Form # P 04

#### DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

## **CITY OF PORTLAND**

Please Read Application And Notes, If Any, Attached

# PERMIT

Permit Number: 100274

This is to certify thatGODUTI ELEANOR J &	JOHN H WALKER ETAL TRS/Cunningh	
has permission toInstall Fire Alarm		
AT 9 DEERING ST	CBL 046 F	3023001
provided that the person or person	MINISTER CONTRACTOR CO	
of the provisions of the Statutes o		
the construction, maintenance and	d 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.  PERMIT ISSUED	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 FEQUIPED APPROVALS  Fire Dept. 2010  Health Dept  Appeal Board  Other  Department Name	a	Director - Building & Inspection Services
PEN	NALTY FOR REMOVING THIS CARD	,

City of Portland, Maine -	Building or Use	Permi	t Application	Permit No:	I	ssue Date:		CBL:		
389 Congress Street, 04101					74			046 B023001		
Location of Construction:	Owner Name:			Owner Address:				Phone:		
9 DEERING ST	GODUTI ELE	ANOR	J & JOHN H	PO BOX 31						
Business Name:	Contractor Name	:		Contractor Addr	ess:			Phone		
	Cunningham S	ecurity	Systems	10 Prince Poir	nt Road	h	2078463350			
Lessee/Buyer's Name	Phone:			Permit Type:					Zone:	
				Fire Alarm S	ystem				K-6	
Past Use:	Proposed Use:			Permit Fee:	Co	st of Work:	C	EO District:		
Commercial Office connected v	v/ Commercial O	ffice - i	nstall Fire	\$110.0	0	\$8,800	.00	2		
permit# 090205	Alarm			FIRE DEPT:	X A		NSPECT	TON:	Tire	
			4	w/corditions		enied	Use Grou	p: B/R-2	Type: Harn	
ist C.	( , , , ) +	•	4	- diar	λ	1/10		7	Mar	
legKLuse: 1-+100r 41	notasionslo	uss 1	4 res. Duo	4 200 a 5	1 4/1/	110	TBL	-2003		
Proposed Project Description:	, ,		′	+(0)	1 1 1 1			D Q	ulali	
Install Fire Alarm				Signature:	well!		Signature	XMD	18/10	
				PEDESTRIAN A	CTIVIT	TIES DISTE	RICT (P.A	1.b.)	1 1	
				Action: A	proved	Appro	oved w/Co	onditions [	Denied	
				Signature:			D	Date:		
Permit Taken By:	Date Applied For:			Zon	ing A	pproval				
ldobson	03/22/2010					PP				
This permit application do	es not preclude the	Spe	cial Zone or Review	ws 7	Coning A	Appeal		Historic Prese	ervation	
Applicant(s) from meeting		☐ Sh	noreland	☐ Var	iance			Not in Distric	t or Landmark	
Federal Rules.								_		
2. Building permits do not inc	clude plumbing,	□w	etland	☐ Mis	cellaneo	ous		Does Not Req	quire Review	
septic or electrical work.	formula is not stanted		ood Zone		nditional	Hee		Requires Rev	iew	
3. Building permits are void i within six (6) months of the			ood Zone		iditional	Osc		_ Requires Rev	iew	
False information may inva			abdivision	☐ Inte	rpretatio	on	Ιr	Approved		
permit and stop all work			.ourrision		promise					
		Si	te Plan	☐ App	proved		1	Approved w/0	Conditions	
							'			
	OUTED	Maj	Minor MM	☐ Der	nied			Denied		
PERMIT IS	SULU	W.	the condi	funts				1	1	
		Date:	Jyncona	Date:			Date	e: 3/123	12012	
APR 1 2	2010	_	5 7/2	U10				TX A	1	
All 1 -			1	1.				D.A	dru	
	271 0010									
CITY OF PO	RILAND									
			CEDTIFIC : T	ON						
T1 1 10 10 1 T	C 1 0.1		CERTIFICATION		1 .					
I hereby certify that I am the ow I have been authorized by the o										
jurisdiction. In addition, if a pe	rmit for work describe	ed in the	application is is	sued. I certify	that the	code offi	cial's an	thorized renr	esentative	
shall have the authority to enter	all areas covered by s	uch per	mit at any reason	nable hour to en	force	the provis	ion of the	he code(s) ap	plicable to	
such permit.		r				•				
1										
			ADDRES	S		DATE		PHO	ONE	
SIGNATURE OF APPLICANT			ADDICE	77.0						

