City of Aurora
Building Codes Division
15151 E Alameda Pkwy
Aurora, CO 80012
(303) 739-7420

Notice

This material is subject to copyright protection pursuant to Federal Law: 17 United States Code Section 106.

Building Permit Application

Permit Center - 15151 E Alameda Pkwy ❖ Ste 2400❖Aurora, CO 80012❖(303)739-7420
Email buildingplans@auroragov.org

Project Address: 1501 S. Potomac St. Unit # 3rd Floor Zip code: 80011
Project Name: Medical Center of Aurora
Contractor Company Name: Empire Fire & Safety Phone: 3)451-0975 Fax: 3)920-9298
Contact Person: DAVE Walker Phone: 3) 217-1438
Email: empirefiresafety@msn.com Fax: 3) 920-9298
Architect and/or Engineer Contact information for correction items:
Architect or Engineer Name: Email:
Phone #: Fax #:
Owner:(Required for Certificate of Occupancy) only:
Owner address:
Email:
Valuation / FDA$ 7500.00 **Materials cost $** 2000.00

FDA = Fee Determination Assessment. (Also known as the value of project. The Fee Determination Assessment, FDA has no relationship to the construction costs for the building which can vary greatly. Rather, the Assessment is used only to determine the appropriate level of fees to fund our code compliance activities.

Describe the work you will be doing: Adding power supply to synchronize strobes in new 3rd floor ICU area.

I declare under penalty that this application has been examined by me; and that the statements made herein are made in good faith pursuant to City of Aurora tax and licensing regulations; and to the best of my knowledge and belief are true, correct and complete.

Print Name: Dave Walker **Signature:** Dave Walker **Date:** 11/6/2012

BOARD OF APPEALS - Contractor's Appeals and Standards Board. Applicants have the right to have the board hear appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of the building code. Any application for appeal to the board shall be based on a claim that the true intent of the code or the rules legally adopted there under have been incorrectly interpreted, the provisions of the building code do not fully apply or an equally good or better form of construction is proposed.

Sprinkler & Alarm permits are separate submittals, and the value is NOT included on main permit.

◆◆◆◆ **THIS SPACE FOR OFFICE USE ONLY** ◆◆◆◆

Change of occupancy/use: ☐ Yes ☐ No

FDA:

Reviews		Inspections	
☐	Structural	☐	Structural
☐	Mechanical	☐	Mechanical
☐	Plumbing	☐	Plumbing
☐	Electrical	☐	Electrical
☒	Fire Life Safety	☒	Life Safety
☐	Bldg Life Safety	☐	Gate/Haz.

Intake Date: 01/9/12 PE Initial JP

Balance Due: $

Initials

Pre-approval(s): Zoning: ☐ Water: ☐
Exterior changes? ☐ Yes ☒ No
Homeowner Verified ☐ Yes
Permit Type Limited
Mid roof /Avg. bldg height
Parent Permit RSN 624289
Plans Examiner JP
Sub Type 4X Alarm
RSN: 637557

2012577161

Plans Picked up by
Company Nam
Phone #

See reverse side for Fence/sign/Public Improvements application

3rd Floor – Portion Of

Medical Center of Aurora
1501 S. Potomac St.
Aurora, Colorado 80012

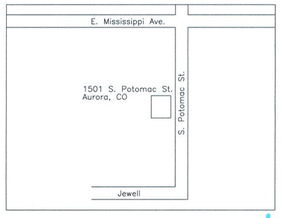
Fire Protection Codes:

All work shall conform to the current editions of national, state and local codes, and other regulation agencies which have authority over any portions of the work. All contractors and subcontractors performing general construction, mechanical, electrical, plumbing or related work shall comply with applicable sections of the codes that have jurisdiction.

Applicable Codes:

2011 ~~2005~~ NEC National Electrical Code
2007 ~~2010~~ NFPA 72 Fire Alarm Code (standard)
2009 ~~2006~~ IBC International Building Code
~~2006~~ IFC International Fire Code

Site Plan:



General Notes:

- Fire alarm systems cannot be combined with burglar alarm systems.
- The installer is required to coordinate with the mechanical contractor to determine installation of smoke detectors or sensors (i.e., not closer than 3 feet from any supply/return diffuser and that additional detection may be required due to the relocation or spacing adjustment of detectors as a result.
- Fire alarm devices must be placed in protected areas with ambient temperature ranging from 32 degrees to 120 degrees F.
- Do not place smoke detectors within 3 feet of air supply registers and diffusers.
- Fire alarm system shall be monitored by a Class I Central Station.
- Fire alarm control panel will be placed in the location specified within the plan submittal unless approved by the life safety field inspector.
- City of Aurora Building Codes Division does not grant approval for any violations of adopted fire code. Code violations uncovered during field inspections must be corrected.
- Per the 2006 IFC and the 2008 NEC, the installer must request a rough wiring inspection on the fire alarm system prior to requesting a fire alarm final inspection.
- The contractor shall conduct a "pre-test" of the project area prior to scheduling an acceptance test with the Building Codes Division.
- Remote alarm indicators shall be provided for any automatic fire alarm detector located in a concealed location with a normally locked door.
- At the time of final fire alarm inspection, the system must be supervised/monitored by a Class I central monitoring agency.
- The installing contractor (or designee) must provide all necessary testing equipment and perform all testing required by the life safety field inspector.
- In-duct smoke detectors installed in concealed locations or where the detectors alarm indicator is not readily visible to responding personnel shall be provided with a remote indicator(s), remote test station and placarding.
- All new or existing fire alarm systems must be connected to any exterior horn and strobe device. If the building is fire sprinklered, a general alarm activation at the fire alarm control panel will activate the exterior horn and strobe. Silencing the panel must allow the visual device to continue until the panel is reset.
- Fire alarm systems shall include both audible and visual alarms. Visual alarms will be required in all accessible public and common-use areas per the 2006 IFC and the 2003 ANSI A117.1 standard.
- Provide a primary and secondary power supply for the fire alarm system per the 2006 IFS, Section 907.5 and the 2002 NFPA 72.
- Field inspection consultation is available upon request. Call 303-739-7420 to request consultation.

- THE FIRE ALARM INSTALLATION CONTRACTOR MUST COMPLETE THE NFPA 72 "RECORD OF COMPLETION" PRIOR TO SCHEDULING THE AHJ ACCEPTANCE TEST.
- ~~FIELD INSPECTION CONSULTATION IS AVAILABLE UPON REQUEST. CALL 303-739-7420 TO REQUEST CONSULTATION.~~
- AUDIBLE ALARM SIGNALING DEVICES SHALL EXCEED THE PREVAILING SOUND LEVEL IN A ROOM OR SPACE BY 15 DBA. SOUND LEVELS FOR ALARM SIGNALS SHALL BE 120 DBA MAXIMUM. IFC SECTION 907.10.2.

