DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

# CITY OF PORTLAND

# BUILDING PERMIT

This is to certify that
CUNNINGHAM SECURITY
10 PRINCES POINT RD
YARMOUTH, ME 04096

For installation at
26 THOMAS ST

Job ID: 2012-09-4872-FAFS

CBL: 062- E-005-001

has permission to install 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 |

BJC 12/6 (58)

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

# BUILDING PERMIT INSPECTION PROCEDURES

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

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

## Final Fire

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.

# PORTLAND MAINE

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

Director of Planning and Urban Development
Jeff Levine

**Job ID: 2012-09-4872-FAFS**
**install fire alarm system**

**For installation at:**
**26 THOMAS ST**

**CBL: 062- E-005-001**

## Conditions of Approval:

## Fire

The Vista-128 panel is being approved due to the building being designated a historic landmark.

The installation shall comply with the following:

City of Portland Chapter 10, Fire Prevention and Protection;

NFPA 1, *Fire Code* (2009 edition), as amended by City Code;

NFPA 101, *Life Safety Code* (2009 edition), as amended by City Code;

City of Portland Fire Department Rules and Regulations;

NFPA 72, *National Fire Alarm and Signaling Code* (2010 edition), as amended by Fire Department Rules and Regulations; and

NFPA 70, *National Electrical Code* (2011 edition) as amended by the State of Maine.

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

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

All smoke detectors and smoke alarms shall be photoelectric.

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

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

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

A Knox Box is required.

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.

A master box connection is not authorized for this building.

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

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

| Job No: | Date Applied: | CBL: | |
|---|---|---|---|
| **2012-09-4872-FAFS** | **9/4/2012** | **062- E-005-001** | |
| Location of Construction: **26 – 32 THOMAS ST** | Owner Name: **32 THOMAS STREET LLC** | Owner Address: **477 CONGRESS STREET, SUITE 601 PORTLAND, ME 04102** | Phone: |
| Business Name: **Majella Global Technologies** | Contractor Name: **Cunningham Security Systems, Michael Major** | Contractor Address: **10 PRINCESS POINT RD YARMOUTH MAINE 04096** | Phone: **846-3350** |
| Lessee/Buyer's Name: | Phone: | Permit Type: **FIRE ALARM** | Zone: **C-57** |
| Past Use: **1st floor offices; daycare; place of worship** | Proposed Use: **Same: 1st floor offices, daycare & place of worship – to install fire alarm** | Cost of Work: **$8,000.00** | CEO District: |
| | | Fire Dept: 1 Approved w/ conditions ___ Denied ___ N/A 9/19/12 Signature: BFarrell - (58) | Inspection: Use Group: Type: Signature: |
| Proposed Project Description: **Fire Alarm, FACP in Tel/Data Rm 1st Floor** | | Pedestrian Activities District (P.A.D.) | |
| Permit Taken By: Brad | | | |

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 electrial work.
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.

**Zoning Approval**

| Special Zone or Reviews | Zoning Appeal | Historic Preservation |
|---|---|---|
| ___ Shoreland | ___ Variance | within |
| ___ Wetlands | ___ Miscellaneous | ___ Not in Dist or Landmark |
| ___ Flood Zone | ___ Conditional Use | ___ Does not Require Review |
| ___ Subdivision | ___ Interpretation | ___ Requires Review |
| ___ Site Plan | ___ Approved | ___ Approved |
| ___ Maj ___ Min ___ MM | ___ Denied | ___ Approved w/Conditions |
| Date: 9/7/12 | Date: | ___ Denied Date: |

Interior work requires A Separate Review & Approval

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

Extend 9/4/12 C-57

# 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.

# 2012-09-4872-FAFS

Installation address: 32 Thomas Street CBL: 62-E-5-001

Exact location: (within structure) FACP is located in the Tel/Data Room on First Floor

Type of occupancy(s) (NFPA & ICC): Mixed Use

Building owner: 32 Thomas Street LLC

Must be
System Designer (point of contact): Michael Major/Cunningham Security Systems

Designer phone: 207-846-3350 E-mail: mmajor@cunninghamsecurity.cc

Installing contractor: Cunningham Security Systems Certificate of Fitness No: 1004

Contractor phone: 207-846-3350 E-mail: mmajor@cunninghamsecurity.cc

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:**

- [x] Floor plans
- [x] Wiring diagram
- [x] Annunciator details
- [x] Input/ Output Matrix
- [x] Equipment data sheets
- [x] Electrical Permit Pulled (check alarm/com)
- [x] Scope of Work
- [x] 11 ½ x 17s
- [ ] pdf copy (may be e-mailed)
- [x] Designer qualifications
- [x] Battery/ voltage drop calcs

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

COST OF WORK: ~~$7930~~ $8006

PERMIT FEE: 100
($10 PER $1,000 + $30 FOR THE FIRST $1,000)

RECEIVED
SEP 04 2012
Dept. of Building Inspections
City of Portland Maine

**The designer shall be the responsible party for this application. Download a new copy of this application at www.portlandmaine.gov/fire for every submittal. Submit all plans in electronic PDF in addition to readable 11 ½ x 17s to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.**

Prior to acceptance of any fire alarm system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with the *City of Portland Technical Standard for Signaling Systems for the Protection of Life and Property*, available at www.portlandmaine.gov/fire .

Applicant signature: _____ Date: 9-2-12

Receipts Details:

**Tender Information:** Check , Check Number: 49577
**Tender Amount:** 155.00

Receipt Header:

**Cashier Id:** bsaucier
**Receipt Date:** 9/4/2012
**Receipt Number:** 47801

Receipt Details:

| | | | |
|---|---|---|---|
| Referance ID: | 7886 | Fee Type: | BP-Constr |
| Receipt Number: | 0 | Payment Date: | |
| Transaction Amount: | 100.00 | Charge Amount: | 100.00 |
| Job ID: Job ID: 2012-09-4872-FAFS - Fire Alarm, FACP in Tel/Data Rm 1st Floor | | | |
| Additional Comments: 26 Thomas (32) | | | |

| | | | |
|---|---|---|---|
| Referance ID: | 7887 | Fee Type: | BP Elec Comm |
| Receipt Number: | 0 | Payment Date: | |
| Transaction Amount: | 55.00 | Charge Amount: | 55.00 |
| Job ID: Job ID: 2012-09-4872-FAFS - Fire Alarm, FACP in Tel/Data Rm 1st Floor | | | |

Additional Comments:

Thank You for your Payment!

