Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 100275

This is to certify that COTTON STREET DEVELOPMENT LLC /Anthony Mancini Elect

has permission to install fire alarm

AT 505 FORE ST **CBL** 038 C016001

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

Apply to Public Works for street line and grade if nature of work requires such information.	Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.	A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

PERMIT ISSUED

APR 12 2010

CITY OF PORTLAND

Department Name

OTHER REQUIRED APPROVALS

Fire Dept. BJ Walsh (2nd)

Health Dept.

Appeal Board

Other

Jamie Bourke 4/7/10

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
10-0275		038 C016001

Location of Construction:	Owner Name:	Owner Address:	Phone:
505 FORE ST	COTTON STREET DEVELOPME	PO BOX 6799	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Anthony Mancini Electrical Contract	179 Sheridan Street Portland	2077745829
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Fire Alarm System	B-3

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commerical Restaurant Legal use: Restaurant 1st floor with offices above	Commercial Restaurant - install fire alarm	$40.00	$1,500.00	1

Proposed Project Description:
install fire alarm

FIRE DEPT: ☒ Approved w/conditions ☐ Denied
4/7/10
Signature: [signature]

INSPECTION:
Use Group: A-2/B Type: Fire Alarm
IBC-2003
Signature: GMB 4/7/10

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)
Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied
Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	03/22/2010

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

PERMIT ISSUED
APR 12 2010
CITY OF PORTLAND

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☑ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 3/22/10	Date:	Date: 3/23/10

D. Andrews

CERTIFICATION

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

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

City of Portland, Maine - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
10-0275	03/22/2010	038 C016001

Location of Construction:	Owner Name:	Owner Address:	Phone:
505 FORE ST	COTTON STREET DEVELOPME	PO BOX 6799	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Anthony Mancini Electrical Contract	179 Sheridan Street Portland	(207) 774-5829
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Fire Alarm System	

Proposed Use:	Proposed Project Description:
Commercial Restaurant - install fire alarm	install fire alarm

Dept: Historic **Status:** Approved with Conditions **Reviewer:** Deborah Andrews **Approval Date:** 03/23/2010

Note: **Ok to Issue:** ☑

1) * Existing Knox box adjacent to Cotton Street entrance to be used; no additional exterior fixtures.

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 03/22/2010

Note: **Ok to Issue:** ☑

1) ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
2) This property shall remain a restaurant on the 1st floor with offices above. Any change of use shall require a separate permit application for review and approval.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Jeanine Bourke **Approval Date:** 04/07/2010

Note: **Ok to Issue:** ☑

1) Separate permits are required for any electrical, plumbing, sprinkler, fire alarm HVAC systems, heating appliances, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
2) Fire Alarm systems shall be installed per Sec. 907 of the IBC 2003

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Ben Wallace Jr. **Approval Date:** 04/07/2010

Note: **Ok to Issue:** ☑

1) As-built documents shall be submitted in pdf to the Building Inspections Office upon completion of job.
2) System acceptance and commissioning must be co-ordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.
3) All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP labeled "FIRE ALARM RECORDS". Records cabinate, FACP, annunciator(s), and pull stations shall be keyed alike.
4) Installation of a Fire Alarm system requires a Knox Box to be installed per city crdinance
5) 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.

Comments:

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

RECEIVED
MAR 22 2010
Dept. of Building Inspections
City of Portland Maine

Fire Alarm Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

Installation address: 505 Fore Street CBL: 38-C-16

Exact location: (within structure) First Floor and Basement

Type of occupancy(s) (NFPA & ICC): Restaurant and Bar

Building owner: Kerry Anderson

System Designer (point of contact): Dave Gagnon (Must be)

Designer phone: 207-883-3473 E-mail: daveg@norrisinc.com

Installing contractor: Anthony Mancini Inc Certificate of Fitness No: T1010

Contractor phone: 207-774-5829 E-mail: gmancini@mancinielectric.com

This is a new application: YES (●) NO ( )

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

The following documents shall be provided with this application:

- [x] Floor plans
- [x] Wiring diagram
- [ ] Annunciator details
- [x] Equipment data sheets
- [x] Battery & voltage drop calculations
- [x] Input/ Output Matrix
- [x] Designer qualifications
- [x] Electrical Permit Pulled (check alarm/com)

COST OF WORK: $1,500.00

PERMIT FEE: $ 40.00

($10 PER $1,000 + $30 FOR THE FIRST $1,000)

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

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

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

Applicant signature: Gino Mancini Date: March 19, 2010

NORRIS INC

Prepared For Tomorrow; Delivered Today

LOSS PREVENTION *BUILDING AUTOMATION* *COMMUNICATIONS*

SUBMITTAL PACKAGE

Project:	**SIANO'S PIZZERIA**
System:	**Fire Alarm Addtition**
Submitted By:	**Norris Inc.** **2257 West Broadway** **South Portland, Maine 04106** **Telephone: (800) 370-3473**
Project Manager:	**Corey Chapman**
Electrical Contractor:	**Mancini Electric**
Date:	**3/5/10**

Norris Inc
2257 West Broadway
South Portland, ME 04106

1-800-370-3473

*** * SUBMITTAL * *** 3/5/2010

Project Number: 306943SP

For :
MANCINI ELECTRIC
Siano's Pizzeria
Customer P.O.: X

* * SUBMITTAL * * to:
MANCINI ELECTRIC
179 SHERIDAN STREET
PORTLAND, ME 04101-

Tel: 207-774-5829 Fax: 207-772-1686

Project Site:
MANCINI ELECTRIC
GINO

179 SHERIDAN STREET
PORTLAND, ME 04101-

Mfr-Part No.	Qty	Description	Unit Price	Extended
	0	Notifier 500 (existing)		
	7	Pullstation, Red Die Cast		
	7	i# Photo Detector, 2-wire, 12/24 Vdc, Photo.		
	1	194 ¦F (90¦ C) fixed temperature.		
	6	HORN/STRB,S2,24VDC,SEL,W/R		
	5	STRB 24V,15/30/75/110 CNDL RED		
	1	STRB,24VDC,75C,WP,RED		
	1	BACKBOX,WP,RSSWP		
		Contractor Discount		

NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES®

HEREBY CERTIFIES THAT

David S. Gagnon

HAS ATTAINED THE GRADE OF

LEVEL IV

IN FIRE PROTECTION ENGINEERING TECHNOLOGY
FIRE ALARM SYSTEMS

AND RECOGNIZES THAT THROUGH EDUCATION, EXPERIENCE, AND KNOWLEDGE THIS PERSON HAS MET THE STANDARDS SET FORTH BY THIS INSTITUTE

Certification Valid through April 1, 2011

CERTIFICATION NUMBER 88203

Leonel Saenz Jr.

CHAIRMAN OF THE BOARD OF GOVERNORS, NICET

SPONSORED BY THE NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Reliable Security Group P.O. Box 849 Lakewood CA. 90714
P 562-529-5100 F 562-529-5102

MANUAL STATIONS

The RMS manual pull station is a high quality non toxic die-cast manual pull station manufactured entirely in the U.S.A. Low profile design and smooth edges offer an attractive yet functional design. All components are prepainted or have plated surfaces to inhibit corrision. Electrically the RMS manual pull station is unbeatable with 10 amp snap action switch offered in all possible contact arrangements (including gold contacts). The RMS pull station can be used with or without a break glass rod with replacement requiring no special tools.

UL No. 1154

Other features include

- Lift and pull
- Break glass cover
- Institutional key lock
- Weather and explosion proof versions
- All stations offer hex screw or key lock access
- Private labeling and special options also available

( ) represents switch type plus pigtail leads or terminal block connections

Made in the U.S.A.

RMS IT Shown

CONSTRUCTION • MATERIAL

- Painted Die Cast Housing
- 14 Ga Plated Steel Back Plate
- Corrision Inhibited Surfaces
- Terminal Block (4 Position)
- Single Gang Mounting
- 10 AMP Snap Action Switch (S.P.S.T.,S.P.D.T.)

SPECIFICATIONS

Electrical

Switch	10 amp @ 120vac
Gold Contact	1.0 amp @ 120vac
Key Switch	0.5 amp @ 30vdc
Phone Jack	0.1 amp @ 24vdc

Dimensions

Station	Width	3.200in
	Length	4.750in
	Depth	0.875in
Weight		15.5oz/420 grams
Mount		Single gang
RMS-DAH	Width	3.325in
	Length	4.750in
	Depth	1.625in
Weight		1lb 9oz/756 grams
RMS-LP and LPH	Width	3.325in
	Length	4.750in
	Depth	1.500in
Weight		1lb 4oz/560 grams

ORDERING INFORMATION

RMS ( ) ( )

Manual Station Series
Switch type plus pigtail leads or terminal block connections
Package options

Options (add to above)

- -1P S.P.S.T. with pigtails
- -1T S.P.S.T. with terminal block
- -2T D.P.S.T. with terminal block
- -6T D.P.D.T. with terminal block
- -PS Presignal key switch 0.5 amp @ 30vdc
- -LP Lift and pull dual action adaptor
- -LPH Lift and pull dual halon adaptor
- -LED Light emitting diode (red/green/yellow)
- -GCS S.P.D.T. Gold Contact 1.0amp @ 120vac
- -GCD D.P.D.T. Gold Contact 1.0amp @ 120vac
- -PJ Phone Jack 0.1amp @ 24vdc
- -KL Key lock access (specify key type)
- -BB Surface mounting back box
- -EXC Exit alarm only sign

Example: RMS-IT-LP-KL
Single pole throw switch with terminal block,
lift and pull cover and key lock access

Note: Meets UL,FM,CSFM and BSA requirements. Quality pricing/Private labeling available.

i³ Series

Photoelectric Smoke Detectors

NOTIFIER® by Honeywell

Conventional Initiating Devices

General

System Sensor's i³™ Series photoelectric and photoelectric/thermal smoke detectors represent a significant advancement in conventional detection, incorporating three key features: installation ease, intelligence, and instant inspection.

Installation ease. The i³ Series redefines installation ease with its plug-in design. This allows an installer to pre-wire the bases included with the heads. The large wire-entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of backbox mounting methods, as well as direct mounting with drywall anchors. To complete the installation, i³ Series heads plug into the base with a simple Stop-Drop 'N Lock™ action.

Intelligence. i³ Series detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms, to minimize nuisance alarms, are standard in the i³ Series. When connected to the 2W-MOD loop test/maintenance module, an SFP-2402/-2404 panel, SFP-5UD/10UD, or RP-2001/2002 two-wire i³ detectors are capable of generating a remote maintenance signal when they need cleaning. This signal is indicated by LEDs located at the module and at the panel. To read the sensitivity of i³ detectors, the SENS-RDR is a wireless device that displays sensitivity in terms of percent-per-foot obscuration.

Instant inspection. The i³ Series provides wide-angle red and green LED indicators for instant inspection of detector condition. The LEDs indicate: normal standby, out-of-sensitivity, alarm, or freeze trouble conditions. The "EZ Walk" loop test feature is available on two-wire i³ Series detectors when connected to the 2W-MOD loop test/maintenance module. The "EZ Walk" feature verifies the initiating loop wiring by providing LED status indication at each detector.

Features

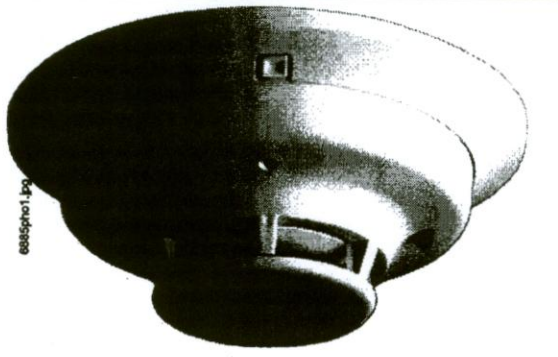
- Plug-in detector line — mounting base included.
- Large wire-entry port.
- In-line terminals with SEMS screws.
- Mounts to octagonal and single-gang backboxes, 4" (101.6 mm) square backboxes, or directly to ceiling.
- Stop-Drop 'N Lock attachment to base.
- Removable detector cover and chamber for easy cleaning.
- Built-in remote maintenance signaling.
- Drift compensation and smoothing algorithms.
- Simplified sensitivity measurement.
- Wide-angle, dual-color LED indication.
- Loop testing via "EZ Walk" feature.
- Built-in test switch.

Specifications

PHYSICAL SPECIFICATIONS

Operating Temperature Range: For models 2W-B and 4W-B: 32°F to 120°F (0°C to 49°C); for thermal models 2WT-B and 4WT-B: 32°F to 100°F (0°C to 37.8°C).

Operating Humidity Range: 0% – 95% RH, non-condensing.



Thermal Sensor: 135°F (57.2°C) fixed (models 2WT-B, 4WT-B).

Freeze Trouble: 41°F (5°C) (models 2WT-B and 4WT-B).

Sensitivity: 2.5%/foot (0.762%/meter) nominal.

Input Terminals: Utilize 14 to 22 AWG wire.

Dimensions (including base): 5.3" (134.62 mm) diameter, 2.0" inches (50.8 mm) high.

Weight: 6.3 oz. (178.6 grams).

Mounting Options: 3.5" (88.9 mm) octagonal backbox; 4" (101.6 mm) octagonal backbox; single-gang backbox; 4" (101.6 mm) square backbox with a plaster ring; or direct mount to ceiling.

ELECTRICAL SPECIFICATIONS

Operating Voltage: 12/24 V non-polarized nominal; 8.5 V minimum; 35 V maximum.

Maximum Alarm Current: *For two-wire models:* 130 mA limited by control panel; *For four-wire models:* 20 mA @ 12 V, 23 mA @ 24 V.

Alarm Contact Ratings: For four-wire models: 0.5 A @ 30 VAC/VDC; not applicable for two-wire models.

Architectural/Engineering Specifications

Smoke detector shall be a System Sensor i³ Series model number _____, Listed to Underwriters Laboratories UL 268 Fire Protection Signaling Systems. The detector shall be a photoelectric type (models 2W-B, 4W-B) or a combination photoelectric/thermal (models 2WT-B, 4WT-B) with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3.5" (88.9 mm) and 4" (101.6 mm) octagonal, single-gang, and 4" (101.6 mm) square backboxes with a plaster ring, or directly mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5%/foot (0.762%/meter) as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms. The detector shall provide dual-color LED indication which blinks to indicate power-up, normal standby, out-of-sensitivity, alarm, and freeze trouble

(models 2WT-B, 4WT-B) conditions. When used in conjunction with the 2W-MOD module, two-wire models shall include a maintenance signal to indicate the need for maintenance at the alarm control panel, and shall provide a loop testing capability to verify the circuit without testing each detector individually.

Agency Listings and Approvals

In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. *Consult factory for latest listing status.*

- **UL/ULC Listed:** S911
- **FM Approved**
- **CSFM:** 7272-1653:152
- **MEA:** 290-01-E
- **Maryland State Fire Marshal:** Permit # 2093

LED Modes	Green LED	Red LED
Power Up	Blink every 10 seconds	Blink every 10 seconds
Normal (Standby)	Blink every 5 seconds	OFF
Out of Sensitivity	OFF	Blink every 5 seconds
Freeze Trouble	OFF	Blink every 10 seconds
Alarm	OFF	Solid ON
Power Up Sequence for LED Indication		
Condition		**Duration**
Initial LED Status Indication		80 Seconds

Product Line Information

2W-B: Two-wire photoelectric smoke detector.

C2W-BA: Same as 2W-B, ULC listing.

2WT-B: Two-wire photoelectric smoke detector with 135°F (57.2°C) fixed thermal sensor.

C2WT-BA: Same as 2WT-B, ULC listing.

4W-B: Four-wire photoelectric smoke detector.

C4W-BA: Same as 4W-B, ULC listing.

4WT-B: Four-wire photoelectric smoke detector with 135°F (57.2°C) fixed thermal sensor.

C4WT-BA: Same as 4WT-B, ULC listing.

ACCESSORIES:

2W-MOD2: Two-wire loop test/maintenance module.