Authority Having Jurisdiction:

Aurora Building Codes Division
15151 E. Alameda Parkway
2nd Floor Permit Center
Aurora, Colorado 80012
Phone: 303-739-7420
Fax: 303-739-7551

General Project Information:

Occupancy Group: IBC ~~I-2~~ I-2
Number of Stories: 5 Stories
New or Existing System: Existing System
Construction Type: ~~UBC Type 2-FRN~~ IBC 1-A, SPK
Square Footage of Project Area:
Total Square Footage of Structure: 425,000 s.f. (SCOPE OF WORK 18,118 S.F.)

Fire Alarm System Shall be Monitored by:

Simplex Grinnell
6240 Smith Road
Denver, Colorado 80216
Phone: 303-355-0500

Scope of Work

Work limited to synchronization of strobes in remodel area 3rd floor. All devices of remodel area are within one evacuation zone. (ON FIRST FLOOR)

New power supply panel added to provide power and synchronization for strobes. Chimes are powered for existing fire panel, no changes to chime configuration.

All Chime Strobes are existing, Strobe only devices replaced to match brand of chime strobes to accomplish synchronization.

City of Aurora Plan Review
Occ./Const. Type I-2/1A, SPK
Code '09 IFC S.F. 18,118
'07 NFPA 72/'11 NEC
City of Aurora Plan Review
Project AURORA MED. CNTR-3RD FLR-FIRE ALARM
Address 1501 S. POTOMAC
Contractor EMPIRE FIRE
RSN 637557
Permit Number 12-577161
Plan Location STELLENT

Horn/Strobe Circuit Voltage Drop Calculations 24vdc Systems

Job Name: Medical Center of Aurora – ICU 3rd Floor
Normal Voltage 24 Vdc
85% Voltage for Calculations 20.4 Vdc

Circuit ID: Spare Ckt –

Device	Qty.	Current (ma)	Total
–	–	–	0.0
–	–	–	0.0
–	–	–	0.0
–	–	–	0.0
–	–	–	0.0
			0.0
Devices/Ckt	11	Current Draw	0.000 Amps
		Wire Run	– FT
		Wire Gauge	– AGW
		Voltage Drop	0.00 Volts
		% Volt Drop	0.00 %
		End of Run Voltage	20.40 Volts

Wire Gauge	Ohms Per Foot
12	0.0016 ohms
14	0.0026 ohms
16	0.0041 ohms
16	0.0065 ohms

Circuit ID: Spare Ckt –

Device	Qty.	Current (ma)	Total
–	–	–	0.0
–	–	–	0.0
–	–	–	0.0
–	–	–	0.0
–	–	–	0.0
			0.0
Devices/Ckt	15	Current Draw	0.000 Amps
		Wire Run	– FT
		Wire Gauge	– AGW
		Voltage Drop	0.00 Volts
		% Volt Drop	0.00 %
		End of Run Voltage	20.40 Volts

Total System Amperage
Alarm 0.000 Amp
Standby 0.000 Amp

Horns to be Temporal tone. UL Max current used for calculations.

Circuit ID: Strobe Ckt1 –

Device	Qty.	Current (ma)	Total
CH70-241575W-FR	3	90.0	270.0
RSS-2415MCW-FR	8	60.0	480.0
ST-15	–	0.0	0.0
–	–	0.0	0.0
–	–	0.0	0.0
			0.0
Devices/Ckt	11	Current Draw	0.750 Amps
		Wire Run	200 FT
		Wire Gauge	14 AGW
		Voltage Drop	0.77 Volts
		% Volt Drop	3.79 %
		End of Run Voltage	19.63 Volts

Wire Gauge	Ohms Per Foot
12	0.0016 ohms
14	0.0026 ohms
16	0.0041 ohms
16	0.0065 ohms

Circuit ID: Strobe Ckt2

Device	Qty.	Current (ma)	Total
CH70-241575W-FR	6	90.0	540.0
RSS-2415MCW-FR	5	60.0	300.0
RSS-2475MCW-FR	1	165.0	165.0
–	–	0.0	0.0
–	–	0.0	0.0
			0.0
Devices/Ckt	6	Current Draw	1.005 Amps
		Wire Run	200 FT
		Wire Gauge	14 AGW
		Voltage Drop	1.04 Volts
		% Volt Drop	5.08 %
		End of Run Voltage	19.36 Volts

Total System Amperage
Alarm 0.000 Amp
Standby 0.000 Amp

System Current Draw – HPF24S6

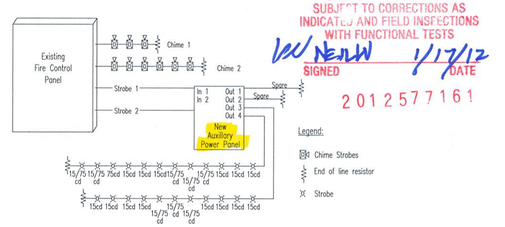
Total Currents	
C1	0.091 A
C2	1.900 A
C3	0.065 A

Device	C1– Non-Alarm Current Qty.		Draw	Non-Alarm	C2– Alarm Current Qty.		Draw	Non-Alarm	C3–Secondary Non-Alarm Qty.		Draw	Non-Alarm
1.System Modules												
HPF24S6 Main Circuit Board	1	X	0.09100	0.09100	1	X	0.14500	0.14500	1	X	0.06500	0.06500
Power Supervision Relay	0	X	0.02500		0	X	0.02500		0	X	0.02500	
2. NAC#1									0	X		
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
NAC#1 Totals(Max 3 Amps)				0.00000				0.00000				0.00000
3. NAC#2												
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
NAC#2 Totals(Max 3 Amps)				0.00000				0.00000				0.00000
4. NAC#3												
CH70-241575W-FR	3	X	0.00000	0.00000	3	X	0.00000	0.27000	3	X	0.00000	0.00000
RSS-2415MCW-FR	8	X	0.00000	0.00000	8	X	0.00000	0.48000	8	X	0.00000	0.00000
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
NAC#3 Totals(Max 3 Amps)				0.00000				0.00000				0.00000
5. NAC#4												
CH70-241575W-FR	6	X	0.00000	0.00000	6	X	0.00000	0.54000	6	X	0.00000	0.00000
RSS-2415MCW-FR	5	X	0.00000	0.00000	5	X	0.00000	0.30000	5	X	0.00000	0.00000
RSS-2475MCW-FR	1	X	0.00000	0.00000	1	X	0.00000	0.16500	1	X	0.00000	0.00000
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
	0	X	0.00000		0	X	0.00000		0	X	0.00000	
NAC#4 Totals(Max 3 Amps)				0.00000				0.00000				0.00000
6. Auxillary Power												
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
7. Compatible Devices not listed												
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Auxillary Device	0	X	0.00000		0	X	0.00000		0	X	0.00000	
Total Non-Alarm Load					Total Alarm Load			1.900	Total Secondary Non-Alarm Load			0.066