# CUNNINGHAM

## Security Systems

10 Princes Point Road • Yarmouth, Maine 04096
(207) 846-3350 • Fax (207) 846-6080 • (800) 210-0257


8/31/12

Lieutenant Benjamin Wallace, Jr.
Portland Fire Department
380 Congress Street
Portland Maine 04101

Please find attached a permit application for the property located at 32 Thomas Street and referred to as Magella GT. The scope of this permit application includes the installation of a new addressable fire alarm system and occupant notification in a renovated portion of the building. This is the first phase of the renovation and occupancy of the overall structure. We are proposing to use an Ademco Vista 128FBP as there is a present and future need to use wireless initiation devices to preserve the historic integrity of the building as well as incorporating the future residential uses into the alarm system. There is currently a conventional Fire Lite alarm system with many deficiencies that is being replaces as part of this project. Please contact me with any questions at 207-846-3350.

Sincerely,

Michelle Perkins

Michelle Perkins, Operations Manager

Honeywell

# VISTA-128FBP/V128FBP-24

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL

**Now UL864 9th Edition Approved**

Designed to integrate seamlessly with CCTV, access control and Honeywell's full range of fire and burglary components, the new VISTA-128FBP provides the ultimate protection of life and property. The UL Listed commercial fire and burglary control panel supports up to eight partitions and up to 128 zones/points using hardwired, wireless and V-Plex® addressable technologies. A diverse line of Honeywell initiating devices, notification circuits, communication devices, keypads, RF receivers and relays are also supported. The VISTA-128FBP has been designed to mount quickly and easily in an attack resistant cabinet, and is available in 12V and 24V models.

## FEATURES

- Eight hardwired zones standard, expandable to 120 V-Plex addressable points/zones or 128 wireless points/zones
- Can control eight separate areas independently (8 partitions)
- Supports commercial wireless fire and burglary devices
- Stores up to 512 events
- Accommodates 150 user codes and up to 250 access card holders using VistaKey
- Supports V-Plex addressable VistaKey access control (1 to 8 doors)
- Two on-board notification (bell) circuits delivering 2.3A @ 12V or 3.4A @ 24V
- Automatic smoke detector sensitivity maintenance testing
- Four-wire smoke reset using onboard J2 output trigger
- Supports Dynamic Signaling for AlarmNet Communicators
- Supports Remote Control via the Internet*
- Supports Internet Alarm Reporting*
- Supports Graphical User Interface Consoles
- Listed to UL864 9th Edition
- Upload/download via Ethernet*
- Carbon monoxide (CO) zone support

** When used with AlarmNet devices.*

# VISTA-128FBP/V128FBP-24

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL

Honeywell

## ADDITIONAL FEATURES

- Notification Appliance Circuits (two):
  - Programmable
  - Temporal code compliant
  - Individually silenceable
- Programmable on-board auxiliary relay
- 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 eight style B hardwired zones
  - EOLR supervised for Fire and UL burglary installations
  - Supports N.O. or N.C. sensors
  - Individually assignable to any eight partitions
  - Up to ~~32~~ 16 two-wire smoke detectors each on zone one and two (~~64~~ 32 total)
  - Up to 50 two-wire glassbreak detectors on zone eight
- Patented addressable V-Plex polling loop technology
  - Supports 120 two-wire zones points
  - Global polling technology for faster processing
  - Supervised by panel
  - Zones individually assignable to partitions, notification circuit (bell) output or auxiliary relay
  - 4,000 ft. capability without the use of shielded cable
  - Extender/Isolation bus modules
  - Eight zone – Class A and B expander module
  - Eight zone – Class B expander module
  - One zone supervised contact monitor module
- UL Listed wireless expansion
  - Supports up to 128 wireless zones/points
  - Supervised by control for check-in signals
  - Tamper protection for transmitters
  - Individually assignable up to eight partitions
  - Supports commercial wireless smoke detectors
- Access Control integration
  - Full integration with PassPoint Access Control System Complete Gateway interface of VISTA and access functions
- Up to eight doors using VistaKey V-Plex Access Control
- Event reporting
- Local printer of access or VISTA related events
- Communication
  - Phone mapping by zone response type
  - Panel operation during download

Honeywell

## SPECIFICATIONS

### Applications

The VISTA-128FBP control is well suited for a variety of applications as an integrated fire and burglary control. A diverse line of Honeywell initiating devices supports this extremely powerful control. Some of the applications supported are: medical and professional buildings, churches or synagogues, office buildings, schools, strip malls, larger residences and factory or warehouse environments.

### Electrical

- Primary power: 18VAC @ 72VA Honeywell No. 1451
- Control panel quiescent current draw: 300mA
- Backup battery:
  – 12VDC, 12AH min to 34.4AH max
  – Lead acid battery (gel type)
- Alarm power: 12VDC, 1.7A max for each notification (bell) circuit output Total 2.3A @ 12V
- Aux. standby pwr: 12VDC, 1A max
- Total power: 2.3A at 12VDC, 3.4A at 24VDC from all sources
- Standby time: 24 hours with 1A standby load using 34.4AH battery
- Fusing: Battery input, aux. and notification (bell) circuit outputs are protected using PTC circuit protectors. All outputs are power limited.
- Optional 24-volt power supply, PS 24 supplies two 24 VFW, 1.7A full wave rectified, unfiltered outputs

### Main Dialer

- Line seize: Double Pole
- Ringer equiv.: 0.7B
- Formats: ADEMCO Low Speed, ADEMCO 4+2 Express, ADEMCO High Speed, ADEMCO Contact ID, Sescoa and Radionics
- Dual phone line capability (using 5140DLM module)

### 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

- UL609 Grade A Local Mercantile Premises and Mercantile Safe and Vault
- UL611/1610 Grades A, AA, Central Station
- UL365 Grades A, AA Police Connect
- UL864/NFPA72 Local, Central Station and Remote Station
- UL985
- Factory Mutual
- California State Fire Marshal
- MEA
- CAN/ULC S304 – Central and Monitoring Station Burglar Alarm Unit
- CAN/ULC S527 – Central Unit for Fire Alarm Systems
- CAN/ULC S303 – Local Burglar Alarm Unit
- CAN/ULC S525 – Audible Signal Appliances

# VISTA-128FBP/V128FBP-24

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL

## COMPATIBLE DEVICES

**Auxiliary Devices**

- 6160CR-2 – Red Alpha Keypad
- 4204 – Relay Module, four form C contacts
- 4204CF – Two supervised output circuits
- 5881 Series RF receiver
- 5883H RF receiver
- 6220S – System printer used with 4100SM serial module
- 6160CR-2 – Red Fire Keypad
- 6160 – Burglary Keypad