PHONE

DATE

City of Portland, Maine - E	Ruilding or Use Permit	t	Permit No:	Date Applied For:	CBL:
389 Congress Street, 04101 Te			10-0274	03/22/2010	046 B023001
Location of Construction:	Owner Name:		wner Address:		Phone:
9 DEERING ST	GODUTI ELEANOR	J & JOHN H	PO BOX 31		
Business Name:	Contractor Name:	C	Contractor Address:		Phone
	Cunningham Security	Systems	10 Prince Point Ro	ad Yarmouth	(207) 846-3350
Lessee/Buyer's Name	Phone:	P	ermit Type:		
	Til .	_	Fire Alarm System	n	
Proposed Use:			Project Description:		
Commercial Office - install Fire	Aiarm	Instan	Fire Alarm		
Dept: Historic Status	s: Approved with Condition	ns Reviewer:	Deborah Andrew	s Approval D	ate: 03/23/2010
Note:					Ok to Issue:
* Position of Knox box on bu	ilding exterior to be determi	ined by Keith Ga	utreau, in consultat	tion with HP staff. B	ox to be located
such that it has limited visual	<u> </u>		*		
Dept: Zoning Status	s: Approved with Condition	ne Davioware	Marge Schmucka	al Approval D	ate: 03/22/2010
Note:	S. Approved with Condition	is Reviewer.	Marge Schiller	ai Approvar <i>b</i>	Ok to Issue:
50 (68800)700077		val then Historia I	Dwasawration This	property is located u	
ANY exterior work requires a     District.	a separate review and approv	vai tiiru Historic i	reservation. This	property is located w	Itiliii ali Fiistoric
This is NOT an approval for not limited to items such as st					nt including, but
3) This property shall remain 4 change of use shall require a				nits on the 2nd & 3rd	l floors. Any
Dept: Building Statu	s: Approved with Condition	ns Reviewer:	Jeanine Bourke	Approval D	ate: 04/07/2010
Note:					Ok to Issue:
Separate permits are required hood exhaust systems and fue			7.7		
2) Fire Alarm systems shall be i	nstalled per Sec. 907 of the	IBC 2003			
Dept: Fire Statu	s: Approved with Condition	ns Reviewer:	Ben Wallace Jr.	Approval D	eate: 04/07/2010
Note:					Ok to Issue:
1) Installation of a Fire Alarm s	ystem requires a Knox Box	to be installed pe	r city crdinance		
2) As-built documents shall be s	submitted in pdf to the Build	ling Inspections (	Office upon comple	etion of job.	
3) Central Station monitoring for	or addressable fire alarm sys	tems shall be by p	point.		
4) System acceptance and comr Department. Call 874-8703		ated with alarm a	nd suppression sys	tem contractors and	he Fire
5) All fire alarm records require RECORDS". Records cabin					"FIRE ALARM

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

7) Detectors in the office spaces and basement, with the exception of the panel smoke, shall be ROR heat detectors.

<b>Location of Construction:</b>	Owner Name:	Owner Address:	Phone:					
9 DEERING ST	GODUTI ELEANOR J & JOHN H	PO BOX 31						
Business Name:	Contractor Name:	Contractor Address:	Phone					
	Cunningham Security Systems	10 Prince Point Road Yarmouth (207) 846-3						
Lessee/Buyer's Name	Phone:	Permit Type:	0 0					
		Fire Alarm System						

Comment	S	:
---------	---	---

3/24/2010-gg: received from historic as of 03/23/10. Gg

#### **Benjamin Wallace - 9 Deering St**

From:

Benjamin Wallace

To:

mmajor@cunninghamsecurity.com

Date:

3/31/2010 12:06 PM

Subject:

9 Deering St

Attachments: Benjamin Wallace.vcf

#### Hi Michael,

Has this system installation been completed already? I just started reviewing it and have a few issues:

- There is no operations matrix or cut sheets for other than the panel and annunciator,
- Smokes are not appropriate for the basement (w/ the exception of over the panel) and the office spaces on the first floor. These should be ROR heat detectors.
- I expect to see everything keyed alike.

#### Thanks,

Benjamin A. Wallace Jr. Fire Prevention Officer Portland Fire Department 380 Congress Street Portland, Maine 04101 (207)756-8096 wallaceb@portlandmaine.gov