SENS-RDR: Sensitivity reader.

A77-AB2: Retrofit adapter bracket, 6.6" (167.7cm) diameter.

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

5600 Series

Mechanical Heat Detectors

NOTIFIER® by Honeywell

Conventional Initiating Devices

GENERAL

System Sensor's 5600 Series mechanical heat detectors offer property protection against fire and for non-life-safety installations, where smoke detectors are inappropriate.

Multiple configurations. The 5600 Series offers a full line of configurations to accommodate a broad range of applications. Both single- and dual-circuit models are offered, each available for low- and high-temperature ratings with either fixed-temperature or combination fixed-temperature/rate-of-rise (ROR) activation. The ROR element of the fixed/ROR models is restorable, to accommodate field-testing the unit.

Installation flexibility. To satisfy a variety of installations, the 5600 Series easily mounts to single-gang and octagonal backboxes. These models also accommodate 4" (101.6 mm) square backboxes when used with a plaster ring. The mounting bracket is reversible to allow for flush- and surface-mount backbox installations.

Visual identification. The 5600 Series provides clear markings on the exterior of the unit to ensure that the proper detector is being used. Alphanumeric characters identify the activation method, as well as the temperature rating, in degrees Fahrenheit and Celsius. Fixed temperature models are identified "FX", while combination fixed/rate-of-rise units are marked "FX/ROR". The 5600 Series also provides a collector as a post-activation indicator. Once the detector has been activated, the collector drops from the unit to allow easy identification of the specific unit in alarm.

FEATURES

- Multiple configurations available:
  - Fixed-temperature (non-resettable) or combination fixed (non-resettable)/rate-of-rise (self-restoring).
  - Low-temperature and high-temperature ratings.
  - Single-circuit and dual-circuit.
- Easy-to-read alphanumeric identification of detector type and temperature rating.
- External collector provides visual indication of activation.
- Reversible mounting bracket for flush- and surface-mount installations.
- Flexible mounting capabilities: single-gang, 3.5" or 4" octagonal, 4" (101.6 mm) square with plaster ring.
- Easy-to-use terminal screws provide a more positive wiring connection.
- Low-profile design to coordinate with room aesthetics.

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL Listed:** S2101
- **ULC Listed:** S2101 (all with "A" suffix)
- **MEA:** 199-03-E
- **CSFM:** 7270-1209:227, 7270-1653:167
- **FM Approved**

SPECIFICATIONS

PHYSICAL SPECIFICATIONS

Maximum installation temperature:

For models 5601P, 5603, 5621, 5623: 100°F (38°C).

For models 5602, 5604, 5622, 5624: 150°F (65.6°C).

Alarm temperature:

For models 5601P, 5603, 5621, 5623: 135°F (57°C).

For models 5602, 5604, 5622, 5624: 194°F (90°C).

Rate-of-Rise Threshold: 15°F (8.3°C) per minute (models 5601, 5602, 5621, 5622 only).

Operating Humidity Range: 5% to 95% RH noncondensing.

Input Terminals: non-polarized, accept 14 to 22 AWG (2.0 to 0.33 mm^2).

Dimensions: diameter with mounting bracket: 4.57" (116 mm); height with mounting bracket: 1.69" (43 mm).

Weight: 6 oz. (170 grams).

Mounting Options: 3.5" (88.9 mm) octagonal backbox; 4" (101.6 mm) octagonal backbox; single-gang backbox; 4" (101.6 mm) square backbox with a square-to-round plaster ring.

ELECTRICAL SPECIFICATIONS

Operating Voltage	Contact Ratings (resistive)
6 - 125 VAC	3.0 A
6 - 28 VDC	1.0 A
125 VDC	0.3 A
250 VDC	0.1 A

Mechanical heat detector shall be a System Sensor 5600 Series model number _____, Listed to Underwriters Laboratories UL 521 for Heat Detectors for Fire Protective Signaling Systems. The detector shall be either a single-circuit or a dual-circuit type, normally open. The detector shall be rated for activation at either 135°F (57°C) or 194°F (90°C), and shall activate by means of a fixed-temperature thermal sensor, or a combination fixed-temperature/rate-of-rise thermal sensor. The rate-of-rise element shall be activated by a rapid rise in temperature, approximately 15°F (8.3°C) per minute. The detector shall include a reversible mounting bracket for mount-

ing to 3.5-inch (88.9 mm) octagonal, 4-inch (101.6 mm) octagonal, single gang, and 4-inch (101.6 mm) square backboxes with a square-to-round plaster ring. Wiring connections shall be made by means of SEMS screws that shall accommodate 14 – 22 AWG wire. The detector shall contain alphanumeric markings on the exterior of the housing to identify its temperature rating and activation method. The rate-of-rise element of combination fixed-temperature/rate-of-rise models shall be restorable, to allow for field-testing. The detectors shall include an external collector that shall drop upon activation to identify the unit in alarm.

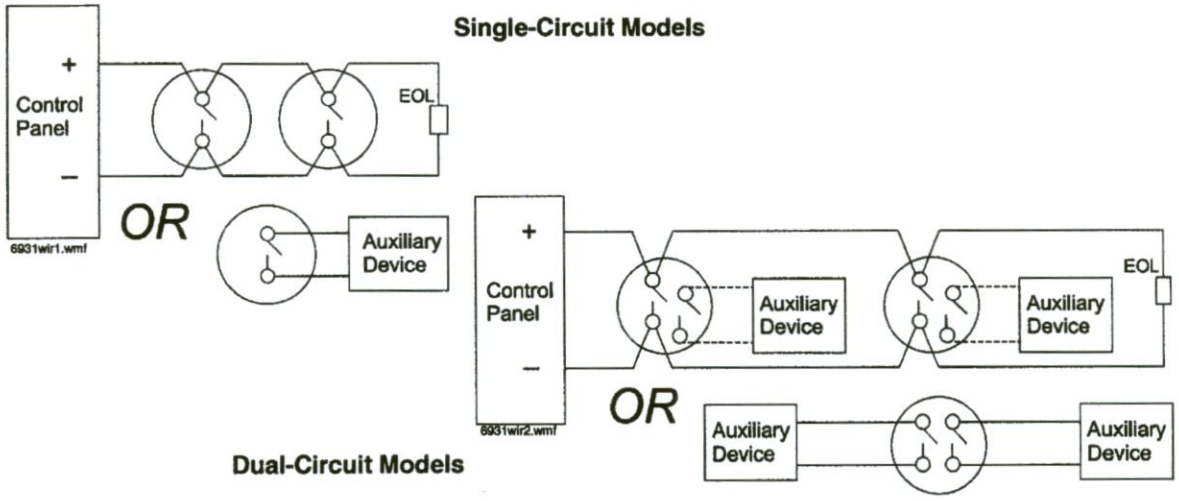
ORDERING INFORMATION

Model*	Identification Method on Exterior	Circuit	Temperature Rating	Activation	UL Protected Spacing, 10' (3.048 m) Ceiling*
5601P	None	Single	135°F (57°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5602	Lettering	Single	194°F (90°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5603	Lettering	Single	135°F (57°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)
5604	Lettering	Single	194°F (90°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)
5621	Lettering	Dual	135°F (57°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5622	Lettering	Dual	194°F (90°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5623	Lettering	Dual	135°F (57°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)
5624	Lettering	Dual	194°F (90°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)

NOTE: *Refer to NFPA 72 guidelines for spacing reductions when ceiling heights exceed 10 feet (3.048 m).*

** Add an "A" to part number for ULC model.*

WIRING DIAGRAMS



For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

Wheelock NS/NH Series

NS Series Horn Strobes
NH Series Horns

NOTIFIER® by Honeywell

Audio/Visual Devices

General

The Wheelock Series NS Horn Strobe Appliances will satisfy virtually all requirements for indoor, wall mount applications.

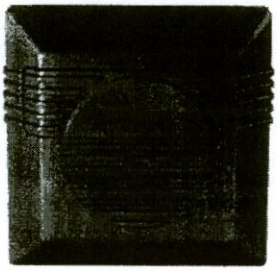
The Series NH Horn and the horn portion of the Series NS include a selectable continuous horn tone or temporal pattern (Code 3) with selectable dBA settings of 90 or 95 dBA.

Strobe options include 1575cd or Wheelock's patented Multi-Candela strobe with field selectable candela settings of 15/30/75/110cd.

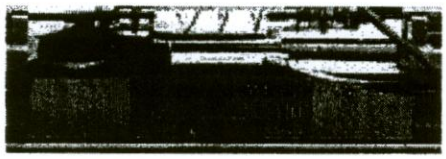
These versatile Horn Strobe Appliances may be synchronized when used in conjunction with the Wheelock SM or DSM Sync Modules or a Power Supply with the Wheelock patented Sync Protocol. Additionally, the audible may be silenced while maintaining strobe activation.

All models of the Series NS and NH are designed for maximum performance, reliability and cost-effectiveness while meeting or exceeding the latest requirements of NFPA 72/ANSI 117.1/UFC and UL Standards 1971 and 464 as well as meeting ADA requirements concerning photosensitive epilepsy.

NS Horn Strobe



NH Horn



Multi-Candela Indicator
(bottom of Strobe Lens)

Features

- Field selectable Candela settings 15/30/75/110cd (24 VDC Multi-Candela models) or 1575cd in 12 or 24 VDC.
- Selectable Continuous Horn or Temporal (Code 3).
- 2 selectable dBA settings of 90 and 95 dBA in both tones.
- 12 and 24 VDC models with UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage.
- Patented Universal Mounting Plate.
- Wall mount.
- ADA/NFPA/UFC/ANSI compliant.
- Complies with OSHA 29, Part 1910.165.
- NH Horn is selectable 12 or 24 VDC in 1 unit.
- Synchronize with Wheelock SM or DSM Sync Module or the Power Supply with built-in Sync Protocol.
- Patent Pending Universal Mounting Plate for single-gang, double-gang 4" (10.16c m) square, or 100 mm European backboxes, or Wheelock's SHBB shallow surface backbox.
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires.

General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range." Note that NFPA 72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second.
- All candela ratings represent minimum effective Strobe intensity based on UL Standard 1971.
- Series NS Strobe products are listed under UL Standard 1971 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 NH Horns are listed under UL Standard 464 for audible signal appliances (indoor use only).

- *"Regulated Voltage Range" is the newest terminology used by UL to identify the voltage range. Prior to this change, UL used the terminology "Listed Voltage Range."*

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR 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.

Table 1: Ratings Per UL Standard 1971

Model	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (CD)
NS-24MCW	24	16.0-33.0	15/30/75/110
NS-241575W	24	16.0-33.0	15 (75 on axis)

Table 2: dBA Ratings for Series NS/NH Horn

Description	Volume	Reverberant dBA @ 10ft per UL 464		Anechoic dBA @ 10ft	
		12VDC	24VDC	12VDC	24VDC
Continuous Horn	High	83	87	89	95
	Low	76	81	84	90
Code 3 Horn	High	79	82	89	95
	Low	72	76	84	90

Table 3: *Average RMS Current Ratings

NS-24MCW with High (95 dBA) Setting				
Voltage	15cd	30cd	75cd	110cd
16.0 VDC	.077	.113	.195	.268
24.0 VDC	.065	.087	.134	.174
33.0 VDC	.069	.085	.117	.134
NS-24MCW with Low (90 dBA) Setting				
Voltage	15cd	30cd	75cd	110cd
16.0 VDC	.070	.106	.188	.261
24.0 VDC	.052	.072	.126	.158
33.0 VDC	.045	.060	.097	.114

* Average RMS Current is per UL average RMS method and Average Mean Current is per UL average mean method. NH models use average mean current. For rated in Rush and Peak current across UL Listed voltage range for both filtered DC and VRMS (FWR), see installation instructions.

Table 4: *Average RMS Current Ratings

NS-241575W		
Voltage	High (95) dBA	Low (90) dBA
16.0 VDC	.120	.116
24.0 VDC	.094	.093
33.0 VDC	.102	.078

Table 5: *Average Mean Current Ratings NH Horn 24 Volt Models

Voltage	High (95) dBA	Low (90) dBA
16.0 VDC	.019	.017
24.0 VDC	.028	.022
33.0 VDC	.039	.027

Table 6: Sync Models/Power Supply

Model Number	Input Voltage (VDC)	Average Mean Current @ 24 VDC	Mounting Options
SM-12/24-R	24	.028	W
DSM-12/24-R	24	.035	W

***NOTE:** SM Sync Module is rated for 3.0 amperes @ 24 VDC. DSM Sync Module is rated for 3.0 amperes per circuit. The maximum number of interconnected DSM Modules is twenty (20).*

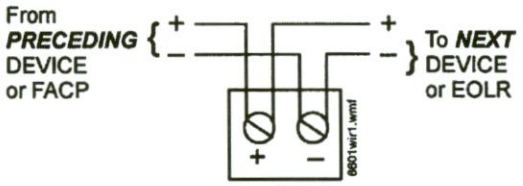
Table 7: UL Maximum Current**

Series NS/NH 24 VDC		Audible	Wall Mount Strobe Models				
		NH-12/24	NS-241575W	NS-24MCW			
		@24VDC	15/75cd	15cd	30cd	75cd	110cd
High (95) dBA	24VDC	.044	.104	.074	.107	.184	.244
Low (90) dBA	24VDC	.018	.096	.066	.101	.177	.232
Series NS/NH 12 VDC		**Audible**	**Wall Mount**	** RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33V for 24V units). For strobes, the UL max current is usually at the minimum listed voltage (16V for 24V units). For audibles, the max current is usually at the listed voltage (33V for 24V units). For unfiltered FWR ratings, see installation instructions.			
		NH-12/24	Aud/Strobe				
		@12VDC	NS-121575W				
High (95) dBA	12VDC	.021	.220				
Low (90) dBA	12VDC	.012	.210				

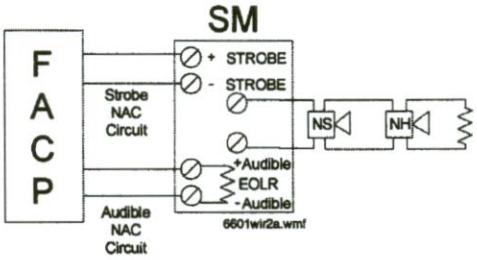
WARNING: CONTACT WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS (P83983) SERIES NS-24MCW, (P84234) SERIES NS-12 AND 24 VDC SINGLE CANDELA MODELS, (P83600) SERIES NH AND "GENERAL INFORMATION" SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

- **TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.**
- **FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.**
- **COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.**
- **ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELLA SETTINGS WILL AFFECT CURRENT DRAW. RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCES OR FUSES.**
- **THE VOLTAGE APPLIED TO THE PRODUCTS MUST BE WITHIN THEIR "REGULATED VOLTAGE RANGE."**
- **INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.**
- **INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.**
- **THESE APPLIANCES ARE NOT DESIGNED TO BE USED ON CODED SYSTEMS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF.**
- **FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, AND/OR PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**
- **CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.**

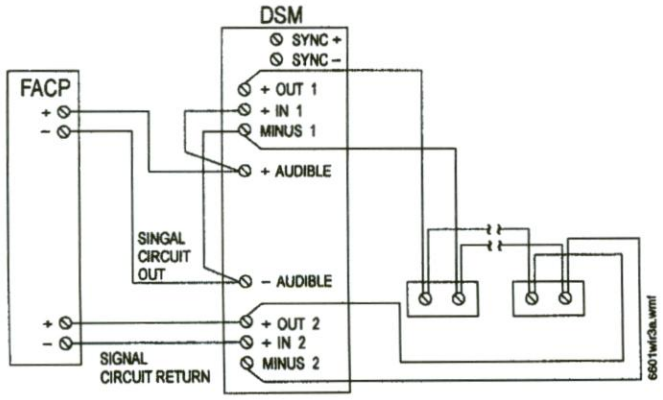
Wiring Diagrams



NS/NH APPLIANCE



NS AND NH APPLIANCES SYNCHRONIZED WITH SM MODULE SINGLE CLASS "B" NAC CIRCUIT WITH AUDIBLE SILENCE FEATURE



NS AND NH APPLIANCES SYNCHRONIZED WITH DSM MODULE DUAL CLASS "A" NAC CIRCUIT WITH NO AUDIBLE SILENCE FEATURE

NOTE: *NS/NH must be set on Code 3 horn tone to achieve synchronized temporal (Code 3) tone. Refer to installation instruction (P83983, P83600 respectively).*

NOTE: *For detail using SM or DSM Sync Module refer to data sheet S3000 or installation instructions P83123 for SM and P83177 for DSM.*

Architectural/Engineering Specifications

The audible/visual notification appliances shall be Wheelock Series NS Horn Strobe appliances and Series NH Horn appliances or approved equals. The Series NS appliances shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired for Indoor Fire Protection Service). The Series NH Horn shall be UL Listed under Standard 464 (Fire Protective Signaling). The horn strobe shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by the Fire Alarm Control Panel (FACP).

