

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING PERMIT



This is to certify that
PROTECTION PROFESSIONALS
325 US Route One
FALMOUTH, ME 04105

For installation at
415 FOREST AVE
THE CHILDREN'S HOUSE

Job ID: **2012-05-4116-FAFS**

CBL: **111- C-005-001**

has permission to **install master box fire alarm for day care**

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes 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

Bjornell (58)

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

SCANNED

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: 2012-05-4116-FAFS
install master box fire alarm for day care

For installation at:
415 FOREST AVE
THE CHILDREN'S HOUSE

CBL: 111- C-005-001

Conditions of Approval:

Fire

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.

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

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

All smoke detectors and smoke alarms shall be photoelectric.

Records cabinet, FACP, annunciator(s), and pull stations shall be keyed alike.

Central Station monitoring for addressable fire alarm systems shall be by point.

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

Installation of a Fire Alarm system requires a Knox Box to be installed per city ordinance.

System acceptance and commissioning must be coordinated with alarm 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.

A master box connection and drill switch is required. AES Zones shall be:

1. Not assigned
2. Not assigned
3. Pull stations and detectors
4. City Disconnect: Pull stations and detectors
5. Not assigned
6. Not assigned
7. Not assigned
8. AES tamper switch

Master Box Approval

Applicant: Protection Professionals
App Phone #: 207-775-5755
Building Name: The Children's House
Building Address: 415 Forest Ave
Occupancy: Day Care

Emergency Contact: Magnifique Butera
Emergency phone #: 207-775-1112
Date of Application: 5/30/12
Billing Address: 415 Forest Ave
Portland, ME 04101
Comments:

Assembly OL>300, 20 unit apartment building, etc.

Applicant completes red box and submits with Fire Alarm Permit

1

FIRE PREVENTION:

Approved

Denied

6 / 4 / 12
Date

B. Wallace
Fire Prevention Officer

Zone 1: Unassigned Zone 2: Unassigned

Zone 3: Pulls and detectors Zone 4: City disconnect - Pulls and Detectors

Zone 5: Unassigned Zone 6: Unassigned

Zone 7: Unassigned Zone 8: AES Tamper switch

Modify City Box response to alarm sounding in CAD: YES NO

2

FIRE ALARM:

Box #: _____

ELECTRICAL DIVISION: Approved Denied

Box Type: AES Radio Box / _____
New Other

3

Test Date: _____ / _____ / _____ In Service Date: _____ / _____ / _____ Fire Alarm Technician

AES / Circuit if applicable: _____

4

FIRE ALARM: Same Running Assignment As Box: _____

Notifications: All Stations Run Books Digitizer Computer Cad Box Test

South Portland _____ Other _____ Dispatcher

5

BILLING: Entered _____ Financial Officer

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2012-05-4116-FAFS	Date Applied: 5/30/2012	CBL: 111- C-005-001	
Location of Construction: 415 FOREST AVE	Owner Name: PORTLAND BAY PROPERTIES	Owner Address: 415 FOREST AVE STE 3 PORTLAND, ME 04101	Phone:
Business Name:	Contractor Name: Rich Brobst, Jr- Protection Professionals	Contractor Address: 325 US FALMOUTH MAINE 04105	Phone: (207) 775-5755
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE ALARM	Zone: B-2b
Past Use: Daycare under #09-1185	Proposed Use: Same: Daycare – to install fire alarm	Cost of Work: \$6,000.00	CEO District:
		Fire Dept: 6/5/12 <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A Signature: <i>Bjornell</i> (58)	Inspection: Use Group: Type: Signature:
Proposed Project Description: Install Fire Alarm for Day Care		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	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>	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <i>5/30/12</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 Dist 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:
	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	PHONE



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.

B-26

Installation address: 415 Forest Avenue CBL: 111-C-5

Exact location: (within structure) _____

Type of occupancy(s) (NFPA & ICC): Day Care of 20 children (use under # 09-1185)

Building owner: Magnifique Butera Portland Bay Properties

System Designer (point of contact): Richard Brobst, Jr

Designer phone: 775-5755 E-mail: rich@protectionprofessionals.net

Installing contractor: Leach Electric Certificate of Fitness No: M1001

Contractor phone: 657-5556 E-mail: _____

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: 75,133.50

PERMIT FEE: 80
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

RECEIVED
MAY 30 2012
Dept. of Building Inspections
City of Portland Maine

11200

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: 5-30-12

Protection Professionals

325 US Route 1
 Falmouth, ME 04105
 Ph 207-775-5755
 Fax 207-781-2064

Device List

No. 3964

List Date
5/16/2012

Bill To Name / Address
The Children's House 415 Forest Avenue Portland, Maine

Job Site
The Children's House 415 Forest Avenue Portland, Maine

CHANGING THIS DEVICE LIST DOES NOT ALTER THE ORIGINAL ESTIMATE
 Attach copy to Purchase Order for accounting

Estimate No.

Item	Description	Qty To Order	Qty Ordered
FPD-7024	Fire alarm control panel, 4 zones expandable to 8 zones, expandable to 247 addressable points, 2 NACs at 4amp maximum	1	
FPC-7034	4 Zone Expander Module	1	
Bat 12-12	Battery	2	
IM-RJ31XSET	IM-RJ31XSET	2	
06-SSU00672	Fire Document box 12 inches wide X 13.1 inches high X 2.25 inches deep, CAT 30 keyed	1	
7788F	Wireless fire subscriber for City of Portland	1	
1640	16.5 Volt AC 40 VA Class 2 Transformer	1	
Bat 12-7	12V 7AH Batteries	1	
D8004	UL TRANSFORMER KIT	1	
Miscellaneous Materials	Master box bypass switch	1	
GI-TSW01S	Tamper Switch for master boxes	3	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
D101	D101 Lock & Key Set	4	
BK-2WB	Smoke Detector w/ Base	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	3	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd	1	
3221	3200 Series w/ Lift-Off Door Recess Mounted State of Maine Sales Tax		

Ordered By: _____

Date: _____

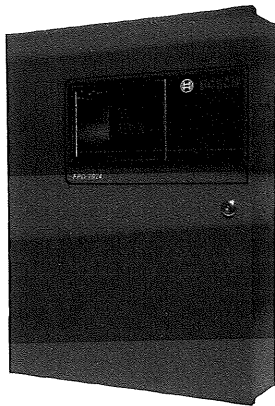
Received By: _____

Date: _____



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FPD-7024 Fire Alarm Control Panels



The FPD-7024 Fire Alarm Control Panels (FACPs) can be used in commercial and public building applications such as schools, universities, manufacturing plants, and health care facilities. They are listed by UL for central station, local, auxiliary, and remote station systems.

The FPD-7024 FACPs support four on-board initiating zones that can be expanded to eight using the FPC-7034. Each initiating zone supports two-wire and four-wire detectors configurable as Class A, Style D or Class B, Style B loops. Each zone can support up to 20 two-wire detectors, or any number of four-wire detectors depending on available power. Each FACP has a built-in digital fire alarm communicator transmitter (DACT).

Enhance the FPD-7024 conventional system features by adding a D7039 Multiplex Expansion Module. Adding a D7039 Multiplex Expansion Module to the FPD-7024 turns the conventional FACP into an addressable FACP. The D7039 adds up to 247 addressable points to the base system and adds an additional 400 events to the history buffer for a total of 499 events. The D7039 also increases the number of programmable relay outputs from 19 to 59 and expands system users to 100.