# SURGA IN INCIDENCE OF THE PROPERTY OF THE PROP

### **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: 9 Deering Street	CBL: 46-B-23
Exact location: (within structure) Basement	
Type of occupancy(s) (NFPA & ICC): Mixed Use Residential	And Commercial
Building owner: GODUTI ELEANOR J & JOHN H WALK	CER ETAL TRS
Must be System Designer (point of contact): Michael J. Major	
Designer phone: 207-846-3350	E-mail: mmajor@cunninghamsecurity.
Installing contractor: Cunningham Security Systems	
Contractor phone: 846-3350	E-mail: mmajor@cunninghamsecurity
This is a new application: YES NO	
This is an amendment to an existing permit: YES NO	Permit no:
The following documents shall be provided with this application:	
✓ Floor plans	COST OF WORK: PROS.
✓ Wiring diagram	PERMIT FEE: //O (\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)
Annunciator details	(\$101 ER \$1,000 + \$301 OR HILTIKS1 \$1,000)
Equipment data sheets	
Battery & voltage drop calculations	PECEIVED  NAR 2 2 2010  Download a new copy of this application at Maine
Input/ Output Matrix	ECENT
✓ Designer qualifications	PLE 2 2010
Electrical Permit Pulled (check alarm/com)	WAR Inspections
The <u>designer</u> shall be the responsible party for this application. I	Download a new copy of this application at
www.portlandmaine.gov/fire for every submittal. Submit all plans in o	electronic PDF in addition to full sized plans to the
Building Inspections Department, 389 Congress Street, Room 315	5, Portland, Maine 04101.
Prior to acceptance of any fire alarm system, a complete commissioni	ng and acceptance test must be coordinated with all
fire system contractors and the Fire Department, and proper documen	tation of such test(s) provided.
All installation(s) must comply with the City of Portland Technical S	tandard for Signaling Systems for the Protection of
Life and Property available at www.portlandmaine.gov/fire.	
Applicant signature: 1 March 1997	Date: 3 (22-10)

#### 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 2 Corporate Center Dr. Suite 100 Melville, NY 11747 1.800.467.5875 www.honeywell.com Honeywell

L/6160CR2D/D September 2009 © 2009 Honeywell International Inc.

## 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.

# 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

#### **5881ENHC**

#### COMMERCIAL WIRELESS RECEIVER



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

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

#### **FEATURES**

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

#### **COMPATIBLE CONTROLS**

VISTA-32FB

- VISTA-128FBP
- VISTA-250FBP
- FA1700 series

- VISTA-128BP
- VISTA-250BP
- FA1600 series

#### **SPECIFICATIONS**

#### **Dimensions**

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

#### **Input Voltage**

• 12VDC (from control's keypad terminals)

#### Current

• 60mA (typical)

#### **Operating Temperature**

• 32° F to 122° F (0° C to 50° C)

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

#### 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

utions

Honeywell

L/5881ENHC/D October 2008 © 2008 Honeywell International Inc.

## 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

#### ACCESSORIES (sold separately)

#### SENS-RDR Infrared Sensitivity Reader

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





#### **RT Removal Tool**

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



#### **ORDERING**

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

Accessories sold separately:

SENS-RDR Hand-held Sensitivity Reader

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

#### **Honeywell Security & Communications**

Honeywell 2 Corporate Center Dr. Suite 100 P.O. Box 9040 Melville, NY 11747 www.honeywell.com Honeywell

L/5806W3DS/D
February 2008
© 2008 Honeywell International Inc.

<sup>\*</sup> With adapter bracket (4.9" without mounting base)

<sup>&</sup>lt;sup>†</sup>Replacement batteries include Duracell DL123A, Sanyo CR123A, Panasonic CR123A, or ADEMCO 466

## 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

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 activationbutton on the PC board assembly OR(b) Holding a portable hair dryer about12 to 18 inches away from the detector,turn the dryer on and aim the warm airat 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

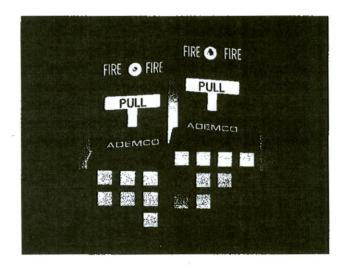
L/5809/D October 2007 © 2007 Honeywell International Inc



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

#### **PRIMARY FEATURES**

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



#### GENERAL DESCRIPTION

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

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

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

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

#### OPERATION

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

#### CONSTRUCTION

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

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

#### **MOUNTING**

#### SEMI-FLUSH MOUNT

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

#### SURFACE MOUNT

Use Ademco Backbox model number 5140MPS-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