The audible portion of the appliance shall have a minimum of two (2) field selectable settings for dBA levels (90 and 05 dBA) and shall have a choice of continuous or temporal (Code 3) audible outputs.

The strobe portion of the appliance shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan lens. The Series NS shall be of low current design. Where wall mount, Multi-Candela appliances are specified, the strobe intensity shall never have field selectable settings and shall be rated per UL Standard 1971 for 15/30/75/110 candela. The selector switch for selecting the candela setting shall be tamper resistant. The 1575 candela strobe shall be specified when 15 candela UL Standard1971 Listing with 75 candela on-axis is required (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with Wheelock's SM, DSM Sync Modules or a Power Supply with Wheelock's built-in patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. 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. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation.

The Series NS Horn Strobes and NH Horn shall incorporate a patented Universal Mounting Plate that shall allow mounting to a single-gang, double-gang, 4 inch square, and 100 mm European backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided.

All notification appliances shall be backward compatible.

Listings and Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in progress. Consult factory for listing status.

- **ULC Listed:** E5946
- **ULC Listed:** CS 243, CS 356
- **CSFM:** 7125-0785:142
- **MEA:** 151-92-E
- **FM Approved**

Ordering Information

Model	Strobe Candela	Non-Sync	Sync w/ SM, DSM	24 VDC	12 VDC	2 Wire	Mounting Options	Agency Approvals				
								UL	MEA	CSFM	FM	BFP
NS-24MCW-FR	15/30/75/110	X	X	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-24MCW-FW	15/30/75/110	X	X	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-241575W-FR	15 (75 on axis)	X	X	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NH-12/24-R	12V, 24V	X	X	X	X	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

Wheelock RSS & RSSP Series

Single- and Multi-Candela Strobes and Strobe Plates

NOTIFIER® by Honeywell

Audio/Visual Devices

General

Wheelock's patented Series RSS Strobe Appliances and Series RSSP Strobe Plates have lower current draw while maintaining outstanding performance, reliability and cost effectiveness. These versatile appliances will satisfy virtually all requirements for indoor, wall or ceiling mount appliances.

Strobe options for wall mount models include 15/75 or Wheelock's patented MCW multi-candela strobe with field selectable candela settings of 15/30/75/110cd. Ceiling mount models include the patented MCC multi-candela ceiling strobe with field selectable intensities of 15/30/75/95cd or the high intensity MCCH strobe with field selectable 115/177cd.

All models may be synchronized when used in conjunction with the Wheelock SM or DSM Sync Modules or a power supply with Wheelock's patented Sync Protocol. Synchronized strobes can eliminate possible restrictions on the number of strobes in the field of view. Wheelock's synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy as well as meetings the requirements of NFPA 72.

Wheelock's Series RSS Strobes employ a Patented Integral Strobe Mounting Plate that can be mounted to a single-gang, double gang, 4" square, 100mm European backboxes or the SHBB surface backbox. If the flush backbox has side or top space between it and the finished wall, the NATP (Notification Appliance Trimplate) may be used. It provides an additional .65" of trim for the appliance. An attractive cover plate is provided for a clean, finished appearance on all models.

The Series RSSP Multi-Candela Strobe Plates are a cost effective way to retrofit required wall strobe appliances to bells, horns, chimes, multitones, or speakers and easily mounts to standard 4" backboxes or, for surface mount, use with Wheelock's SBL2 surface backbox.

Series RSS

RSS Round

Multi-Candela
(bottom of strobe lens)

Series RSSP

5765ccv1.jpg, 5765ccv2.jpg, 5765ccv3.jpg, 6601pho3.jpg

Features

- Wall mount multi-candela models are available with field selectable candela settings of 15/30/75/110cd or 135/185cd. Single candela models are available in 15/75cd.
- Ceiling mount multi-candela models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd.
- Strobes produce 1 flash per second over the regulated voltage range.
- 12 and 24 VDC models with wide UL "Regulated Voltage" using filtered (DC) or unfiltered VRMS input voltage.
- Synchronize with Wheelock SM or DSM Sync Modules or power supplies with built-in Sync Protocol.
- ADA/NFPA/UFC/ANSI compliant. Meets OSHA 29 Part 1910.165.

General Notes

- RSS/RSSP Series strobe products are listed under UL 1971 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- "Regulated Voltage Range" is the newest terminology used by UL to identify the voltage range. Prior to this change, UL used the terminology "Listed Voltage Range."

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THE FOLLOWING 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.

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

Table 1: Audibles/Speakers for RSSP Strobe Plate

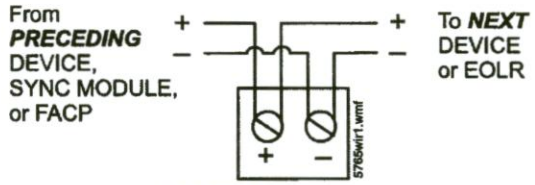
Product	Series
Multitone Appliances	AMT, MT
Horns	AH, NH, HS
Motor Bells	MB-G6/G10
Speakers	ET-1010/1080, E70, ET70
Chimes	CH70

Table 2: UL Maximum Current*													
RSS/RSSP 24 VDC Models	RSS/RSSP - Wall Mount							Ceiling Mount					
	241575W	24MCW				24MCWH		24MCC				24MCCH	
	1575cd	15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd
UL max*	.090	.060	.092	.165	.220	.300	.420	.065	.105	.189	.249	.300	.420
RSS/RSSP 24 VDC Models	RSS/RSSP Wall Mount 121575W	* RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33V for 24V units). For strobes, the UL max current is usually at the minimum listed voltage (16V for 24V units). For audibles, the max current is usually at the listed voltage (33V for 24V units). For unfiltered FWR ratings, see installation instructions.											
12VDC	.152												
UL max*	.255												

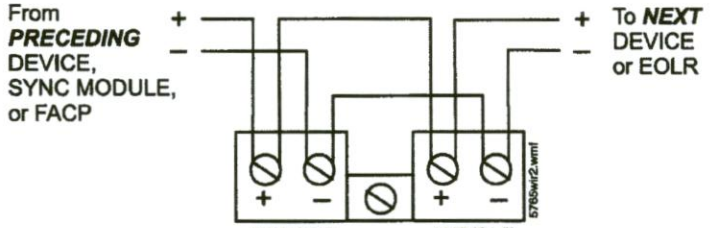
Table 3: Sync Modules/Power Supplies				
Model Number	Order Code	Input Voltage (VDC)	Average Mean Current @ 24VDC	Mounting Options
SM-12/24-R	6369	24	.028	W
DSM-12/24-R	6374	24	.035	W

NOTE: *SM Sync Module is rated for 3.0 amperes 24VDC. DSM Sync Module is rated for 3.0 amperes per circuit. The maximum number of interconnected DSM modules is twenty (20).*

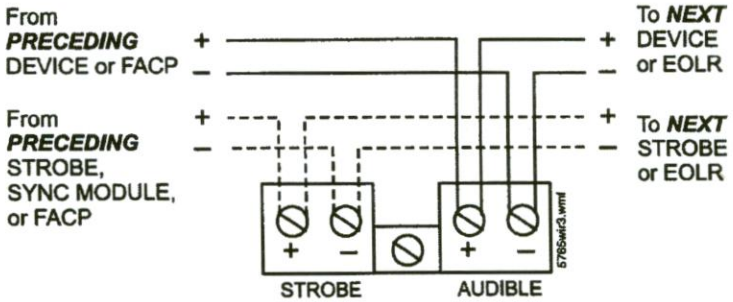
Wiring Diagrams



RSS/RSSP Device

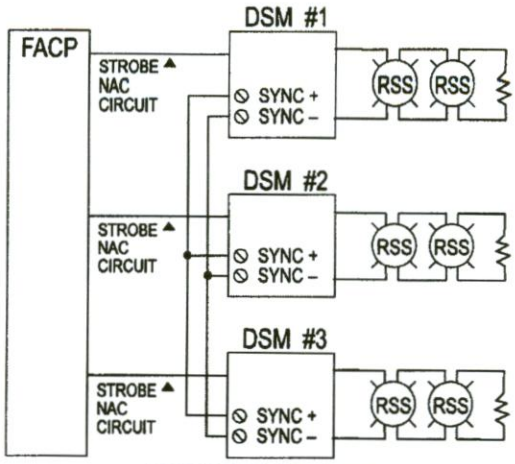


Strobe/Plate Assembly
(with Audible and Visible operating in unison)

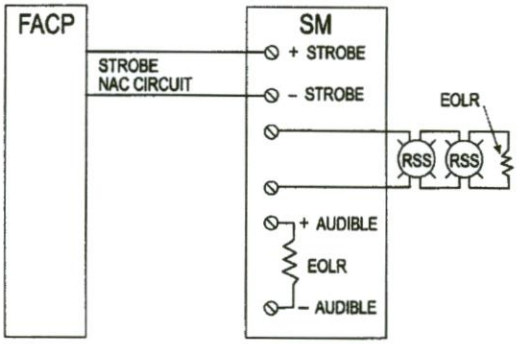


Strobe/Plate Assembly
(with Audible and Visible operating independently)

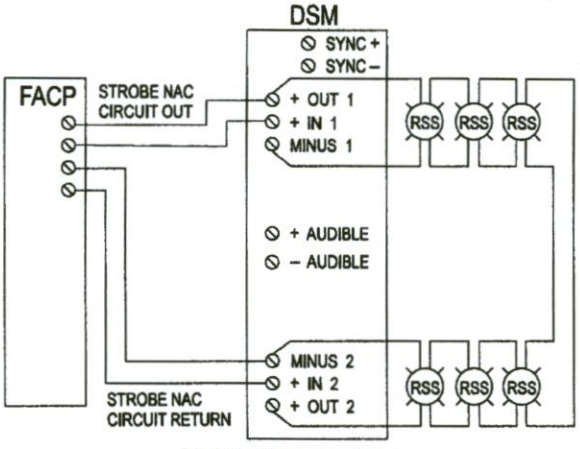
Wiring Diagrams (continued)



RSS/RSSP Devices
(synchronized with DSM module; single Class "A" NAC circuit)



RSS/RSSP Devices
(synchronized with SM module; single Class "B" NAC circuit)



RSS/RSSP Devices
(synchronized with multiple DSM modules)
(NOTE: INTERCONNECTING WIRING SHOWN. MAXIMUM OF 20 DSM MODULES)

For details on using the SM or DSM Sync Modules see installation instructions #P83123 (for SM) or #P83177 (for DSM).

WARNING: CONTACT WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS AND GENERAL INFORMATION SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

- **TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.**
- **FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.**
- **COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.**
- **ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELLA SETTINGS WILL AFFECT CURRENT DRAW. RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCES OR FUSES.**
- **THE VOLTAGE APPLIED TO THE PRODUCTS MUST BE WITHIN THEIR "REGULATED VOLTAGE RANGE."**
- **INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.**
- **INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.**
- **USE STROBES ONLY ON CIRCUITS WITH CONTINUOUSLY APPLIED OPERATING VOLTAGE. DO NOT USE STROBES ON CODED OR INTERRUPTED CIRCUITS IN WHICH THE APPLIED VOLTAGE CYCLED ON AND OFF AS THE STROBE MAY NOT FLASH.**
- **FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, AND/OR PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**
- **CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.**

Architectural/Engineering Specifications

The visual notification appliances shall be Wheelock Series RSS Strobe Appliances or approved equals. The Series RSS shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing Impaired) for indoor Fire Protection Service. The strobe shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. The strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP). When Strobe Plates are to be installed, they shall be the Wheelock Series RSSP Strobe Plate and shall have the same electronic circuitry as the Wheelock Series RSS.

The Series RSS Strobe shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 at 15/30/75/110cd or 135/185cd for wall mount and 15/30/75/95cd or 115/175cd for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 1575 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on axis is required (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with Wheelock's SM or DSM Sync Modules or a power supply with built-in Patented Wheelock Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the Sync Module or power supply fail to operate (i.e. contacts remain closed), the strobe shall revert to a non-synchronized flash rate. The strobes shall be designed for indoor surface or flush mounting.

The Series RSS Strobe Appliances shall incorporate a Patented, Integral Strobe Mounting Plate that shall allow mounting to single-gang, double-gang, 4-inch square, 100mm European type backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided. An attaching cover plate shall be provided to give the appliance an attractive appearance. The appliance shall not have any mounting holes or screw heads visible when the installation is completed.

The Series RSSP Multi-Candela or single candela Strobe Plate shall mount to either a standard 4-inch square backbox for flush mounting, or the Wheelock SBL2 backbox for surface mounting.

All notification appliances shall be backward compatible. *NOTE: Due to continuous development of our products, specifications and offering are subject to change without notice in accordance with Wheelock, Inc. standard terms and conditions.*

Listings and Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in progress. Consult factory for listing status.

- **ULC Listed:** E5391
- **ULC Listed:** CS 356
- **CSFM:** 7125-0785:141
- **MEA:** 151-92-E Vol. XIX, XX; Vol. XXIV (RSS-24MCW-FR/-FW)
- **FM Approved**

Ordering Information

Model	Wall/ Ceiling Mount	Non-Sync	Sync w/ SM, DSM	Strobe Candela	12/24 VDC	Model Color	Model Shape	Agency Approvals
RSS-24MCW-FR	Wall	X	X	15/30/75/110	24	Red	Square	UL, MEA, CSFM, FM, BFP
RSS-24MCW-FW	Wall	X	X	15/30/75/110	24	White	Square	UL, MEA, CSFM, FM, BFP
RSS-241575W-FR	Wall	X	X	15 (75 on axis)	24	Red	Square	UL, MEA, CSFM, FM, BFP
RSS-24MCC-FW	Ceiling	X	X	15/30/75/95	24	White	Square	UL, MEA, CSFM, FM
RSS-24MCC-FR	Ceiling	X	X	15/30/75/95	24	Red	Square	UL, MEA, CSFM, FM
RSS-24MCCR-FW	Ceiling	X	X	15/30/75/95	24	White	Round	UL, MEA, CSFM, FM
RSS-24MCCHR-FW	Ceiling	X	X	115/177	24	White	Round	UL, MEA, CSFM, FM
RSSWP-2475W-FR	Wall	X	X	180 @ 77°F 75 @ -31°F	12/24	Red	Square	UL, MEA, CSFM, FM

Lexan® is a registered trademark of GE Plastics, a subsidiary of General Electric Company.

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

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We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

Benjamin Wallace - Re: Siano's Old Port Pizzeria - 505 Fore Street- Fire Alarm Permit 3-19-10

From: Benjamin Wallace
To: gmancini@mancinielectric.com
Date: 3/31/2010 1:29 PM
Subject: Re: Siano's Old Port Pizzeria - 505 Fore Street- Fire Alarm Permit 3-19-10
Attachments: Benjamin Wallace.vcf

Hi Gino,
Thanks for getting me the additional documentation. There is two cut sheets that are unreadable: the pull stations and another that looks like it says Construction Material?
Is there a sprinkler system in the building? The reason I ask is because the smoke detectors aren't appropriate because there are no defined exit areas. ROR heat detectors are what should be in the building, however we waive those if the building is protected by a supervised, automatic sprinkler system. If the building has a sprinkler system it has to be supervised any ways.
So the long and short:

- Supervised, automatic sprinkler system or ROR heat detectors,
- tie in the hood suppression system,
- pull stations,
- horn/ strobes,
- central station,
- Fire Alarm Records cabinet.