Wire Schedule:

SYM	Wire	Application	Wire Color
A	#18 P	Initiating zone wire (IDC)	Red/black
B	#18 P	Signaling line circuit (SLC)	Red/black
C	#16 P	Interior horn/strobe circuit	Red/black
E	#14 P	Strobe circuit	Red/black
D	#14 P	Chime circuit	Red/black
Y	#14 P	Remote annunciator	Red/black
F	#18 P	DUCT remote test station	Red/black/green/yellow
G	#18 P	Fan shutdown circuit	Red/black
H	CAT 5	Phone line	
J	#14 P	Horn/strobe circuit	Red/black
Z	#14 P	24VDCV Power	Red/black
AC	3 # 12 THHN	120VAC Power	Black/white/green

AURORA BUILDING DEPARTMENT
LIFE SAFETY SYSTEMS
APPROVED
SUBJECT TO CORRECTIONS AS INDICATED AND FIELD INSPECTIONS WITH FUNCTIONAL TESTS
SIGNED 1/17/12 DATE
2012577161



1 Line Diagram

Installed By:

Empire Fire & Safety, Inc.
10475 Irma Drive #17
Northglenn, Colorado 80233
Phone: 303-451-0975
Fax: 303-920-9298

3rd Floor – ICU
Medical Center of Aurora
1501 S. Potomac St.
Aurora, Colorado 80012
Miscellaneous Project Information

Drafted By:
C&S Design
2893 So. Paris Court
Aurora, Colorado 80014
Phone: 303.695.4071
Fax: 720.747.1402

Empire Fire & Safety Job Number:

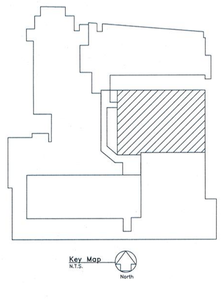
Empire Contact:
Dave Walker

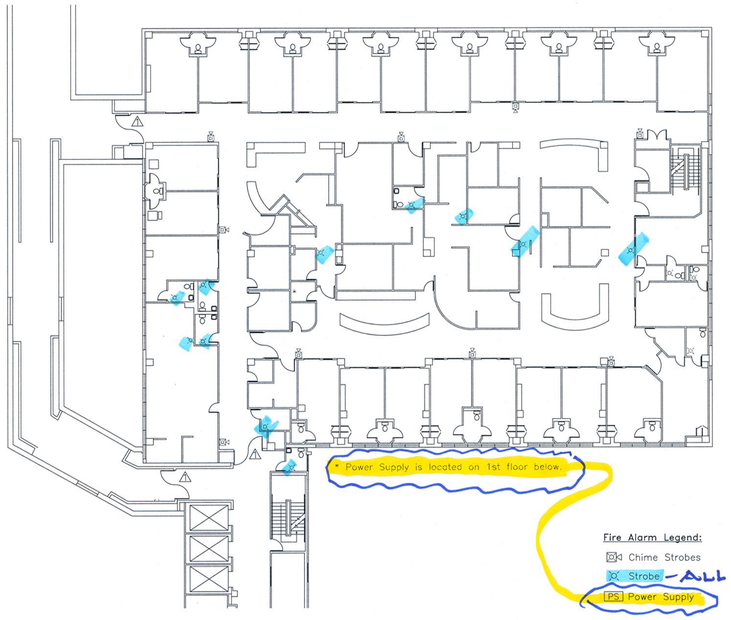
Engineer's Stamp:
Brian Kaiser, CET
NICET 93915
Fire Alarm System, III

Date: 11/22/11 Scale: N/A
Revisions:

Drawing Name:
Med.Ctr.–3rdFlr.Proj.Info.

Sheet 1 of 2





Note:

⚠ NFPA 72 2007 Edition
Reference # 7.5.2.6
per Mike Dean

Fire Alarm Legend:

Chime Strobes
Strobe – ALL SHOWN BEING REPLACED (PER SCOPE OF WORK AND PHONECON W/APPLICANT)
PS Power Supply

Portion of 3rd Floor Plan
Scale: 1/16"=1'-0"
North

AURORA BUILDING DEPARTMENT
LIFE SAFETY SYSTEMS
APPROVED
SUBJECT TO CORRECTIONS AS INDICATED AND FIELD INSPECTIONS WITH FUNCTIONAL TESTS
SIGNED 1/17/12 DATE
2012577161

Installed By:

Empire Fire & Safety, Inc.
10475 Irma Drive #17
Northglenn, Colorado 802
Phone: 303-451-0975
Fax: 303-920-9298

3rd Floor – Partial

Medical Center of Aurora
1501 S. Potomac St.
Aurora, Colorado 80012

Partial 3rd Floor Plan

Drafted By:

C&S Design
2893 So. Paris Court
Aurora, Colorado 80014
Phone: 303.695.4071
Fax: 720.747.1402

Empire Fire & Safety Job Number:
Empire Contact:
Dave Walker
Engineer's Stamp:
Brian Kaiser, CET NICET 93915 Fire Alarm Systems, III

Date: 11/22/11	Scale: 1/16"=1'-
Revisions:	
12/27/11	1/6/12
Drawing Name:	
Med.Ctr.–Partial 3rd Flr	

Sheet 1 of 2

2012577161

Fire Alarm System Acceptance Inspection

2009 IFC and 2007 NFPA 72

This worksheet is for jurisdictions that permit the use of 2007 NFPA 72 in lieu of IFC's referenced 2002 NFPA 72.

Date of Inspection: _____ Permit Number: _____

Business/Building Name: AURORA MED CNTR Address of Project: 1501 S. POTOMAC, 3RD FLR

Contractor: EMPIRE FIRE & SAFETY Contractor's Phone: 3-451-0975

Reference numbers following worksheet statements represent an NFPA code section unless otherwise specified.