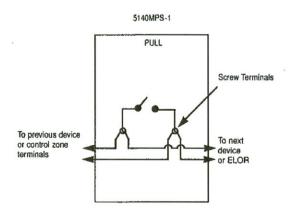
5140MPS-2: Manual Station

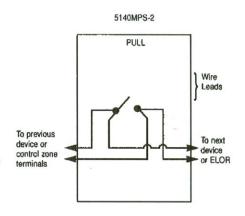
Hex Allen Reset

Test and Wire Leads

5140MPS-BB: Surface Backbox

#### WIRING DIAGRAM

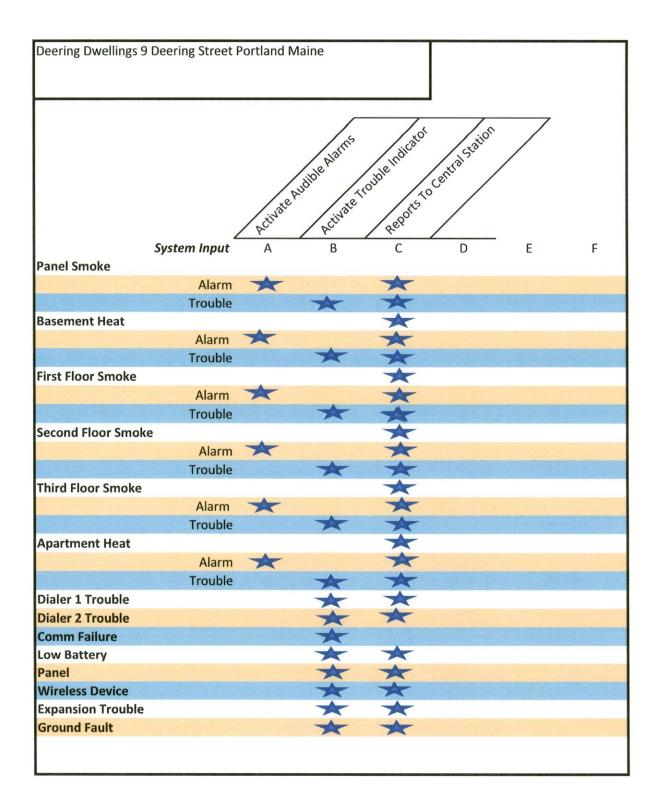




#### ARCHITECTURAL/ENGINEERING SPECIFICATIONS

Manual Fire Alarm Station Model 5140MPS-1 [5140MPS-2] shall be non-coded and include a breaktype 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.



# 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
  - 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).
  - 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.
  - 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.
  - 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 unbypassing, 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 - $10^{\circ}$  C to  $70^{\circ}$ 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:

- 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

Honeywell Security		Fac	cility Informat	ion			Enter Stand	dby and Alarm Tin	nes	Battery Contigency Factor
Battery & Power Budget Calculator	Location:	, 40		Contract of the Assessment Contract of the	ering Street	CHARLES THE CONTRACTOR	A STREET, SQUARE, SQUA	Standby (hours):	24	100/
@ 2003 Honeywell International Inc. All Rights Reserved	Account #:							ration (minutes):	10	10%
Apply UL Power Limits? (Required to maintain UL Listing)	Model:									
	Engineer:							Recommended	13.3	
Commercial Fire Installation	Date:							Battery (AH)	70.0	
Commercial Burg Installation										
				SELECTED	PANEL M	AXIMUM (	OUTPUT F	RATINGS		
	Polling	Standby	Alarm	Panel	Panel	Bell #1	Bell #2	Maximum Panel	Maximum Panel	Max Battery Supported b
Select Panel from pulldown list:	Loop (mA)	Auxiliary Power (mA)	Auxiliary Power (mA)	Standby (mA)	Alarm (mA)	Output (mA)	Output (if used; mA)	Standby Output	Alarm Output	Panel
Vista-128FBP ▼	128	1000	1700	300	470	1700	1700	1300	2800	34
					1930			Total Standby	Total Alarm	
Calculated Current Draw	0	165	150	Calculate	ed Bell Draw	1547	720	165 Standby Budget	2417 Alarm Budget	
Power Budget	128.0	835.0	1550.0	Bell Po	wer Budget	153.0	980.0	1135.0	383.0	
					D(-) ( 4)		0.0	F.4 (# Pa	Domini (m.A).	
Remove Unused Devices From List			Externa	I Bell Power	Reg a (mA):		0.0	EXT. OL PO	wer Req'd (mA):	0.54
Grayed-out device(s) are not supported	by selected	panel								
	Enter	How many					Total		15000	
KEYPADS/INTERFACES	Enter Quantity	powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling Loop	Standby Current	Total Alarm Current	Total External Current Required	
RETPADS/INTERPACES	Quantity 0	O O	A CONTRACTOR OF THE PARTY OF TH	THE PERSON NAMED IN	HIIIIIIII	MILITALI	0			
	0		HHHHH		HHHH	HHHHK	0			A DESCRIPTION OF THE PERSON NAMED IN
	0	-	HHHHH	HHHHH	HHHHH	HHHHH	0	-		0.0000000000000000000000000000000000000
6139/6139R	0		********	100			0			5
	0		*********	MIIIIII III	MIIIII	HIIIII	C			
	0	0			IIIIIII		C	C	0	)
	0	0					C	C	0	)
	0		*********				C			
6160/6160CR	1	0			<i>IIIIIIII</i>		45		+	
6160RF	0			-			C			
6160V	0						C			
6270	0	-		-			C		-	200220000000000
6271C	0	-					C		-	50000000000000000000000000000000000000
6271CV 6271V	0						C			
8132 (Symphony)	0	-		-						
FSA-8 Fire Zone Annunciator	0									
FSA-24 Fire Zone Annunciator	0				<del>4444444</del>					CONTRACTOR CONTRACTOR
Add'l Keypd (Enter # and Currents)	0				44444444		0			
Add'l Keypd (Enter # and Currents)	0	0	0	0						<u>ז</u>
2 WIRE & 4 WIRE SMOKE DETECTORS	Enter	How many powered	Standby (aux	Alarm		Total Polling	Total Standby		Total External	
(except Vplex Polling Loop detectors)	Quantity	externally?	pwr)	Current (Aux)	Polling Loop		Current	Total Alarm Current		
2 wire smoke detector (zone powered)	6	IIIIIIIIII						e included to help you	HIHIHIH	3
2 wire smoke detector (zone powered)	0			te equipment list. e selected panel				rs exceeds panel		3
2 wire smoke detector (zone powered)	0									3
2 wire smoke detector (zone powered)	0	111111111111111111111111111111111111111	NAME AND ADDRESS OF THE OWNER, WHEN SHE ADDRESS OF THE OWNER,	Vire Smoke Det	ectors OK for s	selected panel				3
12V 4 Wire Smoke (Qnt'y & Currents)	0				HIIIIII				2	200 EXCESS 250
12V 4 wire Smoke ( Qnt'y & Currents)	0				HHHH	HHHH	(			0
12V 4 wire Smoke ( Qnt'y & Currents)	0	-			HHHHH					
12V 4 wire Smoke ( Qnt'y & Currents)				0		MIIIIIII			0	0
										7
MULTI-POWER DEVICES	Enter Quantity	How many powered externally?	Standby (aux pwr)	Alarm Current (Aux)	Polling Loop	Total Polling	Total Standby Current	Total Alarm Current	Total External	
4208U [powered by polling loop]	Quantity		·····	MIIIIIIII	HIIIIII	Million	Million	MILLION TO STATE OF THE STATE O	Million	8
4208U [powered by panel aux power]	0		444444444	HHHHH	HHHH	HHHH	HHHH	HHHHH	HHHHHH	3
4208U [powered externally]	0	-	44444444	HHHHH	HHHH	HHHH	HHHH	HHHHHH	HHHHHH	
4208SN [powered by polling loop]	0		WHITH I			HIIIII				
4208SN [powered by panel aux power]	C									3
4208SN [powered externally]	C									
4208SNF [powered by polling loop]	(		HHHHH							
4208SNF [powered by panel aux power]	(		444444444444444444444444444444444444444				HIIIII			3
4208SNF [powered externally]	(		********							3
4208SNF (Class B to A Zone Converter)	(	-	*********		MILLION TO	0	WILLIAM TO			200
4209U Grouped Zone Mux. Module	(		4444444	HIHHH	<i>iillllll</i>	HHHH	HHHH	HHHHHH	HHHHH	3
4209U [powered externally]	(		44444444	HHHHK	HHH	HHHH	HHHH			8
Add'l Device (enter quant. & currents)							MIIIIIIII			0
Add'l Device (enter quant. & currents)  Add'l Device (enter quant. & currents)										Ö

