

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that Surveillance Specialties
of 4 Thomas Dr, STE 5, Westbrook, ME 04092

For installation at 40 QUARRY RD

Job ID: 2011-12-2828-FAFS

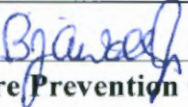
CBL: 150- A-003-001

has permission to renovate the 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 CARD**

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (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.**

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.



PORTLAND MAINE

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

Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-12-2828-FAFS
renovate the fire alarm system

For installation at:
40 QUARRY RD

CBL: 150- A-003-001

Conditions of Approval:

Fire

Permit is to renovate the NAC and add one pull station.

Installation 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.

In field installation shall be installed per code as conditions dictate.

The annunciator will require a locked cover.

Records cabinet, FACP, annunciator cover, and the new pull station shall be keyed alike.

All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP labeled "FIRE ALARM RECORDS".

A Knox Box is required.

The fire alarm system shall be certified by a master fire alarm company and have a new fire alarm inspection sticker.

System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

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.

Fire alarm system requires a master box or approved existing central station alarm number.

Sprinkler supervision shall be provided in accordance with NFPA 101, *Life Safety Code*, and NFPA 72, *National Fire Alarm and Signaling Code*.

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2011-12-2828-FAFS	Date Applied: 11/29/2011	CBL: 150- A-003-001	
Location of Construction: 40 QUARRY RD	Owner Name: JB BROWN	Owner Address: PO BOX 207 PORTLAND, ME 04112	Phone:
Business Name:	Contractor Name: Surveillance Specialties	Contractor Address: 4 Thomas Drive, Westbrook, ME 04092	Phone: 828-0022
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE ALARM	Zone: C-50
Past Use: Self-storage units	Proposed Use: Same: Self-storage units – to install fire alarm	Cost of Work: \$5,000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type:
		Signature: <i>Bjarnald</i> (58)	Signature:
Proposed Project Description: fire alarm		Pedestrian Activities District (P.A.D.)	
Permit Taken By: Gayle		Zoning Approval	

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	<p>Special Zone or Reviews</p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetlands</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p><input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM</p> <p>Date: <i>ok - 12/1/11</i></p>	<p>Zoning Appeal</p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date: <i>[Signature]</i></p>	<p>Historic Preservation</p> <p><input checked="" type="checkbox"/> Not in Dist or Landmark</p> <p><input type="checkbox"/> Does not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: <i>[Signature]</i></p>
	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

9011 12 2828 66

C-50



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: 40 Quarry Rd CBL: 150 A003

Exact location: (within structure) Inside front door to Kerry

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

Building owner: J. B. Brown

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

Designer phone: 207-310-4009 E-mail: kinman@surv.com

Installing contractor: SURV Certificate of Fitness No: M1020

Contractor phone: 207-828-0022 E-mail: jkimball@surv.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: \$ 5000

PERMIT FEE: 70.00
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

RECEIVED

NOV 29 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 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: 11-28-11

Read Self Storage

40 Quarry Rd.

Portland, ME

Fire Alarm add – Scope of Work

We will be installing Ceiling Mounted Horn/Strobes using room spacing of 70' X 70' and aligning them with the pathways between the storage units as best as possible.

This will add 10 Horn/Strobes set at 185cd.

These will be powered by their own NAC extender an Altronix 802ULADA.

There is one new egress door being added we will place an Addressable Pull Station at this door.

All of these devices will be tied into the buildings existing fire alarm panel. This is a Bosch 9412 located in the Kerry space.


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D9412GV2 Control Panel



The D9412GV2 Control Panel provides an integrated solution for intrusion, access control, and fire alarm system applications. The control panel includes a communicator that sends events to selected public switched telephone network (PSTN) or IP network destinations through four programmable route groups. The control panel provides up to 246 individually identified points. Each point:

- Accommodates normally-open (NO) and normally-closed (NC) devices with end-of-line (EOL) resistor supervision
- Is programmable for fire, fire supervisory, or intrusion applications.

With the D9412GV2 you can:

- Monitor alarm points for intruder or fire alarms while operating user keypads and other outputs
- Program all system functions on-site through a D5200 Programmer or remotely through Remote Programming Software (RPS).
- Add up to eight doors of access control using the optional D9210BLC Access Control Interface Module.