Pass	Fail	NA		General
1. ____	____	____		Obtained a copy of the fire alarm installation certification and a Record of Completion from installer, 4.5.2.1.
2. ____	____	____		Approved plans are on site.
3. ____	____	____		Fire alarm control unit (FACU) and remote annunciator (RA) are installed consistent with approved plans, 4.4.6.1.1. and 7.10.
4. ____	____	____		A zone and legend map is provided at the RA or an approved location.
5. ____	____	____		Fire alarm zones are properly identified on the FACU and RA panels.
6. ____	____	____		The fire alarm system power supply is a dedicated 120 AC branch circuit, which is labeled, 4.4.1.4.2.2.
7. ____	____	____		Type and gauge of wire or cable(s) for each circuit are consistent with the plans.
8. ____	____	____		Device location and installation are consistent with the plans.
9. ____	____	____		Pull stations are installed at the proper height and location, 42 in. to 48 in. and within the 200 ft. maximum travel distance, 5.13 and IFC 907.5.2.1 and 907.5.2.2.
10. ____	____	____		A Contractor Sound Pressure Level (dBA) Pretest Room Log is provided and verified with the use of a sound meter during a sound pressure test.
Operational				
11. ____	____	____		Fire alarm audible notification devices sound throughout the occupancy providing a sound pressure level at least a minimum of 15 dBA above the average ambient noise level or 5 dBA above the maximum noise level. For bedrooms with closed door provide at least 75 dBA at the pillow, 7.4.4.1, IFC 907.6.2.1.1.
12. ____	____	____		Fire alarm audible devices are a three-pulse temporal pattern unless they were permitted to match existing audible devices, 6.8.6.5.1.
13. ____	____	____		Fire alarm visual notification device intensity (cd) ratings and settings, mounting height (80 in. to 96 in.), and location, are consistent with the plans, 7.5.4.1.
14. ____	____	____		Emergency voice/ alarm communications systems is tested and documentation is provided documenting the verbal statement(s) are distinguishable and understandable, Table 10.4.2.2.15(b).
15. ____	____	____		In sprinklered buildings, the fire alarm notification devices will activate by operation of the sprinkler flow alarm.
16. ____	____	____		HVAC duct detectors are supervised by the fire alarm system, detectors are all tested to verify if they can sample the air stream, fans shut down upon activation and visual and audible status alarm functions, Table 10.4.2.2.14(g).
17. ____	____	____		A central, remote or proprietary monitoring service received various signals during system tests.
18. ____	____	____		Verify that the correct and distinctive signals are received (alarm, trouble, and supervisory alarms), 4.4.3.3, 10.4.1.1
19. ____	____	____		Two monitoring circuits are provided, both circuits send correct signals to monitoring company within 90 seconds, Table 10.4.2.2.16.
20. ____	____	____		Verify proper operation of magnetic door-releasing hardware and/or ventilation shutdown.
21. ____	____	____		Sprinkler tamper switch activation transmits a trouble signal at the annunciator panel.
22. ____	____	____		Fire department communications system, if provided, is operational.
23. ____	____	____		For air sampling and flame detectors, test the device in accordance with the manufacturer's instructions.
24. ____	____	____		Restoreable heat and smoke detectors, and pull stations are tested.
25. ____	____	____		Trouble condition is created for each circuit and the FACU responds appropriately.
26. ____	____	____		Remote annunciator displays the correct zone and device information.

2012577161

27. ____	____	____		Battery load test: the system is switched to battery operation 24 hours before the test and in the presence of the inspector the notification devices are activated and operate for 5 minutes or 15 minutes for emergency voice alarms.
28. ____	____	____		Check battery charger, measure load voltage, and open circuit voltage.
29. ____	____	____		Test ground-fault monitoring circuit, if provided.
30. ____	____	____		Under primary and secondary power, perform these tests:
____	____	____	A.	power light on and in normal condition, trouble signal when on secondary power.
____	____	____	B.	supervisory signals: fire pump power loss or phase reversal, water level/temp, pressure switches, control valves, etc.
____	____	____	C.	silence switch functions.
____	____	____	D.	a 2nd alarm initiating zone overrides silence switch.
____	____	____	E.	trouble signals and FACU panel lights operate for each circuit tested; disconnect .wires from devices and primary power supply to simulate trouble conditions.
____	____	____	F.	on secondary power, measure standby and alarm current demand.
____	____	____	G.	trouble and alarm reset switches operate.
____	____	____	H.	emergency voice alarms: the message is clear and distinct.
____	____	____	I.	initiating devices tested, audible sound pressure levels, and visuals operate.
____	____	____	J.	panel lamp test switch operates: if provided.
____	____	____	K.	field zones and device address signals corresponded with panel zones and addresses.
____	____	____	L.	elevator(s) recall to designated floor and alternate floor in accordance with 6.16.3.
31. ____	____	____		Other systems activate fire alarm: kitchen hood suppression system, clean agent, etc.
32. ____	____	____		As-builts are required when system installation is not consistent with the plans.
33. ____	____	____		Circuit loop resistance is within specifications and a test may be required if the system wiring has changed from the plans.
34. ____	____	____		Heat and spot smoke detectors are not within 4 in. of the sidewall, or if on the sidewall, the detector is 4 in. to 12 in. from the ceiling, 5.6.3.1, 5.7.3.2.1.
35. ____	____	____		Visual devices in a room or adjacent space with more than 2 devices within the field of view the flash are synchronized, 7.5.4.1.2(3). Devices in a corridor with more than 2 devices within the field of view and a maximum spacing of 100 ft., are synchronized, 7.5.4.2.5 and 7.5.4.2.7.
36. ____	____	____		Visual devices are wall mounted 80 in. to 96 in. above the floor level unless otherwise permitted by the approved plans and the fire code official, 7.5.4.1.
37. ____	____	____		Supplemental (extra) visual devices are permitted to be mounted less than 80 in. above the floor, 7.7.2.
38. ____	____	____		Ceiling-mounted devices are listed for use and spaced in accordance with Table 7.5.4.1.1(b) and the approved plans.

*Note: additional testing criteria is found in NFPA 72: Chapter 10.

Additional Comments:

Inspection Date: _____ Approved or Disapproved FD Inspector: _____

Inspection Date: _____ Approved or Disapproved FD Inspector: _____

Fire Alarm Installation Certification

Permit #: 2012577161 Date: _____

	Property Protected	System Installer	System Supplier
Business Name:	AURORA MED CNTR		
Address:	1501 S. POTOMAC ST- 3RD FLOOR AURORA CO 80012		
Representative:			
Telephone:			

Location of Plans: _____

Location of Owner's Manual: _____

1. Certification of System Installation: Complete this section after system is installed, but prior to conducting operational acceptance tests. Check wiring for opens, ground faults, and improper branching.