**Two-Wire Smoke Detectors Conventional**

- System Sensor
- ESL
- DSC

**Horn/Strobes**

- System Sensor
- Wheelock
- Gentex

**Manual Pull Stations**

- 5140MPS-1
- 5140MPS-2

**V-Plex (Addressable) Devices**

- 4208U Loop Expansion Module – eight zones
- 4101SN Single Relay/Zone Module
- 4208SNF Class A/B Expander Module
- 4190SN Remote Point Module – two zones
- 4193SN Two-Zone Serial Interface Module
- VSI Module
- 4293SN One-Zone Serial Interface Module

**V-Plex Extender/Isolation Modules**

- 4297 Extender/Isolator Module
- VSI Isolator Module

**V-Plex Smoke Detectors:**

- 5193SD
- 5193SDT

**V-Plex Passive Infrared Detectors**

- 998MX
- IS2500SN
- DT7500SN

**V-Plex (Addressable) Contacts**

- 4939SN-WH
- 4944SN-WH
- 4959SN

**V-Plex Glassbreak Detectors**

- FG1625SN

**Optional 24V Power Supply**

- PS24 – 24V power supply – 3.4A

**Commercial Wireless Devices**

- 5808W3 – Photoelectric Smoke/Heat Detector
- 5806W3 – Photoelectric Smoke Detector
- 5809 – Wireless Heat Detector
- 5817CB – Wireless Commercial Transmitter
- 5869 – Hold-Up Transmitter
- 5881ENHC – RF Receiver
- 5883H – RF Receiver

**Access Control**

- VistaKey V-Plex (addressable) Access Control
- VistaKey-SK Starter Kit
- VistaKey-EX Expansion Kit

**Alarm Communications**

- 7845i-ENT – Internet/Intranet Communicator
- 7845GSM – Digital Cellular Communicator
- 7845i-GSM – Internet and Digital Cellular Communicator
- GSMCF/iGSMCF – Commercial Fire Communication Kits (when available)

*Product specifications subject to change.*

## ORDERING

| | |
|---|---|
| **V128FBP-9** | Commercial Fire and Partitioned Burglary Alarm Control Panel 12V Model |
| **V128FBP9-24** | Commercial Fire and Partitioned Burglary Alarm Control Panel 24V Model |

**For more information:** 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

Honeywell

L/VSTA128FBPD/D
September 2009

# SECURITY ACCESS AND SURVEILLANCE
# SECTION 13850

# VISTA-128FBP
# ARCHITECT AND ENGINEER SPECIFICATION
# FOR
# SECURITY SYSTEM

ADEMCO Group
165 Eileen Way
Syosset, New York 11791

1-800-645-7568

# SECTION 13850
# DETECTION AND ALARM

## PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Control Panel
2. Associated Equipment

B. Products Installed But Not Supplied Under This Section

1. Section 16140 - Wiring Devices
2. Section 16530 - Emergency Lighting

C. Related Sections

1. Section 13700 - Security Access and Surveillance
2. Section 13800 - Building Automation and Control

1.02 REFERENCES

A. Underwriters Laboratories (UL):

1. UL 268 – Smoke Detectors for Fire Protective Signaling Systems
2. UL 365 – Police Station Connected Burglar Alarm Units and Systems
3. UL 609 – Local Burglar Alarm Units and Systems
4. UL 611 – Central Station Burglar-Alarm Units
5. UL 636 – Holdup Alarm Units and Systems
6. UL 684 – Local, Central Station, and Remote Station
7. UL 864 – Control Units for Fire Protective Signaling Systems
8. UL 985 – Household Fire Warning System Units
9. UL 1023 – Household Burglar-Alarm System Units
10. UL 1076 – Proprietary Burglar-Alarm Units and Systems
11. UL 1610 – Central-Station Burglar-Alarm Units

B. Federal Communications Commission (FCC):

1. Code of Federal Regulations Title 47 - Part 15 – Radio Frequency Devices
2. Code of Federal Regulations Title 47 - Part 68 – Connection of Terminal Equipment to the Telephone Network

C. National Fire Protection Association (NFPA):

1. NFPA70 – National Electrical Code.

2. NFPA 72 – National Fire Protection Code

1.03 SYSTEM DESCRIPTION

A. The system shall be a Fire/Burglary/Access Control/CCTV Switching System that includes the following capabilities:

1. Listed for UL Commercial Fire and Burglary.
2. Supports up to 128 zones.
3. Supports up to eight (8) separate partitions.
4. Supports up to 150 users.
5. Supports commercial wireless devices.
6. Provides integrated security, access control, and CCTV switching and commercial fire capability.
7. Provides supervision of peripheral devices.
8. Supports up to 96 optional relay outputs.
9. Supports long-range radio (LRR) communication.
10. Provides scheduling capability to allow for automated operations.
11. Supports up to eight (8) alphanumeric paging devices.
12. Supports panel linking.
13. Supports alarm reporting via Internet.
14. Interfaces with automation software.
15. Monitors smoke detector maintenance signals.
16. Capable of being installed using existing wiring.

1.04 SUBMITTALS

A. Submittals shall include manufacturer data sheets for all major system components.

1.05 QUALITY ASSURANCE

A. The alarm manufacturer shall be certified as being compliant with ISO9001.

**PART 2 PRODUCTS**

2.01 SYSTEM PERFORMANCE

A. Control Panel - The control panel shall be an eight (8)-partition, UL commercial fire and burglary control panel that supports up to 128 zones using basic

hardwired, polling loop, and wireless zones. It shall also provide supervision of two (2) notification appliance output circuits (NAC), RF receivers, and relay modules. In addition, the control shall provide the ability to schedue time-driven events, and allow certain operations to be automated by pressing a single button. The system shall be capable of interfacing with an ECP long-range radio (LRR) unit that can send Contact ID messages, and alphanumeric paging devices. The control shall provide integrated access control and CCTV-switching capability with the use of a single downloader and database.

1. Basic Hardwired Zones - The control shall provide eight (8) style-B hardwire zones with the following characteristics:
   a. EOLR supervision (optional for zones 3-8): Shall support N.O. or N.C. sensors (EOLR supervision required for UL installations).
   b. Zones/Points shall be individually assignable to one of eight (8) partitions.
   c. Support up to 32 two-wire smoke detectors on two selected zones (64 total).
   d. Support four-wire smoke or heat detectors on any zone (power to four-wire smoke detectors must be supervised with an EOL device).
   e. Support up to 50 two-wire latching glass break detectors on one selected zone.
   f. Individually assignable to Notification Appliance (NAC) outputs and/or auxiliary relays.