34.4

	Enter	How many powered	Standby (aux	Alarm		Total Polling	Total Standby		Total External
AUXILIARY POWERED DEVICES	Quantity	externally?	pwr)	Current (Aux)	Polling Loop	Loop	Current	Total Alarm Current	Current Required
PS24 24 volt Power Supply Module	0	0	50	100			0		
4100SM (no more than one per system)	0	0	25	0			0		
4204: Enter no. of relays used	0	0	40	0			0		
4204CF:Enter no. of relays used	0	0	80				0		
4285 Voice Module	0	0	160				0		
4286 with warning speakers	0	0	220	300			0	0	
5140DLM Backup Dialer Module	0	0	5	15			0	0	
5800RP wireless repeater module	0	0	100				0	0	
5800TM wireless xmtr module	0	0	20				0	0	
5881EN receiver	2	0	60				120	0	
5883 hi-security receiver	0	0	80				0	0	
UVS-QM	0	0	75	110			0	0	
VA8200 Panel Linking Module	0	0	88	0			0		
VA8201 Alpha Pager Module	0	0	165	0			0		
Add'l Device (enter quant. & currents)	0	0	0	0			0		
Add'l Device (enter quant. & currents)	0		0	0			0		
Communicators		AND ASSESSMENT			anninininininininininininininininininin	minim			
7845GSM/7845i-GSM	0	0	10		mmm	www.	0	0	and the second second
7845i/7845i-ENT	0		1,7020		HHHHH		0		
	0	0	10				0		
GSMCF/iGSMCF Fire Communicator	0		75				0		
7847i/7847i-E Internet Communicator									
Add'l Device (enter quant. & currents)	0	0		0			0		
Add'l Device (enter quant. & currents)	0	0	0	0			0	0	
PIR Motion Detectors					······	mm			
IS215T LED Active?	0	1.00					0		
IS215TCE	0	1050					0		
IS2260/IS2260T LED Active?	0						0		
IS2460	0	0					0	-	
IS2500LT	0	0					0	10	
IS2535/IS2535T	0			-			0		
IS2560/IS2560T	0						0		
IS2560TC	0	0					0		
IS310/IS320 Request to Exit (RTE)	0	0	35				0	0	
997 Ceiling Mount PIR LED Active?	0	0	12				0	0	
998 Wall Mount PIR LED Active?	0	0	13				0	0	
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	
Motion Detctrs (enter quant. & currents)	0	0	0	0			0	0	
Motion Detctrs (enter quant. & currents)	0	-		0	MHHH	HHHH	0		
Dual Tech Motion Detectors	NAME OF TAXABLE	EVER LEVE	MANAGE TO WARRANT	SPLANTE TO					
DT-515	0	0	20	0	WWWW.	WWW.	C	0	
DT-6100STC	0				HHHH	HHHH	0		
DT-7235T	0				HHHHH	HHHHH	0		
DT-7435/DT-7435C	0				HHHHH	HHHHH	0		
DT-7450/DT-7450MIC	0		0.00	-	HHHHH	HHHH	0		
DT-7450/DT-7450MIC	0				HHHHH	HHHH	0		
	0				HHHHH	HHHH			
Motion Detetrs (enter quant. & currents)	0				HHHHH	HHHH			
Motion Detectrs (enter quant. & currents)					HHHHH		C		
Motion Detctrs (enter quant. & currents)	0	-			HHHHH	HHHHH	C		
Motion Detctrs (enter quant. & currents)	0	0	0	0	THILLIAN S				1