This system hasn't been installed yet, right?
Thanks,

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

>>> "Gino Mancini ME" <gmancini@mancinielectric.com> 3/19/2010 9:32 AM >>>

Ben,
Here is the application and floor plan for Siano's Old Port Pizzeria @ 505 Fore Street. I will drop the balance of information to you asap.

Thank you,

Gino Mancini
Mancini Electric
179 Sheridan Street
Portland, Maine 04101
P. 207-774-5829
F. 207-772-1686
gmancini@mancinielectric.com

Benjamin Wallace - RE: Siano's Old Port Pizzeria - 505 Fore Street- Fire Alarm Permit 3-19-10

From: "Gino Mancini ME" <gmancini@mancinielectric.com>
To: "'Benjamin Wallace'" <wallaceb@portlandmaine.gov>
Date: 4/7/2010 8:47 AM
Subject: RE: Siano's Old Port Pizzeria - 505 Fore Street- Fire Alarm Permit 3-19-10
Attachments: Standard Pull Station.pdf

Ben,

1. I am attaching the two cut sheets that were unreadable
2. The building has a sprinkler system and we will eliminate the smoke detectors with the exception of the one required over the fire alarm panel.
3. Automatic sprinkler system is currently supervised with central station monitoring
4. We will tie in the hood suppression system
5. Pull stations as indicated on drawings
6. Horn/ strobes as indicated on drawings
7. We will install a Fire Alarm Records cabinet.

The system is being installed now.

Gino Mancini
Mancini Electric
179 Sheridan Street
Portland, Maine 04101
P. 207-774-5829
F. 207-772-1686
gmancini@mancinielectric.com

From: Benjamin Wallace [mailto:wallaceb@portlandmaine.gov]
Sent: Wednesday, March 31, 2010 1:29 PM
To: gmancini@mancinielectric.com
Subject: Re: Siano's Old Port Pizzeria - 505 Fore Street- Fire Alarm Permit 3-19-10

Hi Gino,
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NOTIFIER by Honeywell

AC Branch Current

Select devices using the "Qty" column.

Use yellow cells to enter quantities and current values.

To show only selected devices, select "Show Selected Devices".

To clear selected devices, select "Clear Selections".

Note: These selections only determine the AC branch current. If these devices will affect the battery requirements, you need to select them on the System Current Draw sheet.

◉ 120 VAC ○ 220/240 VAC

Device	Qty		Current	Total
MS-24BPCA	1	x	1.80 A	1.80 A
AA-30	0	x	1.00 A	
AA-120	0	x	1.85 A	
ACPS-2406	0	x	2.70 A	
APS-6R	0	x	2.50 A	
AVPS-24	0	x	1.00 A	
CHG-120	0	x	2.00 A	
FCPS-24	0	x	2.00 A	
FCPS-24S	0	x	3.20 A	
MPS-24A	0	x	1.80 A	
MPS-24B	0	x	2.40 A	
XPIQ	0	x	3.50 A	
XRM-24	0	x	1.00 A	
[ ]	0	x	0.00 A	
[ ]	0	x	0.00 A	
			AC Branch Required:	**1.80 A**

NOTIFIER by Honeywell

System Current Draw - System 500

Current Draw	
C1	0.093 A
C2	2.389 A
C3	0.053 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Non-Alarm Current				C2 - Alarm Current				C3 - Standby Current			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Standby
CPU 500	1	x	0.03100	0.03100	1	x	0.22300	0.22300	1	x	0.03100	0.03100
MS-24BPCA	1	x	0.06200	0.06200	1	x	0.06200	0.06200	1	x	0.02200	0.02200
NS-2430MCW-FR	6	x	0.00000	0.00000	6	x	0.10700	0.64200	6	x	0.00000	0.00000
RSS-2430MCW-FR	5	x	0.00000	0.00000	5	x	0.09200	0.46000	5	x	0.00000	0.00000
RSSP-24MCW-FR30	1	x	0.00000	0.00000	1	x	0.09200	0.09200	1	x	0.00000	0.00000
2W-B	7	x	0.00005	0.00035	7	x	0.13000	0.91000	7	x	0.00005	0.00035
NBG-12L	7	x	0.00000	0.00000	7	x	0.00000	0.00000	7	x	0.00000	0.00000
5604	1	x	0.00000	0.00000	1	x	0.00000	0.00000	1	x	0.00000	0.00000
			Total Non-Alarm Load:	0.093			Total Alarm Load:	2.389			Total Standby Load:	0.053

NOTIFIER by Honeywell

System Power Requirements

System 500 Fire Alarm Control Panel

Protected Premises: Siano's Pizzeria Date: 3/11/2010
Address:
City: Portland State: Maine Zip:

Prepared By: Norris Inc Phone: 207-883-3473
Address: 2257 West Broadway Email:
City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements **1.80** Amps @ 120 VAC
Current required by source to power the fire alarm system.

Primary Standby Load **0.09** Amps
Current load on the primary power supply during non-alarm conditions.

Primary Alarm Load **2.39** Amps
Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements **2.02** Amp Hours
Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Seconday Standby Load 0.053 A	x	Required Standby Time 24 hours	1.28
Secondary Alarm Load 2.389 A	x	Required Alarm Time (hours) 0.167 hours	0.40
Auxiliary Power Supply Load 0.000 A	x	Required Alarm Time (hours) 0.167 hours	0.00
		Total Secondary Load	1.68
		Derating factor	x 1.2
		Secondary Load Requirements	**2.02** AH

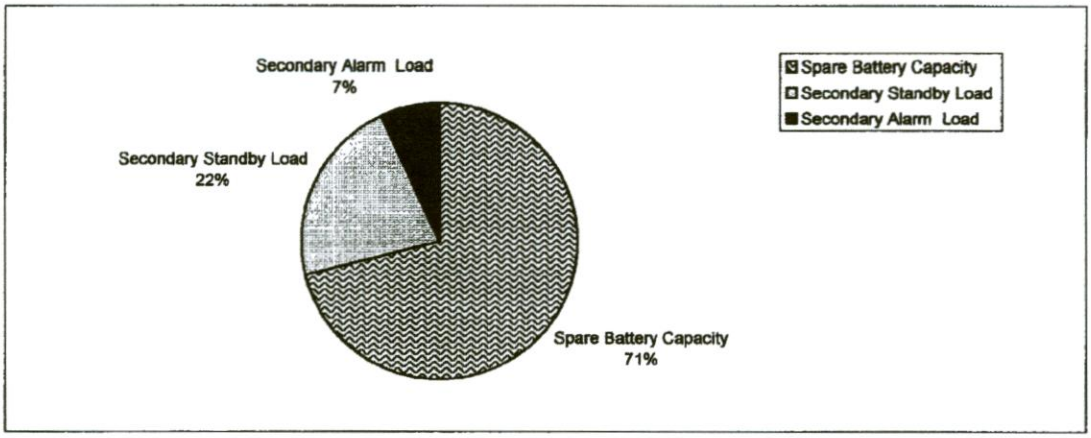
Battery Selection **7** Amp Hours
Select batteries from the list below.

7.0 AH BAT-1270 Battery (12 volt)

(•) Two ( ) Four (two 12VDC sets in parallel)

Battery Distribution Chart

Shows amp-hour distribution of your



Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	4.98	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.54	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.48	Secondary Alarm Load (AH) * Derating Factor

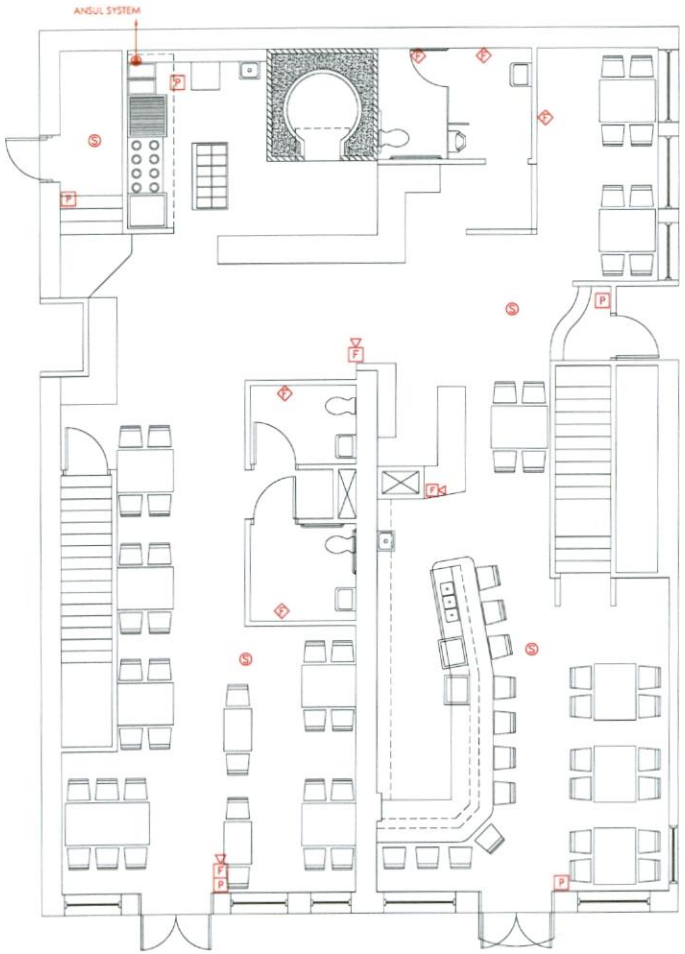
NOTIFIER by Honeywell

Device Current Draw

System 500 Fire Alarm Control Panel

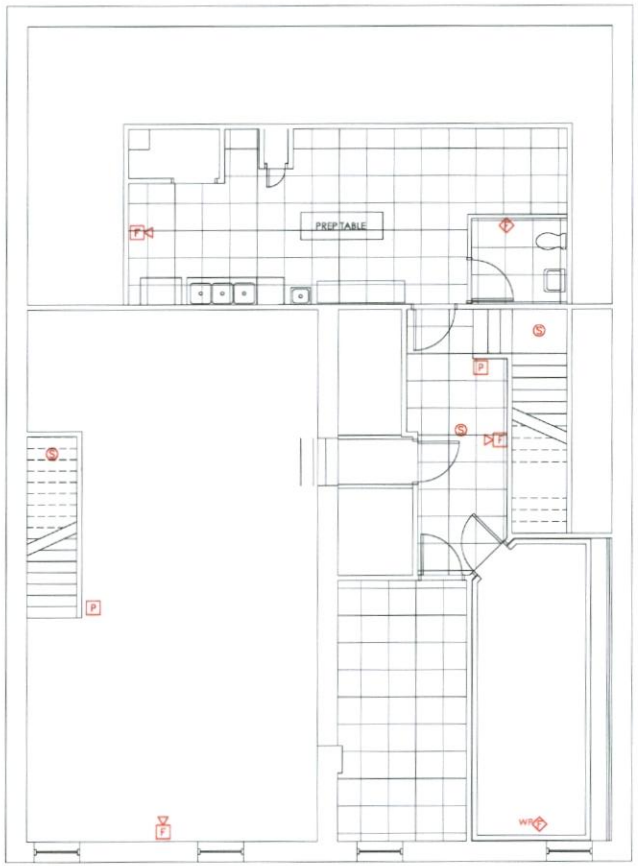
Quantity x [device current draw] = total current draw per device (in amps)

Part Number	Qty	Primary Non-Alarm	Primary Alarm	Secondary Non-Alarm
CPU 500	1	x [0.03100] = 0.03100	x [0.22300] = 0.22300	x [0.03100] = 0.03100
MS-24BPCA	1	x [0.06200] = 0.06200	x [0.06200] = 0.06200	x [0.02200] = 0.02200
NS-2430MCW-FR	6	x [0.00000] = 0.00000	x [0.10700] = 0.64200	x [0.00000] = 0.00000
RSS-2430MCW-FR	5	x [0.00000] = 0.00000	x [0.09200] = 0.46000	x [0.00000] = 0.00000
RSSP-24MCW-FR30	1	x [0.00000] = 0.00000	x [0.09200] = 0.09200	x [0.00000] = 0.00000
2W-B	7	x [0.00005] = 0.00035	x [0.13000] = 0.91000	x [0.00005] = 0.00035
NBG-12L	7	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
5604	1	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
Total (Amperes):		**0.0934 A**	**2.3890 A**	**0.0534 A**



MAIN FLOOR - FIRE ALARM LAYOUT

1/4" = 1'-0"



BASEMENT - FIRE ALARM LAYOUT

1/4" = 1'-0"

FIRE ALARM LEGEND

- P — FIRE ALARM MANUAL PULL STATION - MOUNT 48" AFF TO TOP OF BOX
- F — FIRE ALARM HORN AND STROBE UNIT - MOUNT 84" AFF TO TOP OF BOX OR 6" BELOW CEILING, WHICH EVER IS LOWER
- F — FIRE ALARM STROBE UNIT - MOUNT ABOVE DOOR - MOUNT 84" AFF TO BOTTOM OF BOX OR 6" BELOW CEILING, WHICH EVER IS LOWER
- S — SMOKE DETECTOR - CEILING MOUNTED

Anthony Mancini, Inc.
179 SHERIDAN ST.
PORTLAND, ME 04101
P: (207)774-5829 F: (207)772-1684
E: info@mancinielectric.com
"We appreciate Your Business."