2. Optional Expansion Zones
   a. Polling Loop Expansion – The control shall support up to 120 additional hardwire zones using a built-in two-wire polling (multiplex) loop interface. The polling loop shall provide power and data to remote point modules, and constantly monitor the status of all zones on the loop. Maximum current draw shall not exceed 128 mA. The polling loop zones shall have the following characteristics:
      (1) Interface with RPM (Remote Point Module) devices that provide Class B, Style Y (e.g., 4208U/4208SN) or a combination of Class B, Style Y, and Class A, Style Z (e.g., 4208SNF) zones.
      (2) Individually assignable to one of eight (8) partitions.
      (3) Individually assignable to NAC outputs or auxiliary relays.
      (4) Supervised by the control panel.
      (5) A 12,000 ft (3658 m) wire run capability without using shielded cable.

(6) Each RPM (Remote Point Module) enclosure shall be tamper protected.

b. Wireless Expansion – The control shall support up to 128 wireless zones using a 5800 series RF receiver (fewer if using hardwire and/or polling loop zones). Wireless zones shall have the following characteristics:

(1) Supervised by control panel for check-in signals (except certain non-supervised transmitters).

(2) Tamper-protection for supervised zones.

(3) Individually assignable to one of the partitions.

(4) Individually assignable to bell outputs and or auxiliary relays.

(5) Support wireless devices listed for Commercial Burglary using the 5881ENHC RF Receiver.

3. Partitions – The control shall provide the ability to operate eight (8) separate areas, each functioning as if it had its own control. Partitioning features shall include:

a. A Common Lobby partition (1-8), which can be programmed to perform the following functions:

(1) Arm automatically when the last partition that shares the common lobby is armed.

(2) Disarm when the first partition that shares the common lobby is disarmed.

b. A Master partition (9), used strictly to assign keypads for the purpose of viewing the status of all eight (8) partitions at the same time (master keypads).

c. Assignable by zone.

d. Assignable by keypad/annunciator.

e. Assignable by relay to one or all eight (8) partitions.

f. Ability to display fire and/or burglary and panic and/or trouble conditions at all other partitions' keypads (selectable option).

g. Certain system options selectable by partition, such as entry/exit delay and subscriber account number.

4. User Codes – The control shall accommodate 150 user codes, all of which can operate any or all partitions. Certain characteristics must be assignable to each user code, as follows:

a. Authority level (Master, Manager, or several other Operator levels). Each User Code (other than the installer code) shall be

capable of being assigned the same or a different level of authority for each partition that it will operate.

b. Opening/Closing central station reporting option.

c. Specific partitions that the code can operate.

d. Global arming capability (ability to arm all partitions the code has access to in one command).

e. Use of an RF (button) to arm and disarm the system (RF key must first be enrolled into the system).

5. Peripheral Devices – The control shall support up to 30 addressable ECP devices, which can be any combination of keypads, RF receivers, relay modules, annunciator modules, and interactive phone modules. Peripheral devices have the following characteristics:

a. Each device set to an individual address according to the device's instructions.

b. Each device enabled in system programming.

c. Each device's address shall be supervisable (via a programming option).

6. Keypad/Annunciator – The control shall accommodate up to 16 keypads or six (6) touch-screen (i.e.; advanced user interface) keypads. The keypads shall be capable of the following:

a. Performing all system arming functions.

b. Being assigned to any partition.

c. Providing four programmable single-button function keys, which can be used for:

(1) Panic Functions –activated by wired and wireless keypads; reported separately by partition.

(2) Keypad Macros –32 keypad macro commands per system (each macro is a series of keypad commands). Assignable to the A, B, C, and D keys by partition.

7. Optional Output Relays - A total of 96 relay outputs shall be accommodated using relay modules. Each relay module shall provide four (4) Form C (normally open and normally closed) relays for general-purpose use or two (2) Class-B, Style-Y supervised notification appliance circuit outputs, when using the 4204CF module. The relays shall be capable of being:

a. Programmed to activate in response to system events.

b. Programmed to activate using time intervals.

c. Activated manually using a relay command mode.

d. Assigned an alpha descriptor.

e. Used for Class B, Style-Y supervised bell outputs (4204CF module).

f. A combination of 4204 (ECP) and 4101SN (polling loop) relays.

8. Optional Vista Interactive Phone Module – The control shall support the ADEMCO 4285/4286 VIP Modules, which permit access to the security system in order to perform the following functions:

a. Obtain system status information.

b. Arm and disarm the security system.

c. Control relays.

9. Optional LED Annunciator – The control shall support the ADEMCO FSA-8 and FSA-24 annunciators, which are capable of:

a. Visually identifying a zone or point that is in alarm or trouble.

b. Programmable for system silence/reset.

c. Up to 96 LEDs may be used in one system.

d. A total of four (4) FSA-24 or 12 FSA-8 annunciators may be used in one system.

e. An optional keyswitch, FSAKSM module, shall be available for UL listed Silence and Reset capability.

10. Notification Appliance Circuits (NAC) – The Control Panel shall internally provide two supervised NAC outputs for operating fire and burglar alarm notification appliances. It shall also support additional supervised bell outputs when using 4204CF relay modules. Each NAC output shall be rated at 10-14 VDC, 1.7 amp max power limited. Total alarm current draw when using two NAC outputs shall not exceed 2.3 amps for battery independent operation.

11. Auxiliary Relay – A built-in Form C relay shall be provided. The relay contacts shall be rated at 28 VAC/VDC, 2.8 amps maximum. The relay shall support:

a. Alarm activation.

b. Trouble/supervisory activation.

c. Reset of four-wire smoke detectors.

d. Battery saving feature.

12. Integrated Access Control – The control shall be capable of the following:

a. Providing a command that activates relays to allow access doors to open (e.g., lobby door), lights to be turned on or off, etc.

b. Becoming a fully integrated access control system by using numerous VistaKey Single-Door Access Control Modules.

c. Supporting up to eight (8) VistaKey Access Control Modules. The VistaKey Access Control Modules shall use the same Compass Downloader as the Vista-128FBP and shall be programmable from the Compass Downloader or the Keypad/Annunciators.

d. Assigning any number of access control relays to each partition (up to 96 for the system).

e. Supporting up to 250 access card holders using VistaKey.

f. Connecting to the ADEMCO PassPoint Access Control System via the Vista Gateway Module (VGM).