   This system installation was inspected and found to comply with the installation requirements of:
   _____ NFPA 72
   _____ Article 760 of NEC
   _____ Manufacturer's Instructions
   _____ Other (specify; FM, UL, etc.) _____

   Print Name: _____
   Signed: _____ Date: _____
   Organization: _____

2. Certification of System Operation: All operational features and functions of this system were tested and found to be operating properly in accordance with the requirements of:
   _____ NFPA 72
   _____ Design Specifications
   _____ Manufacturer's Instructions
   _____ Other (specify) _____

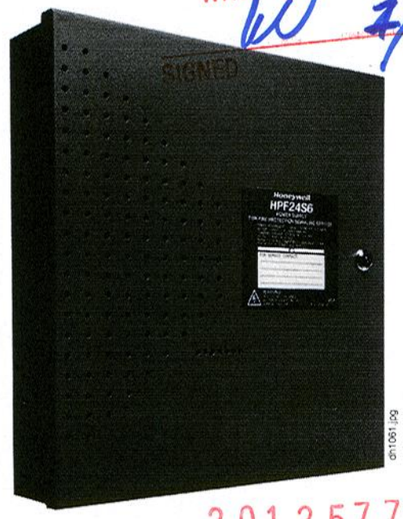
   Print Name: _____
   Signed: _____ Date: _____
   Organization: _____

AURORA BUILDING
LIFE SAFETY SYSTEMS
APPROVED
SUBJECT TO CORRECTIONS
INDICATED AND FIELD INSPECTIONS
WITH FUNCTIONAL TESTS
DATE 1/17/12
TYP. LR Pages

Honeywell

• HPF24S6 • HPF24S6E • HPF24S6C
• HPF24S8 • HPF24S8E • HPF24S8C

Fire Alarm Power Supply



2012577161

Description

The HPF24S6 and HPF24S8 are compact, cost-effective, 6-amp or 8-amp remote power supplies with a battery charger built in. They may be connected to any 12- or 24-volt Fire Alarm Control Panel (FACP) or may stand alone. Primary applications include Notification Appliance (bell) Circuit (NAC) expansion (to support ADA requirements and NAC synchronization) or auxiliary power to support 24-volt system accessories. The supply provides regulated and filtered 24 VDC power to four Notification Appliance Circuits configured as either four Class B (Style Y) or Class A (Style A, with ZNAC-4 option module). Alternately, the four outputs may be configured as all non-resettable or all resettable or two non-resettable and two resettable. They also contains a battery charger capable of charging up to 18 Amp Hour batteries.

Benefits

- Extends and supports power for additional fire alarm devices.
- Instantaneous switchover to standby battery (if equipped) when AC fails, maintaining power to all attached devices without intervention.
- Strobe signal "passes through" allowing syncing of large systems.
- LED lights for quick and easy diagnosis, troubleshooting, and status indication.
- Two outputs can be used for constant power devices such as door holders (power drops upon alarm).
- Works with almost any UL 864 fire alarm.

Specifications

- Primary (AC) Power
  - HPF24S6, HPF24S6C: 120 VAC 60 Hz, 3.2 A maximum
  - HPF24S8, HPF24S8C: 120 VAC 60 Hz, 3.2 A maximum
  - HPF24S6E: 220/240 VAC, 50 Hz, 1.6 A maximum
  - HPF24S8E: 220/240 VAC, 50 Hz, 1.6 A maximum

  Wire size: minimum 14 AWG (2.0 mm²) with 600V insulation.
- Control Input Circuit
  - Trigger Input Voltage: 9.0 to 32 VDC.
  - Trigger Current: 2.0 mA (16 - 32 V).

  (per input) 1.0 mA (9 - 16 V).
- Trouble Contact Rating
  - 5.0 A at 24 VDC.
- Auxiliary Power Output
  - Specific Application Power - 500 mA maximum.
- Output Circuits
  - +24 VDC filtered, regulated.
  - 3.0 A maximum for any one circuit.
  - 4.0 A maximum total continuous current for all outputs (Stand-alone mode) for the HPF24S6 and 6A for the HPF24S8.
  - 6A oer 8A (depending on model) maximum total short-term current for all outputs (NAC Expander mode).
- Secondary Power (Battery) Charging Circuit
  - Supports lead-acid batteries only.
  - Float Charge Voltage: 27.6VDC.
  - Maximum Charge Current: 1.5 A.
  - Maximum Battery Capacity: 18 AH.
- UL Listed NAC Synchronization using System Sensor, Wheelock or Gentex (Commander Series) appliances.
- Cascade up to 10 power supplies (four with Gentex) with strobe timing maintained.
- Operates as a sync follower or a sync generator (default).
- Contains two, fully-isolated input/control circuits (triggered from FACP Notification Appliance Circuit [NAC expander mode] or jumpered permanently on [standalone mode]).
- Configured to internally house addressable SLC control module for alarm activation.
- Four Class B (Style Y) or four Class A (Style Z) (with ZNAC-4 Module) Notification Appliance Circuits.
- 6.0A or 8A (depending on model) full load output (3.0 A maximum per circuit) in NAC expander mode (UL 864).
- 4.0A or 6.0Acontinuous output in stand-alone mode (UL 1481).
- In stand-alone mode, output power circuits may be configured as resettable (reset line from FACP required) or nonresettable or a mix of two and two.
- Fully regulated and filtered power output (optimal for powering four-wire smoke detectors, annunciators and other system peripherals requiring regulated/filtered power).
- Power-limiting technology meets UL power-limiting requirements.
- Form-C normally-closed trouble relay.
- Fully supervised power supply, battery and Notification Appliance Circuits.
- Selectable earth fault detection.
- AC trouble report selectable for immediate or 8 hour delay.
- Works with virtually any UL 864 fire alarm control which utilizes an industry-standard reverse-polarity notification circuit (including unfiltered and unregulated bell power).
- Requires input trigger voltage of 9.0 - 32 VDC.

- Self-contained in compact, lockable cabinet (15" [38.1 cm] H x 14.5" [36.8 cm] W x 2.75" [7.0 cm] D).
- Includes integral battery charger capable of charging up to 18 AH batteries. Cabinet capable of housing 7.0 AH batteries.
- Battery charger may be disabled via dip switch for applications requiring larger batteries.
- Fixed, clamp-type terminal blocks accommodate up to 12 AWG (3.1 mm²) wire.

Standards and Codes

- NFPA 72 National Fire Alarm Code.
- UL 864 Standard for Control Units for Fire Alarm Systems (NAC expander mode).
- UL 1481 Power Supplies for Fire Alarm Systems (standalone mode).
- FM Approved
- CSFM Approved
- HPF24S6Cand HPF24S8C approved
  – CAN/ULC-S527-99

Listings

Listings and approvals below apply to the HPF24S6 and HPF24S8. 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 Listed:** S6677
- **CAN/ULC Listed:** S6677
- **CSFM:** 7315-1637:102
- **FM Approved**

Ordering Information

HPF24S6: Remote charger 6A power supply (120 VAC). Includes main printed circuit board, transformers, red enclosure, and installation instructions.