Functions

Programmable Outputs

- 2 A alarm power at 12 VDC
- 1.4 A auxiliary power at 12 VDC
- Four alarm-output patterns
- Programmable bell test
- Programmable bell shut-off timer

- ▶ Fully integrated intrusion, fire, and access control allows users to interface with one system instead of three
- ▶ Conettix IP-based communication option provides high-speed, secure alarm transport and control
- ▶ Eight programmable areas with perimeter and interior partitioning
- ▶ 246 points with flexible configuration options to meet multiple installation requirements
- ▶ Your choice of vacuum fluorescent or ATM style user interface keypads
- ▶ New user interface functions provide additional security and flexibility
- ▶ Commercial Wireless allows up to 238 RF points

System Response

- 31 custom point indexes, including fire supervisory
- Selectable point response time
- Cross point capability
- Fire alarm verification
- Fire inspector's local test
- Watch mode
- Scheduled events (skeds) arm, disarm, bypass and unbypass points, control relays, control authority levels, and control door access

User Interface

- Supervision of up to eight keypads (up to 32 unsupervised keypads can be used)
- Custom keypad text
- Full function command menu including custom functions
- Authority by area and 16-character name for each user
- 14 custom authority levels control user's authority to change, add, or delete passcodes or access control credentials; to disarm or bypass points; and to start system tests

Note Use at least one keypad in each system.

Existing

Area Configurations

Area programming offers a wide selection of different system configurations. Each area is assigned an account number to define annunciation, control, and reporting functions. Multiple areas can be linked to a shared area which is automatically controlled (hallway or lobby). Area arming can be conditional on other areas (master or associate).

Two Man Rule

Two Man Rule provides added security by requiring:

- Two people present at opening
- Two unique passcodes on the same keypad to disarm an area

Without the second passcode, the system denies entry.

Early Ambush

Early Ambush requires two passcode entries on the same keypad. Enter the same passcode twice or have two unique passcodes, depending on the configuration. The first entry disarms the area and the second entry stops a timer programmed to send a duress event. If the second entry does not occur within the programmed time, the system generates a duress event. Early Ambush allows users to inspect the premises and use the system to confirm that the area is safe to enter, providing added security.

Easy Exit Control

The D9412GV2 Control Panel changes from one armed state to another armed state without disarming. For example, if you change the state from Master Arm to Perimeter Arm, the control panel complies and reports the change. Easy Exit Control reduces the number of keystrokes, simplifying system operation.

Programmable Passcode-controlled Menu List

The system prompts users to enter a passcode prior to viewing the keypad menu. The keypad display shows the user the menu options allowed according to the user's authority level. Passcode-controlled menus provide users only with the options and information pertinent to them, simplifying system operation.

Passcode Follows Scope

Use Passcode Follows Scope to restrict passcode arming and disarming to the keypad's immediate local area, even if the keypad can report events from other areas. Passcode Follows Scope simplifies the arming and disarming procedure without limiting any other keypad capabilities.

Invisible Walk Test

A menu item allows the user to test invisible 24-hour points within the scope of the keypad without sending a report to the central station.

Door-Activated Custom Function

A custom function activates when user credentials are presented to a D9210B door controller's reader. The custom function behaves as though the user performed a function at the keypad associated with the door controller.

Passcodes

User passcodes contain three to six digits. Assign each user one of 14 customized authority levels in each area. Restrict passcodes to operate only during certain times.

The Two Man Rule and Early Ambush options require two passcodes, providing additional security in financial establishments such as banks.

Communications

The D9412GV2 Control Panel prioritizes and sends reports in BFSK or Modem IIIa² communications formats to four route groups. Each group has a programmable primary and backup destination.

The D9412GV2 works with the Conettix D6600 Communications Receiver/Gateway using a Conettix DX4020 Network Interface Module. When using a DX4020, the D9412GV2 has programmable anti-replay anti-substitution features.

The Modem IIIa² Communications Format, available with Bosch receivers, adds central station reporting capabilities such as:

- Individual point numbers and text
- Opening or closing reports by area number
- Remote programming attempts
- Diagnostic reports
- User name reports

Security and Fire Detection

The D9412GV2 Control Panel provides eight on-board points, and up to 238 additional off-board points (depending on model and expansion interfaces). You can program individual points to monitor all types of burglar alarms, fire alarms, and supervision devices.

Event Log

The event log stores up to 1,000 local and transmitted events. The event log includes time, date, event, area, point, and user number. View the event log from a keypad or use RPS to remotely retrieve event information. RPS operators can retrieve events periodically using one phone call, rather than receiving several calls each day. When the event log reaches a programmed threshold of stored events, it can send an optional report to a receiver.

Access Control

The D9412GV2 provides custom door strike, point shunt and auto disarming response by area. There are 14 panel-wide access levels with both manual and scheduled control.