NO.	DATE	DESCRIPTION

PROJECT NAME & ADDRESS:
Siano's Old Port Pizzeria
505 Fore Street
Portland, Maine

SHEET NAME:
Fire Alarm Layout

Checked By: G.MANCINI
Drawn By: A.AMPS
Date: 01.28.2010
Scale: 1/4" = 1'-0"

SHEET:
FA1

NORRIS INC

Prepared For Tomorrow; Delivered Today

LOSS PREVENTION *BUILDING AUTOMATION* *COMMUNICATIONS*

SUBMITTAL PACKAGE

Project:	**SIANO'S PIZZERIA**
System:	**Fire Alarm Addtition**
Submitted By:	**Norris Inc.** **2257 West Broadway** **South Portland, Maine 04106** **Telephone: (800) 370-3473**
Project Manager:	**Corey Chapman**
Electrical Contractor:	**Mancini Electric**
Date:	**3/5/10**

Norris Inc
2257 West Broadway
South Portland, ME 04106
1-800-370-3473

*** * SUBMITTAL * *** 3/5/2010

Project Number: 306943SP

For :
MANCINI ELECTRIC
Siano's Pizzeria
Customer P.O.: X

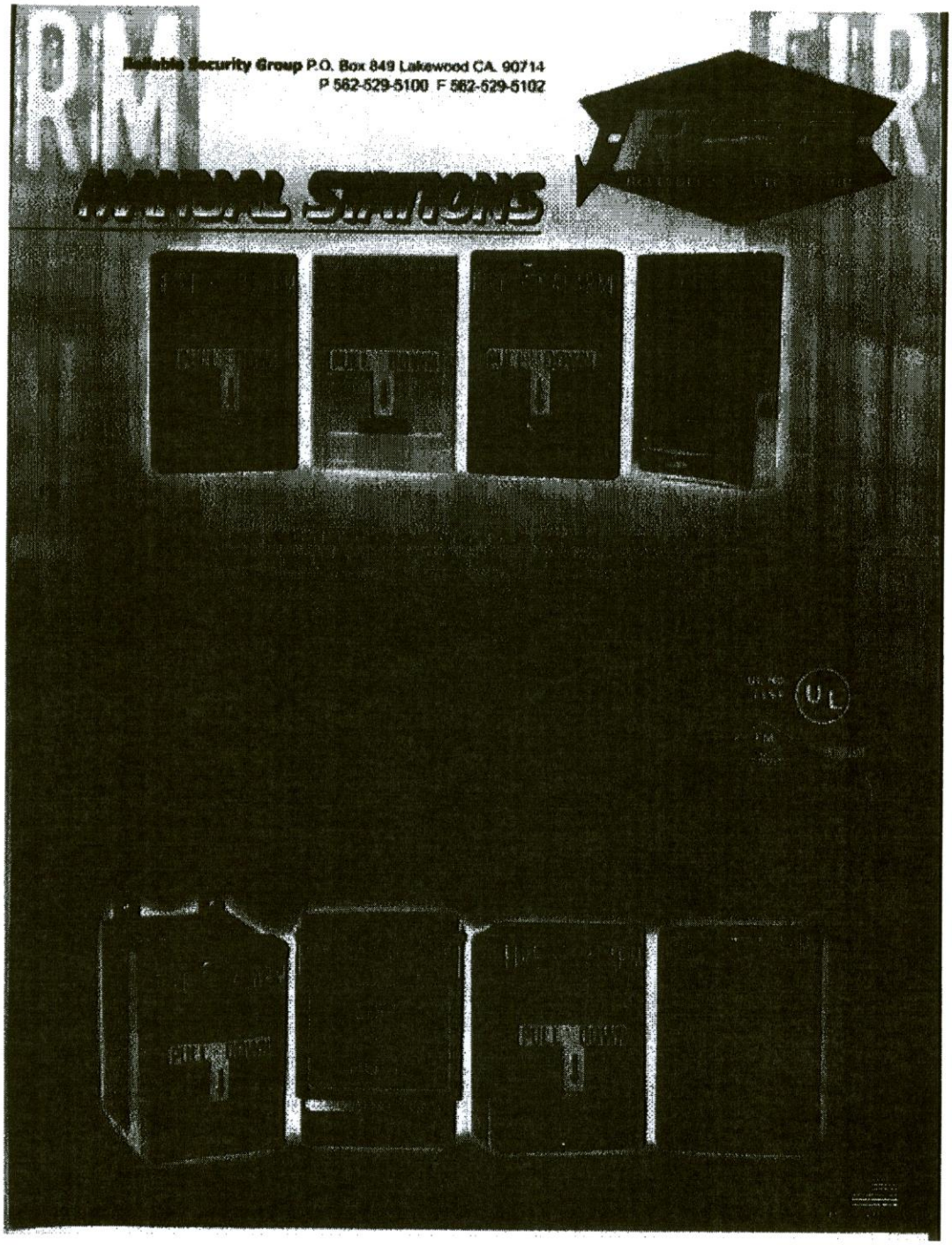
* * SUBMITTAL * * to:
MANCINI ELECTRIC
179 SHERIDAN STREET
PORTLAND, ME 04101-

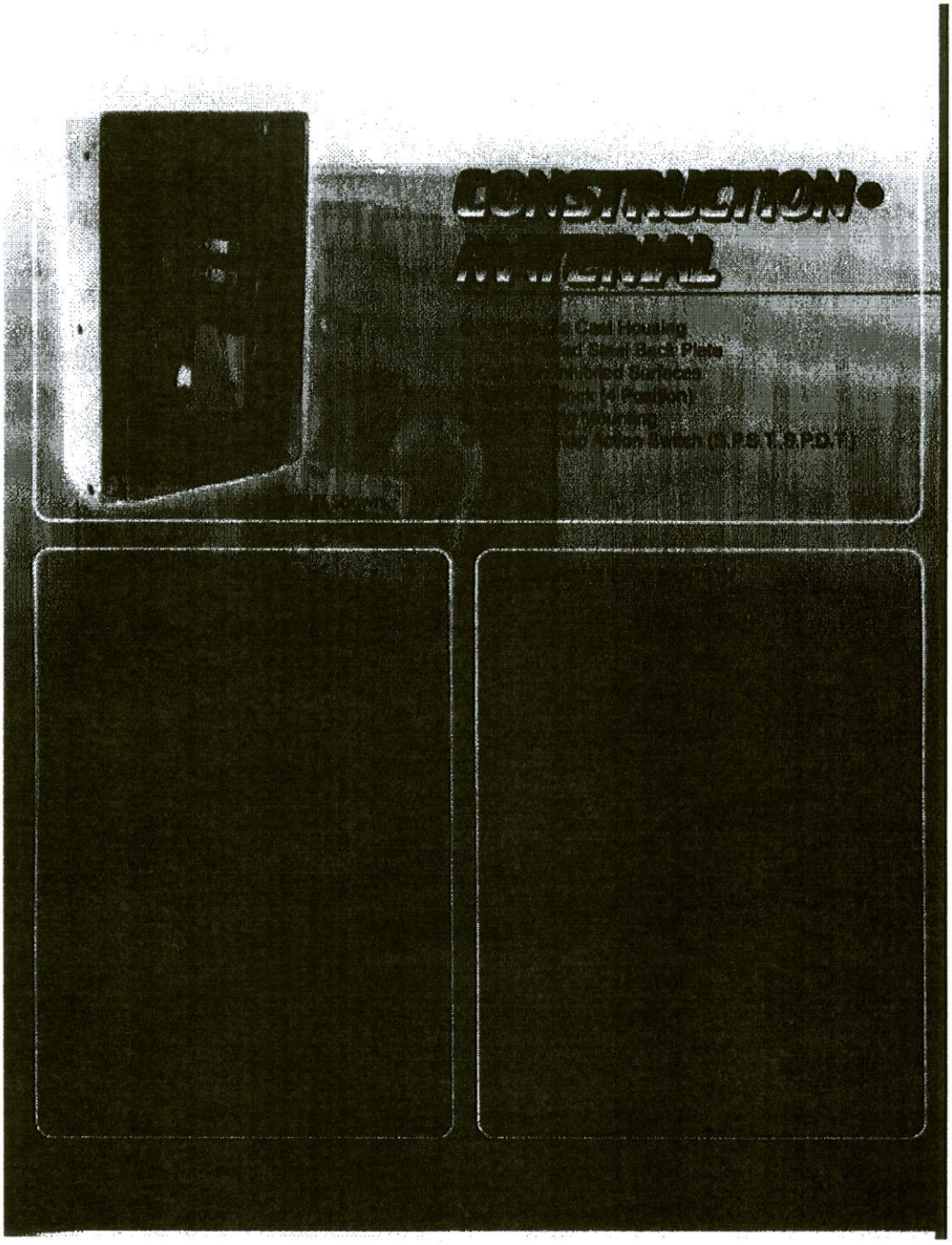
Tel: 207-774-5829 Fax: 207-772-1686

Project Site:
MANCINI ELECTRIC
GINO

179 SHERIDAN STREET
PORTLAND, ME 04101-

Mfr-Part No.	Qty	Description	Unit Price	Extended
	0	Notifier 500 (existing)		
	7	Pullstation, Red Die Cast		
	7	i# Photo Detector, 2-wire, 12/24 Vdc, Photo.		
	1	194 ¦F (90¦ C) fixed temperature.		
	6	HORN/STRB,S2,24VDC,SEL,W/R		
	5	STRB 24V,15/30/75/110 CNDL RED		
	1	STRB,24VDC,75C,WP,RED		
	1	BACKBOX,WP,RSSWP		
		Contractor Discount		


Reliable Security Group P.O. Box 849 Lakewood CA. 90714
P 562-529-5100 F 562-529-5102
MANUAL STATIONS
UL


CONSTRUCTION
MATERIAL

i³ Series

Photoelectric Smoke Detectors

NOTIFIER® by Honeywell

Conventional Initiating Devices

General

System Sensor's i³™ Series photoelectric and photoelectric/thermal smoke detectors represent a significant advancement in conventional detection, incorporating three key features: installation ease, intelligence, and instant inspection.

Installation ease. The i³ Series redefines installation ease with its plug-in design. This allows an installer to pre-wire the bases included with the heads. The large wire-entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of backbox mounting methods, as well as direct mounting with drywall anchors. To complete the installation, i³ Series heads plug into the base with a simple Stop-Drop 'N Lock™ action.

Intelligence. i³ Series detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms, to minimize nuisance alarms, are standard in the i³ Series. When connected to the 2W-MOD loop test/maintenance module, an SFP-2402/-2404 panel, SFP-5UD/10UD, or RP-2001/2002 two-wire i³ detectors are capable of generating a remote maintenance signal when they need cleaning. This signal is indicated by LEDs located at the module and at the panel. To read the sensitivity of i³ detectors, the SENS-RDR is a wireless device that displays sensitivity in terms of percent-per-foot obscuration.

Instant inspection. The i³ Series provides wide-angle red and green LED indicators for instant inspection of detector condition. The LEDs indicate: normal standby, out-of-sensitivity, alarm, or freeze trouble conditions. The "EZ Walk" loop test feature is available on two-wire i³ Series detectors when connected to the 2W-MOD loop test/maintenance module. The "EZ Walk" feature verifies the initiating loop wiring by providing LED status indication at each detector.

Features

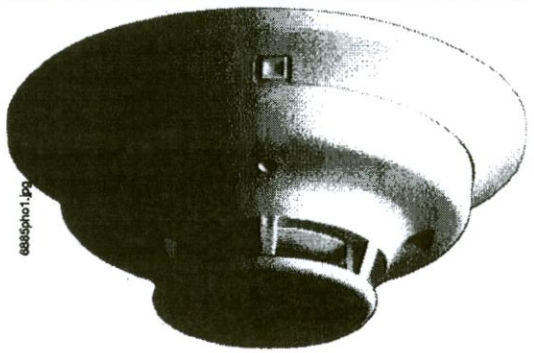
- Plug-in detector line — mounting base included.
- Large wire-entry port.
- In-line terminals with SEMS screws.
- Mounts to octagonal and single-gang backboxes, 4" (101.6 mm) square backboxes, or directly to ceiling.
- Stop-Drop 'N Lock attachment to base.
- Removable detector cover and chamber for easy cleaning.
- Built-in remote maintenance signaling.
- Drift compensation and smoothing algorithms.
- Simplified sensitivity measurement.
- Wide-angle, dual-color LED indication.
- Loop testing via "EZ Walk" feature.
- Built-in test switch.

Specifications

PHYSICAL SPECIFICATIONS

Operating Temperature Range: For models 2W-B and 4W-B: 32°F to 120°F (0°C to 49°C); for thermal models 2WT-B and 4WT-B: 32°F to 100°F (0°C to 37.8°C).

Operating Humidity Range: 0% – 95% RH, non-condensing.



Thermal Sensor: 135°F (57.2°C) fixed (models 2WT-B, 4WT-B).

Freeze Trouble: 41°F (5°C) (models 2WT-B and 4WT-B).

Sensitivity: 2.5%/foot (0.762%/meter) nominal.

Input Terminals: Utilize 14 to 22 AWG wire.

Dimensions (including base): 5.3" (134.62 mm) diameter, 2.0" inches (50.8 mm) high.

Weight: 6.3 oz. (178.6 grams).

Mounting Options: 3.5" (88.9 mm) octagonal backbox; 4" (101.6 mm) octagonal backbox; single-gang backbox; 4" (101.6 mm) square backbox with a plaster ring; or direct mount to ceiling.

ELECTRICAL SPECIFICATIONS

Operating Voltage: 12/24 V non-polarized nominal; 8.5 V minimum; 35 V maximum.

Maximum Alarm Current: *For two-wire models:* 130 mA limited by control panel; *For four-wire models:* 20 mA @ 12 V, 23 mA @ 24 V.

Alarm Contact Ratings: For four-wire models: 0.5 A @ 30 VAC/VDC; not applicable for two-wire models.

Architectural/Engineering Specifications

Smoke detector shall be a System Sensor i³ Series model number _____, Listed to Underwriters Laboratories UL 268 Fire Protection Signaling Systems. The detector shall be a photoelectric type (models 2W-B, 4W-B) or a combination photoelectric/thermal (models 2WT-B, 4WT-B) with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3.5" (88.9 mm) and 4" (101.6 mm) octagonal, single-gang, and 4" (101.6 mm) square backboxes with a plaster ring, or directly mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5%/foot (0.762%/meter) as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms. The detector shall provide dual-color LED indication which blinks to indicate power-up, normal standby, out-of-sensitivity, alarm, and freeze trouble

(models 2WT-B, 4WT-B) conditions. When used in conjunction with the 2W-MOD module, two-wire models shall include a maintenance signal to indicate the need for maintenance at the alarm control panel, and shall provide a loop testing capability to verify the circuit without testing each detector individually.

Agency Listings and Approvals

In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. *Consult factory for latest listing status.*

- **UL/ULC Listed:** S911
- **FM Approved**
- **CSFM:** 7272-1653:152
- **MEA:** 290-01-E
- **Maryland State Fire Marshal:** Permit # 2093

LED Modes	Green LED	Red LED
Power Up	Blink every 10 seconds	Blink every 10 seconds
Normal (Standby)	Blink every 5 seconds	OFF
Out of Sensitivity	OFF	Blink every 5 seconds
Freeze Trouble	OFF	Blink every 10 seconds
Alarm	OFF	Solid ON
Power Up Sequence for LED Indication		
Condition		**Duration**
Initial LED Status Indication		80 Seconds

Product Line Information

2W-B: Two-wire photoelectric smoke detector.

C2W-BA: Same as 2W-B, ULC listing.

2WT-B: Two-wire photoelectric smoke detector with 135°F (57.2°C) fixed thermal sensor.

C2WT-BA: Same as 2WT-B, ULC listing.

4W-B: Four-wire photoelectric smoke detector.

C4W-BA: Same as 4W-B, ULC listing.

4WT-B: Four-wire photoelectric smoke detector with 135°F (57.2°C) fixed thermal sensor.

C4WT-BA: Same as 4WT-B, ULC listing.

ACCESSORIES:

2W-MOD2: Two-wire loop test/maintenance module.

SENS-RDR: Sensitivity reader.

A77-AB2: Retrofit adapter bracket, 6.6" (167.7cm) diameter.

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

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Made in the U.S. A.

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www.notifier.com

5600 Series

Mechanical Heat Detectors

NOTIFIER® by Honeywell

Conventional Initiating Devices

GENERAL

System Sensor's 5600 Series mechanical heat detectors offer property protection against fire and for non-life-safety installations, where smoke detectors are inappropriate.

Multiple configurations. The 5600 Series offers a full line of configurations to accommodate a broad range of applications. Both single- and dual-circuit models are offered, each available for low- and high-temperature ratings with either fixed-temperature or combination fixed-temperature/rate-of-rise (ROR) activation. The ROR element of the fixed/ROR models is restorable, to accommodate field-testing the unit.

Installation flexibility. To satisfy a variety of installations, the 5600 Series easily mounts to single-gang and octagonal backboxes. These models also accommodate 4" (101.6 mm) square backboxes when used with a plaster ring. The mounting bracket is reversible to allow for flush- and surface-mount backbox installations.

Visual identification. The 5600 Series provides clear markings on the exterior of the unit to ensure that the proper detector is being used. Alphanumeric characters identify the activation method, as well as the temperature rating, in degrees Fahrenheit and Celsius. Fixed temperature models are identified "FX", while combination fixed/rate-of-rise units are marked "FX/ROR". The 5600 Series also provides a collector as a post-activation indicator. Once the detector has been activated, the collector drops from the unit to allow easy identification of the specific unit in alarm.