13. CCTV Switching – The System shall be capable of supporting the VistaView 100 CCTV Switching System. The CCTV system shall be fully integrated and be event driven by Fire, Burglary or Access events. When cameras are not event driven, they shall be driven by an automatic preset dwell time. The system shall also be capable of:

a. Activating the CCTV system via a Form-C relay output.

b. Operating up to 60 camera inputs and 30 video outputs.

14. Commercial Wireless Equipment – The Control shall be compatible with UL Listed Commercial Wireless Fire & Security equipment including:

a. ADEMCO 5881ENHC Commercial Fire/Burg Receiver. - The receiver shall be capable of receiving as many points as the control panel is rated for. Up to two (2) receivers may be used on any system. Receivers may be remotely located anywhere on the system Keypad/Annunciator bus.

b. ADEMCO 5808LST Wireless Photoelectric Smoke and Heat Detector - The device shall be UL 268 listed and shall have Maintenance Alert capability and Automatic Drift Compensation.

c. ADEMCO 5809 Wireless 135D Fixed Temperature and Rate of Rise Heat Detector - The device shall be UL 521 listed for commercial applications.

d. ADEMCO 5817CB Wireless Universal Contact Monitoring Transmitter - This device shall be capable of making any conventional UL listed contact device a wireless device. The device shall be UL listed for commercial fire and burglary applications as follows: UL 864, 985 for fire and UL 365, 609, 1023, 1076 and 1610 for security and nurse call.

e. ADEMCO 5869 Wireless Hold Up Switch/Transmitter - This device shall be UL 636 listed for commercial burglary applications.

15. Optional Keyswitch – The control shall support the ADEMCO 4146 Keyswitch on any one of the system's eight (8) partitions. If used, zone 7 is no longer available as a protection zone.

16. Voltage Triggers – The system shall provide voltage triggers, which change state for different conditions. Used with long-range radio (LRR) equipment or other devices such as a remote keypad sounder, keyswitch ARMED and READY LEDs, or a printer to print the system's event log.

17. Event Log – The System shall maintain a log of different event types (enabled in programming). The event log shall provide the following characteristics:

    a. Stores up to 512 events.

    b. Viewable at the keypad or through the use of Compass software.

    c. Printable on a serial printer using a 4100SM Module including zone alpha descriptors.

    d. Stores PassPoint access control events.

    e. Sends printed events to up to eight (8) alphanumeric pagers.

18. Scheduling - Provides the following scheduling capabilities:

    a. Open/close schedules (for control of arming/disarming and reporting).

    b. Holiday schedules (allows different time windows for open/close schedules).

    c. Timed events (for activation of relays, auto-bypassing and un-bypassing, auto-arming and disarming, etc.).

    d. Access schedules (for limiting system access to users by time)

    e. End User Output Programming Mode (provides 20 timers for relay control).

    f. The system shall automatically adjust for daylight savings time.

19. Communication Features - Supports the following formats and features for the primary and secondary central station receivers:

    a. Formats

        (1) ADEMCO Low Speed (Standard or Expanded).

        (2) Sescoa/Radionics.

        (3) ADEMCO Express.

(4) ADEMCO High Speed.

(5) ADEMCO Contact ID.

b. Backup reporting – The system shall support backup reporting via the following:

(1) Secondary phone number.

(2) ECP long-range radio (LRR) interface.

(3) Option to select long range radio (LRR) or dialup as the primary reporting method (dynamic signaling feature).

c. Internet reporting – The system shall be capable of communicating with the central station via the internet using Alarmnet-i. It shall shall provide the user with the ability to control the system via a browser interface (i.e., AOL, Netscape, Internet Explorer). All packet data transmitted to the monitoring station shall be encrypted with a minimum of 1024 bits of encryption.

20. Audio Alarm Verification Option - Provides a programmable Audio Alarm Verification (AAV) option that can be used in conjunction with an output relay to permit voice dialog between an operator at the central station and a person at the premises.

21. Cross-Zoning Capability - Helps prevent false alarms by preventing a zone from going into alarm unless its cross-zone is also faulted within five (5) minutes.

22. Pager Interface – The Control Panel shall be capable of sending event information to an alphanumeric pager via a VA-8201 pager interface device.

23. 24-Volt Power Supply – The Control Panel shall be compatible with a 24-Volt power supply module. The module shall supply two (2) 24 vdc, 3.4 amps, rectified, unfiltered outputs, which power:

a. Alarm notification appliances, including but not limited to sirens horns, bells and strobes.

b. Auxiliary devices capable of operating using full-wave rectified unfiltered voltage.

24. Exit Error False Alarm Prevention Feature – The System shall be capable of differentiating between an actual alarm and an alarm caused by leaving an entry/exit door open. If not subsequently disarmed, the control panel shall:

a. Bypass the faulted E/E zone(s) and/or interior zones and arm the system.

b. Generate an Exit Error report by user and by zone so the central station knows it was an exit alarm and who caused it.

25. Enhanced Fire Walk-Test Mode – The Control Panel shall provide the installer with the following features:

a. Automatic test of all integrated remote point module (RPM) devices, equipped with an automatic test feature.

b. While automatic test is in progress all fire zones that remain untested shall be displayed.

c. An event log shall be capable of logging the results of tested and untested zones.

d. The ability to report the result of tested and untested zones to the central station.

26. Built-in User's Manual and Descriptor Review - For end-user convenience, the control panel shall contain a built-in User's Manual. It shall include the following capabilities:

a. By depressing any of the function keys on the keypad for five (5) seconds, a brief explanation of that function shall scroll across the alphanumeric display.

b. By depressing the READY key for five (5) seconds, all programmed zone descriptors shall be displayed (one at a time). This feature shall provide a check for installers and ensure all descriptors have been entered properly.

27. Programming - The Control shall be capable of being programmed locally or remotely using the ADEMCO Compass Downloader and shall be capable of:

a. Uploading and downloading all programming information at 300 baud.

b. Uploading and displaying firmware revision levels from the control.

28. Panel Linking - The Control shall be capable of being networked together with up to eight other controls and being operated by any keypad within the system. It shall provide the ability for users to:

a. Control multiple zones, partitions, and/or buildings from a central location.

b. Check status, arm and disarm any partition from any keypad in the system.

c. Globally arm or disarm partitions based upon user authority.

29. Automation Software - The Control shall be capable of interfacing with automation software via an RS232 input on a single partition.

The control panel shall be the ADEMCO VISTA-128FBP Commercial Fire/Burglary Partitioned Security System or equivalent.

2.02 ENCLOSURE

A. The Control Panel shall be enclosed in a metal cabinet, suitable for wall mounting. The dimensions shall not exceed 18 inches (45.7 cm) in height, 14.5 inches (36.8 cm) in width or 4.3 inches (10.9 cm) in depth.

2.03 ELECTRICAL POWER REQUIREMENTS

A. System Power – The Fire and Burglary Alarm System shall operate using standard 120 volts AC, 50/60 Hz power.

1. Control Primary Power – Transformer power shall be 18 VAC, 72 VA.

2. Backup Battery – A rechargeable 12 VDC, gel type, lead acid backup battery shall be provided. The battery shall be rated between 12 and 34-ampere hours (AH).

3. Alarm Power – Alarm power shall be 12 VDC, 1.7 amps for each bell output

4. Auxiliary Standby Power – Standby power shall be 12 VDC, 1 amp maximum.

5. Total Power - Combined auxiliary standby and alarm currents shall be 2.3 amps.

6. Fusing – The battery input, auxiliary, and bell outputs shall be protected using PTC circuit breakers. All outputs shall be power limited.

7. Power Supply - A 24-volt power supply shall provide 24 vdc, 3.4 amps full-wave rectified, unfiltered outputs.

2.04. ENVIRONMENTAL CONDITIONS

A. Environmental Conditions – The Fire and Burglary Alarm System shall be designed to meet the following environmental conditions.

1. Storage Temperature – The system shall be designed for a storage temperature of -10° C to 70°C.

2. Operating Temperature - The system shall be designed for an operating temperature of 0° C to 50°C (32° F to 120°F).

3. Humidity - The system shall be designed for normal operation in an 85% relative humidity environment.

4. Electromagnetic Interference – The system shall meet or exceed the requirements of FCC Part 15, Class B devices, FCC Part 68, IEC EMC directive.

## PART 3 EXECUTION

### 3.01 EXAMINATION

A. Submission of a proposal confirms that the Contract Documents and site conditions are accepted without qualifications unless exceptions are specifically noted.

B. The site shall be visited on a regular basis to appraise ongoing progress of other trades and contracts, make allowances for all ongoing work, and coordinate the requirements of this contract in a timely manner.

### 3.02 INSTALLATION

A. The System shall be installed and tested in accordance with the Manufacturer's Installation instructions. The following conditions are applicable:

1. In order to ensure a complete, functional System, for bidding purposes, where information is not available from the Owner upon request, the worst case condition shall be assumed.

2. Interfaces shall be coordinated with the Owner's representative, where appropriate.

3. All necessary backboxes, pullboxes, connectors, supports, conduit, cable, and wire shall be furnished and installed to provide a complete and reliable System installation. Exact location of all boxes, conduit, and wiring runs shall be presented to the Owner for approval in advance of any installation.

4. All conduit, cable, and wire shall be installed parallel and square with building lines, including raised floor areas. Conduit fill shall not exceed forty percent (40%). All wires shall be gathered and tied up to create an orderly installation.

### 3.03 TESTING AND CERTIFICATION

A. The Contractor shall demonstrate the functionality of the System upon completion of installation, documenting the result of all tests and providing these results to the Owner. The System shall be tested in accordance with the following:

1. The Contractor shall conduct a complete inspection and test of all installed equipment. This includes testing and verifying connection to equipment of other Divisions.

2. The Contractor shall provide staff to test all devices and all operational features of the System for witness by the Owner's representative and the Authority having jurisdiction. The Contractor shall provide two-way radio communications to assist in the testing. All testing must be witnessed by the owner's representative, prior to acceptance.

3. The testing and certification shall take place as follows:

    a. System shall be tested in conjunction with the manufacturer's representative.

    b. All deficiencies noted in the above test shall be corrected.

    c. Test results shall be submitted to the consultant or owner's representative.

    d. System test witnessed by owner's representative and correction of any deficiencies noted.

    e. The owner's representative shall accept the System.

    f. System test shall be witnessed by the Authority having Jurisdiction, and any deficiencies that are noted shall be corrected.

4. A letter of certification shall be provided to indicate that the tests have been performed and all devices are operational.

END OF SECTION

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Combination Control/Communicator Models 5140XM, Vista 100, Vista-128FB, Vista-128FBP, Vista-250FBP, VISTA-250FBPADT, FA1600C, FA1700C and Vista-32FB intended for use with Model 1451 Transformer.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

##: For Canadian Versions Only

USL indicates evaluation to the following Standards:
*UL 609 -Local Burglar Alarm Units and Systems
*UL 365 -Police Station Connected Burglar Alarm Units and Systems
*UL 1610-Central Station Burglar Alarm Units
*UL 1635 -Digital Alarm Communicator System Units
*UL 864 -Control Units For Fire-Protective Signaling Systems.

CNL indicates evaluation to the Standard for Central and Monitoring Station Burglar Alarm Units, CAN/ULC-S304-M88, the Standard for Fire Protective Signaling Systems, CAN/ULC-S527-M89, and the Standard for Supervising Station Communication Systems, NFPA-72, Section 4-5.

Suitable for Local Protective Signaling System use when used with suitable sounding device. Compatible alarm indicating/notification appliances, with EOL supervision, shall be employed as indicated in the control unit's installation instructions. Battery and loading requirements shall be configured as described in the Installation Instructions to provide for 24 hours of normal standby power and at least 5 minutes of general alarm standby power. Combined auxiliary power and alarm currents shall not exceed 2.3 A.

Suitable for Central Station Protective Signaling Service when used with Model 7620ULF, 7720ULF or with Model 5140DLM for central station monitoring. Local alarm indicating/notification appliance use is optional subject to the requirements of the Local Authorities Having Jurisdiction. Battery and loading requirements shall be configured as described in the Installation Instructions for Central Station service.

Suitable for Remote Station Fire Alarm System Service when used with Model 5140DLM. Local alarm indicating/notification appliance use is optional subject to the requirements of the Local Authorities Having Jurisdiction. Battery and loading requirements shall be configured as described in the Installation Instructions for Remote Station service to provide 60 hours of normal standby power and at least 5 minutes of general alarm standby power.

## A total of eight operator keypads, (Model 6139CN or FA560KP) may be connected to each control unit by means of the four-wire bush provided.

## The Model 6137B, 6139B, 6150 and 6160 keypads are intended for use with the Vista-128FB control unit and are connected by means of the 4-wire bus.

##: When connected to SRRF signal receiver, Model 5882, wireless devices may be used.

Suitable for Grade A local mercantile Burglar Alarm Service when used with a Listed Burglar Alarm Sounding Device/Housing. Depending upon installation application a compatible Listed sounding device enclosure may also be required. As indicated in the Installation Instructions a Listed tamper switch shall be used to protect the control unit's cover and all conduit openings to the control shall be used or blocked. As a result of the attack test results described in File S789, Report dated August 12, 1992 the maximum entry delay time shall not exceed 45 s and maximum exit delay time shall not exceed 60 s. Suitable for safe and vault burglar alarm installations when also used with a shock sensor Listed for protection of sheet metal enclosures and a Listed tamper switch installed on the rear of the control unit.

Suitable for Grade A Police Station Connected Burglar Alarm System Service when the 24 hour test report is enabled, programmed for 24 hour Test Reporting, or can be used with Model 346 polarity reversing relay/voltage booster or Model 7720, or 7620ULF Long Range Radio, or 5140DLM Backup Dialer (Basic Line Security). Suitable for Grade AA (High Line Security) when used in conjunction with Model 445 direct wire transmitter or Model 7920SE Long Range Radio. The digital alarm communicator transmitter shall be programmed for UL installations as stated in the Installation Instructions.

Suitable for Grade C Central Station Service, Grade B Central Station Service when used with a Listed Mercantile Sounding Device. Depending upon the installation application a compatible Listed sounding device enclosure may also be required. Suitable for Grade A Central Station Service when used with Model 7720 Long Range Radio or Model 7620ULF Long Range Radio. One zone of the control panel shall be programmed as a 24-hour zone to supervise the radio unit. Suitable for Grade AA, BB or CC Central Station service when used with the 7920SE Long Range Radio as indicated in the installation instructions. As indicated in the Installation Instructions a Listed tamper switch shall be used to protect the control unit's cover and all conduit openings to the control shall be used or blocked. Suitable for safe and vault burglar alarm installations when also used with a shock sensor Listed for protection of sheet metal enclosures and a Listed tamper switch installed on the rear of the control unit.

The Vista 100 and 128FB Controls can be partitioned into a maximum of 8 areas. The Vista-32FB can only be partitioned into a maximum of 2 areas. All fire zones shall be assigned to partition 1. The manufacturers installation instructions shall be observed for all UL applications of zone partitioning.

Except for the following differences the Vista-32FB is identical to the Vista-128FB. The Vista-32FB:

A) Has reduced software features.
B) The primary transformer is mounted inside the control unit enclosure and is separated from the rest of the control unit wiring by a sheet steel frame.

The Vista-128FBP is identical to the Vista-128FB except for the addition *of the following features: Internet Communication Module, cancel verify, Fire verity, Quick exit, Group bypass, Arm faulted, Stay1, Stay2, Auto stay silent burg, and tamper option each zone.

The Vista-250FBP is identical to the Vista-128FBP except that it supports 16 vista key modules, 250 zones, 250 users, 1000 event log, and 500 vista card holders.

The FA1700C is the First alert version of the Vista-250FBP).

The Vista-250FBPADT is identical to the Vista-250FBP except for ADT defaults and the changes in hardware and software to support the AC communicator module, Model 472491D. The AC Communicator module, Model 472491D, can only be used as a dedicated AC telephone line mode. The Vista-250FBPADT is suitable for used with the Internet Communication Module, Models 7845i, 7845i-ENT and the Premises Cellular Control Channel Transceiver, Model 7845C. The Models 7845i, 7845i-ENT and 7845C device must either be mounted in the control panel cabinet, or within 3 feet of the panel cabinet with wiring routed in conduit.

All commercial fire alarm installations shall comply with the installation requirements contained in NFPA 72 - National Fire Alarm Code. All UL commercial burglar alarm installations shall comply with the installation requirements contained in UL Standard 681, Installation And Classification of Burglar And Holdup Alarm Systems. Each control unit is intended to be used with other separately Listed devices as indicated in the manufacturer's Installation Instructions. Two wire and four wire smoke detectors shall be installed as specified by the control unit's installation instructions. The units are intended for the applications described in Table I.

## In order to provide fire protective signaling service, the Model Vista-128FB control units shall be provided with a backup signaling channel by means of the Model 7835CF cellular control channel transceiver, which is connected to the control unit by means of the data communication bus designed for this purpose.

## The Model Vista-128FB unit is powered from a Class II limited energy plug-in type transformer and two sealed lead acid batteries provide 24-hour standby capacity.

## The system shall be installed in accordance with the Manufacturer's Installation Instructions and the Canadian Electrical Code, Part I.

Model FA1600C is identical to Vista-100 except for model designation.

Honeywell

# 5808W3

PHOTOELECTRIC SMOKE/HEAT DETECTOR WITH BUILT-IN WIRELESS TRANSMITTER

Honeywell's 5808W3 is a 3V lithium powered, photoelectronic smoke/heat detector with a built-in wireless transmitter. It is intended for use with any 5800 Series Wireless Receiver/Transceiver for residential installations (for commercial installations, the 5881ENHC or the 5883H receiver is required).

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.

Smoothing algorithms minimize nuisance alarms by smoothing out short term spikes from dust and smoke – virtually eliminating nuisance alarms.

Since there are no holes to drill or wires to run, you can preserve the beauty of the building while protecting it. The 5808W3 is an ideal smoke detector for those difficult to wire locations, applications where room aesthetics are critical, or where hazardous materials exist.

All models also feature a restorable, built-in, fixed temperature (135°F) thermal detector that is also capable of sensing a pre-freeze condition if the temperature is below 41°F.

## FEATURES

- **Improved Robust RF Field Strength**
  The distance between the detector and receiver has been significantly increased without the need for a repeater
- **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**
  The technician is able 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 a snap with green and red LED status indicators. A green LED denotes a normal condition while the red LED indicates abnormal conditions.
- **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, which accommodate drywall anchors for easy surface mounting.

**ADDITIONAL FEATURES:**

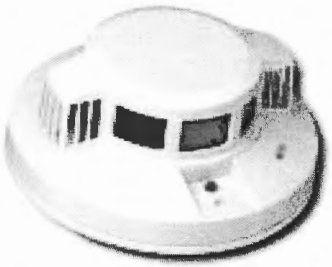
- Utilizes one long-life 3V lithium battery
- Microcontroller runs on a 4.0 MHz clock
- Horn operates at 3.3 KHz with sound pressure level of 85 dBA at 10 feet
- Built-in wireless transmitter, temporal code 3 sounder
- Maintenance signal fully complies with the sensitivity test requirement specified in NFPA 72, 7-2.2 and is approved by UL

ADEMCO
An ADEMCO Group Company

# 5808/5809/5806/5807
## Smoke and Heat Detectors



## SMOKE AND HEAT DETECTORS



**Ordering Information**

| Part No. | Description |
|---|---|
| 5808 | Wireless smoke detector |
| 5809 | Wireless rate of rise temperature sensor |
| 5806 | Photoelectric smoke detector |
| 5807 | Photoelectric smoke detector |

The protection of life and property is made difficult, and sometimes prevented by many obstacles. Home designs such as cathedral ceilings make it virtually impossible to use hardwired smoke detectors. Historical buildings present unique and challenging situations for the installation of any security device, which could damage or alter the structure. ADEMCO solves these problems with reliable wireless technology.

There are no wires to run, so installation can be done cost-effectively — and protection can be accomplished in the most appropriate location.

### 5808

**Wireless Smoke Detector:**

- Provides a low profile design
- Features two concealed thermistors for heat detection
- Maintains UL217, UL268 and UL864 listing
- Contains pre-low battery warning signal
- Includes an extended five-year battery life with 3V lithium

### 5809

**Wireless Rate-of-Rise Temperature Sensor:**

- Mounts on ceiling or wall
- Contains built-in thermostat trips at 135°F or when temperature rises 15°F or more per minute.
- Includes a 3V lithium battery
- Provides heat and rate-of-rise protection

### 5806

**Photoelectric Smoke Detector:**

- Features tamper protection
- Includes two 9V batteries
- Maintains UL217 listing

### 5807

**Photoelectric Smoke Detector:**

- Features tamper protection
- Includes two 9V batteries
- Maintains UL217 listing

165 Eileen Way, Syosset, New York 11791 • 
ADEMCO is an ISO9001 Registered Company
L/SMKHTDET/D Rev. 1/99

ADEMCO GROUP

Honeywell

# 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 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 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**
Honeywell
2 Corporate Center Drive Suite 100
P.O. 9040
Melville, NY 11747
www.honeywell.com

Honeywell

L/5809/D
October 2007

# 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-128BP
- VISTA-128FBP
- VISTA-250BP
- VISTA-250FBP
- FA1600 series
- FA1700 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)

**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

## ORDERING

| | |
|---|---|
| **5881ENHC** | Commercial Wireless Receiver |

**Automation and Control Solutions**
Honeywell Security & Communications
2 Corporate Center Dr. Suite 100
P.O. Box 9040
Melville, NY 11747

www.honeywell.com

Honeywell

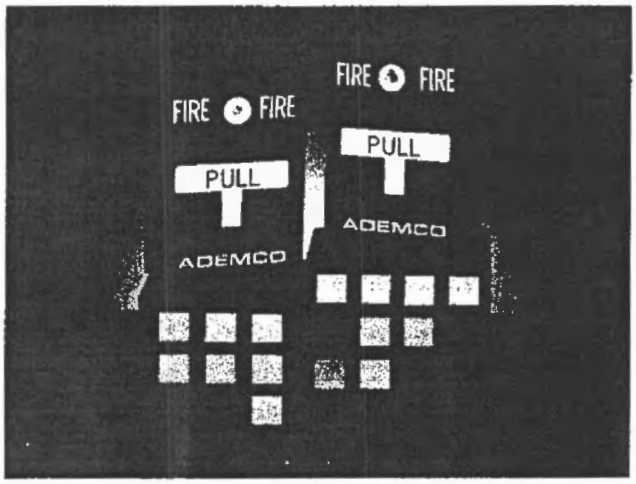
L/5881ENHC/D
October 2008

# 5140MPS-1/5140MPS-2
# Manual Pull Stations

ADEMCO COMMERCIAL SECURITY SOLUTIONS

## 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 appearence. 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-BB for surface mount installations. The Backbox has four predrilled 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

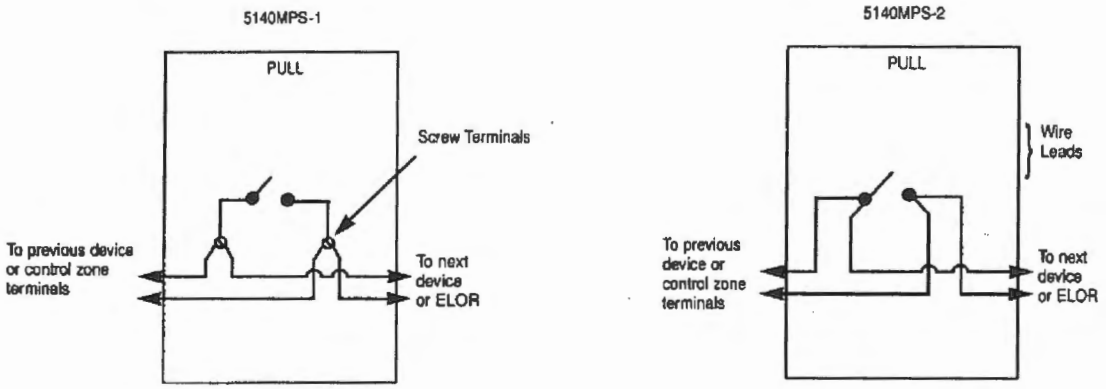
## ■ ORDERING INFORMATION

*5140MPS-1:* Manual Station
Key Reset Test
and Terminal Block

*5140MPS-2:* Manual Station
Hex Allen Reset
Test and Wire Leads

*5140MPS-BB:* Surface Backbox

## ■ WIRING DIAGRAM



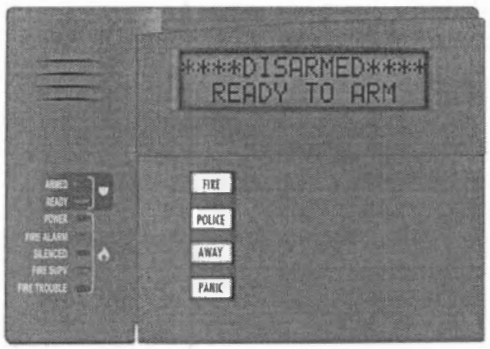

## ARCHITECTURAL/ENGINEERING SPECIFICATIONS

Manual Fire Alarm Station Model 5140MPS-1 (5140MPS-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 minimum 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.

# 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

**Automation and Control Solutions**
Honeywell Security & Communications
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Melville, NY 11747
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Honeywell

L/6160CR2D/D
September 2009