Store, view, or print access events such as:

- Access granted

- No entry
- Request-to-enter
- Request-to-exit

Scheduled Events (Skeds)

The internal clock and calendar start individually scheduled events (skeds). Skeds perform functions such as arm or disarm, relay control, or point bypassing. The D9412GV2 Control Panel offers:

- 40 scheduled events with up to 25 different functions
- Eight opening windows and eight closing windows
- Eight user windows
- Day-of-week, date-of-month, or holiday only schedules
- Four holiday schedules of 366 days each (leap year)

Fire Test

When a user activates Fire Test Mode, the control panel suppresses all reports to the central station. The keypad and annunciator show all testing data. An automatic sensor reset feature saves time; you do not need to reset the sensors manually. At the end of test, the keypad shows the number of untested points.

Programming, Diagnostics and Controls

Users can program on-site with a D5200 Programmer, or program remotely through RPS. A programmable system passcode prevents unauthorized remote programming.

D9412GV2 Control Panels accommodate up to four separate telephone numbers for primary, alternate, and backup receivers for automatic test reports.

When resetting alarms or arming or disarming a system, the user is identified by name and number.

Certifications and Approvals

Region	Certification	
USA	UL	AMCX: Central Station Alarm Units (UL1610, UL1635), AMCX7: Central Station Alarm Units Certified for Canada (CAN/ULC-S304-M88, UL 1635), AMTB: Control Panels, SIA False Alarm Reduction (ANSI/SIA CP-01-2000), AOTX: Local Alarm Units (UL464, UL609), AOTX7: Local Alarm Units Certified for Canada (CAN/ULC-S303, CAN/ULC-S525), APAW: Police Station Alarm Units (UL365, UL464), APAW7: Police Station Alarm Units Certified for Canada (CAN/ULC-S303, CAN/ULC-S304, CAN/ULC-S525), APOU: Proprietary Alarm Units (UL1076), APOU7: Proprietary Alarm Units Certified for Canada (ULC/ORD-C1076), NBSX: Household Burglar Alarm System Units (UL1023), NBSX7: Household Burglar Alarm System Units Certified for Canada (ULC/ORD-C1023), UOJZ: Control Units, System (UL864, 9th edition), UTOU: Control Units and Accessories - Household System Type (UL985), UTOU7: Control Units and Accessories - Household System Type Certified for Canada (ULC-S545)
		FM
		CSFM 7165-1615: 119 and 7170-1615: 145
		FCC AJ9-MUL-46532-AL-E
		NYC-MEA 12-92-E, Vol. 15
		Canada IC 1294A-GV2

Installation/Configuration Notes

Compatible Products

Keypads	D1260 Series Keypads (D1260, D1260W, D1260R, D1260BLK, D1260B)
	D720 Series Keypads (D720, D720W, D720R, D720B)
	D1255 Series Keypads (D1255, D1255W, D1255R, D1255B, D1255RB)
	D1256 and D1256RB Fire Keypads
	D1257 and D1257RB Remote Fire Alarm Annunciators
	D279A Independent Zone Control



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D1256 Fire Keypad



- ▶ Provides system control with easy to use function keys
- ▶ Built-in multi-tone sounder
- ▶ Easy to read vacuum fluorescent display shows complete system status in English format
- ▶ Programmable custom text for each point
- ▶ Local system test display
- ▶ Molded red ABS plastic construction

The D1256 Fire Keypad is a full-function system controller and annunciator. Four one-touch function keys provide user-friendly control over the system. The function keys allow the user to silence the audible alarm output, silence the trouble sounder, reset the annunciator display, and reset the system detectors. Four additional navigational keys allow access to other programmed system functions. The D1256 can be mounted in secure areas.

Certifications and Approvals

Listings and Approvals:

- UL AMCX: Central Station Alarm Units (UL1610)
- UL APAW: Police Station Alarm Units (UL365)
- UL APOU: Proprietary Alarm Units (UL1076)
- UL NBSX: Household Burglary Alarm System Units (UL1023)
- UL UOXX: Control Unit Accessories, System (UL864)
- UL UTOU: Control Units and Accessories – Household System Type (UL985)
- CSFM 7167-1615: 100, 7165-1615: 113, 7165-1615: 119, 7170-1615: 144, 7170-1615: 145
- Factory Mutual Research
- NYC/MEA (12-92-E, Vol. 12)

Existing

Installation/Configuration Notes

Compatible Control Panels

The D1256 Fire Keypad is compatible with the D7212, D7212B1, D7212G, D7412, D7412G, D9112, D9112B1, D9124 (using the D9112LTB, the D9112LTB-EX, or the D9412GLTB), D9412, and D9412G Control Panels.

Mounting

The D1256 is a low profile, surface-mounted unit molded in durable red plastic with three mounting holes in the base that allow secure, correct positioning during installation. Protect the surface-mounted D1256 by mounting it to a D56 or D56R Conduit Back Box. The D1256 can be flush mounted using a D54B or D54C Flush-mount Kit. For desktop applications, the D1256 can be mounted to a D55 Desk Stand.

