

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT

This is to certify that PROTECTION PROFESSIONALS  
of 325 US Route 1, Falmouth, ME 04105

For installation at 1064 BRIGHTON AVE  
Pine Tree Plaza

Job ID: 2011-11-2785-FAFS

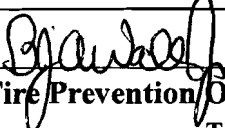
CBL: 263A-A-005-001

has permission to install plaza master box fire alarm system

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

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

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

  
Fire Prevention Officer

58

Code Enforcement Officer / Plan Reviewer

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

PENALTY FOR REMOVING THIS CARD

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

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

Job No: <b>2011-11-2785-FAFS</b>	Date Applied: <b>11/16/2011</b>	CBL: <b>263A- A-005-001</b>	
Location of Construction: <b>1064 BRIGHTON AVE</b>	Owner Name: <b>Centro Heritage SPE 4 LLC</b>	Owner Address: <b>11 Dartmouth St., Boston, MA 02116</b>	Phone:
Business Name:	Contractor Name: <b>PROTECTION PROFESSIONALS</b>	Contractor Address: <b>325 US FALMOUTH MAINE 04105</b>	Phone: <b>388-2898</b>
Lessee/Buyer's Name:	Phone:	Permit Type: <b>FIRE ALARM</b>	Zone: <b>B-2</b>
Past Use:  <b>Mixed Retail/Service uses</b>	Proposed Use:  <b>Same: Mixed retail/service uses – to install fire alarm in rear utility room</b>	Cost of Work: <b>\$48,000.00</b>	CEO District:
		Fire Dept:  <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A  Signature: <i>B. G. [Signature]</i> (58)	Inspection: Use Group: Type:  Signature:
Proposed Project Description: <b>Install Fire Alarm System</b>		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	<b>Zoning Approval</b>		
<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	<b>Special Zone or Reviews</b> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan  <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <i>OK 11/24/11</i>	<b>Zoning Appeal</b> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	<b>Historic Preservation</b> <input checked="" type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>[Signature]</i>
	<b>CERTIFICATION</b>		

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
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## Master Box Approval

**Applicant:** Protection Professionals

**App Phone #:** 207-775-5755

**Building Name:** Pine Tree Shopping Plaza

**Building Address:** 1100 Brighton Ave

**Occupancy:** Class A Mercantile

Assembly OL>300, 20 unit apartment building, etc.

**Emergency Contact:** Josh Berman

**Emergency phone #:** 617-406-2537

**Date of Application:** 11/1/11

**Billing Address:** Bixmore,  
131 Dartmouth St, 3<sup>rd</sup> Floor,  
Boston, MA 02116

**Comments:**

**Applicant completes red box and submits with Fire Alarm Permit**

**1**

**FIRE PREVENTION:**

☒ Approved

☐ Denied

10 / 14 / 11

Date

*B. G. W. [Signature]*  
Fire Prevention Officer

Zone 1: Water flow

Zone 2: City disconnect - Water Flow

Zone 3: Pulls and detectors

Zone 4: City disconnect - Pulls and Detectors

Zone 5: Unassigned

Zone 6: Unassigned

Zone 7: Unassigned

Zone 8: AES Tamper switch

Modify City Box response to alarm sounding in CAD: ☐ YES ☒ NO

**2**

**FIRE ALARM:**

Box #: 4761

Formerly covered Big Lots only

**ELECTRICAL DIVISION:** ☐ Approved

☐ Denied

Box Type: AES Radio Box /  
New

Other

**3**

Test Date:      /      /     

In Service Date:      /      /     

Fire Alarm Technician

AES

Circuit if applicable:

**4**

**FIRE ALARM:** Same Running Assignment As Box:     

Notifications: ☐ All Stations ☐ Run Books ☐ Digitizer ☐ Computer ☐ Cad Box Test

☐ South Portland

☐

Other

Dispatcher

**5**

**BILLING:** ☐ Entered

Financial Officer

## BUILDING PERMIT INSPECTION PROCEDURES

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

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

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

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

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

Director of Planning and Urban Development  
Penny St. Louis

**Job ID: 2011-11-2785-FAFS**  
**install plaza master box fire alarm system**

**For installation at:**  
**1064 BRIGHTON AVE**  
**Pine Tree Plaza**

**CBL: 263A- A-005-001**

## **Conditions of Approval:**

### **Fire**

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

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

The Dollar Tree bathroom hallway and Little Caesar's kitchen space needs proper visual notification appliances.

All NAC power supplies require smoke detector coverage.

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

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

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

Installation of a Fire Alarm system requires a Knox Box to be installed per city ordinance.

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

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 sprinkler supervisory system shall be provided in accordance with NFPA 101, *Life Safety Code*, and NFPA 72, *National Fire Alarm and Signaling Code*. Sprinkler supervisory system shall monitor for water flow and sprinkler supervisory signals via an approved fire alarm panel to central station. One smoke detector shall be located over the panel, a manual pull station located at the front door, and an audible water flow alarm provided.

Fire alarm system requires a wireless master box connection per city ordinance. Masterbox design and installation shall be as approved by City Electrical Division.

AES Zones:

1. Water Flow
2. City Disconnect: Water Flow
3. Pulls and Detectors
4. City Disconnect: Pulls and Detectors
5. Unassigned
6. Unassigned

7. Unassigned

8. AES Tamper Switch



## 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.

B-2

Installation address: Brighton Avenue CBL: 263-AA 5-  
Exact location: (within structure) Pine Tree Shopping Center, FACP in rear utility room  
Type of occupancy(s) (NFPA & ICC): Retail  
Building owner: Centro Heritage SPE 4 LLC / Brixmor Property Group  
System Designer (point of contact): Richard Brobst, Jr  
Designer phone: 207-775-5755 E-mail: rich@protectionprofessionals.net  
Installing contractor: Wecott Electric llc Certificate of Fitness No: M1001  
Contractor phone: 207-388-2898 E-mail: dwescott@wescottelectricllc.com

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

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

The following documents shall be provided with this application:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Floor plans                                | <input checked="" type="checkbox"/> Scope of Work               |
| <input checked="" type="checkbox"/> Wiring diagram                             | <input checked="" type="checkbox"/> 11 1/2 x 17s                |
| <input checked="" type="checkbox"/> Annunciator details                        | <input checked="" type="checkbox"/> pdf copy (may be e-mailed)  |
| <input checked="" type="checkbox"/> Input/ Output Matrix                       | <input checked="" type="checkbox"/> Designer qualifications     |
| <input checked="" type="checkbox"/> Equipment data sheets                      | <input checked="" type="checkbox"/> Battery/ voltage drop calcs |
| <input checked="" type="checkbox"/> Electrical Permit Pulled (check alarm/com) |   |

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

COST OF WORK: \$48,000.00

PERMIT FEE: \$500.00  
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

RECEIVED

NOV 16 2011

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](http://www.portlandmaine.gov/fire) for every submittal. Submit all plans in electronic PDF in addition to readable 11 1/2 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](http://www.portlandmaine.gov/fire).

Applicant signature: \_\_\_\_\_ Date: 11/16/11

11/28/11



# CITY OF PORTLAND, MAINE

Department of Building Inspections

## Original Receipt

11-17 20 11

Received from

Location of Work

Cost of Construction

\$

Building Fee:

Permit Fee

\$

Site Fee:

Certificate of Occupancy Fee:

Total:

Building (I1)

Plumbing (I5)

Electrical (I2)

Site Plan (U2)

Other

CBL:

Check #:

Total Collected \$

**No work is to be started until permit issued.  
Please keep original receipt for your records.**

Taken by:

WHITE - Applicant's Copy

YELLOW - Office Copy

PINK - Permit Copy

# 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 11/16/11

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

CBL# 263-445LOCATION: 1100 BRIGHTON AVE METER MAKE & # \_\_\_\_\_CMP ACCOUNT # \_\_\_\_\_ OWNER CENTRO HERITAGE / BRIXMORTENANT PINE TREE PLAZA PHONE # \_\_\_\_\_

## TOTAL EACH FEE

OUTLETS	Receptacles	Switches	Smoke Detector	.20	
FIXTURES	Incandescent	Fluorescent	Strips	.20	
SERVICES	Overhead	Underground	TTL AMPS <800	15.00	
	Overhead	Underground	>800	25.00	
Temporary Service	Overhead	Underground	TTL AMPS	25.00	
				25.00	
METERS	(number of)			1.00	
MOTORS	(number of)			2.00	
RESID/COM	Electric units			1.00	
HEATING	oil/gas units	Interior	Exterior	5.00	
APPLIANCES	Ranges	Cook Tops	Wall Ovens	2.00	
	Insta-Hot	Water heaters	Fans	2.00	
	Dryers	Disposals	Dishwasher	2.00	
	Compactors	Spa	Washing Machine	2.00	
	Others (denote)			2.00	
MISC. (number of)	Air Cond/win			3.00	
	Air Cond/cent		Pools	10.00	
	HVAC	EMS	Thermostat	5.00	
	Signs			10.00	
	Alarms/res			5.00	
	Alarms/com			15.00	15.00
	Heavy Duty(CRKT)			2.00	
	Circus/Carnv			25.00	
	Alterations			5.00	
	Fire Repairs			15.00	
	E Lights			1.00	
	E Generators			20.00	
PANELS	Service	Remote		4.00	
TRANSFORMER	0-25 Kva			5.00	
	25-200 Kva			8.00	
	Over 200 Kva			10.00	
			TOTAL AMOUNT DUE		
	MINIMUM FEE/COMMERCIAL 55.00		MINIMUM FEE 45.00		55.00

RECEIVED

NOV 16 2011

 Dept. of Building Inspections  
 City of Portland, Maine
CONTRACTORS NAME WESCOTT ELECTRIC LLC MASTER LIC. # MS60019193ADDRESS 1253 MAIN ST HARTFORD ME 04226 LIMITED LIC. # \_\_\_\_\_TELEPHONE 388-2898

SIGNATURE OF CONTRACTOR \_\_\_\_\_


White Copy - Office

Yellow Copy - Applicant



## MPC-6000 Intelligent Fire Alarm Panel

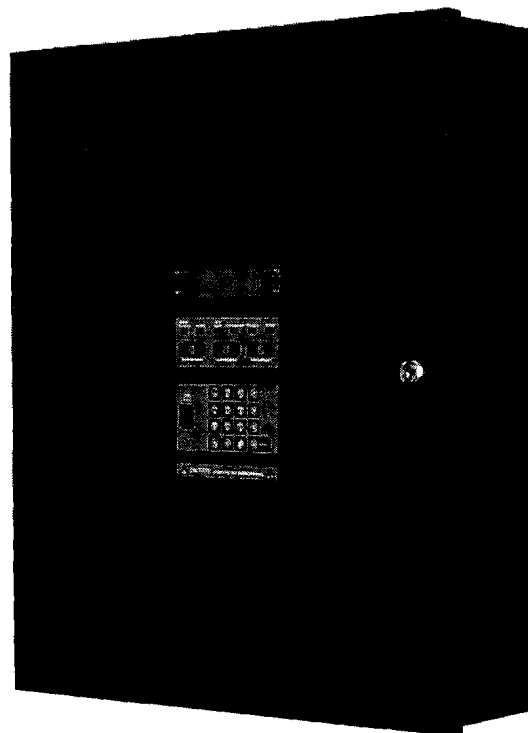
### Features

- One intelligent Signaling Line Circuit
- SLC loop supports up to 252 addressable Inputs AND signal/relay outputs (504 inputs/outputs total)
- Addressable devices are polarity insensitive
- Devices operate on standard wire-no twist or shield required
- FireSmart Application Specific fire detection
- 4 Class B/2 Class A notification appliance circuits
- Up to 6A NAC Power
- Built in strobe synchronization protocol
- 80 Character backlit LCD display
- Optional Peer-to-Peer networking using MPC-Net
- One man walk test (Silent or Audible)
- Auto Program Feature
- UP to 16 remote LCD Displays with control capabilities
- Programmable from front keypad, or Windows based PC programming software
- Maintenance and technician level passwords
- Optional internal DACT
- 2000 event history log
- Made in the USA, ISO 9001 quality crafted
-  UL 864, MEA & CSFM Listed

### Description

The MPC-6000 is an advanced modular fire alarm panel. It features analog/addressable detection, programming, and memory capability. It's base configuration includes one analog/addressable loop, with four notification appliance output circuits.

Operating controls and indicators are mounted behind a locked cabinet door and an 80-character LCD display provides specific indications for addressable devices, while LEDs indicate general panel status.



MPC-6000

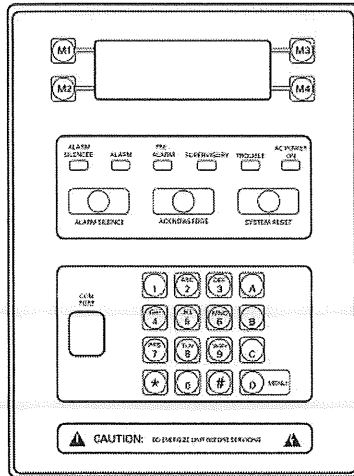
### Hardware Configuration

The main termination board mounts in the rear of the panel. The main power supply is physically contiguous with the main termination board. The MPC-6000 main termination board provides the interface for external system connections, the SLC loop interface PCB, four NAC circuits, remote signaling circuits and indicating interfaces.

The front Display Board mounts on a hinged front plate, which is located behind a locked cabinet door. Displays for any number of zones are handled through this board.

All normal operation is controlled from the front of the panel via membrane switches. Displays are provided by an 80-character, alphanumeric, backlit LCD display and by discrete LED indicators for major panel functions.

The 80-character LCD display is used to display event data, including alarms and troubles, supervisory identification of zone or device, and presentation of history. The menus are controlled by a set of four membrane switches commanding the control processor. A back light is included to assure visibility in low light, but to conserve power, it is only activated during a reported event.



### Minimum Control Unit Configuration

- A. Intelligent Signaling Line Circuit – The main termination board has addressable loop interface circuitry supporting one SLC loop. Devices are polarity insensitive and can operate on untwisted, unshielded wire.
- B. Notification Appliance Circuits – The base panel has four independent NACs. Each circuit can be selected to give continuous output, one of eight sounding patterns. NACs are style Z or Y capable, without additional modules.
- C. Dry Contacts – Four programmable form “C” dry relay contacts are provided.
- D. Remote Annunciation – The MPC-6000 panel will drive up to 16 annunciators and 8 remote processors on an RS-485 communication line.
- E. Power Supply – A 7A, 24V nominal power supply provides all operating power to the panel for both standby and alarm conditions.

### Auxiliary Devices

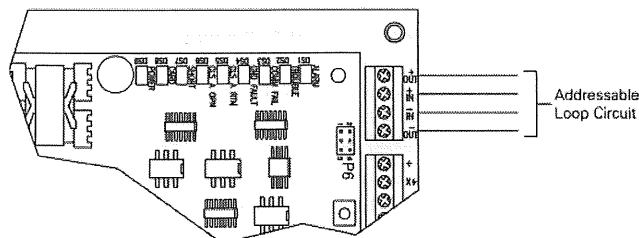
- A. Remote LCD Annunciator (RDC-2) – The remote LCD annunciator consists of a backlit 80 character, alphanumeric display, 4 menu buttons, 4 dedicated buttons for operator interaction, 6 LED indicators, and a security key switch.
- B. Serial Annunciator (SLU-2) – Consists of one remote processor and one annunciator driver board capable of providing 16 supervised outputs for LEDs or incandescent lamps. Expansion to drive 512 LEDs or lamps is via additional processor boards and annunciator drive boards (SLE-16).
- C. Serial Relay Unit (SRU-2) – Consists of remote processor and relay board which provides 8 relays with form “C” dry contacts rated at 1 amp. Expansion to 192 relays is via additional remote processor boards and relay boards (SLE-8).

### Optional Control Unit Configuration

- A. MPC-DACT – The MPC-DACT provides a dual line digital alarm communications transmitter. Its parameters are set via the control unit programming sequence.

The MPC-DACT is compatible with the following formats: SIA DCS 8, SIA DCS 20, Ademco Contact ID, 3/1 1400 Hz., 3/1 2300 Hz.,

## Wiring, Main Termination Board



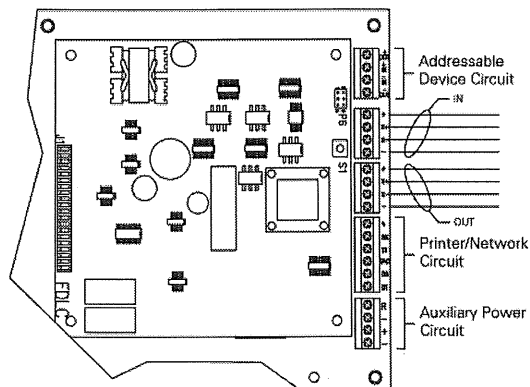
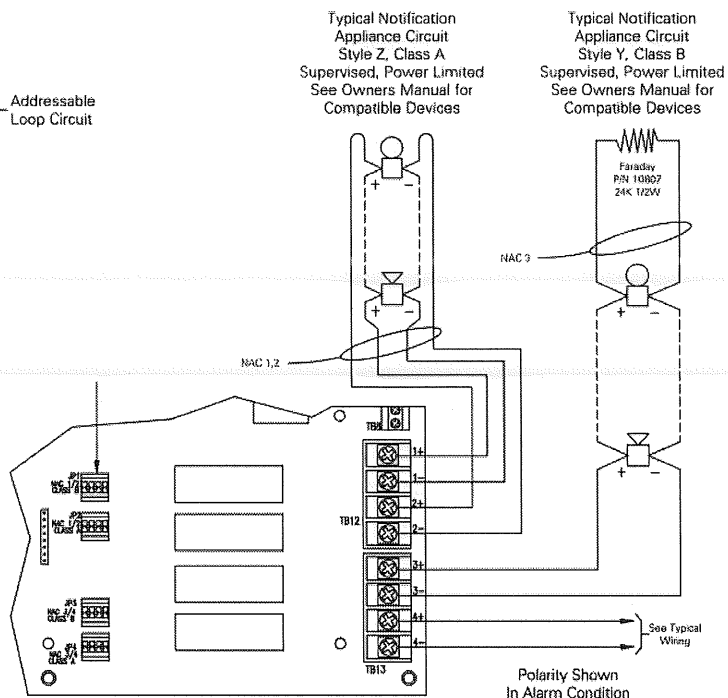
**Addressable Device Circuit**  
 Style 4 or 6 Operation  
 24VDC nominal  
 Wire Resistance-50 ohms max  
 (see Line Resistance Graph)  
 Supervised, Power Limited  
 See Owner's Manual for Compatible Devices

### NAC Rating:

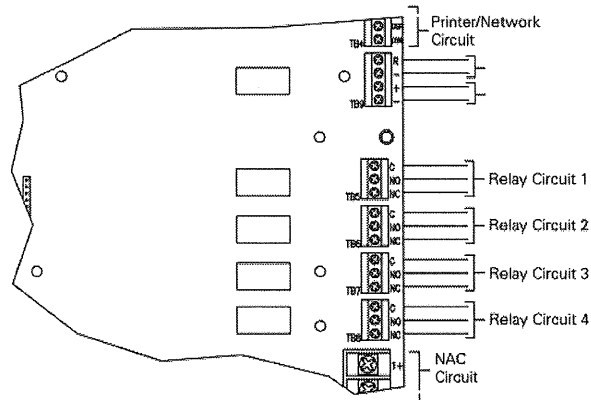
Alarm Voltage: 24V FW nominal  
 Max. Alarm Current: 1.5A/NAC circuit  
 Max. Ripple: 16VAC  
 Max. Wire Voltage Drop: 1.0VDC  
 Max. Standby Current: 1.0mA

### NOTE:

The maximum total current for the MPC-6000 NACs is 3.0A and 6.0A with the optional additional Transformer P/N NPE-1



**Serial Interface Circuit,**  
 (+, -) 24VDC nominal, 0.4 max  
 (X+, X-) RS-485 levels  
 Wire Type-Twisted Pair For Data  
 Wire Resistance-11 ohms/line (4000' max)  
 Supervised, Power Limited,  
 See Owner's Manual for  
 Compatible Devices.



**Auxiliary Power Outputs**  
 0.4A max. @24VDC nominal  
 Unsupervised, Power Limited  
 Maximum current of all auxiliary outputs  
 circuits, Serial Interface Circuit and  
 option boards is: 0.5A for the 6000  
 1.0 A for the 7000

**Status Relay Contacts**  
 (Shown in normal standby condition)  
 1A 28VDC max Resistive For Power  
 Limited Source, Unsupervised

## General Specifications

### Environmental

Operating temperature: 32-120°F (0-49°C)  
 Relative Humidity - 85% @ 86°F

### Primary Supply

Primary input voltage -  
 120 Vac (50/60 Hz.), 240 Vac (50/60 Hz.)  
 Maximum primary input current -  
 1.3 amp @ 120 Vac

### Secondary and Trouble Power Supply

24 volt lead-acid battery with 7 AH-38 AH capacity

### Auxiliary Power Outputs

Current - 0.5 amp resettable/non-resettable  
 power outputs

### Status System Relays

4 relays rated @ 1 amp, 28Vdc resistive

### NAC Circuits

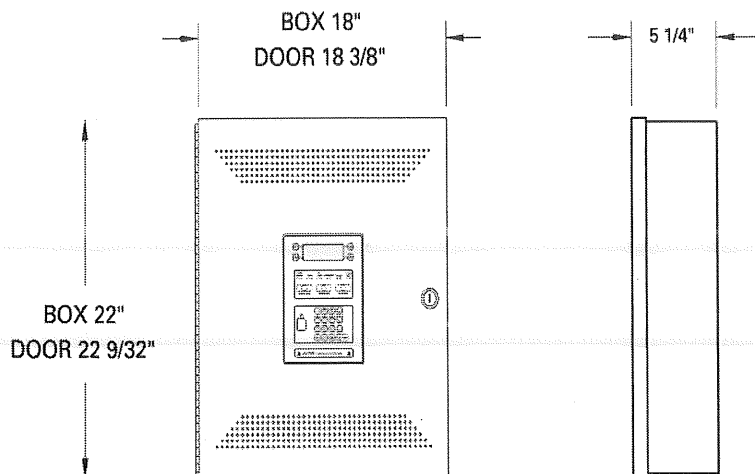
Rating per NAC circuit, 1.5A ea., 6 max.

### Battery

Base cabinet will accommodate a 10 A battery  
 set. Larger batteries will require separate enclosure



## Dimensions



## Ordering Information

Model	Description	Part No.
MPC-6000	MPC-6000 Single Loop Addressable Fire Alarm Panel, Red	599-049304FA
MPC-6000B	MPC-6000 Single Loop Addressable Fire Alarm Panel, Black	599-049303FA
<b>Options</b>		
RDC-2	Remote Annunciator	500-648980FA
NPE-1	Transformer to expand NAC power	500-649120FA
SRU-2	RS-485 Relay Card	500-649308FA
SRE-8	8 Relay Extender	500-649337FA
SLU-2	RS-485 LED Driver Card (16 Outputs)	500-649307FA
SLE-16	16 LED Driver Extender	500-649339FA
FAE-21	ACC. Enclosure for RS-485 Devices	500-401403014FA
MPC-DACT	Dialer for MPC-6000 and MPC-7000	500-649330FA
CT-1K	CityTie Module for MPC-6000 and MPC-7000	500-649336FA
SFTK-6R	Semi-Flush Trim for MPC-6000, Red	500-648955FA
SFTK-6B	Semi-Flush Trim for MPC-6000, Black	500-648954FA



Siemens Building Technologies, Inc.  
 8 Fernwood Road • Florham Park, NJ 07932  
 Tel: (973) 593-2600 • Fax: (973) 593-6670  
 Web: [www.faradayfirealarms.com](http://www.faradayfirealarms.com)

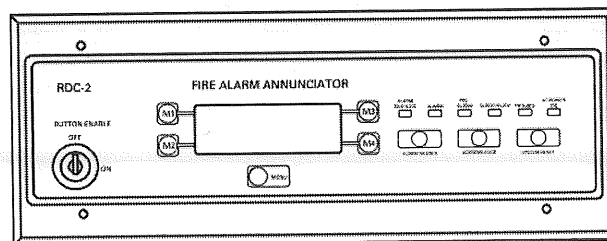
**WARNING** - The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information, are provided with the product and are available from the Manufacturer. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact the Manufacturer.



