

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Permit Number: 100057

Please Read Application And Notes, If Any, Attached

This is to certify that 250-256 DANFORTH STREET LLC/Security

has permission to install fire alarm

PERMIT ISSUED

AT 254 DANFORTH ST

CB# 057 G003001

26

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 buildings and structures, and of the application on file in this department.

City of Portland

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise worked-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. CAPT. R. Jantzen

Health Dept. _____

Appeal Board _____

Other _____

Department Name

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

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

Permit No: 10-0057	Issue Date:	CBL: 057 G003001
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Location of Construction: 254 DANFORTH ST	Owner Name: 250-256 DANFORTH STREET LL	Owner Address: 81 HILLCREST AVE	Phone:
Business Name:	Contractor Name: Seacoast Security	Contractor Address: 4 Summer Street Freeport	Phone: 2078650394
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm System	Zone: R-6

Past Use: 6 Unit condo - Connected w/ Pending permit#071322	Proposed Use: 6 Unit condo - Connected w/ Pending permit#071322 - install fire alarm	Permit Fee: \$40.00	Cost of Work: \$1,500.00	CEO District: 2	Zone: 6365#
--------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------	-------------------------------	------------------------------------	---------------------------	-----------------------

Proposed Project Description: install fire alarm	FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied INSPECTION: Use Group: U Type: Alarm Signature: <i>(Signature)</i> Signature: <i>(Signature)</i> PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: _____ Date: _____
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Permit Taken By: Ldobson	Date Applied For: 01/21/2010	Zoning Approval	
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1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Min <input type="checkbox"/> MM <input type="checkbox"/> <input type="checkbox"/> Denied Date: <i>(Signature)</i> 1/21/10	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: _____	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>(Signature)</i>
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PERMIT ISSUED

JAN 26 2010

City of Portland

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

BUILDING PERMIT INSPECTION PROCEDURES

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

to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-construction Meeting will take place upon receipt of your building permit.

 X **A final inspection is required to be performed by the Fire Department. A fire alarm test report must be presented at that time.**

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

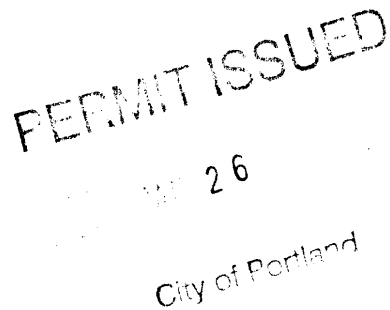
CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.

Signature of Applicant/Designee

Date

Signature of Inspections Official

Date



City of Portland, Maine - Building or Use Permit

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

Permit No: 10-0057	Date Applied For: 01/21/2010	CBL: 057 G003001
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Location of Construction: 254 DANFORTH ST	Owner Name: 250-256 DANFORTH STREET LL	Owner Address: 81 HILLCREST AVE	Phone:
Business Name:	Contractor Name: Seacoast Security	Contractor Address: 4 Summer Street Freeport	Phone: (207) 865-0394
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm System	

Proposed Use: 6 Unit condo - Connected w/ Pending permit#071322 - install fire alarm	Proposed Project Description: install fire alarm
------------------------------------------------------------------------------------------------	------------------------------------------------------------

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 01/21/2010

Note: **Ok to Issue:**

- 1) This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.
- 2) This property shall remain a six unit residential condominium dwelling. Any change of use shall require a separate permit application for review and approval.
- 3) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved **Reviewer:** **Approval Date:**

Note: **Ok to Issue:**

Dept: Fire **Status:** Approved **Reviewer:** Capt Keith Gautreau **Approval Date:** 01/26/2010

Note: **Ok to Issue:**

PERMIT ISSUED

MAY 26

City of Portland



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: 254-256 DANFORTH ST. CBL: 57-6-3

Exact location: (within structure) FACP - FRONT HALL 254 DANFORTH ST.

Type of occupancy(s) (NFPA & ICC): NFPA 13, NFPA 101, NFPA 72

Building owner: LOUISE MURPHY

System Designer (point of contact): LOU GARZA

Designer phone: 865-0394 E-mail: LOUG@SEACOASTSECURITY.COM

Installing contractor: SEACOAST SECURITY Certificate of Fitness No: 1006

Contractor phone: 865-0394 E-mail: LOUG@SEACOASTSECURITY.COM

This is a new application: YES NO

This is an amendment to an existing permit: YES NO Permit no: _____

The following documents shall be provided with this application:

- Floor plans
- Wiring diagram
- Annunciator details
- Equipment data sheets
- Battery & voltage drop calculations
- Input/ Output Matrix
- Designer qualifications
- Electrical Permit Pulled (check alarm/com)

COST OF WORK: \$1,500

PERMIT FEE: 40
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

RECEIVED

JAN 21 2010

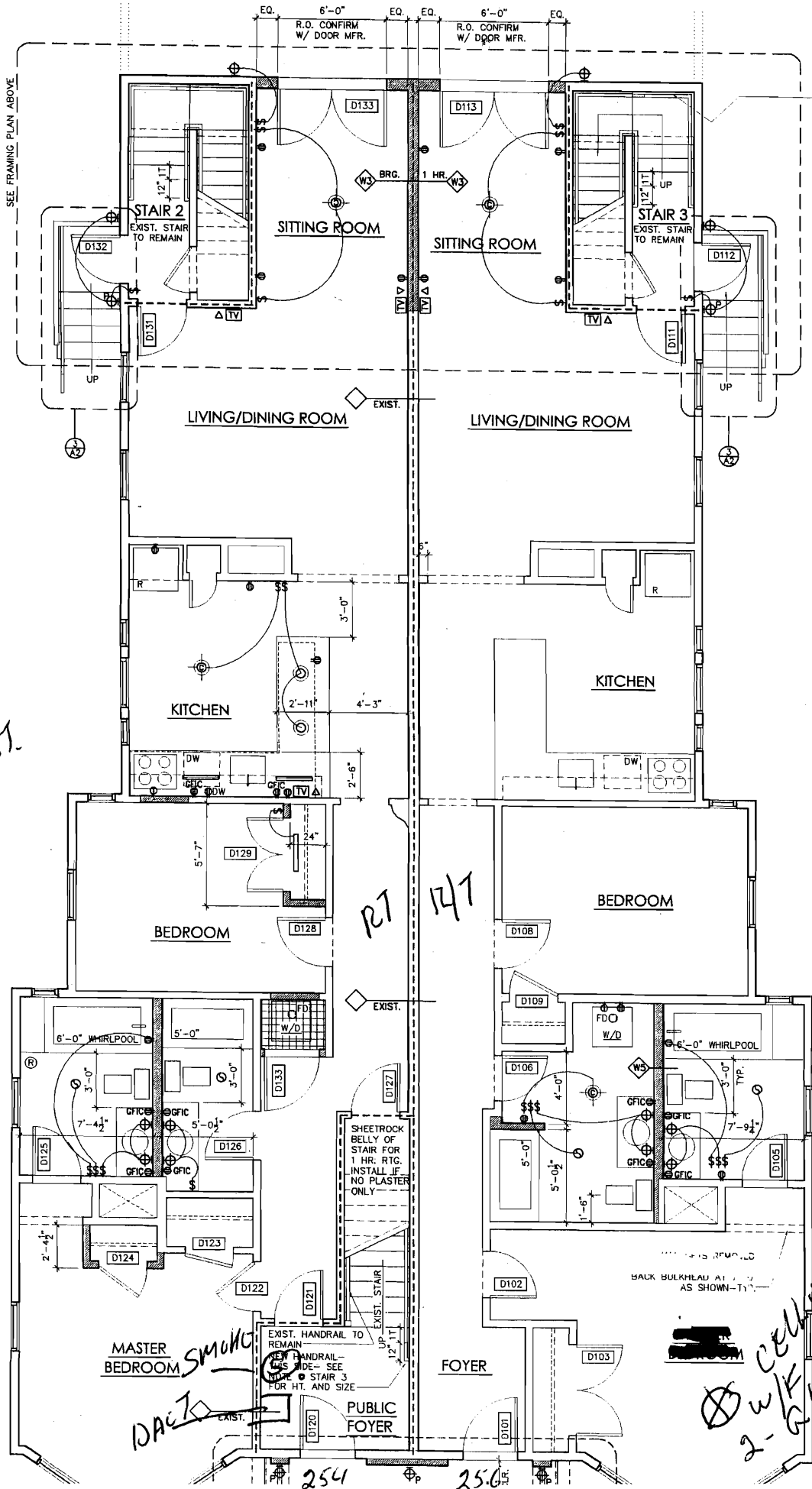
Dept. of Building Inspections
City of Portland Maine

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 full sized plans 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: 1/21/10



254-256
DRAW FOR 7H ST.

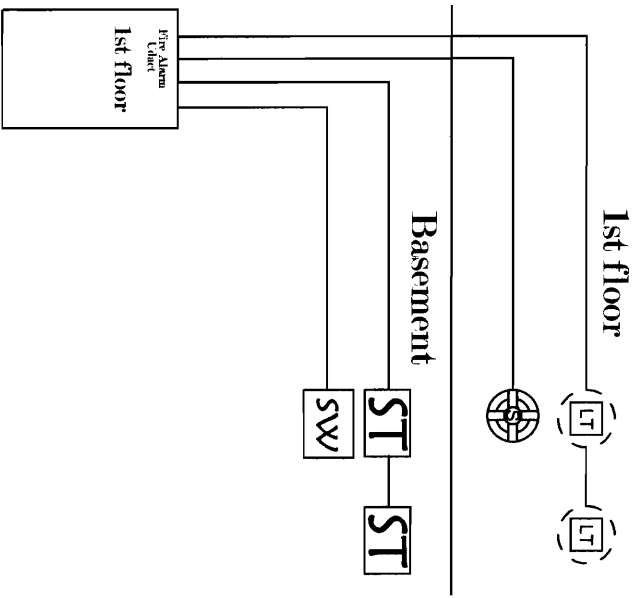
R7 147

DACT
SMOKE

2 W/K
2-GR/15

254 256

254-256 Danforth St Portland



411UDAC Fire Alarm Communicator

Section: Control/Communicators

GENERAL

The **Fire-Watch 411UDAC** from **Fire-Lite** is a compact, multifaceted, stand-alone or slave Fire Alarm Communicator designed for a variety of fire and non-fire applications. It provides four channels (inputs) that accept waterflow devices, two- and four-wire smoke detectors, pull stations, and other normally-open contact devices. The 411UDAC is a cost-effective solution for applications that require an existing (or new) Fire Alarm Control or Security Panel to transmit system status to an off-site monitoring facility for Central or Remote Station compliance. Due to its extremely flexible programming options, the 411UDAC is also ideal for use as a stand-alone unit to monitor: sprinkler systems for waterflow and supervisory conditions; processes (i.e., water level, gas detection, loss of air flow); and normally-open contact devices. With fifteen selectable transmission formats, including Ademco Contact ID, compatibility with virtually all Digital Alarm Communicator Receivers (DACR) is ensured. Programming can be accomplished on-site with a hand-held programmer (**PRO-411**), or remotely utilizing an optional **PK-411UD** Windows®-based remote upload/download software package (order **PK-CD**). The PK-411UD upload/download software also permits system interrogation and revision from a remote site.

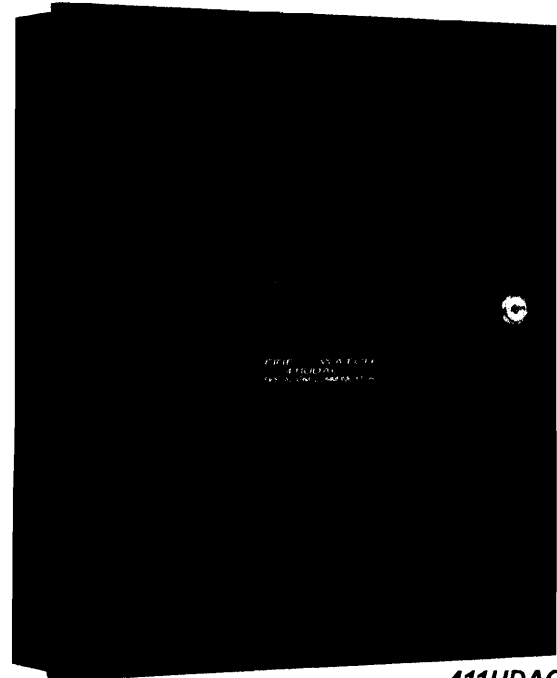
FEATURES

- Four supervised monitoring channels (inputs): three fixed Style B (Class B) and one Style A (Class A) or Style B (Class B).
- **Inputs may be individually programmed for stand-alone applications, or when monitoring a host control panel, for:**
 - ✓ Two- and four-wire smoke detectors (Inputs 1 and 3).
 - ✓ Pull station.
 - ✓ Normally-Open contacts.
 - ✓ Host panel trouble (slave mode).
 - ✓ Supervisory.
 - ✓ Supervisory (autoresettable).
 - ✓ Waterflow (silenceable).
 - ✓ Waterflow (non-silenceable).
 - ✓ Process monitoring.
 - ✓ Process monitoring (autoresettable).
- One Style Y (Class B) Notification Appliance (bell) Circuit (NAC).
- 1.0 Amp notification appliance power.
- Coded (temporal) notification appliance (bell, signal) circuit.
- 12 VDC operation.
- Capable of 60 hours of standby.



California
State Fire
Marshal
7300-0075:174

MEA
328-94-E Vol. VI



411UDAC

- **Seven individual LEDs; six visible through door:**
 - ✓ AC Power.
 - ✓ System Trouble.
 - ✓ System Alarm.
 - ✓ Supervisory.
 - ✓ Communication Fail.
 - ✓ Battery Trouble.
 - ✓ Earth Fault (not visible with door closed).
- **Dual telephone lines:**
 - ✓ Dual telephone line voltage detect.
 - ✓ Alternating phone lines for 24-hour test messages (programmable).
- Industry-first, UL recognized, "dialer runaway" prevention feature.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **Fire-Lite Alarms**, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll-Free FAX: (877) 699-4105, Website: www.firelite.com

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS



FL-411UDACT Battery Cal

Regulated Load in Standby

Device	Number of Devices		Current (Amps)		Total Current (Amps)
Main PC Bd	1	X	0.14	=	0.14
Bk-2WTB	1	X	0.001	=	0.001
411	1	X	0.078	=	0.078
STANDBY LOAD					= 0.219

Regulated Load in ALARM

Device	Number of Devices		Current (Amps)		Total Current (Amps)
Main PC Bd	1	X	0.2	=	0.2
Bk-2WTB	1	X	0.13	=	0.13
411	1	X	0.126	=	0.126
ALARM LOAD					= 0.456

Battery Amp Hour Calculation

Standby Load Current (Amps)		Required Standby Time (Typically 24 or 60 Hours)		
0.219	X	24	=	5.256 AH
Alarm Load Current (Amps)		Required Alarm Time (Typically 5 or 10 Minutes)		
0.456	X	5	=	0.04 AH
Sub Total Standby / Alarm Amp Hours				5.29 AH
Multiply by the Derating Factor				X 1.2 *
Total Ampere Hours Required				= 7 AH

* Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

* The HP300ULX is capable of housing batteries up to 12 AH. Batteries larger than 12 AH rec external battery cabinet such as the BB-26, BB-55F or other UL listed external battery cabir

- New long-distance Carrier Access Code (CAC) compliant, accepting 20-digit central station and service terminal telephone numbers.
- Industry-first, user-selectable restoral methods.
- Fully programmable transmittal codes for fire and non-fire (e.g., process monitoring) applications.
- **Capable of transmitting the following DACT information, in addition to vital system status of the host control panel:**
 - ✓ DACT troubles.
 - ✓ Telephone line 1 and 2 voltage fault.
 - ✓ Primary or Secondary Central Station communication fault.
 - ✓ System off-normal.
 - ✓ 24-hour normal test.
 - ✓ 24-hour abnormal test.
- Includes 15 popular communication formats, including the widely used **Ademco Contact ID** format, ensuring compatibility with virtually all DACRs.
- Local piezo sounder with separate and distinct sounds for various conditions.
- Acknowledge/System Silence and Reset switches.
- Alarm verification.
- Signal silence inhibit.
- Autosilence.
- Trouble reminder (with 24-hour resound).
- Real-time clock.
- **OPTIONAL: two Form-C relays (411RK), fully programmable to activate for the following conditions:**
 - ✓ Fire alarm.
 - ✓ Process monitoring (autoresettable).
 - ✓ Host control panel trouble.
 - ✓ Total communication trouble.
 - ✓ Fire supervisory (latching).
 - ✓ Fire supervisory (autoresettable).
 - ✓ DACT trouble (factory default for relay).
 - ✓ Process monitoring.
- Optional **PK-411UD** Remote Upload/Download Kit (order **PK-CD**).
- Optional **DP-2** Dress Panel (required for Canadian applications).

HOUSING

The cabinet is red and measures 14.5" (36.83 cm) high x 12.5" (31.75 cm) wide and 2.875" (7.303 cm) deep. It provides space for up to two 7 A.H. batteries (order batteries separately). An optional dress panel, DP-2 (required for Canadian installations), which mounts inside the cabinet, is available. The dress panel restricts access to the system wiring but allows access to the membrane switch panel.

PHONE LINE CONNECTIONS

Two modular phone connections are provided on the 411UDAC, accessible by simply opening the door. They provide connections for two separate telephone lines using standard RJ31X or RJ38X jacks. Both telephone lines are constantly supervised for proper voltage and current. If one phone line goes into fault, and the remaining is operational, a report is sent to the central or remote station via the operable phone line.

COMMUNICATION FORMATS

- 0: 4+1 Ademco Express Standard, DTMF, 1400/2300 ACK.
- 1: 4+2 Ademco Express Standard, DTMF, 1400/2300 ACK.
- 2: 3+1 Standard 1800 Hz Carrier, 2300 Hz ACK.
- 3: 3+1 Expanded 1800 Hz Carrier, 2300 Hz ACK.
- 4: 3+1 Standard 1900 Hz Carrier, 1400 Hz ACK.
- 5: 3+1 Expanded 1900 Hz Carrier, 1400 Hz ACK.
- 6: 4+1 Standard 1800 Hz Carrier, 2300 Hz ACK.
- 7: 4+1 Expanded 1800 Hz Carrier, 2300 Hz ACK.
- 8: 4+1 Standard 1900 Hz Carrier, 1400 Hz ACK.
- 9: 4+1 Expanded 1900 Hz Carrier, 1400 Hz ACK.
- A: 4+2 Standard 1800 Hz Carrier, 2300 Hz ACK.
- B: 4+2 Expanded 1800 Hz Carrier, 2300 Hz ACK.
- C: 4+2 Standard 1900 Hz Carrier, 1400 Hz ACK.
- D: 4+2 Expanded 1900 Hz Carrier, 1400 Hz ACK.
- E: Contact ID, DTMF, 1400/2300 ACK.
- F: Future Use.

SPECIFICATIONS

This digital communicator/transmitter has been designed to comply with standards set forth by the following regulatory agencies:

- Underwriters Laboratories, Inc.
- NFPA 72 National Fire Alarm Code.
- CAN/ULC: S527 - M87 Standard for Control Units for Fire Alarm Systems.

FCC Registration: OAAUSA-25431-AL-E.

Ringer Equivalence: 0.5 B.

For Canadian Applications:

IC Certificate Number: 2132 9028 A.

Ringer Equivalence Number (REN): 0.2.

PROGRAMMING: An optional digital programming unit with a keypad, model PRO-411, is available for programming the 411UDAC. It is also used for troubleshooting and accessing the various modes of operation. **Off-site programming** can be accomplished with the optional PK-411UD on PK-CD. The PK-411UD enables a user to program the 411UDAC off-site via the public switched telephone network using any personal computer with Windows® 3.1 or higher or Windows® 95 and a 1200-baud Hayes® compatible modem.

GENERAL SPECIFICATIONS:

AC Power (TB3): 120 VAC, 60 Hz, 0.3 A. **Wire size:** minimum 14 AWG (2.00 mm²) with 600 V insulation.

Battery (Lead-Acid Only) (J3): **Maximum charging circuit:** normal flat charge 13.7 V @ 0.6 A. **Maximum charger capacity:** 14 AH battery.

Channels/Inputs (TB2 Terminals 1 through 10):

- Programmable Channels 1 through 4.
- Power-limited circuitry.
- Fully supervised (monitored for opens, shorts, and earth faults).
- Normal operating voltage: 12.0 VDC (ripple 100 mV maximum).
- End-of-line resistor: 2.2K ohms, 1/2 watt (part # 27070, UL listed).

Operation for each channel:

- **Channel/Input 1**, Style B (Class B) two-wire smoke detector input and **Channel/Input 3**, Style B (Class B) or Style D (Class A) two-wire smoke detector or waterflow input.
- **Channel/Input 2** and **Channel/Input 4** Style B (Class B) contact closure input.
- Refer to *Device Compatibility Document* for listed compatible devices.

Notification Appliance Circuit (TB4 Terminals 1[+] and 2[-]):

- Style Y (Class B) circuit.
- Power-limited and supervised (monitored for opens, shorts, and earth fault).
- Operating voltage nominal 13.8 VDC.
- Current for all external devices: 1.0 A.
- End-of-line resistor: 2.2K ohms, 1/2 watt (P/N 27070).
- Refer to *Device Compatibility Document* for listed compatible devices.

Two Optional Form-C Relays (TB1 Terminals 1 through 6): **Operating voltage:** nominal 12 VDC. **Contact rating:** 2.0 A @ 30 VDC (resistive), or 0.5 A @ 30 VAC.

12 VDC Resettable Power (TB4 Terminals 3[+] and 4[-]):

- Operating voltage: nominal 12 volts.
- Up to 200 mA available to power four-wire smoke detectors.
- Power-limited and supervised circuitry.
- Recommended maximum standby current: 50 mA.

NOTE: For power supply and battery calculations, refer to the 411UDAC manual.

OPERATING POWER: Primary Power Source (AC): AC power connections are made inside the 411UDAC cabinet. The primary power source is 120 VAC, 60 Hz, 0.3 A.

Secondary Power Source (Batteries): One 12-volt battery can provide power for up to 7 AH applications. Two 12-volt, 7 AH batteries (in parallel) can provide power for up to 14 AH applications (60-hour standby). The battery charger is current-limited and capable of recharging sealed lead-acid-type batteries. The charger shuts off when the system is in alarm. Refer to the battery calculations table in the 411UDAC manual to determine the correct battery rating.

TRANSFORMER ASSEMBLY: One transformer is shipped in the same carton as the cabinet and main circuit board but not mounted in the cabinet. The transformer should be installed before the cabinet is mounted to the wall.

AUXILIARY RELAY: Two optional Form-C relays (411RK) are available for installation on the 411UDAC main circuit board. The relays are programmable for activation on fire alarm, host panel trouble, fire supervisory, process monitoring, total communications failure, and DACT trouble. **Relay contact rating:** 2.0 A @ 30 VDC (resistive); or 0.5 A @ 30 VAC (resistive).

PRODUCT LINE INFORMATION

411UDAC Four-channel, dual-line, stand-alone or slave Fire Alarm Communicator. Includes housing, operating and programming instructions. Use PRO-411 (*below*) hand-held DACT programmer for local programming; or PK-411UD on PK-CD (*below*) Windows®-based programming software for remote programming and real-time diagnostics.

DP-2 Dead-front dress panel, **required for Canadian applications.**

PRO-411 Optional hand-held DACT programmer which can be used to troubleshoot and program the 411UDAC, as well as access the various modes of operation.

PK-CD Contains PK-411UD programming software for a Windows®-based PC computer. The PK-411UD enables a user to program the 411UDAC off-site via the public switched telephone network using any personal computer with Windows® 3.1 or greater and a 1200-baud Hayes®-compatible modem.

411RK Optional dry auxiliary Form-C relays, with contacts rated for 2.0 A @ 30 VDC (resistive) or 0.5 A @ 30 VAC (resistive). *Optional use requires two relays.*

MCBL-7 DACT phone cord, seven feet long (*two required*).

BAT-1270 Battery, 12-volt, 7.0 AH (*one required for 24-hour systems; two [wired in parallel] required for 60-hour systems*).

Fire-Lite® Alarms is a registered trademark of Honeywell Corporation Inc. **Windows®** is a registered trademark of Microsoft Corporation. ©2006 Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.

**See page 4 for
COMPATIBLE
UL-LISTED
RECEIVERS**

COMPATIBLE UL-LISTED RECEIVERS

The chart below shows UL-listed receivers compatible with the 411UDAC:

	Format # (addresses 16 & 42)	Ademco 685 (1)	Silent Knight 9000	ITI CS4000 (3)	FBI CP220FB	Osborne Hoffman Models 1 & 2	Radionics 6000/6500 (5)	Sescoa 3000R (7)	SurGuard MLR-2 (9)
0	4+1 Ademco Express	✓			✓				✓
1	4+2 Ademco Express	✓			✓	✓ (8)		✓	✓
2	3+1/Standard/1800/2300	✓	✓ (2)	✓	✓ (4)	✓	✓(5,6)	✓	✓
3	3+1/Expanded/1800/2300	✓	✓ (2)	✓	✓ (4)	✓		✓	✓
4	3+1/Standard/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
5	3+1/Expanded/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
6	4+1/Standard/1800/2300	✓	✓ (2)	✓	✓ (4)	✓	✓ (5)	✓	
7	4+1/Expanded/1800/2300	✓	✓ (2)		✓ (4)	✓		✓	✓
8	4+1/Standard/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
9	4+1/Expanded/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
A	4+2/Standard/1800/2300	✓	✓ (2)	✓	✓ (4)	✓	✓ (5)	✓	✓
B	4+2/Expanded/1800/2300	✓	✓ (2)		✓ (4)	✓		✓	✓
C	4+2/Standard/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
D	4+2/Expanded/1900/1400	✓	✓ (2)		✓ (4)	✓		✓	✓
E	Ademco Contact ID	✓			✓	✓			✓

51735rec.tbi

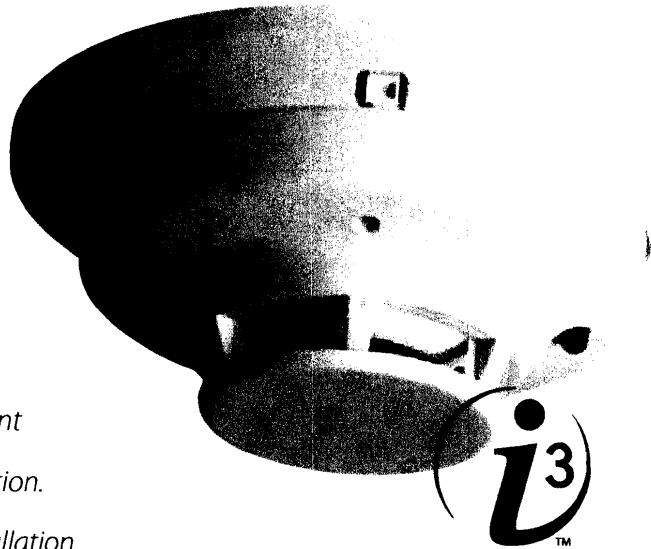
KEY:

- (1) With 685-8 Line Card with Rev 4.4d software.
- (2) With 9002 Line Card Rev 9035 software or 9032 Line Card with 9326A software.
- (3) Rev. 4.0 software.
- (4) FBI CP220FB Rec-11 Line Card with Rev 2.6 software and a memory card with Rev 3.8 software.
- (5) Model 6500 with Rev 600 software.
- (6) Model 6000 with Rev 204 software.
- (7) With Rev B control card at Rev 1.4 software and Rev C line card at Rev 1.5 software.
- (8) Model 2 only.
- (9) Version 1.62 software.



Photoelectric Smoke Detectors

System Sensor *i*³™ series smoke detectors represent significant advancement in conventional detection. The *i*³ 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 back boxes, 4-square back boxes, 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 *i*³ line redefines installation ease with its plug-in design. This allows an installer to pre-wire bases (included with 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, *i*³ heads plug into the base with a simple Stop-Drop 'N Lock™ action.

Intelligence. *i*³ detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the *i*³ line to minimize nuisance alarms. 2-wire *i*³ detectors can generate a remote LED-indicated maintenance signal when connected to the 2W-MOD2 loop test/maintenance module or a panel equipped with the *i*³ protocol. The SENS-RDR, a wireless device, displays the sensitivity of *i*³ detectors in terms of percent-per-foot obscuration.

Instant inspection. The *i*³ 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 *i*³ protocol, the EZ Walk loop test feature is available on 2-wire *i*³ detectors. This feature verifies the initiating loop wiring by providing LED status indication at each detector.

Agency Listings



5911

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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 that 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: 12/24 V non-polarized Minimum: 8.5 V Maximum: 35 V
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 @ 12 V, 23 mA @ 24 V
Peak Standby Current	2-wire: 100 µA; 4-wire: n/a
Alarm Contact Ratings	2-wire: n/a; 4-wire: 0.5 A @ 30 V AC/DC

Physical Specifications

Dimensions (including base)	5.3 inches (127 mm) diameter; 2.0 inches (51 mm) height
Weight	6.3 oz (178 g)
Operating Temperature Range	2W-B and 4W-B: 32°F to 120°F (0°C to 49°C); 2WT-B and 4WT-B: 32°F to 100°F (0°C to 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 to 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 @ 12 V, 23 mA @ 24 V	
4WT-B	Yes	4-wire	20 mA @ 12 V, 23 mA @ 24 V	
Accessories				
2W-MOD2	2-wire loop test / maintenance module		RT	Removal / replacement tool
SENS-RDIR	Sensitivity reader		A77-AB2	Retrofit adapter bracket, 6.6 inch (16.76 cm) diameter



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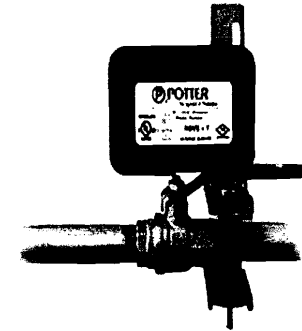
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News / **RBVS Universal Ball Valve Switch**

The Potter RBVS Universal Ball Valve Switch is the **only patented** product designed to monitor the full open position on any new or previously installed ¼ turn ball valve in a sprinkler system.

The RBVS **complies with NFPA 72, 2007 6.8.5.10.4** and building codes requiring the monitoring of ball valves installed in the alarm lines of dry pipe, pre-action, and wet systems with alarm valves. The RBVS is US patented (#6,945,509), UL/cUL listed, as well as FM approved. It comes manufactured with a 1/2" opening for conduit and screw terminals for easy wire connections, as well as a NEMA 4 gasketed enclosure with single screw cover design. Versatile mounting hardware on the RBVS allows for easy installation on ball valves and back flow preventers from ½" - 2".



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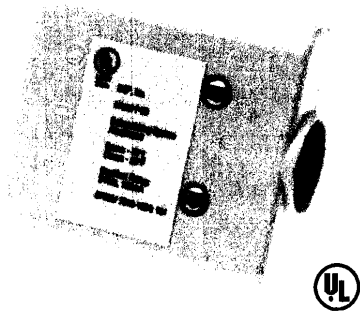


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PRODUCT SPECIFICATION SHEET

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F20 Temperature Sensor



Looking for an affordable way to monitor critical temperature settings? The F20 is always reliable, easy to install, and provides a standard dry contact output so there's no need to worry about compatibility issues.

- **Temperature Supervisory Switch**
- **Fixed Temperature Type**
- **Closed Circuit Detector Opens at 40° F
(Variance of +/- 5°F)**
- **Contact Rating 24VDC-120mA**

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