Note Do not install the D1256 in direct sunlight. This damages the module components and makes the display less visible. Do not mount the D1256 in wet or moist locations.

Wiring

The D1256 connects to the FACP through a standard four-wire cable. The field wiring connects to a four-wire harness supplied with the unit. This harness plugs into

a four-pin connector on the circuit board through the back of the D1256.

Note Use shielded cable where excessive electromagnetic interference is a problem.

Technical Specifications

Environmental Considerations

Relative Humidity: 5% to 85% non-condensing at +86°F (+30°C)
 Temperature (operating): +32°F to +122°F (0°C to +50°C)

Mechanical Properties

Color: Red
 Dimensions (H x W x D): 8.3 in. x 4.5 in. x 0.8 in.
 (21 cm x 11.4 cm x 2 cm)
 Material: Molded ABS plastic

Power Requirements

Current: 104 mA minimum, 206 mA maximum
 Voltage: 12 VDC nominal supplied by the control panel

Ordering Information

D1256 Fire Keypad	D1256
Hardware Accessories	
D54B Brass Flush Mount Kit Back box and polished brass faceplate.	D54B
D54C Stainless Steel Flush Mount Kit Back box and stainless steel faceplate.	D54C
D55 Keypad Desk Stand Portable desk stand in smoke colored Plexiglas™.	D55
D56 Surface Mount Conduit Box White surface mount box.	D56
D56R Red Surface Mount Conduit Box Red surface mount box.	D56R

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 www.boschsecurity.com

Represented by



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FMM-462 Series POPIT Addressable Manual Stations



- ▶ Single-gang mounting
- ▶ Latching alarm lever and key-locked reset
- ▶ Rugged die-cast housing with 14 gauge (1.9 mm) plated steel back and corrosion-resistant construction
- ▶ Optional scored acrylic breakrod

The FMM-462 Series Addressable Manual Stations allow people evacuating a building to initiate an alarm and alert others still inside. This UL-listed initiating device is compatible with the Bosch G Series Control Panels and the D9124 Fire Alarm Control Panel (FACP).

The POPIT module is addressed using on-board slide switches. It is then connected to a D9124 data expansion loop. The POPIT is polled by the control panel and sends reports on any opens, shorts, or ground faults on the manual station's wiring. The addressable feature allows the agencies responding to alarm or trouble conditions to go to the point that initiated the alarm or trouble report.

These low-profile manual stations are die cast with rounded edges to fit most design applications. All metallic components are painted or plated to inhibit corrosion. The FMM-462 Series Manual Stations conform with the Americans with Disabilities Act (ADA) standards.

Functions

Addressable Operation

The POPIT connects to a two-wire data expansion circuit from the control panel. Device address is set through slide switches on the POPIT Module, allowing

programmable device identification by the control panel.

Certifications and Approvals

Listings and Approvals:	UL UNIU: Boxes, Non-Coded (UL38)
Approvals:	CSFM: 7150-1615: 122
Complies with:	Americans with Disabilities Act (ADA 4.28.3) National Fire Protection Association (NFPA 72)

Installation/Configuration Notes

Compatibility Information

The FMM-462 Series Addressable Manual Stations are compatible with the following products:

Category	Product ID	Product Description
Control	D7212G	Control panel
Panels:	D7412G	Control panel
	D9412G	Control panel
	D9124	Addressable FACP
Modules	D9127U	POPIT module

Mounting Considerations

The FMM-462 manual stations are for indoor use only.

1 - new

The FMM-462 or FMM-462-D and the wiring from the control panel data expansion loop fit into a single-gang back box for flush mounting. Use the larger FMM-100BB-R Back Box for surface mounting and to provide additional room for system wiring and the module.

Parts Included

Quant.	Component
1	Manual station
1	D9127U POPIT module
1	FMM-100GR scored acrylic breakrod
1	D102 Key (1358)
1	Literature pack

Technical Specifications

Environmental Considerations

Temperature (operating): +14°F to +120°F (-10°C to +49°C)

Mechanical Properties

Activation Force:	5 lb (2.3 kg)
Alarm Response Time:	1 sec (approximately)
Dimensions (HxWxD):	4.75 in. x 3.2 in. x 0.875 in. (12.1 cm x 8.1 cm x 2.2 cm)
Material:	Painted die-cast metal, plated steel back and painted steel front

Power Requirements

Current (alarm):	0.8 mA
Current (normal):	0.5 mA
Voltage (operating):	7 VDC to 15 VDC supplied by the control panel