HPF24S8: Remote charger 8A power supply (120 VAC). Includes main printed circuit board, transformers, red enclosure, and installation instructions.

HPF24S6E: Export version, 220/240 VAC, 50 Hz.

HPF24S8E: Export version, 220/240 VAC, 50 Hz.

HPF24S6C: Canadian version

HPF24S8C: Canadian version

FCPS-24S6RB: Replacement mother board.

ZNAC-4: Class A (Style Z) NAC option module

A77-716B: 12/24 VDC end-of-line relay for monitoring 4-wire smoke detector power.

BAT-1270: Battery, 12 volt, 7.0 AH (two required).

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.
©2010 by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.

Automation and Control Solutions
Honeywell
12 Clintonville Road
Northford, CT 06472-1610
www.honeywellpower.com

1(877) HPP-POWR
hpp_techserv@honeywell.com

Honeywell

dh-1061:C
May 2010
Made in the U.S.A.
® U.S. Registered Trademark
© 2010 Honeywell International Inc.

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

2012577161

COOPER Notification

Series CH Chimes and Chime Strobes



SERIES CH70
CHIME STROBE



SERIES CH90
CHIME STROBE


SERIES CH90
CHIME


SERIES CH70
CHIME

Description

The Wheelock Series CH Chimes and Chime Strobes minimize alarm system power supply requirements and wiring costs with a low current draw and a patented chime mounting plate for fast, easy installation. Each model has a built-in level adjustment feature and an aesthetic two (2) screw grille cover.

These unique solid-state chime appliances provide field selectable single-stroke or vibrating operation with Anechoic sound levels adjustable up to 83 dB and tone adjustable from 800 to 1200 Hz.

Strobe options for wall mount models include 1575cd or Wheelock patented MCW multi-candela strobe with field selectable candela settings of 15/30/75/110cd or the high intensity MCWH strobe with field selectable 135/185cd.

Ceiling mount models are available in Wheelock 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.

The strobe portion of all Series CH Chime Strobes may be synchronized when used in conjunction with the Wheelock, DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. Wheelock's synchronized strobes offer an easy way to comply with ADA recommendations concerning photosensitive epilepsy as well as meeting the requirements of NFPA 72 and UFC.

The Series CH Chime Strobes are UL Listed for indoor, wall or ceiling mount applications under Standard 1971 for Signaling Devices for the Hearing-Impaired and under Standard 464 for Private Mode Audible Signal Appliances. They are available in two attractive package styles for flush mounting to standard electrical boxes or convenient surface mounting. All models include IN/OUT wiring terminations that accept two #12 to #18 AWG wires at each terminal. Inputs are polarized for compatibility with industry standard reverse polarity supervision.

Features

- Approvals include: UL Standard 1971, UL Standard 464, New York City (MEA), and California State Fire Marshal (CSFM) and Chicago (BFP) See approvals by model in Specifications and Ordering Information
- ADA/NFPA/UFC/ANSI compliant
- Complies with OSHA 29 Part 1910.165
- Wall mount models are available with Field

  Selectable Candela Settings of 15/30/75/110cd or 135/185cd (Multi-Candela models) or 1575cd (single candela model)
- Ceiling mount models are available with field selectable candela settings of 15/30/75/95cd or

  115/177cd (Multi-candela models)
- Low current draw with temperature compensation to reduce power consumption and wiring costs
- Strobes produce 1 flash per second over the regulated voltage range
- 24 VDC with wide UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Synchronize using the Wheelock Sync Modules or panels with built-in Wheelock Patented Sync Protocol
- Adjustable Volume and Tone Control
- Single Stroke or Vibrating Operation
- Fast Installation with IN/OUT screw terminals using #12 to #18 AWG wires

S5391 151-92-E 7125-0785:151 7135-0785:109 (Chime Only)

2012577161

NOTE: All CAUTIONS and WARNINGS are identified by the symbol ⚠. All warnings are printed in bold capital letters.

⚠ **WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS. 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.**

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.
- **"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".**

Table 1: Average RMS Current

CH70/ CH90 Chimes	Chime current	CH70 Strobe current - Wall Mount							CH90 Strobe current - Ceiling Mount					
		241575W	24MCW				24MCWH		24MCC				24MCCH	
		1575cd	15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd
24 vdc	**0.022**	**0.060**	**0.041**	**0.063**	**0.109**	**0.140**	**0.195**	**0.270**	**0.045**	**0.070**	**0.119**	**0.159**	**0.195**	**0.270**
UL max*	0.022	0.090	0.060	0.092	0.165	0.220	0.300	0.420	0.065	0.105	0.189	0.249	0.300	0.420

Table 2: Chime dBA ratings

CH70/CH90 sound level	Peak dBA @ 10 ft. anechoic	dBA @ 10 ft reverberant	
		Min	Max
	83	52	58

* 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 maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

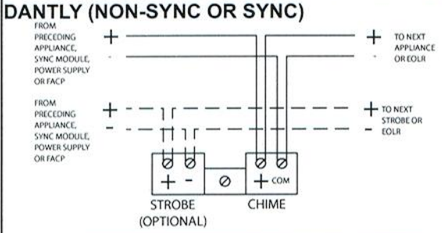
Application

1. The chimes are factory set in single stroke (SS) mode. They can be changed to vibrating (VIB) mode with jumper on PC Board. SINGLE STROKE OPERATION: The minimum input pulse duration must be at least 160 ms "on" time and 160 ms "off" time. The chime will only operate once each time it is pulsed. This mode is recommended for coded systems. VIBRATING OPERATION: Continuous input voltage applied to the chime will activate the chime at one-second intervals.
2. The volume and tone controls have been adjusted at the factory to insure maximum dBA output. However, once the mode is selected, the installer may want to fine-tune the signal to better suit the application.
3. Anechoic dBA is measured in an anechoic chamber with peak meter response. Reverberant dBA is rated per UL Standard 464.
4. Chime inrush current is 0.100 amps maximum with filtered DC input (0.140 amps with VRMS input voltage) with a time duration of 100 milliseconds.