## Model RDC-2 Remote 80 Character LCD Annunciator

### Features

- 80 character, alphanumeric backlit display
- Mounts to 6 gang or 12411 surface box
- Contains four (4) menu buttons, four (4) dedicated buttons for operator interaction, six (6) LED indicators and a security key switch
- UL listed, standard 864



RDC-2 Annunciator

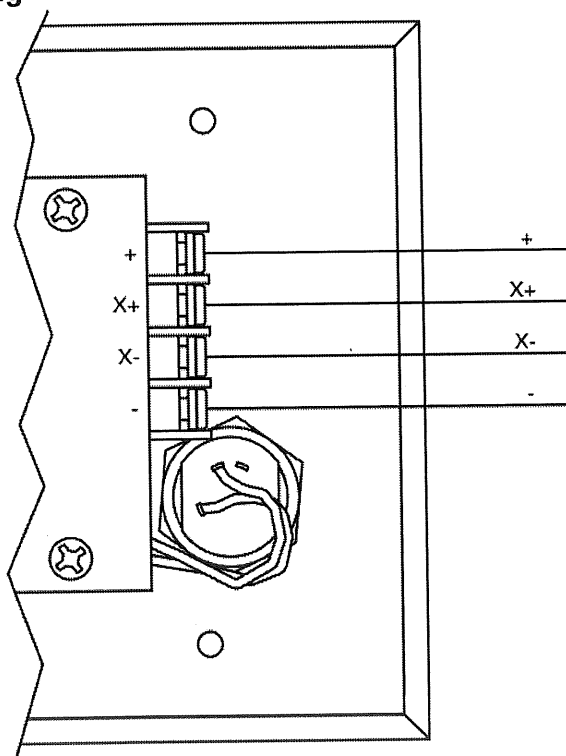
### Description

The RDC-2 remote LCD annunciator is an optional accessory for the MPC-6000 and MPC-7000 Fire Alarm Control Panels from Faraday. It provides a 80 character LCD display along with the system status LEDs. The button enable keyswitch allows system reset, trouble silence/acknowledge, alarm silence and menu access. The lamp test operation is also enabled by the keyswitch, but the function is

limited to the annunciator. The annunciator mounts to a horizontally mounted 6-gang box, 2" deep minimum. The Faraday part number 12411 Surface Backbox may be used for surface mounting.

Up to 16 annunciators may be addressed by the communications circuit.

### Typical Wiring



Cable for power (+ & -) and Twisted pair Cable for data (X+ & X-) from panel or previous remote and to next remote or 120 ohm termination resistor on the last remote.

## General Specifications

### Environmental

Operating Temperature:

32-120°F (0-49°C)

Relative Humidity: 85% @ 86°F

### Power Consumption

Alarm: .025 Amp

Standby: .020 Amp

### Transmission Format

Multiplexed, supervised style "W," power limited

### Display

80 character, alphanumeric, backlit

### Wiring

(2) pair, no. 18 awg. min., 4000 ft. max.,  
daisy chained, no t-taps

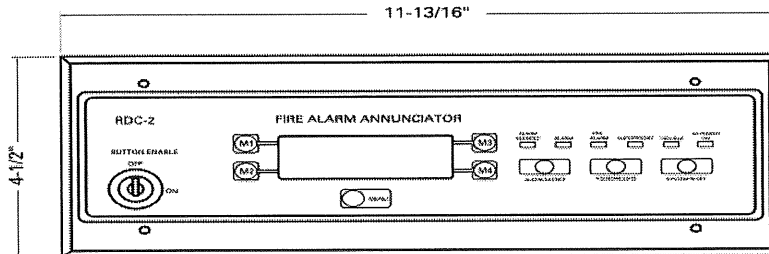
### Mounting

6 gang box (supplied by others)

### Shipping Weight

2 lbs. approx.

## Dimensions



## Ordering Information

Model	Description	Part No.
RDC-2	Remote 80 character LCD annunciator	500-648980FA
<b>Options</b>		
12411014	Surface mount back box	500-699639FA



Siemens Building Technologies, Inc.  
8 Fernwood Road • Florham Park, NJ 07932  
Tel: (973) 593-2600 • Fax: (973) 593-6670  
Web: [www.faradayfirealarms.com](http://www.faradayfirealarms.com)

**WARNING** -The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information, are provided with the product and are available from the Manufacturer. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact the Manufacturer.

# 7744F/7788F



**AES** *Intelli*  
CORPORATION | For Alarm Monitoring

UL Listed

## RF Subscriber Unit

UL Fire, AA Burglary and NFPA-72 Compliant

*UL Listed*

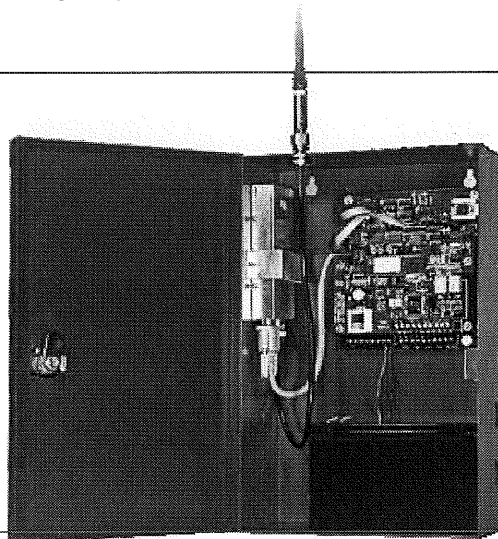
*UL Listed Central Station*

*Remote Station*

*864 Ed. 9, 827, 1610, 365, 681*

*CSFM*

*NFPA  
RF Section 8.6.3.5*



- Options for Full Data Fire and Burglary
- Available in 7744F & 7788F Zone Configurations
- Built-in Power Supply Battery Charger
- Local Annunciation Options on Board

### Advanced Wireless Alarm Monitoring

The 7744F/7788F smart subscriber unit links an alarm panel to an alarm monitoring central station. This 2-way transceiver and repeater in one is housed in a full size locking steel cabinet for superior performance. The 7744F/7788F supports a wide range of inputs such as NO/NC/EOL and direct voltage. It automatically senses wire and antenna cuts, and monitors battery and AC power status. Advanced status reporting, self-diagnostics and a built-in power supply make the 7744F/7788F the first choice for all wireless alarm communication needs.

### Full Data for Fire and Burglary

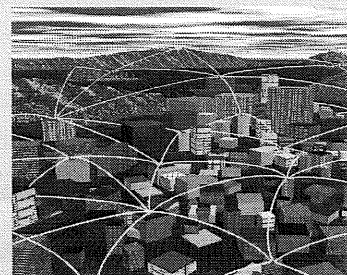
Use with the optional Firetap for full fire data or the IntelliTap for full fire and burglary data.

#### Available Configurations

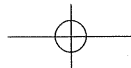
**7744F** – 4 reversing

#### Available Options

FireTap 7770



Wireless mesh networking is an innovative technology adopted by many industries with applications that need to communicate data over a large geographic area with a level of reliability at a low total



## 7744F/7788F RF Subscriber Unit

### Technical Specifications

#### Radio

Standard CSAA frequency ranges:  
450-470 MHz and 130-174 MHz, VHF  
and UHF. Others available

#### Standard Output Power

2 watts (requires FCC license)

#### Power Input

16.5 VAC, 40VA UL listed  
Class II transformer required

#### Voltage

12 VDC nominal

#### Current

175mA standby; 800mA transmit

#### Alarm Signal Inputs

- 4 individually programmable Zones:  
NO/NC/EOL, trouble restore
- RS-232
- Reversing voltage (7744F only) 12  
or 24 VDC

#### Operating Temperature Range

0° to 50°C, 32° to 122°F

#### Storage Temperature Range

-10° to 60°C, 14° to 140°F

#### Relative Humidity Range

0-85% RHC non-condensing

#### Back up Battery

12V, 7.5 Ahr

#### Low Battery Reporting

22.5-minute test cycle

#### AC Status

Reports to central station after  
approximately 60 minutes without AC  
power, reports power restored after  
approximately 60 minutes of restored  
power. programmable from 60 to 180  
minutes

#### Antenna Cut (local reporting)

Form 'C' Contact 1 AMP

#### Size

13.25"H x 8.5"W x 4.3"D  
34cm x 21.5cm x 11cm

#### Weight

6.4 lbs, 2.9 Kilograms  
(excluding battery)

#### Colors

Available in standard  
Burglary Beige or Fire Red  
Please specify when ordering

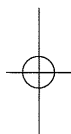
#### Available Options

- 7788F RF subscriber unit  
with 8 EOL inputs
- 7744F RF subscriber unit with 4  
EOL inputs and 4 reverse polarity  
inputs
- 7770 - FireTap
- 7067 - IntelliTap
- NEMA 4 Enclosure

Please specify when ordering

### Available configurations

- 7788F, 8 EOL inputs
- 7744F, 4 EOL inputs w/  
reverse polarity inputs



AES-IntelliNet™ is the industry leader in delivering high quality wireless mesh networks to the fire and security industry in commercial, corporate, government, and educational applications with its broad line of products and advanced network management tools. Users of AES-IntelliNet networks have gained significant revenue, communications, and cost advantages while meeting the high standards of reliability required for the fire and security industry. AES-IntelliNet alarm monitoring systems are deployed at hundreds of thousands of locations in over 130 countries.



# Protection Professionals

325 US Route 1  
Falmouth, ME 04105  
Ph 207-775-5755  
Fax 207-781-2064

## Device List

No. 3334

List Date

11/9/2011

### Bill To Name / Address

Wescott Electric LLC  
Attn: Accounts Payable  
1253 Main Street  
Hartford, ME 04220-5126

### Job Site

Dollar Tree  
Pine Tree shopping Center  
Portland, Maine

**CHANGING THIS DEVICE LIST DOES NOT ALTER THE ORIGINAL ESTIMATE**  
**Attach copy to Purchase Order for accounting**

Estimate No.

Item	Description	Qty To Order	Qty Ordered
599-050590	Dollar Tree store MPC6-EKIT, MPC-6000 FACP, 252 points, 2 NPE-1, 6 amps, 4 Class B NACs or 2 Class A NACs	1	
500-648953FA	Complete Enclosure Red for MPC-6000	1	
500-649120FA	Transformer To Expand NAC Power (6000 & 7000) NPE-1	1	
Bat 12-18	Battery	2	
500-649330FA	Dialer for MPC-6000 & MPC-7000	1	
IM-RJ31XSET	IM-RJ31XSET	2	
DK-DTK120HW	DITEK AC SURGE PROTECTION	1	
06-SSU00672	Fire Document box 12 inches wide X 13.1 inches high X 2.25 inches deep, CAT 30 keyed	1	
7788F	Wireless fire subscriber for City of Portland	1	
1640	16.5Volt AC 40 VA Class 2 Transformer	1	
Bat 12-7	12V 7AH Batteries	1	
D8004	UL TRANSFORMER KIT	1	
500-033300FA	8704 Module for Contact Devices with Relay	3	
Miscellaneous Materi...	Bypass switch	1	
500-648980FA	RDC-2 Remote Annunciator for MPC-6000 & MPC-7000 (to be recessed in a masonry box supplied by others)	1	
SF-6580	Heater strip for protectors	1	
500-033170FA	8709 Isolator Module	4	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL (one in fire alarm room)	4	
500-034000FA	8701 Mini-Module for Contact Devices	4	
500-033290FA	8713 Photo/Thermal Detector (FireSmart) over FACP	1	
500-094151FA	8853B - 2-WIRE SMOKE DETECTOR BASE	1	
500-636169	ZR-MC-R, Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathrooms)	2	

Ordered By: \_\_\_\_\_

Date: \_\_\_\_\_

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Item	Description	Qty To Order	Qty Ordered
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd (stockroom and fire panel room)	1	
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	3	
500-636106	Strobe, weatherproof, 75 candela (over annunciator and fire alarm room)	2	
500-636139	WPSBBS-R ST strobe weatherproof backbox, red	2	
3261	Knox Box 3261 Hinged Door Black	1	
4101	Knox Box, large size, hinged cover	1	
	All of the rest of the campus. Please note the parts are itemized by the stores for your convenience. The old Daddy's Junky Music store may not need to be done. They will probably have a new fit out upon a new lessor.		
AX-AL1002ULADA	NAC power supply, 10 amps, two Class A and four Class B circuits at 2.5 amps/circuit, 1 amp Aux power	2	
Bat 12-7	12V 7AH Batteries	4	
	Empty space next to the Dollar Tree		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	5	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathrooms)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	4	
500-034000FA	8701 Mini-Module for Contact Devices	4	
	CVS Pharmacy		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail)	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd (stock room)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler)	1	
	Big Lots (already has a fire alarm system.) We need to replace the items onto our system. We may be able to reuse their parts but we calculated otherwise. All connections at the Big Lots fire alarm system will be supplied by others.		

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Item	Description	Qty To Order	Qty Ordered
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	12	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	4	
500-034000FA	8701 Mini-Module for Contact Devices	4	
500-033360FA	8703 Dual Module for Contact Devices (to monitor fire alarm panel with duct detectors connected to it. This device does not need to trip the horn/strobes. It is a supervisory panel only)	1	
	Little Caesar's		
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd (by each doorway)	3	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler and Ansul system)	2	
	Hair Excitement		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathroom and tanning beds)	7	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
	Key Bank		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
	Fashion Bug		

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Item	Description	Qty To Order	Qty Ordered
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail, fitting area, stockroom)	3	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler)	1	
500-636167	Joanne's Fabrics ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail area and stockroom)	8	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	3	
500-034000FA	8701 Mini-Module for Contact Devices	3	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler)	1	
500-636167	Full Belly Deli ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail and stockroom)	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathrooms)	2	
500-033360FA	8703 Dual Module for Contact Devices (Ansul systems)	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-636167	Radio Shack ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (classroom and bathroom)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	

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Item	Description	Qty To Order	Qty Ordered
500-034000FA	8701 Mini-Module for Contact Devices Empty store, formerly Daddy's Junky Music (We did not have access to this store so we guessed on parts)	2	
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	3	
500-034000FA	8701 Mini-Module for Contact Devices Tax Exempt	3	

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Item	Description	Qty To Order	Qty Ordered
599-050590	Dollar Tree store		
	MPC6-EKIT, MPC-6000 FACP, 252 points, 2 NPE-1, 6 amps, 4 Class B NACs or 2 Class A NACs	1	
500-648953FA	Complete Enclosure Red for MPC-6000	1	
500-649120FA	Transformer To Expand NAC Power (6000 & 7000) NPE-1	1	
Bat 12-18	Battery	2	
500-649330FA	Dialer for MPC-6000 & MPC-7000	1	
IM-RJ31XSET	IM-RJ31XSET	2	
DK-DTK120HW	DITEK AC SURGE PROTECTION	1	
06-SSU00672	Fire Document box 12 inches wide X 13.1 inches high X 2.25 inches deep, CAT 30 keyed	1	
7788F	Wireless fire subscriber for City of Portland	1	
1640	16.5Volt AC 40 VA Class 2 Transformer	1	
Bat 12-7	12V 7AH Batteries	1	
D8004	UL TRANSFORMER KIT	1	
500-033300FA	8704 Module for Contact Devices with Relay	3	
Miscellaneous Materi...	Bypass switch	1	
500-648980FA	RDC-2 Remote Annunciator for MPC-6000 & MPC-7000 (to be recessed in a masonry box supplied by others)	1	
SF-6580	Heater strip for protectors	1	
500-033170FA	8709 Isolator Module	4	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL (one in fire alarm room)	4	
500-034000FA	8701 Mini-Module for Contact Devices	4	
500-033290FA	8713 Photo/Thermal Detector (FireSmart) over FACP	1	
500-094151FA	8853B - 2-WIRE SMOKE DETECTOR BASE	1	
500-636169	ZR-MC-R, Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathrooms)	2	

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Item	Description	Qty To Order	Qty Ordered
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd (stockroom and fire panel room)	1	
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	3	
500-636106	Strobe, weatherproof, 75 candela (over annunciator and fire alarm room)	2	
500-636139	WPSBBS-R ST strobe weatherproof backbox, red	2	
3261	Knox Box 3261 Hinged Door Black	1	
4101	Knox Box, large size, hinged cover	1	
	All of the rest of the campus. Please note the parts are itemized by the stores for your convenience. The old Daddy's Junky Music store may not need to be done. They will probably have a new fit out upon a new lessor.		
AX-AL1002ULADA	NAC power supply, 10 amps, two Class A and four Class B circuits at 2.5 amps/circuit, 1 amp Aux power	2	
Bat 12-7	12V 7AH Batteries	4	
	Empty space next to the Dollar Tree		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	5	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathrooms)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	4	
500-034000FA	8701 Mini-Module for Contact Devices	4	
	CVS Pharmacy		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail)	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd (stock room)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler)	1	
	Big Lots (already has a fire alarm system.) We need to replace the items onto our system. We may be able to reuse their parts but we calculated otherwise. All connections at the Big Lots fire alarm system will be supplied by others.		

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Item	Description	Qty To Order	Qty Ordered
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	12	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	4	
500-034000FA	8701 Mini-Module for Contact Devices	4	
500-033360FA	8703 Dual Module for Contact Devices (to monitor fire alarm panel with duct detectors connected to it. This device does not need to trip the horn/strobes. It is a supervisory panel only)	1	
	Little Caesar's		
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd (by each doorway)	3	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler and Ansul system)	2	
	Hair Excitement		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathroom and tanning beds)	7	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
	Key Bank		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
	Fashion Bug		

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Item	Description	Qty To Order	Qty Ordered
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail, fitting area, stockroom)	3	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler)	1	
500-636167	Joanne's Fabrics ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail area and stockroom)	8	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	3	
500-034000FA	8701 Mini-Module for Contact Devices	3	
500-033360FA	8703 Dual Module for Contact Devices (sprinkler)	1	
500-636167	Full Belly Deli ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail and stockroom)	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (bathrooms)	2	
500-033360FA	8703 Dual Module for Contact Devices (Ansul systems)	1	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	
500-034000FA	8701 Mini-Module for Contact Devices	2	
500-636167	Radio Shack ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd	1	
500-636161	ZH-MC-R Horn/strobe, red, wall mount, Hi or Lo volume, 15cd, 30cd, 75cd, or 110cd	1	
500-636169	ZR-MC-R Strobe only, red, wall mount, 15cd, 30cd, 75cd, or 110cd (classroom and bathroom)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	2	

Ordered By: \_\_\_\_\_

Date: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

# Protection Professionals

325 US Route 1  
Falmouth, ME 04105  
Ph 207-775-5755  
Fax 207-781-2064

## Device List

No. 3334

List Date

11/9/2011

Bill To Name / Address

Wescott Electric LLC  
Attn: Accounts Payable  
1253 Main Street  
Hartford, ME 04220-5126

Job Site

Dollar Tree  
Pine Tree shopping Center  
Portland, Maine

**CHANGING THIS DEVICE LIST DOES NOT ALTER THE ORIGINAL ESTIMATE**  
Attach copy to Purchase Order for accounting

Estimate No.

Item	Description	Qty To Order	Qty Ordered
500-034000FA	8701 Mini-Module for Contact Devices	2	
	Empty store, formerly Daddy's Junky Music (We did not have access to this store so we guessed on parts)		
500-636167	ZH-HMC-CR Ceiling mount, red, horn/strobe, 135cd or 185cd (retail)	2	
500-648507FA	MANUAL PULL STATION DUAL ACTION KEY RESET CAST METAL	3	
500-034000FA	8701 Mini-Module for Contact Devices	3	
	Tax Exempt		

Ordered By: \_\_\_\_\_

Date: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

# Sequence of Operations

	Audio/visual activation	Activate audible/visual signal at FACP & Annunciator	Device Description at FACP & Annunciator	Shutdown of HVAC equipment	Log event in system history	Activate Elevator Fire Hat	Activate Elevator primary or secondary control	Activate Elevator shunt trip	Silence of audible devices including FACP & annunciator	Release door holders	Release locked doors	Event acknowledgement	Reset of all system functions and all visual devices	Remote transmission to Central Station A=alarm; T=trouble; S=Supervisory; L = log only	Remote indicator	Master Box (AES box) activation
Manual Pull Stations	X	X	X		X					X	X			A		X
Smoke detectors common area	X	X	X		X					X	X			A		X
Smoke detectors elevator lobbies	X	X	X		X		X			X	X			A		X
Smoke Detectors elevator shaft/machine room	X	X	X		X	X	X			X	X			A		X
Duct mounted Smoke Detectors		X	X	X	X									S	X	
Heat Detectors common area/inside apartments	X	X	X		X					X	X			A		X
Heat Detectors Elevator shaft/machine room	X	X	X		X	X	X	X		X	X			A		X
Sprinkler flow or pressure switches	X	X	X		X					X	X			A		X
Sprinkler Tamper, low temp, or low air		X	X		X									S		
Secondary fire panel such as kitchen hood	X	X	X		X					X	X			A		X
FACP/annunciator silence button		X	X		X			X	X					L		
FACP/annunciator acknowledge button		X	X		X							X				
FACP/annunciator reset button		X	X		X								X	L		
Removal of any device		X	X		X									T		
Ground fault		X	X		X									T		
System wiring "open"		X	X		X									T		
AC Power loss		X	X		X									T		
Secondary power loss		X	X		X									T		
Telephone line loss		X	X		X									T		





## Series PM6600 & PM6700 Manual Non-Code Keyed Stations

### Features

- MM101 Key Switch Cover
- Sturdy Metal Construction
- Enclosed Switch with Optional Glass Rod
- 10 Amp @ 120 Vac, 5 Amp @ 24 Vdc Switch Contact Rating
- Stations Available are: Single Action, Dual Action, Pre-Signal / General Alarm, Institutional, Weatherproof, and Explosion Proof
- UL, CSFM Listed & MEA approved
- Made in USA

### Description

The PM6600/6700 series meets the requirements of the keyed reset station in every way. By using the standard Faraday MM101 series key, the user eliminates the need to search through many different reset keys. All stations are constructed of a solid die cast housing and come painted glossy red. The back switch plate is made of thick 14 Ga. plated steel and comes in a one gang size.

The electrical switch has a hefty 10 Amp @ 120 Vac normally open contact rating. All stations come with terminal block connections with the exception of the single action stations. These may be ordered with terminal blocks or pigtails (See ordering information for a more detailed description).

Explosion proof and weatherproof units come complete with their own back box. Optional PM6767 matching red surface interior back boxes are also available.

### Operation

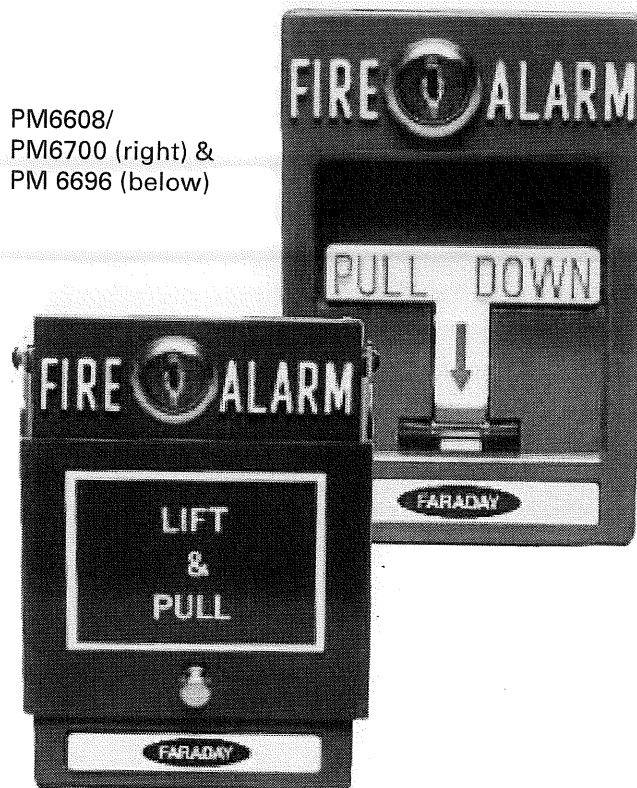
#### Alarm

To activate the manual station, a firm downward pull of the recessed pull lever is required. Such action locks the lever in the down position, breaks the glass rod, (if used) and actuates the switch creating an alarm condition.

#### Reset

To restore an operated manual station to normal standby condition requires the use of a standard Faraday MM101 key. The lock, located at the top of the station, is turned with an inserted MM101 key.