- ▶ **Four initiating zones (expandable to eight); up to 20 two-wire smoke detectors per zone**
- ▶ **Built-in DACT**
- ▶ **Two notification appliance circuits (NACs) on board with a shared internal regulated 24 VFWR, 4 A NAC power supply**
- ▶ **Easily converts to addressable with the addition of a D7039 Multiplex Expansion Module**
- ▶ **Programmable through front panel interface, remote FMR-7033 Liquid-crystal Display (LCD) Keypads, remote programming software (RPS), or DX4010V2 or DX4020**

Functions

Notification Appliance Circuits (NACs)

Two Class A, Style Z or Class B, Style Y NACs provide up to 4 A of regulated 24 VFWR power to operate horns, strobes, bells, and other notification appliances. Each NAC can be programmed to provide Temporal Code 3, California March, steady, pulsed, and synchronized output for either Wheelock or System Sensor notification appliances.

User Interface

A viewing port in the locked control panel enclosure door shows the system status light-emitting diodes (LEDs) and liquid-crystal display (LCD) while maintaining system keypad security. Unlocking the enclosure door provides access to the system controls for silencing off-normal conditions, zone bypassing, detector resetting, testing, other fire functions, and programming. These functions are also available on all FMR-7033 LCD Keypads connected to the system.

Organized Event Display

Sorts alarm, trouble, and supervisory events into categories and allows scrolling through specific events.

History Buffer

The system stores events in a 99-event history buffer.

Note The number of events that can be stored in the history buffer increases to 499 with the

addition of a D7039 Multiplex Expansion Module.

Central Station Reporting

The FPD-7024 FACP's send reports to two telephone numbers (or IP addresses with a DX4020 Network Interface Module installed) with full single, double, and backup reporting. They communicate in BFSK, SIA, Contact ID, Modem IIIa², and 4/2 and 3/1 Tone Bursts.

Dirty Smoke Detector Monitoring

All on-board zones and FPC-7034 zones are continuously monitored for smoke detectors signaling a dirty condition using the Bosch Chamber Check feature and CleanMe protocol. If a detector's smoke chamber is dirty, the detector sends a CleanMe signal on the two-wire loop or a dirty detector signal on the addressable loop. The control panel annunciates that there is a dirty detector on the loop or the address. The Chamber Check feature signals a dirty smoke chamber using the LED on the detector head.

Accessories

The FPD-7024 enclosure has space for additional accessory modules and two D1218 (18 Ah) batteries or two D126 (7 Ah) batteries.

Certifications and Approvals

Region	Certification	Details
USA	UL	UL864, 9th edition
	FM	
	CSFM	7165-1615:227
	FCC	ESVAL04B7024
	FDNY-CoA	#6024

Installation/Configuration Notes

Compatible Products

The following products are compatible with the FPD-7024 FACP:

Category	Product ID	Product Description
Batteries and Power Supplies	D126	12 V, 7 Ah battery
	D1218	12 V, 18 Ah battery
Detectors	D7038	Remote NAC power supply
	For two-wire detector compatibility, refer to <i>FPD-7024 Smoke Detector Compatibility List Technogram</i> (P/N: F01U010790)	
Keypads and Annunciators	D7030X	Eight-point LED annunciator (eight red)
	D7030X-S2	Eight-point LED annunciator (two yellow, six red)

Category	Product ID	Product Description	
Modules	D7030X-S8	Eight-point LED annunciator (eight yellow)	
	D7032	Eight-point LED annunciator expander (eight red)	
	FMR-7033	LCD fire system keypad	
	FMR-7036	LCD annunciator	
	D132B	Smoke detector reversing relay module	
	D184A	Local energy kit	
	D185	Reversing polarity module	
	D275	EOL power supervision module	
	FPC-7034	Four-point expander	
	D7039	Multiplex expansion module	
	Option Bus Devices	D7035	Octal relay module
		D7035B	Octal relay module in box
		DX4010V2	USB/serial interface module
NAC Devices	DX4020	Network interface module	
	Refer to <i>FPD-7024 Device Compatibility List Technogram</i> (P/N: F01U010791)		

The following additional products are compatible with the FPD-7024 Addressable FACP's:

Category	Product ID	Product Description
Detector Heads and Bases	D7050	Addressable Photoelectric Smoke Detector Head
	D7050TH	Addressable Photoelectric Smoke and Heat Detector Head
	D7050-B6	Detector Base
Modules	D7042	Multiplex eight-input remote module
	D7042B	Multiplex eight-input remote module in box
	D7044	Multiplex single-input module
	D7044M	Mini multiplex single-input module
	D7048	Multiplex octal driver
	D7048B	Multiplex octal driver in box
	D7052	Multiplex dual-input module
Pull Stations	D7053	Multiplex input-output module
	FMM-7045	Single-action manual station
	FMM-7045-D	Double-action manual station

Parts Included

Quant.	Component
1	FPD-7024 board in a static-resistant bag
1	Enclosure (P/N: 30897)
1	Lock set with two #1358 (D102) keys (P/N: F01U009775)
1	Transformer (P/N: F01U008702)
6	2.21 kΩ end-of-line (EOL) resistors (P/N: 25899 or 4998113202)
1	Hardware pack
1	Literature pack

Note For the FPD-7024 to be addressable, a D7039 Multiplex Expansion Module must be installed. The D7039 is purchased separately.

Technical Specifications

Electrical

Current (alarm):	380 mA
Current (standby):	200 mA
Power (primary):	120 VAC, 1.2 A maximum, 60 Hz or 240 VAC, 0.75 A maximum, 50 Hz

Environmental

Environment:	Indoor, dry
Relative Humidity:	Up to 95%, non-condensing
Temperature (operating):	+32°F to +120°F (0°C to +49°C)

Mechanical Properties

Color:	Red
Dimensions (HxWxD):	20.8 in. x 15 in. x 4.3 in. (52.8 cm x 38.1 cm x 10.9 cm)
Material:	Cold-rolled steel Base: 18 gauge (1.2 mm) Cover: 19 gauge (1.1 mm)

Indicating Device Circuits (IDC)

Current:	44 mA maximum per loop
Line resistance:	150 Ω
Voltage:	24 VDC nominal

Outputs

NAC:	24 VDC nominal, 4 A maximum
On-board Relays:	Three Form C contacts rated at 5 A, 28 VDC
Off-board Relays:	Up to two D7035 Octal Relay Modules with each providing eight Form C relay outputs; contacts rated at 5 A, 28 VDC In an addressable system, up to 20 D7053 Multiplex Input-Output Modules are allowed per bus for a total of 40

Trademarks

Trademark names are used throughout this document. In most cases, these designations are claimed as trademarks or registered trademarks in one or more countries by their respective owners. Rather than placing a trademark symbol in every occurrence of a trademark name, Bosch Security Systems, Inc. uses the names only in an editorial fashion and to the benefit of the trademark owner with no intention of infringing the trademark.

Chamber Check is a registered trademark of Bosch Security Systems, Inc. in the United States.

CleanMe is a registered trademark of GE Interlogix in the United States and/or other countries.

Wheelock is a trademark of Cooper Wheelock, Inc.

System Sensor is a registered trademark of System Sensor, a brand of Honeywell International, Inc. in the United States and/or other countries.