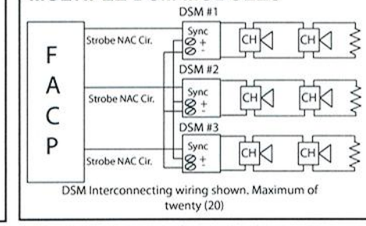
2012577161

Wiring Diagrams#

SERIES CH CHIME & STROBE OPERATE INDEPENDANTLY (NON-SYNC OR SYNC)

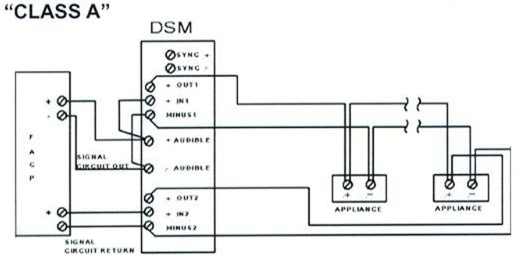


SERIES CH CHIME STROBES SYNCHRONIZED W/ MULTIPLE DSM MODULES

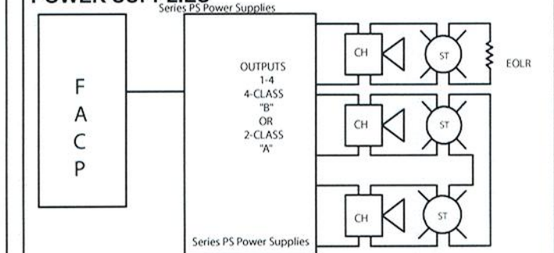


Note: Figure shows interconnection to strobe through sync module. Chime portion requires 2 separate conductors to FACP.

SERIES CH CHIME STROBE APPLIANCES SYNCHRONIZED WITH DSM MODULE SINGLE "CLASS A"



SERIES CH CHIME STROBE APPLIANCES & ST STROBES SYNCHRONIZED WITH WHEELOCK POWER SUPPLIES



For wiring information on the Wheelock Power Supplies, please refer to Data Sheet #9100.

Specifications and Ordering Information

Model Number	Order Code	Wall Mount	Ceiling Mount	Strobe Sync w/ DSM or Wheelock Power Supplies	Strobe Candela	24 VDC	Model Color RED	Model Color White	Mounting Options	Agency Approvals			
										UL	MEA	CSFM	BFP
CH70-24MCW-FR	9018	X		X	15/30/75/110	X	X	-	L,O,P,Q,R,U,Y	X	X	X	X
CH70-24MCW-FW	9019	X	-	X	15/30/75/110	X	-	X	L,O,P,Q,R,U,Y	X	X	X	X
CH70-24MCWH-FR	9083	X	-	X	135/185	X	X	-	L,O,P,Q,R,U,Y	X	X	X	-
CH70-24MCWH-FW	9084	X	-	X	135/185	X	-	X	L,O,P,Q,R,U,Y	X	X	X	-
CH70-241575W-FR	7830	X	-	X	15 (75 on Axis)	X	X	-	L,O,P,Q,R,U,Y	X	X	X	X
CH90-24MCC-FW	3168	-	X	X	15/30/75/95	X	-	X	Q,U,V	X	X	X	-
CH90-24MCC-FR	3167	-	X	X	15/30/75/95	X	X	-	Q,U,V	X	X	X	-
CH90-24MCCH-FW	3110	-	X	X	115/177	X	-	X	Q,U,V	X	X	X	-
CH70-24-R	7825	X	X	-	-	X	X	-	L,O,P,Q,R,U,Y	X	X	X	X
CH70-24-W	7827	X	X	-	-	X	-	X	L,O,P,Q,R,U,Y	X	X	X	X
CH90-24-W	7826	X	X	-	-	X	-	X	Q,U,V	X	X	X	X
CH90-24-R	7828	X	X	-	-	X	X	-	Q,U,V	X	X	X	X

Models are available in either Red or White. Call Customer Service for Order Code & Delivery.

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

2012577161

Architects and Engineers Specifications

The chime appliances shall be Wheelock Series CH Chimes and the chime strobe appliances shall be Wheelock Series CH Chime Strobes or approved equals. The chime shall be UL Listed under Standard 464 for Audible Signal Appliances and chimes equipped with strobes shall be listed under UL Standard 1971 for Emergency Devices for the Hearing-Impaired. In addition, the strobes shall be certified to meet the requirements of FCC Part 15, Class B and shall incorporate low temperature compensation to ensure the lowest possible current consumption.

All chimes shall use solid state components and shall provide field selectable single stroke or vibrating operation with volume control and tone control. All models shall have a peak Anechoic sound output of 83 dB at 10 feet and an adjustable frequency range of 800 to 1200 Hz. All inputs shall employ terminals that accept #12 to #18 AWG wire sizes.

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 strobe shall be of low current design. Where Multi-Candela Chime Strobes are specified, the strobe intensity shall have a minimum of four (4) 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 115/177cd for ceiling mount. The selector switch for selecting the candela shall be tamper resistant and not accessible from the front of the appliance. 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 strobe portion of the appliance shall be compatible with Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock 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 strobe shall revert to a non-synchronized flash rate.

The chime and the chime strobe appliances shall be designed for indoor surface or flush mounting. The chime and chime strobe shall incorporate a chime mounting plate with a grille cover which is secured with two screws for a level, aesthetic finish and shall mount to standard electrical hardware requiring no additional trimplate or adapter.

All chime and chime strobe appliances shall be backward compatible.

2012577161

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

S0710 CH 06/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

Cooper Notification is Wheelock® MEDC SAFEPATH WAVES RoamAlert SecuraCom

COOPER Notification

COOPER Notification

Series RSS and RSSP Strobes and Strobe Plates



Series RSS



Series RSS



Series RSSWP

Description

The Wheelock 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 applications.

Strobe options for wall mount models include 1575 or the Wheelock Patented MCW multi-candela strobe with field selectable candela settings of 15/30/75/110cd or the high intensity MCWH strobe with field selectable 135/185cd. 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 using the Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock 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 meeting the requirements of NFPA 72.

The Wheelock 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 the Wheelock SBL2 surface backbox.

Features

- Approvals include: UL Standard 1971, New York City (MEA), California State Fire Marshal (CSFM), Factory Mutual (FM), and Chicago (BFP) See approvals by model in Specifications and Ordering Information
- ADA/NFPA/UFC/ANSI compliant. Meets OSHA 29 Part 1910.165
- 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 1575cd
- Ceiling mount Multi-Candela models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd. (Square)
- 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 using the Wheelock sync modules or panels with built-in Wheelock Patented Sync Protocol
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wire

For Weatherproof Series RSS See Datatsheet S9004

2012577161

S5391 MEA 151-92-E 7125-0785:141 7300-0785:154 FM APPROVED

NOTE: All CAUTIONS and WARNINGS are identified by the symbol ⚠. All warnings are printed in bold capital letters.

⚠ WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER WHEELOCK FOR THE CURRENT INSTALLATION INSTRUCTIONS. 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.