PM6608/  
PM6700 (right) &  
PM 6696 (below)



This lets the front of the station swing down and allows the recessed pull down lever to be reset in the normal up position. Replacement of the glass rod (if used) is not necessary to reset the station. However, spare glass rods can be stored inside the station. To lock the station swing the front of the station back up to its original position and turn the MM101 key in the previously operated position.

### Engineering Specification

Furnish and install where located on the drawings Faraday non-code pull stations. The stations should be pull down operation type with operation instructions provided on the station in raised letters. The station should be of metal construction, finished in fire alarm red/white, and shall be capable of proper operation with or without a break glass rod. Stations using any plastic parts other than the switch body, or requiring the use of a break glass rod to maintain a standby condition shall not be acceptable.

Upon operation the pull down lever shall lock into the alarm position and remain so until manually reset. A common Faraday MM101 key shall be required to gain access for resetting the station, testing the station or replacing the glass rod. Stations with test features that do not test the actual station actuating switch shall not be acceptable.

Stations shall contain one or more normally open alarm contacts. Wiring to the fire alarm system initiating circuit shall be via pressure type screw terminals or pigtail wires with in and out wiring required.

## Specifications

### Electrical

Contacts – All contacts except General Alarm: 10A @ 120 Vac, General Alarm: 5A @ 30 Vdc

### Dimensions

4-3/4" (H) x 3-3/16" (W) x 7/8" (D)

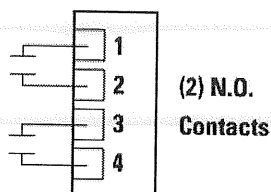
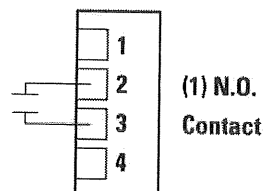
### Weight

15-1/2 oz.

### Mounting

Single gang box

## Wiring



## Ordering Information

Model	Description	Part No.
<b>Single Action Stations</b>		
PM6700	(RMS-1P-KL) Station, N.O., Pigtails	500-648504FA
PM6608	(RMS-1T-KL) Station, N.O., Terminals	500-648505FA
<b>Dual Action Stations</b>		
PM6696	(RMS-2T-LP-KL) Station, (2) N.O., Terminals	500-648507FA
<b>Pre-Signal/General Alarm Stations</b>		
PM6695	(RMS-1T-KS-KL) N.O. Pre-sig, N.O. Terminals	500-648265FA
<b>Weatherproof Stations</b>		
PM6699	(RMS-2T-WP-KL) (2) N.O. Terminals	500-648266FA
<b>Accessories</b>		
PM6698	(BB) Surface Back Box, Interior	500-648506FA
PM7601	Glass Rods (pack of 10)	500-648245FA
10531	(STI1130) Cover, surface mount w/horn	500-648563FA
10538	(STI1130) Cover, flush mount, w/ horn	500-648591FA
10539	(STI1200) Cover, flush mount, w/o horn	500-648253FA



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Web: [www.faradayfirealarms.com](http://www.faradayfirealarms.com)

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## Models 8710, 8712, 8713 (FireSmart™) X1 Series Detectors

### Features

#### Intelligent Detectors for use with MPC 6000 and 7000 Control Panels

- Three models available Photo (8710), Photo-Thermal (8713) and 135°F Thermal, fixed and rate of rise (8712)
- High-Speed, Fault-Tolerant Communication
- Multi-color status L.E.D (green, amber, red)
- Field cleanable photo chamber
- Electronic addressing with field programmer model 8720
- Mounts in standard 8853 Series Base
- Low Profile Design
- Optional fully programmable relay base, audible base and duct housing
- Two Wire Operation
-  UL Listed, CSFM, NYMEA and FM Approved

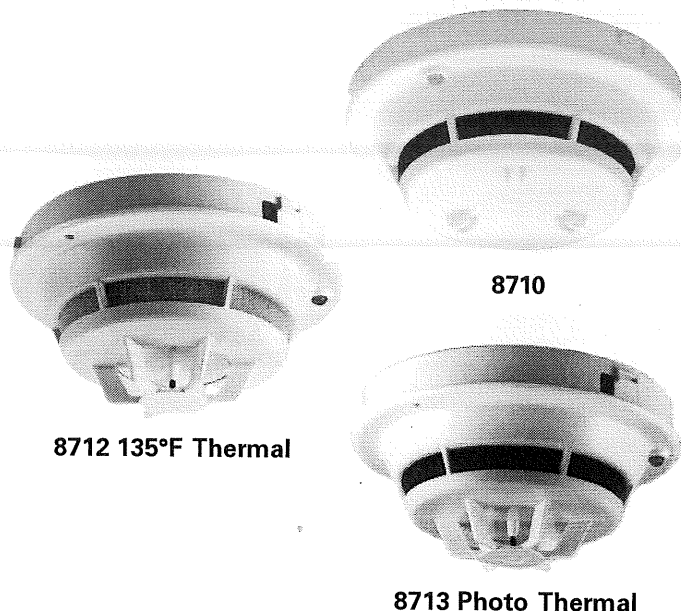
### Introduction

The 8710 and 8713 intelligent photoelectric smoke detectors provide reliable smoke detection to meet today's critical life safety and property protection needs. The FireSmart series of detectors provide an extremely high degree of resistance to RFI, EMI and humidity. The FireSmart series detector utilizes a microprocessor with "on-board" EEPROM supporting the detectors sophisticated programming, error checking and self-diagnostic capabilities.

The 8710 is an intelligent smoke detector, the 8713 is a smoke detector with thermal assist, and the 8712 is a heat detector. The thermal sensors respond at 135°F. These devices are designed for use with the MPC-6000 and 7000 control panels and use the 8853 detector base.

### Description

The 8710, 8712 and 8713 are two-wire, plug-in detectors that are compatible with the MPC-6000 and 7000 control panels. Each 8710 and 8713 have a dust resistant, field cleanable photo chamber and microprocessor based electronics. The 8712 and 8713 utilize a state-of-the-art thermistor for heat sensing. All detectors have low profile, high-temperature plastic covers for maximum protection of components and use surface mount electronic components for increased reliability. Every smoke detector is shipped with a red protective dust cover.



Smoke detectors utilize an infrared light emitting diode (IRLED) and a light sensing photodiode. Under normal conditions, light transmitted by the LED is directed away from the photodiode and scattered through the smoke chamber in a controlled pattern. The smoke chamber is designed to manage light dissipation and extraneous reflections from dust particles or other non-smoke airborne contaminants in such a way as to maintain stable, consistent detector operation. When smoke enters the chamber, light emitted from the IRLED is scattered by the smoke particles and is received by the photodiode.

When an alarm condition occurs, the detector "latches" in alarm and informs the control panel of its status. The detector is reset upon command from the control panel. The control panel also sets the detector's sensitivity.

Every time the control panel polls the detector, the multi-color LED will flash green to indicate that it has passed the internal self test and has communicated its status to the control panel. If the detector does not pass the self test, is dirty beyond the limits of its environmental compensation, or is in "trouble" in any way, the LED flashes amber and informs the panel of its status, allowing for easy identification of which detector is in trouble. When in alarm, the detector LED flashes red.

Detectors are assigned their address using the 8720 Field Programmer/Tester, which electronically stores address information in the detectors non-volatile memory. The 8720 can also be used for device testing and diagnostics.

The FireSmart series detectors can be on the same circuit as other 8700 series initiating devices such as manual stations, TRI Monitoring/Relay Modules, etc. Detectors are mounted in the standard 8853 or 8716 Relay Base, 8715 Audible Base, or 8840/8717 Duct Housing. Use the standard 8727C or 8727W (red) Remote Lamps when remote annunciation is required.

Smoke detectors are field cleanable per the instructions included on the installation sheet provided with the product. X1 series detectors are UL listed for operation within the standard UL specified temperature range of 32 to 100 degrees F (0 to 38 degrees C).

### Application Data

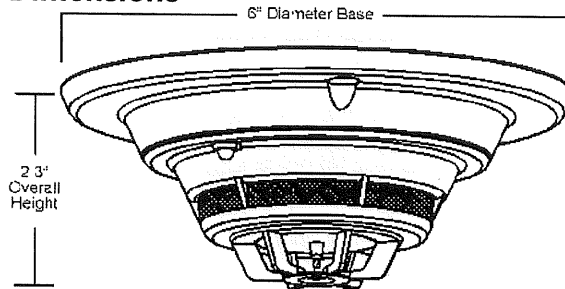
Installation of X1 series detectors require detector bases 8853, 8715, 8716, or 8840.

The 8710 and 8713 detectors can be applied within a maximum 30-foot center spacing (900 square foot area) as referenced in NFPA 72. This applications guideline is based on ideal conditions; specifically, smooth ceiling surfaces, minimal air movement and no physical obstructions between potential fire sources and the detector. Do not mount detectors in close proximity to ventilation or heating and air conditioning outlets. Exposed joints or beamed

ceilings may also affect safe spacing limitations of detectors. Should any questions arise regarding detector placement, observe NFPA 72 guidelines. Locating in close proximity to "noisy" electronic light ballasts or other sources of high level EMI or RFI should be avoided.

Good fire protection system engineering and common sense dictate how and when fire detection devices are installed and used. Contact your local Faraday authorized sales outlet whenever you need assistance applying these devices. Be sure to follow NFPA guidelines, the UL approved installation instructions provided with the product and local codes, as with any other fire protection equipment.

### Dimensions



### Technical Specifications

#### Operating Temperature

+32°F (0°C) to 100°F (38°C) per UL 269/268A

#### Humidity

0-93% Relative Humidity Non-Condensing

#### Current Draw

1 mA in alarm or stand-by mode

### Ordering Information

Model	Description	Part No.
8710	Photoelectric Detector	500-034800FA
8713	Photo-Thermal Detector (FireSmart™)	500-033290FA
8712	135°F Fixed Thermal Detector	500-033380FA
8715	Audible Base	500-033210FA
8853	Detector Base	500-094151FA
8840	Air Duct Housing	500-095656FA
8717	Air Duct Housing with Relay	500-033280FA
8716	Relay Base	500-033220FA
8727W	Remote Lamp (red) for 4" octagon box	500-033310FA
8727C	Remote Lamp (red) for single gang box	500-033230FA
8720	Field Programmer	500-033260FA
8846	Detector base lock (Pkg. of 50)	500-695350FA



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### Z Strobes, Horns, Horn/Strobes

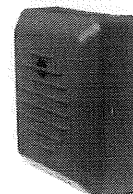
#### Features

- UL listed. ULC, CSFM, and FM pending.
- ADA/NFPA compliant
- EZ Mount design, with separate base plate, provides ability to pre-wire the base and test the circuit wiring before the walls are covered
- The base plate is protected by a disposable cover and the appliances can quickly snap onto the base after the walls are painted.
- EZ Mount Universal Mounting Plate (ZBB) – uses single plate for ceiling and wall mount installations
- Wall Mount models feature field selectable candela settings of 15/30/75/110cd and 135/185cd
- Ceiling Mount models feature field selectable candela settings of 15/30/75/95cd and 115/177cd
- Strobes can be synchronized using the Siemens 5406B sync modules, MPC-6000 panel, MPC-7000 panel, or RSE-300 power supply with built-in sync protocol
- "Special Applications" listed with Siemens panels
- Strobes produce 1 flash per second
- Selectable Continuous Horn or Temporal (Code-3) Tones with selectable 90 or 95 dBA setting (ZH model)

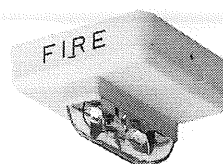
#### Description

The Siemens Series Z notification appliances feature an easy snap on base that is designed to simplify the installation and testing of horns, strobes, and horn/strobes. The separate Series Z snap on base can be pre-wired so circuit wiring can be fully tested before the appliance is installed and before the walls are covered. Once all surrounding work is complete, the appliance can be simply installed by snapping it on the base. Shorting contacts in the base, which provide continuity for circuit testing, are permanently opened when the appliance is installed so any subsequent removal of the appliance will indicate a trouble condition on that circuit at the control panel when circuit supervision is enabled. The same base is used for all Series Z horns, strobes and horn/strobes to provide consistent installation and easy replacement of appliances if required. A locking screw is also included for the appliance to provide extra secure installation.

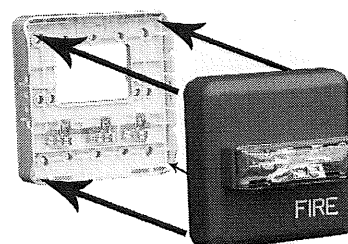
The Siemens Series Z appliances incorporate the same dependable circuitry and high efficiency optics that are used in Siemens ST strobes, NS horn/strobes and NH horns and have the same high performance ratings. The Series Z appliances are "Special Applications" listed with Siemens panels.



Series ZH



Series ZR



ZR AND ZH Mounting

#### Engineering Specifications

##### General

Audible/visual notification appliances shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. These appliances shall be listed under UL Standard 1971, (Standard for Safety Signaling Devices for Hearing Impaired) and UL Standard 464 (Fire Protective Signaling). The appliances shall use a universal backplate that shall allow mounting to a single-gang, double-gang, 4-inch square, 4" octal, or a 3-1/2" octal backbox. Two wire appliance wiring shall be capable of directly connecting to the mounting back plate. Continuity checking of the entire NAC circuit prior to attaching any audible/visual notification appliances shall be allowed. A dust cover shall fit and protect the mounting plate. The dust cover shall be easily removed when the appliance is installed over the backplate. Removal of an appliance shall result in a trouble condition by the Fire Alarm Control Panel (FACP).

##### Strobes

Strobe appliances shall produce a minimum flash rate of 60 flashes per minute (1 flash per second) over the Regulated Input Voltage Range and shall incorporate a

Xenon flashtube enclosed in a rugged Lexan® lens. The strobes shall be available with two or four field selectable settings in one unit and shall be rated, per UL 1971, for up to 185 cd for wall mounting and 177 cd for ceiling mounting. The strobes shall operate over an extended temperature range of 32°F to 120°F (0°C to 49°C) and be listed for maximum humidity of 95% RH. Strobe inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

#### Audibles and Audible/Strobe Combinations

Horns and horn/strobes shall be listed for Indoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have at least 2 sound level settings of 90 and 95 dBA.

#### Synchronization Modules

When synchronization of strobes or temporal Code-3 audibles is required, the appliances shall be synchronized using the Siemens 5406B sync modules, MPC-6000 panels, MPC-7000 panels, or RSE-300 power supplies with built-in sync protocol. The strobes shall not drift out of synchronization at any time during operation. Au-

dibles and strobes shall be able to be synchronized on a 2-wire circuit with the capability to silence the audible if required. If the sync module or power supply fails to operate (i.e., contacts remain closed), the strobes shall revert to a non-synchronized flash rate. All notification appliances shall be listed for "Special Applications".

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Input Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series ZH Strobe products are listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- Series ZH horns are listed under UL Standard 464 for audible signal appliances (Indoor use only).

#### Technical Information

For complete technical information, please consult the relevant installation sheets as well as the Siemens Compatibility Guide.

### Ordering Information / Mounting Requirements / Approvals

Model Number	Order Code	Mounting Options#	Agency Approvals			
			UL	ULC	CSFM	FM
ZH-MC-R	500-636161	B, D, E, F	X	#	#	#
ZH-MC-W	500-636162	B, D, E, F	X	#	#	#
ZH-HMC-R	500-636163	B, D, E, F	X	#	#	#
ZH-HMC-W	500-636164	B, D, E, F	X	#	#	#
ZH-R	500-636159	B, D, E, F	X	#	#	#
ZH-W	500-636160	B, D, E, F	X	#	#	#
ZH-MC-CR	500-636165	B, D, E, F	X	#	#	#
ZH-MC-CW	500-636166	B, D, E, F	X	#	#	#
ZH-HMC-CR	500-636167	B, D, E, F	X	#	#	#
ZH-HMC-CW	500-636168	B, D, E, F	X	#	#	#
ZR-MC-R	500-636169	B, D, E, F	X	#	#	#
ZR-MC-W	500-636170	B, D, E, F	X	#	#	#
ZR-HMC-R	500-636171	B, D, E, F	X	#	#	#
ZR-HMC-W	500-636172	B, D, E, F	X	#	#	#
ZR-MC-CW	500-636174	B, D, E, F	X	#	#	#
ZR-MC-CR	500-636173	B, D, E, F	X	#	#	#
ZR-HMC-CR	500-636175	B, D, E, F	X	#	#	#
ZRS-HMC-CW	500-636176	B, D, E, F	X	#	#	#
ZBB-R	500-636193	Accessory - Includes base, dust cover, mounting screws and installation sheet				
ZBB-W	500-636194	Accessory - Includes base, dust cover, mounting screws and installation sheet				

X = listed/approved      # = pending      \* = Refer to Data Sheet #9675 for mounting options.

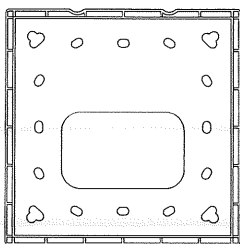
**WARNING:** PLEASE READ THESE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.



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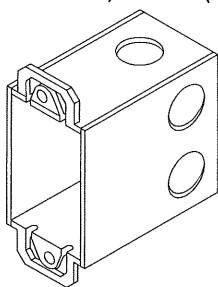
### Mounting Matrix and Details

(A) UNIVERSAL MOUNTING PLATE



"AS" Mounting (item included with AS series devices)

(B) SINGLE-GANG, FLUSH (BO)

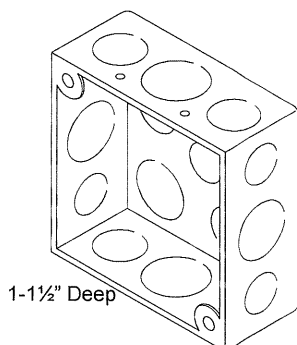


MAXIMUM NUMBER OF CONDUCTORS

AWG. #18	AWG. #16	AWG. #14	AWG. #12
4	4	4	4

Used with Series AH, AS, MH, NH, NS, ST

(D) 4" SQUARE, FLUSH (BO)



1-1/2" Deep

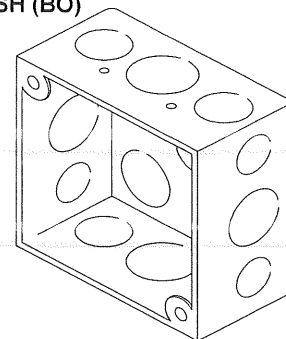
MAXIMUM NUMBER OF CONDUCTORS

AWG. #18	AWG. #16	AWG. #14	AWG. #12
4	4	4	4

Used with Series MH115, B6, B10, AH, AS, HS, MBDC, MTH, NH, NS, ST

(E) 4" SQUARE, DEEP, FLUSH (BO)

2-1/8" Deep

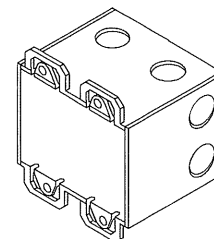


MAXIMUM NUMBER OF CONDUCTORS

AWG. #18	AWG. #16	AWG. #14	AWG. #12
8	8	8	8

Used with Series MH115, B6, B10, AH, AS, SETSF, SET-ULC, HS, MBDC, MTH, NH, NS, ST

(F) DOUBLE-GANG, FLUSH (BO)



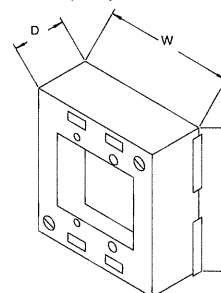
MAXIMUM NUMBER OF CONDUCTORS

AWG. #18	AWG. #16	AWG. #14	AWG. #12
4	4	4	4

Used with Series AH, AS, HS, MT, NH, NS, ST

(G) DOUBLE-GANG, SURFACE (BO)

L	W
4-3/4"	4-3/4"
D	GANG #
1-3/4"	2



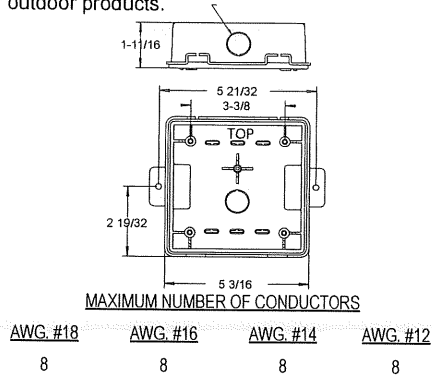
MAXIMUM NUMBER OF CONDUCTORS

AWG. #18	AWG. #16	AWG. #14	AWG. #12
4	4	4	4

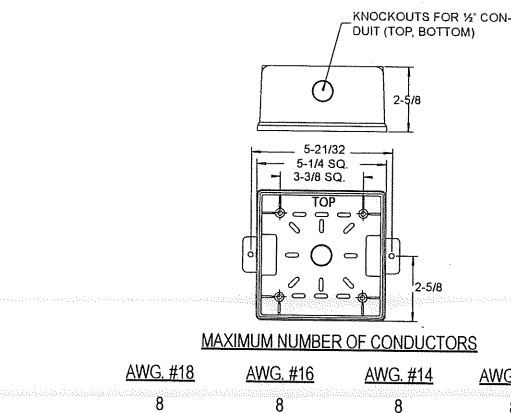
Used with Series AH, AS, NH, NS, ST

**(I) WPBBS (ORDER CODE: RED 500-636137)**

Plastic backbox for surface mounting series AS weather-proof outdoor products.

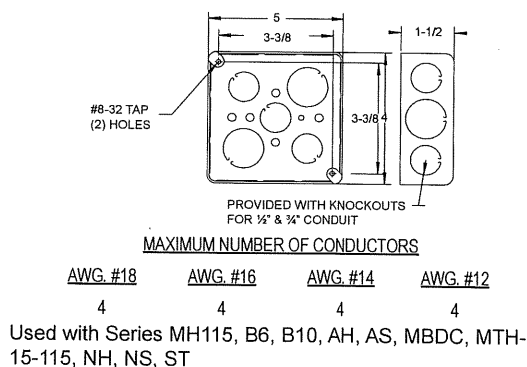


**(M) MT-SUR-BOX BACKBOX (ORDER CODES: RED 500-693168, WHITE 500-636118)**



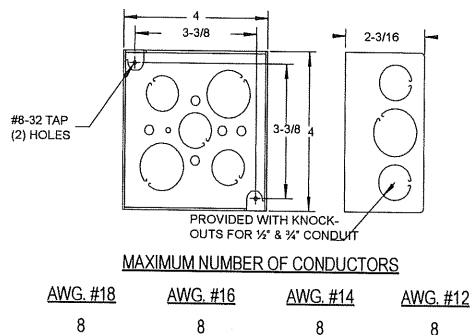
**(J) BBS BACKBOX (ORDER CODES: RED 500-636110)**

Standard steel backbox with knockouts for interior surface mounting, concealed conduit mounting or semi-flush applications.



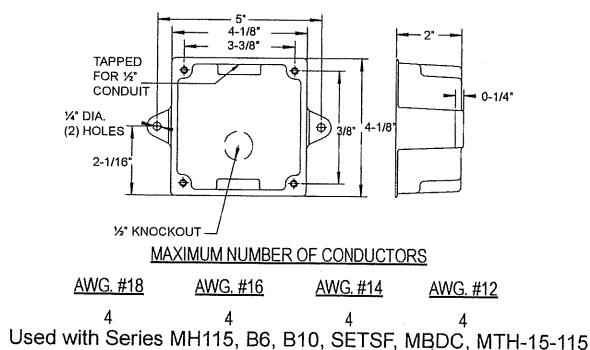
**(N) DBBS BACKBOX (ORDER CODE: RED 500-636111)**

Standard steel backbox provided with knockouts for interior surface mounting, concealed conduit mounting or semi-flush applications.



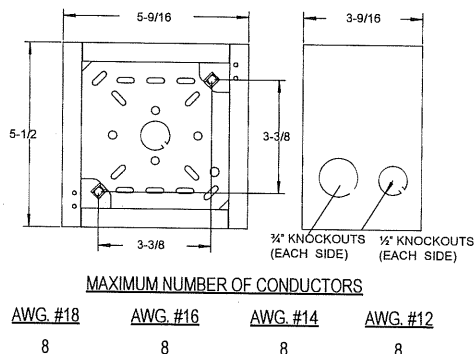
**(K) WBBS WEATHER RESISTANT BACKBOX (ORDER CODES: RED 500-636129, WHITE 500-636131)**

Sturdy die cast housing, threaded conduit hole and knockout for outdoor applications.