Ordering Information

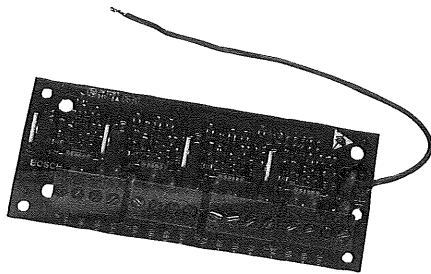
FPD-7024 FACP	FPD-7024
Four detector zones (expandable to eight); up to 20 two wire smoke detectors per zone	
FPD-7024-LC FACP without Enclosure and Transformer	FPD-7024-LC
Four detector zones (expandable to eight); up to 20 two wire smoke detectors per zone	
FPD-7024-LT FACP without Transformer	FPD-7024-LT
Four detector zones (expandable to eight); up to 20 two wire smoke detectors per zone. Available only in Latin America.	



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FPC-7034 Four-Point Expander



- ▶ Adds four Class B (Style B) or two Class A (Style D) initiating circuits to the FPD-7024 FACP
- ▶ For use with normally-open (NO) or normally-closed (NC) alarm contacts
- ▶ Compatible with two-wire or four-wire smoke detectors
- ▶ Up to 20 two-wire smoke detectors per circuit
- ▶ Easy installation due to plug-in design and screw terminal circuit connections
- ▶ No programming necessary

The FPC-7034 Four-point Expander doubles the number of alarm initiating device circuits on the FPD-7024 Fire Alarm Control Panel (FACP). These circuits are identical to the circuits on the FACP.

This plug-in module is automatically recognized by the control panel's firmware when power is restored to the system.

Certifications and Approvals

Region	Certification
USA	UL UL864, 9th edition
	FM
	CSFM 7165-1615:227
	FDNY-CoA #6024

Installation/Configuration Notes

Compatible Products

The following products are compatible with the FPC-7034 Four-point Expander:

Category	Product ID	Product Description
Control Panels	FPD-7024	Addressable or conventional FACP
Detectors	Refer to <i>FPD-7024 Smoke Detector Compatibility List Technogram</i> (P/N: F01U010790) for a list of smoke detectors compatible with the FPD-7024 FACP.	

Note When four-wire smoke detectors are used, power must be supplied to the detectors from either the control panel or an external power source.

Mounting Considerations

The FPC-7034 mounts on the FPD-7024 control board, just to the right of the keypad. Use the four nylon stand-offs supplied with the expander.

Initiating Circuit Wiring

Circuit connection for the expansion initiating circuits is identical to the on-board circuit configuration. Refer to the *FPD-7024 Installation Guide* (P/N: F01U008458) for wiring details.

Install a supplied EOL resistor at the end of each wiring run.

Parts Included

Quant.	Component
1	Four-loop expander board
4	2.21 kΩ End-of-Line (EOL) Resistors (P/N: 25899)
4	Stand-offs (P/N: 26510)
1	Literature pack

Technical Specifications

Environmental Considerations

Environment:	Indoor, dry
Relative Humidity:	Up to 95%, non-condensing
Temperature (operating):	+32°F to +122°F (0°C to +50°C)

Mechanical Properties

Dimensions (HxWxD):	2.0 in. x 4.5 in. x 1.3 in. (5.1 cm x 11.4 cm x 3.3 cm)
Response Time:	Choice of fast (500 ms) or programmable from 1 sec to 89 sec

Power Requirements

per initiating circuit:

Alarm Current (short circuit):	40 mA maximum
Alarm Current (threshold):	> 25 mA
Detector Standby Current (total):	3 mA maximum
Loop Supervision Current:	8.0 mA to 15.0 mA
Trouble Current Threshold:	< 7 mA
Voltage (supply):	18.0 VDC to 25.5 VDC

per FPC-7034 module:

Current (standby):	60 mA maximum
Current (alarm):	160 mA maximum

Ordering Information

FPC-7034 Four-Point Expander **FPC-7034**
 Doubles the number of alarm initiating device
 circuits on the FPD-7024 FACP

Americas:
 Bosch Security Systems, Inc.
 130 Perinton Parkway
 Fairport, New York, 14450, USA
 Phone: +1 800 289 0096
 Fax: +1 585 223 9180
 security.sales@us.bosch.com
 www.boschsecurity.us

Europe, Middle East, Africa:
 Bosch Security Systems B.V.
 P.O. Box 80002
 5600 JB Eindhoven, The Netherlands
 Phone: + 31 40 2577 284
 Fax: +31 40 2577 330
 emea.securitysystems@bosch.com
 www.boschsecurity.com

Asia-Pacific:
 Robert Bosch (SEA) Pte Ltd, Security Systems
 11 Bishan Street 21
 Singapore 573943
 Phone: +65 6258 5511
 Fax: +65 6571 2698
 apr.securitysystems@bosch.com
 www.boschsecurity.com

Represented by

Z Strobes, Horns, Horn/Strobes

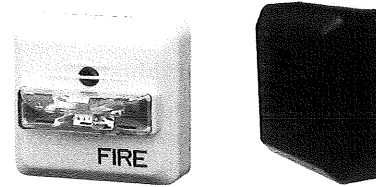
Features

- UL listed. ULC, CSFM, and FM pending.
- ADA/NFPA compliant
- EZ Mount design, with separate base plate, provides ability to pre-wire the base and test the circuit wiring before the walls are covered
- The base plate is protected by a disposable cover and the appliances can quickly snap onto the base after the walls are painted.
- EZ Mount Universal Mounting Plate (ZBB) – uses single plate for ceiling and wall mount installations
- Wall Mount models feature field selectable candela settings of 15/30/75/110cd and 135/185cd
- Ceiling Mount models feature field selectable candela settings of 15/30/75/95cd and 115/177cd
- Strobes can be synchronized using the Siemens 5406B sync modules, MPC-6000 panel, MPC-7000 panel, or RSE-300 power supply with built-in sync protocol
- "Special Applications" listed with Siemens panels
- Strobes produce 1 flash per second
- Selectable Continuous Horn or Temporal (Code-3) Tones with selectable 90 or 95 dBA setting (ZH model)

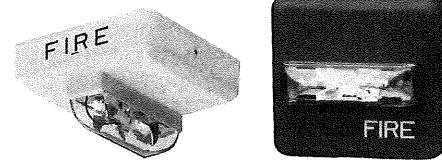
Description

The Siemens Series Z notification appliances feature an easy snap on base that is designed to simplify the installation and testing of horns, strobes, and horn/strobes. The separate Series Z snap on base can be pre-wired so circuit wiring can be fully tested before the appliance is installed and before the walls are covered. Once all surrounding work is complete, the appliance can be simply installed by snapping it on the base. Shorting contacts in the base, which provide continuity for circuit testing, are permanently opened when the appliance is installed so any subsequent removal of the appliance will indicate a trouble condition on that circuit at the control panel when circuit supervision is enabled. The same base is used for all Series Z horns, strobes and horn/strobes to provide consistent installation and easy replacement of appliances if required. A locking screw is also included for the appliance to provide extra secure installation.

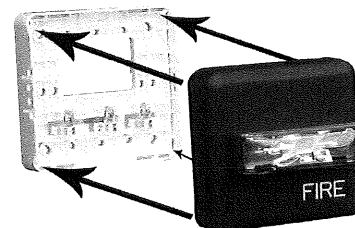
The Siemens Series Z appliances incorporate the same dependable circuitry and high efficiency optics that are used in Siemens ST strobes, NS horn/strobes and NH horns and have the same high performance ratings. The Series Z appliances are "Special Applications" listed with Siemens panels.