Ordering Information

FMM-462 Single-Action Manual Station	FMM-462
FMM-462-D Double Action Manual Station	FMM-462-D

Hardware Accessories

D102 Replacement Key	D102
FMM-100BB-R Surface-mount Back Box (red)	FMM-100BB-R
FMM-100GR Scored Acrylic Breakrods	FMM-100GR

Americas:

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Fax: +65 6319 3499
ap.securitysystems@bosch.com
www.boschsecurity.com

Represented by



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

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



Features

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

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

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

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

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

Agency Listings



5411 - chimes, horn (strobes, horns)
55512 - strobes



3023572



MEA452-05-E



7125-1653-186 (indoor strobes)
7125-1653-188 (horn strobes, chime strobes)
7135-1653-184 (horns, chimes)

10-NEW

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 1¾-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 9 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, and 185.

Strobe

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

Horn Strobe Combination

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

Synchronization Module

The module shall be a System Sensor Sync-Circuit model MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4½/16 x 4½/16 x 2½/8-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

Physical/Electrical Specifications

Standard Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12 DC/FWR or regulated 24 DC/FWR
Operating Voltage Range ²	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
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)
Wall-Mount Trim Ring Dimensions (sold as a 5 pack) (TR-HS, TRW-HS)	5.7" L x 4.8" W x 0.35" D (145 mm L x 122 mm W x 9 mm D)

Notes:

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12 V nominal only for 15 and 15/75 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

	Candela	8-17.5 Volts		16-33 Volts	
		DC	FWR	DC	FWR
Standard	15	123	128	66	71
Candela Range	15/75	142	148	77	81
	30	NA	NA	94	96
	75	NA	NA	158	153
	95	NA	NA	181	176
	110	NA	NA	202	195
	115	NA	NA	210	205
High	135	NA	NA	228	207
Candela Range	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

UL Max. Horn Current Draw (mA RMS)

Sound Pattern	dB	8-17.5 Volts		16-33 Volts	
		DC	FWR	DC	FWR
Temporal	High	57	55	69	75
Temporal	Medium	44	49	58	69
Temporal	Low	38	44	44	48
Non-temporal	High	57	56	69	75
Non-temporal	Medium	42	50	60	69
Non-temporal	Low	41	44	50	50
Coded	High	57	55	69	75
Coded	Medium	44	51	56	69
Coded	Low	40	46	52	50

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15-115 cd)

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

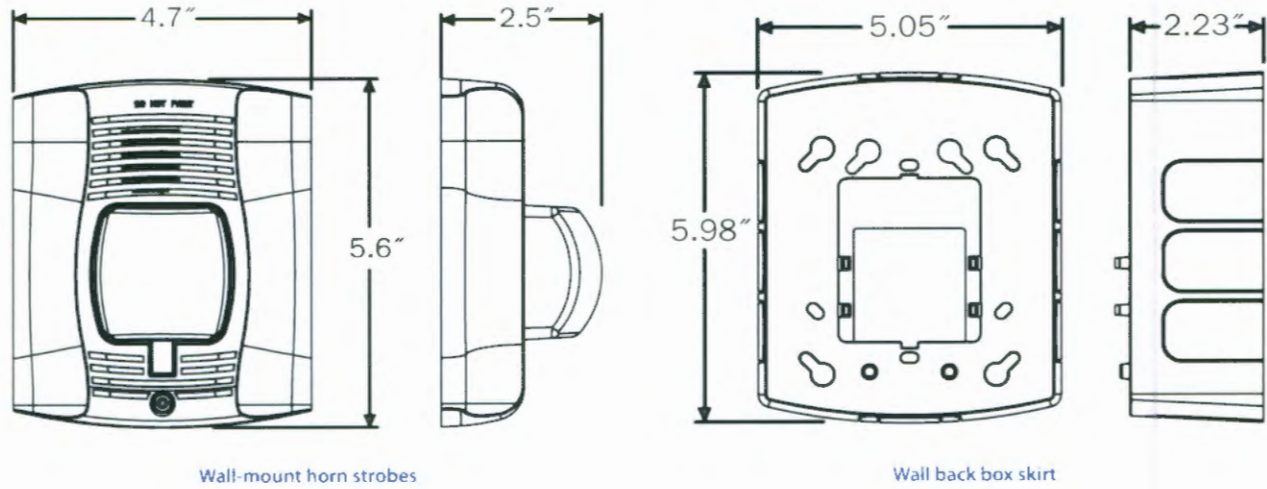
Horn Tones and Sound Output Data

Horn and Horn Strobe Output (dBA)

Switch Position	Sound Pattern	dB	8-17.5 Volts		16-33 Volts		24-Volt Nominal			
							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 ¹	Coded	High	82	82	88	88	93	92	101	101
8 ¹	Coded	Medium	78	78	85	85	90	90	97	98
9 ¹	Coded	Low	75	75	81	81	88	85	96	92

¹Settings 7, 8, and 9 are not available on 2-wire horn strobes.