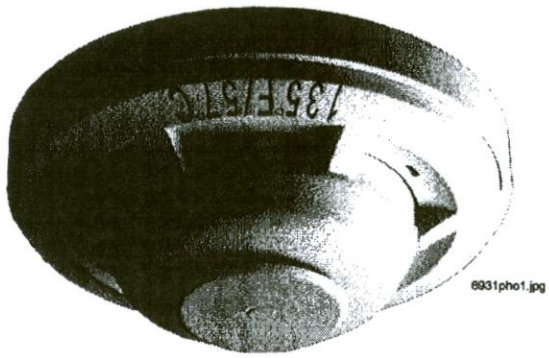
FEATURES

- Multiple configurations available:
  - Fixed-temperature (non-resettable) or combination fixed (non-resettable)/rate-of-rise (self-restoring).
  - Low-temperature and high-temperature ratings.
  - Single-circuit and dual-circuit.
- Easy-to-read alphanumeric identification of detector type and temperature rating.
- External collector provides visual indication of activation.
- Reversible mounting bracket for flush- and surface-mount installations.
- Flexible mounting capabilities: single-gang, 3.5" or 4" octagonal, 4" (101.6 mm) square with plaster ring.
- Easy-to-use terminal screws provide a more positive wiring connection.
- Low-profile design to coordinate with room aesthetics.

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL Listed:** S2101
- **ULC Listed:** S2101 (all with "A" suffix)
- **MEA:** 199-03-E
- **CSFM:** 7270-1209:227, 7270-1653:167
- **FM Approved**



6931pho1.jpg

SPECIFICATIONS

PHYSICAL SPECIFICATIONS

Maximum installation temperature:

For models 5601P, 5603, 5621, 5623: 100°F (38°C).

For models 5602, 5604, 5622, 5624: 150°F (65.6°C).

Alarm temperature:

For models 5601P, 5603, 5621, 5623: 135°F (57°C).

For models 5602, 5604, 5622, 5624: 194°F (90°C).

Rate-of-Rise Threshold: 15°F (8.3°C) per minute (models 5601, 5602, 5621, 5622 only).

Operating Humidity Range: 5% to 95% RH noncondensing.

Input Terminals: non-polarized, accept 14 to 22 AWG (2.0 to 0.33 mm²).

Dimensions: diameter with mounting bracket: 4.57" (116 mm); height with mounting bracket: 1.69" (43 mm).

Weight: 6 oz. (170 grams).

Mounting Options: 3.5" (88.9 mm) octagonal backbox; 4" (101.6 mm) octagonal backbox; single-gang backbox; 4" (101.6 mm) square backbox with a square-to-round plaster ring.

ELECTRICAL SPECIFICATIONS

Operating Voltage	Contact Ratings (resistive)
6 - 125 VAC	3.0 A
6 - 28 VDC	1.0 A
125 VDC	0.3 A
250 VDC	0.1 A

Mechanical heat detector shall be a System Sensor 5600 Series model number _____, Listed to Underwriters Laboratories UL 521 for Heat Detectors for Fire Protective Signaling Systems. The detector shall be either a single-circuit or a dual-circuit type, normally open. The detector shall be rated for activation at either 135°F (57°C) or 194°F (90°C), and shall activate by means of a fixed-temperature thermal sensor, or a combination fixed-temperature/rate-of-rise thermal sensor. The rate-of-rise element shall be activated by a rapid rise in temperature, approximately 15°F (8.3°C) per minute. The detector shall include a reversible mounting bracket for mount-

ing to 3.5-inch (88.9 mm) octagonal, 4-inch (101.6 mm) octagonal, single gang, and 4-inch (101.6 mm) square backboxes with a square-to-round plaster ring. Wiring connections shall be made by means of SEMS screws that shall accommodate 14 – 22 AWG wire. The detector shall contain alphanumeric markings on the exterior of the housing to identify its temperature rating and activation method. The rate-of-rise element of combination fixed-temperature/rate-of-rise models shall be restorable, to allow for field-testing. The detectors shall include an external collector that shall drop upon activation to identify the unit in alarm.

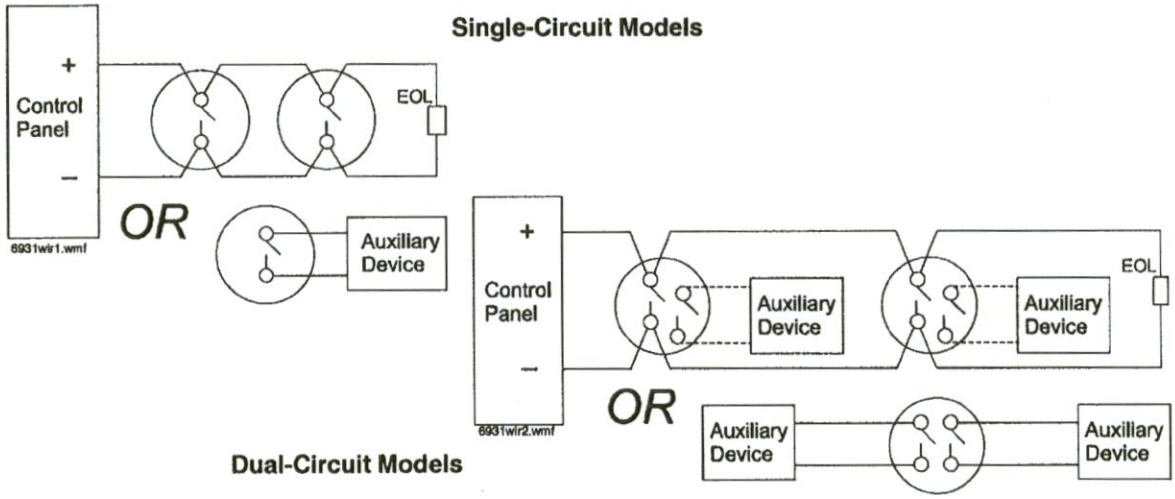
ORDERING INFORMATION

Model*	Identification Method on Exterior	Circuit	Temperature Rating	Activation	UL Protected Spacing, 10' (3.048 m) Ceiling*
5601P	None	Single	135°F (57°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5602	Lettering	Single	194°F (90°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5603	Lettering	Single	135°F (57°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)
5604	Lettering	Single	194°F (90°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)
5621	Lettering	Dual	135°F (57°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5622	Lettering	Dual	194°F (90°C)	Fixed-Temperature/Rate-of-Rise	50 ft. x 50 ft. (15.24 m x 15.24 m)
5623	Lettering	Dual	135°F (57°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)
5624	Lettering	Dual	194°F (90°C)	Fixed-Temperature	25 ft. x 25 ft. (7.62 m x 7.62 m)

NOTE: *Refer to NFPA 72 guidelines for spacing reductions when ceiling heights exceed 10 feet (3.048 m).*

** Add an "A" to part number for ULC model.*

WIRING DIAGRAMS



ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

Wheelock NS/NH Series

NS Series Horn Strobes
NH Series Horns

NOTIFIER®
by Honeywell

Audio/Visual Devices

General

The Wheelock Series NS Horn Strobe Appliances will satisfy virtually all requirements for indoor, wall mount applications.

The Series NH Horn and the horn portion of the Series NS include a selectable continuous horn tone or temporal pattern (Code 3) with selectable dBA settings of 90 or 95 dBA.

Strobe options include 1575cd or Wheelock's patented Multi-Candela strobe with field selectable candela settings of 15/30/75/110cd.

These versatile Horn Strobe Appliances may be synchronized when used in conjunction with the Wheelock SM or DSM Sync Modules or a Power Supply with the Wheelock patented Sync Protocol. Additionally, the audible may be silenced while maintaining strobe activation.

All models of the Series NS and NH are designed for maximum performance, reliability and cost-effectiveness while meeting or exceeding the latest requirements of NFPA 72/ANSI 117.1/UFC and UL Standards 1971 and 464 as well as meeting ADA requirements concerning photosensitive epilepsy.

Features

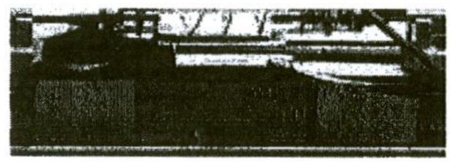
- Field selectable Candela settings 15/30/75/110cd (24 VDC Multi-Candela models) or 1575cd in 12 or 24 VDC.
- Selectable Continuous Horn or Temporal (Code 3).
- 2 selectable dBA settings of 90 and 95 dBA in both tones.
- 12 and 24 VDC models with UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage.
- Patented Universal Mounting Plate.
- Wall mount.
- ADA/NFPA/UFC/ANSI compliant.
- Complies with OSHA 29, Part 1910.165.
- NH Horn is selectable 12 or 24 VDC in 1 unit.
- Synchronize with Wheelock SM or DSM Sync Module or the Power Supply with built-in Sync Protocol.
- Patent Pending Universal Mounting Plate for single-gang, double-gang 4" (10.16c m) square, or 100 mm European backboxes, or Wheelock's SHBB shallow surface backbox.
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires.

General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range." Note that NFPA 72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second.
- All candela ratings represent minimum effective Strobe intensity based on UL Standard 1971.
- Series NS Strobe products are listed under UL Standard 1971 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 NH Horns are listed under UL Standard 464 for audible signal appliances (indoor use only).

NS Horn Strobe

NH Horn



Multi-Candela Indicator (bottom of Strobe Lens)

6601pho1.jpg; 6601pho2.jpg; 6601pho3.jpg

- *"Regulated Voltage Range" is the newest terminology used by UL to identify the voltage range. Prior to this change, UL used the terminology "Listed Voltage Range."*

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR 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.

Table 1: Ratings Per UL Standard 1971

Model	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (CD)
NS-24MCW	24	16.0-33.0	15/30/75/110
NS-241575W	24	16.0-33.0	15 (75 on axis)

Table 2: dBA Ratings for Series NS/NH Horn

Description	Volume	Reverberant dBA @ 10ft per UL 464		Anechoic dBA @ 10ft	
		12VDC	24VDC	12VDC	24VDC
Continuous Horn	High	83	87	89	95
	Low	76	81	84	90
Code 3 Horn	High	79	82	89	95
	Low	72	76	84	90

Table 3: *Average RMS Current Ratings

NS-24MCW with High (95 dBA) Setting				
Voltage	15cd	30cd	75cd	110cd
16.0 VDC	.077	.113	.195	.268
24.0 VDC	.065	.087	.134	.174
33.0 VDC	.069	.085	.117	.134
NS-24MCW with Low (90 dBA) Setting				
Voltage	15cd	30cd	75cd	110cd
16.0 VDC	.070	.106	.188	.261
24.0 VDC	.052	.072	.126	.158
33.0 VDC	.045	.060	.097	.114

* Average RMS Current is per UL average RMS method and Average Mean Current is per UL average mean method. NH models use average mean current. For rated in Rush and Peak current across UL Listed voltage range for both filtered DC and VRMS (FWR), see installation instructions.

Table 4: *Average RMS Current Ratings

NS-241575W		
Voltage	High (95) dBA	Low (90) dBA
16.0 VDC	.120	.116
24.0 VDC	.094	.093
33.0 VDC	.102	.078

Table 5: *Average Mean Current Ratings NH Horn 24 Volt Models

Voltage	High (95) dBA	Low (90) dBA
16.0 VDC	.019	.017
24.0 VDC	.028	.022
33.0 VDC	.039	.027

Table 6: Sync Models/Power Supply

Model Number	Input Voltage (VDC)	Average Mean Current @ 24 VDC	Mounting Options
SM-12/24-R	24	.028	W
DSM-12/24-R	24	.035	W

***NOTE:** SM Sync Module is rated for 3.0 amperes @ 24 VDC. DSM Sync Module is rated for 3.0 amperes per circuit. The maximum number of interconnected DSM Modules is twenty (20).*

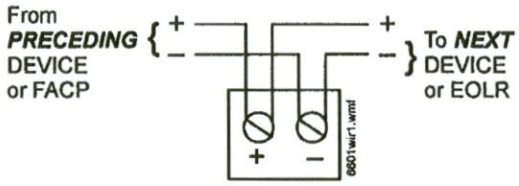
Table 7: UL Maximum Current**

Series NS/NH 24 VDC		Audible	Wall Mount Strobe Models				
		NH-12/24	NS-241575W	NS-24MCW			
		@24VDC	15/75cd	15cd	30cd	75cd	110cd
High (95) dBA	24VDC	.044	.104	.074	.107	.184	.244
Low (90) dBA	24VDC	.018	.096	.066	.101	.177	.232
Series NS/NH 12 VDC		**Audible**	**Wall Mount**	** RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33V for 24V units). For strobes, the UL max current is usually at the minimum listed voltage (16V for 24V units). For audibles, the max current is usually at the listed voltage (33V for 24V units). For unfiltered FWR ratings, see installation instructions.			
		NH-12/24	**Aud/Strobe**				
		@12VDC	**NS-121575W**				
High (95) dBA	12VDC	.021	.220				
Low (90) dBA	12VDC	.012	.210				

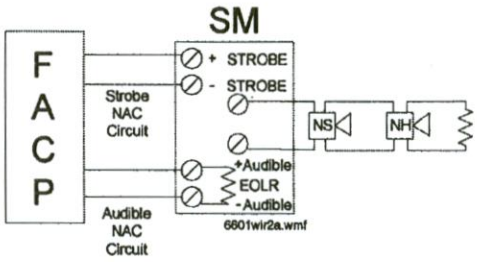
WARNING: CONTACT WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS (P83983) SERIES NS-24MCW, (P84234) SERIES NS-12 AND 24 VDC SINGLE CANDELA MODELS, (P83600) SERIES NH AND "GENERAL INFORMATION" SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

- **TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.**
- **FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.**
- **COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.**
- **ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELLA SETTINGS WILL AFFECT CURRENT DRAW. RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCES OR FUSES.**
- **THE VOLTAGE APPLIED TO THE PRODUCTS MUST BE WITHIN THEIR "REGULATED VOLTAGE RANGE."**
- **INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.**
- **INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.**
- **THESE APPLIANCES ARE NOT DESIGNED TO BE USED ON CODED SYSTEMS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF.**
- **FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, AND/OR PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**
- **CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.**

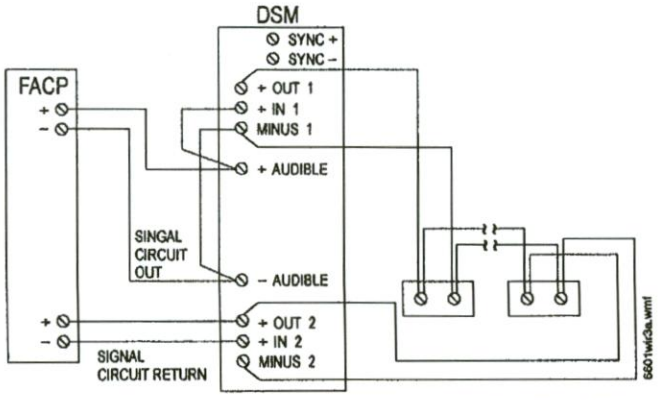
Wiring Diagrams



NS/NH APPLIANCE



NS AND NH APPLIANCES SYNCHRONIZED WITH SM MODULE SINGLE CLASS "B" NAC CIRCUIT WITH AUDIBLE SILENCE FEATURE



NS AND NH APPLIANCES SYNCHRONIZED WITH DSM MODULE DUAL CLASS "A" NAC CIRCUIT WITH NO AUDIBLE SILENCE FEATURE

***NOTE:** NS/NH must be set on Code 3 horn tone to achieve synchronized temporal (Code 3) tone. Refer to installation instruction (P83983, P83600 respectively).*

***NOTE:** For detail using SM or DSM Sync Module refer to data sheet S3000 or installation instructions P83123 for SM and P83177 for DSM.*

Architectural/Engineering Specifications

The audible/visual notification appliances shall be Wheelock Series NS Horn Strobe appliances and Series NH Horn appliances or approved equals. The Series NS appliances shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired for Indoor Fire Protection Service). The Series NH Horn shall be UL Listed under Standard 464 (Fire Protective Signaling). The horn strobe shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by the Fire Alarm Control Panel (FACP).

The audible portion of the appliance shall have a minimum of two (2) field selectable settings for dBA levels (90 and 05 dBA) and shall have a choice of continuous or temporal (Code 3) audible outputs.

