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

Permit No:	Issue Date:	CBL:
09-0850		038 E012001

Location of Construction:	Owner Name:	Owner Address:	Phone:
52 Center St	Picture Island Inc	Po Box 15148	

Business Name:	Contractor Name:	Contractor Address:	Phone
	Protection One/Kevin Bridgham	10 Manuel Drive Portland	2073475309

Lessee/Buyer's Name	Phone:	Permit Type:	Zone:
		Fire Alarm System	B-3

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial	Commercial / Install Fire Alarm	$110.00	$8,800.00	1

FIRE DEPT: w/ Conditions ☒ Approved ☐ Denied 8/24/09

INSPECTION: Use Group: B Type:

Signature: _____

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: _____ Date: _____

Proposed Project Description:
Install Fire Alarm

Permit Taken By:	Date Applied For:
gg	08/10/2009

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..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐ Date: 9/25/09	☐ Denied Date:	☐ Denied Date:
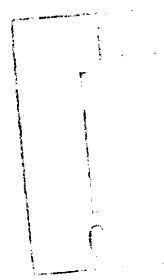
CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the 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

Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK
CITY OF PORTLAND
BUILDING INSPECTION
PERMIT

Permit Number: 090850

Please Read
Application And
Notes, If Any,
Attached

This is to certify that ____ Picture Island Inc /Protection O... Kevin B...

has permission to ____ Install Fire Alarm

AT _52 Center St____

CB...038 E012001

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.

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 closed-in. 24 HOUR NOTICE IS REQUIRED.
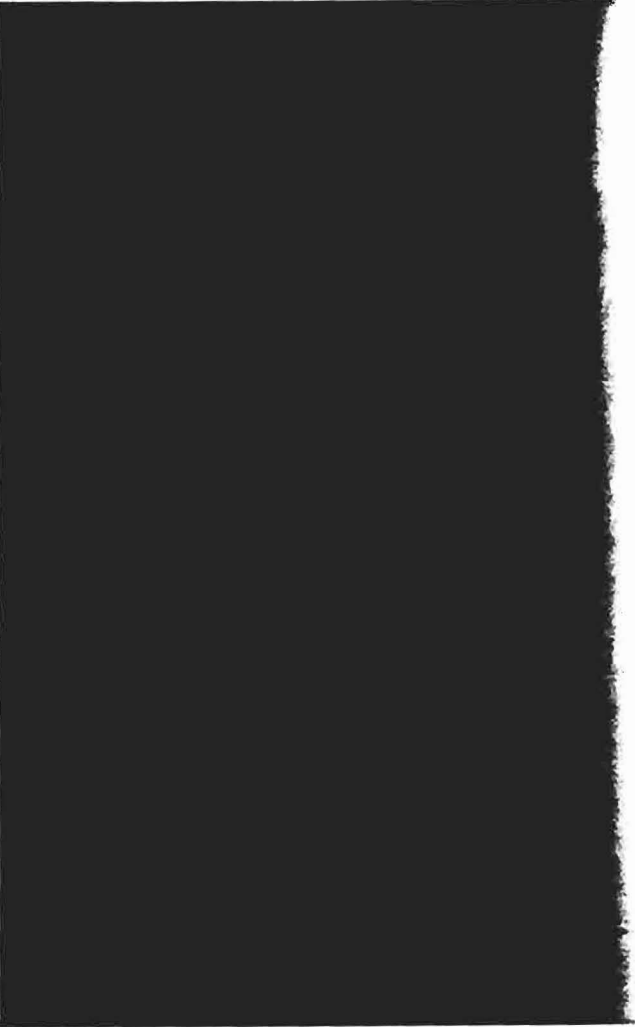
A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____ (202)

Health Dept. _____

Appeal Board _____

Other _____
Department Name

Director, Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
09-0850	08/10/2009	038 E012001

Location of Construction:	Owner Name:	Owner Address:	Phone:
52 Center St	Picture Island Inc	Po Box 15148	

Business Name:	Contractor Name:	Contractor Address:	Phone
	Protection One/Kevin Bridgham	10 Manuel Drive Portland	(207) 347-5309

Lessee/Buyer's Name	Phone:		Permit Type:
			Fire Alarm System

Proposed Use:	Proposed Project Description:
Commercial / Install Fire Alarm	Install Fire Alarm

Dept: Zoning   **Status:** Approved   **Reviewer:** Marge Schmuckal   **Approval Date:** 08/25/2009
Note: **Ok to Issue:** ☑

Dept: Building   **Status:** Approved   **Reviewer:** Penny Littell   **Approval Date:** 08/27/2009
Note: **Ok to Issue:** ☐

Dept: Fire   **Status:** Approved with Conditions   **Reviewer:** Ben Wallace Jr.   **Approval Date:** 08/24/2009
Note: **Ok to Issue:** ☑

1) Annunciator and all pull stations shall be labeled "Local Alarm Only - Dial 911" if system is not monitored.

2) A final acceptance test shall be scheduled with the fire department. Call 874-8703 to schedule.

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

4) Annunciator panel shall be located at front door.

5) 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.

6) The fire alarm system shall comply with NFPA 72 and Fire Department Technical Standard. A compliance letter is required.

7) Installation of a Fire Alarm system requires a Knox Box to be installed per city crdinance

I 09 0850

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: 52 Center Street   CBL: 238 - E 012

Exact location: (within structure) FACP in basement

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

Building owner: Dan Steele

System Designer: Kevin Bridgham , 10 Maneuel Dr. Portland 04103

Designer phone: 347-5309   E-mail: Kevinbridgham@protectionone.com

Installing contractor: _____ License No: _____

Contractor phone: _____ E-mail: _____

This is a new application: YES ☑   NO ☐

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

The following documents have been provided with this application:

Floor plans:	YES ☑	NO ☐	COST OF WORK: $8800
Wiring diagram:	YES ☐	NO ☐	PERMIT FEE: $110
Annunciator details:	YES ☑	NO ☐	($10 PER $1,000 + $30 FOR THE FIRST $1,000)
Bid specifications:	YES ☐	NO ☐	
Equipment data sheets:	YES ☑	NO ☐	
Battery & voltage drop calculations: YES ☐		NO ☐	
Sequence of operations:	YES ☐	NO ☐	
Designer/ personnel qualifications: YES ☐		NO ☐	

Please submit all of the information outlined on the checklist 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 NFPA 70, NFPA 72, and Fire Department Technical Standard(s).

Applicant signature: Kevin S Bridgham   Date: 7-28-2009

CITY OF PORTLAND, MAINE
Department of Building Inspections

Original Receipt

Aug 10 20_C9_

Received from _Project One_

Location of Work _52 Center St_

Cost of Construction $_____   Building Fee:_____

Permit F- $_____   Site Fee: _____

Certificate of Occupancy Fee: _____

Total: _____

'mbing (I5) ___   Electrical (I2) ___   Site Plan (U2) ___

_8/17/09_
Awaiting additional
info from kevin .
Ben

_/2_

___   **Total Collected** $ _110.00_

_ be started until permit issued.
_c keep original receipt for your records.

Taken by: _____

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

BASEMENT

1st FLOOR

2nd FLOOR

3rd FLOOR

4th FLOOR
(Residence)

1B

1A, 1B

1B

1A, 1B

1B
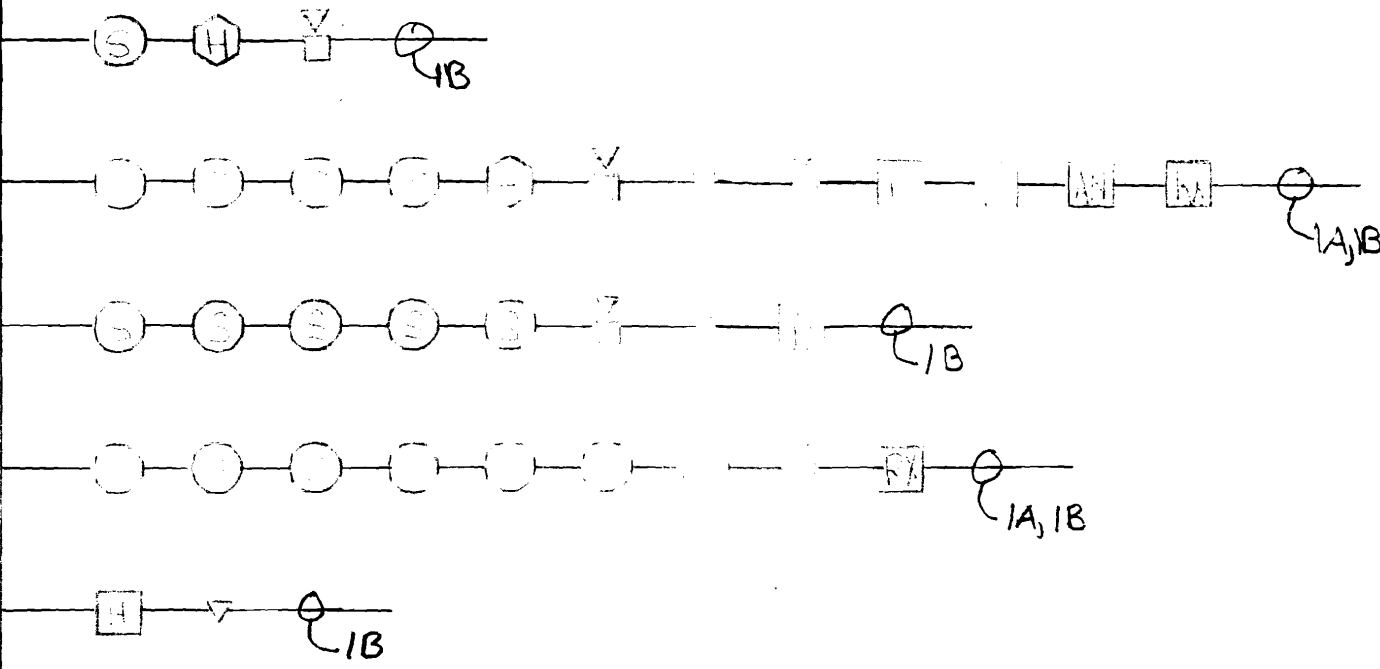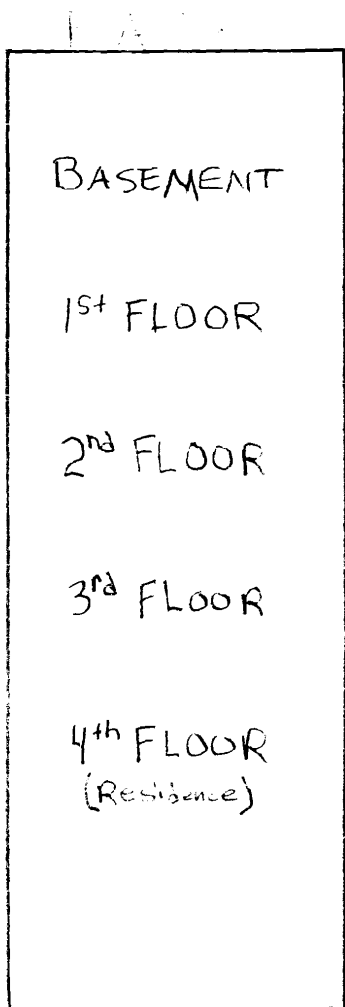
* All initiating devices
  are wireless