SpectrAlert Advance Dimensions



Wall-mount horn strobes

Wall back box skirt

SpectrAlert Advance Ordering Information

Model	Description
Wall Horn Strobes	
P2R*	2-Wire Horn Strobe, Standard cd [†] , Red
P2RH*	2-Wire Horn Strobe, High cd, Red
P2W*	2-Wire Horn Strobe, Standard cd, White
P2WH*	2-Wire Horn Strobe, High cd, White
P4R*	4-Wire Horn Strobe, Standard cd, Red
P4RH	4-Wire Horn Strobe, High cd, Red
P4W	4-Wire Horn Strobe, Standard cd, White
Wall Strobes	
SR*	Strobe, Standard cd, Red
SRH*	Strobe, High cd, Red
SW*	Strobe, Standard cd, White
SWH*	Strobe, High cd, White

Notes:

* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2R-P.

† Add "-SP" to model number for "FUEGO" marking on cover, e.g., P2R-SP.

‡ "Standard cd" refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd" refers to strobes that include 135, 150, 177, and 185 candela settings.

Model	Description
Horns	
HR	Horn, Red
HW	Horn, White
Accessories	
BB5-2	Back Box Skirt, Wall, Red
BB5W-2	Back Box Skirt, Wall, White
TR-HS	Trim Ring, Wall, Red
TRW-HS	Trim Ring, Wall, White



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 the most current product information, including the latest revisions of this data sheet.
 4VDS00600-6/11 • P13F7



AL802ULADA NAC Power Extenders

Rev. AL802ULADA_A25K

Overview



The AL802ULADA are extremely cost effective voltage regulated remote NAC Power Extenders. They may be connected to any 24 volt Fire Alarm Control Panel (FACP). Primary applications include Notification Appliance Circuit (NAC) expansion (supports ADA requirements) and will provide auxiliary power to support system accessories.

Specifications

- 24VDC rated @ 8 amp max.
- Two (2) Class A or four (4) Class B outputs.
- Two (2) Class A or two (2) Class B FACP inputs.
- Two (2) NC dry contact trigger inputs.
- Two (2) Class A or four (4) Class B indicating circuits.
- Two (2) Class B outputs may be paralleled for more power on an indicating circuit.
- One (1) Aux. Power Output @ 1 amp supply current (w/battery back up).
- Signal Circuit Trouble Memory - facilitates quickly locating intermittent system trouble and eliminates costly and unnecessary service calls. LED's indicate a prior fault (short, open, ground) has occurred on one or more signaling circuit outputs.
- 2-wire Horn/Strobe Sync mode allows audible notification appliances (Horns) to be silenced while visual notification appliances (Strobes) continue to operate.
- Horn/Strobe sync protocols include: CooperWheelock®, Gentex®, System Sensor®, Faraday, Amseco.
- Temporal Code 3 Mode.
- Steady Mode.
- Input to Output Follower Mode (maintains synchronization of notification appliance circuits).
- March Time.
- Compatible with 12VDC or 24VDC fire panels.
- Common trouble inputs and outputs.
- Ground fault detection.
- Input 115VAC.
- AC fail supervision (form "C" contacts).
- Low battery supervision (form "C" contacts).
- Battery presence supervision (form "C" contacts).
- Power supply, logic board, red enclosure, cam lock, transformer & battery leads.
- Enclosure:
 - Combination knockouts are 1/2" and 3/4"
 - Accommodates up to two (2) 12VDC/12AH batteries.

AL802ULADA weights:
Product weight: 10.7 lbs.
Shipping weight: 13.3 lbs.

Agency Approvals



UL Listed Control Units and Accessories for Fire Alarm Systems (UL 864) Ninth Edition



California State Fire Marshal Approved.



MEAs Approved NYC Department of Buildings Approved.