Series ZH



Series ZR



ZR AND ZH Mounting

Engineering Specifications

General

Audible/visual notification appliances shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. These appliances shall be listed under UL Standard 1971, (Standard for Safety Signaling Devices for Hearing Impaired) and UL Standard 464 (Fire Protective Signaling). The appliances shall use a universal backplate that shall allow mounting to a single-gang, double-gang, 4-inch square, 4" octal, or a 3-1/2" octal backbox. Two wire appliance wiring shall be capable of directly connecting to the mounting back plate. Continuity checking of the entire NAC circuit prior to attaching any audible/visual notification appliances shall be allowed. A dust cover shall fit and protect the mounting plate. The dust cover shall be easily removed when the appliance is installed over the backplate. Removal of an appliance shall result in a trouble condition by the Fire Alarm Control Panel (FACP).

Strobes

Strobe appliances shall produce a minimum flash rate of 60 flashes per minute (1 flash per second) over the Regulated Input Voltage Range and shall incorporate a

Xenon flashtube enclosed in a rugged Lexan® lens. The strobes shall be available with two or four field selectable settings in one unit and shall be rated, per UL 1971, for up to 185 cd for wall mounting and 177 cd for ceiling mounting. The strobes shall operate over an extended temperature range of 32°F to 120°F (0°C to 49°C) and be listed for maximum humidity of 95% RH. Strobe inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

Audibles and Audible/Strobe Combinations

Horns and horn/strobes shall be listed for Indoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have at least 2 sound level settings of 90 and 95 dBA.

Synchronization Modules

When synchronization of strobes or temporal Code-3 audibles is required, the appliances shall be synchronized using the Siemens 5406B sync modules, MPC-6000 panels, MPC-7000 panels, or RSE-300 power supplies with built-in sync protocol. The strobes shall not drift out of synchronization at any time during operation. Au-

dibles and strobes shall be able to be synchronized on a 2-wire circuit with the capability to silence the audible if required. If the sync module or power supply fails to operate (i.e., contacts remain closed), the strobes shall revert to a non-synchronized flash rate. All notification appliances shall be listed for "Special Applications".

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Input Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series ZH Strobe products are listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- Series ZH horns are listed under UL Standard 464 for audible signal appliances (Indoor use only).

Technical Information

For complete technical information, please consult the relevant installation sheets as well as the Siemens Compatibility Guide.

Ordering Information / Mounting Requirements / Approvals

Model Number	Order Code	Mounting Options#	Agency Approvals			
			UL	ULC	CSFM	FM
ZH-MC-R	500-636161	B, D, E, F	X	#	#	#
ZH-MC-W	500-636162	B, D, E, F	X	#	#	#
ZH-HMC-R	500-636163	B, D, E, F	X	#	#	#
ZH-HMC-W	500-636164	B, D, E, F	X	#	#	#
ZH-R	500-636159	B, D, E, F	X	#	#	#
ZH-W	500-636160	B, D, E, F	X	#	#	#
ZH-MC-CR	500-636165	B, D, E, F	X	#	#	#
ZH-MC-CW	500-636166	B, D, E, F	X	#	#	#
ZH-HMC-CR	500-636167	B, D, E, F	X	#	#	#
ZH-HMC-CW	500-636168	B, D, E, F	X	#	#	#
ZR-MC-R	500-636169	B, D, E, F	X	#	#	#
ZR-MC-W	500-636170	B, D, E, F	X	#	#	#
ZR-HMC-R	500-636171	B, D, E, F	X	#	#	#
ZR-HMC-W	500-636172	B, D, E, F	X	#	#	#
ZR-MC-CW	500-636174	B, D, E, F	X	#	#	#
ZR-MC-CR	500-636173	B, D, E, F	X	#	#	#
ZR-HMC-CR	500-636175	B, D, E, F	X	#	#	#
ZRS-HMC-CW	500-636176	B, D, E, F	X	#	#	#
ZBB-R	500-636193	Accessory - Includes base, dust cover, mounting screws and installation sheet				
ZBB-W	500-636194	Accessory - Includes base, dust cover, mounting screws and installation sheet				

X = listed/approved # = pending * = Refer to Data Sheet #9675 for mounting options.

WARNING: PLEASE READ THESE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.



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 8 Fernwood Road • Florham Park, NJ 07932
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 Web: www.faradayfirealarms.com

7744F/7788F

AES IntelliNet
CORPORATION | For Alarm Monitoring

UL Listed

RF Subscriber Unit UL Fire, AA Burglary and NFPA-72 Compliant

UL Listed

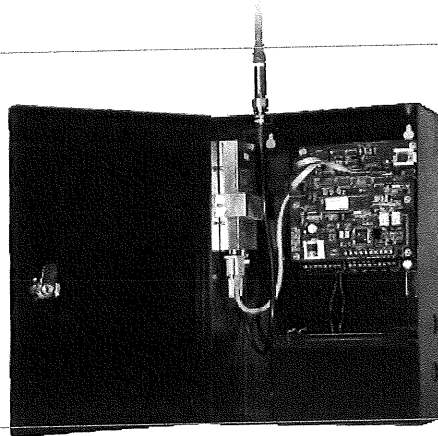
UL Listed Central Station

Remote Station

864 Ed. 9, 827, 1610, 365, 681

CSFM

NFPA
RF Section 8.6.3.5



Advanced Wireless Alarm Monitoring

The 7744F/7788F smart subscriber unit links an alarm panel to an alarm monitoring central station. This 2-way transceiver and repeater in one is housed in a full size locking steel cabinet for superior performance. The 7744F/7788F supports a wide range of inputs such as NO/NC/EOL and direct voltage. It automatically senses wire and antenna cuts, and monitors battery and AC power status. Advanced status reporting, self-diagnostics and a built-in power supply make the 7744F/7788F the first choice for all wireless alarm communication needs.

Full Data for Fire and Burglary

Use with the optional FireTap for full fire data or the IntelliTap for full fire and burglary data.

Available Configurations

7744F – 4 reversing polarity inputs plus 4 programmable EOL inputs

7788F – Programmable EOL inputs with 8 zones

Available Options

FireTap 7770

IntelliTap 7067

NEMA 4 Enclosure

High Gain Antenna

Additional Back Up Battery

Available in Burglary Beige or Fire Red

- Options for Full Data for Fire and Burglary
- Available in 7744F & 7788F Zone Configurations
- Built-in Power Supply and Battery Charger
- Local Annunciation Options on Board



Wireless mesh networking is an innovative technology adopted by many industries with applications that need to communicate data over a large geographic area with a high level of reliability at a low total cost of ownership.

The advanced design and 2-way communications capability provides easy installation, expansion, and management when compared to alternative communication methods, both wired and wireless.