WIRE
A = 18/4 FPLP Receiver/Ann
B = 14/2 FPLP Horn/Strob

= Smoke   = Horn

= Heat   = Horn/Strobe

= Pull   = Strobe

AN = Annunciator   R = Receiver

Kevin Bridgham
Commercial Security Consultant

10 Manuel Drive
Portland, ME 04103
Direct: 207-347-5309
Toll Free: 800-310-5011 Ext. 65309
Cell: 207-332-9379
Fax: 207-772-7355
kevinbridgham@ProtectionOne.com

HOME
AND BUSINESS
Protection One
SECURITY

Your World Is Worth Protecting®
www.ProtectionOne.com

PERMIT ISSUED

AUG 14 2009

CITY OF PORTLAND

Honeywell Security

© 2003 Honeywell International Inc. All Rights Reserved

☑ Apply UL Power Limits?
(Required to maintain UL Listing)

☑ Commercial Fire Installation

☐ Commercial Burg Installation

Facility Information

Location:	
Account #:	
Model:	
Engineer:	
Date:	

Enter Standby and Alarm Times

Battery Standby (hours):	24
Alarm Duration (minutes):	5

Battery Contigency Factor: 10% ▼

Recommended Battery (AH)	14.2

SELECTED PANEL MAXIMUM OUTPUT RATINGS

Select Panel from pulldown list: Vista-128FB ▼

	Polling Loop (mA)	Standby Auxiliary Power (mA)	Alarm Auxiliary Power (mA)	Panel Standby (mA)	Panel Alarm (mA)	Bell #1 Output (mA)	Bell #2 Output (if used; mA)	Maximum Panel Standby Output	Maximum Panel Alarm Output	Max Battery Supported by Panel
	128	1000	1700	300	470	1700	1700	1000	2300	34.4
Calculated Current Draw	0	210	165	Calculated Bell Draw		0	1078	Total Standby: 210	Total Alarm: 1243	
Power Budget	128.0	790.0	1535.0	Bell Power Budget		1700.0	622.0	Standby Budget: 790.0	Alarm Budget: 1057.0	

External Bell Power Req'd (mA): 0.0   Ext. UL Power Req'd (mA): 0.0

Grayed-out device(s) are not supported by selected panel

KEYPADS	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Alarm Current	Total External Current Required
/////////	0	0					0	0	0
/////////	0	0					0	0	0
/////////	0	0					0	0	0
6139/6139R	0	0	40	100			0	0	0
/////////	0	0					0	0	0
/////////	0	0					0	0	0
/////////	0	0					0	0	0
/////////	0	0					0	0	0
6160/6160CR	1	0	45	150			45	150	0
6160RF	0	0	50	150			0	0	0
6160V	0	0	60	190			0	0	0
/////////	0	0					0	0	0
Add'l Keypd (Enter # and Currents)	0	0	0	0			0	0	0

2 WIRE & 4 WIRE SMOKE DETECTORS (except Vplex Polling Loop detectors)	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Alarm Current	Total External Current Required
2 wire smoke detector (zone powered)	0			Two-wire smoke detector current is built into the panel budgets. These fields are					
2 wire smoke detector (zone powered)	0			included to help you create a complete equipment list. The line below indicates if					
2 wire smoke detector (zone powered)	0			number of detectors exceeds panel capacity.					
2 wire smoke detector (zone powered)	0			Quantity of 2 Wire Smoke Detectors OK for selected panel!					
12V 4-wire Smoke (Qnt'y & Currents)	0	0	0	0			0	0	0
12V 4-wire Smoke (Qnt'y & Currents)	0	0	0	0			0	0	0
12V 4-wire Smoke (Qnt'y & Currents)	0	0	0	0			0	0	0
12V 4-wire Smoke (Qnt'y & Currents)	0	0	0	0			0	0	0

MULTI-POWER DEVICES	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Alarm Current	Total External Current Required
4208U [powered by polling loop]	0		0	0	27.3	0	0	0	0
4208U [powered by panel aux power]	0		28	0	0.6	0	0	0	0
4208U [powered externally]	0		28	0	0.6	0	0	0	0
4208SN [powered by polling loop]	0		0	0	33.6	0	0	0	0
4208SN [powered by panel aux power]	0		33	0	0.6	0	0	0	0
4208SN [powered externally]	0		33	0	0.6	0	0	0	0
4208SNF [powered by polling loop]	0		0	0	33.6	0	0	0	0
4208SNF [powered by panel aux power]	0		40	0	0.6	0	0	0	0
4208SNF [powered externally]	0		40	0	0.6	0	0	0	0
4208SNF (Class B to A Zone Converter)	0	0	40	0	0	0	0	0	0
4209U Grouped Zone Mux. Module	0	0	110	0	15.5	0	0	0	0
4297 Polling Loop Extender	0	0	178	0			0	0	0
Add'l Device (enter quant. & currents)	0	0	0	0	0	0	0	0	0
Add'l Device (enter quant. & currents)	0	0	0		0	0	0	0	0

AUXILIARY POWERED DEVICES	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Alarm Current	Total External Current Required
PS24 24 volt Power Supply Module	0	0	50	100			0	0	0
4100SM (no more than one per system)	0	0	25	0			0	0	0
4204: Enter no. of relays used	0	0	40	0			0	0	0
4204CF:Enter no. of relays used	0	0	80				0	0	0
4285 Voice Module	0	0	160				0	0	0
4286 with warning speakers	0	0	220	300			0	0	0
5140DLM Backup Dialer Module	1	0	5	15			5	15	0
5800RP wireless repeater module	0	0	100				0	0	0
5800TM wireless xmtr module	0	0	20				0	0	0
5881EN receiver	0	0	60				0	0	0
5883 hi-security receiver	2	0	80				160	0	0
7845C Cellular Radio ☐ Current Limited?	0	0	400				0	0	0
7845CV2 Cell Radio ☐ Current Limited?	0	0	600				0	0	0
7845i Internet Communicator	0	0	110				0	0	0
997 Ceiling Mount PIR ☐ LED Active?	0	0	12				0	0	0
998 Wall Mount PIR ☐ LED Active?	0	0	13				0	0	0
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	0
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	0
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	0
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	0
FSA-8 fire zone annunciator	0	0	35	65			0	0	0
FSA-24 fire zone annunciator	0	0	35	130			0	0	0
UVS	0	0	75	110			0	0	0
VA8200 Panel Linking Module	0	0	88	0			0	0	0
VA8201 Alpha Pager Module	0	0	165	0			0	0	0
Add'l Device (enter quant. & currents)	0	0	0	0			0	0	0
Add'l Device (enter quant. & currents)	0	0	0	0			0	0	0

POLLING LOOP DEVICES	Enter Quantity	How many powered by 4297?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Alarm Current	Total External Current Required
4101SN Single Output Relay Module	0	0			7	0			
4190SN Two Zone SIM	0	0			2	0			
4190WH	0	0			2	0			
4191SN-WH	0	0			0.5	0			
4192CP	0	0			0.4	0			
4192SD Photoelectric Smoke Det.	0	0			0.4	0			
4192SDT	0	0			0.4	0			
4193SN Two Zone SIM	0	0			1.5	0			
4194 Contact	0	0			1	0			
4196	0	0			1	0			
4209U	0	0			15.5	0			
4275EX Dual PIR ☐ LED Active?	0	0			1	0			
4275EX-SN Dual PIR ☐ LED Active?	0	0			1	0			
4278EX-SN ☐ LED Active?	0	0			1	0			
4293SN	0	0			1	0			
4939SN WH/BR/GY Surf Mt. Cntct.	0	0			1	0			
4944SN Recessed Contact	0	0			1	0			
4945SN-WH	0	0			0.5	0			
4959SN Overhead Door Contact	0	0			0.5	0			
5192SD Smoke Detector	0	0			2.8	0			
5192SDT Smoke Detector with Heat	0	0			2.8	0			
998MX PIR ☐ LED Active?	0	0			1	0			
FG-1625SN Glass Break Detector	0	0			1	0			
Quest2260SN	0	0			6	0			
Vistakey	0	0			2	0			
Add'l VPlex (enter qnt'y & current)	0	0			0	0			
Add'l Vplex (enter qnt'y & current)	0	0			0	0			

12V NOTIFICATION DEVICES ON BELL OUTPUT #1	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Sounder Current from Panel Bell #1	Total Sounder Current (external)
Enter device name, quant., & current	0	0		0				0	0
Enter device name, quant., & current	0	0		0				0	0
Enter device name, quant., & current	0	0		0				0	0
Enter device name, quant., & current	0	0		0				0	0
Enter device name, quant., & current	0	0		0				0	0

12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Total Standby Current	Total Sounder Current from Panel Bell #2	Total Sounder Current (external)
Gentex Horn Strobe Multi-Candela	6	0		135				810	0
Gentex Horn	1	0		29				29	0
Gentex Strobe	2	0		106				212	0
Sync Module	1	0		27				27	0
Enter device name, quant., & current	0	0		0				0	0

12V AUX POWER AND BELL CIRCUIT WIRE RUN DATA	Units	Wire Gauge(AWG)	Ohms per 1000 ft	Alarm Current Draw (mA)	Run Length	Actual Resistance (twin leads)	Voltage At EOL	Voltage Drop (Percent)
Panel Aux Power Wire Run (twin lead)	Feet ▼	<Select Wire Gauge> ▼	0.00	165.00	0	0.00	12.00	0.00
Panel Bell 1 Wire Run (twin lead)	Feet ▼	#14 AWG Solid ▼	3.19	0.00	0	0.00	12.00	0.00
Panel Bell 2 Wire Run (twin lead)	Feet ▼	#14 AWG Solid ▼	3.19	1078	0	0.00	12.00	0.00

PS24 Power Supply

Standby/Alarm Durations (from top)	
Battery Standby (hours):	24
Alarm Duration (minutes):	5
Required Capacity (AH)	1.059
Use TWO identical batteries w/ this AH capacity	7.0

PS24 POWER SUPPLY MODULE, MAXIMUM CAPACITIES										
	Panel 12V Standby (mA)	Panel 12V Alarm (mA)	Output A Standby (mA)	Output A Alarm (mA)	Output B Standby (mA)	Output B Alarm (mA)	PS24 PC Board (mA)	Maximum Total Standby Output	Maximum Total Alarm Output	Max. Battery Capacity
Using PS24 to back up Control Panel	510	1713	570	1700	570	1700	40	610	4180	34.4
								Total Standby	Total Alarm	
Equivalent panel load @ 24V	0.0	0.0	0	0	0	0	40	40	40	
(converted to 12VDC from 24V full-wave)								Standby Budget	Alarm Budget	
Power Budget	510.0	1713.0	570.0	1700.0	570.0	1700.0		570.0	4140.0	34.4

24V NOTIFICATION APPLIANCES Enter Device Names & Specifications	Enter Quantity	Which PS24 Output?	Device Standby Load (MA)	Device Alarm Load (MA)		Subtotal A Standby	Subtotal A Alarm	Subtotal B Standby	Subtotal B Alarm
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0
24V Notification Appliance	0	Output A ▼	0	0		0	0	0	0

24V BELL CIRCUIT WIRE RUN DATA	Units	Wire Gauge(AWG)	Ohms per 1000 ft	Total Alarm Current Draw (mA)	Run Length	Actual Resistance (twin leads)	Voltage At EOL	Voltage Drop (Percent)
PS24 Output A Wire Run (twin lead)	Feet ▼	<Select Wire Gauge> ▼	0.00	0.00	0	0.00	24.00	0.00
PS24 Output B Wire Run (twin lead)	Feet ▼	<Select Wire Gauge> ▼	0.00	0.00	0	0.00	24.00	0.00

BOSCH

Invented for life

GE3-12 Series 12 V Strobes and Horn Strobes

- ► Silence the horn while strobes flash
- ► Use the SuperSlide˚ feature for easy testing
- ► Wide voltage range; 8 VDC to 17.5 VDC
- ► Many candela choices
- ► Select high or low frequency, high or low volume, and temporal Code 3 or continuous tone pattern
- ► Rugged die-cast metal mounting plate

The Gentex Commander[3] Series Low-profile Strobes (GES3-12) and Horn Strobe (GEC3-12) combinations offer dependable alarms, a low current draw, and a minimum flash rate of 1 Hz regardless of input voltage.

Functions

Easy Installation and Testing

The user can wire then install the entire system, reducing installation and operating costs. Use the SuperSlide˜ feature to test supervision.

Horn Output

The horns provide a selection of high or low volume. The user can also select either Continuous or Temporal (Code 3) tone output, and synchronize the temporal signals by using the AVS Series Synchronization Modules.

Strobe Output

Select from 15 cd, 30 cd, 60 cd, or 75 cd while in the field using a sliding switch. The horn strobe appliance with the AVS-44, AVSM, or a compatible control panel can silence the audible signal while leaving the visible signal energized with the use of a single pair of power wires.

Certifications and Approvals

Gentex Corporation holds these Listings and Approvals:

Listings and Approvals:	c-UL-us: Dual-Listed 464, 1971, 1638
	CSFM: 7135-0569: 122
	City of Chicago Bureau of Fire Protection
	NYC/BSA and MEA: (285-91-E, Vol. XV)
	Factory Mutual Research
Complies with:	Americans with Disabilities Act (ADA 4.28.3)
	National Fire Protection Association (NFPA 72)

Installation/Configuration Notes

Compatible Products

The following products are compatible with the GE3-12 Series 12 V Strobes and Horn Strobes:

Category	Product ID	Product Description
Control Panels		Compatible with all Bosch G Series, 6000 Series, 2000 Series, DS7400Xi and DS7400XiV4, DS7080iP-32, DS7200 Series, and DS7060 Series Control Panels[1]
	D7022[2]	Conventional FACP
Modules	AVS-44	Synchronization module (red)
	AVS44-W	Synchronization module (white)

www.boschsecurity.com

AVSM-R	Synchronization module (red)
AVSM-W	Synchronization module (white)

[1] For synchronization, use the AVS44 or AVSM Synchronization Modules with these control panels.
[2] The D7022 must be set for 12 VDC operation and requires the AVS44 or AVSM Synchronization Modules for synchronization.

Mounting Considerations

Note   Use the GE3-12 series for indoor installations only.

These strobes and horn strobe combinations are equipped with a four-inch square metal mounting plate that can be attached as follows:

	Conduit Applications	Surface Mounted	Semi Flush Mounted
Single-gang	•		•
Double-gang	•	•	•
Four-inch square	•	•	•
GSB	•	•	

Also included is a locking mechanism that secures the product to the bracket without any screws showing.

Shipping Information

The GEC3-12 horn strobe models are delivered from the factory set to the temporal lower frequency mode.

Wiring

Note   Do not use these units in coded or pulsed signaling circuits.

The input terminals accept wires with diameters between 18 AWG (1.2 mm) and 12 AWG (2.3 mm).

Parts Included

Quant.	Component
1	Strobe or horn strobe with finish plate
1	Die-cast mounting plate
1	Plastic test card
1	Hardware pack
1	Literature pack

Technical Specifications

Alarm Ratings

Horn (Continuous, 2400 Hz)

Audible Device Current (maximum):	29 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	79 dBA to 84 dBA

Horn (Continuous, Mechanical)

Audible Device Current (maximum):	26 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	79 dBA to 83 dBA

Horn (Temporal Code 3, 2400 Hz)

Audible Device Current (maximum):	29 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	76 dBA to 81 dBA

Horn (Temporal Code 3, Mechanical)

Audible Device Current (maximum):	26 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	75 dBA to 80 dBA

Chime (Continuous)

Audible Device Current (maximum):	13 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	64 dBA* to 65 dBA*

Chime (Temporal Code 3)

Audible Device Current (maximum):	13 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	63 dBA* to 64 dBA*

Whoop

Audible Device Current (maximum):	55 mA RMS
Sound Output (maximum range) at 10 ft (3 m):	77 dBA to 80 dBA

* If you operate the horn in this mode at this voltage, it does not meet the UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high output setting for public mode application.

Note   The sound output for the temporal (Code 3) tone is rated lower because the time the horn is off is averaged into the sound output rating. When the horn is producing a tone in the Temporal mode its sound pressure is the same as the Continuous mode.

Environmental Considerations

Relative Humidity	Up to 93% non-condensing
Temperature (Operating):	+32°F to +120°F (0°C to +49°C)

Mechanical Properties

Dimensions (H x W x D):	5.0 in. x 4.5 in. x 2.5 in. (12.7 cm x 11.4 cm x 6.4 cm)

Power Requirements

Voltage Range: 8 to 17.5 VDC or FWR

Voltage (Input):   12 VDC or FWR nominal

Strobe Current Ratings (maximum)

15 cd: 163 mA RMS

30 cd: 212 mA RMS

60 cd: 331 mA RMS

75 cd: 436 mA RMS

Trademarks

SuperSlide™ is a trademark of the Gentex Corporation, USA.

Ordering Information

GEC3-12WR 12-VDC Horn Strobe Unit	GEC3-12WR
GEC3-12WW 12-VDC Horn Strobe Unit	GEC3-12WW
GES3-12WR 12-VDC Strobe Unit	GES3-12WR
GES3-12WW 12-VDC Strobe Unit	GES3-12WW

Hardware Accessories

AVS-44 Synchronization Control Module (red)   AVS-44
  Synchronization Control Module primarily for use
  with the Gentex HS24 Series and ST24 Series
  notification appliances.

AVS44-W Synchronization Control Module (white)   AVS44-W
  Synchronization Control Module primarily for use
  with the Gentex HS24 Series and ST24 Series
  notification appliances.

AVSM-R Synchronization Control Module (red)   AVSM-R
  Synchronization module for use with all Gentex
  synchronizable notification appliances except
  the HS24 Series and the ST24 Series.

AVSM-W Synchronization Control Module (white)   AVSM-W
  Synchronization module for use with all Gentex
  synchronizable notification appliances except
  the HS24 Series and the ST24 Series.

GSB Surface Back Box (red)   GSB

BOSCH
Invented for life

GEH12 Series Low-frequency Horns

▸ Evacuation tone

▸ Use the SuperSlide˙ feature for easy testing

▸ Wide voltage range: 8 VDC to 17.5 VDC

▸ Select high or low frequency, high or low volume, and Temporal Code 3 or Continuous tone pattern

▸ Wire then install the entire system

▸ Rugged die-cast metal mounting plate

The Gentex GEH12 Series Low-frequency Horns offer a dependable audible alarm and a low current draw.

Functions

Easy Installation and Testing

The user can wire then install the entire system, reducing installation and operating costs. Use the SuperSlide™ feature to test supervision.

Horn Output

The horns provide a selection of high or low volumes with a peak sound of 100 dBA or greater at 10 ft (3 m). The series offers a choice between a 2400 Hz (remote signaling) tone or a broadband low frequency (1500 Hz to 3000 Hz) mechanical sounding (evacuation) tone where closed doors could be a problem. The user can also select either continuous or temporal Code 3 tone output, and synchronize the temporal signals by using the AVS Series Synchronization Modules or a compatible control panel.

Certifications and Approvals

Gentex Corporation holds these Listings and Approvals:

Listings and Approvals:	c-UL-us: Dual-Listed 464, 1971, 1638
	CSFM: 7135-0569: 122
	City of Chicago Bureau of Fire Protection
	NYC/BSA and MEA (285-91-E: Vol. XV
	Factory Mutual Research
Complies with:	Americans with Disabilities Act (ADA 4.28.3)
	National Fire Protection Association (NFPA 72)

Installation/Configuration Notes

Compatible Products

The following products are compatible with the GEH12 Series Horns:

Category	Product ID	Product Description
Control Panels	Compatible with all Bosch G Series, 6000 Series, 2000 Series, DS7400Xi and DS7400XiV4, DS7080iP-32, DS7200 Series, and DS7060 Series Control Panels[1]	
	D7022[2]	Conventional FACP
Modules	AVS-44	Synchronization module (red)
	AVS44-W	Synchronization module (white)
	AVSM-R	Synchronization module (red)
	AVSM-W	Synchronization module (white)

[1] For synchronization, use the AVS44 or AVSM Synchronization Modules with these control panels.

[2] The D7022 must be set for 12 VDC operation and requires the AVS44 or AVSM Synchronization Modules for synchronization.

Mounting Considerations

Outdoor Applications
For an outdoor application or a severe environment (NEMA 3R) application, the GEH12 Series Horns must be surface mounted on a flat wall in a GOE Outdoor Enclosure. Use a watertight conduit fitting.

Indoor Applications
Install the horns with their tops at least 90 in. (2.3 m) above the floor and no closer than 6 in. (15.2 cm) to the ceiling. The horns are equipped with a four-inch square mounting plate that can be attached as follows:

	Conduit Applications	Surface Mounted	Semi Flush Mounted
Single-gang	•		•
Double-gang	•	•	•
Four-inch square	•	•	•
GSB	•	•	

Shipping Information
The horns are delivered from the factory set to the temporal lower frequency mode. Also included is a locking mechanism that secures the product to the bracket without any screws showing.

Wiring
The input terminals accept wires with diameters between 18 AWG (1.2 mm) and 12 AWG (2.3 mm).

Parts Included

Quant.	Component
1	Horn with finish plate
1	Die-cast mounting plate
1	Plastic test card
1	Hardware pack
1	Literature pack

Technical Specifications

Alarm Ratings

Horn (Continuous, 2400 Hz)

Audible Device Current (maximum):	29 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 78 dBA Low output: 73 dBA

Horn (Continuous, Mechanical)

Audible Device Current (maximum):	26 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 81 dBA Low output: 75 dBA

Horn (Temporal Code 3, 2400 Hz)

Audible Device Current (maximum):	29 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 78 dBA Low output: 73 dBA

Horn (Temporal Code 3, Mechanical)

Audible Device Current (maximum):	26 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 78 dBA Low output: 72 dBA*

Chime (Continuous)

Audible Device Current (maximum):	13 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 64 dBA* Low output: 63 dBA*

Chime (Temporal Code 3)

Audible Device Current (maximum):	13 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 63 dBA* Low output: 62 dBA*

Whoop

Audible Device Current (maximum):	55 mA RMS
Sound output at 10 ft (3 m) at 12 VDC:	High output: 79 dBA Low output: 74 dBA*

* If you operate the horn in this mode at this voltage, it does not meet the UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high output setting for public mode application.

Note The sound output for the temporal (Code 3) tone is rated lower because the time the horn is off is averaged into the sound output rating. When the horn is producing a tone in the Temporal mode, its sound pressure is the same as the Continuous mode.

Mechanical Properties

Dimensions (HxWxD):	5.0 in. x 4.5 in. x 2.5 in. (12.7 cm x 11.4 cm x 6.4 cm)

Environmental Considerations

Relative Humidity	Up to 93% non-condensing
Temperature (Operating):	+32°F to +120°F (0°C to +49°C)

Power Requirements

Voltage Range: 8 VDC to 17.5 VDC

Voltage (Input):   12 VDC nominal

Trademarks

SuperSlide™ is a trademark of the Gentex Corporation, USA.

Ordering Information

GEH12WR 12 VDC Horn (red)   GEH12WR

GEH12WW 12 VDC Horn (white)   GEH12WW

Hardware Accessories

AVS-44 Synchronization Control Module (red)   AVS-44
    Synchronization Control Module primarily for use
    with the Gentex HS24 Series and ST24 Series
    notification appliances.

AVS44-W Synchronization Control Module (white)   AVS44-W
    Synchronization Control Module primarily for use
    with the Gentex HS24 Series and ST24 Series
    notification appliances.

AVSM-R Synchronization Control Module (red)   AVSM-R
    Synchronization module for use with all Gentex
    synchronizable notification appliances except
    the HS24 Series and the ST24 Series.

AVSM-W Synchronization Control Module (white)   AVSM-W
    Synchronization module for use with all Gentex
    synchronizable notification appliances except
    the HS24 Series and the ST24 Series.

GENTEX CORPORATION

A Smarter Vision™

AVS GANGABLE SYNCHRONIZATION CONTROL MODULE

AVS MODULE SERIES

Applications

The Gentex AVSM and AVS44 control modules are designed to provide an easy way to synchronize multiple horns as well as strobe light flashes using only two wires in instances where a synchronized flash is required.

When the module is in temporal 3 mode, it has the capability to synchronize multiple horn signals and the ability to silence the horn while allowing the strobes to continue to flash. In unison mode, the horn cannot be silenced while maintaining strobe operation.

By incorporating the control module as shown in the following diagrams on pages 2-4, the control module will control the power to the horns to produce the synchronized operation. The AVSM and AVS44 Control Modules are warranted for three years from date of purchase.

Standard Features

- Synchronize Horn and Strobe With the Use of Only Two Wires
- Easy to Install
- Module is Rated for 3 Amps Continuous Current and 5 Amps Surge or Inrush Current
- Synchronizes to 1Hz Flash Rate
- Operates 1 Class 'A' Circuit or 2 Class 'B' Circuits at 3 Amps per Circuit.
- Dual Synchronization Module *Only* When Using the 2 Class 'B' Circuits.
- A Green LED Status Indicator to Signal Operation of Module.
- Option to Silence the Horn While Strobes Continue to Flash When Using Temporal 3 Mode.

- AVSM Operates the GCS/GCC, GCSR/GCCR, GES3-24/GEC3-24, GES3-12/GEC3-12, GEC/GES/GEH, GESR/GECR, SSPK Series and GX93 Series.
- The AVSM *WILL NOT* Operate the ST/HS Series. The AVS44 *MUST BE* used.
- The AVS44 *MUST BE* Used When the ST/HS Series is on a Circuit.
- The AVS44 *WILL NOT* Operate the GES3-12/GEC3-12 Series. The AVSM *MUST BE* used.
- Three Year Warranty From Date of Purchase.

AVSM & AVS44 CONTROL MODULE

Product Listings

c(UL)us

The symbol or the product's nameplate means it is
Listed by UNDERWRITERS LABORATORIES, INC.

- BFP (City of Chicago)
- BS+A/MEA 285-91-E Vol.XII (AVS44)
  285-91-E Vol.XVIII (AVSM)
- CSFM: 7300-0569:121 (AVS44)
  7125-0569:123 (AVSM)
- UL 464 and UL 1971 Listed
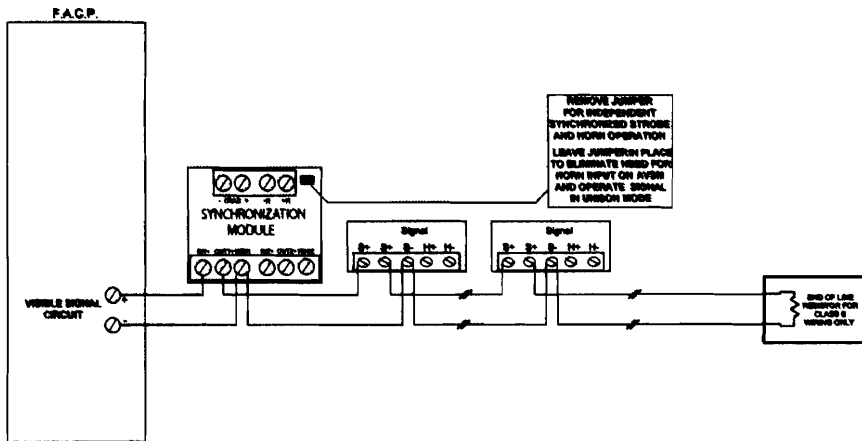- CAN/ULC S526-M87/S524-01 Compliant

NEMA MEMBER   ASSEMBLED IN THE USA

Available Models

Model Number	Part Number	Model Number	Part Number
AVSM-R	904-1243-002	AVS44-R	904-1255-002
AVSM-W	904-1244-002	AVS44-W	904-1256-002

AVS Series Product Current Draw		
Product	AVS44	AVSM
12 VDC	N/A	27mA
12VDC UL Max[1]	N/A	31mA
24VDC	37mA	37mA
24 VDC UL Max[1]	45mA	45mA

[1] RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33VDC for 24VDC units) (8-17VDC for 12VDC units). For strobes the UL max current is usually at the minimum listed voltage (16VDC for 24VDC units) (8VDC for 12VDC units). For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Notes:
- The AVS Modules come with own back box and cover plate.
- **Dimensions of Module:**
  3.85"H x 3.82"W x 1.32"D
  Dimensions of Box:
  5.57"H x 4.55"W x 2.39"D
- A green LED status indicator will flash once every four seconds if zone 1 is operational. The LED will flash twice every four seconds if zones 1 and 2 are operational.
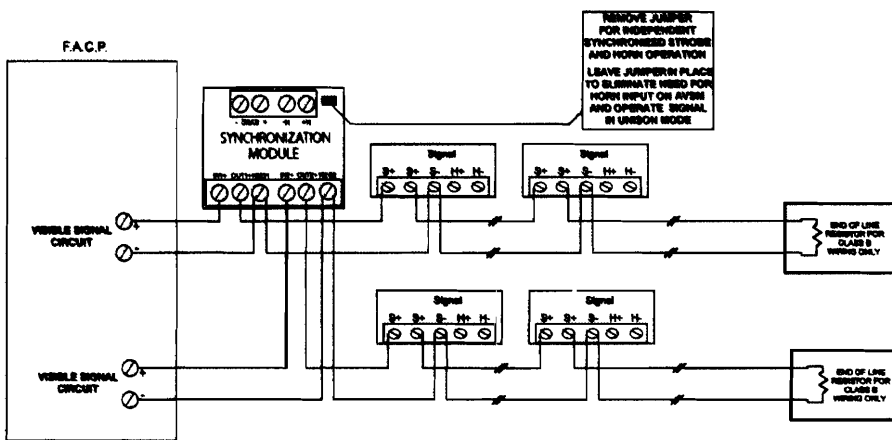
Diagram 1
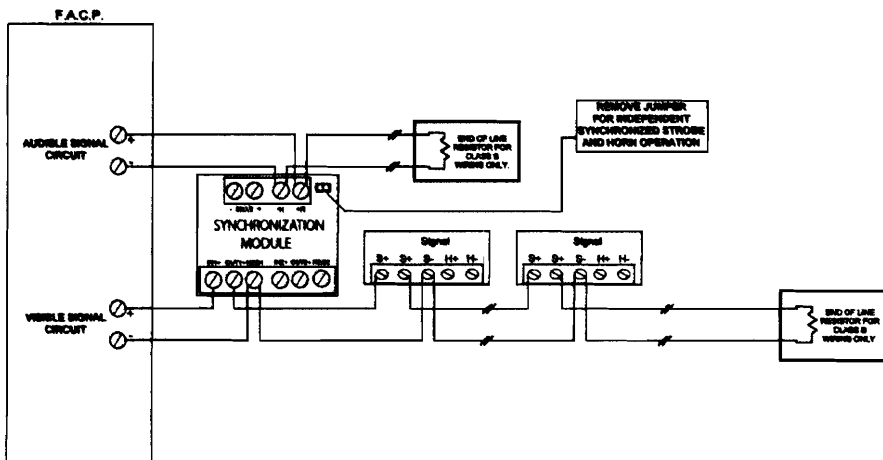## Wiring for One Class B Circuit with Strobe/Horn Operating in Unison

F.A.C.P.

REMOVE JUMPER
FOR INDEPENDENT
SYNCHRONIZED STROBE
AND HORN OPERATION

LEAVE JUMPER IN PLACE
TO ELIMINATE NEED FOR
HORN INPUT ON AVSM
AND OPERATE SIGNAL
IN UNISON MODE

SYNCHRONIZATION MODULE

Signal

Signal

VISIBLE SIGNAL CIRCUIT

END OF LINE RESISTOR FOR CLASS B WIRING ONLY
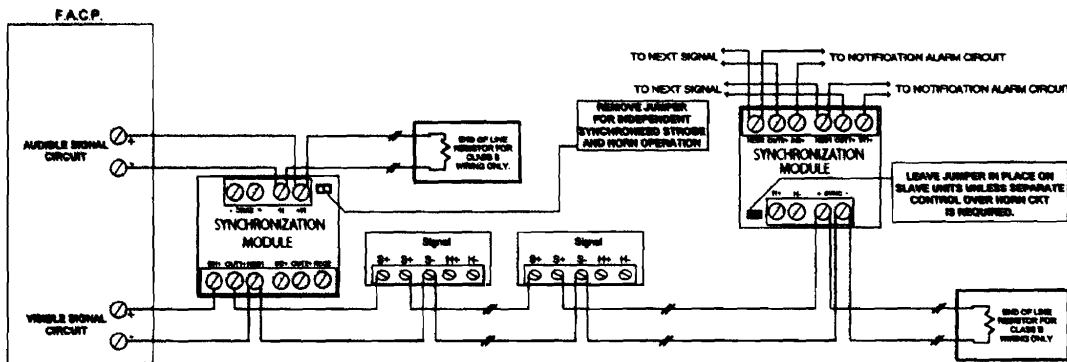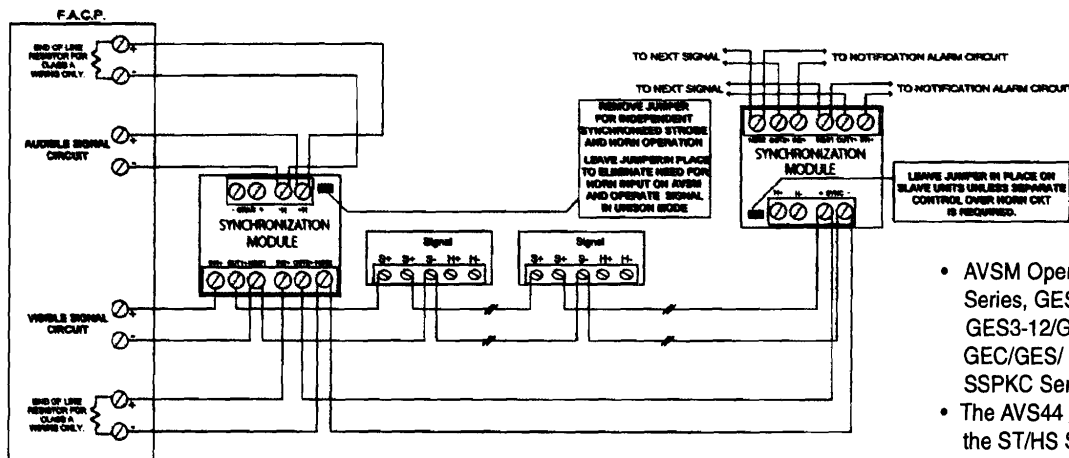
- AVSM Operates the GCS/GCC
  Series, GES3-24/GEC3-24 Series,
  GES3-12/GEC3-12 Series,
  GEC/GES/ GEH Series, SSPK/
  SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when
  the ST/HS Series is on a circuit.

Diagram 2
Wiring for Two Class B Circuits with Strobe/Horn Operating in Unison

F.A.C.P.

REMOVE JUMPER
FOR INDEPENDENT
SYNCHRONIZED STROBE
AND HORN OPERATION

LEAVE JUMPER IN PLACE
TO ELIMINATE NEED FOR
HORN INPUT ON AVSM
AND OPERATE SIGNAL
IN UNISON MODE

SYNCHRONIZATION MODULE

Signal

Signal

VISIBLE SIGNAL CIRCUIT

END OF LINE RESISTOR FOR CLASS B WIRING ONLY

Signal

Signal

VISIBLE SIGNAL CIRCUIT

END OF LINE RESISTOR FOR CLASS B WIRING ONLY

- AVSM Operates the GCS/GCC
  Series, GES3-24/GEC3-24 Series,
  GES3-12/GEC3-12 Series,
  GEC/GES/ GEH Series, SSPK/
  SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when
  the ST/HS Series is on a circuit.

Diagram 3
Wiring for One Class B Circuit with Strobe/Horn Operating Independently

F.A.C.P.

AUDIBLE SIGNAL CIRCUIT

END OF LINE RESISTOR FOR CLASS B WIRING ONLY

REMOVE JUMPER
FOR INDEPENDENT
SYNCHRONIZED STROBE
AND HORN OPERATION

SYNCHRONIZATION MODULE

Signal

Signal

VISIBLE SIGNAL CIRCUIT

END OF LINE RESISTOR FOR CLASS B WIRING ONLY

- AVSM Operates the GCS/GCC
  Series, GES3-24/GEC3-24 Series,
  GES3-12/GEC3-12 Series,
  GEC/GES/ GEH Series, SSPK/
  SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when
  the ST/HS Series is on a circuit.

Diagram 4
Wiring for One Class A Circuit with Strobe/Horn Operating in Unison
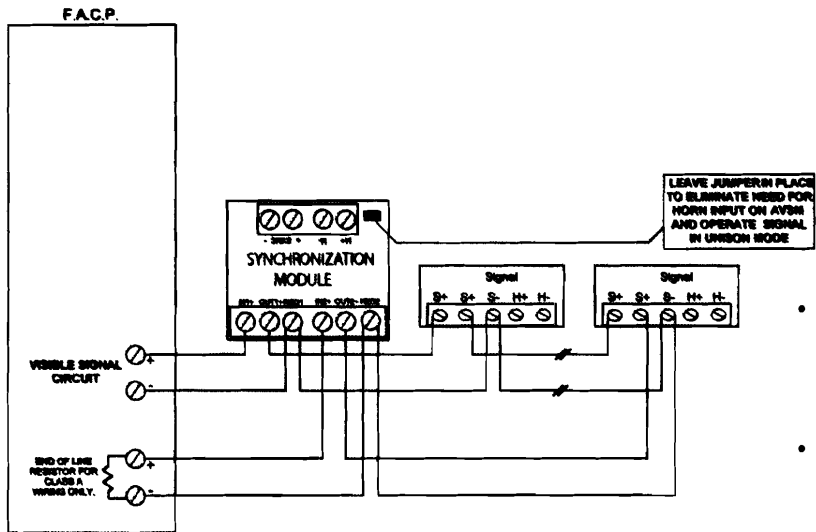
F.A.C.P.

LEAVE JUMPER IN PLACE
TO ELIMINATE NEED FOR
HORN INPUT ON AVSM
AND OPERATE SIGNAL
IN UNISON MODE

SYNCHRONIZATION
MODULE

Signal

Signal

VISIBLE SIGNAL
CIRCUIT

END OF LINE
RESISTOR FOR
CLASS A
WIRING ONLY.

- AVSM Operates the GCS/GCC
  Series, GES3-24/GEC3-24 Series,
  GES3-12/GEC3-12 Series,
  GEC/GES/ GEH Series, SSPK/
  SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when
  the ST/HS Series is on a circuit.

Diagram 5
Wiring for One Class A Circuit with Strobe/Horn Operating Independently
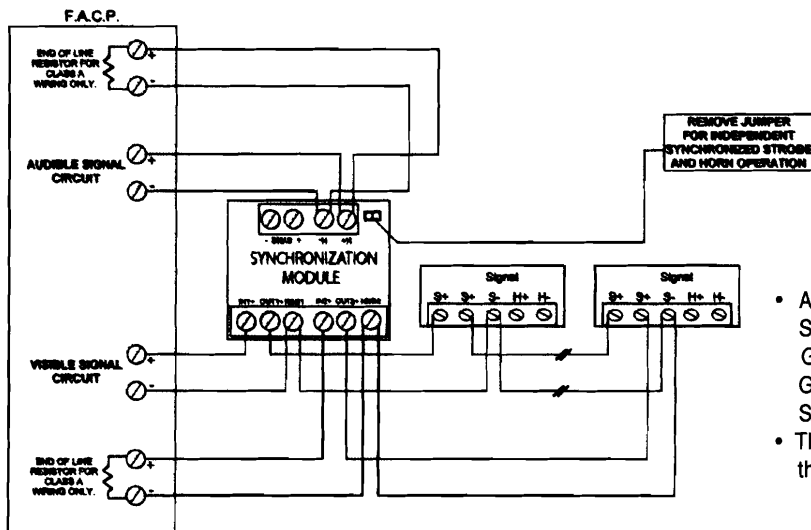
F.A.C.P.

END OF LINE
RESISTOR FOR
CLASS A
WIRING ONLY.

AUDIBLE SIGNAL
CIRCUIT

REMOVE JUMPER
FOR INDEPENDENT
SYNCHRONIZED STROBE
AND HORN OPERATION

SYNCHRONIZATION
MODULE

Signal

Signal

VISIBLE SIGNAL
CIRCUIT

END OF LINE
RESISTOR FOR
CLASS A
WIRING ONLY.

- AVSM Operates the GCS/GCC
  Series, GES3-24/GEC3-24 Series,
  GES3-12/GEC3-12 Series,
  GEC/GES/ GEH Series, SSPK/
  SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when
  the ST/HS Series is on a circuit.

Diagram 6a
Wiring for One Class B Circuit with Strobe/Horn Operating
in Unison and Use of Slave Module
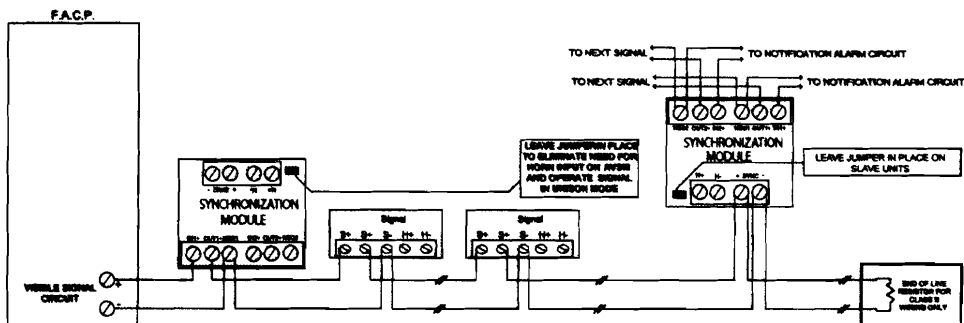
F.A.C.P.

TO NEXT SIGNAL   TO NOTIFICATION ALARM CIRCUIT

TO NEXT SIGNAL   TO NOTIFICATION ALARM CIRCUIT

SYNCHRONIZATION
MODULE

LEAVE JUMPER IN PLACE ON
SLAVE UNITS

LEAVE JUMPER IN PLACE
TO ELIMINATE NEED FOR
HORN INPUT ON AVSM
AND OPERATE SIGNAL
IN UNISON MODE

SYNCHRONIZATION
MODULE

Signal

Signal

VISIBLE SIGNAL
CIRCUIT

END OF LINE
RESISTOR FOR
CLASS B
WIRING ONLY.

- AVSM Operates the GCS/GCC
  Series, GES3-24/GEC3-24 Series,
  GES3-12/GEC3-12 Series,
  GEC/GES/ GEH Series, SSPK/
  SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when
  the ST/HS Series is on a circuit.

Diagram 6b
Wiring for One Class B Circuit with Strobe/Horn Operating
Independently and Use of Slave Module

- AVSM Operates the GCS/GCC Series, GES3-24/GEC3-24 Series, GES3-12/GEC3-12 Series, GEC/GES/ GEH Series, SSPK/ SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when the ST/HS Series is on a circuit.

Diagram 7
Wiring for One Class A Circuit with Strobe/Horn Operating Independently and
Use of a Slave Module

- AVSM Operates the GCS/GCC Series, GES3-24/GEC3-24 Series, GES3-12/GEC3-12 Series, GEC/GES/ GEH Series, SSPK/ SSPKC Series and GX93 Series.
- The AVS44 *MUST BE* used when the ST/HS Series is on a circuit.

Note: When using the Commander 2, 3 & 4 Series incoming positive power lead must be broken and each lead is to be inserted into each of the top two terminals. If two power runs are made to the signal, one for the strobe and one for the horn, only one of the runs must have its positive lead broken and placed under the two separate top terminals. A barrier is provided to prevent both leads from being placed under the same terminal.

NOTE: The AVS Modules are listed per UL 1971/Signaling Appliances for the Hearing Impaired with a voltage range of 8-33 VDC/fwr and CAN/ULC S526-M87, Visual Signaling Appliances, with a voltage range of 10 VDC/fwr to 30 VDC/fwr - 20% +10%. It is for indoor use only, with a temperature range of 0°C - 49°C (32°F - 120°F) and a maximum humidity of 93%RH.

CAUTION: The AVS Modules are to be connected only to circuits that provide continuously applied voltage. Do not use this module on coded or interrupted circuits in which the voltage is cycled on and off.

Honeywell

VISTA-128FB/V128FB-24

COMMERCIAL FIRE AND
PARTITIONED ALARM PLATFORM

Designed to integrate seamlessly with CCTV, access control and Honeywell's full range of fire and burglary components, the VISTA-128FB provides the ultimate protection of life and property. The UL listed Commercial Fire and Burglary Control Platform controls up to eight partitions and supports up to 128 zones/points using hardwired, wireless and addressable V-Plex technologies.

A diverse line of Honeywell initiating devices, notification circuits, digital dialers, keypads, RF receivers and relays support this extremely powerful control platform. The VISTA-128FB has been designed to mount quickly and easily in an attack resistant cabinet and is available in 12V and 24V models.

FEATURES

- Supports addressable V-Plex access control points using VistaKey (1 to 8 doors)

- Supports up to 15 doors of access control using Vista Gateway Module (VGM)*

- Supports CCTV applications with the new VistaView-100 CCTV switcher module

- Identifies the point or zone of a fire or alarm, using the new FSA-8/FSA-24 Fire system annunciator

- Stores up to 512 events and can accommodate 150 user codes

- New E2 software simplifies programming

- Easily programmed and maintained with newly upgraded Compass Downloader software

- Eight hardwired zones standard, expandableto 120 V-Plex addressable points/zones or 128 wireless points/zones

- Can control eight separate areas independently (8 partitions)

- Two on-board notification (bell) circuits delivering 2.3A @ 12V or 3.4 amp @ 24V

- Automatic smoke detector sensitivity maintenance testing

* Connects to Honeywell's Passpoint Access Control Systems. Maximum 32 doors.

VISTA-128FB/V128FB-24

COMMERCIAL FIRE AND PARTITIONED ALARM PLATFORM

SPECIFICATIONS:

- **Cabinet dimensions**
  - 18"H X 14.5"W X 4.3"D

- **Environmental**
  - Storage temp: -14°F to 158°F (-10°C to 70°C)
  - Operating temp: -32°F to 122°F (0°C to 50°C)
  - Humidity: 85% RH

- **EMI**
  Meets or exceeds the following requirements:
  - FCC Part 15, Class B Device
  - FCC Part 68
  - IEC EMC Directive

- **Agency Listings**
  Burglary
  - UL609 Grade A Local Mercantile Premises and
  - Mercantile Safe and Vault
  - UL611/1610 Grades A, AA, Central Station
  - UL365 Grades A, AA Police Connect

- **Fire**
  - UL864 FPA72 Local, Central Station and Remote Station
  - Factory Mutual
  - California State Fire Marshal
  - MEA
  - UL985

- **Additional Features**
  - Notification Appliance Circuits (two)
    - Programmable
    - Temporal code compliant
    - Individually silenceable
  - Programmable on-board auxiliary relay
    - SIA false alarm reduction features:
    - Exit Error Logic
    - Exit Delay Reset
    - Cross Zoning
    - Call Waiting Defeat
    - Recent Close Report

- Supports commercial hardwired, addressable V-Plex polling loop and wireless zones

- Hardwired zones:
  - Provides nine style B hardwired zones
  - EOLR supervised for Fire and UL burglary installations
  - Supports N.0 or N.C. sensors
  - Individually assignable to one or all eight partitions
  - Up to 16 two-wire smoke detectors each zone 1 and 2 (32 total)
  - Up to 50 two-wire glass break detectors on zone eight

- Patented addressable V-Plex polling loopV-Plex technology:
  - Supports up to 120 two-wire zones/points
  - Global polling technology for faster processing

- Increased current draw capacit (128mA)
- Supervised by panel
- Individually assignable to partitions, notification circuit (bell) output or aux relay
- 4,000 ft capability without the use of shielded cable
- Extender/Isolation bus module
- Two-wire smoke detector zone/group expansion module adds two or four zones
- Eight zone - Class A and B Extender Module
- One zone supervised Contact Monitor Module

- UL Listed wireless expansion
  - Supports up to 128 wireless zones using 5881 Receiver
  - Supervised by control for check-in signals
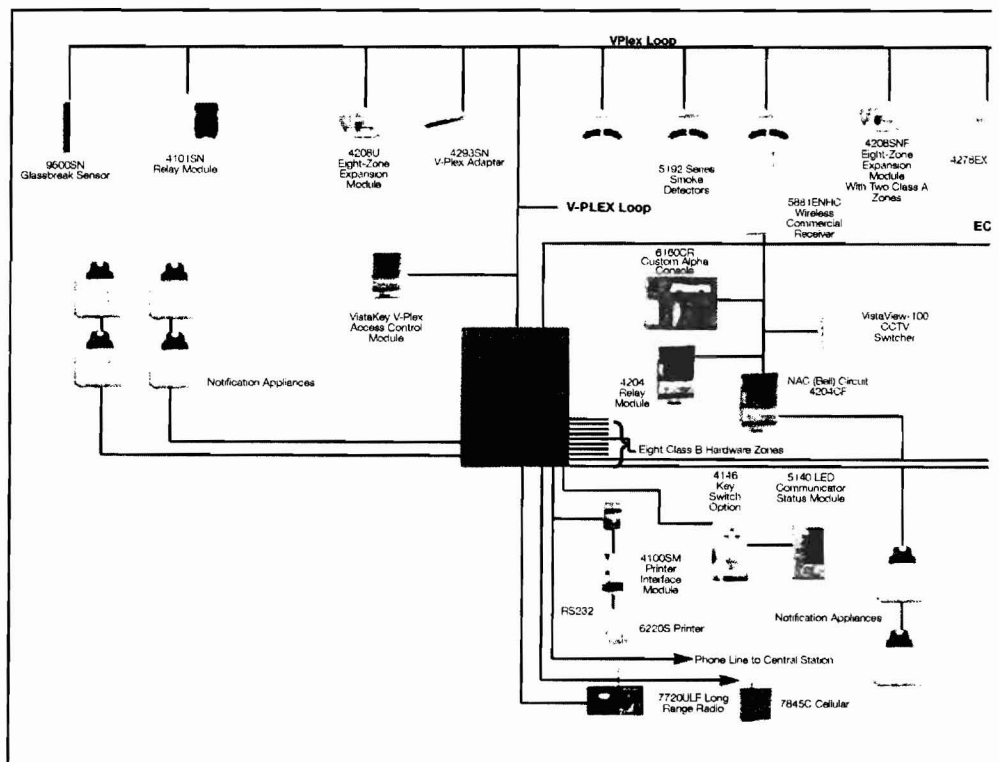
VISTA-128FB/V128FB-24
COMMERCIAL FIRE AND PARTITIONED ALARM PLATFORM

SPECIFICATIONS:

- Tamper protection for transmitter
- Individually assignable up to eight partitions
- Supports UL864 FPA approved wireless smoke\ndetectors

- Access control integration
  - Full integration with PassPoint
  - Access Control System Complete Gateway in access functions

- Event reporting

- Local printer of access or VISTA related event

- Scheduled uploading of events to central station

- Stored events for one call retrieval

- Communication
  - Phone mapping by zone response type
  - Supports VIP Interactive Phone

Voice Module
- Panel operation during download
- Uploading equipment list to central station
- Communication to PassPoint via Vista Gateway Module (VGM)

• **Applications**

Supported by a diverse line of Honeywell initiating devices, the powerful VISTA-128FB is the ideal integrated fire and burglary control for applications where a higher level of security is necessary including medical and professional buildings, supermarkets, churches and synagogues, office buildings, schools, universities, strip malls, larger residences and factory or warehouse environments.

• **Installation**

The VISTA-128FB alarm system has been designed to mount both quickly and easily in an attack resistant cabinet. It meets all applicable requirements for UL commercial burglary installations.

• **Electrical:**
- Primary power:
  - 18 VAC@ 72 VA No. 1450
  - Quiescent current draw:
  - 350mA
- Backup battery
  - 12VDC, 12AH min to 34AAH max
  - Lead acid battery (gel type)
- Alarm power
  - 12VDC, 1.7A max for each notification (bell) circuit output
- Aux. standby power
  - 12VDC, 1A max
- Total power
  - 2.3A at 12VDC, 3.4A at 24VDC from all sources
- Standby time
  - 24 hours with 1A standby load or 60 hours with 205mA max standby load using 34AAH battery
- Fusing
  - Battery input, aux. and notification (bell) circuit outputs are protected using PTC circuit protectors. All outputs are power limited.
- Main dialer
  - Line seize:
  - Double Pole

• **Ringer equiv.**
- 0.713

• **Formats**
- ADEMCO Low Speed, ADEMCO 4+2 Express, ADEMCO High Speed, ADEMCO Contact ID, Sescoa and Radionics
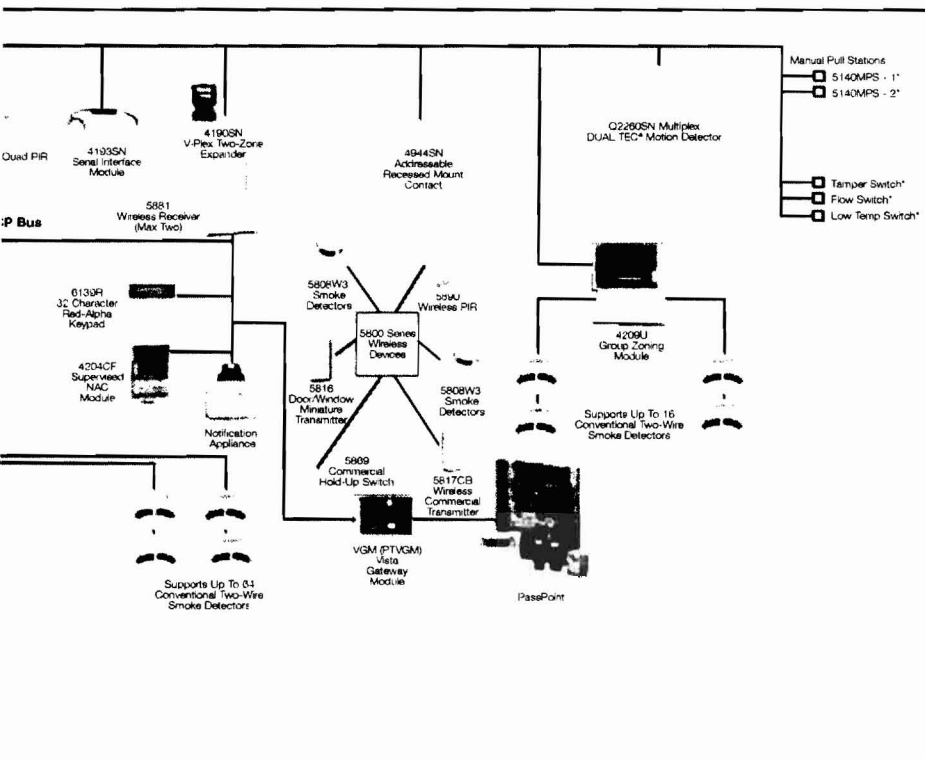
VISTA-128FB/V128FB-24
COMMERCIAL FIRE AND PARTITIONED ALARM PLATFORM

SPECIFICATIONS:

- **Auxiliary devices**
  - 6160CR Alpha Keypad Commercial Fire
  - 6139R - Red Alpha Keypad/Annunciator
  - FSA-8 & FSA-24 Fire System Annunciator
  - 4204 - Relay Module, four form C contacts
  - 4204CF - Two supervised output circuits
  - 6220S - System printer used with 4100SM Serial Interface Module
  - 5140DLM, FSA-8, FSA-24, FSAKSM Fire Annunciator

- **Two-wire and four-wire smoke detectors conventional**
  - System Sensor smoke detectors

- **Horn/Strobes**
  - System Sensor notification appliances

- **Manual pull stations**
  - 5140MPS-1
  - 5140MPS-2

- **V-Plex (addressable) devices**
  - 4101SN Single Relay/Zone Module
  - 4190SN Remote Point Module - two zones
  - 4190WH Two Point Multiplex RPM
  - 4193SN Two Zone Serial Interface Module
  - 4208U Loop Expansion Module - eight zones
  - 4208SNF Class A/13 Expander Module

- 4209U Group Zoning Module - two/four zones
- 4293SN One Zone Serial Interface Module
- 4297 Isolation/Extender Module

- **V-Plex (addressable) smoke detectors**
  - 5192SD
  - 5192SDT

- **Passive infrared detectors**
  - 998MX
  - 4275EX-SN
  - 4278EX-SN
  - Quest 2260SN

- **V-Plex (addressable) contacts**
  - 4939SN-WH
  - 4944SN-WH
  - 4959SN

- **Glassbreak detectors**
  - 9500SN

- **VISTA Interactive Phone Module**
  - 4286 Voice Module

- **Optional 24V power supply**
  - PS24 - 24V power supply - 3.4A

- **Long range radio**
  - Long range radio 7720ULF-XX, 7845C, 7835CFPK

- **Upgraded software**
  - Upgraded Compass Downloader Windows compatible

- **Wireless devices**
  - 5804 - Wireless Key
  - 5804BD - Bi-Directional Key
  - 5804BDV - Bi-Directional with voice
  - 5816 - Door/Window Transmitter
  - 5819 - Shock Sensor
  - 5827BD - Bi-Directional Keypad
  - 5849 - Glassbreak Detector
  - 5881 Series - RF Receiver supporting 5800 wireless detectors
  - 5890 - PIR

- **Access control**
  - VistaKey V-Plex (addressable) Access Control
  - VistaKey-SK Starter Kit
  - VistaKey-EX Expansion Kit
  - VGM Vista Gateway Module to PassPoint Access Control (Honeywell Access Systems)

- **CCTV**
  - VistaView-100-CCTV Switch Module

- **Commercial wireless devices**
  - 5869 - Hold up Transmitter
  - 5817CB - Wireless Commercial Transmitter
  - 5881ENHC - Commercial Fire/Burg Receiver
  - 5808W3 - Wireless Smoke Detector
  - 5809 - Wireless Heat Detector

ORDERING

VISTA-128FB	Commercial Fire and Partitioned Burglary Alarm Platform 12V Model
V128FB-24	Commercial Fire and Partitioned Burglary Alarm Platform 24V Model

Honeywell

5881ENHC

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 345MHz. Connection of up to two receivers to a control panel can provide redundant coverage or extend coverage in large areas. The receiver features a Spatial Diversity System that virtually eliminates the possibility of "nulls" and "dead spots" within the coverage area. The new 5881ENHC Receiver contains front and back tamper that permits its use in commercial fire/burglary installations.

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
- Connects to control panel via the keypad bus
- UL listed for Commercial Fire/Burg applications
- Can be mounted remotely, anywhere on the keypad bus for extended coverage
- Compatible with all 5800 series wireless devices

Commercial Wireless Receiver

Compatible Controls:
- The 5881ENHC is compatible with:
  VISTA-32FB Rev 3, or higher
  VISTA-128B Rev 3, or higher
  VISTA-128FB Rev 4, or higher
  FA1600 Series Rev 8, or higher

Ordering:

Part No.	Description
5881ENHC	Commercial Wireless Receiver

ADEMCO GROUP

5881ENHC

SPECIFICATIONS:

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

Input Voltage:
12VDC (from control's keypad terminals)

Current:
60mA (typical)

Operating Temperature:
0-50°C

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

UL Listings:
Commercial Fire   UL864
Household Fire   UL985
Household Burg   UL1023
Commercial Burg   UL365, UL609,
                   UL1076, UL1610

FM - Pending
MEA - Pending
CSFM - Pending

Range:
200ft (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.

Commercial Wireless Receiver

ADEMCO GROUP

5800 Transmitters

The 5800 Series of door and window transmitters provide the most reliable, convenient and cost effective solutions for security protection. These devices are powerful and versatile enough to help solve even the toughest, most labor intensive installations.

With a demonstrated outdoor range of over a mile, the 5800 Series has the best performance of any transmitters available today. All 5800 Series transmitters send supervisory messages to the control panel, as well as tamper and low battery notification. The 5800 wireless technology will provide year after year of reliable security.

5815

5816

Door/Window Transmitters

FEATURES:

5814 Ultra-Small Door/Window Transmitter

Although the 5814's compact design slightly decreases it's effective range to maintain a long battery life, it is the perfect solution for difficult to reach places and applications where aesthetics and small size is important (ornate doors/windows, casements, etc.)

- Extremely compact
- Features a built-in reed switch and tamper
- Includes replaceable lithium coin cell battery
- Dimensions: 1-1/2" H x 1-1/5" W x 3/5" D
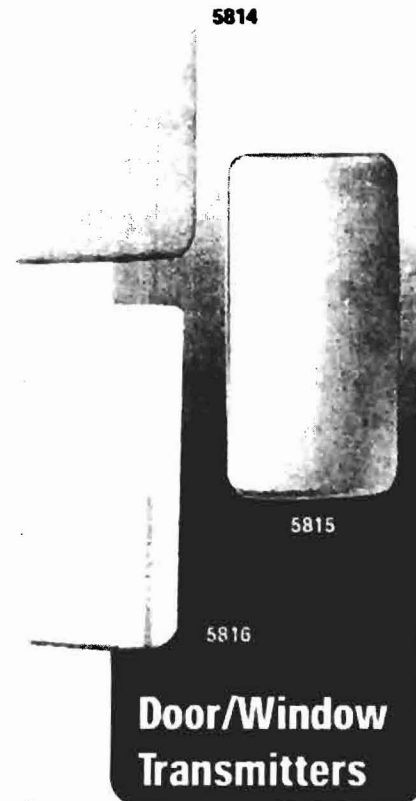
5815 Door/Window Transmitter

The 5815 is the ideal solution for installations where small size and aesthetics are important. It provides a reliable, convenient, and cost-effective solution for door and window protection.

- New sleek design
- Two reed switches
- Transmits supervisory, tamper and low battery messages
- Dimensions: 1-1/2" W x 3" H x 7/8" D
- Battery: 3V Lithium

5816 Door/Window Transmitter

Two zone transmitter with both built-in magnetic reed switches and wired closed circuit contact loop.

- Features a standard white plastic case. Brown cases available in packs of three (5816BR)
- Dimensions: 3-1/16" H x 1-9/16" W x 1-3/16" D

ADEMCO GROUP

5800 Transmitters

SPECIFICATIONS:

5816MN Door/Window Transmitter

Two zone transmitter with both built-in magnetic reed switches [90° apart] and wired closed circuit contact loop.

- Features a small design for a hidden professional look
- Dimensions: 3-1/16" H x 1-9/16" W x 1-5/32" D

5817 Three Zone Universal Transmitter

Three zone transmitter with three separate contact loops. Primary loop supports no open and normally closed applications and fast loop response time. The two auxilia support conventional normally closed contact applications.

- Features a normal zone response time of 200msec; the fast zone response is 5n
- Dimensions: 3-1/2" H x 1-9/16" W x 1-3/16" D

5817CB Universal Contact-Monitoring Transmitter

The 5817CB is a universal contact-monitoring transmitter that can be used with household and commercial fire and burglary-initiating devices.

- The 5817CB has three unique input loops (zones)
- The first loop (primary loop) is supervised and typically used for high-priority alarm 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
- Dimensions 1-9/16"W x 3-1/2"H x 1-3/16"D

5818 Recessed Transmitter

Contact sensor that provides concealed protection for a door or window.

- Features a tapered cylinder for easy and flush fit
- Includes self-contained transmitter, reed sensor, battery & recessed magnet
- Features a standard white plastic case; brown cases available (5818BR); plastic cover-up plug included
- Use 7/8" drill bit for transmitter
- Use 1/2" drill bit for magnet
- Dimensions:
  Transmitter: 13/16" diameter, 4-7/8" long
  Magnet: 1/2" diameter, 1-3/4" long

5816MN

5817CB

5817

5818

Door/Window Transmitters

ORDERING:

Part No.	Description
5814	Ultra Small Door/Window Transmitter
5815	Ultra Small Door/Window Transmitter
5816MN	Door/Window Transmitter
5816	Door/Window Transmitter
5817	Three Zone Universal Transmitter
5817CB	Three Zone Universal Transmitter
5818	Recessed Transmitter

ADEMCO GROUP

5809

ADEMCO's ability to meet virtually any installation challenge using wireless, addressable or conventional UL Listed detection makes our product line unique

FEATURES

ADEMCO'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.

◆ 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

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)
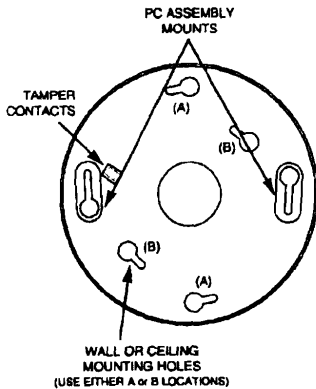
◆ Dimensions: 4.4" diameter/2/2" deep

AGENCY LISTINGS

◆ UL 521 Listed for Commercial (when using 5881EH Receiver or Residential applications

WIRELESS TRANMISSION 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.

ADEMCO
An ADEMCO Group Company

5809

PC ASSEMBLY MOUNTS

TAMPER CONTACTS

(A)

(B)

(B)

(A)

WALL OR CEILING MOUNTING HOLES
(USE EITHER A or B LOCATIONS)

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.

◆ 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 soley 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.

◆ Activiate 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 Notice

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 Information

Part No.	Description
5809	Heat Detector

ADEMCO
GROUP
COMMERCIAL SYSTEMS DIVISION

Honeywell

5806W3

WIRELESS PHOTOELECTRIC
SMOKE DETECTOR

Honeywell's 5806W3 is a 3V battery operated, photoelectronic smoke detector with a built-in wireless transmitter. It facilitates fire verification for false alarm reduction requirements by ANSI/SIA CP-01standards 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
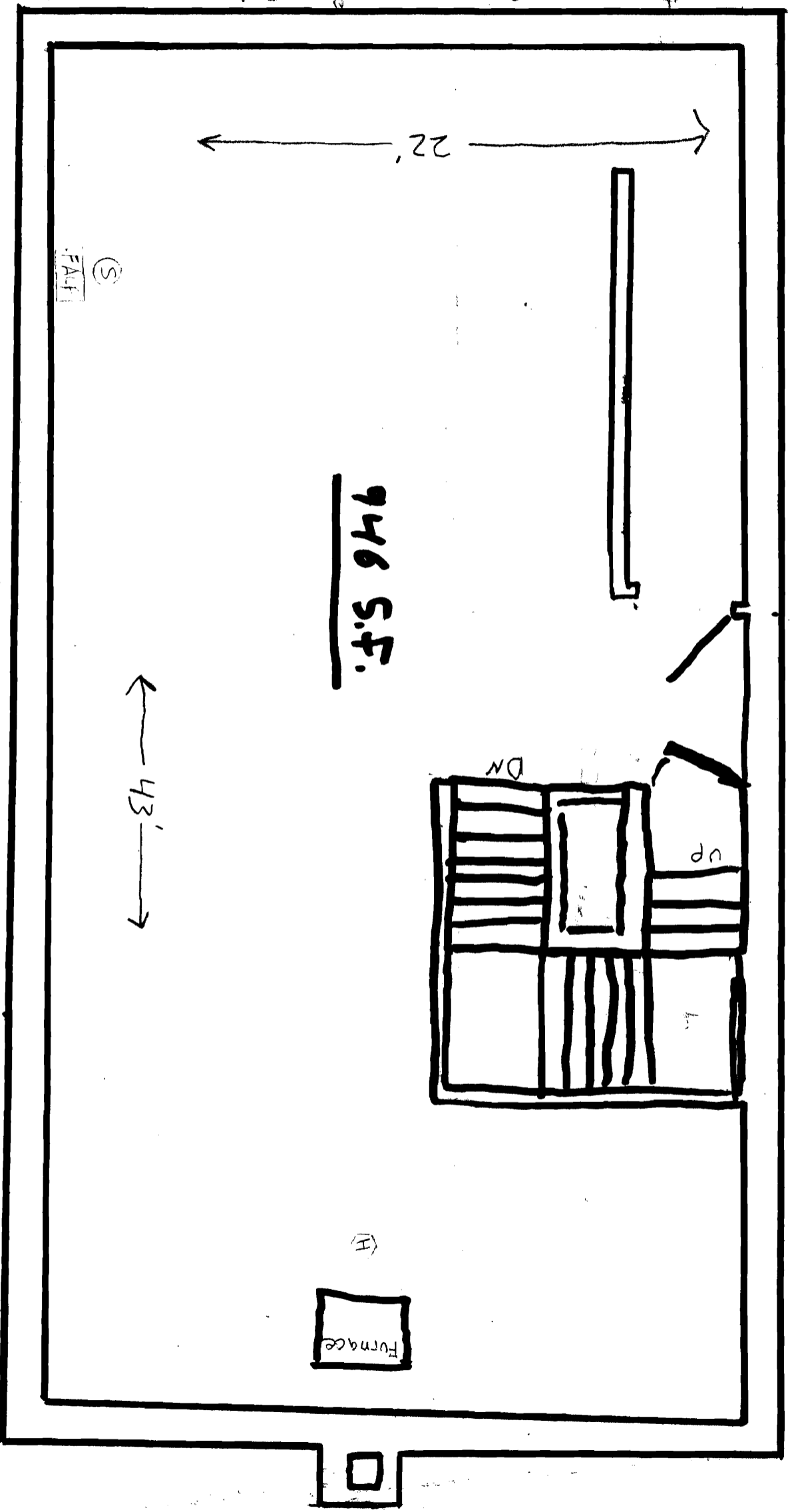
Honeywell

Basement/storage

52 Center St. Portland, Me.

~ = Strobe   2
S = SMOKE   1
H = HEAT   2
P = PULL   3
~ = HORN/   6
    STROBE

* Additionally
  ...
  has ... be
  in the hall ...
  area and a horn
  ...

22'

43'

946 S.F.

FALt
S

UP
DN

H

Furnace

52 Center St. Portland, Me.

office
84.7 S.f.

9'4"

9'6"

BAT.
5'

4'

61 S.f.
Kit.

8'5"

7'3"

59 S.f.

8'2"

125 S.f.
office

8'4"

15'

3'3"

UP

DN

3'6"

5'3"

9'2"

Reception
165 S.f.

18'

conf.
220.5 S.f.

18'

12'3"

Entry

2nd floor

2 office

2 04.25 sf.

9'6"

12'6"

BAT

5'8"

4'6"

Secretary
184.8 s.f.

15'6"

office

12'5"

8'6"

office

14'4"

1643 s.f.

135 s.f.

10'0"

office

12'8"

UP

2nd fl.
your street

52 center St. Portland, ME.

office 96.35 S.f.

10'5"

9'3"

office 85.5 S.f.

9'6"

Secretary 58 S.f.

← 12' →

↑ 9'2" ↓

9'6"

3'6"

75.35 S.f.

4'8"

office 130.6 S.f.

12'3"

10'8"

11'

office 88 S.f.

8'

front ← center st.

3rd floor