator (4G)		0.000	0.000					
	LED Annunciator (3G)		0.000	0.000					
	LED Driver Module		0.000	0.000					
	Relay Module		0.000	0.000					
	Notification Appl Circuit		0.000	1.070	#12 Solid		150		2.50%
	Notification Appl Circuit		0.000	0.900	#12 Solid		150		2.10%
	Notification Appl Circuit		0.000	0.000	#12 Solid				0.00%
	Notification Appl Circuit		0.000	1.290	#12 Solid		250		5.03%
	Total Standby Current (Amps)		0.174	3.589	Total Alarm Current (Amps)				
	Standby Time (Hours)		24	0.084	Alarm Time (Minutes)				5 Minutes
	Total Standby AH Required		4.174	0.029	Total Alarm AH Required				0.299
	Total Combined AH Required			4.8					
	Multiply by Safety Derating			1.2					
	Minimum Battery Amp Hours Required			5.81					

Command Shortcuts

Configure Circuits

Print Page

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SECURITY

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1685 Congress LLC
1685 Congress St.
Portland, Me

Fire Alarm upgrade:

Walked building with Lt. Ben Wallace 1/4/11.

We are replacing the 3 existing fire alarm panels with a new Silent Knight Addressable panel.

Panel will be located at the front door lobby.

Existing pull stations will be addressed through Addressable modules.

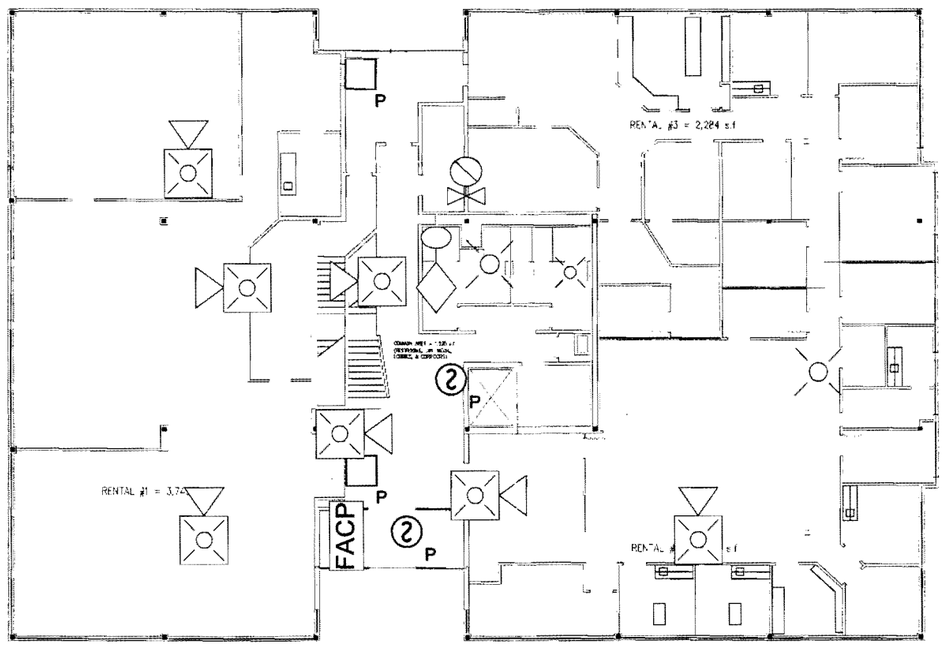
Existing old style A/V devices will be replaced with new Gentex syncable devices.
New A/V devices will be added to public rest rooms to meet code.

Sprinkler monitoring will be moved to the new panel.

Elevator recall will be moved to the new panel.

The vacant spaces will not be brought up to code at this time but at the time they are rented. They will be placed on the new system and brought up to code.

Kevin Inman, CET
Protection One
207-332-1204



Legend

Legend Subtitle

Symbol	Count	Description
(2)	2	Smoke Detector
□	2	Manual Station
◇	1	Flow Detector
⊘	1	Valve w/ Tamper Detector
⊠	1	Horn w/ Light
✳	3	Light

Notes

10 Manuel Dive Portland, Maine 04103
MC60018702

Site

Drawn By:

Checked By:

Job #

Revision

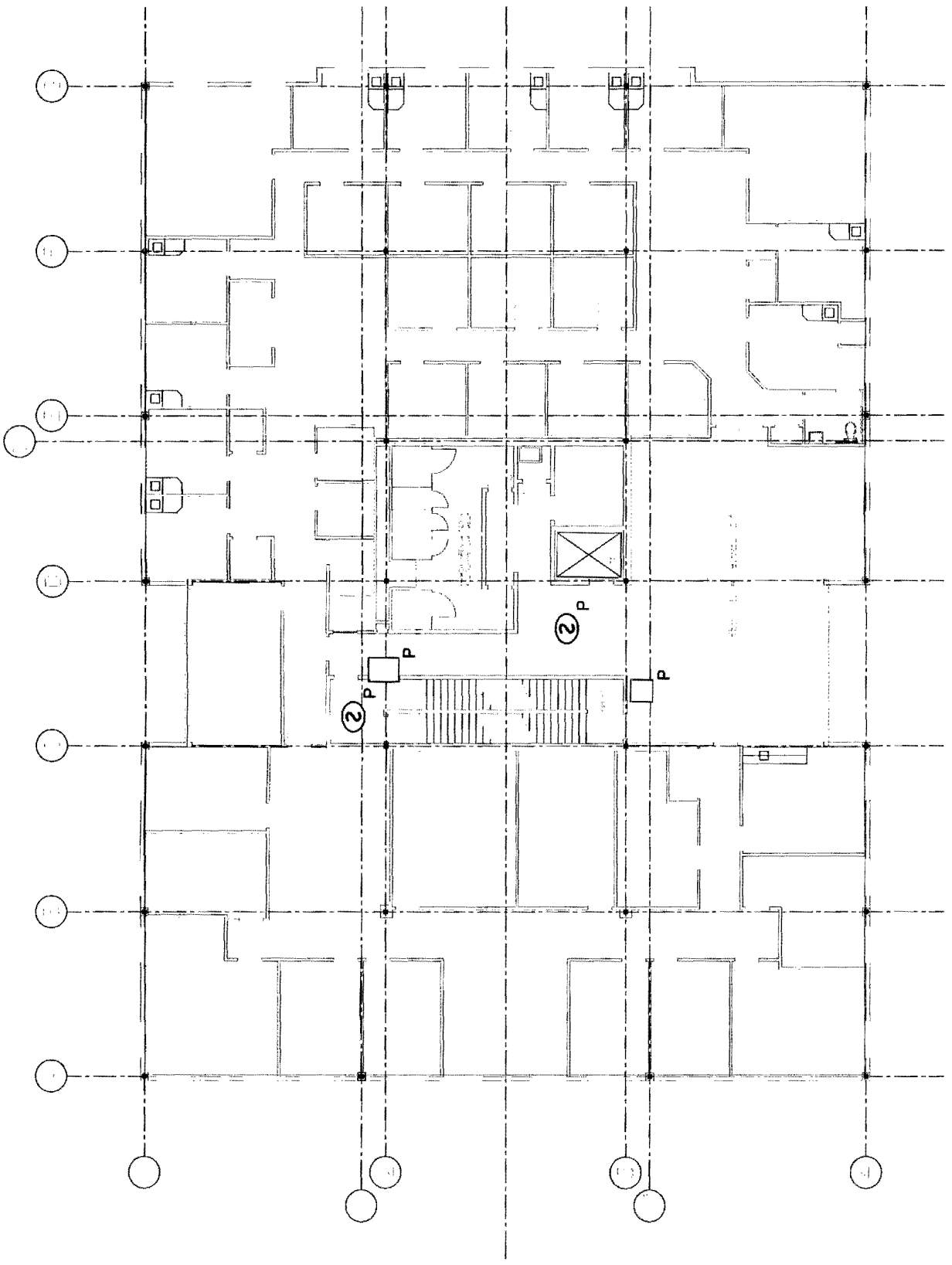
Scale

Sheet #

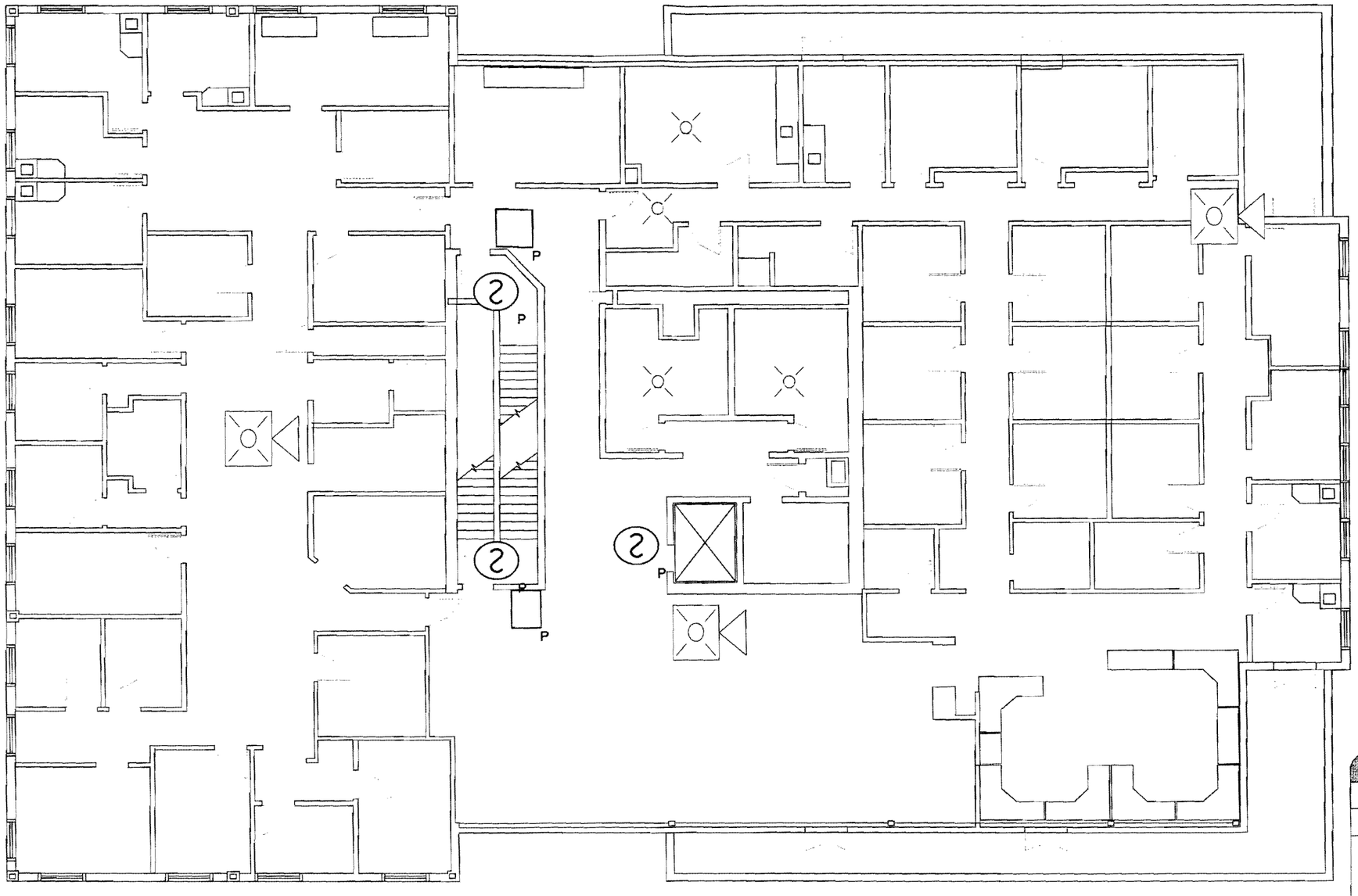
1685 Congress St, LLC

1685 Congress St.

Symbol	Count	Description
□	2	Manual Station
②	2	Smoke Detector
—	1	NICET BAR



Protection One®	Kevin Inman, Certified Engineering Technician Level III, NICET Cert. # 52435		
-	10 Manuel Drive, Portland, Maine 04103 (207) 347-5318	1/10/11	-



1685 Congress LLC		
1685 Congress St.		
Symbol	Count	Description
	2	Manual Station
S	3	Smoke Detector
	1	Horn w/ Light
	1	Light

STROUDWATER CROSSING
3RD FLOOR PLAN

FMC CADD
207-878-8511 Fax 207- 878-8

CITY OF PORTLAND, MAINE
Department of Building Inspections

Original Receipt

1.13 2011

Received from Rotation Inc.

Location of Work 1685 Congress

Cost of Construction $_____ Building Fee: _____

Permit Fee $_____ ~~Site Fee:~~ elec. _____

Certificate of Occupancy Fee: _____

Total: 115

Building (IL) ___ Plumbing (I5) ___ Electrical (I2) ___ Site Plan (U2) ___

Other _____

CBL: 219 A 13

Check #: CC Total Collected $ 115

No work is to be started until permit issued.
Please keep original receipt for your records.

Taken by: [signature]

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy