

**City of Portland, Maine - Building or Use Permit Application**

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

Job No: 2011-05-976-FAFS	Date Applied: 5/6/2011	CBL: 048 - - F - 021 - 001 - - - - -	
Location of Construction: 497 CUMBERLAND AVE	Owner Name: TROUT GROUP INVESTMENTS	Owner Address: PO BOX 7051 PORTLAND, ME - MAINE 04112	Phone:
Business Name:	Contractor Name: Maine State Security, Rich Brobst	Contractor Address: 98 Company RD Dayton MAINE 04005	Phone: (207) 247-4371
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE ALARM - Fire Alarm	Zone: R-6
Past Use: 12 residential dwelling units	Proposed Use: Same: 12 residential dwelling units - to add fire alarm system	Cost of Work: 10,000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type:
		Signature: <i>B. Gaudet</i> (SB)	Signature:
Proposed Project Description: 497 Cumberland -fire alarm		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	<b>Zoning Approval</b>		
<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>	<b>Special Zone or Reviews</b> <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>ok with conditions</i>	<b>Zoning Appeal</b> <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:	<b>Historic Preservation</b> <i>within</i> <input 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: <i>any exterior work requires A</i>
	CERTIFICATION <i>5/9/11</i>		Separate Review

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	PHON

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT

This is to certify that TROUT GROUP INVESTMENTS

Located At 497 CUMBERLAND ST

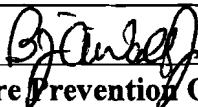
Job ID: 2011-05-976-FAFS

CBL: 048 - - F - 021 - 001 - - - -

has permission to install a new commercial fire alarm system  
provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

  
Fire Prevention Officer

(58)

Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY**

**PENALTY FOR REMOVING THIS CARD**

## BUILDING PERMIT INSPECTION PROCEDURES

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

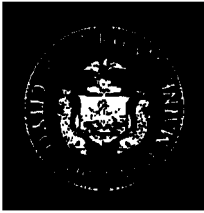
or email: [buildinginspections@portlandmaine.gov](mailto:buildinginspections@portlandmaine.gov)

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.**

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](http://www.portlandmaine.gov)*

Director of Planning and Urban Development  
Penny St. Louis

Job ID: 2011-05-976-FAFS

Located At: 497 CUMBERLAND  
ST

CBL: 048 - - F - 021 - 001 - - - -

## Conditions of Approval:

### **Zoning**

1. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
2. This property shall remain a twelve residential family building. Any change of use shall require a separate permit application for review and approval.
3. 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.

### **Fire**

The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.

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

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 and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

Fire Alarm system shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.

The annunciator shall have a locked Lexan cover.



# 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: <sup>497 of</sup> ~~488~~ Cumberland Ave CBL: 48-F-21

Exact location: (within structure) N/A

Type of occupancy(s) (NFPA & ICC): Existing Apartment Building

Building owner: Trout Group Investments / Larry Robinson

System Designer (point of contact): <sup>Must be</sup> Rich ~~Robst~~ Brobst

Designer phone: 207-775-5755 E-mail: rich@protectionprofessionals.net

Installing contractor: Maine State Security Certificate of Fitness No: 1002

Contractor phone: 207-247-4371 E-mail: info@mainestatesecurity.com

This is a new application: YES  NO  New AES Master Box: YES  NO   
(Include Master Box approval form)

Amendment to an existing permit: YES  NO  Permit no: \_\_\_\_\_

The following documents shall be provided with this application:

- Floor plans
- Wiring diagram
- Annunciator details
- Input/ Output Matrix
- Equipment data sheets
- Electrical Permit Pulled (check alarm/com)
- Scope of Work
- 11 1/2 x 17s
- pdf copy (may be e-mailed)
- Designer qualifications  
*OK F.I.R. w/ Portland.*
- Battery/ voltage drop calcs

Master box approval only: YES  NO   
(If yes check *New AES Master Box* above)

COST OF WORK: \$10000

PERMIT FEE: 120  
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

98 Company Rd  
Dayton, ME 04005-7214

The designer shall be the responsible party for this application. Download a new copy of this application at [www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire) for every submittal. Submit all plans in electronic PDF in addition to readable 11 1/2 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](http://www.portlandmaine.gov/fire).

Applicant signature: Rich S Brobst Date: 5-6-11

RECEIVED  
MAY - 6 2011  
Dept. of Building Inspections  
City of Portland Maine

# Maine State Security Services

*A Division of L'Heureux Inc.*

1308 New County RD Dayton, ME 04005  
Tel: 207-247-4371  
Fax: 207-929-8484  
Email: info@mainestatesecurity.com

May 4, 2011

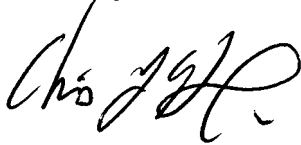
Portland Fire Prevention  
Lt. Ben Wallace  
380 Congress Street  
Portland, Me 04101

*497 al*  
Re: ~~400~~ Cumberland Ave

Scope of work: We intend to install a Fire Alarm System per NFPA101 for existing Apartment buildings with 12 or more units using option #2. The system will be a combination of hard wired and wireless devices all UL listed for commercial fire due to the construction of the building.

Please feel free to give me a call after reviewing the submittals if you have any questions.

Sincerely,



Chris L'Heureux  
President.



497<sup>000</sup>.  
Re: ~~406~~ Cumberland Avenue

Thursday, May 05, 2011

Thank you for the chance to review your fire alarm system requirements. The first item for your review is the code references which we are using to answer your various questions about the fire alarm system.

Please note the following requirements regarding the fire alarm system in your Apartment Building as per Life Safety Code NFPA 101 2006 edition:

1. Smoke detection:
  - a. Apartment buildings exceeding 11 dwelling units shall have a fire alarm system as per 31.3.4.1.1.
  - b. Pull stations are required on each level and at each exit as per 31.3.4.2.1.
  - c. Smoke detection is required in all common areas outside the dwelling units including stairways and any tenant less spaces such as the laundry room as per 31.3.4.4.2.(1).
  - d. Heat detection is required in all dwelling units as per 31.3.4.4.2.(2).
  - e. Remote notification of an alarm is required such as a digital dialer as per 31.3.4.3.5.
2. Horn/strobes:
  - a. Occupants shall be warned of the existence of fire as per section 4.5.4
  - b. The Americans with Disabilities Act requires that all items in a building shall not be discriminatory. This would include those individuals who cannot hear or see properly. The Act also allows for lawsuits if a party feels that they are being discriminated against. We urge you to seek legal advice if you should have any further questions.
  - c. NFPA 72 provides for audibility requirements and visibility requirements for any fire alarm system. Audibility has to be 15 decibels above average noise level and the visibility shall be based upon charts or formulas such as a 20 foot square room shall have a 15 candela strobe. In addition each bedroom has to achieve a minimum of 75 decibels of sound heard at the "pillow".
  - d. Basically public hallways in your building should have a 15 candela horn/strobe such that one is visible every 15 feet (or 30 feet apart for more than one). In addition minihorns or horn/strobes may have to be installed in the dwelling units based upon the audibility and impaired hearing requirements.
3. Authority Having Jurisdiction/Fire chief: IMPORTANT NOTE, the local fire department cannot provide less than what the code requires but they can provide more than the code requires. We strongly urge that any changes made to your fire alarm system be approved by the local fire representative.

Sincerely yours,

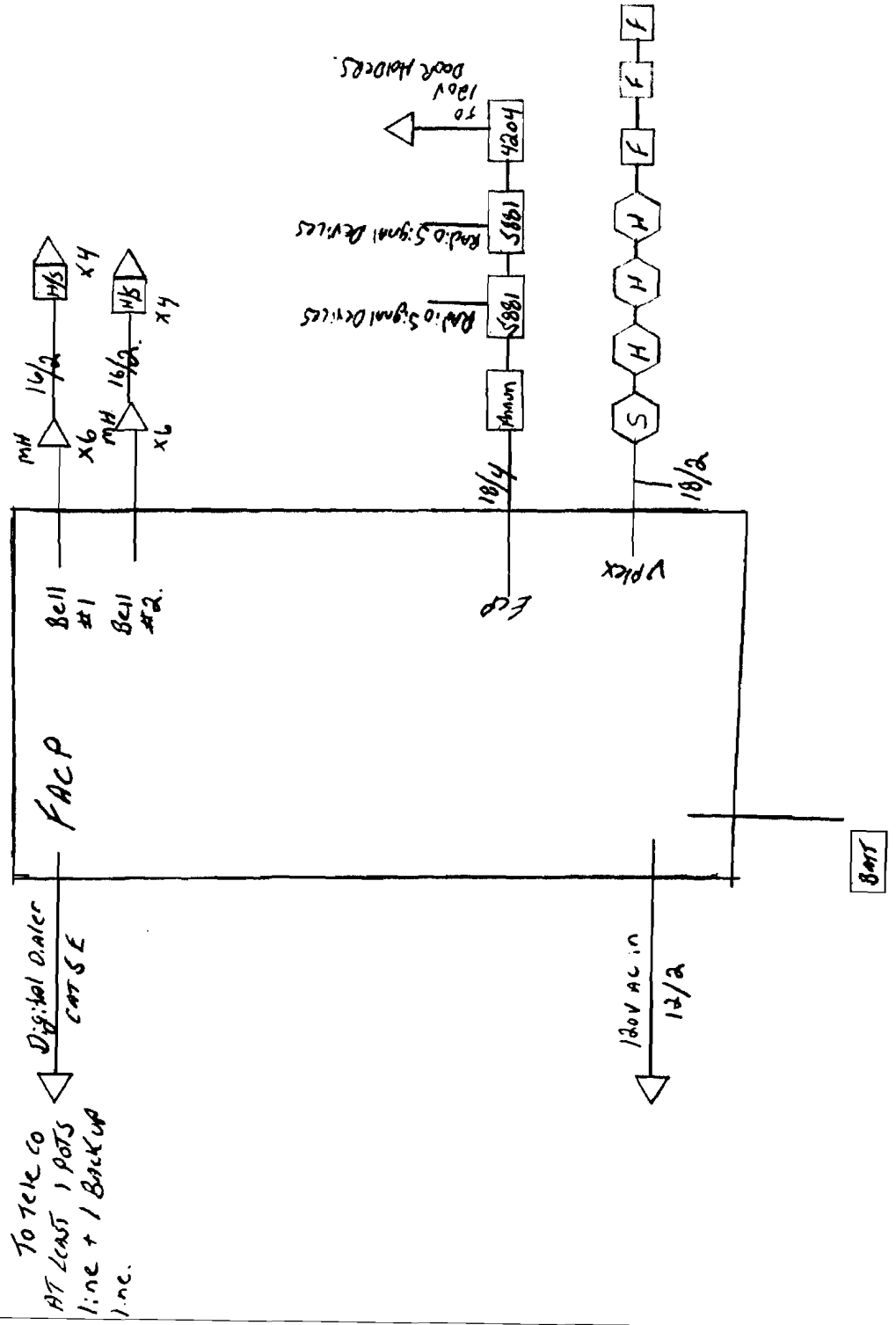
Rich Brobst, Jr  
NICET III

# Sequence of Operations

497 Cumberland Ave Portland, Maine	Audio/visual activation	Activate audible/visual signal at FACP & Annunciator	Device Description at FACP & Annunciator	Shutdown of HVAC equipment	Log event in system history	Activate Elevator Fire Hat	Activate Elevator primary or secondary control	Activate Elevator shunt trip	Silence of audible devices including FACP & annunciator	Release door holders	Release locked doors	Event acknowledgement	Reset of all system functions and all visual devices	Remote transmission to Central Station A=alarm; T=trouble; S=Supervisor; L = log only	Remote indicator
Manual Pull Stations	X	X	X	X	X					X	X			A	
Smoke detectors common area	X	X	X	X	X					X	X			A	
Heat Detectors common area and Units	X	X	X	X	X					X	X			A	
FACP/annunciator silence button	X	X	X	X	X				X					L	
FACP/annunciator acknowledge button	X	X	X	X	X							X		L	
FACP/annunciator reset button	X	X	X	X	X								X	L	
Removal of any device	X	X	X	X	X									T	
Ground fault	X	X	X	X	X									T	
System wiring "open"	X	X	X	X	X									T	
AC Power loss	X	X	X	X	X									T	
Secondary power loss	X	X	X	X	X									T	
Telephone line loss	X	X	X	X	X									T	



497B Cumberland Ave Riser,







POLLING LOOP DEVICES	Enter Quantity	How many powered by 42977?					
4193SN Two Zone SIM	9	0		1.5		13.5	
<input type="checkbox"/> LED Active?							
<input type="checkbox"/> LED Active?							
<input type="checkbox"/> LED Active?							
5192SDT Smoke Detector with Heat	1	0		2.8		2.8	
<input type="checkbox"/> LED Active?							
<input type="checkbox"/> LED Active?							
<input type="checkbox"/> LED Active?							

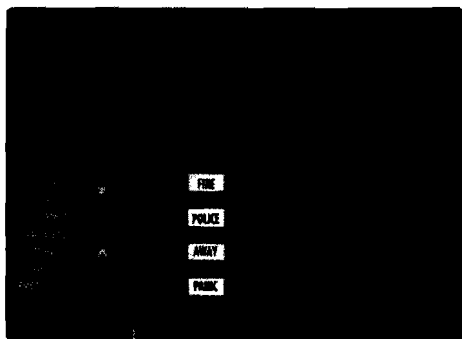
12V NOTIFICATION DEVICES ON BELL OUTPUT #1	Enter Quantity	How many powered externally?	Alarm Current (Amp)				
System sensor p2r .144 ma	4	0	0			0.576	0
System Sensor mini horn .012ma	6	0	0			0.072	0

12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)	Enter Quantity	How many powered externally?	Alarm Current (Amp)				
Enter device name, quant., & current	4	0	0			0.576	0
Enter device name, quant., & current	6	0	0			0.072	0

12V AUX POWER AND BELL CIRCUIT WIRE RUN DATA								
Panel Aux Power Wire Run (twin lead)	Feet	<Select Wire Gauge>	0.00			0.00	12.00	0.00
Panel Bell 1 Wire Run (twin lead)	Feet	#16 AWG Solid	5.08	200	2.03	12.00	12.00	0.01
Panel Bell 2 Wire Run (twin lead)	Feet	#16 AWG Solid	5.08	300	3.05	12.00	12.00	0.02

# 6160CR-2

COMMERCIAL FIRE ALPHA KEYPAD  
UL864 REV 9 LISTED



The 6160CR-2 is an addressable remote keypad intended for use in commercial fire applications with Honeywell's commercial fire control panels. The keys are continuously backlit for convenience and easy visibility. The LCD display

is backlit only when a key is depressed\*, or when the system is in alarm or trouble condition.

\*Note: The LCD may be programmed to remain on at all times (see panel instructions for details).

## FEATURES

- Four programmable function keys
- Built-in sounder
- Seven Status LEDs
  - Armed (Red)
  - Ready (Green)
  - Power (Green)
  - Fire Alarm (Red)
  - Silenced (Yellow)
  - Supervisory (Yellow)
  - Trouble (Yellow)
- Large easy-to-read display
- Red removable door
- Physical  
5.250" W x 7.437" H x 1.312" D

## SPECIFICATIONS

### Sounder

- High-quality speaker

### Electrical

- 45mA standby 160mA in alarm (sounder, back light and LED on)

### Compatibility

- Supports Control Panels
  - VISTA-32FB Rev 5 and higher
  - VISTA-128FBP Rev 4 and higher
  - VISTA-250FBP Rev 4 and higher

UL/CUL and residential Listed for commercial fire and burglary installations. To be employed with manufacturer's listed control units as indicated in the installation instructions.

*Product specifications subject to change.*

## ORDERING

**6160CR-2**

Commercial Fire Alpha Keypad

For more information: [www.honeywell.com/security/hsc](http://www.honeywell.com/security/hsc)

**Automation and Control Solutions**  
Honeywell Security & Communications  
2 Corporate Center Dr. Suite 100  
Melville, NY 11747  
1.800.467.5875  
[www.honeywell.com](http://www.honeywell.com)

L/6160CR20/D  
September 2009  
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# Honeywell

# 5881ENHC

## COMMERCIAL WIRELESS RECEIVER



The new 5881ENHC RF Receiver is designed for use with control panels that are approved for use in commercial fire and/or burglary installations. The receiver recognizes alarm, status and keypad control messages from wireless

transmitters operating at 345 MHz. The receiver also features a Spatial Diversity System that virtually eliminates "nulls" and "dead spots" within the coverage area.

### FEATURES

- Front and back tamper for commercial fire/burg installations
- One or two receivers can be used to provide redundant coverage or extend coverage in large areas
- Spatial Diversity System virtually eliminates "nulls" and "dead spots" within the coverage area
- Can be mounted remotely, anywhere on the keypad bus, for extended coverage
- Compatible with all 5800 series wireless devices
- Connects to control panel via the keypad bus
- UL listed for Commercial Fire/Burg applications

### COMPATIBLE CONTROLS

- VISTA-32FB
- VISTA-128FBP
- VISTA-250FBP
- FA1700 series
- VISTA-128BP
- VISTA-250BP
- FA1600 series

### SPECIFICATIONS

#### Dimensions

- 7-3/8" W x 4-3/8" (10-7/8" with antennas) H x 1-7/16" D  
188mm W x 112mm H  
(277mm with antennas) x 37mm D

#### Input Voltage

- 12VDC (from control's keypad terminals)

#### Current

- 60mA (typical)

#### Operating Temperature

- 32° F to 122° F  
(0° C to 50° C)

### ORDERING

**5881ENHC**

Commercial Wireless Receiver

#### Interface Wiring

- RED: 12VDC input (+) Aux. power
- GREEN: Data out to control
- YELLOW: Data in from control
- BLACK: Ground (-)

#### Range

- 200 ft (60m) nominal indoors from wireless transmitters (the actual range to be determined with the security system in the Test mode)

#### Installation

- See product installation instructions for details on programming and mounting

#### UL Listings

- Commercial Fire UL 864
- Household Fire UL 985
- Household Burg UL 1023
- Commercial Burg UL 365, UL 609, UL 1076, UL 1610
- FM
- MEA
- CSFM

#### Automation and Control Solutions

Honeywell Security & Communications  
2 Corporate Center Dr. Suite 100  
P.O. Box 9040  
Melville, NY 11747

www.honeywell.com

# Honeywell

L/5881ENHC/D  
October 2008  
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# 5140MPS-1 / 5140MPS-2 Manual Pull Stations

## PRIMARY FEATURES

- ADA COMPLIANT
- KEY TEST OR ALLEN RESET
- KEYED TO ADEMCO CONTROLS
- STYLIZED HIGH TECH DESIGN
- ALUMINUM DIE CAST HOUSING
- TERMINAL BLOCK OR WIRE LEADS
- GOLD CONTACTS
- UL LISTED

## ■ GENERAL DESCRIPTION

Ademco's manual fire alarm stations are designed to be non-code single action devices for use in UL listed fire alarm applications. The attractive die-cast aluminum-alloy housing meets ADA pull requirements and has been tested at Underwriter's Laboratory.

For ADA compliance, manual stations must be mounted less than 48" above the floor for front wheelchair access and less than 54" above the floor for side wheelchair access.

A key reset feature on the 5140MPS-1 is designed for positive authorized resetting action. The key is designed to operate and match Ademco controls. The 5140MPS-1 utilizes a terminal block for secure terminations. The 5140MPS-2 is furnished with an Allen hex fitting and is equipped with wire leads.

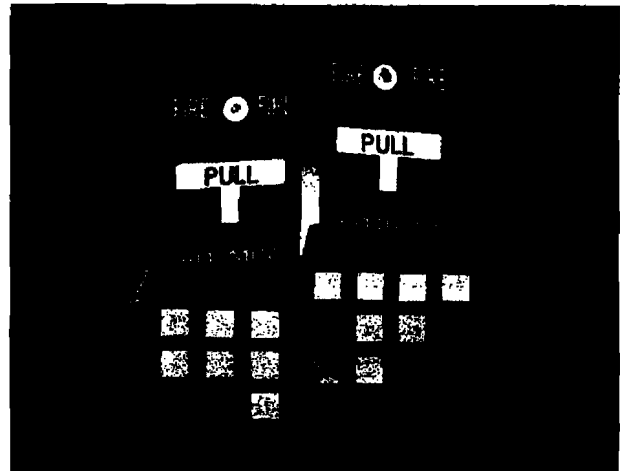
Two alarm deterrent break tubes are supplied with each manual station; one tube is visible from the front, and the spare is stored in a compartment within the unit.

## ■ OPERATION

Pulling the handle down causes the manual stations to latch in the down position and to close the normally open switch. The handle is restored manually by using the key to unlock the station and pivot the station forward for resetting the pull handle to its normal position. The crush tube is then inserted in the cavity and the station assembly is then locked in the normal upright position.

## ■ CONSTRUCTION

The 5140MPS-1 and 5140MPS-2 manual stations are constructed of a durable die-cast aluminum-alloy and



provide a neat and distinctive appearance. The housing is finished in red with white raised lettering and the "T-bar" handle is white with raised red lettering for enhanced visibility. The units are adaptable to both surface and semi-flush mounting configurations.

## ■ MOUNTING

### SEMI-FLUSH MOUNT

Most semi-flush mount installations can be attached to a standard single-gang switch box using two 6-32 screws inserted through the slots that are centered on the unit's metal mounting plate.

### SURFACE MOUNT

Use Ademco Backbox model number 5140MPS-8B for surface mount installations. The Backbox has four pre-drilled mounting holes of 0.187 inch diameter and conduit knockouts. Secure the Backbox to a wall with screws of size 8 or smaller. After the Backbox is in place, attach the conduit.

The housing is locked by using a key or Allen wrench lock. Unlock the housing by turning the key clockwise and swinging down the front of the housing to make the sheet metal mounting plate accessible. Mount the metal plate to the Backbox using the four 1/4" long, 8-32 screws (supplied).

## ■ DIMENSIONS

4.75" H x 3.12" W x 2" D

**ADEMCO**

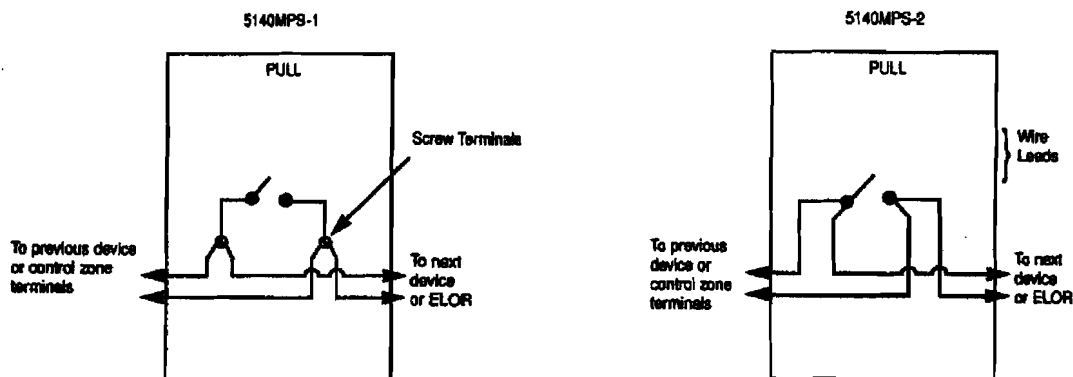
## ■ ORDERING INFORMATION

514OMPS-1: Manual Station  
Key Reset Test  
and Terminal Block

514OMPS-2: Manual Station  
Hex Allen Reset  
Test and Wire Leads

514OMPS-BB: Surface Backbox

## ■ WIRING DIAGRAM



### ARCHITECTURAL/ENGINEERING SPECIFICATIONS

Manual Fire Alarm Station Model 514OMPS-1 (514OMPS-2) shall be non-coded and include a break-type tube operated test-reset lock allowing testing with a key (Allen wrench). They shall be designed so that normal operation cannot be restored after an actual Fire Emergency Operation except by use of a key (Allen wrench). The key shall fit all standard Ademco controls.

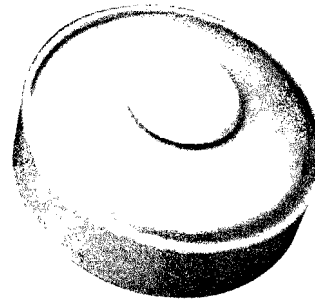
An operated station shall automatically condition itself so as to be visually detected, as operated, at a mini-

imum distance of one hundred feet, front or side. Manual Stations shall be constructed of die cast aluminum alloy with clearly visible operating instructions provided on the cover. The word FIRE shall appear on the front of the stations in raised letters. Stations shall be suitable for surface mounting on matching Backbox or semi-flush mounting on a standard single-gang box. Manual Stations shall be Underwriter's Laboratories Listed.



## 5809

### WIRELESS HEAT DETECTOR



Honeywell's 5809 wireless fixed heat and rate-of-rise temperature sensor offers expanded fire detection and installation flexibility. It is ideal for hard to wire locations and applications that require more than smoke detection. With no wires to run, the 5809 is fast and easy to install. The 5809 combines both rate-of-rise and fixed temperature sensors. Fires typically cause a rapid rise in temperature in the

surrounding area. The 5809's rate-of-rise thermostat senses the rise in temperature and signals an alarm if the increase is 15° or more per minute. A built-in fixed temperature sensor will also signal an alarm if the environmental temperature rises above 135°F. The 5809 is UL Listed (UL521) and CSFM approved for commercial and residential applications.

## FEATURES

- Contains a built-in transmitter which can send alarm, supervisory and battery condition messages to the system's receiver/control unit
- Powered by a three-volt lithium battery. If the battery voltage gets too low, the 5809 sends a low battery signal to the control panel
- Features a tamper switch, which causes a trouble signal to be sent to the control if the unit is removed from the mounting base
- UL Listed for Commercial (when using 5881EH Receiver) or Residential applications

# 5809

## WIRELESS HEAT DETECTOR

### SPECIFICATIONS:

---

• **Power:**

- 3V lithium battery (Duracell DL123A, Panasonic CR123A, Sanyo CR123A, Varta CR123A)
- Operating temperature: 40° to 140°F (6° to 60°C)
- Rate-of-rise temperature: 15°F (8°C) increase per minute (NOTE: Rate-of-rise sensor does not operate above 38°C)

- Fixed temperature: 135°F (57°C)
- Maximum spacing: 50 ft x 50 ft UL, 30 ft x 30 ft FM (refer to National Fire Alarm Code Standard NFPA 72 for application requirements)
- Dimensions: 4.4" diameter/2/2" deep

• **Agency Listings:**

- UL 521 Listed for Commercial (when using 5881EH Receiver) or

Residential applications

• **Wireless Transmission Path Test:**

- A good RF transmission path must be established from the proposed mounting location before permanently installing the detector. To determine that there is a good signal reception from the proposed location, perform the test procedure described in the installation instructions procedure.

### MOUNTING THE DETECTOR:

---

- You can mount the 5809 on a wall or ceiling within the protection area:
- Wall mounting: Mount the detector 4" 6" from the ceiling
- Ceiling mounting: Mount the detector at least 4" from any wall. Make sure the normal ceiling temperature will not exceed 100°F (37.8° C).

- Refer to NFPA Standard 72 for detector spacing and other requirements. Maximum spacing for UL installations is 50' x 50'
- Avoid mounting the detector near heat generating devices (e.g. ovens, heat vents, furnaces, boilers)
- IMPORTANT: Heat detectors should

be used for property protection. Reliance should not be placed solely on heat detectors for life safety. When life safety is involved, smoke detectors MUST also be used. Detectors must not be painted.

### TESTING THE DETECTOR:

---

The test procedure should be performed to determine a good RF transmission path and again after installation is completed.

- CAUTION: The fixed temperature sensor is intended for one-time use. Prolonged heat during testing can damage the unit. If used carefully following the instructions described below, the heat from a portable hair dryer can be used to test the unit. If the round disk on top of the detector detaches, the detector must be replaced.
- Activate the control panel's test mode

- Use either method (a) or (b) or activate the detector

- (a) Press and release the activation button on the PC board assembly OR
- (b) Holding a portable hair dryer about 12 to 18 inches away from the detector, turn the dryer on and aim the warm air at the side of the detector.

**CAUTION:** Aiming the dryer directly at the round disk on the detector can damage the unit to be replaced.

- The system's keypad should beep and the detector's ID should be displayed

- Exit the control's test mode  
FCC ID: CFS 8DL 5809

This device complies with part 15 of FCC rules.

Operation is subject to the following conditions:

- (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### ORDERING

**5809** Heat Detector

#### Honeywell Security & Custom Electronics

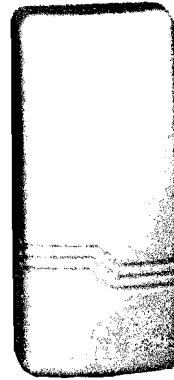
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L/5809/D  
October 2007  
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# Honeywell

## 5817CB

### WIRELESS COMMERCIAL TRANSMITTER



The 5817CB is a universal contact-monitoring transmitter that can be used with household and commercial fire and burglary-initiating devices such as door/window contacts, motion and glassbreak detectors, sprinkler water flow

switches, tamper switches, post indicator valves, manual pull stations and remote duct detectors. Upon activation, it emits an RF signal to a control panel, sending a burglary or fire alarm to a central station.

## FEATURES

- The 5817CB has three unique input loops (zones).
- The first loop (primary loop) is supervised and typically used for high-priority alarm reporting such as commercial fire or burglary.
- The second loop is the built-in, normally closed reed switch used in conjunction with magnet.
- The third loop is another normally closed household burglary loop. All three loops may be used.
- A fourth (automatically enrolled) loop contains two tamper switches to protect the 5817CB.

## MOUNTING

1. Remove the transmitter cover by inserting the flat blade of a small screwdriver into the pry-off slot at the bottom end of the unit (on the right side closest to the cover's decorative ribs and twisting).

2. Disengage the supplied mounting plate from the unit by inserting the blade of a small screwdriver into the mounting plate release hole (see Diagram 2) and pushing the locking tab out (see Diagram 1). Slide the mounting plate downward along the case back.

**Note:** For this application, the alignment guide strip along one edge of the mounting plate serves no function and may be broken away, if desired.

3. If concealed wiring is to be used, feed the wires through the concealed wiring entry hole on one corner of the plate (surface wiring is mentioned in step 5 below).

4. Install the mounting plate, with its caseholding posts pointing up, in the location selected as described in the

installation instructions. Use the two flat-head screws supplied. Note: To ensure proper operation of the unit's back tamper (when it is separated from the mounting plate), the screws must be anchored to a wall stud or other solid wood material.

5. Set the DIP switch (after the control panel has enrolled the transmitter's input ID's) for the desired primary loop characteristics, as described in the table on the following page.

# 5817CB

## WIRELESS COMMERCIAL TRANSMITTER

Primary Loop Options Table				
Switch Setting	DIP Switch Position			
	1	2	3	4
<b>On</b>	<b>Repeating transmission</b> (every 4 sec.) upon primary loop fault use for high priority alarm, such as fire.	Switch must <b>always</b> be in the <b>on</b> position	Switch must <b>always</b> be in the <b>on</b> position	Switch must <b>always</b> be in the <b>off</b> position
<b>Off</b>	<b>Single transmission</b> per primary loop change-of-state			

Notes: a. In order for the control panel to enroll the transmitter, the DIP switches must be Set to OFF-ON-ON-OFF (see Diagram 2).  
b. The auxiliary loops are not affected by the DIP switch settings.

### Wiring Connections

Connect the loop wiring to the unit's terminals before installing the battery (see Diagram 2).

Notes: a. Primary loop 1 is a supervised loop and must have an end-of-line (EOL) resistor (470K ohms, supplied) placed across the sensor. Additionally, for primary loop 1, a contact device may not be installed more than 20 feet from the transmitter.

b. If loop 2 is not going to be used, the magnet is not necessary.

c. If loop 3 is not going to be used, no connection is needed across its terminals. For UL household burglary and fire installations, the loop 3 contact device (if used) may not be more than 3 feet from the transmitter.

## SPECIFICATIONS:

### • Dimensions:

- 1-9/16"W x 3-1/2"H x 1-3/16"D  
(40mm x 89mm x 30mm)
- Battery 3v Lithium  
(see BATTERY INSTALLATION AND REPLACEMENT).

### • UL Listings:

- Commercial Fire UL864
- Household Fire UL985
- Household Burg UL1023
- Commercial Burg UL365, UL609, UL1076, UL1610

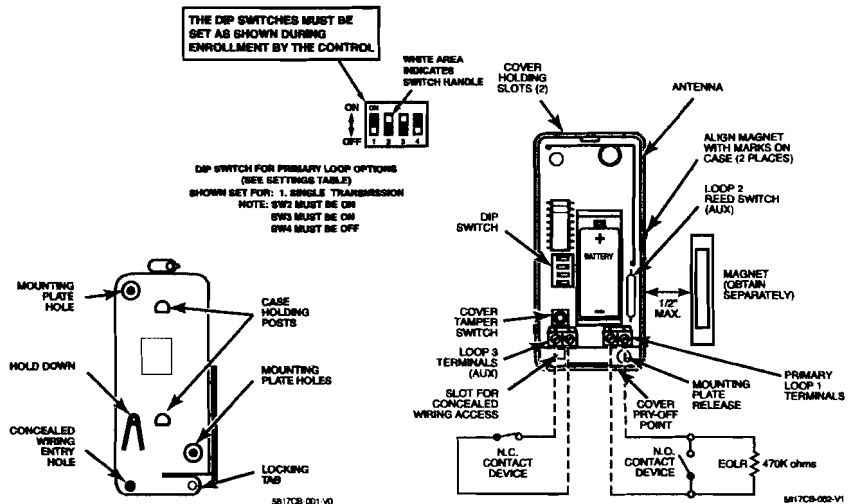


Diagram 1. Mounting Plate

Diagram 2. Transmitter, Cover Removed

Note: For UL commercial and household fire installations, only one initiating device may be connected to this transmitter. For UL commercial burglary installations, multiple initiating devices may be used as long as the devices all service the same function such as door/window contacts, motion or glassbreak detectors. All initiating devices must be located within the same room.

## ORDERING

**5817CB** Wireless Commercial/Household Transmitter

### Honeywell Security & Custom Electronics

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# Honeywell

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August 2007  
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# 5193SD/5193SDT

V-PLEX® ADDRESSABLE SMOKE DETECTOR

## SPECIFICATIONS

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- **Heat Sensor:** (Model 5193SDT):  
135° F (57.2° C);  
Fixed Temperature Electronic Thermistors
- **Operating Ambient Temperature Range:**  
32° to 100° F (0° to 38° C)
- **Operating Humidity Range:**  
0 to 95% RH non-condensing
- **Storage Temperature Range:**  
-4° to 158° F (-20° to 70°C)
- **Diameter (including base):** 5.3 inches
- **Height (including base):** 2.0 inches
- **Weight:** 6.3 oz.
- **Agency Listing:** UL-268
- **System Voltage Range:** 7-14V
- **Standby Current** (maximum @ 12V)  
LED off: 1.2mA  
LED on: 2.8mA

## ACCESSORY (sold separately)

---

To measure the detector's sensitivity, the **SENS-RDR Infrared Sensitivity Reader tool (sold separately)** should be used. It reduces testing time, simplifies sensitivity measurements and displays them precisely in terms of percent per foot obscuration. The SENS-RDR eliminates the need for magnets, voltmeters and ladders.

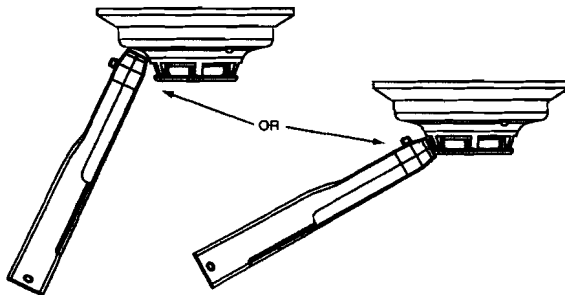


Figure 2: Position of Reader



## ORDERING

- 5193SD** Addressable Photoelectric Smoke Detector  
**5193SDT** Addressable Photoelectric Smoke Detector with Integral Heat Sensor

### Accessory sold separately:

- SENS-RDR** Handheld Sensitivity Reader

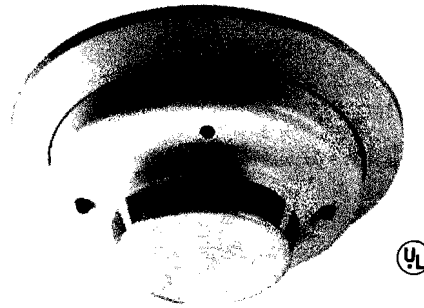
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May 2009  
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# Honeywell

## 5193SD/5193SDT

V-PLEX® ADDRESSABLE SMOKE DETECTOR



Honeywell's 5193SD/SDT Addressable Photoelectric Smoke Detector is designed to provide open area protection and to be used with compatible UL-listed Honeywell control panels that support V-Plex technology. The detector incorporates a state-of-the-art optical sensing chamber and an advanced microprocessor. Built-in Drift Compensation algorithms automatically maintain proper operation at factory calibrated detection levels, even when sensitivity is altered due to the presence of contaminants settling into the unit's chamber. The 5193SDT also features a restorable, built-in, fixed temperature (135° F/57.2° C) thermal detector.

### FEATURES

- **Easy Installation:** Installation of the 5193SD/SDT detector is simplified by the use of a mounting base that may be pre-wired to the system, allowing the detector to be easily installed or removed for maintenance or service. (See Figure 1).
- **LED Status Indicators:** Two LEDs (green and red) provide local visual indication of the detector's status – including normal operation, alarm, out of sensitivity and trouble conditions.
- **Test button:** This button allows the user to perform periodic testing of the detector's circuitry and verify that the detector is within the sensitivity limits.
- **Versatile Mounting:** Mounting is made simple with the included hardware and the large mounting ports, which accommodate drywall anchors for easy surface mounting. (See Figure 1).
- **Tamper Protection and Tamper Resistance:** The detector contains a built-in tamper switch that can communicate back to the control panel in the event the detector is removed from its base. For an added level of security, the detector also includes a tamper resistant element that prevents removal from the base without the use of tools. (See Figure 1).

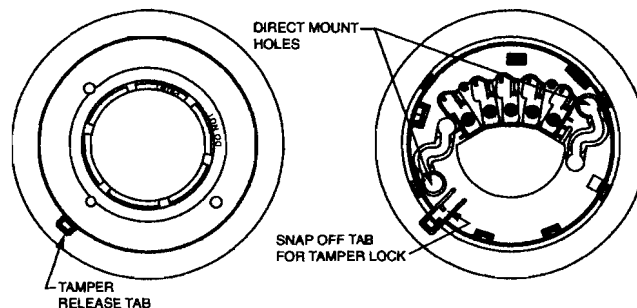
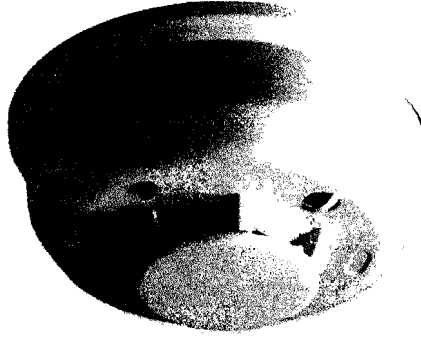


Figure 1: Tamper-Resistant Feature/Wiring

## 5806W3

### WIRELESS PHOTOELECTRIC SMOKE DETECTOR



Honeywell's 5806W3 is a 3V battery operated, photoelectric smoke detector with a built-in wireless transmitter. It facilitates fire verification for false alarm reduction requirements by ANSI/SIA CP-01 standards and is intended for use with any of Honeywell's 5800 Series wireless receiver/transceivers for residential installations. The 5881ENHC or 5883H receivers are required for commercial installations.

The transmitter can send alarm, tamper, maintenance (when control panels are equipped to process maintenance signals) and battery condition messages to the system's receiver. The maintenance signal fully complies with the sensitivity test requirement specified in NFPA 72, 7-2.2 and is UL approved.

The 5806W3 incorporates a state-of-the-art optical sensing chamber and advanced microprocessor. It also helps

eliminate nuisance alarms and virtually eliminates non-billable service calls and fines resulting from false alarms. The microprocessor allows the detector to automatically maintain proper operation at factory calibrated detection levels, even when sensitivity is altered due to the presence of contaminants settling into the unit's smoke chamber. A removable detector cover and chamber top allows the technician to quickly and easily clean the detector chamber without disassembling the detector head.

Since there are no holes to drill or wires to run, installers can preserve the beauty of the protected premise while protecting it. The 5806W3 is an ideal smoke detector for difficult to wire locations, applications where room aesthetics are critical or where hazardous materials exist.

## FEATURES

- **Smoothing Algorithms**

Mathematical calculations in the detector's software that minimize nuisance alarms by smoothing out short term spikes from dust and smoke.

- **Smart Check**

A signal is sent to the control panel when the detector requires cleaning. This allows a regular, non-emergency service call to clean the detector before it goes into alarm.

- **Drift Compensation**

Virtually eliminates nuisance alarms from long-term dust build-up by automatically adjusting the detector's sensitivity.

- **Removable Detector Cover and Chamber Top**

Provides the technician the ability to quickly and easily clean the detector

chamber without disassembling the detector head.

- **Approved UL Listings for Residential and Commercial Applications**

Both residential and commercial installation requirements are met.

- **Additional LED Status Indicators**

Identifying between alarm or trouble conditions is easier with green and red LED status indicators. The green LED denotes a normal condition while the red LED indicates an abnormal condition.

- **Easy-to-install Mounting Base**

The sturdy mounting base allows the detector to be more easily installed on uneven surfaces (i.e. stucco). The mounting base has larger mounting ports to accommodate drywall anchors for easy surface mounting.

- **Improved Robust RF Field Strength**

The distance between the detector and receiver has been significantly increased.

- **Additional Features:**

- Utilizes one long-life 3V lithium battery
- Microcontroller runs on an 4.0 MHz clock
- Horn operates at 3.3 KHz with sound pressure level of 85dBA at 10 feet
- Built-in wireless transmitter, temporal code 3 sounder

# 5806W3

## WIRELESS PHOTOELECTRIC SMOKE DETECTOR

### SPECIFICATIONS

- **Dimensions**
  - Diameter: 5.3\*\*, Height: 2.30\*
- **Weight**
  - 8.5 oz. (without batteries)
- **Operating Temperature**
  - 32-100°F (0-37.8°C)
- **Humidity Range**
  - 0% to 95% RH, non-condensing
- **Air Velocity**
  - 1,000 ft./min. max.
- **Operating Voltage**
  - 2.5-3.6VDC
- **Standby Current**
  - 8.5 µA avg.
- **Alarm Current**
  - 35 mA max.
- **Power Source**
  - One 3V CR123A lithium Battery†
- **Audible Output**
  - 85dB min. @ 10 ft.
- **Agency Listings**
  - UL268 - Commercial and Residential

\* With adapter bracket (4.9" without mounting base)

† Replacement batteries include Duracell DL123A, Sanyo CR123A, Panasonic CR123A, or ADEMCO 466

### ACCESSORIES (sold separately)

#### SENS-RDR Infrared Sensitivity Reader

Reduces testing time, simplifies sensitivity measurements and displays them precisely in terms of percent per foot obscuration. The SENS-RDR eliminates the need for magnets, voltmeters and ladders.



#### RT Removal Tool

Simplifies the attachment and removal of the detector head to the mounting base. It may be attached to a threaded extension pole or broom handle thereby eliminating the need for ladders.



### ORDERING

**5806W3** Wireless Photoelectric Smoke Detector with Built-in Wireless Transmitter

**Accessories sold separately:**

**SENS-RDR** Hand-held Sensitivity Reader

**RT** i3 Removal Tool used for easy installation and removal of head from base

#### Honeywell Security & Communications

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February 2008  
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# Honeywell





## Selectable-Output Horns, Strobes, and Horn Strobes

*SpectrAlert® Advance selectable-output horns, strobes, and horn strobes are rich with features guaranteed to cut installation times and maximize profits.*



**SPECTRAlert  
ADVANCE**

### Features

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

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

Like the entire SpectrAlert Advance product line, horns, strobes, and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature plug-in designs with minimal intrusion into the back box, which make installations fast and foolproof while virtually eliminating costly and time-consuming ground faults. Furthermore, a universal mounting plate with an onboard shorting spring tests wiring continuity before the device is installed, protecting devices from damage.

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

### Agency Listings



7125-1653:186 (indoor strobes)  
7125-1653:188 (horn strobes,  
chime strobes)  
7135-1653:189 (horns, chimes)

# SpectrAlert Advance Specifications

## General

SpectrAlert Advance horns, strobes, and horn strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. Two-wire products shall also mount to a single-gang 2 × 4 × 1⅞-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, when used with the Sync-Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync-Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 9 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 17 and 33 volts. Indoor SpectrAlert Advance products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185.

## Strobe

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

## Horn Strobe Combination

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

## Synchronization Module

The module shall be a System Sensor Sync-Circuit model MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4⅞ × 4⅞ × 2⅞-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

## Physical/Electrical Specifications

<b>Standard Operating Temperature</b>	32°F to 120°F (0°C to 49°C)
<b>Humidity Range</b>	10 to 93% non-condensing
<b>Strobe Flash Rate</b>	1 flash per second
<b>Nominal Voltage</b>	Regulated 12 DC/FWR or regulated 24 DC/FWR <sup>1</sup>
<b>Operating Voltage Range<sup>2</sup></b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
<b>Input Terminal Wire Gauge</b>	12 to 18 AWG
<b>Ceiling-Mount Dimensions (including lens)</b>	6.8" diameter × 2.5" high (173 mm diameter × 64 mm high)
<b>Wall-Mount Dimensions (including lens)</b>	5.6" L × 4.7" W × 2.5" D (142 mm L × 119 mm W × 64 mm D)
<b>Horn Dimensions</b>	5.6" L × 4.7" W × 1.3" D (142 mm L × 119 mm W × 33 mm D)
<b>Wall-Mount Back Box Skirt Dimensions (BBS-2, BBSW-2)</b>	5.9" L × 5.0" W × 2.2" D (151 mm L × 128 mm W × 56 mm D)
<b>Ceiling-Mount Back Box Skirt Dimensions (BBSC-2, BBSCW-2)</b>	7.1" diameter × 2.2" high (180 mm diameter × 57 mm high)
<b>Wall-Mount Trim Ring Dimensions (sold as a 5 pack) (TR-HS, TRW-HS)</b>	5.7" L × 4.8" W × 0.35" D (145 mm L × 122 mm W × 9 mm D)
<b>Ceiling-Mount Trim Ring Dimensions (sold as a 5 pack) (TRC-HS, TRCW-HS)</b>	6.9" diameter × 0.35" high (175 mm diameter × 9 mm high)

## Notes:

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

## UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)						UL Max. Horn Current Draw (mA RMS)					
	Candela	8-17.5 Volts		16-33 Volts		Sound Pattern	dB	8-17.5 Volts		16-33 Volts	
		DC	FWR	DC	FWR			DC	FWR	DC	FWR
<b>Standard</b>	15	123	128	66	71	Temporal	High	57	55	69	75
<b>Candela Range</b>	15/75	142	148	77	81	Temporal	Medium	44	49	58	69
	30	NA	NA	94	96	Temporal	Low	38	44	44	48
	75	NA	NA	158	153	Non-temporal	High	57	56	69	75
	95	NA	NA	181	176	Non-temporal	Medium	42	50	60	69
	110	NA	NA	202	195	Non-temporal	Low	41	44	50	50
	115	NA	NA	210	205	Coded	High	57	55	69	75
<b>High</b>	135	NA	NA	228	207	Coded	Medium	44	51	56	69
<b>Candela Range</b>	150	NA	NA	246	220	Coded	Low	40	46	52	50
	177	NA	NA	281	251						
	185	NA	NA	286	258						

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15-115 cd)										
DC Input	8-17.5 Volts				16-33 Volts					
	15	15/75	15	15/75	30	75	95	110	115	
Temporal High	137	147	79	90	107	176	194	212	218	
Temporal Medium	132	144	69	80	97	157	182	201	210	
Temporal Low	132	143	66	77	93	154	179	198	207	
Non-Temporal High	141	152	91	100	116	176	201	221	229	
Non-Temporal Medium	133	145	75	85	102	163	187	207	216	
Non-Temporal Low	131	144	68	79	96	156	182	201	210	
<b>FWR Input</b>										
Temporal High	136	155	88	97	112	168	190	210	218	
Temporal Medium	129	152	78	88	103	160	184	202	206	
Temporal Low	129	151	76	86	101	160	184	194	201	
Non-Temporal High	142	161	103	112	126	181	203	221	229	
Non-Temporal Medium	134	155	85	95	110	166	189	208	216	
Non-Temporal Low	132	154	80	90	105	161	184	202	211	

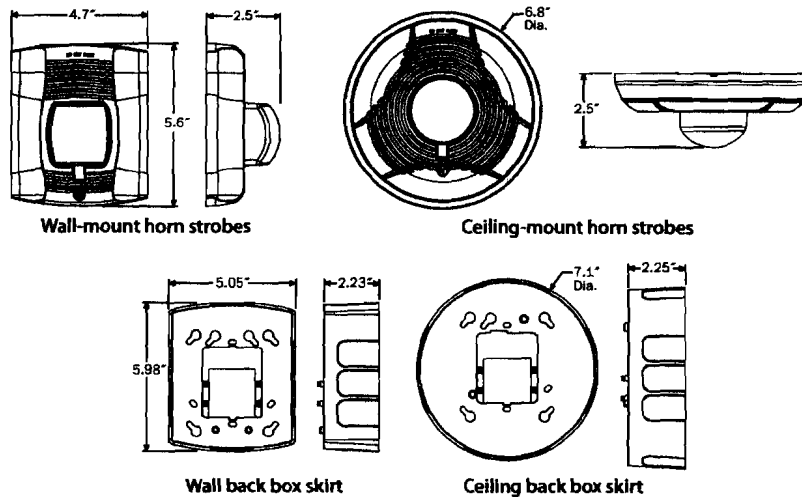
UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, High Candela Range (135-185 cd)										
DC Input	16-33 Volts				FWR Input	16-33 Volts				
	135	150	177	185		135	150	177	185	
Temporal High	245	259	290	297	Temporal High	215	231	258	265	
Temporal Medium	235	253	288	297	Temporal Medium	209	224	250	258	
Temporal Low	232	251	282	292	Temporal Low	207	221	248	256	
Non-Temporal High	255	270	303	309	Non-Temporal High	233	248	275	281	
Non-Temporal Medium	242	259	293	299	Non-Temporal Medium	219	232	262	267	
Non-Temporal Low	238	254	291	295	Non-Temporal Low	214	229	256	262	

## Horn Tones and Sound Output Data

Horn and Horn Strobe Output (dBA)										
Switch Position	Sound Pattern	dB	8-17.5 Volts		16-33 Volts		24-Volt Nominal			
			DC	FWR	DC	FWR	Reverberant		Anechoic	
			DC	FWR	DC	FWR	DC	FWR	DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	89
4	Non-Temporal	High	82	82	88	88	93	92	100	100
5	Non-Temporal	Medium	78	78	85	85	90	90	98	98
6	Non-Temporal	Low	75	75	81	81	88	84	96	92
7†	Coded	High	82	82	88	88	93	92	101	101
8†	Coded	Medium	78	78	85	85	90	90	97	98
9†	Coded	Low	75	75	81	81	88	85	96	92

†Settings 7, 8, and 9 are not available on 2-wire horn strobe.

## SpectrAlert Advance Dimensions



## SpectrAlert Advance Ordering Information

Model	Description
<b>Wall Horn Strobes</b>	
P2R*†	2-Wire Horn Strobe, Standard cd, Red
P2RH*	2-Wire Horn Strobe, High cd, Red
P2W*	2-Wire Horn Strobe, Standard cd, White
P2WH*	2-Wire Horn Strobe, High cd, White
P4R*	4-Wire Horn Strobe, Standard cd, Red
P4RH	4-Wire Horn Strobe, High cd, Red
P4W	4-Wire Horn Strobe, Standard cd, White
<b>Wall Strobes</b>	
SR*†	Strobe, Standard cd, Red
SRH*†	Strobe, High cd, Red
SW*	Strobe, Standard cd, White
SWH*	Strobe, High cd, White
<b>Ceiling Horn Strobes</b>	
PC2R*	2-Wire Horn Strobe, Standard cd, Red
PC2RH	2-Wire Horn Strobe, High cd, Red
PC2W*†	2-Wire Horn Strobe, Standard cd, White
PC2WH*	2-Wire Horn Strobe, High cd, White
PC4R	4-Wire Horn Strobe, Standard cd, Red
PC4RH	4-Wire Horn Strobe, High cd, Red
PC4W	4-Wire Horn Strobe, Standard cd, White

Model	Description
<b>Ceiling Strobes</b>	
SCR	Strobe, Standard cd, Red
SCRH	Strobe, High cd, Red
SCW*	Strobe, Standard cd, White
SCWH	Strobe, High cd, White
<b>Horns</b>	
HR	Horn, Red
HW	Horn, White
<b>Accessories</b>	
BBS-2	Back Box Skirt, Wall, Red
BBSW-2	Back Box Skirt, Wall, White
BBSC-2	Back Box Skirt, Ceiling, Red
BBSCW-2	Back Box Skirt, Ceiling, White
TR-HS	Trim Ring, Wall, Red
TRW-HS	Trim Ring, Wall, White
TRC-HS	Trim Ring, Ceiling, Red
TRCW-HS	Trim Ring, Ceiling, White

### Notes:

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

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

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



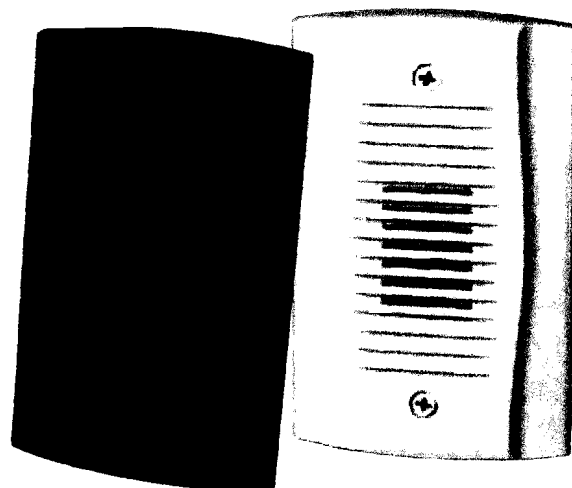
3825 Ohio Avenue • St. Charles, IL 60174  
Phone: 800-SENSOR2 • Fax: 630-377-6495

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Product specifications subject to change without notice. Visit [systemsensor.com](http://systemsensor.com) for current product information, including the latest version of this data sheet.  
A05-0395-007 • 4/09 • #2132



## Mini-Horns

The SpectrAlert® Advance series of mini-horn sounders are designed to simplify installations to provide primary and secondary signaling for fire and security applications.



**SPECTRAlert**  
**ADVANCE**

### Features

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- 12 and 24V operation
- High and low volume settings
- Temporal and non-temporal tones
- Mounts to single gang back box
- Compatible with MDL sync module
- Mechanically and electrically compatible with PA400 series Mini-Alert™ sounders

The MHR and MHW mini-horns operate at 12 and 24 volts and are ideal for hotel, motel or residential fire system applications, where a smaller notification device is desired. The mini-horns offer high and low volume settings, and temporal or non-temporal tones. The horns can be mounted to single gang back boxes for aesthetically sensitive applications. Synchronization is also provided when using the MDL module.

The MHR and MHW mini-horns can operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified, unfiltered power supply. They are listed to Underwriter's Laboratories Standard UL 464 for fire protective signaling systems.

### Agency Listings

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## SpectrAlert® Advance Mini-Horn Specifications

### Architectural/Engineering Specifications

Mini-horns shall be a System Sensor Model MHR or MHW capable of operating at nominal 12 or 24VDC and shall mount to a deep single gang back box. Mini-horn shall be listed to Underwriter's Laboratories Standard UL464 for fire protective signaling systems. Mini-horns shall operate between 32 and 120 degrees Fahrenheit from a regulated DC, or full-wave rectified, unfiltered power supply. When used with the Sync-Circuit™ Module, 12-volt rated notification appliance circuit outputs shall operate between nine and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 17 and 33 volts.

### Physical Specifications

<b>Dimensions</b>	4.6"L x 2.9"W x .45"D
<b>Weight</b>	2.67 oz
<b>Operating Temperature Range</b>	32°F to 120°F (0°C to 49°C)
<b>Mounting</b>	Surface: deep single-gang back box (2¾" deep) Flush: Standard 4" x 4" back box

### Electrical Specifications

<b>Input Terminals</b>	12 to 18 AWG
<b>Nominal Voltage</b>	Regulated 12DC/FWR or regulated 24DC/FWR
<b>Operating Voltage</b>	8-33
<b>Operating Voltage with MDL</b>	9-33

## UL Sound Output and Current Draw Data

### Sounder Output (dBA)

Switch Setting	Pattern	Output Level	8-17.5 VDC	8-17.5 VFWR	Nominal 12 VDC	Nominal 12 VFWR	16-33 VDC	16-33 VFWR
1	Temporal	High	68	67	71	70	78	76
2	Temporal	Low	66	65	69	68	76	75
3	Non-temporal	High	72	71	75	74	80	79
4	Non-temporal	Low	70	69	73	72	78	77

### Sounder Current Draw (mA RMS)

Switch Position	Sound Pattern	Volume	8-17.5 Volts		16-33 Volts	
			DC	FWR	DC	FWR
1	Temporal	High	12	10	17	15
2	Temporal	Low	10	9	14	13
3	Non-temporal	High	22	17	29	25
4	Non-temporal	Low	17	13	21	19

## Ordering Information

Part No.	Description
MHR	Mini-Horn, Red
MHW	Mini-Horn, White



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Phone: 800-SENSOR2 • Fax: 630-377-6495

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Product specifications subject to change without notice. Visit [www.systemsensor.com](http://www.systemsensor.com) for current product information, including the latest version of this data sheet.  
A05-0414-001 • 12/09 • #2266

# ELECTRICAL PERMIT

## City of Portland, Me.



To the Chief Electrical Inspector, Portland Maine:  
 The undersigned hereby applies for a permit to make electrical installations  
 in accordance with the laws of Maine, the City of Portland Electrical Ordinance,  
 National Electrical Code and the following specifications:

Date 5-6-11

Permit # \_\_\_\_\_

CBL# 48 F 2

LOCATION: <sup>497</sup> ~~780~~ Cumberland Ave. METER MAKE & # \_\_\_\_\_  
 CMP ACCOUNT # \_\_\_\_\_ OWNER Trout Group Investment / Lady Robinson  
 TENANT \_\_\_\_\_ PHONE # \_\_\_\_\_

						TOTAL EACH FEE		
OUTLETS	Receptacles	Switches	Smoke Detector			.20		
FIXTURES	Incandescent	Fluorescent	Strips			.20		
SERVICES	Overhead	Underground	TTL AMPS <800			15.00		
	Overhead	Underground	>800			25.00		
Temporary Service	Overhead	Underground	TTL AMPS			25.00		
						25.00		
METERS	(number of)					1.00		
MOTORS	(number of)					2.00		
RESID/COM	Electric units					1.00		
HEATING	oil/gas units	Interior	Exterior			5.00		
APPLIANCES	Ranges	Cook Tops	Wall Ovens			2.00		
	Insta-Hot	Water heaters	Fans			2.00		
	Dryers	Disposals	Dishwasher			2.00		
	Compactors	Spa	Washing Machine			2.00		
	Others (denote)							
	MISC. (number of)	Air Cond/win					10.00	
		Air Cond/cent		Pools			10.00	
		HVAC	EMS	Thermostat			5.00	
	Signs					10.00		
	Alarms/res					5.00		
<u>FIRE</u>	<u>X</u> Alarms/com					15.00		
	Heavy Duty(CRKT)					2.00		
	Circus/Carnv					25.00		
	Alterations					5.00		
	Fire Repairs					15.00		
	E Lights					1.00		
	E Generators					20.00		
PANELS	Service	Remote	Main			4.00		
TRANSFORMER	0-25 Kva					5.00		
	25-200 Kva					8.00		
	Over 200 Kva					10.00		
						TOTAL AMOUNT DUE		
MINIMUM FEE/COMMERCIAL 55.00						MINIMUM FEE	45.00	

**RECEIVED**  
 MAY - 6 2011  
 Dept. of Building Inspections  
 City of Portland, Maine

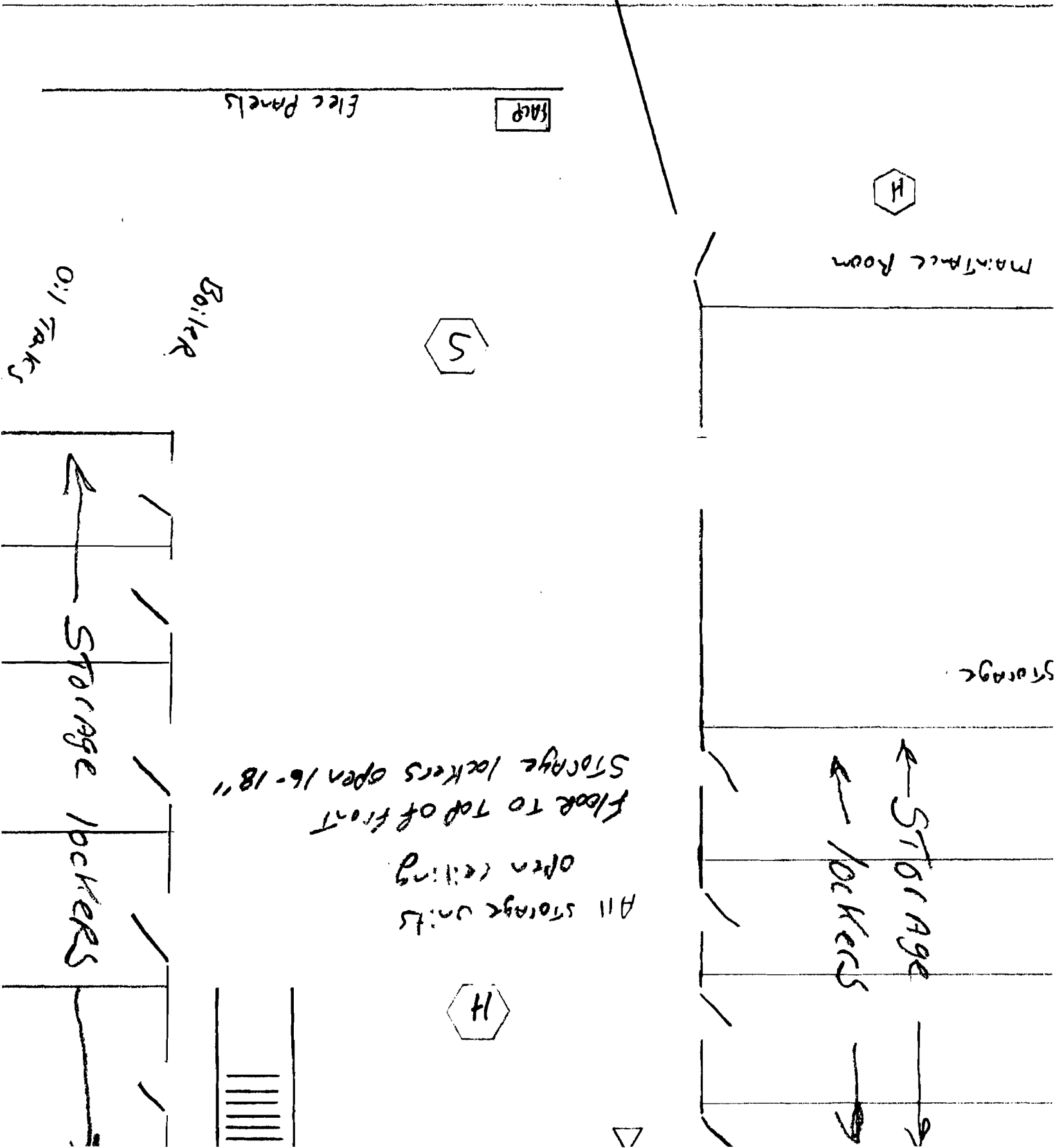
*16127*

CONTRACTORS NAME Chris Lheureux MASTER LIC. # \_\_\_\_\_  
 ADDRESS 98 Company Road LIMITED LIC. # Lm50012202  
 TELEPHONE Dayton me 04005

SIGNATURE OF CONTRACTOR Chris Lheureux

APT APARTMENT BUILDING  
Cumberland Ave  
and Maine

Basement Plan



H

MAINTENANCE ROOM

S

Panel

Elec Panels

Boiler

OIL TANKS

Storage

Storage

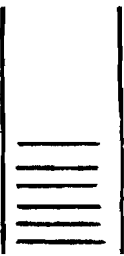
lockers

All storage units  
open ceiling

Floor to top of front  
Storage lockers open 16-18"

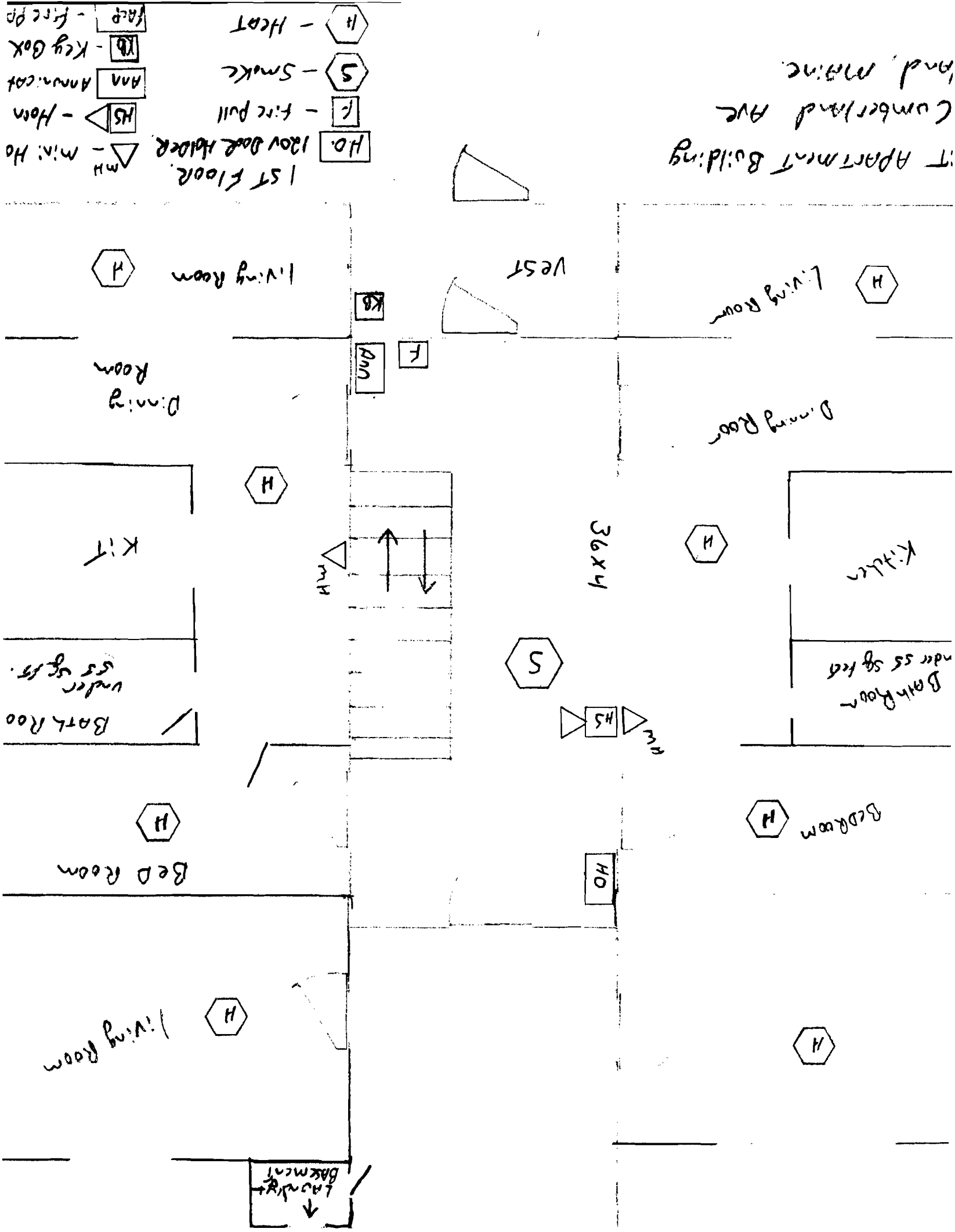
H

Storage lockers





1st Apartment Building  
 Cumberland Ave  
 and, Maine



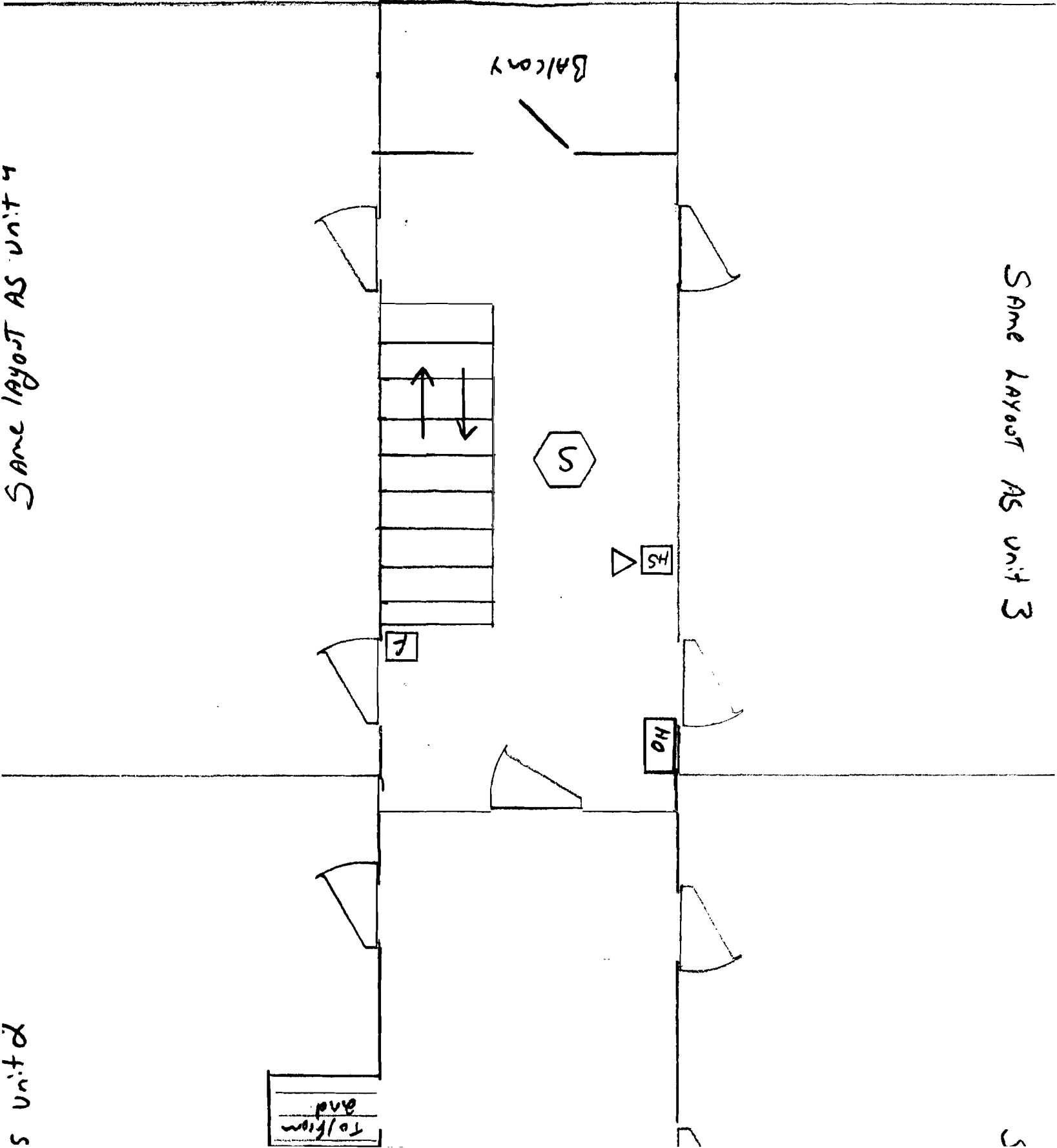
SAME LAYOUT AS UNIT 4

Unit 2

2nd Floor

1st Apartment Building  
Cumberland Ave  
Mand, Maine

SAME LAYOUT AS UNIT 3

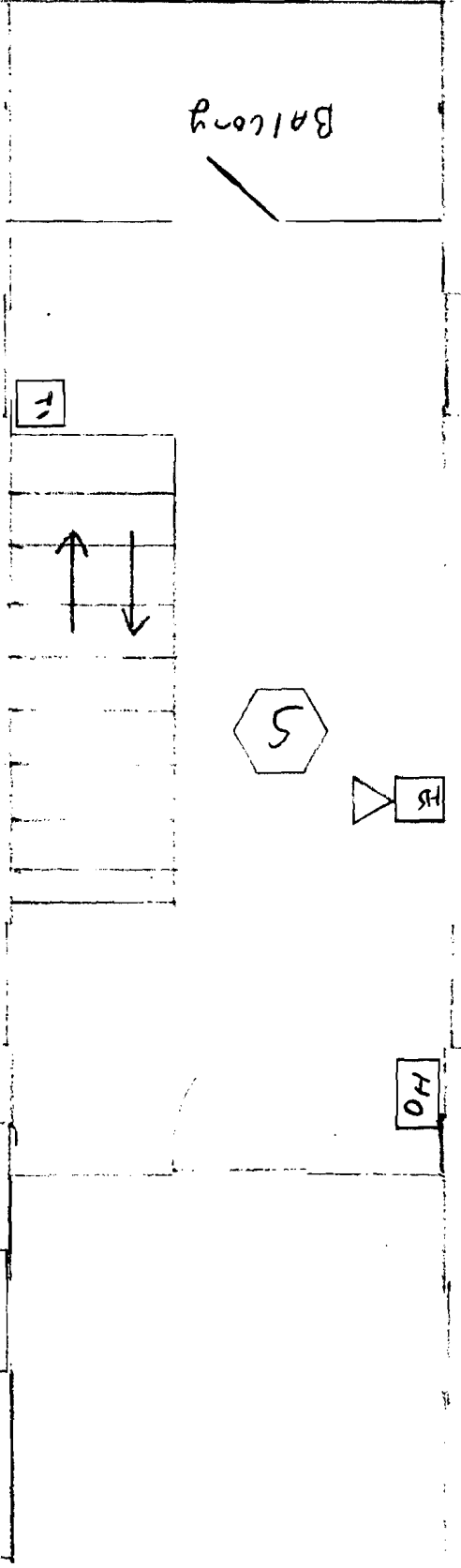


SAME LAYOUT AS UNIT 4

S unit 2

3rd Floor

10th floor



Unit Apartment Building  
 Cumberland Ave  
 and Maine

SAME LAYOUT AS UNIT 5