7744F/7788F RF Subscriber Unit

Technical Specifications

Radio

Standard CSAA frequency ranges:
450-470 MHz and 130-174 MHz, VHF
and UHF. Others available

Standard Output Power

2 watts (requires FCC license)

Power Input

16.5 VAC, 40VA UL listed
Class II transformer required

Voltage

12 VDC nominal

Current

175mA standby; 800mA transmit

Alarm Signal Inputs

- 4 individually programmable Zones:
NO/NC/EOL, trouble restore
- RS-232
- Reversing voltage (7744F only) 12
or 24 VDC

Operating Temperature Range

0° to 50°C, 32° to 122°F

Storage Temperature Range

-10° to 60°C, 14° to 140°F

Relative Humidity Range

0-85% RHC non-condensing

Back up Battery

12V, 7.5 Ahr

Low Battery Reporting

22.5-minute test cycle

AC Status

Reports to central station after
approximately 60 minutes without AC
power, reports power restored after
approximately 60 minutes of restored
power. programmable from 60 to 180
minutes

Antenna Cut (local reporting)

Form 'C' Contact 1 AMP

Size

13.25"H x 8.5"W x 4.3"D
34cm x 21.5cm x 11cm

Weight

6.4 lbs, 2.9 Kilograms
(excluding battery)

Colors

Available in standard
Burglary Beige or Fire Red
Please specify when ordering

Available Options

- 7788F RF subscriber unit
with 8 EOL inputs
- 7744F RF subscriber unit with 4
EOL inputs and 4 reverse polarity
inputs
- 7770 - FireTap
- 7067 - IntelliTap
- NEMA 4 Enclosure

Please specify when ordering

Available configurations

- 7788F, 8 EOL inputs
- 7744F, 4 EOL inputs w/4
reverse polarity inputs

AES-IntelliNet™ is the industry leader in delivering high quality wireless mesh networks to the fire and security industry in commercial, corporate, government, and educational applications with its broad line of products and advanced network management tools. Users of AES-IntelliNet networks have gained significant revenue, communications, and cost advantages while meeting the high standards of reliability required for the fire and security industry. AES-IntelliNet alarm monitoring systems are deployed at hundreds of thousands of locations in over 130 countries.



For more information

Call 800-AES-NETS (800-237-6387)

AES Corporation | 285 Newbury Street | Peabody, MA 01960 USA
Tel. +1 978-535-7310 | Fax +1 978-535-7313 | Email info@aes-intellinet.com
Web www.aes-intellinet.com

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7744F/7788F/08/09



Photoelectric Smoke Detectors

System Sensor's *i³* series smoke detectors represent significant advancement in conventional detection. The *i³* family is founded on three principles: installation ease, intelligence, and instant inspection.



Features

- Plug-in detector line, mounting base included
- Large wire entry port
- In-line terminals with SEMS screws
- Mounts to octagonal and single-gang backboxes, 4-square backboxes, or direct to ceiling
- Stop-Drop 'N Lock attachment to base
- Removable detector cover and chamber
- Built-in remote maintenance signaling
- Drift compensation and smoothing algorithms
- Simplified sensitivity measurement
- Wide angle, dual color LED indication
- Loop testing via EZ Walk feature
- Built-in test switch

Installation ease. The *i³* line redefines installation ease with its plug-in design. This allows an installer to pre-wire the bases included with the heads. The large wire entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of back box mounting methods, as well as direct mounting with drywall anchors. To complete the installation, *i³* heads plug in to the base with a simple Stop-Drop 'N Lock™ action.

Intelligence. *i³* detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the *i³* line to minimize nuisance alarms. Two-wire *i³* detectors needing cleaning can generate a remote maintenance signal, when connected to the 2W-MOD2 loop test/maintenance module, or to a panel equipped with the *i³* protocol. This signal is indicated by LEDs located at the module and the panel. The SENS-RDR, a wireless device, displays the sensitivity of *i³* detectors in terms of percent per-foot-obscuration.

Instant inspection. The *i³* series provides wide-angle red and green LED indicators for instant inspection of the detector's condition: normal standby, out-of-sensitivity, alarm, or freeze trouble. When connected to the 2W-MOD2 loop test/maintenance module or a panel with the *i³* protocol, the EZ Walk loop test feature is available on two-wire *i³* detectors. This feature verifies the initiating loop wiring by providing LED status indication at each detector.

Agency Listings



Smoke Detector Specifications

Architectural/Engineering Specifications

Smoke detector shall be a System Sensor i³ Series model number _____, listed to Underwriters Laboratories UL 268 for Fire Protection Signaling Systems. The detector shall be a photoelectric type (Model 2W-B, 4W-B) or a combination photoelectric/thermal (Model 2WT-B, 4WT-B) with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3½-inch and 4-inch octagonal, single gang, and 4-inch square back boxes with a plaster ring, or direct mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5 percent-per-foot nominal as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms. The detector shall provide dual color LED indication which blinks to indicate power up, normal standby, out of sensitivity, alarm, and freeze trouble (Model 2WT-B, 4WT-B) conditions. When used in conjunction with the 2W-MOD2 module, 2-wire models shall include a maintenance signal to indicate the need for maintenance at the alarm control panel, and shall provide a loop testing capability to verify the circuit without testing each detector individually.

Electrical Specifications

Operating Voltage	Nominal: 12/24V non-polarized Minimum: 8.5V Maximum: 35V
Maximum Ripple Voltage	30% peak to peak of applied voltage
Standby Current	2-wire: 50 µA maximum average; 4-wire: 50 µA maximum average
Maximum Alarm Current	2-wire: 130 mA limited by control panel; 4-wire: 20 mA @ 12V, 23mA @ 24V
Peak Standby Current	2-wire: 100 µA; 4-wire: n/a
Alarm Contact Ratings	2-wire: n/a; 4-wire: 0.5 A @ 30V AC/DC

Physical Specifications

Dimensions (including base)	5.3 inches (127 mm) diameter; 2.0 inches (51 mm) height
Weight	6.3 oz. (178 grams)
Operating Temperature Range	2W-B and 4W-B: 32°F–120°F (0°C–49°C); 2WT-B and 4WT-B: 32°F–100°F (0°C–37.8°C)
Operating Humidity Range	0 to 95% RH non-condensing
Thermal Sensor	135°F (57.2°C) fixed
Freeze Trouble	2WT-B and 4WT-B only: 41°F (5°C)
Sensitivity	2.5%/ft. nominal
Input Terminals	14–22 AWG
Mounting	3½-inch octagonal back box 4-inch octagonal back box Single gang back box 4-inch square back box with a plaster ring Direct mount to ceiling

LED Modes		Power Up Sequence for LED Indication		
LED Mode	Green LED	Red LED	Condition	Duration
Power up	Blink every 10 seconds	Blink every 10 seconds	Initial LED status indication	80 seconds
Normal (standby)	Blink every 5 seconds	off		
Out of sensitivity	off	Blink every 5 seconds		
Freeze trouble	off	Blink every 10 seconds		
Alarm	off	Solid		

Ordering Information

Model	Thermal	Wiring	Alarm Current
2W-B	No	2-wire	130 mA max. limited by control panel
2WT-B	Yes	2-wire	130 mA max. limited by control panel
4W-B	No	4-wire	20 mA @ 12V, 23mA @ 24V
4WT-B	Yes	4-wire	20 mA @ 12V, 23mA @ 24V

Accessories			
2W-MOD2	2-wire loop test / maintenance module	RT	Removal / replacement tool
SENS-RDR	Sensitivity reader	A77-AB2	Retrofit adapter bracket, 6.6 in. (16.76cm) diameter



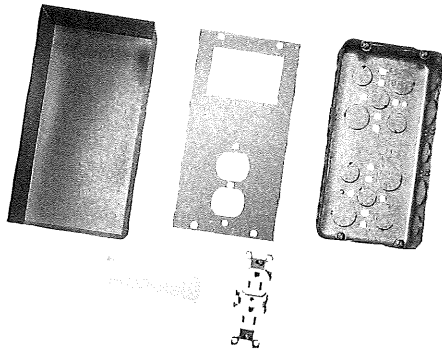
3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495

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Product specifications subject to change without notice. Visit systemsensor.com for current product information, including the latest version of this data sheet.
A05-0318-006 - 7/06 - #1676



BOSCH
Invented for life

D8004 Transformer Enclosure



The D8004 Transformer Enclosure protects the AC plug-in transformer and ensures that it remains securely fixed to the AC wall outlet. The D8004 Transformer Enclosure may be required for certain applications; the most common being fire alarm.

Certifications and Approvals

Region	Certification
USA	UL AMCX: Central Station Alarm Units (UL1610, UL1635), AOTX: Local Alarm Units (UL464, UL609), APAW: Police Station Alarm Units (UL365, UL464), NBSX: Household Burglar Alarm System Units (UL1023), UOXX: Control Unit Accessories, System (UL864, 9th edition), UTOU: Control Units and Accessories - Household System Type (UL985)
	FM
	CSFM 7167-1615: 100, 7165-1615: 112, 7165-1615: 119
	NYC-MEA 12-92-E, Vol. 12 12-92-E, Vol. 15

Technical Specifications

Environmental Considerations

Environment: Indoor, dry

Mechanical Properties

Cover

Color: Light gray
Dimensions: 8.8 in. x 4.7 in. x 3.0 in.
(22.4 cm x 11.9 cm x 7.6 cm)
Material: Cold-rolled steel, 18 gauge (1.2 mm)

Outlet Box

Dimensions: 8.7 in. x 4.6 in. x 1.7 in.
(22.1 cm x 11.7 cm x 4.3 cm)
Material: Galvanized steel, 18 gauge (1.2 mm)

Power Requirements

Voltage (supply): 120 VAC

Ordering Information

D8004 Transformer Enclosure

D8004

For applications such as fire alarm that might require a transformer enclosure.

**NO
EXCUSES!**



FDB

Fire Alarm Control Unit (FACU) Records & Document Box

The Space Age FDB has been developed to be a code compliant solution to a mandated item specified by the National Fire Code (NFPA 72).

An internal galvanized sleeve holds the documents safely and securely. Access to the documents is via a high security CAT 30 Lock Set.

NFPA 72 section 6.2.2.1 states, "A record of installed software and firmware version numbers shall be maintained at the location of the fire alarm control unit." The FDB is large enough to hold Operating Manuals, Permits, Shut-Down Instructions and more.

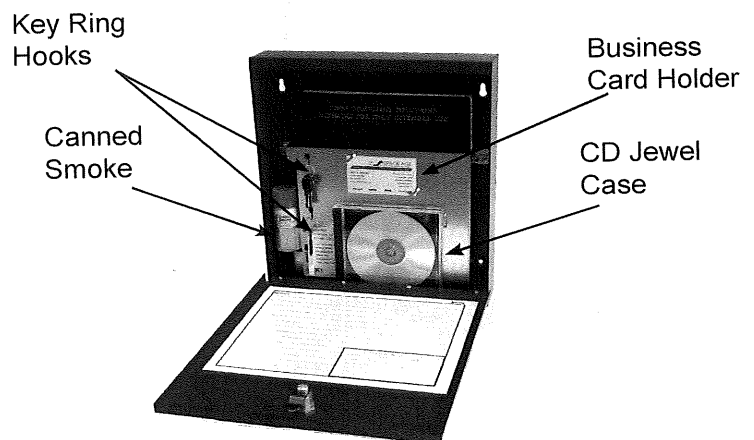
The galvanized sleeve also contains 2 hooks for key rings or thumb drives, a place for several business cards, a cutout for a 1.4 Oz. can of test gas and a slot where a standard CD "jewel" case can be stored.

Held in by two "wing nuts" the sleeve is easily removable to allow storage of a 1.5" 3 ring binder.

Standard Features:

- Overall Dimensions are:
12" Wide x 13.1" High x 2.25" Deep
- CAT 30 Secured Locking Door
- Piano Hinged Door w/Notes Sticker
- Removable document holder can hold 1" of 8.5" x 11" paperwork
- Powder Coat Red Finish
- 16 Gauge CRS construction
- Embossed:
 - Key Ring Hooks
 - Business Card Holder
 - CD Case Slot
- 1.4 Oz. can of detector test gas
- Private labeling available

The door reads "FACU MAINTENANCE RECORDS" in 1" tall white lettering. Custom Logo and Lock Sets are available upon request.



ISO 9001
REGISTERED
COMPANY



AcEBOX

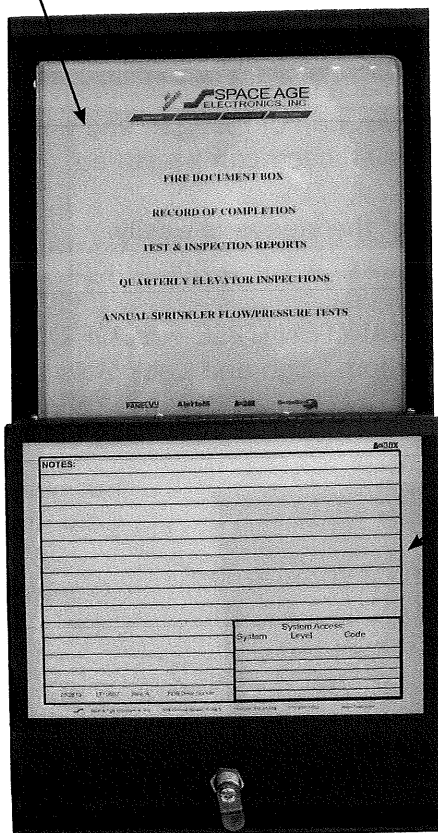
Space Age Electronics, Inc.
www.1sae.com
800.486.1723 Toll Free
508.485.0966 Local
508.485.4740 Fax

Specifications:

The Fire Document Box (FDB) shall be constructed of 16 gauge cold rolled steel (CRS), it shall be painted with a durable red powder coat paint. The front door shall be lettered with the words "FACU MAINTENANCE RECORDS" in White indelible letters 1" in height. The door of the FDB shall be locked with a keyed lock (standard shall be CAT 30, but others shall be available along with Private Labeling).

Inside the cabinet shall contain a 16 gauge galvanized CRS sleeve. This sleeve shall allow for the storage of 1" of paper, test and inspection records, manuals and other important documents. The sleeve shall also facilitate the hanging of key rings and thumb drives (for data storage) along with business cards and space for a CD 'jewel' case. The unit shall also contain a 1.4oz can of smoke detector test gas. Inside the door shall have a "Notes" label for the recording of valuable information such as AHJ approvals, various system codes and the location of hard to find devices.

If so desired, the internal sleeve (held in by 2 wing nuts) may be removed and the space used to insert a 1.5" 3 ring binder.



Ac-BOX		
NOTES:		
		System Access:
System	Level	Code
EA2613 LT10507 Rev. A FDB Door Sticker		
Space Age Electronics, Inc. 188 Central Street, Suite 1 Hudson, MA 01749 800-486-1723 www.1sae.com		

Notes Sticker inside FDB Door

Ordering Information:

Part #	Description
SSU00672	FDB Fire Document Box
SSU00673	FDB Custom Logo/lock (ask for Form FD10498 to order custom box)
CK1	Replacement 1.4 Oz Test Gas

Ac-BOX
Space Age Electronics, Inc.
www.1sae.com
800.486.1723 Toll Free
508.485.0966 Local
508.485.4740 Fax

No Excuses, Just Solutions!