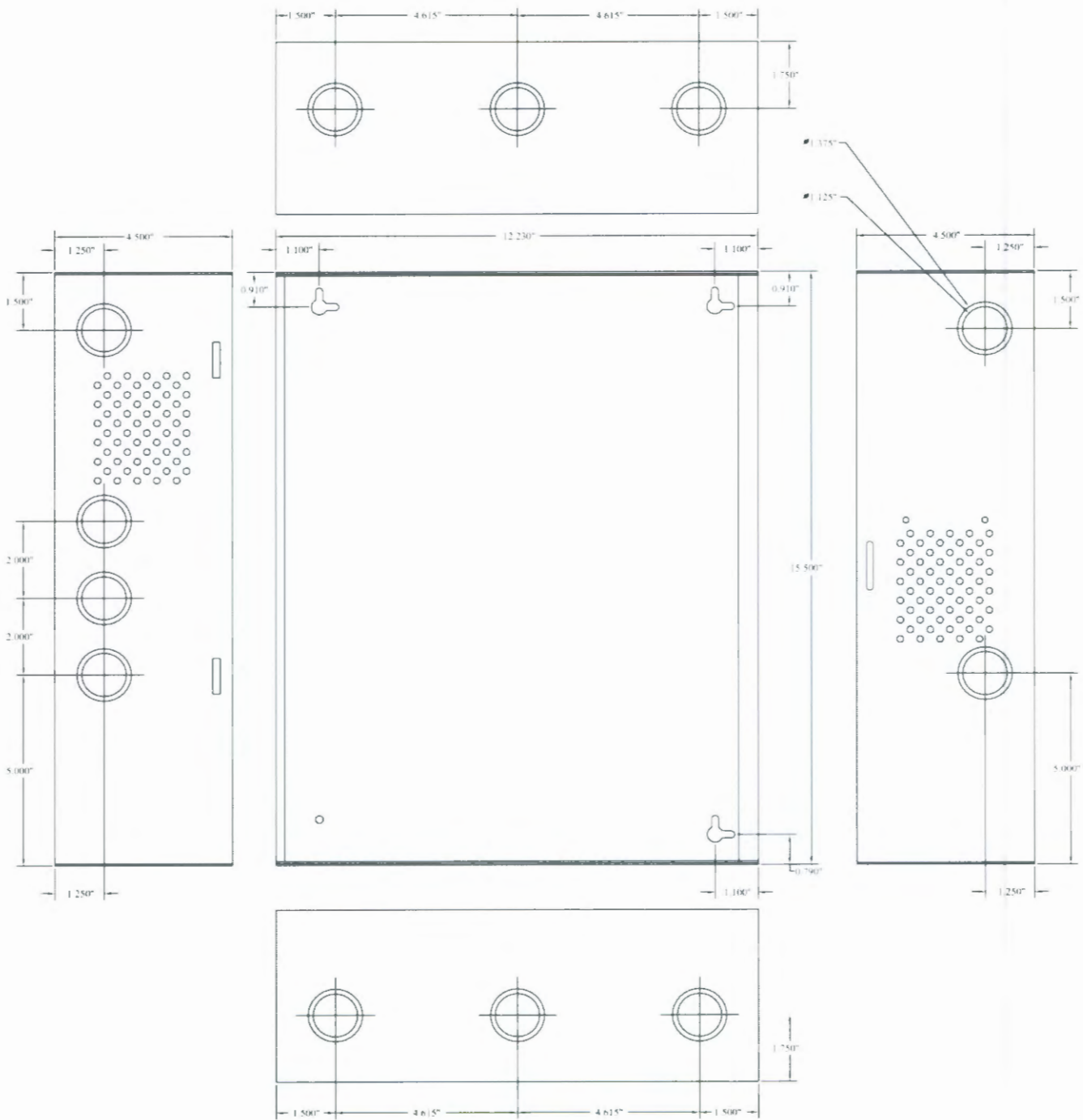


Factory Mutual Approved.

1-New

Enclosure Dimensions

15.5"H x 12.23"W x 4.5"D





Job Name: Read St. Self Storage

40 Quarry Rd
 Portland
 Portland, ME 04101
 AHJ: Portland Fire Department

Prepared By:

Kevin Inman M1020
 SURV
 4 Thomas Dr
 Westbrook, ME 04092
 2073104009

Circuit Information

Panel Name: 9412
 Circuit Name: NAC 1
 Starting Voltage: Starting Voltage = 20.4

(2) amp circuit
 Class B @ 14 AWG
 DC 24 - volt Supply

Type and Model	Candela	Current	Tone and Volume	Dist from last device (ft)	Dist from source (ft)	14
Horn/Strobe PC2RH	185	0.297	Temporal, High	69	69	19.877
Horn/Strobe PC2RH	185	0.297	Temporal, High	69	138	19.485
Horn/Strobe PC2RH	185	0.297	Temporal, High	69	207	19.223
Horn/Strobe PC2RH	185	0.297	Temporal, High	69	276	19.093
Total current/amps 1.188	Total Dist:276		voltage drop			1.307



Circuit Information

Panel Name: 9412 (2) amp circuit
 Circuit Name: NAC 2 Class B @ 14 AWG
 Starting Voltage: Starting Voltage = 20.4 DC 24 - volt Supply