The strobe portion of the appliance shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan lens. The Series NS shall be of low current design. Where wall mount, Multi-Candela appliances are specified, the strobe intensity shall never have field selectable settings and shall be rated per UL Standard 1971 for 15/30/75/110 candela. The selector switch for selecting the candela setting shall be tamper resistant. The 1575 candela strobe shall be specified when 15 candela UL Standard1971 Listing with 75 candela on-axis is required (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with Wheelock's SM, DSM Sync Modules or a Power Supply with Wheelock's built-in patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. 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. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation.

The Series NS Horn Strobes and NH Horn shall incorporate a patented Universal Mounting Plate that shall allow mounting to a single-gang, double-gang, 4 inch square, and 100 mm European backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided.

All notification appliances shall be backward compatible.

Listings and Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in progress. Consult factory for listing status.

- **ULC Listed:** E5946
- **ULC Listed:** CS 243, CS 356
- **CSFM:** 7125-0785:142
- **MEA:** 151-92-E
- **FM Approved**

Ordering Information

Model	Strobe Candela	Non-Sync	Sync w/ SM, DSM	24 VDC	12 VDC	2 Wire	Mounting Options	Agency Approvals				
								UL	MEA	CSFM	FM	BFP
NS-24MCW-FR	15/30/75/110	X	X	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-24MCW-FW	15/30/75/110	X	X	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-241575W-FR	15 (75 on axis)	X	X	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NH-12/24-R	12V, 24V	X	X	X	X	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X

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Wheelock RSS & RSSP Series

Single- and Multi-Candela Strobes and Strobe Plates

NOTIFIER® by Honeywell

Audio/Visual Devices

General

Wheelock's patented Series RSS Strobe Appliances and Series RSSP Strobe Plates have lower current draw while maintaining outstanding performance, reliability and cost effectiveness. These versatile appliances will satisfy virtually all requirements for indoor, wall or ceiling mount appliances.

Strobe options for wall mount models include 15/75 or Wheelock's patented MCW multi-candela strobe with field selectable candela settings of 15/30/75/110cd. Ceiling mount models include the patented MCC multi-candela ceiling strobe with field selectable intensities of 15/30/75/95cd or the high intensity MCCH strobe with field selectable 115/177cd.

All models may be synchronized when used in conjunction with the Wheelock SM or DSM Sync Modules or a power supply with Wheelock's patented Sync Protocol. Synchronized strobes can eliminate possible restrictions on the number of strobes in the field of view. Wheelock's synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy as well as meetings the requirements of NFPA 72.

Wheelock's Series RSS Strobes employ a Patented Integral Strobe Mounting Plate that can be mounted to a single-gang, double gang, 4" square, 100mm European backboxes or the SHBB surface backbox. If the flush backbox has side or top space between it and the finished wall, the NATP (Notification Appliance Trimplate) may be used. It provides an additional .65" of trim for the appliance. An attractive cover plate is provided for a clean, finished appearance on all models.

The Series RSSP Multi-Candela Strobe Plates are a cost effective way to retrofit required wall strobe appliances to bells, horns, chimes, multitones, or speakers and easily mounts to standard 4" backboxes or, for surface mount, use with Wheelock's SBL2 surface backbox.

Series RSS

RSS Round

Multi-Candela
(bottom of strobe lens)

Series RSSP

5765ocv1.jpg, 5765ocv2.jpg, 5765ocv3.jpg, 6601phc3.jpg

Features

- Wall mount multi-candela models are available with field selectable candela settings of 15/30/75/110cd or 135/185cd. Single candela models are available in 15/75cd.
- Ceiling mount multi-candela models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd.
- Strobes produce 1 flash per second over the regulated voltage range.
- 12 and 24 VDC models with wide UL "Regulated Voltage" using filtered (DC) or unfiltered VRMS input voltage.
- Synchronize with Wheelock SM or DSM Sync Modules or power supplies with built-in Sync Protocol.
- ADA/NFPA/UFC/ANSI compliant. Meets OSHA 29 Part 1910.165.

General Notes

- RSS/RSSP Series strobe products are listed under UL 1971 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- "Regulated Voltage Range" is the newest terminology used by UL to identify the voltage range. Prior to this change, UL used the terminology "Listed Voltage Range."

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THE FOLLOWING 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.

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

Table 1: Audibles/Speakers for RSSP Strobe Plate

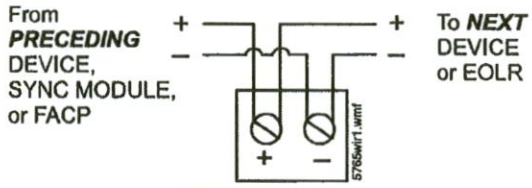
Product	Series
Multitone Appliances	AMT, MT
Horns	AH, NH, HS
Motor Bells	MB-G6/G10
Speakers	ET-1010/1080, E70, ET70
Chimes	CH70

Table 2: UL Maximum Current*													
RSS/RSSP 24 VDC Models	RSS/RSSP - Wall Mount							Ceiling Mount					
	241575W	24MCW				24MCWH		24MCC				24MCCH	
	1575cd	15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd
UL max*	.090	.060	.092	.165	.220	.300	.420	.065	.105	.189	.249	.300	.420
RSS/RSSP 24 VDC Models	RSS/RSSP Wall Mount 121575W	* RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33V for 24V units). For strobes, the UL max current is usually at the minimum listed voltage (16V for 24V units). For audibles, the max current is usually at the listed voltage (33V for 24V units). For unfiltered FWR ratings, see installation instructions.											
12VDC	.152												
UL max*	.255												

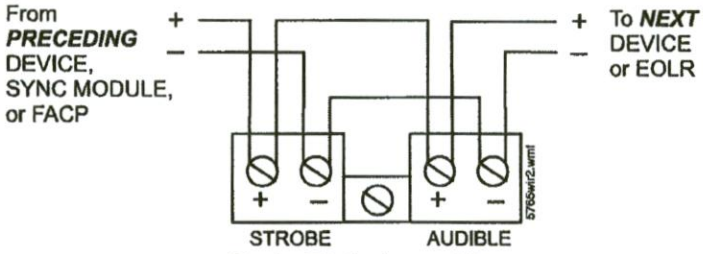
Table 3: Sync Modules/Power Supplies				
Model Number	Order Code	Input Voltage (VDC)	Average Mean Current @ 24VDC	Mounting Options
SM-12/24-R	6369	24	.028	W
DSM-12/24-R	6374	24	.035	W

NOTE: *SM Sync Module is rated for 3.0 amperes 24VDC. DSM Sync Module is rated for 3.0 amperes per circuit. The maximum number of interconnected DSM modules is twenty (20).*

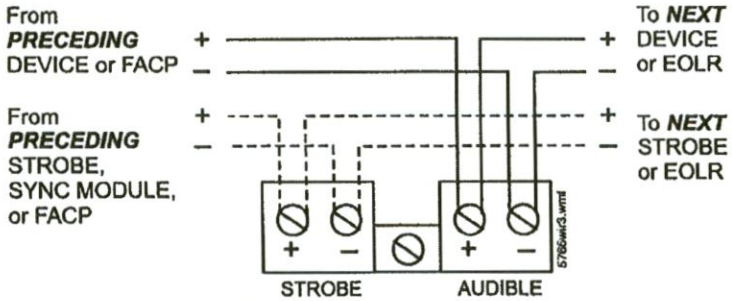
Wiring Diagrams



RSS/RSSP Device

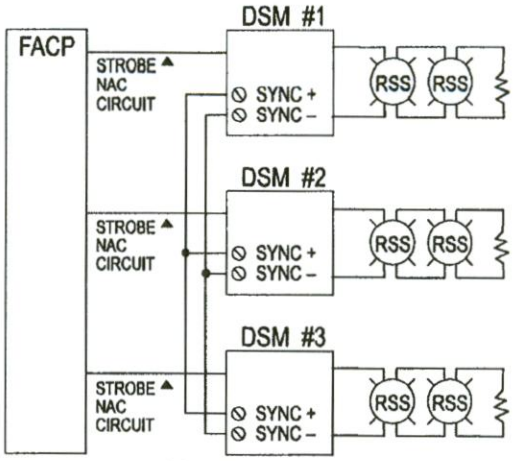


Strobe/Plate Assembly
(with Audible and Visible operating in unison)

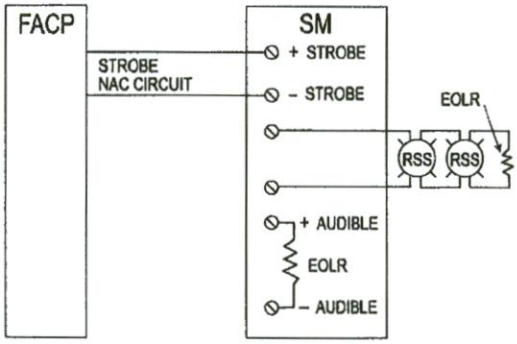


Strobe/Plate Assembly
(with Audible and Visible operating independently)

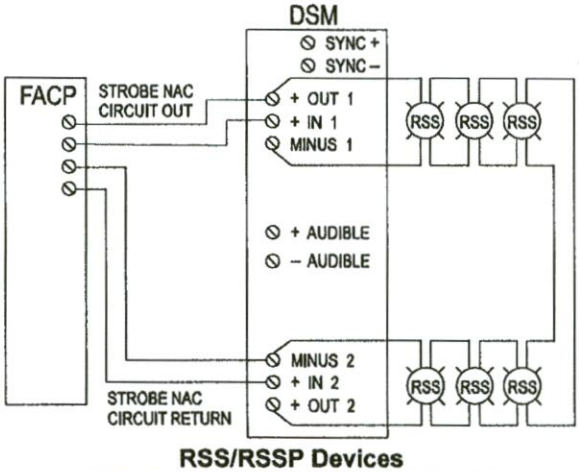
Wiring Diagrams (continued)



RSS/RSSP Devices
(synchronized with DSM module; single Class "A" NAC circuit)



RSS/RSSP Devices
(synchronized with SM module; single Class "B" NAC circuit)



RSS/RSSP Devices
(synchronized with multiple DSM modules)
(NOTE: INTERCONNECTING WIRING SHOWN. MAXIMUM OF 20 DSM MODULES)

For details on using the SM or DSM Sync Modules see installation instructions #P83123 (for SM) or #P83177 (for DSM).

WARNING: CONTACT WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS AND GENERAL INFORMATION SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:

- **TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.**
- **FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.**
- **COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.**
- **ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELLA SETTINGS WILL AFFECT CURRENT DRAW. RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCES OR FUSES.**
- **THE VOLTAGE APPLIED TO THE PRODUCTS MUST BE WITHIN THEIR "REGULATED VOLTAGE RANGE."**
- **INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.**
- **INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.**
- **USE STROBES ONLY ON CIRCUITS WITH CONTINUOUSLY APPLIED OPERATING VOLTAGE. DO NOT USE STROBES ON CODED OR INTERRUPTED CIRCUITS IN WHICH THE APPLIED VOLTAGE CYCLED ON AND OFF AS THE STROBE MAY NOT FLASH.**
- **FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, AND/OR PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**
- **CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.**

Architectural/Engineering Specifications

The visual notification appliances shall be Wheelock Series RSS Strobe Appliances or approved equals. The Series RSS shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing Impaired) for indoor Fire Protection Service. The strobe shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. The strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP). When Strobe Plates are to be installed, they shall be the Wheelock Series RSSP Strobe Plate and shall have the same electronic circuitry as the Wheelock Series RSS.

The Series RSS Strobe shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 at 15/30/75/110cd or 135/185cd for wall mount and 15/30/75/95cd or 115/175cd for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 1575 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on axis is required (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with Wheelock's SM or DSM Sync Modules or a power supply with built-in Patented Wheelock Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the Sync Module or power supply fail to operate (i.e. contacts remain closed), the strobe shall revert to a non-synchronized flash rate. The strobes shall be designed for indoor surface or flush mounting.

The Series RSS Strobe Appliances shall incorporate a Patented, Integral Strobe Mounting Plate that shall allow mounting to single-gang, double-gang, 4-inch square, 100mm European type backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided. An attaching cover plate shall be provided to give the appliance an attractive appearance. The appliance shall not have any mounting holes or screw heads visible when the installation is completed.

The Series RSSP Multi-Candela or single candela Strobe Plate shall mount to either a standard 4-inch square backbox for flush mounting, or the Wheelock SBL2 backbox for surface mounting.

All notification appliances shall be backward compatible. *NOTE: Due to continuous development of our products, specifications and offering are subject to change without notice in accordance with Wheelock, Inc. standard terms and conditions.*

Listings and Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in progress. Consult factory for listing status.

- **ULC Listed:** E5391
- **ULC Listed:** CS 356
- **CSFM:** 7125-0785:141
- **MEA:** 151-92-E Vol. XIX, XX;
  Vol. XXIV (RSS-24MCW-FR/-FW)
- **FM Approved**

Ordering Information

Model	Wall/ Ceiling Mount	Non-Sync	Sync w/ SM, DSM	Strobe Candela	12/24 VDC	Model Color	Model Shape	Agency Approvals
RSS-24MCW-FR	Wall	X	X	15/30/75/110	24	Red	Square	UL, MEA, CSFM, FM, BFP
RSS-24MCW-FW	Wall	X	X	15/30/75/110	24	White	Square	UL, MEA, CSFM, FM, BFP
RSS-241575W-FR	Wall	X	X	15 (75 on axis)	24	Red	Square	UL, MEA, CSFM, FM, BFP
RSS-24MCC-FW	Ceiling	X	X	15/30/75/95	24	White	Square	UL, MEA, CSFM, FM
RSS-24MCC-FR	Ceiling	X	X	15/30/75/95	24	Red	Square	UL, MEA, CSFM, FM
RSS-24MCCR-FW	Ceiling	X	X	15/30/75/95	24	White	Round	UL, MEA, CSFM, FM
RSS-24MCCHR-FW	Ceiling	X	X	115/177	24	White	Round	UL, MEA, CSFM, FM
RSSWP-2475W-FR	Wall	X	X	180 @ 77°F 75 @ -31°F	12/24	Red	Square	UL, MEA, CSFM, FM

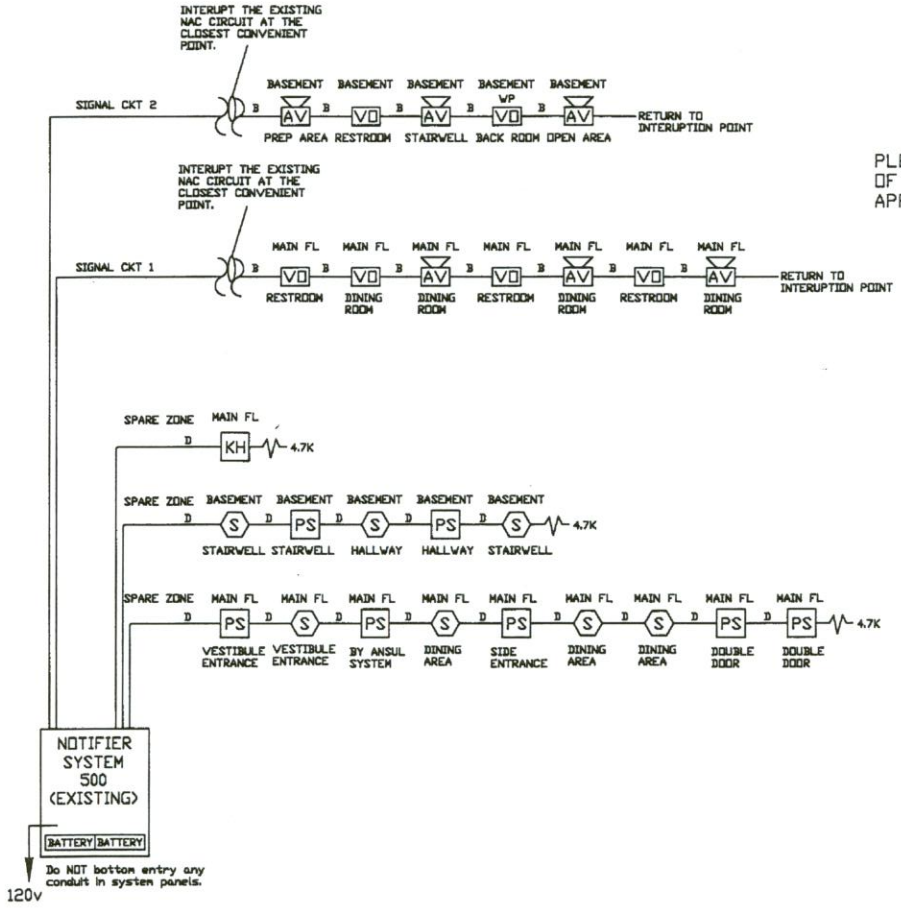
Lexan® is a registered trademark of GE Plastics, a subsidiary of General Electric Company.