This document is subject to change without notice, see doc # ED0479 for legal disclaimer

Series PM6600 & PM6700 Manual Non-Code Keyed Stations

Features

- MM101 Key Switch Cover
- Sturdy Metal Construction
- Enclosed Switch with Optional Glass Rod
- 10 Amp @ 120 Vac, 5 Amp @ 24 Vdc Switch Contact Rating
- Stations Available are: Single Action, Dual Action, Pre-Signal / General Alarm, Institutional, Weatherproof, and Explosion Proof
- UL, CSFM Listed & MEA approved
- Made in USA

Description

The PM6600/6700 series meets the requirements of the keyed reset station in every way. By using the standard Faraday MM101 series key, the user eliminates the need to search through many different reset keys. All stations are constructed of a solid die cast housing and come painted glossy red. The back switch plate is made of thick 14 Ga. plated steel and comes in a one gang size.

The electrical switch has a hefty 10 Amp @ 120 Vac normally open contact rating. All stations come with terminal block connections with the exception of the single action stations. These may be ordered with terminal blocks or pigtails (See ordering information for a more detailed description).

Explosion proof and weatherproof units come complete with their own back box. Optional PM6767 matching red surface interior back boxes are also available.

Operation

Alarm

To activate the manual station, a firm downward pull of the recessed pull lever is required. Such action locks the lever in the down position, breaks the glass rod, (if used) and actuates the switch creating an alarm condition.

Reset

To restore an operated manual station to normal standby condition requires the use of a standard Faraday MM101 key. The lock, located at the top of the station, is turned with an inserted MM101 key.

PM6608/
PM6700 (right) &
PM 6696 (below)



This lets the front of the station swing down and allows the recessed pull down lever to be reset in the normal up position. Replacement of the glass rod (if used) is not necessary to reset the station. However, spare glass rods can be stored inside the station. To lock the station swing the front of the station back up to its original position and turn the MM101 key in the previously operated position.

Engineering Specification

Furnish and install where located on the drawings Faraday non-code pull stations. The stations should be pull down operation type with operation instructions provided on the station in raised letters. The station should be of metal construction, finished in fire alarm red/white, and shall be capable of proper operation with or without a break glass rod. Stations using any plastic parts other than the switch body, or requiring the use of a break glass rod to maintain a standby condition shall not be acceptable.

Upon operation the pull down lever shall lock into the alarm position and remain so until manually reset. A common Faraday MM101 key shall be required to gain access for resetting the station, testing the station or replacing the glass rod. Stations with test features that do not test the actual station actuating switch shall not be acceptable.

Stations shall contain one or more normally open alarm contacts. Wiring to the fire alarm system initiating circuit shall be via pressure type screw terminals or pigtail wires with in and out wiring required.

Specifications

Electrical

Contacts – All contacts except General Alarm:
10A @ 120 Vac, General Alarm: 5A @ 30 Vdc

Dimensions

4-3/4" (H) x 3-3/16" (W) x 7/8" (D)

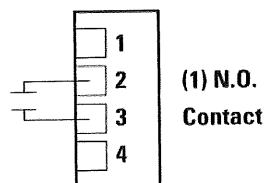
Weight

15-1/2 oz.

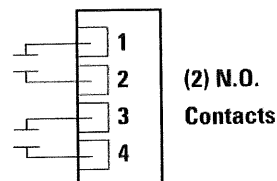
Mounting

Single gang box

Wiring



(1) N.O.
Contact



(2) N.O.
Contacts

Ordering Information

Model	Description	Part No.
Single Action Stations		
PM6700	(RMS-1P-KL) Station, N.O., Pigtails	500-648504FA
PM6608	(RMS-1T-KL) Station, N.O., Terminals	500-648505FA
Dual Action Stations		
PM6696	(RMS-2T-LP-KL) Station, (2) N.O., Terminals	500-648507FA
Pre-Signal/General Alarm Stations		
PM6695	(RMS-1T-KS-KL) N.O. Pre-sig, N.O. Terminals	500-648265FA
Weatherproof Stations		
PM6699	(RMS-2T-WP-KL) (2) N.O. Terminals	500-648266FA
Accessories		
PM6698	(BB) Surface Back Box, Interior	500-648506FA
PM7601	Glass Rods (pack of 10)	500-648245FA
10531	(STI1130) Cover, surface mount w/horn	500-648563FA
10538	(STI1130) Cover, flush mount, w/ horn	500-648591FA
10539	(STI1200) Cover, flush mount, w/o horn	500-648253FA



Siemens Building Technologies, Inc.
8 Fernwood Road • Florham Park, NJ 07932
Tel: (973) 593-2600 • Fax: (973) 593-6670
Web: www.faradayfirealarms.com

WARNING - The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information, are provided with the product and are available from the Manufacturer. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact the Manufacturer.

Bosch 7024

Quantity	Part #	Description	Standby	Alarm	Total standby	Total alarm
1	7024	Fire Panel	0.200	0.380	0.200	0.380
0	D7036	Annunicator	0.080	0.100	0.000	0.000
1	D7034	Expander	0.044	0.160	0.044	0.160
0	D7039	Multiplex	0.150	0.150	0.000	0.000
	FAI	Pull Station	0.000	0.000	0.000	0.000
4	D285	Smoke	0.001	0.001	0.004	0.004
			0.001	0.001	0.000	0.000
			0.001	0.001	0.000	0.000
			0.001	0.001	0.000	0.000
			0.001	0.001	0.000	0.000
		Duct Detector	0.001	0.001	0.000	0.000
		Duct smoke	0.001	0.001	0.000	0.000
		Duct relay	0.001	0.001	0.000	0.000
		Duct Remote	0.001	0.001	0.000	0.000
		Remote light	0.001	0.001	0.000	0.000
			0.000	0.000	0.000	0.000
			0.000	0.000	0.000	0.000
1		NAC power maximum	0.000	4.000	0.000	4.000
					0.000	0.000
					0.000	0.000
					0.000	0.000
		Miscellaneous			0.000	0.000
TOTAL			0.484	4.800	0.248	4.544

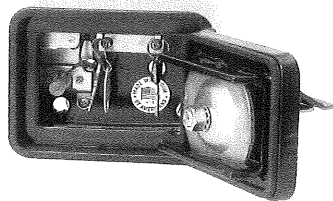
	Hours	Standby current		Total
	24	0.2480		5.952
Minutes		Alarm current		
5	0.08333333	4.5440		0.379
		Battery Capacity		
	20%	6.3307		7.597

High Security Industrial/Government Key Box

Recessed Mount
with Face Flange



Surface Mount



The number one high-security KNOX-BOX® is used for most commercial applications including businesses, schools, government and public buildings, community associations and apartment complexes. The 3200 Series KNOX-BOX holds keys, access cards and other small items necessary for emergency access.