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.
- **"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".**

Table 1: Average RMS Current*

RSS/RSSP 24VDC 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*	0.090	0.060	0.092	0.165	0.220	0.300	0.420	0.065	0.105	0.189	0.249	0.300	0.420

RSS/RSSP 24VDC Models	RSS/RSSP Wall Mount
	121575W
12 vdc	0.152
UL max*	0.255

* 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 maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

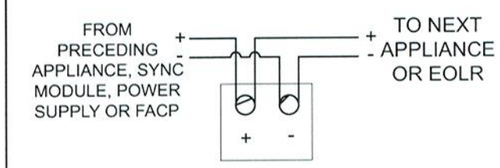
2012577161

Table 2: Audibles/Speakers for RSSP Strobe Plate

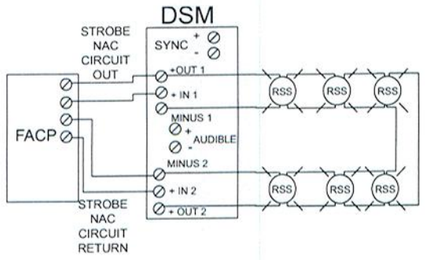
Product	Series
Multitone Appliances	AMT, MT
Horns	AH, NH, HS
Motor Bells	MB-G6/G10
Speakers	ET-1010/1080, E70, ET70
Chimes	CH70

Wiring Diagrams #

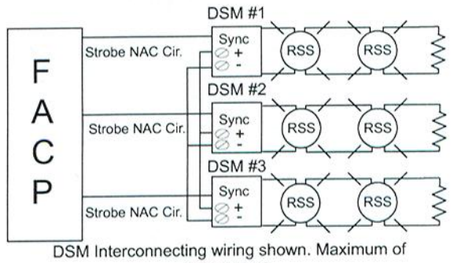
SERIES RSS/RSSP APPLIANCE



SERIES RSS/RSSP APPLIANCES SYNCHRONIZED WITH DSM MODULE SINGLE CLASS "A" NAC CIRCUIT

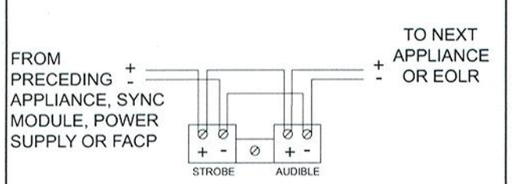


SERIES RSS/RSSP APPLIANCES SYNCHRONIZED WITH MULTIPLE DSM MODULES

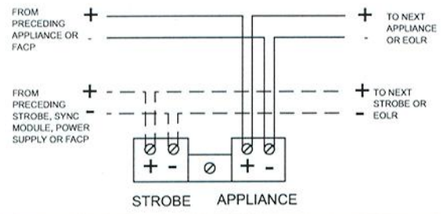


DSM Interconnecting wiring shown. Maximum of twenty (20)

STROBE/PLATE ASSEMBLY
AUDIBLE & VISIBLE APPLIANCE OPERATE IN UNISON

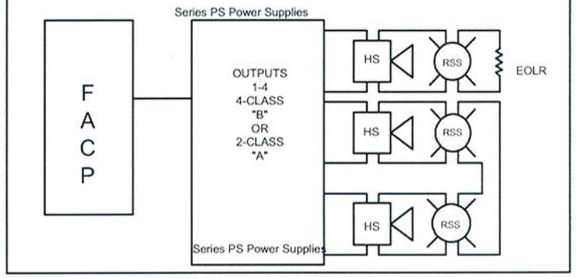


STROBE/PLATE ASSEMBLY
AUDIBLE & VISIBLE APPLIANCE OPERATE INDEPENDENTLY



For detail using DSM Sync Module refer to Data Sheet S3000 or Installation Instructions P83177 for DSM. For wiring information on the power supplies refer to Wheelock Power Supplies.

SERIES RSS/RSSP APPLIANCES SYNCHRONIZED WITH WHEELOCK POWER SUPPLIES



Specifications and Ordering Information

Model	Order Code	Wall Mount	Ceiling Mount	Non-Sync	Strobe Candela	24 VDC	12 VDC	Color RED	Color WHITE	Mounting Options***	Square or Round	Agency Approvals				
												UL	MEA	CSFM	FM	BFP
RSS-24MCW-FR	940	X	-	X	15/30/75/110	X	-	X	-	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-24MCW-FW	9401	X	-	X	15/30/75/110	X	-	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-24MCW-AR****	9773	X	-	X	15/30/75/110	X	-	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-241575W-FR	7471	X	-	X	15 (75 on Axis)	X	-	X	-	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-241575W-FW	7788	X	-	X	15 (75 on Axis)	X	-	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-121575W-FR	7476	X	-	X	15 (75 on Axis)	-	X	X	-	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-121575W-FW	7468	X	-	X	15 (75 on Axis)	-	X	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	X
RSS-24MCC-FW	3158	-	X	X	15/30/75/95	X	-	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSS-24MCC-FR	3157	-	X	X	15/30/75/95	X	-	X	-	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSS-24MCCH-FW	3461	-	X	X	115/177	X	-	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSS-24MCWH-FR	3465	X		X	135/185	X		X		B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSS-24MCWH-FW	3464	X		X	135/185	X			X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSSWP-2475W-FR**	9013	X	-	X	180@ 77°F 75@ -31°F	X	-	X	-	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSSWP-2475W-FW**	3034	X	-	X	180@ 77°F 75@ -31°F	X	-	-	X	B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	X	-
RSSP-121575W-FR	7798	X	-	X	15 (75 on Axis)	-	X	X	-	D,E,Z	Square	X	-	X	X	X
RSSP-24MCW-FR	9402	X	-	X	15/30/75/110	X	-	X	-	D,E,Z	Square	X	X	X	X	X
RSSP-241575W-FR	7793	X	-	X	15 (75 on Axis)	-	-	X	-	D,E,Z	Square	X	X	X	X	X
RSSP-24MCWH-FR	9482	X		X	135/185	X		X		B,D,E,F,G,H,J,N,O,R,X	Square	X	X	X	-	-

2012577161

All models sync with Wheelock DSM or Wheelock Power Supplies.
Models are available in either Red or White. Call Customer Service for Order Code & Delivery.
**For Weatherproof Series RSS Strobe specifications see data sheet S9004.
***Refer to data sheet S7000 for mounting options.
**** "A" stands for Agent Lettering.

Architects and Engineers 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 115/177cd 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 DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in Wheelock 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 strobe shall revert to a non-synchronized flash rate. The strobes shall be designed for indoor surface of 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 and 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 offerings are subject to change without notice in accordance with Wheelock, Inc. standard terms and conditions.

2012577161

NEMA Member

WE ENCOURAGE AND SUPPORT NICET CERTIFICATION
3 YEAR WARRANTY

S0410 RSS/RSSP 07/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

Cooper Notification is Wheelock® MEDC SAFEPATH WAVES

COOPER Notification