Type and Model	Candela	Current	Tone and Volume	Dist from last device (ft)	Dist from source (ft)	14
Horn/Strobe PC2RH	185	0.297	Temporal, High	88	88	20.067
Horn/Strobe PC2RH	185	0.297	Temporal, High	88	176	19.900
Total current/amps 0.594		Total Dist:176		voltage drop		0.500



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Circuit Information

Panel Name: 9412 (2) amp circuit
 Circuit Name: NAC 3 Class B @ 14 AWG
 Starting Voltage: Starting Voltage = 20.4 DC 24 - volt Supply

Type and Model	Candela	Current	Tone and Volume	Dist from last device (ft)	Dist from source (ft)	14
Horn/Strobe PC2RH	185	0.297	Temporal, High	125	125	19.926
Horn/Strobe PC2RH	185	0.297	Temporal, High	125	250	19.689
Total current/amps 0.594		Total Dist: 250		voltage drop		0.71



SILENT KNIGHT

5820XL Calculations
Version 12.30.10

Global Project Values:

Project Name:

Project ID:

Prepared By:

Date:

Standby Hours:

Alarm Mins:

Derating Factor:

Voltage Drop Warning Threshold %:

Panel ID:

Location:

Model: 5820XL Add. Fire Alarm Control Panel

Volts: 24 VDC

Max NAC Current: 3.0 Amps

Max Panel Current: 6.0 Amps

Ckt.#	Circuit Name	Qty	Current Draw		Wire AWG & Type	Ohms Per 1000 Ft.	Length(ft) One-Way	Actual Ohms	Volts @ EOL	%Drop
			Standby	Alarm						
5820XL	5820XL CTRL Panel	1	0.215	0.385						
SK	Photo, Photo-T		0.000	0.000						
SK	Ion		0.000	0.000						
SK	Heat, Heat-HT		0.000	0.000						
SK	Heat ROR		0.000	0.000						
SK	Beam, Beam-T		0.000	0.000						
SK	Duct		0.000	0.000						
SK	Acclimate		0.000	0.000						
SK	Control		0.000	0.000						
SK	Control-6		0.000	0.000						
SK	Monitor, Minimon		0.000	0.000						
SK	Monitor-2		0.000	0.000						
SK	Monitor-10		0.000	0.000						
SK	Pull-SA, Pull-DA		0.000	0.000						
SK	Relay		0.000	0.000						
SK	Relay-6		0.000	0.000						
SK	Zone		0.000	0.000						
SK	Zone-6		0.000	0.000						
SK	Isolator Module		0.000	0.000						
SSB224BI	Isolator Base		0.000	0.000						
B200SR	Sounder Base		0.000	0.000						
SSB224RB	Relay Base		0.000	0.000						
SSRTS151	Magnetic Remote Test		0.000	0.000						
SSRTS151KEY	Key Activated Test		0.000	0.000						
SSRA100Z	Remote LED		0.000	0.000						
5815XL	SLC Loop Expander		0.000	0.000						
5860	LCD Remote Annunc		0.000	0.000						
5824	Serial/Parallel Module		0.000	0.000						
5496	Power Expander		0.000	0.000						
5895XL	Power Expander		0.000	0.000						
5865-4	LED Annunciator (4G)		0.000	0.000						
5865-3	LED Annunciator (3G)		0.000	0.000						
5880	LED Driver Module		0.000	0.000						
5883	Relay Module		0.000	0.000						
PGM-I/O #1	Notification Appl Circuit		0.000	1.236	#14 Solid	2.52	275	1.39	18.69	8.40%
PGM-I/O #2	Notification Appl Circuit		0.000	0.618	#14 Solid	2.52	175	0.88	19.85	2.67%
PGM-I/O #3	Notification Appl Circuit		0.000	0.618	#14 Solid	2.52	250	1.26	19.62	3.82%
PGM-I/O #4	Notification Appl Circuit		0.000	0.618	#14 Solid	2.52	250	1.26	19.62	3.82%
PGM-I/O #5	Notification Appl Circuit		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
PGM-I/O #6	Notification Appl Circuit		0.000	0.000	#12 Solid	1.59		0.00	20.40	0.00%
Total Standby Current (Amps)			0.215	3.475	Total Alarm Current (Amps)					
Standby Time In Hours			24	0.083	Alarm Time In Minutes / 60 (5 Mins)					
Total Standby AH Required			5.160	0.290	Total Alarm AH Required					
Total Combined AH Required			5.45		<p style="text-align: center;">Command Shortcuts</p> <div style="display: flex; justify-content: space-around;"> Configure Circuits Print Page </div>					
Multiply By The Derating Factor			1.20							
Minimum Battery AmpHours Required			6.54							