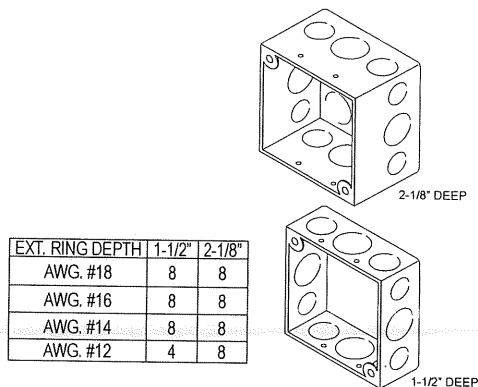
**(P) SBBS BACKBOX (ORDER CODES: RED 500-636119, WHITE 500-636120)**

For surface mounting speakers, chimes, and electronic applications.



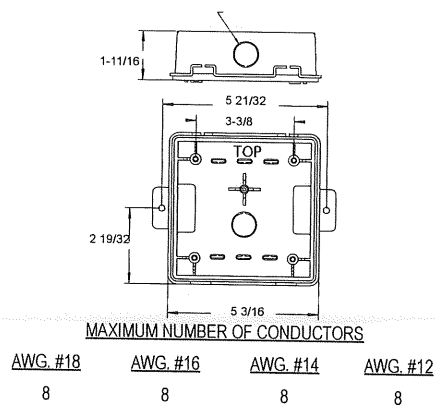


**(Q) 4" SQUARE DEEP W/ EXTENSION RING, FLUSH (BO)**



Used with Series CH, SEF, SET, SETFL

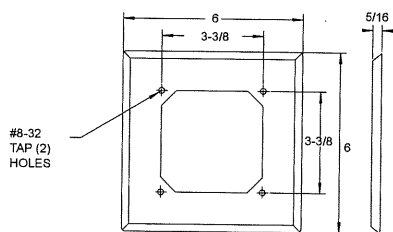
**(T) WPSBBS (ORDER CODES: RED 500-636139, WHITE 500-636140)**



Used with Series ST-WP

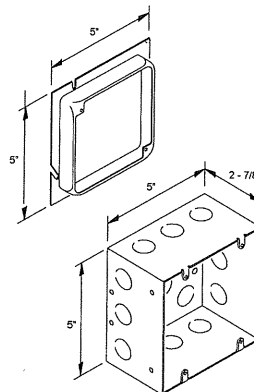
**(R) SFPS SEMI-FLUSH PLATE (ORDER CODES: RED 500-636124, WHITE 500-636125)**

Stamped aluminum surface wall plate which mounts behind the basic unit and serves to cover recessed backboxes in semi-flush mounting applications.



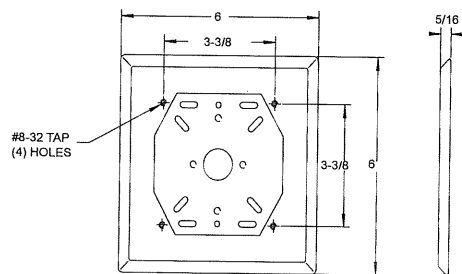
Used with Series MT, SET, SE, NH, NS, ST

**(U) 5" SQUARE BACKBOX W/ EXTENSION RING, FLUSH (BO)**



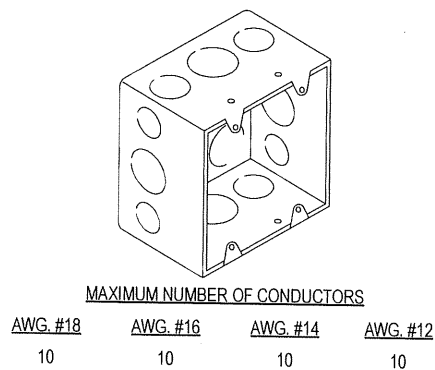
**(S) APS ADAPTER PLATE (ORDER CODE: RED 500-630109)**

Stamped aluminum adapter plate designed for applications where semi-flush installations cannot be used. The plate can be mounted to standard octagon or round backboxes single or double gang boxes or plaster rings. The backbox and basic unit are then fastened to the plate. This type mounting is referred to as a concealed conduit installation.

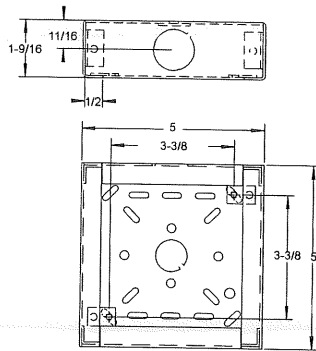


Used with Series MBDC

**(W) 4 11/16" SQUARE, DEEP SURFACE (BO)**

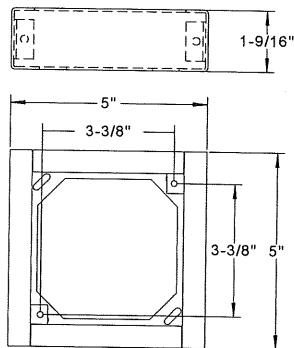


(X) SHBBS SQUARE, SURFACE BACKBOX  
(Order Codes: Red 500-636126, White 500-636127)



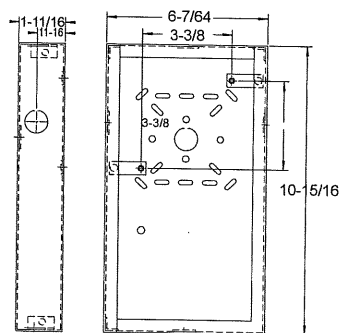
Used with Series AS, AH, NS, Z

(Y) SERS SQUARE SEMI-FLUSH EXTENSION RING (Order Codes: Red 500-636122, White 500-636123)

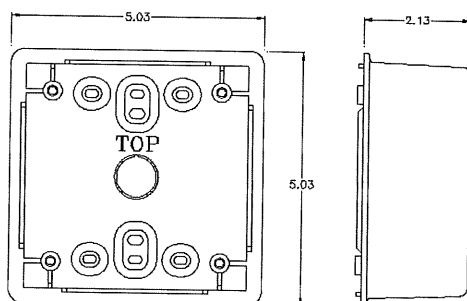


Used with Series CH, SEF, SET

(Z) SBL2S BACKBOX (Order Codes: RED 500-636121)

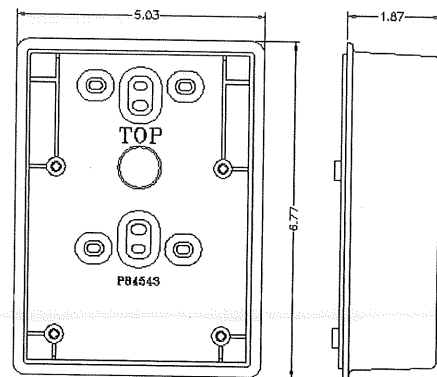


(AA) SPSB (Order Codes: Red 500-636112, White 500-636113)



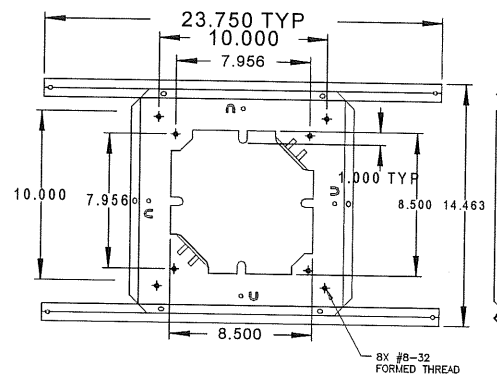
Used with Series SE Speakers

(BB) SPSSB (ORDER CODES: RED 500-636114, WHITE 500-636115)



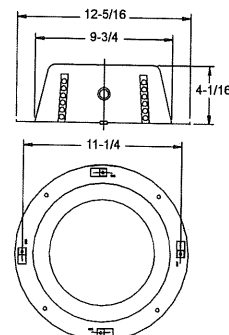
Used with Series SE-MC/HMC  
(wall mount speaker/ strobe)

(CC) SB-W 8" CEILING SUPPORT BRIDGE (ORDER CODE: WHITE 500-634882)



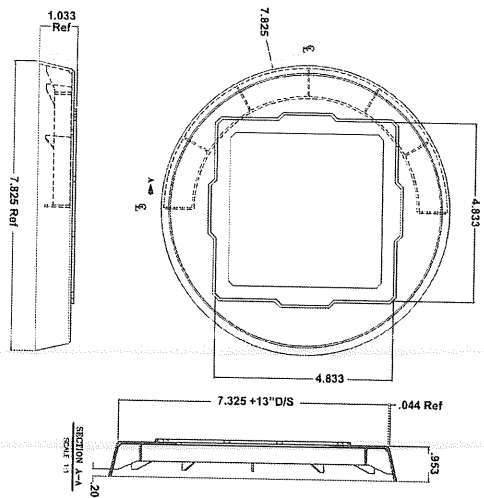
Used with Series S 8" Ceiling Speakers

(DD) SE-1 8" CEILING SPEAKER BACKBOX (ORDER CODE: WHITE: 500-634881)



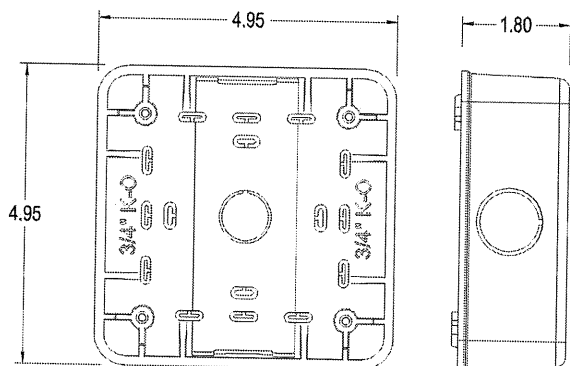
Used with 8" Ceiling Speakers

**(EE) SEXT EXTENSION RING (ORDER CODE: RED 500-636116, WHITE 500-636117)**



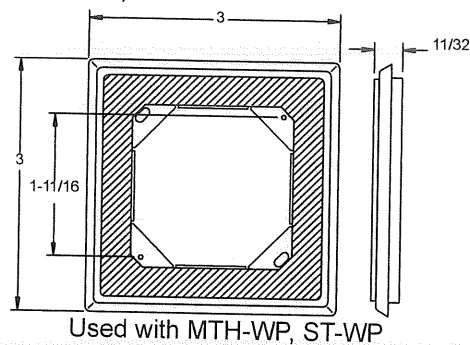
Used with Series SE-MC-C (ceiling mount strobe)

**(FF) ZBB (ORDER CODES: RED 500-636193, WHITE 500-636194)**

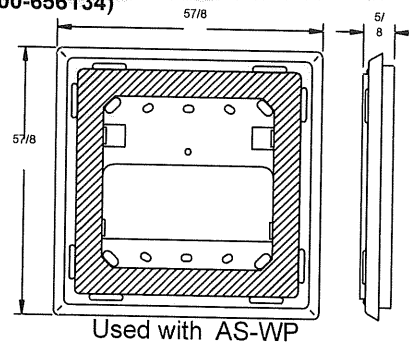


Used with Series Z

**(GG) WFPS PLATE (ORDER CODES: RED 500-636135, WHITE 500-636136)**



**(HH) WFPAS PLATE (Order Codes: Red 500-363133, White 500-656134)**



## MOUNTING MATRIX

	Series SET-C	Series ST	Series ST-MC-RETRO	Series MH115	Series SE	Series B10-115	Series CH	Series SETSF-B	Series SETSF	Series MBDC	Series SET/SET Wall Mount	Series SE-C	Series MH	Series MTH	Series NH/NS	Series HS	Series AS/AH	Series AH-WB(3), MT-WP(4), MTH	Series Z
(A) Universal Mounting Plate (included with AS series devices)																			
(B) 1-GANG x 2" Deep - Flush (BO)		X											X		X		X		X
(D) 4" x 4" x 1.5" Deep - Flush (BO)		X	X	X		X			X					X	X		X		X
(E) 4" x 4" x 2.125 Deep - Flush (BO)		X	X	X	X	X		X	X				X	X	X	X	X		X
(F) 2-Gang x 3.5" Deep - Flush (BO)		X											X	X	X	X	X		X
(G) 2-Gang x 1.75" Deep - Surface (BO)		X												X	X	X	X		X
(I) WPBBS-R Weatherproof Backbox for AS-WP															X	X		2	
(J) BBS Surface (SP) Note 9		X		X	X				X					X					
(K) WBBS Weatherproof (SP)				X	X			X	X								X	3	
(M) MT-SUR-BOX Surface & Weatherproof (SP)										X			X		X			4	
(N) DBBS Surface (SP)		X		X	X			X	X				X	X	X	X			
(P) SBBS Surface (SP)	X	X			X	X	X	X	X	X			X	X	X	X			
(Q) 4" x 4" x 2.125" Box w/ 1.5" Extension Ring- Flush (BO)	X		X			X	X			X	X			X	X	X	X		
(R) SPT Semi-Flush Plate (SP)		X	X	X	X	X	X		X	X			X	X	X	X	X		
(S) APS Adapter Plate (SP)					X			X	X	X									
(T) WPSBBS-R Weatherproof Backbox for ST-WP																		1	
(U) 5" Square Backbox w/ Extension Ring, Flush (BO)	X					X	X				X								
(W) 4.6875" x 4.6785" x 2.125" Deep Surface (BO)																			
(X) SHBBS (SP) Shallow Surface		X			X				X					X		X			
(Y) SERSSemi-Flush Extension Ring (Retrofit Appl.)	X					X				X									
(Z) SBLS-2 Surface (SP)		X	X	X		X	X	X	X										
(AA) SPSB Backbox for SE Speaker					X														
(BB) SPSSB Backbox for SE Speaker Strobe					X														
(EE) SPEXT Extension Ring											X								
(FF) ZBB																			X

## MOUNTING NOTES

**Caution:** The mounting options figures show the maximum number of field wires (conductors) that can enter the backbox used with each mounting option. If these limits are exceeded, there may be insufficient space in the backbox to accommodate the field wires and stresses from the wires could damage the product.

Although the limits shown for each mounting option comply with the National Electrical code (NEC), Siemens recommends use of the largest backbox option and the use of approved field wires whenever possible, to provide additional wiring room for easy installation and minimum stress on the product from wiring.

**Caution:** Check that the installed product will have sufficient clearance and wiring room prior to installing backboxes and conduit, especially if sheathed multiconductor cable or 3/4" conduit fittings are used.

1. Mounting hardware for each mounting option is supplied.
2. Conduit entrances to the backbox should be selected to provide sufficient wiring clearance for the installed product. When extension rings are required, conduit should enter through the backbox, not the extension ring. Use Steel City #53151 (1-1/2" deep) or #53171 (2-1/8" deep) extension rings (as noted in the mounting options) or equal with the same cut-out area.

3. When terminating field wires, do not use more lead length than required. Excess lead length could result in insufficient wiring space for the appliance.
4. Use care and proper techniques to position the field wires in the backbox so that they use minimum space and produce minimum stress on the product. This is especially important for stiff, heavy gauge wires and wires with thick insulation or sheathing.
5. Do not pass additional wires (used for other than the appliance) through the backbox "unless the backbox is of a sufficient size to permit additional wiring as described in NEC 314.16 (B)". Such additional wires could result in insufficient wiring space for the appliance.

**NOTE:** Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Siemens Inc. standard terms and conditions.

# **BACKBOX MOUNTING HEIGHTS** **for SIEMENS WALL MOUNTED** **HORIZONTAL STROBE** **APPLIANCES NFPA-72 (2007)**

7.5.4.1\* Wall-mounted appliances shall be mounted such that the entire lens is not less than 2030 mm (80 in.) and not greater than 2440 mm (96 inc.) above the finished floor or at the mounting height specified using the performance-based alternative 7.5.4.5

7.5.4.2 Where low ceiling heights do not permit mounting at a minimum of 2030 mm (80 in.), visible appliances shall be mounted within 150 mm (6 in.) of the ceiling.

The room size covered by a strobe of a given value shall be reduced by twice the difference between the minimum mounting height of 2030 mm (80 inc.) and the actual, lower mounting height.

Backbox Mounting Options*	Series AS/AH Audible Strobe		Series ST-MC-RETRO Flush and Surface Retrofit Plate		Series NS Horn Strobe		Series Z and ST Strobe		Series MTH Multitone	
	80 IN	6 IN	80 IN	6 IN	80 IN	6 IN	80 IN	6 IN	80 IN	6 IN
(B) 1-Gang x 2" Deep - Flush (BO)	77 1/2"	8 1/2"			78 3/8"	7 5/8"	79 1/8"	6 7/8"		
(D) 4" x 4" x 1.5" Deep - Flush (BO)	77"	9"	83 15/16"		77 7/8"	8 1/8"	78 5/8"	7 3/8"	79 15/16"	6 1/16"
(E) 4" x 4" x 2.125" Deep - Flush (BO)	77"	9"	83 15/16"		77 7/8"	8 1/8"	78 5/8"	7 3/8"	79 15/16"	6 1/16"
(F) 2-Gang x 3.5" Deep - Flush (BO)	77 1/2"	8 1/2"			78 3/8"	7 5/8"	79 1/8"	6 7/8"	80 9/16"	5 7/16"
(G) 2-Gang x 1.75" Deep - Surface (BO)	77 1/2"	8 1/2"			78 3/8"	7 5/8"	79 1/8"	6 7/8"	80 9/16"	5 7/16"
(M) MT-SUR-BOX Surface & Weatherproof (SP)									79 3/8"	6 5/8"
(P) SBBS Surface (SP)									79 1/4"	6 3/4"
(Q) 4" x 4" x 2.125" Box w/ 1.5" Extension Ring - Flush (BO)										
(U) 5" Square Backbox w/ Extension Ring, Flush (BO)	69 1/2"	8 1/2"	83 7/16"		77 3/8"	7 5/8"	78 1/8"	6 7/8"	79 7/16"	5 9/16"
(X) SHBBS (SP) Shallow Surface	76 1/2"	9 1/2"			77 3/8"	8 5/8"	78 1/8"	7 7/8"		
(Y) 4" x 4" x 1.5" Box w/ 1.5" Extension Ring Plate (BO)										
(Z) SBL2S Surface (SP)			78"							
(FF) ZBB							78 1/8"	7 7/8"		

Backbox Mounting Options*	Series CH Chime Strobe		Series SET-V Speaker Strobe		Series SEF-C Speaker Strobe		Series SET-C Speaker Strobe	
	80 IN	6 IN	80 IN	6 IN	80 IN	6 IN	80 IN	6 IN
(P) SBB Surface (SP)	77 3/4"	8 1/4"	79 3/16"	6 13/16"	77 3/4"	8 1/4"	77 3/4"	8 1/4"
(Q) 4" x 4" x 2.125" Box w/ 1.5" Extension Ring - Flush (BO)	77 1/2"	7 1/2"	80"	6"	78 1/2"	7 1/2"	78 1/2"	7 1/2"
(U) 5" Square Backbox w/ Extension Ring - Flush (BO)	78"	7"	79 1/2"	5 1/2"	78"	7"	78"	7"
(X) SHBB (SP) Shallow Surface								
(Y) 4" x 4" x 1.5" Box w/ 1.5" Extension Ring Plate - Flush (BO)	78 1/2"	7 1/2"	80"	6"				

\* Measured from Bottom of Backbox

NOTES: (BO) = By Others (SP) = Siemens Product

**WARNING:** PLEASE READ THESE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.



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8/07 2M SBT/IG

August 2007 - New Issue



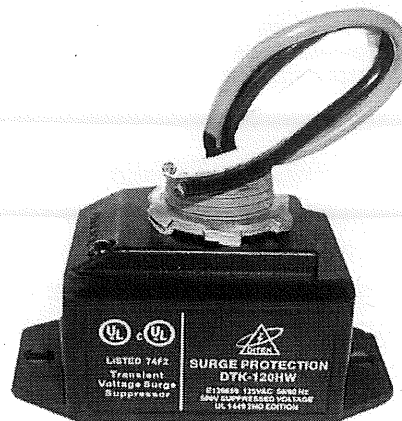
## DTK-HW Series

### Equipment Panel/Dedicated Circuit Surge Protector General Product Specifications

DITEK's HW series of surge protection are designed and manufactured to meet the exacting standards of the life safety industry. These compact parallel mount surge protectors are widely used to protect fire alarm panels and other dedicated branch circuit loads.

**DTK-120HW**  
**DTK-240HW**

**DTK-120/240HW**



#### Product Features

- Diagnostic LED indicates ground presence, system power and SPD function
- Small footprint enables installation in a variety of locations
- Available for popular 120V, 120/240V and 240V single-phase systems
- Ten Year Limited Warranty

#### Specifications

**Agency Approvals:** UL 1449, 2<sup>nd</sup> Edition 2007, cUL (DTK-120HW)

**IEEE Location Categories:** Cat. A & Cat. B

**Suppressor Type:** Parallel configuration, external mount

**Peak Surge Current:** 22,500A (DTK-120HW)  
27,000A (DTK-120/240HW)  
13,500A (DTK-240HW)

**Protection Modes:** L-G, L-N, N-G

**Temperature Range:** -40C to +85C

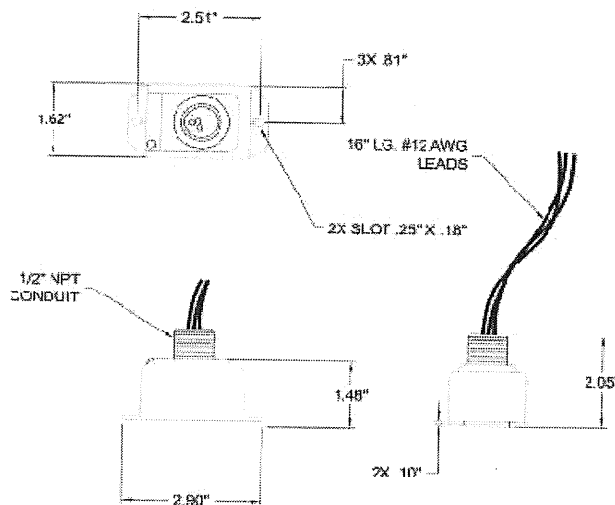
**Operating Frequency:** 0Hz – 400Hz

**Dimensions:** 2.9" x 1.6" x 2.1"  
(73.7mm x 40.6mm x 53.3mm)

**Weight:** .5lb. (227g)

**Housing:** NEMA 4 ABS

Model Selection: DTK-	System Voltage	MCOV	UL 1449, 2 <sup>nd</sup> Ed. S.V.R.
120HW	120VAC	130V	400V
120/240HW	120/240VAC	130V/250V	n/a
240HW	240VAC	250V	n/a



One DITEK Center  
1720 Starkey Road  
Largo, FL 33771


1-800-753-2345  
Technical Support: 1-888-472-6100  
[www.ditekcorp.com](http://www.ditekcorp.com)

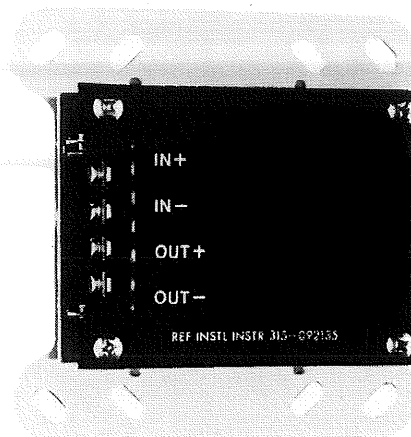
Document: SPS-100057-001 Rev 3 08/08  
©2008 DITEK Corp.  
Specification Subject to Change



## 8709 Line Isolator Module for Use With MPC-6000 & 7000 Control Panels

### Features

- Short Circuit Isolation
- Used on MPC-6000 & 7000 Intelligent Device Circuits
- Increased Fault Tolerance
- Style 4 or Style 6
- Up to 12 Per Loop
- Requires no Programming
- Does Not Occupy a Device Address
- Mounts in Either 4" Square, 2 1/8" Deep or a 3 1/2" Deep Double Gang Electrical Box
- Local LED Indicator
- Cover Plate Included
-  Listed, NYMEA and CSFM Submitted



### Description

The 8709 loop isolator module provides short circuit protection on MPC-6000 & 7000 intelligent device circuits (FDLC). When a short is detected by the 8709, it isolates the affected segment of the circuit, allowing the remaining devices to continue operation. The 8709 is self-restoring, automatically reconnecting to circuit segment when the fault is removed.

The 8709 also includes a yellow LED which illuminates to indicate that the device has been activated. The 8709 mounts in either a 4" square, 2 1/8" deep or a 3 1/2" deep double gang electrical box and is supplied with a cover plate with an opening for the LED.

It can be wired in either a Style 4 or Style 6 configuration.

The 8709 does not occupy a device address on the intelligent device circuit and requires no programming. Up to twelve 8709s may be installed on each loop.

### Ordering Information

Model	Description	Part No.
8709	Line Isolator Module	500-033170FA





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## 8701 Intelligent Monitoring Module

### Features

#### Intelligent Interface Modules for use with MPC-6000 & 7000 Control Panels

- Interfaces and Supervises Normally Open Contacts
- Compact Size Allows Mounting in Single Gang Box Behind Equipment
- Polarity Insensitive Technology
- Innovative Technology Supports Comprehensive System and Interface Communication
- Dynamic Supervision
- Two Wire Operation
- 8720 Device Program/Test Unit Electronically Programs and Verifies Device's Address and Tests Device's Functionality
-  Listed, CSFM and NYMEA Approved

### Introduction

The FARADAY 8701 Intelligent interface module is designed to provide the means of interfacing direct shorting devices to the MPC-6000 & 7000 initiating circuit.

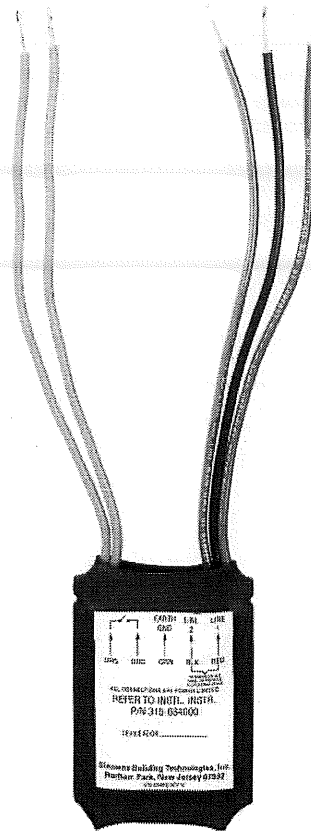
The 8701 Intelligent interface module provides the market's most advanced method of address programming and supervision, combined with sophisticated control panel communication. Each 8701 interface module incorporates microcomputer chip technology and its sophisticated bi-directional communication capabilities with the control panel.

### Description

The 8701 is designed to monitor a normally open dry contact and reports the contact's status to the control panel.

The device's microcomputer chip has the capacity of storing, in memory, identification information as well as important operating status information.

FARADAY innovative technology allows all 8701 intelligent interface modules to be programmed by



using the 8720 Device Program/Test Unit. The 8720 is a compact, portable, menu driven accessory that makes programming and testing an interface device faster, easier and more dependable than previous methods. The 8720 eliminates the need for mechanical addressing mechanisms, such as program jumpers, DIP switches or rotary dials, because it electronically sets the 8701 interface's address into the interface's microcomputer chip non-volatile memory. Vibration, corrosion and other conditions that deteriorate mechanical addressing mechanisms are no longer a cause for concern. This 8701 is connected to the program/tester with the programming cable provided with the tester. This programming cable utilizes two (2) alligator clip connectors to attach to the 8701.

The 8701 Series has five leads, one for grounding, which are wired to the system with user supplied wire nuts.

---

The 8701 is fully compatible on the same circuit with detectors, addressable manual stations or any addressable intelligent modules.

All 8701 intelligent interface modules have been UL and ULC Listed.

Environmental operating conditions for all 8701 modules are 32°F (°C) to 120°F (49°C) with a relative humidity of not greater than 93% non-condensating.

## Ordering Information

Model	Description	Shipping oz.	Weight kg.	Part No.
8701	Single Input	3.5	.1	500-034000FA

## Electrical Ratings

Current Draw (Active or Standby): 1mA



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Web: [www.faradayfirealarms.com](http://www.faradayfirealarms.com)


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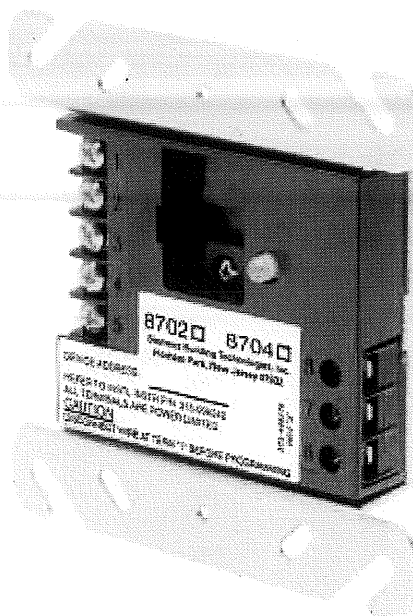


## Monitoring Modules for MPC-6000 & 7000 Control Panels

### Features

#### Intelligent Interface Modules for 8702, 8703 and 8704

- Interfaces and Supervises Normally Open Contacts
- Integral SPDT Relay (up to 4 amps) on 8704 Model
- Dual Input on 8703 Model using a single address
- Polarity Insensitive Technology
- Multi-color L.E.D. indicates status (green, amber, red)
- Easy front access to programming port and wiring terminals
- Mounts 4 inch square 2 1/4 deep box, or double gang box
- Dynamic Supervision
- Comes with 5x5 inch faceplate
- Two wire operation
- 8720 Device Program/Test Unit programs and Verifies Device's Address and Tests Devices functionality
- Electronic Address Programming is Easy and Dependable
-  Listed, CFSM, NYMEA Approved



### Introduction

The 8702, 8703 and 8704 Intelligent interface modules are designed to provide the means of interfacing direct shorting devices to the MPC-6000 & 7000 Control Panels.

The X1 Series Intelligent interface modules provide the market's most advanced method of address programming and supervision, combined with sophisticated control panel communication. Each X1 Series interface module incorporates a microcomputer chip. The X1 Series microcomputer chip technology and its sophisticated bi-directional communication capabilities with the control panel, achieve the state of an "Intelligence Device."

### Description

The X1 Series intelligent interface modules are available in three models. The 8702 and 8704 are designed to monitor a normally open dry contact. The interface module reports the contact's status to the control panel. The 8702 model can only monitor and report the status of the contact, while the 8704 incorporates an addressable Form C relay. The

8704 relay and contact device input are controlled at the same address. For the control panel system, the relay and input contact can be controlled as a separate function. The relay is typically used where control or shunting of external equipment is required.

The 8703 is a dual input module and is designed to supervise and monitor two sets of dry contacts. The Dual Input Module only requires one address but responds independently to each input. The 8703 is ideal for monitoring a water flow switch and its respective valve tamper switch.

The module has a multi-color Light Emitting Diode that flashes green when operating normally, amber if unit is in trouble condition, and red to indicate a change of state. The 8704 red L.E.D. indicates a change of state in the relay.

The device's microcomputer chip has the capacity of storing, in memory, identification information as well as important operating status information.

FARADAY innovative technology allows all X1 Series intelligent interface modules to be programmed by using the 8720 Device Programming/ Test Unit. The 8720 is a compact, portable, menu driven accessory that makes programming and testing an interface device faster, easier and more dependable than previous methods. The 8720 eliminates the need for mechanical addressing mechanisms, such as program jumpers, DIP switches or rotary dials, because the 8720 electronically sets the address into the interface's micro-computer chip nonvolatile memory. Vibration, corrosion and other conditions that deteriorate mechanical addressing mechanisms are no longer a cause for concern.

The X1 Series modules are fitted with screw terminals for connection to an addressable circuit.

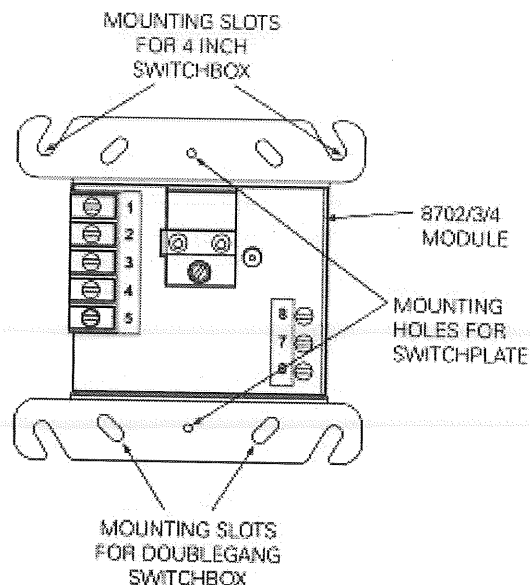
The X1 Series modules are fully compatible on the same circuit with intelligent detectors, addressable manual stations or other addressable intelligent modules.

All X1 Series intelligent interface modules are UL listed.

Environmental operating conditions for all 8700 Series modules are 32°F (°C) to 120°F (49°C) with a relative humidity of not greater than 93% non-condensating.

## Mounting Data

Addressable Interface Model 8702, 8703, 8704 mounts directly into a 4 inch square 2 ¼ deep box or a double gang box (user supplied). A 5 inch square off-white faceplate is included with each module.



**Figure A**  
**Mounting the 8702/3/4**

## Electrical Ratings

**Current Draw (Active or Standby):**  
1mA

### 8704 Relay Ratings

#### Resistive:

4A, 125 VAC  
4A, 30 VDC

#### Inductive:

3.5A, 120 VAC (0.6P.F.)  
3.0A, 30 VDC (0.6P.F.)  
2.0A, 120 VAC (0.4P.F.)  
2.0A, 120 VAC (0.35P.F.)  
2.0A, 30 VDC (0.35P.F.)

## Ordering Information

Model	Description	Shipping Weight		Part No.
		Lb.	Kg.	
8702	Single Input	7 oz.	2	500-033370FA
8703	Dual Input	7 oz.	2	500-033360FA
8704	Single Input w/Relay	7 oz.	2	500-033300FA



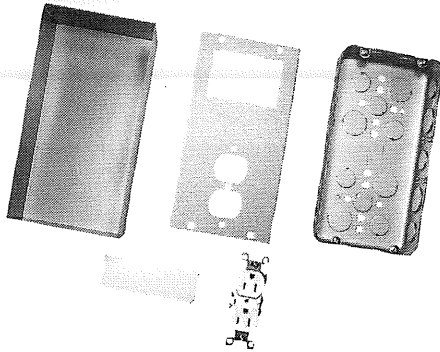
Siemens Building Technologies, Inc.  
8 Fernwood Road • Florham Park, NJ 07932  
Tel: (973) 593-2600 • Fax: (973) 593-6670  
Web: [www.faradayfirealarms.com](http://www.faradayfirealarms.com)

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**BOSCH**  
Invented for life

# D8004 Transformer Enclosure



The D8004 Transformer Enclosure protects the AC plug-in transformer and ensures that it remains securely fixed to the AC wall outlet. The D8004 Transformer Enclosure may be required for certain applications; the most common being fire alarm.

## Certifications and Approvals

Region	Certification	
USA	UL	AMCX: Central Station Alarm Units (UL1610, UL1635), AOTX: Local Alarm Units (UL464, UL609), APAW: Police Station Alarm Units (UL365, UL464), NBSX: Household Burglar Alarm System Units (UL1023), UOXX: Control Unit Accessories, System (UL864, 9th edition), UTOU: Control Units and Accessories - Household System Type (UL985)
	FM	
	CSFM	7167-1615: 100, 7165-1615: 112, 7165-1615: 119
	NYC-MEA	12-92-E, Vol. 12 12-92-E, Vol. 15

## Technical Specifications

### Environmental Considerations

Environment: Indoor, dry

### Mechanical Properties

#### Cover

Color:	Light gray
Dimensions:	8.8 in. x 4.7 in. x 3.0 in. (22.4 cm x 11.9 cm x 7.6 cm)
Material:	Cold-rolled steel, 18 gauge (1.2 mm)

#### Outlet Box

Dimensions:	8.7 in. x 4.6 in. x 1.7 in. (22.1 cm x 11.7 cm x 4.3 cm)
Material:	Galvanized steel, 18 gauge (1.2 mm)

### Power Requirements

Voltage (supply): 120 VAC

## Ordering Information

### D8004 Transformer Enclosure

**D8004**

For applications such as fire alarm that might require a transformer enclosure.

**Americas:**  
Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
security.sales@us.bosch.com  
www.boschsecurity.us

**Europe, Middle East, Africa:**  
Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

**Asia-Pacific:**  
Robert Bosch (SEA) Pte Ltd, Security Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2600  
Fax: +65 6571 2698  
apr.securitysystems@bosch.com  
www.boschsecurity.com

**Represented by**

**NO  
EXCUSES!**



# FDB

## Fire Alarm Control Unit (FACU) Records & Document Box

The Space Age FDB has been developed to be a code compliant solution to a mandated item specified by the National Fire Code (NFPA 72).

An internal galvanized sleeve holds the documents safely and securely. Access to the documents is via a high security CAT 30 Lock Set.

The galvanized sleeve also contains 2 hooks for key rings or thumb drives, a place for several business cards, a cutout for a 1.4 Oz. can of test gas and a slot where a standard CD "jewel" case can be stored.

Held in by two "wing nuts" the sleeve is easily removable to allow storage of a 1.5" 3 ring binder.

The door reads "FACU MAINTENANCE RECORDS" in 1" tall white lettering. Custom Logo and Lock Sets are available upon request.

### Standard Features:

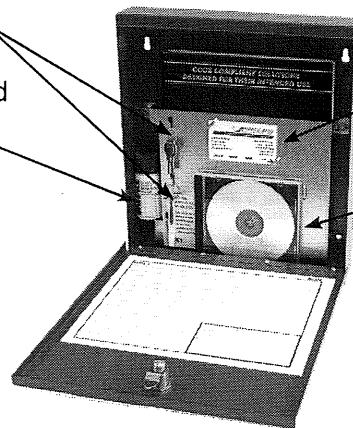
- Overall Dimensions are:  
12" Wide x 13.1" High x 2.25" Deep
- CAT 30 Secured Locking Door
- Piano Hinged Door w/Notes Sticker
- Removable document holder can hold 1" of 8.5" x 11" paperwork
- Powder Coat Red Finish
- 16 Gauge CRS construction
- Embossed:  
Key Ring Hooks  
Business Card Holder  
CD Case Slot
- 1.4 Oz. can of detector test gas
- Private labeling available

Key Ring  
Hooks

Canned  
Smoke

Business  
Card Holder

CD Jewel  
Case



Made In U.S.A.

ISO 9001  
REGISTERED  
COMPANY



**AGE BOX**

Space Age Electronics, Inc.  
www.1sae.com  
**800.486.1723** Toll Free  
508.485.0966 Local  
508.485.4740 Fax





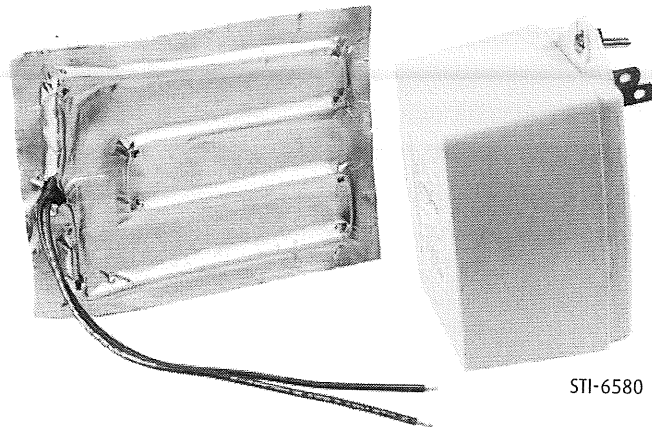
# STI HEATER KIT

## To Protect Costly Electronic Components in Frigid Areas

These easy to install kits are the answer for protecting expensive electronic units that must be installed in low temperature areas, indoors or outdoors. They operate with enclosed covers. In addition to assuring continued operation of protected units, they also keep LCD's from becoming sluggish and help them stay visible.

## Two Basic Systems Available

The 12-volt system (STI-6580) incorporates a 12-volt transformer and is rated at 25 watts. The 24-volt system (STI-6583) is designed to get its power directly from a remote power supply (other than the fire panel) or CCTV power source. It is rated at 8 watts. Both systems include a foil heater pad with adhesive backing and a thermostat.



## Features

- Allows critical electronic components to operate at low temperatures.
- Self-adhesive heater pad.
- Keeps control panels warm when mounted in a protective cover or enclosed space. Results may vary based on installation and enclosure used.
- Temperature controlled.
- Thermostat active 23°F to 41°F (-5°C to 5°C).
- Both 12-volt and 24-volt models available.
- Can be mounted inside control panels to keep batteries and electronics operational.
- Keeps LCD's from becoming sluggish and helps them stay visible at freezing temperatures.
- Easy to install and highly effective.
- One (1) year warranty from the date of original purchase.



## Safety Technology International, Inc.

2306 Airport Road • Waterford, Michigan 48327-1209

Phone: 248-673-9898 • Fax: 248-673-1246 • Toll Free: 800-888-4784 • E-mail: [info@sti-usa.com](mailto:info@sti-usa.com) • Web: [www.sti-usa.com](http://www.sti-usa.com)

Europe Branch Office • Unit 49G Pipers Road • Park Farm Industrial Estate • Redditch • Worcestershire • B98 0HU • England

Tel: 44 (0) 1527 520 999 • Fax: 44 (0) 1527 501 999 • Freephone: 0800 085 1678 (UK only) • E-mail: [info@sti-europe.com](mailto:info@sti-europe.com) • Web: [www.sti-europe.com](http://www.sti-europe.com)

# STI HEATER KIT

## Dimensions and Technical Information

### Models Available

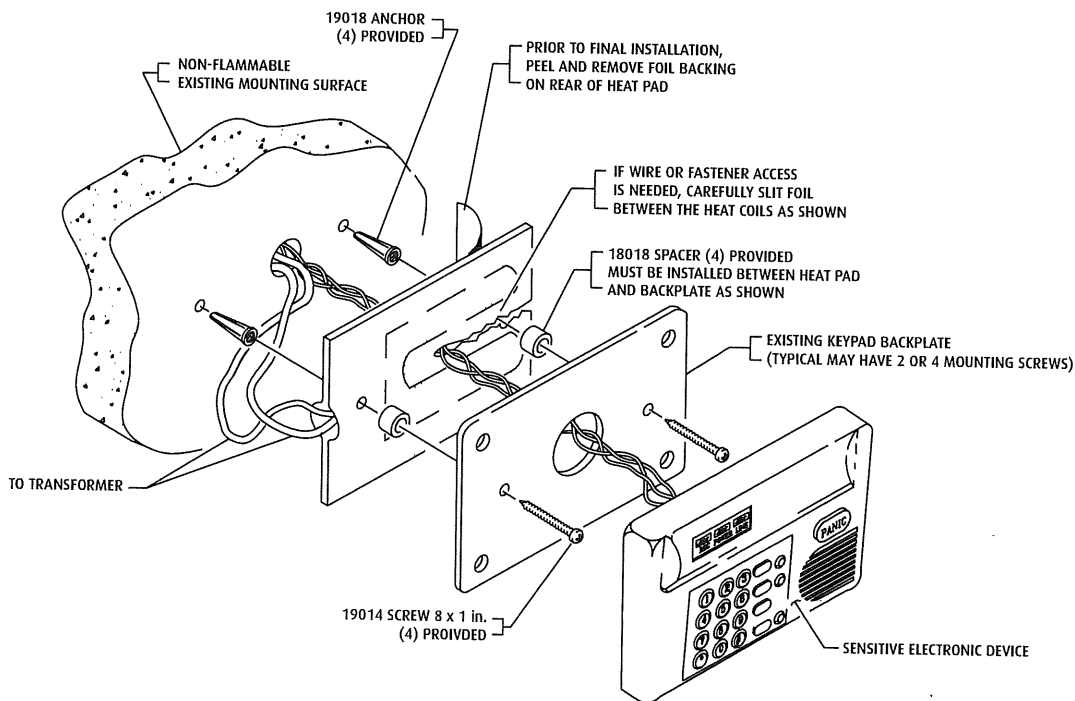
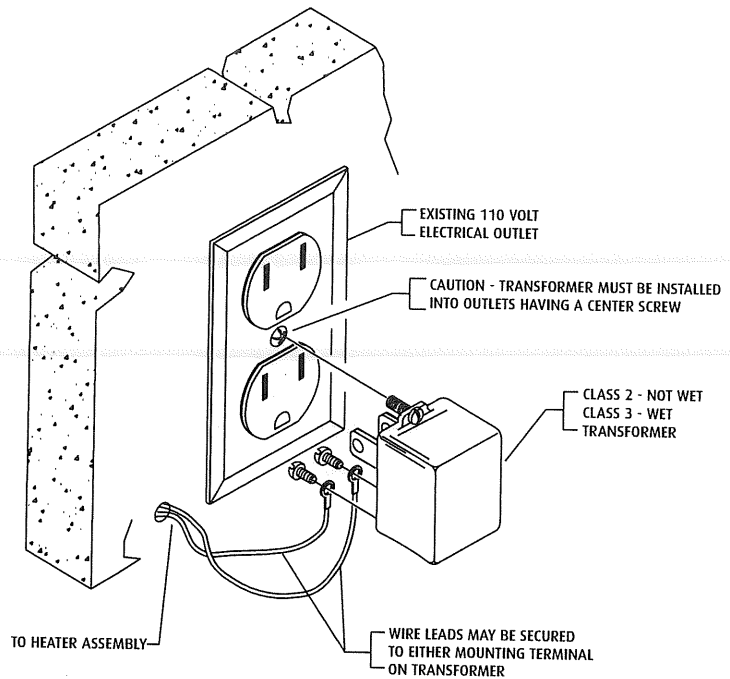
**STI-6580** 12 volt heater Kit  
**STI-6583** 24 volt heater Kit

### SPECIFICATIONS

Heater Pad Size	4" x 5 1/2"
Thermostat Size	3/4" x 1/4" x 3/16"
Thermostat Active	23°F to 41°F (-5°C to 5°C) Creep action thermostat
STI-6580 power	12 Volt 25 Watts (2.25 amp) AC or DC 40 VA 12 VAC Power Supply Included
STI-6583 power	24 Volt 12 Watts (.5 amp) AC or DC Power Supply Not Included

### Note

Keeps control panels warm when mounted in a protective cover or enclosed space. Results may vary based on installation and enclosure used.

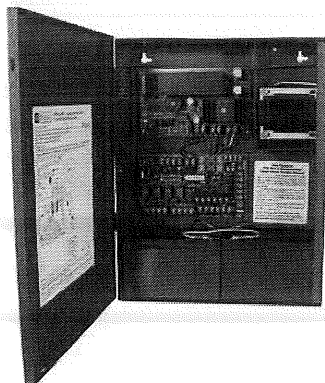




## AL602ULADA, AL802ULADA, AL1002ULADA NAC Power Extenders

Rev. AL602/802/1002ULADA- A051

### Overview



The AL602ULADA, AL802ULADA and AL1002ULADA are extremely cost effective voltage regulated remote NAC Power Extenders. They may be connected to any 12 or 24 volt Fire Alarm Control Panel (FACP). Primary applications include Notification Appliance Circuit (NAC) expansion (supports ADA requirements) and will provide auxiliary power to support system accessories.

#### AL602ULADA

- 24VDC or 12VDC rated @ 6.5 amp max.
- Two (2) Class A or four (4) Class B outputs.

#### AL602ULADAJ

- Larger enclosure.

#### AL802ULADA

- 24VDC or 12VDC rated @ 8 amp max.
- Two (2) Class A or four (4) Class B outputs.

#### AL802ULADAJ

- Larger enclosure.

#### AL1002ULADA

- 24VDC rated @ 10 amp max.
- Two (2) Class A or four (4) Class B outputs.

#### AL1002ULADAJ

- Larger enclosure.

### Specifications

- Two (2) Class A or two (2) Class B FACP inputs.
- Two (2) NC dry contact trigger inputs (AL802ULADA and AL1002ULADA only)
- Two (2) Class A or four (4) Class B indicating circuits.
- Two (2) Class B outputs may be paralleled for more power on an indicating circuit.
- One (1) Aux. Power Output @ 1 amp supply current (w/battery back up).
- Signal Circuit Trouble Memory - facilitates quickly locating intermittent system trouble and eliminates costly and unnecessary service calls. LED's indicate a prior fault (short, open, ground) has occurred on one or more signaling circuit outputs.
- 2-wire Horn/Strobe Sync mode allows audible notification appliances (Horns) to be silenced while visual notification appliances (Strobes) continue to operate.
- Horn/Strobe sync protocols include: Gentex®, System Sensor®, Faraday, Amseco.
- Temporal Code 3 Mode.
- Steady Mode.
- Input to Output Follower Mode (maintains synchronization of notification appliance circuits).
- March Time.
- Compatible with 24VDC or 12VDC fire panels.
- Common trouble inputs and outputs.
- Ground fault detection.
- Input 115VAC.
- AC fail supervision (form "C" contacts).
- Low battery supervision (form "C" contacts).
- Battery presence supervision (form "C" contacts).
- Power supply, logic board, red enclosure, cam lock, transformer & battery leads.
- Enclosure:
  - Combination knockouts re 1/2" and 3/4"
  - Accommodates up to two (2) 12VDC/12AH batteries.

### Agency Approvals



UL Listed Control Units and Accessories for Fire Alarm Systems (UL 864),  
UL Listed Standard for Safety for Fire Protective Signaling Systems (UL 1481).



MEANWELL NYC Department of Buildings Approved.



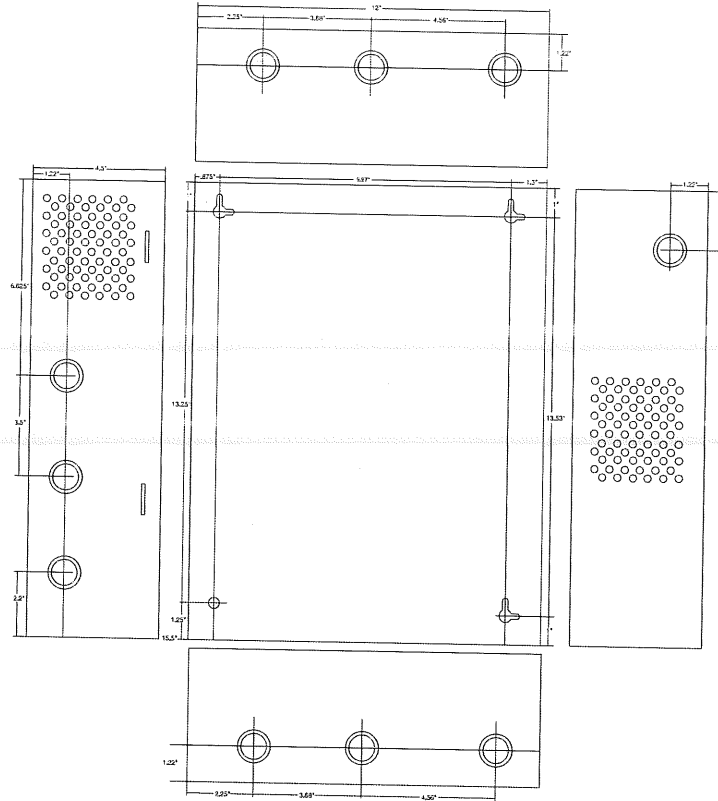
California State Fire Marshal Approved.



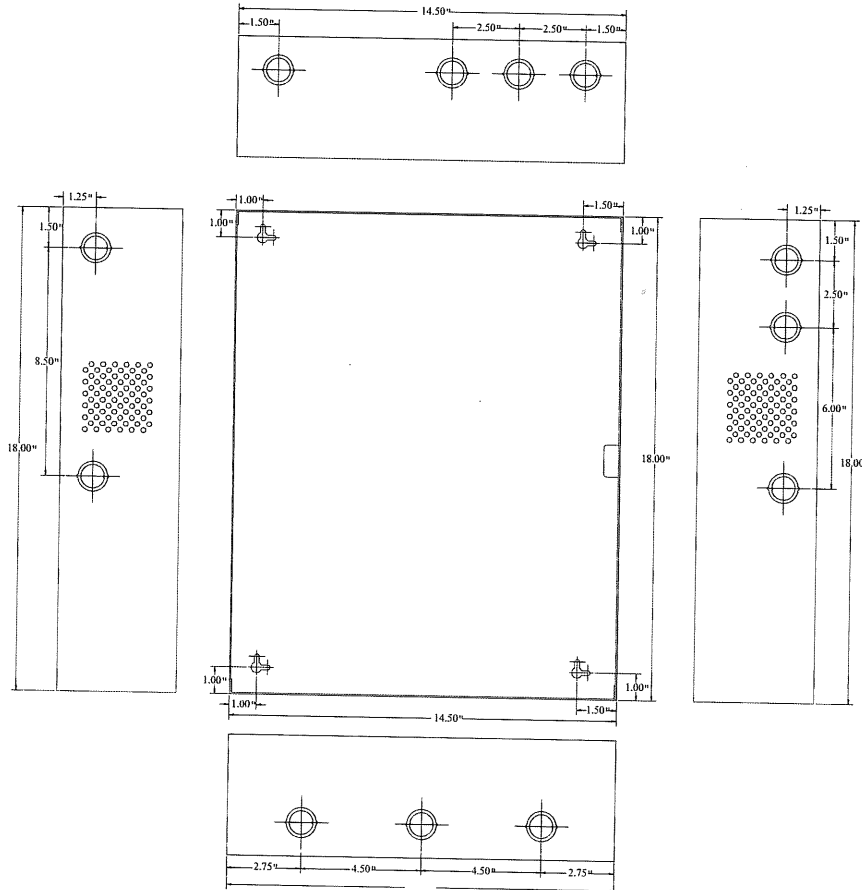
Factory Mutual Approved.

## **Enclosure Dimensions**

AL602ULADA, AL802ULADA and AL1002ULADA: 15.5"H x 12"W x 4.5"D



AL602ULADAJ, AL802ULADAJ and AL1002ULADAJ: 18"H x 14.5"W x 4.625"D



Key Bank

Pull

office

10'

135 cd  
cd  
c

Teller  
Area

75 cd



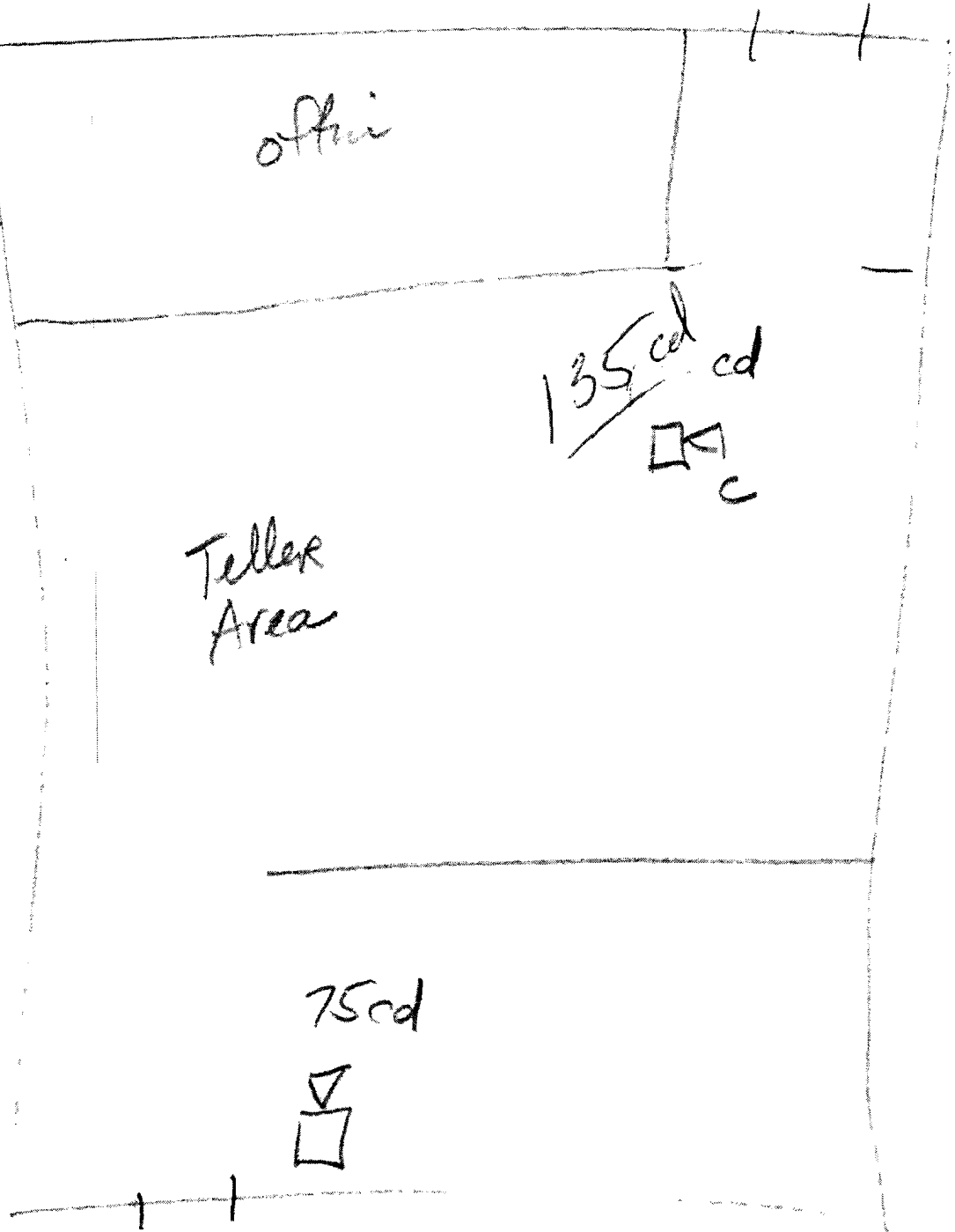
Pull



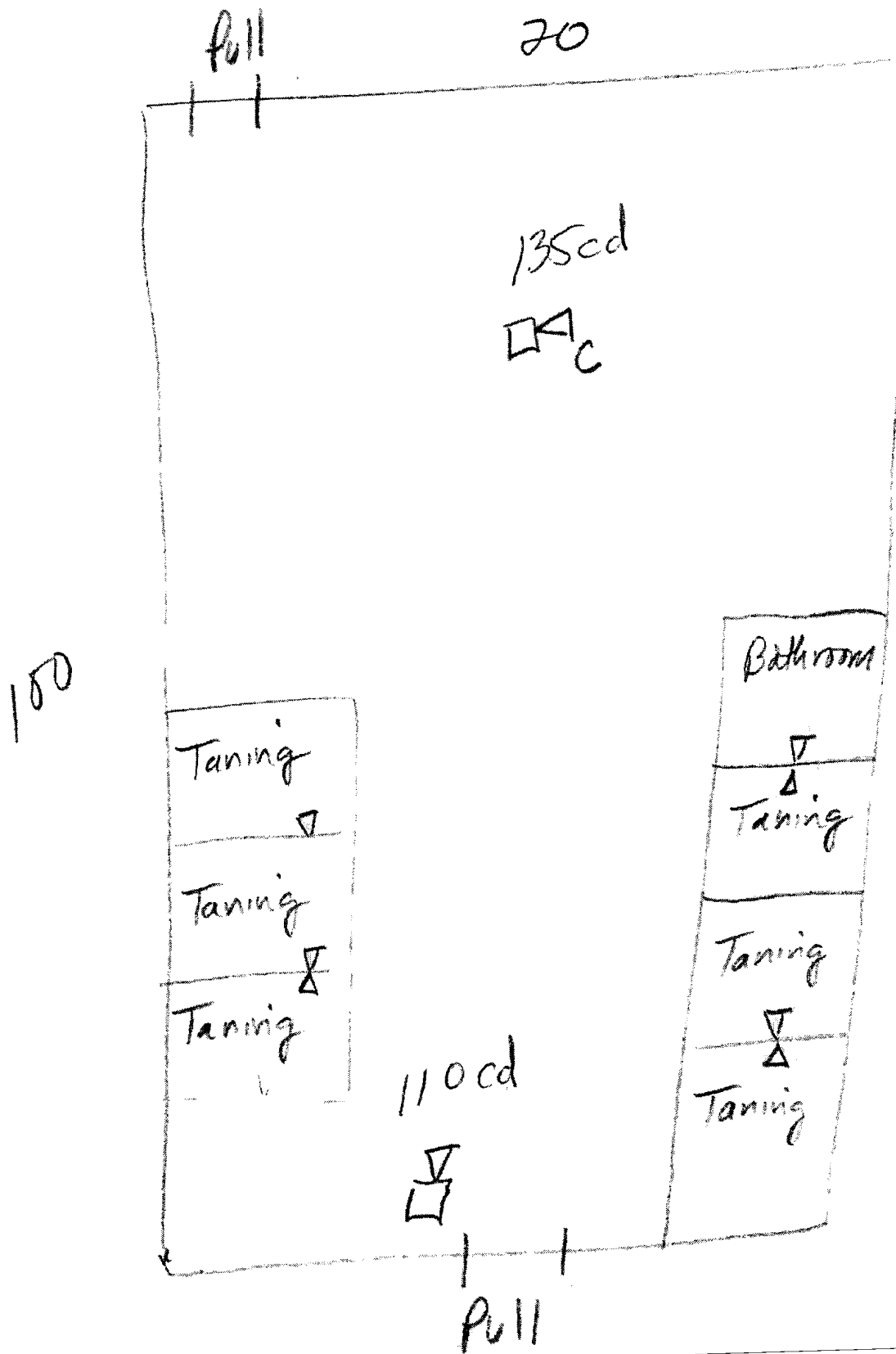
50'



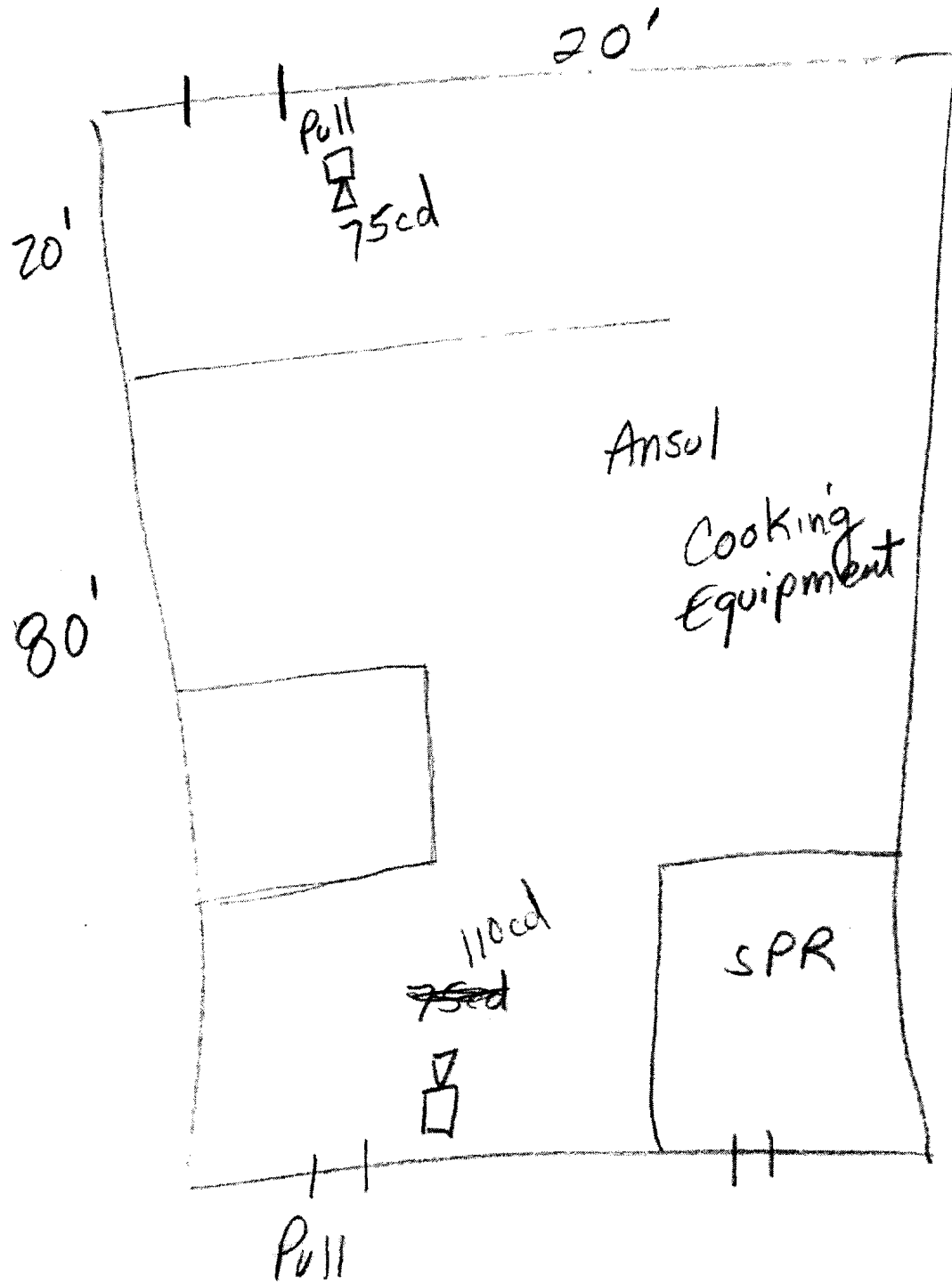
40'



# HAIR ECITMENT



# Little Caesar's FRONT

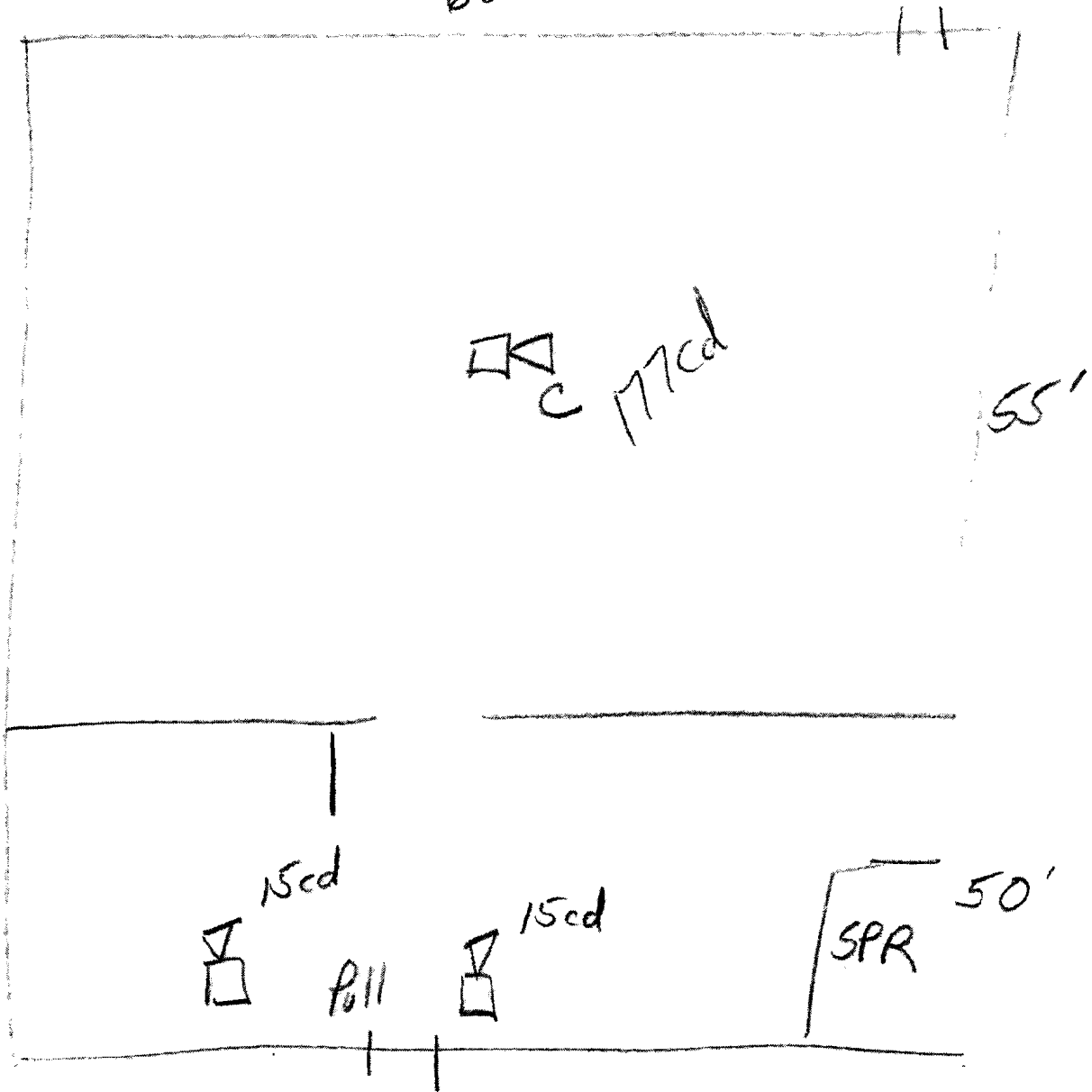


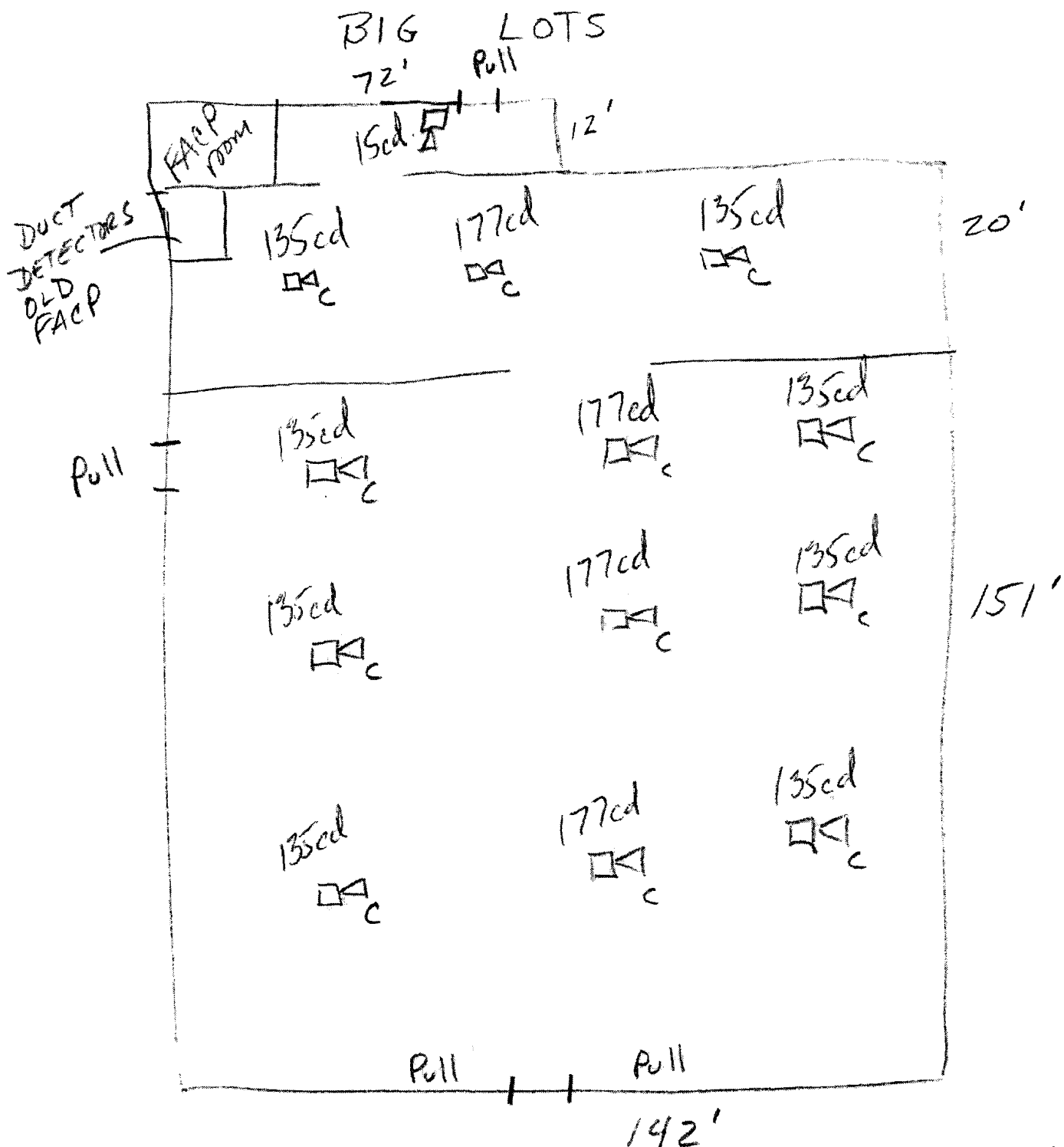


CVS

FRONT  
62'

Pull

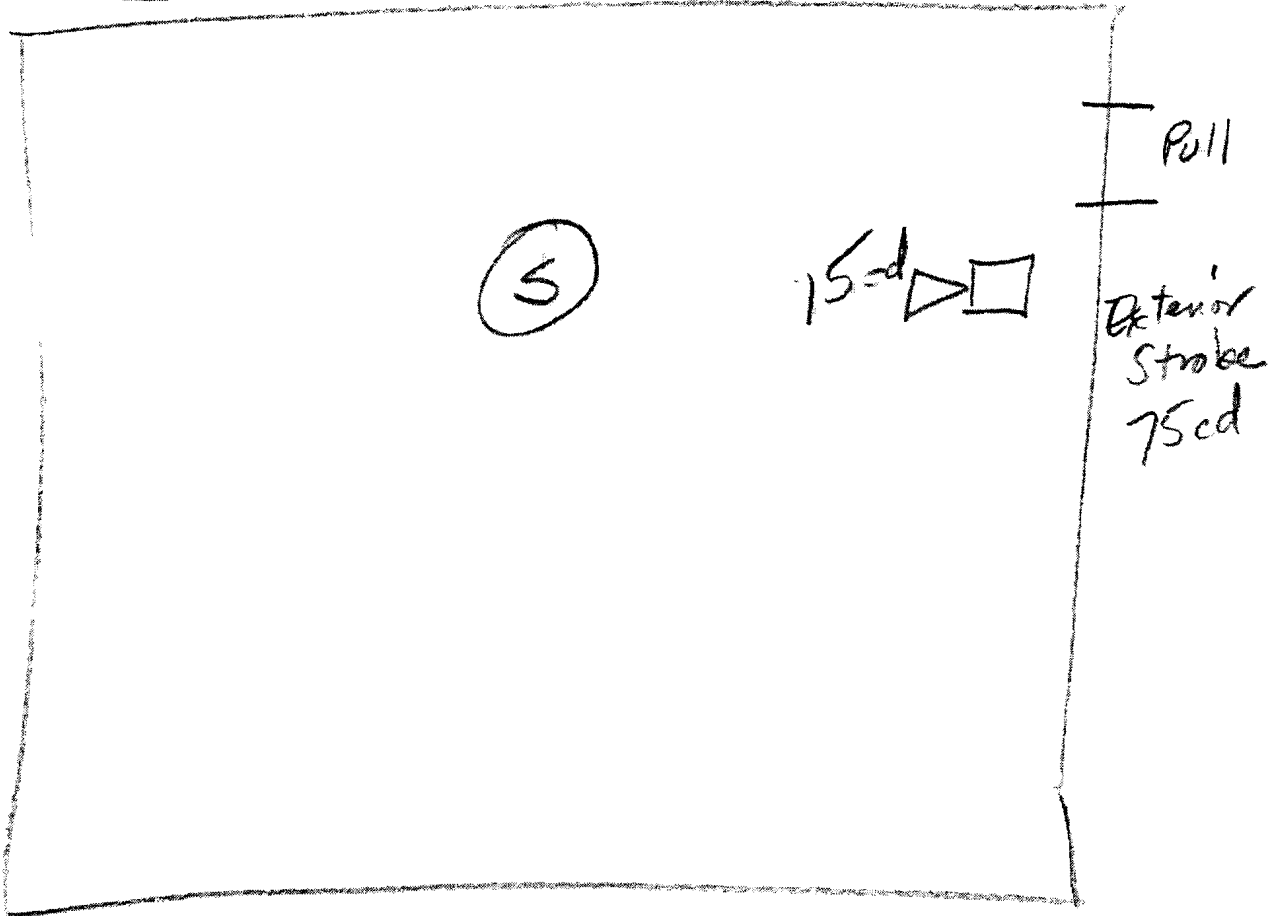




ALL CEILING DEVICES  
177cd.  
FRONT  
FRONT

# FIRE ALARM ROOM

BIG LOTS



FRONT

Empty Space

80 Annunciator

Ext. stroke  
75cd

Pull

15cd  
15cd

177cd

177cd

169'

224'

177cd

65'

Pull

177cd

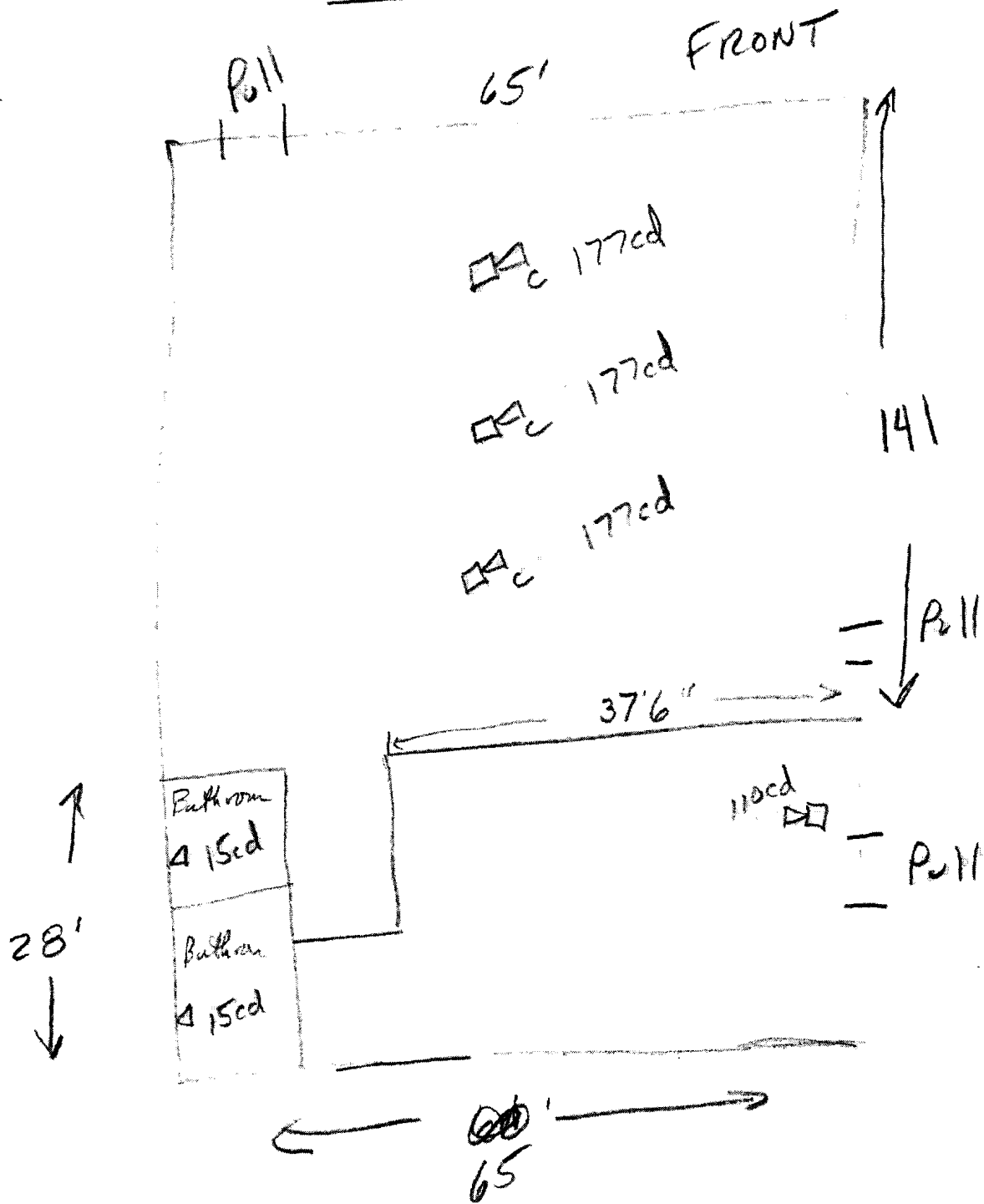
177cd

= Pull

Pull

145'

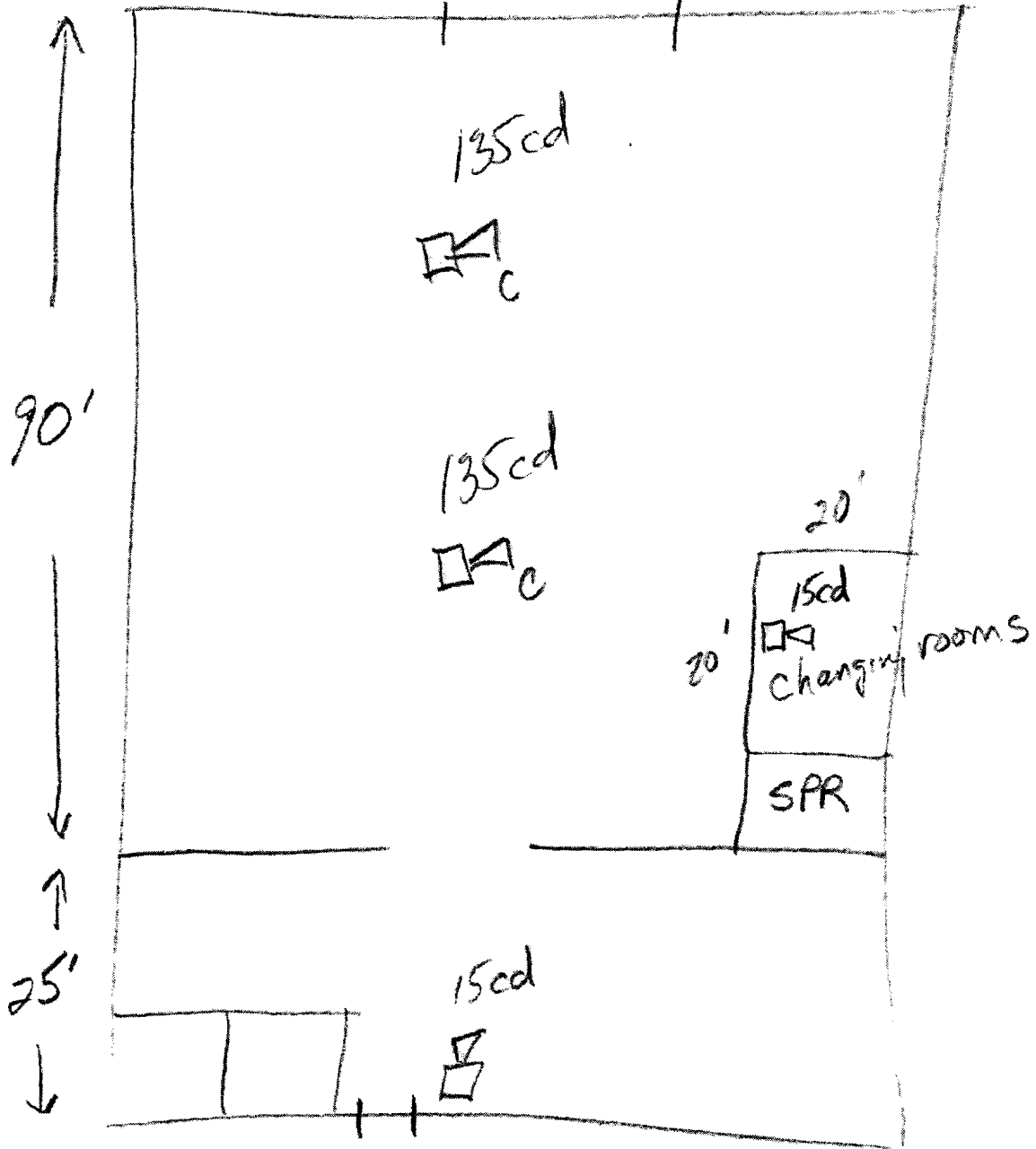
# DOLLAR TREE



Fashion Bug

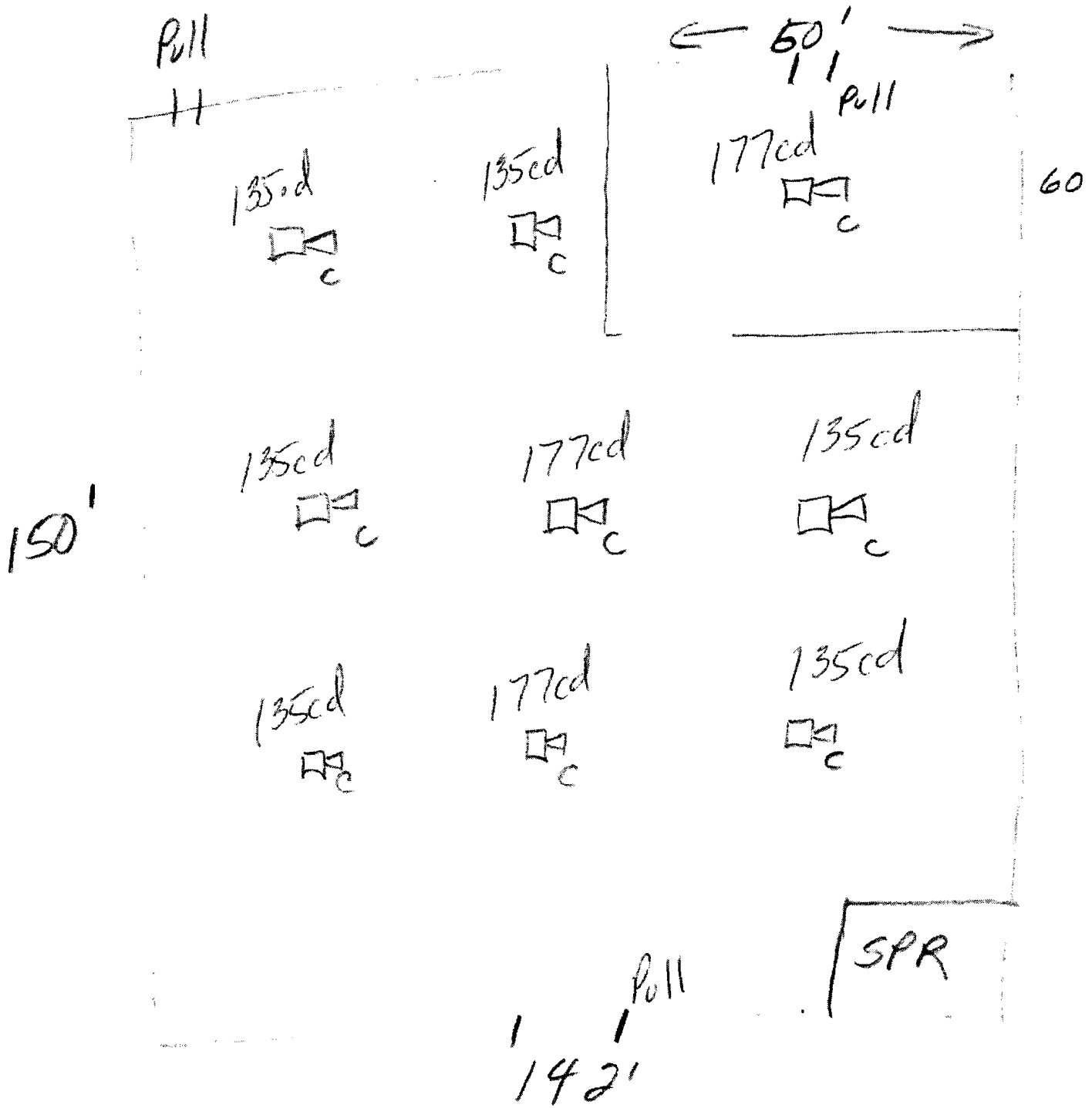
Pull

60' Front



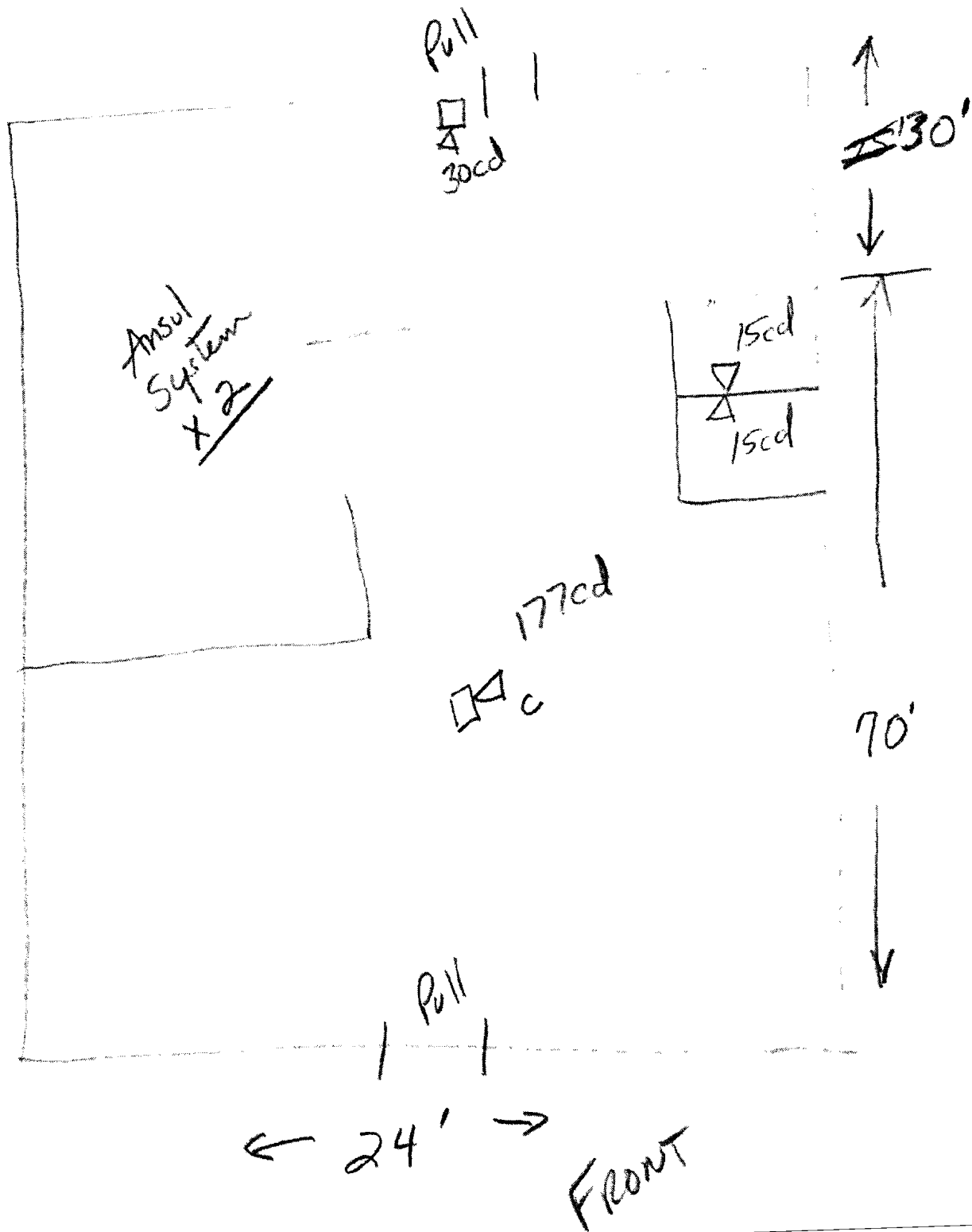
Pull

~~East~~ Joann Fabrics



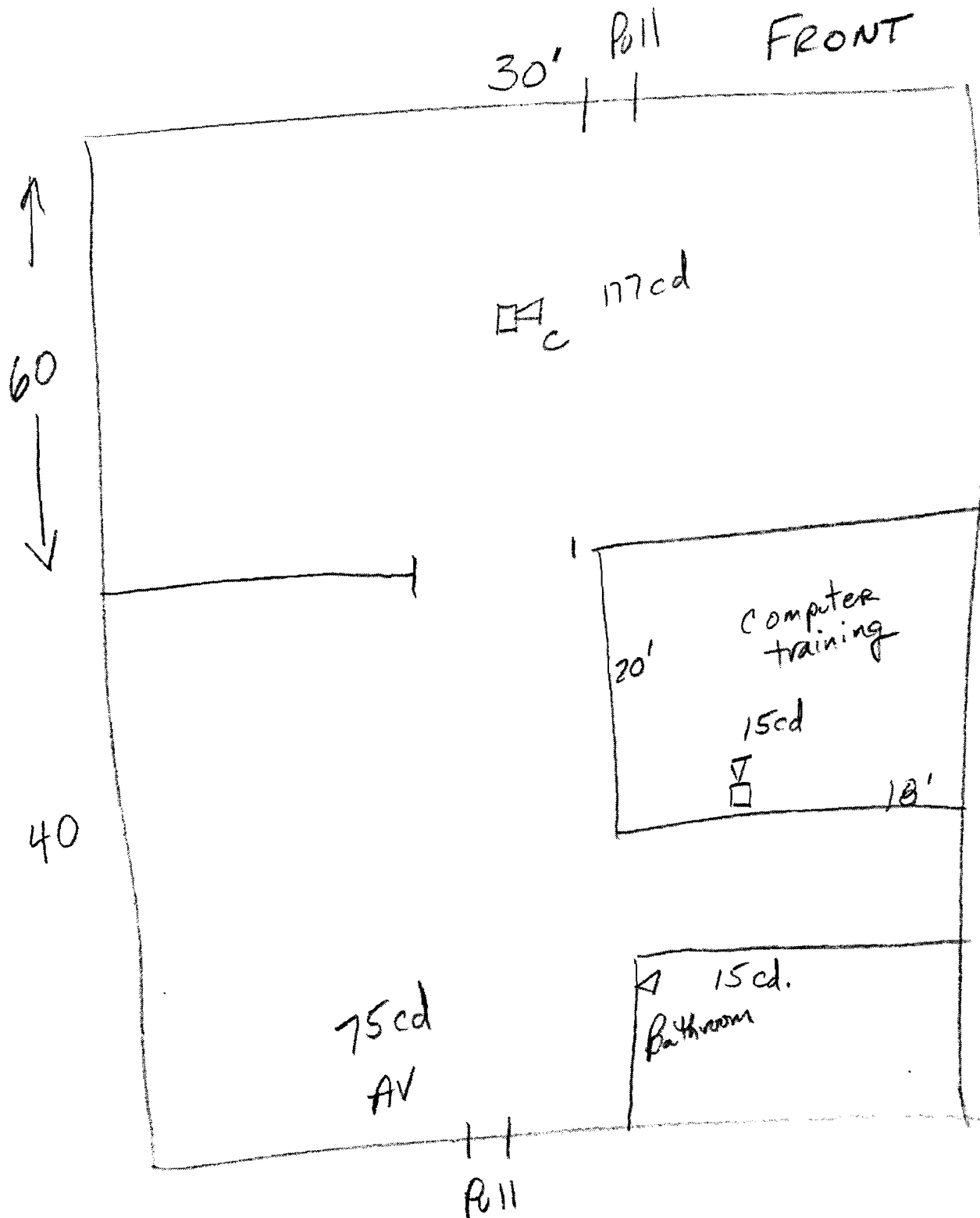
FRONT

# Full Belly Deli

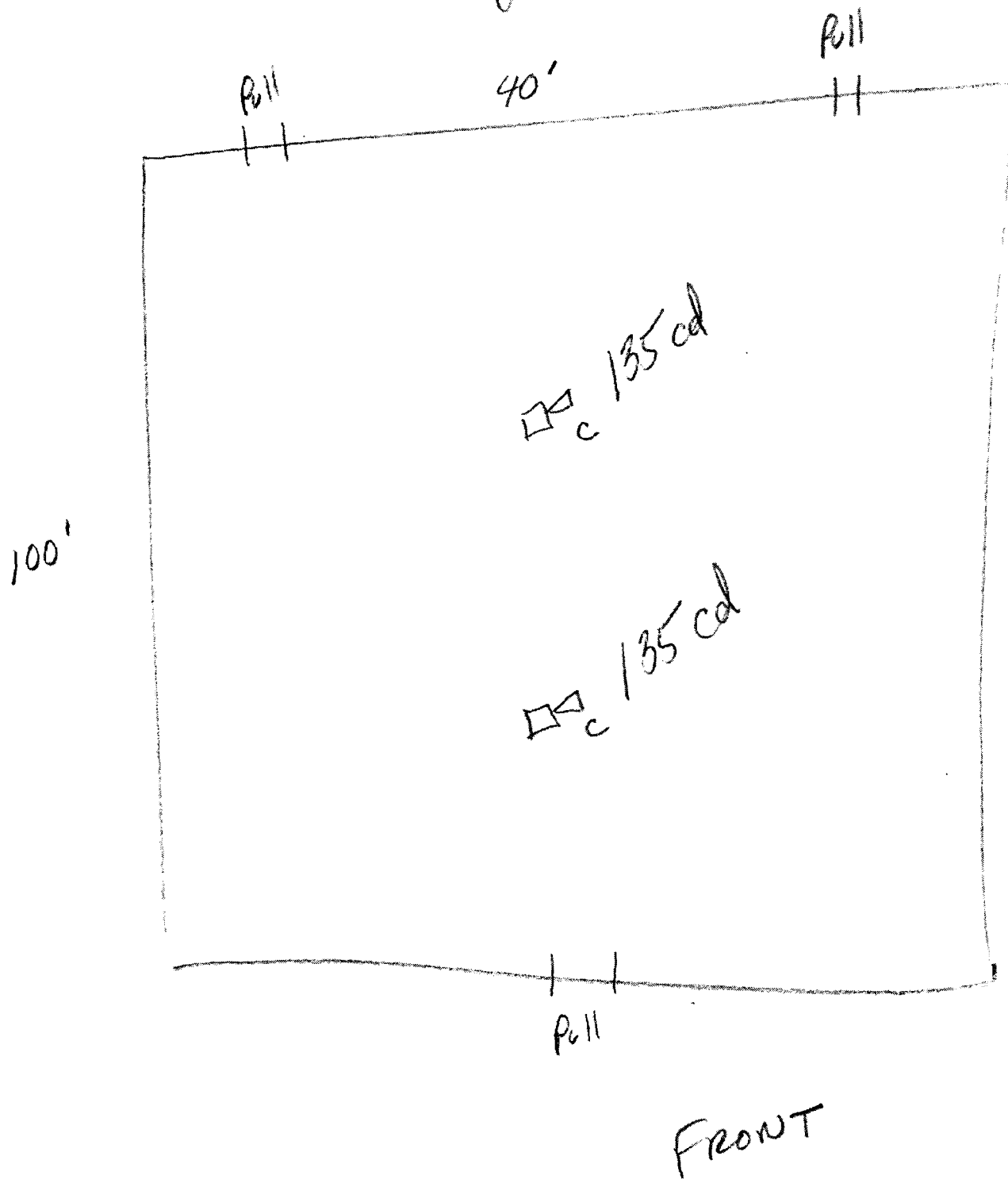




# Radio Shack



# Daddy's Junky Music





**Calculations Report for CEILING mounted strobes**  
**Room Size: 60 Ceiling Height: 15. Rated Candela: 150**

UL Angle (on axis = 0)	UL Angle (radians)	UL Wall% Vertical/ Horizontal	Lumens/sqft Horizontal/ Vertical
0	0.000	100	0.667
5	0.087	90	0.595
10	0.175	90	0.582
15	0.262	90	0.560
20	0.349	90	0.530
25	0.436	90	0.493
30	0.524	75	0.375
35	0.611	75	0.336
40	0.698	75	0.293
45	0.785	75	0.250
50	0.873	55	0.151
55	0.960	45	0.099
60	1.047	40	0.067
65	1.134	35	0.048
70	1.222	35	0.052
75	1.309	30	0.047
80	1.396	30	0.048
85	1.484	25	0.041
90	1.571	25	0.042

This electronic utility is provided on an 'as-is basis' by Wheelock, Inc. for the purpose of providing technical product information and specifications to assist the user in designing notification appliance circuits. There are no warranties of any kind, whether express or implied, including, but not limited to, any warranties of merchantability of fitness for any particular purpose, provided herewith relating to the information contained in this utility or to any calculations using this utility. Wheelock does not hold itself out as providing design or engineering services. Users of this utility are solely responsible for their own selection and use of products based upon information contained in this utility and calculations using this utility, and Wheelock shall have no liability therefore. This utility uses data provided by the user to perform the calculations described in Chapter 7 of the 2002 edition of NFPA 72, which permits the use of a performance based alternative in lieu of tables for spacing wall or ceiling mounted strobe appliances. These calculations are described in Section 7.5.4.3 as follows and are to be provided to the authority having jurisdiction:

To calculate performance based strobe coverage, the inverse square law is used to calculate the illumination at each of the angles in the horizontal and vertical planes per UL 1971 and the effect of polar distribution is included using the minimum percentages in UL 1971 or actual test results recorded by the Listing organization (per Section 7.5.4.3.2).

The calculated illumination is required to be at least 0.0375 lumens/ft squared at any point within the covered area (per Section 7.5.4.3.1).

The calculation points are in the horizontal and vertical planes in 5 degree increments per UL 1971 (to comply with Section 7.5.4.3.2).

For the effect of polar distribution (rated candela at each angle), the UL 1971 minimum percentages are used for the calculations. UL 1971 does not provide ratings for each angle based on actual test results.

This utility is based on square rooms with wall mounted strobes on the centerline of the wall and ceiling mounted strobes on the center of the ceiling.



FIRE ALARM SYSTEMS



**wheelock inc.**

Helping People Take Action<sup>SM</sup>

**Calculations Report for CEILING mounted strobes**  
**Room Size: 55 Ceiling Height: 15. Rated Candela: 135**

UL Angle (on axis = 0)	UL Angle (radians)	UL Wall% Vertical/ Horizontal	Lumens/sqft Horizontal/ Vertical
0	0.000	100	0.600
5	0.087	90	0.536
10	0.175	90	0.524
15	0.262	90	0.504
20	0.349	90	0.477
25	0.436	90	0.444
30	0.524	75	0.338
35	0.611	75	0.302
40	0.698	75	0.264
45	0.785	75	0.225
50	0.873	55	0.136
55	0.960	45	0.089
60	1.047	40	0.060
65	1.134	35	0.051
70	1.222	35	0.055
75	1.309	30	0.050
80	1.396	30	0.052
85	1.484	25	0.044
90	1.571	25	0.045

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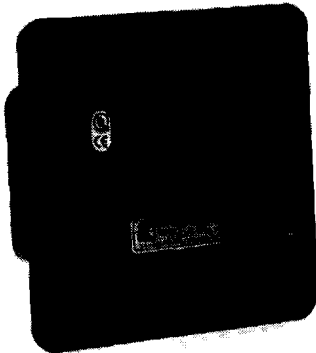
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This utility is based on square rooms with wall mounted strobes on the centerline of the wall and ceiling mounted strobes on the center of the ceiling.

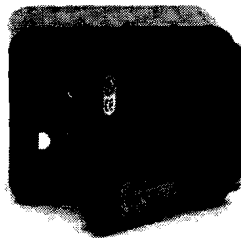


# Knox-Box® 3200 Series HINGED DOOR MODEL

Recessed Mount  
with Face Flange



Surface Mount



The number one high-security KNOX-BOX® is used for most commercial applications including businesses, schools, government and public buildings, community associations and apartment complexes. The 3200 Series KNOX-BOX holds keys, access cards and other small items necessary for emergency access.

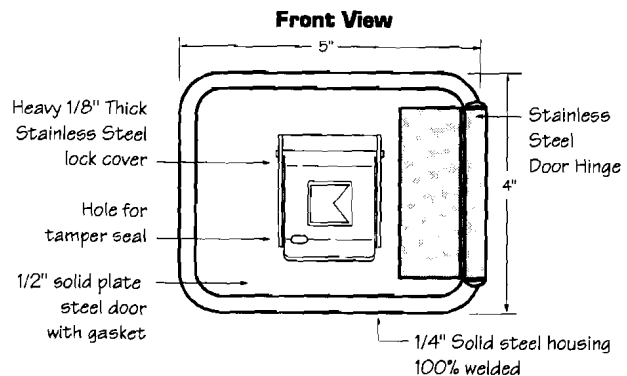
The hinged-door 3200 Series KNOX-BOX is more convenient than the lift-off door version because it allows single-handed operation and opened or closed, it's all one unit.

## Features and Benefits

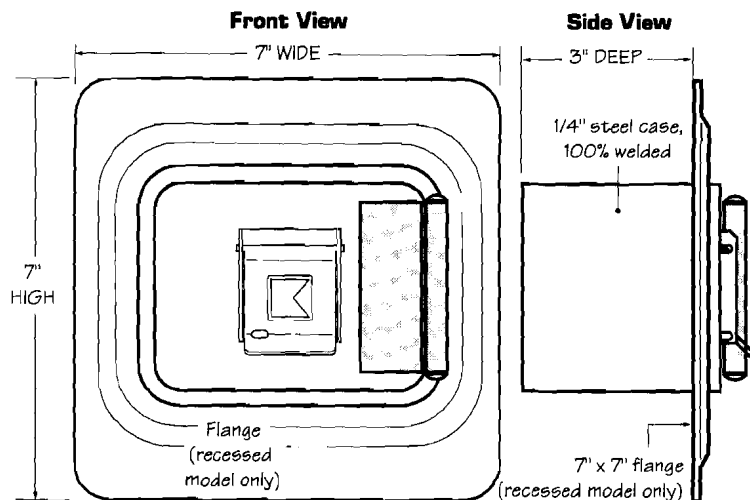
- Holds up to 10 keys or 1 access card in interior compartment
- Ensures high security. Box and lock are UL® Listed
- Includes a Knox-Coat® proprietary finishing process that protects Knox products up to four times better than standard powder coat
- Resists moist conditions with a weather resistant door gasket
- Hinged door allows single-handed operation
- Colors: Black, Dark Bronze or Aluminum
- Weight: Surface mount - 8 lbs.  
Recessed mount - 9 lbs.

## Options

- Alarm tamper switches (UL Listed)
- Additional rust and corrosion protection (Aluminization)
- Recessed Mounting Kit (RMK) for recessed models only
- Inside switch for use on electrical doors, gates and other electrical equipment



**3200 Surface Mount**



**3200 Recessed Mount**

## Ordering Specifications

**To insure procurement and delivery of the 3200 Series KNOX-BOX, it is suggested that the following specification paragraph be used:**

**KNOX-BOX** surface/recessed mount with hinged door, with/without UL Listed tamper switches. 1/4" plate steel housing, 1/2" thick steel door with interior gasket seal and stainless steel door hinge. Box and lock UL Listed. Lock has 1/8" thick stainless steel dust cover with tamper seal mounting capability.

Exterior Dimensions: Surface mount body- 4"H x 5"W x 3 1/4"D  
Recessed mount flange- 7"H x 7"W

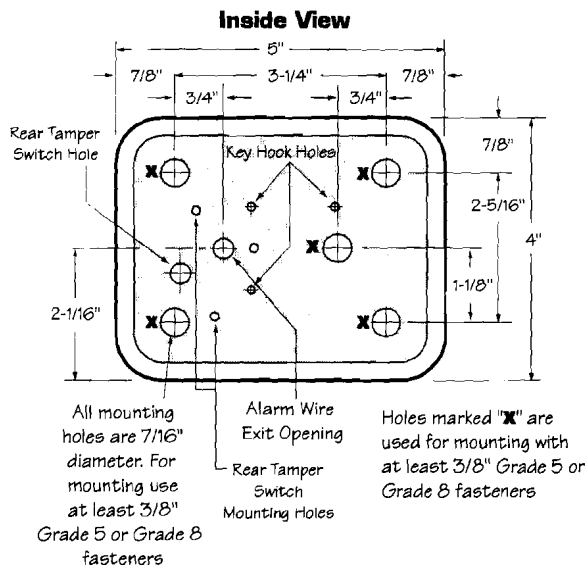
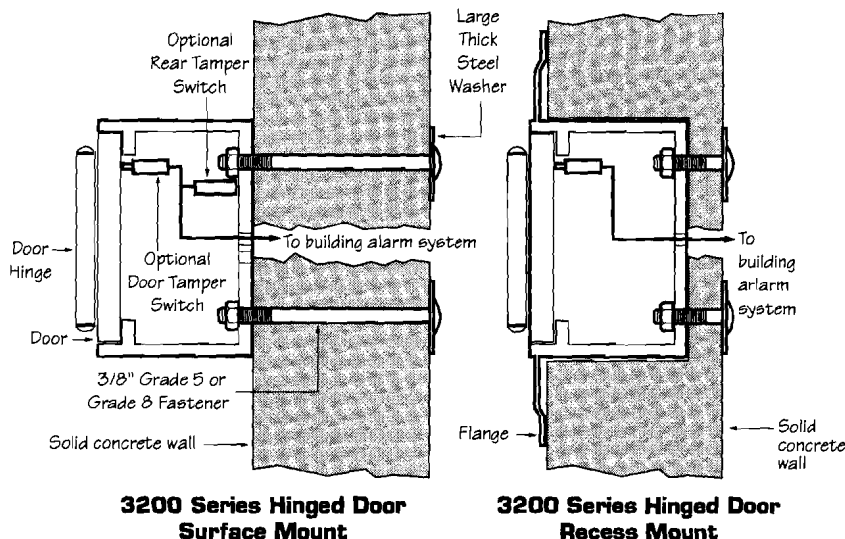
Lock: UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.

Finish: Knox-Coat® proprietary finishing process  
Colors: Black, Dark Bronze or Aluminum

P/N: 3200 Series KNOX-BOX (mfr's cat. ID)

Mfr's Name: **KNOX COMPANY**

**Suggested minimum mounting height  
6 feet above ground**



**Attention: KNOX-BOX® is a very strong device that MUST be mounted properly to ensure maximum security and resist physical attack.**

**Knox® Rapid Entry System**

The Knox Company manufactures a complete line of high security products including Knox-Box key boxes, key vaults, cabinets, key switches, padlocks, locking FDC caps, plugs and electronic master key security systems. For more information or technical assistance, please call Customer Service at 1-800-552-5669.

**Recessed Mounting Kit**

The 3200 Recessed Mounting Kit (RMK) is used for recessed models only. It contains a shell housing and mounting hardware to be cast-in-place in new concrete or masonry construction. After construction is completed, the KNOX-BOX mounts inside the RMK. The RMK may only be used in new concrete or masonry construction.

**Installation In Cast Concrete**

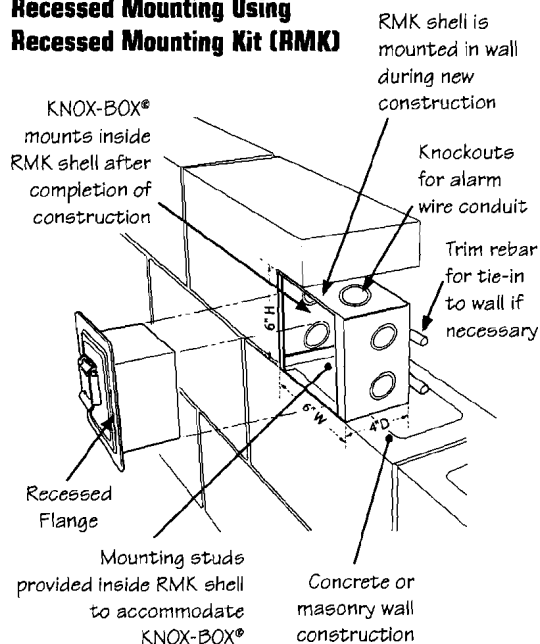
The optional Recessed Mounting Kit is for use in new concrete or masonry construction only. The kit includes a shell housing and mounting hardware to be cast-in-place. The KNOX-BOX is mounted into the shell housing after construction is completed.

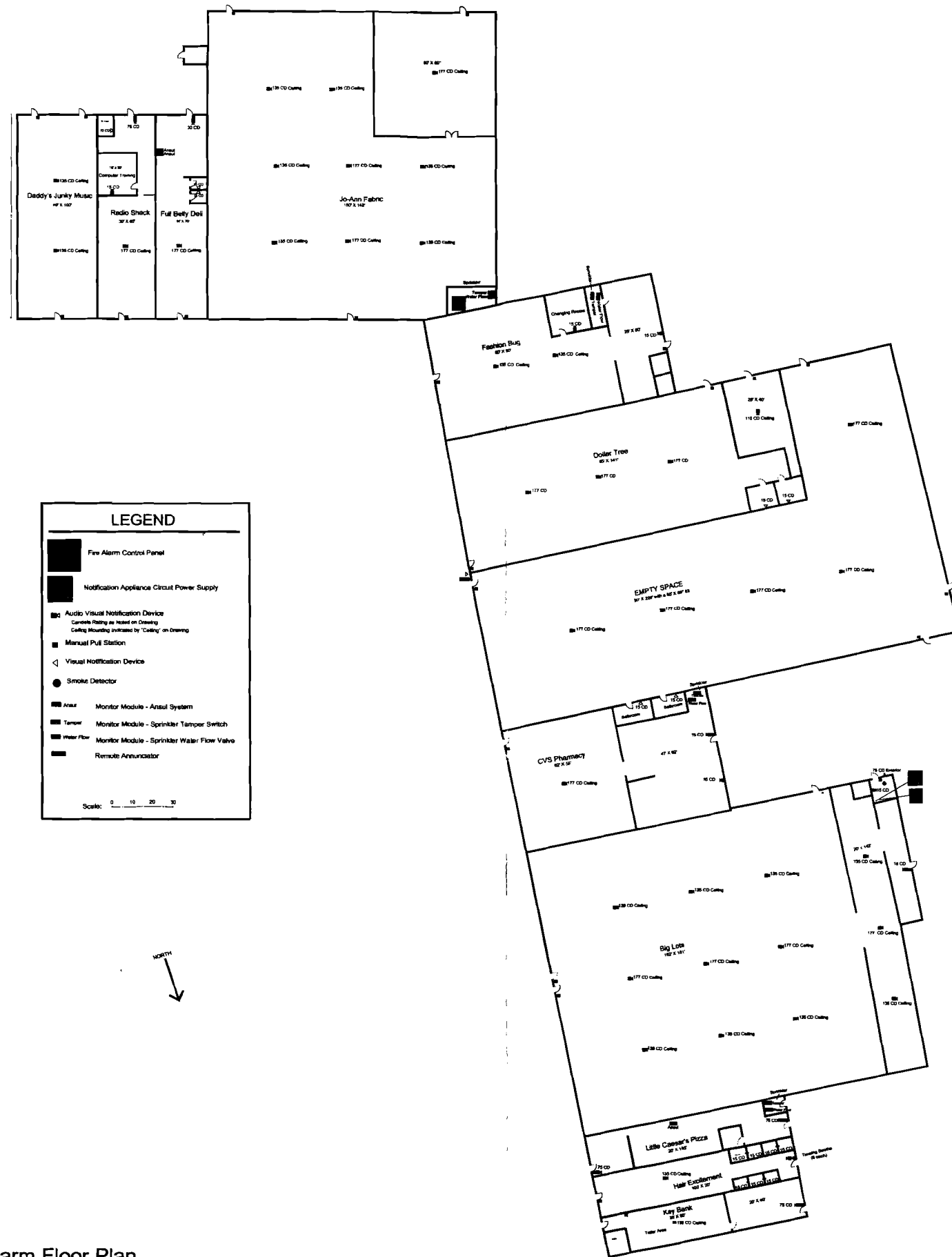
**Dimensions**

Rough-in Dimensions: 6-1/2"H x 6-1/2"W x 5"D

**IMPORTANT:** Care should be taken to insure that the front of the RMK shell housing, including the cover plate and screw heads, is flush with the finish wall. The RMK must be plumbed to insure vertical alignment of the vault.

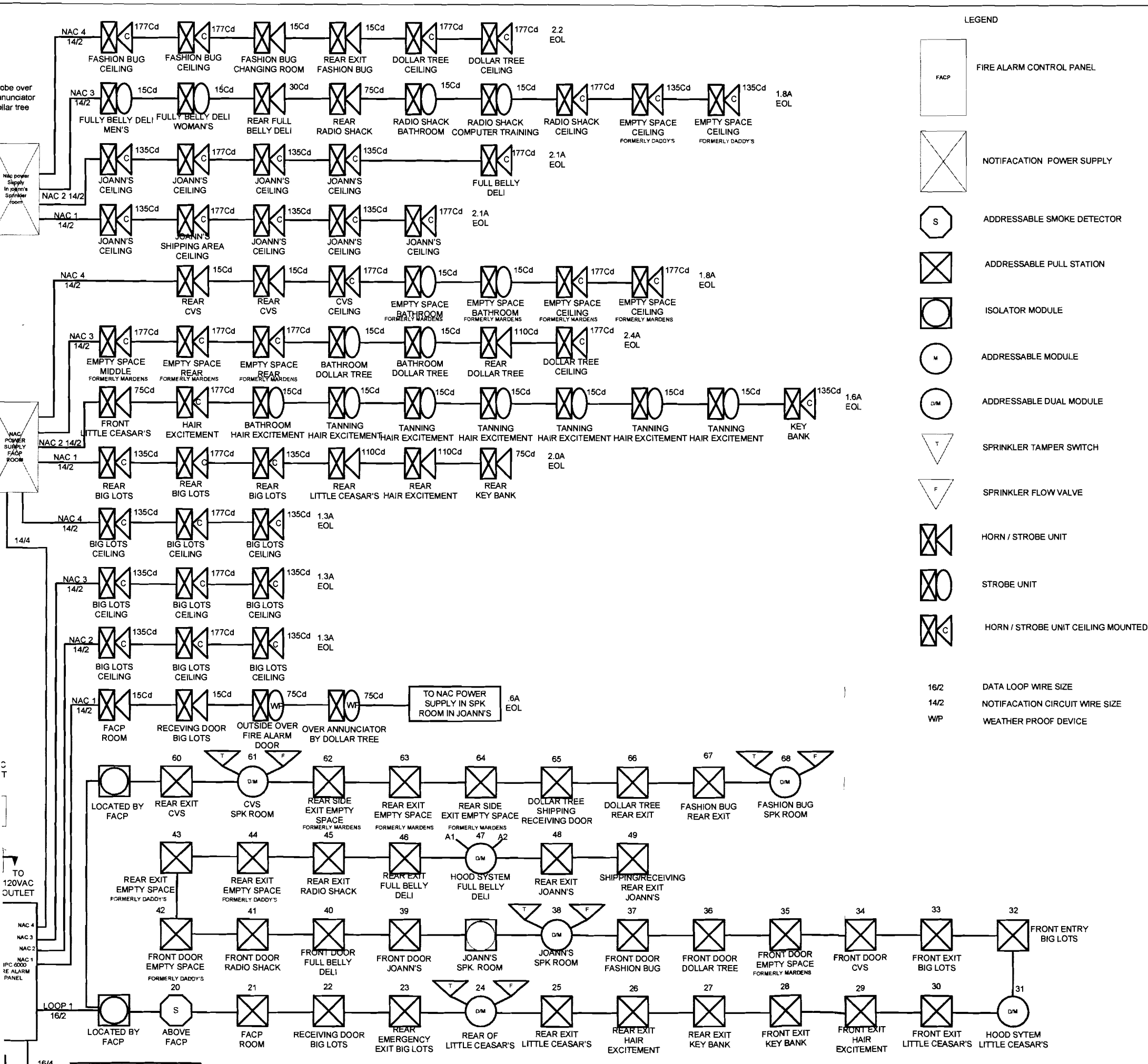
**Recessed Mounting Using Recessed Mounting Kit (RMK)**





Fire Alarm Floor Plan  
Pine Tree Shopping Center  
1100 Brighton Ave  
Portland, ME

Wescott Electric LLC  
www.wescottelectricllc.com  
Drawn By: D. Wescott  
Revision:  
11/16/11



**PROTECTION PROFESSIONALS**

CONSULTANT: **PROTECTION PROFESSIONALS**

PROJECT: **PINE TREE SHOPPING CENTER PORTLAND, MAINE**

**RISER**

DRAWING: \_\_\_\_\_

REVISIONS

DATE: 11-10-11

SCALE: \_\_\_\_\_

DRAWN BY: SA

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