	Enter Quantity	How many powered by	Standby (aux	Alarm	Polling Loop	Total Polling	Total Standby Current	Total Alarm Current	Total External Current Required
POLLING LOOP DEVICES		4297?	pwr)	Current (Aux)		Соор	Current	Total Alarm Current	Carrent Required
1101SN Single Output Relay Module	0	0			7	0			
1190SN Two Zone SIM	0	0			2	0			
1190WH	0	0			2	0			
4191SN-WH	0	0			0.5	0			
4192CP	0	0			0.4	0			
1192SD 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	mmm.	<i>IIIIIIII</i>	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	HHHH		
4939SN WH/BR/GY Surf Mt. Cntct.	0	0	HHHHH	HHHHH	4	0	HHHHH	HHHHHH	HHHHH
	0	0	HHHHH	HHHHH	1	0	HHHHH		HHHHH
4944SN Recessed Contact	0	0	HHHHH	HHHHH	0.5	0	HHHHH	HHHHHH	HHHHH
4945SN-WH						0			
4959SN Overhead Door Contact	0	0			0.5				
5192SD Smoke Detector	0	0			2.8				
5192SDT Smoke Detector with Heat	0	0			2.8	0			
998MX PIR LED Active?	0	0			1	0			
IS2500SN PIR LED Active?	0	0			1.6	0			
FG-1625SN Glass Break Detector	0	0			1	0			
Quest2260SN LED Active?	0	0			6				
Vplex-VSI Short Isolator	0	0			5	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		How many	E2100 2010 V		200		Total	Total Sounder	
			STREET, STREET	1		200000000000000000000000000000000000000			
	Enter	powered externally?	Standby (aux	Alarm	Polling Loop	Total Polling	Standby	Current from Panel	Total Sounder
BELL OUTPUT #1	Quantity	externally?	Standby (aux pwr)	Current (Aux)	Polling Loop	Total Polling Loop		Current from Panel Bell #1	Total Sounder Current (externa
BELL OUTPUT #1  Enter device name, quant., & current	Quantity 7	externally?		Current (Aux)	Polling Loop		Standby	Current from Panel Bell #1	
BELL OUTPUT #1  Enter device name, quant., & current Enter device name, quant., & current	Quantity 7	externally?  0 0		Current (Aux) 221 0	Polling Loop		Standby	Current from Panel Bell #1 1547	
BELL OUTPUT #1  Enter device name, quant., & current  Enter device name, quant., & current  Enter device name, quant., & current	Quantity 7 0 0	externally?  0 0 0		Current (Aux) 221 0 0	Polling Loop		Standby	Current from Panel Bell #1 1547 0	
BELL OUTPUT #1  Enter device name, quant., & current	Quantity 7 0 0 0	0 0 0 0		Current (Aux) 221 0 0 0	Polling Loop		Standby	1547 0 0 0	
BELL OUTPUT #1  Enter device name, quant., & current	Quantity 7 0 0	externally?  0 0 0		Current (Aux) 221 0 0	Polling Loop		Standby	Current from Panel Bell #1 1547 0	
BELL OUTPUT #1  Enter device name, quant., & current	Quantity 7 0 0 0	0 0 0 0		Current (Aux) 221 0 0 0	Polling Loop		Standby	1547 0 0 0	
BELL OUTPUT #1  Enter device name, quant., & current	Quantity 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	externally?  0 0 0 0 0 How many	pwr)	Current (Aux)  221  0  0  0  0	Polling Loop	Loop	Standby Current	Current from Panel Bell #1  1547  0 0 0 Total Sounder	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current	Quantity 7 0 0 0 0 Enter	externally?  0 0 0 0 0 0 How many powered	pwr) Standby (aux	Current (Aux)		Loop  Total Polling	Standby Current  Total Standby	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)	Quantity 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	externally?  0 0 0 0 0 How many powered externally?	pwr)	Current (Aux)  221  0  0  0  Alarm Current (Aux)	Polling Loop	Loop	Standby Current	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED) Enter device name, quant., & current	Quantity 7 0 0 0 0 0 Enter Quantity	externally?  0 0 0 0 0 0 How many powered externally? 0	pwr) Standby (aux	Current (Aux)	Polling Loop	Loop  Total Polling	Standby Current  Total Standby	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)  Enter device name, quant., & current Enter device name, quant., & current Enter device name, quant., & current	Quantity 7 0 0 0 0 0 Enter Quantity 4	externally?  0 0 0 0 0 0 How many powered externally? 0 0	pwr) Standby (aux	Current (Aux)	Polling Loop	Loop  Total Polling	Standby Current  Total Standby	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720  0	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)  Enter device name, quant., & current	Quantity 7 0 0 0 0 0 Enter Quantity 4 0 0	externally?  0 0 0 0 0 0 How many powered externally? 0 0	pwr) Standby (aux	Current (Aux)	Polling Loop	Loop  Total Polling	Standby Current  Total Standby	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720  0	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)  Enter device name, quant., & current	Enter Quantity  4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	externally?  0 0 0 0 0 0 How many powered externally? 0 0	pwr) Standby (aux	Current (Aux)	Polling Loop	Loop  Total Polling	Standby Current  Total Standby	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720  0	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED) Enter device name, quant., & current	Quantity 7 0 0 0 0 0 Enter Quantity 4 0 0	externally?  0 0 0 0 0 0 How many powered externally? 0 0	pwr) Standby (aux	Current (Aux)	Polling Loop	Loop  Total Polling	Standby Current  Total Standby	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720  0	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED)  Enter device name, quant., & current	Enter Quantity  4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	externally?	Standby (aux pwr)	Current (Aux)	Polling Loop  Alarm Current Draw	Total Polling Loop	Standby Current  Total Standby Current  Actual Resistance	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720  0  0  0	Total Sounder Current (externs
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED) Enter device name, quant., & current	Enter Quantity  4 0 0 0 Units	externally?  0 0 0 0 0 0 How many powered externally? 0 0 0 0 Wire Ga	Standby (aux pwr)	Current (Aux)	Polling Loop  Alarm Current Draw (mA)	Total Polling Loop	Total Standby Current  Total Standby Current  Actual Resistance (twin leads)	Current from Panel Bell #1  1547  0  0  0  Total Sounder Current from Panel Bell #2  720  0  0	Current (externa
BELL OUTPUT #1  Enter device name, quant., & current  12V NOTIFICATION DEVICES ON BELL OUTPUT #2 (IF USED) Enter device name, quant., & current	Enter Quantity  4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	externally?	Standby (aux pwr)	Current (Aux)	Polling Loop  Alarm Current Draw (mA)	Total Polling Loop	Total Standby Current  Total Standby Current  Actual Resistance (twin leads)	Current from Panel Bell #1  1547  0 0 0 0 Total Sounder Current from Panel Bell #2  720 0 0 0 Voltage At EOL	Total Sounder Current (externs
BELL OUTPUT #1  Enter device name, quant., & current	Enter Quantity  4 0 0 0 Units	externally?  0 0 0 0 0 0 How many powered externally? 0 0 0 0 Wire Ga	Standby (aux pwr)  Standby (aux pwr)	Current (Aux)	Polling Loop  Alarm Current Draw (mA)	Total Polling Loop	Total Standby Current  Total Standby Current  Actual Resistance (twin leads)  0.00	Current from Panel   Bell #1	Total Sounder Current (externs Voltage Drop (Percent)

#### **PS24 Power Supply**

Battery & Power Budget Calculator

2003-Honeywell International Inc. All Rights Reserved

Standby/Alarm Durations (from top) 1.063 Battery Standby (hours): Alarm Duration (minutes): Required Capacity (AH) 7.0

Use TWO identical batteries w/ this AH capacity

			PS24	POWER S	SUPPLY MO	DDULE, N	AXIMUM	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	//////465	/////2887	570	1700	570	1700	40	610	4180	34.4
						22 30		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)	The second							Standby Budget	Alarm Budget	
Power Budget	465.0	2887.0	570.0	1700.0	570.0	1700.0	HIIIIII.	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	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(
24V Notification Appliance	0	Output A	0	0	0	0	0	(

24V BELL CIRCUIT WIRE RUN DATA	Uni	ts	Wire Gauge(AWG)		Ohms per 1000 ft	10000	irren		irm Iraw	Run Length	Actual Resistance (twin leads)	Voltage At EOL	Voltage Drop (Percent)
PS24 Output A Wire Run (twin lead)	Feet	•	<select gauge="" wire=""></select>	•	0.00			11	2/0/0	0	0.00	24.00	0.00
PS24 Output B Wire Run (twin lead)	Feet	•	<select gauge="" wire=""></select>	•	0.00				200	0	0.00	24.00	0.00

Form # PCC

# **ELECTRICAL PERMIT City of Portland, Me.**

To the Chief Electrical Inspector, Portland Maine:

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

Date_	3.22-10	
Permit	#2010 - 4171	
CBI#	416-B-23	

LOCATION: 9 DEERING S	METER MAKE & #
CMP ACCOUNT # MA	OWNER ELEANOR GOOLT
TENANT	PHONE #

0	15	10 11		L EACH F	CC
OUTLETS	Receptacles	Switches	Smoke Detector	.20	
FIXTURES	Incandescent	Fluorescent	Strips	.20	
TIXTOTLEG	moundoodin	114010000111			
SERVICES	Overhead	Underground	TTL AMPS <800	15.00	
	Overhead	Underground	>800	25.00	
Temporary Service	Overhead	Underground	TTL AMPS	25.00	
			IARKS:	25.00	UATE:
METERS	(number of)			1.00	
MOTORS	(number of)			2.00	
RESID/COM	Electric units			1.00	
HEATING	oil/gas units	Interior	Exterior	5.00	7-0-2
APPLIANCES	Ranges	Cook Tops	Wall Ovens	2.00	
	Insta-Hot	Water heaters	Fans	2.00	
	Dryers	Disposals	Dishwasher	2.00	
	Compactors	Spa	Washing Machine	2.00	
	Others (denote)			2.00	
MISC. (number of)	Air Cond/win			3.00	4 - 40
	Air Cond/cent		Pools	10.00	
	HVAC	EMS	Thermostat	5.00	
	Signs			10.00	
	Alarms/res		N/ED	5.00	
	Alarms/com	T	DECEIVED	15.00	
	Heavy Duty(CRKT)	T	7 1	2.00	
	Circus/Carnv		2 2 2010	25.00	
	Alterations		MAR 2 2 2010	5.00	- De la America de la Constantina del Constantina de la Constantina del Constantina de la Constantina
	Fire Repairs		actions	15.00	
	E Lights		of Building Inspection	1.00	
	E Generators		city of Portland Maine	20.00	
PANELS	Service	Remote	Main	4.00	
TRANSFORMER	0-25 Kva			5.00	
	25-200 Kva			8.00	
	Over 200 Kva			10.00	
			TOTAL AMOUNT DUE		
	MINIMUM FEE/COMI	MERCIAL 55.00	MINIMUM FEE 45.00	)	

CONTRACTORS NAME CUMULINO HITHLY SECURITY MASTER LIC. # 17 (39

ADDRESS 10 PRINCES PONT POND LIMITED LIC. #

TELEPHONE 846-3850

SIGNATURE OF CONTRACTOR

te Copy - Office · Yellow Copy - Applicant