ISO 9001 CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS

This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com



PLEASE NOTE: A MAXIMUM OF 12 NOTIFICATION APPLIANCES PER CIRCUIT.

Important! All electronic devices MUST be place in a heated room with temperature above 32 deg F.

LEGEND

MOUNTING HEIGHT		
48 INCHES	PS	PULL STATION
	S	SMOKE DETECTOR
80 INCHES	VP VD	WEATHERPROOF VISUAL ONLY
80 INCHES	VD	VISUAL ONLY
80 INCHES	AV	AUDIO / VISUAL
	KH	KITCHEN HOOD ANSUL
	SFS STS	SPRINKLER SWITCHES FLOW,TAMPER

This drawing is a typical device layout, wiring is shown diagrammatically only. Riser does not necessary indicate all devices and appliances. See floor plans and specification for location and quantities. The purchaser needs to accurately layout the initiating and notification devices in their proper zones/circuit. Note: Each Signal circuit has a 2.75 amp load limitation. All REMOTE power supply have 8.0 amps limitation equally divided 4 in circuits. (see chart below for current vs. candela rating)

Room Size	Candela Rating	Load (amps)
20' x 20'	15 cd	0.08 amps
30' x 30'	30 cd	0.10 amps
40' x 40'	75 cd	0.15 amps
50' x 50'	110 cd	0.20 amps

4.7k END OF LINE RESISTOR (Panel Circuits)

A	1 PR #14 TWISTED PAIR (under 4800 feet)
A	1 PR #12 TWISTED PAIR (over 4800 feet)
B	1 PR #12 AWG FPL CABLE
D	1 PR #16 AWG FPL CABLE
E	1 PR #14 AWG TWISTED SHIELDED CABLE
F	2c #12 AWG CABLE
G	2c #14 AWG CABLE
H	2c #16 AWG CABLE
I	2c #18 AWG CABLE
S	4c #18 AWG CABLE

REVISION 2	DATE:
REVISION 1	DATE:
REVISION 0 SUBMITTAL	DATE: 3/4/10

SYSTEM WIRING RISER

PROJECT NAME
SIANO'S PIZZERIA
PORTLAND, MAINE

SCALE: NTS
BY: CJC
CK BY:
SAVED AS:

NORRIS INC.
P.O BOX 2551, SOUTH PORTLAND, MAINE 04116
2257 W BROADWAY, SO PORTLAND, MAINE 04106

REVISION 2	DATE:	
REVISION 1	DATE:	
REVISION 0 SUBMITTAL	DATE:	3/5/10

SYSTEM WIRING RISER

PROJECT NAME
SIANO'S PIZZERIA

SCALE: NTS
BY: CJC
CK BY:
SAVED AS:

NORRIS INC
Prepared For Tomorrow; Delivered Today
2257 W BROADWAY, SD PORTLAND, MAINE 04106

SYSTEM OUTPUTS

	SYSTEM INPUTS	CONTROL UNIT ACTIVATION								NOTIFICATION					
		A: ACTUATE COMMON ALARM SIGNAL INDICATOR	B: ACTUATE AUDIBLE ALARM SIGNAL	C: ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	D: ACTUATE AUDIBLE SUPERVISORY SIGNAL	E: ACTUATE COMMON TROUBLE SIGNAL INDICATOR	F: ACTUATE AUDIBLE COMMON TROUBLE SIGNAL	G: RECORD EVENTS IN THE SYSTEM MEMORY	H: ACTUATE GENERAL EVACUATION SIGNALS	I: TRANSMIT FIRE ALARM SIGNAL TO REMOTE ALARM RECEIVING STATION	J: TRANSMIT SUPERVISORY SIGNAL TO REMOTE ALARM RECEIVING STATION	K: TRANSMIT TROUBLE SIGNAL TO REMOTE ALARM RECEIVING STATION	L	M	N
1	MANUAL FIRE ALARM PULL STATION	●	●						●	●		●			
2	AREA SMOKE DETECTOR	●	●						●	●		●			
3	AREA HEAT DETECTOR	●	●						●	●		●			
4	FIRE ALARM AC POWER FAILURE					●	●		●					●	
5	FIRE ALARM SYSTEM LOW BATTERY					●	●		●					●	
6	OPEN CIRCUIT					●	●		●					●	
7	GROUND FAULT					●	●		●					●	
8	NOTIFICATION APPLIANCE CIRCUIT SHORT					●	●		●					●	

NOTIFIER by Honeywell

AC Branch Current

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

Note: These selections only determine the AC branch current. If these devices will affect the battery requirements, you need to select them on the System Current Draw sheet.

◉ 120 VAC ○ 220/240 VAC

Device	Qty		Current	Total
MS-24BPCA	1	x	1.80 A	1.80 A
AA-30	0	x	1.00 A	
AA-120	0	x	1.85 A	
ACPS-2406	0	x	2.70 A	
APS-6R	0	x	2.50 A	
AVPS-24	0	x	1.00 A	
CHG-120	0	x	2.00 A	
FCPS-24	0	x	2.00 A	
FCPS-24S	0	x	3.20 A	
MPS-24A	0	x	1.80 A	
MPS-24B	0	x	2.40 A	
XPIQ	0	x	3.50 A	
XRM-24	0	x	1.00 A	
[ ]	0	x	0.00 A	
[ ]	0	x	0.00 A	
			AC Branch Required:	**1.80 A**

NOTIFIER by Honeywell

System Current Draw - System 500

Current Draw	
C1	0.093 A
C2	2.389 A
C3	0.053 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Non-Alarm Current				C2 - Alarm Current				C3 - Standby Current			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Standby
CPU 500	1	x	0.03100	0.03100	1	x	0.22300	0.22300	1	x	0.03100	0.03100
MS-24BPCA	1	x	0.06200	0.06200	1	x	0.06200	0.06200	1	x	0.02200	0.02200
NS-2430MCW-FR	6	x	0.00000	0.00000	6	x	0.10700	0.64200	6	x	0.00000	0.00000
RSS-2430MCW-FR	5	x	0.00000	0.00000	5	x	0.09200	0.46000	5	x	0.00000	0.00000
RSSP-24MCW-FR30	1	x	0.00000	0.00000	1	x	0.09200	0.09200	1	x	0.00000	0.00000
2W-B	7	x	0.00005	0.00035	7	x	0.13000	0.91000	7	x	0.00005	0.00035
NBG-12L	7	x	0.00000	0.00000	7	x	0.00000	0.00000	7	x	0.00000	0.00000
5604	1	x	0.00000	0.00000	1	x	0.00000	0.00000	1	x	0.00000	0.00000
			Total Non-Alarm Load:	0.093			Total Alarm Load:	2.389			Total Standby Load:	0.053

NOTIFIER by Honeywell

System Power Requirements

System 500 Fire Alarm Control Panel

Protected Premises: Siano's Pizzeria Date: 3/11/2010

Address:

City: Portland State: Maine Zip:

Prepared By: Norris Inc Phone: 207-883-3473

Address: 2257 West Broadway Email:

City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements

1.80 Amps @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load

0.09 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load

2.39 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements

2.02 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Seconday Standby Load 0.053 A	x	Required Standby Time 24 hours	1.28
Secondary Alarm Load 2.389 A	x	Required Alarm Time (hours) 0.167 hours	0.40
Auxiliary Power Supply Load 0.000 A	x	Required Alarm Time (hours) 0.167 hours	0.00
		Total Secondary Load	1.68
		Derating factor	x 1.2
		Secondary Load Requirements	**2.02** AH

Battery Selection

7 Amp Hours

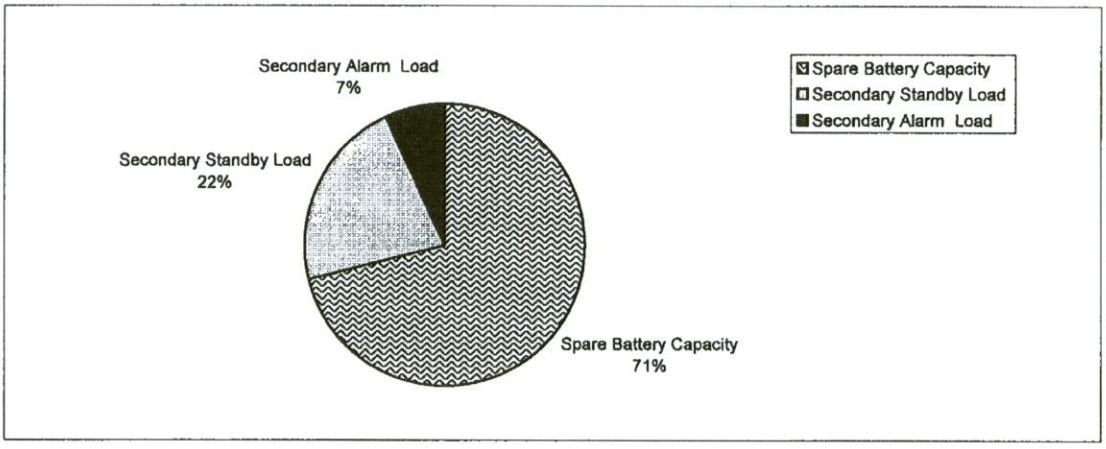
Select batteries from the list below.

7.0 AH BAT-1270 Battery (12 volt)

(•) Two ( ) Four (two 12VDC sets in parallel)

Battery Distribution Chart

Shows amp-hour distribution of your



Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	4.98	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.54	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.48	Secondary Alarm Load (AH) * Derating Factor

NOTIFIER by Honeywell

Device Current Draw

System 500 Fire Alarm Control Panel

Quantity x [device current draw] = total current draw per device (in amps)

Part Number	Qty	Primary Non-Alarm	Primary Alarm	Secondary Non-Alarm
CPU 500	1	x [0.03100] = 0.03100	x [0.22300] = 0.22300	x [0.03100] = 0.03100
MS-24BPCA	1	x [0.06200] = 0.06200	x [0.06200] = 0.06200	x [0.02200] = 0.02200
NS-2430MCW-FR	6	x [0.00000] = 0.00000	x [0.10700] = 0.64200	x [0.00000] = 0.00000
RSS-2430MCW-FR	5	x [0.00000] = 0.00000	x [0.09200] = 0.46000	x [0.00000] = 0.00000
RSSP-24MCW-FR30	1	x [0.00000] = 0.00000	x [0.09200] = 0.09200	x [0.00000] = 0.00000
2W-B	7	x [0.00005] = 0.00035	x [0.13000] = 0.91000	x [0.00005] = 0.00035
NBG-12L	7	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
5604	1	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
Total (Amperes):		**0.0934 A**	**2.3890 A**	**0.0534 A**

REVISION 2	DATE:	
REVISION 1	DATE:	
REVISION 0 SUBMITTAL	DATE:	3/5/10
SYSTEM WIRING RISER		
PROJECT NAME SIANO'S PIZZERIA	SCALE: NTS	
	BY: CJC	
	CK BY:	
NORRIS INC Prepared For Tomorrow; Delivered Today 2257 W BROADWAY, SO PORTLAND, MAINE 04106	SAVED AS:	

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	SYSTEM INPUTS	CONTROL UNIT ACTIVATION								NOTIFICATION					
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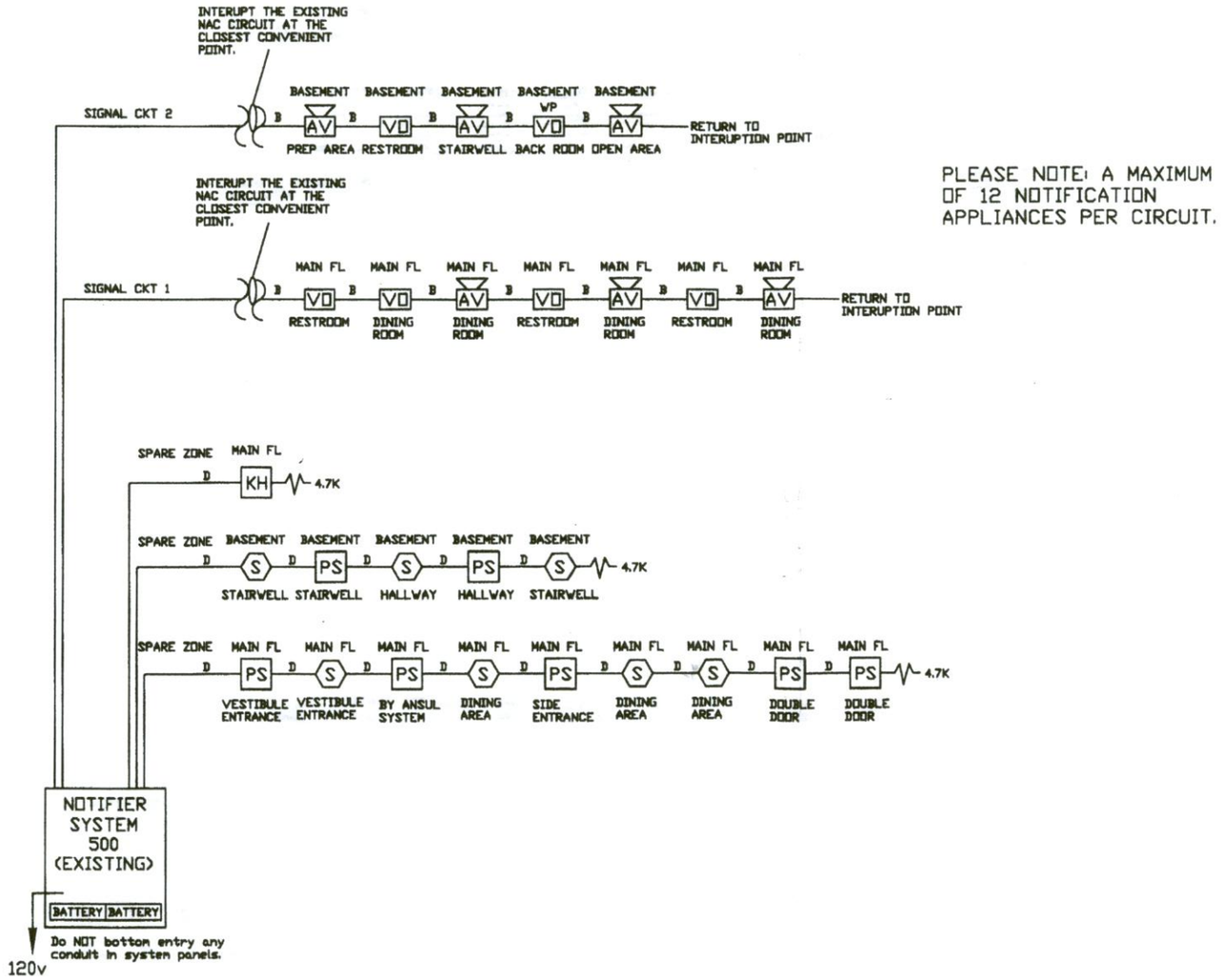

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	SFS STS	SPRINKLER SWITCHES FLOW,TAMPER

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G	2c #14 AWG CABLE
H	2c #16 AWG CABLE
I	2c #18 AWG CABLE
S	4c #18 AWG CABLE

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PROJECT NAME
SIANO'S PIZZERIA
PORTLAND, MAINE

SCALE: NTS
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