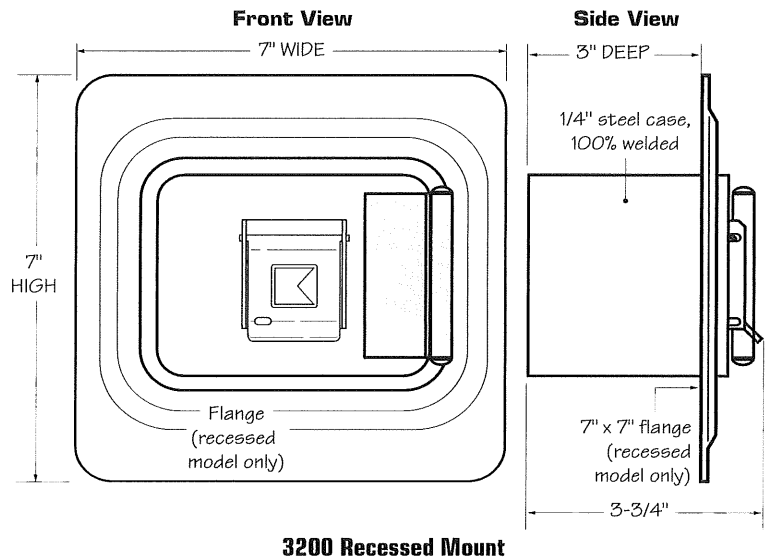
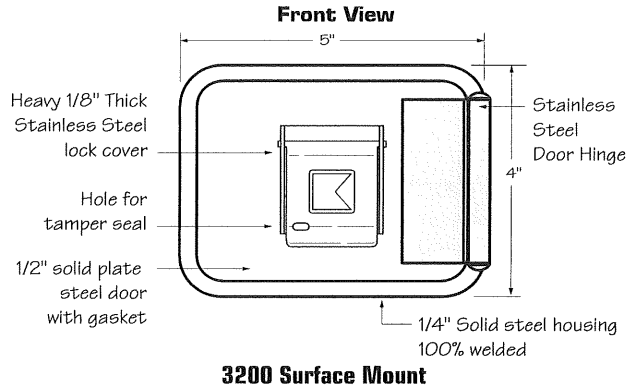
The hinged-door 3200 Series KNOX-BOX is more convenient than the lift-off door version because it allows single-handed operation and opened or closed, it's all one unit.

Features and Benefits

- Holds up to 10 keys and access cards in interior compartment
- Ensures high security. Box and lock are UL® Listed
- Includes a Knox-Coat® proprietary finishing process that protects Knox products up to four times better than standard powder coat
- Resists moist conditions with a weather resistant door gasket
- Hinged door allows single-handed operation
- Colors: Black, Dark Bronze or Aluminum
- Weight: Surface mount - 8 lbs.
Recessed mount - 9 lbs.

Options

- Alarm tamper switches (UL Listed)
- Recessed Mounting Kit (RMK) for recessed models only
- Inside switch for use on electrical doors, gates and other electrical equipment



Ordering Specifications

To insure procurement and delivery of the 3200 Series KNOX-BOX, it is suggested that the following specification paragraph be used:

KNOX-BOX surface/recessed mount with hinged door, with/without UL Listed tamper switches. 1/4" plate steel housing, 1/2" thick steel door with interior gasket seal and stainless steel door hinge. Box and lock UL Listed. Lock has 1/8" thick stainless steel dust cover with tamper seal mounting capability.

Exterior Dimensions: Surface mount body- 4"H x 5"W x 3-3/4"D
Recessed mount flange- 7"H x 7"W

Lock: UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.

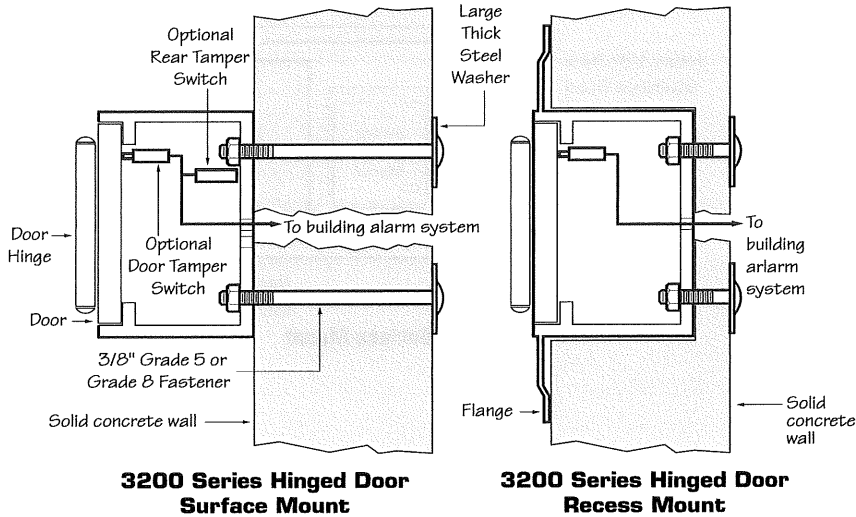
Finish: Knox-Coat® proprietary finishing process

Colors: Black, Dark Bronze or Aluminum

P/N: 3200 Series KNOX-BOX (mfr's cat. ID)

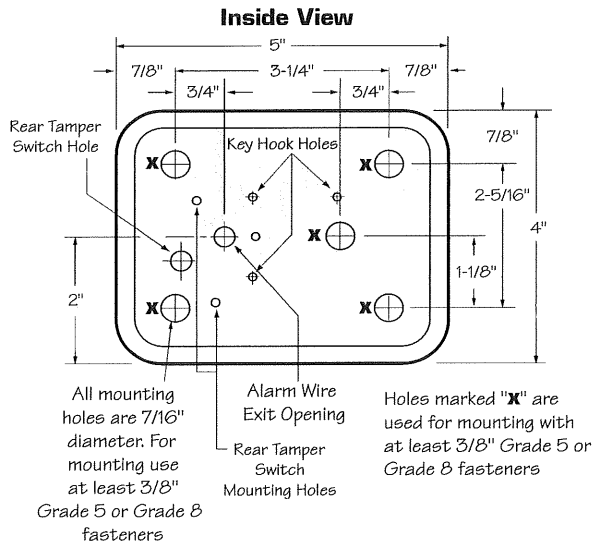
Mfr's Name: **KNOX COMPANY**

**Suggested minimum mounting height
6 feet above ground**



**3200 Series Hinged Door
Surface Mount**

**3200 Series Hinged Door
Recess Mount**



All mounting holes are 7/16" diameter. For mounting use at least 3/8" Grade 5 or Grade 8 fasteners

Alarm Wire Exit Opening
Rear Tamper Switch Mounting Holes

Holes marked "X" are used for mounting with at least 3/8" Grade 5 or Grade 8 fasteners

Attention: KNOX-BOX® is a very strong device that MUST be mounted properly to ensure maximum security and resist physical attack.

Knox® Rapid Entry System

The Knox Company manufactures a complete line of high security products including Knox-Box key boxes, key vaults, cabinets, key switches, padlocks, locking FDC caps, plugs and electronic master key security systems. For more information or technical assistance, please call Customer Service at 1-800-552-5669.

Recessed Mounting Kit

The 3200 Recessed Mounting Kit (RMK) is used for recessed models only. It contains a shell housing and mounting hardware to be cast-in-place in new concrete or masonry construction. After construction is completed, the KNOX-BOX mounts inside the RMK. The RMK may only be used in new concrete or masonry construction.

Installation In Cast Concrete

The optional Recessed Mounting Kit is for use in new concrete or masonry construction only. The kit includes a shell housing and mounting hardware to be cast-in-place. The KNOX-BOX is mounted into the shell housing after construction is completed.

Dimensions

Rough-in Dimensions: 6-1/2"H x 6-1/2"W x 5"D

IMPORTANT: Care should be taken to insure that the front of the RMK shell housing, including the cover plate and screw heads, is flush with the finish wall. The RMK must be plumbed to insure vertical alignment of the vault.

Recessed Mounting Using Recessed Mounting Kit (RMK)

