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

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City of Aurora Public Works Department

BUILDING PERMIT APPLICATION

Building Division • 15151 E. Alameda Parkway, Ste 2400 • Aurora, CO 80012 • 303-739-7420 • Fax: 303-739-7412
Email: ***permitcounter@auroragov.org***

Project Address	1400 So Potomac St (1400 S. Potomac St)		**Unit #** 220
Project Name:	Neuroclinic		
Contractor Company Name	Fire Alarm Services	**Phone** 303-466-8800	**Fax**
Contact Person	Jeremy Biebel	**Phone**	
Email			**Fax**
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:$	4000	**Materials Cost: $**	2000

FDA = Fee Determination Assessment. (Also known as the value of project) 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: INSTALL (4) HORN/STROBES AND (8) STROBES

** ON CD **NO ROUTING/NO SCANNING REQ'D - HW**

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 Parker Berry **Signature** [signature] **Date** 7-24-13

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.

THIS SPACE FOR OFFICE USE ONLY

Fee Determination Assessment: $ _____

Change of occupancy/use: ☐ Yes ☑ No

REVIEWS
- ☐ Structural
- ☐ Mechanical
- ☐ Plumbing
- ☐ Electrical
- ☑ Fire-Life Safety
- ☐ Building Life Safety

INSPECTIONS
- ☐ Structural
- ☐ Mechanical
- ☐ Plumbing
- ☑ Electrical
- ☑ Life Safety
- ☐ Gate/Hazard

Intake Date: 7-24-13

Balance Due: $ _____

PRE APPROVAL Initial _____ ☐ Zoning ☐ Water

Exterior changes? ☐ Yes ☑ No

Homeowner verified: ☐ Yes ☐ No

Permit Type: LT

Mid roof / Ave Bldg Height: _____

Parent Permit RSN: 731035

Plans Examiner: _____

Subtype: ALARM

RSN: 2013-678816 / 733698

Plans Picked Up By: _____

Company Name: RSN: 733698

Phone Number Permit #: 2013-678816-LT

1400 S. POTOMAC, Unit 220

FIRE ALARM SYSTEM SHOP DRAWINGS FOR:

City of Aurora Building Division
Project: *NeuroClinic of Colorado*
Address: *1400 S Potomac St, Unit 220*
Occupancy Group: *IBC B*
Construction Type: *UBC Type II-N - SPK*
RSN: *733698*
Permit: *2013-678816-LT*

BUILDING CLASSIFICATIONS AND CODES

OCCUPANCY GROUP:	B
USE:	OFFICE
CONSTRUCTION TYPE:	TYPE–II
STORIES:	2 FLOORS
SPRINKLERED:	FULLY
REQUIREMENTS:	MODIFIED PER 2009 IFC
CODES:	2009 IFC, 2009 IBC, 2009 IMC, 2007 NFPA 72, 2003 ANSI 17.1, 2005 NFPA 70

SYSTEM TYPE AND MONITORING

SYSTEM CLASSIFICATION:	(NFPA 72, CHAPTER 8), REMOTE STATION
SYSTEM TYPE:	CONVENTIONAL
WIRING CLASSIFICATION:	NAC – CLASS B IDC – CLASS B, STYLE B COMMUNICATION RISER – CLASS A
NOTIFICATION TYPE:	TEMPORAL PATTERN
MONITORING:	THIS SYSTEM IS AND WILL CONTINUE TO BE MONITORED BY A REMOTE SUPERVISING STATION, PER NFPA 72 CHAPTER 8, SECTION 2.
MONITORING COMPANY:	API (303)427–0880
ACCOUNT:	45–00–2941

DRAWING INFORMATION

FAS WORK ORDER #:	13011303
FAS CAD FILE:	NEUROCLINIC OF COLORADO

SCOPE OF WORK

1. PROVIDE AND INSTALL FOUR (4) HORN STROBES.
2. PROVIDE AND INSTALL EIGHT (8) STROBES.

INDEX

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- WIRE COLOR CODE CHART
- VOLTAGE CALC
- BOOSTER CALC
- SEQUENCE OF OPERATIONS MATRIX

PROJECT:

NEUROCLINIC OF COLORADO
1400 S. POTOMAC STREET, SUITE 220
AURORA, CO 80012

GENERAL CONTRACTOR:

EJCM, INC.
111 KALAMATH STREET
DENVER, CO 80223
PH:(303)573–5678
FAX:(303)573–5823
GARY SCOTT

ELECTRICAL CONTRACTOR

FIRE ALARM SERVICES, INC.
4800 W. 60TH AVENUE
ARVADA, CO 80003
PH:(303)466–8800
FAX:(303)466–8820
SHANNON SMITH

FIRE ALARM DESIGNER:

FIRE ALARM SERVICES, INC.
4800 W. 60TH AVENUE
ARVADA, CO 80003
PH:(303)466–8800
FAX:(303)466–8820

1. FIRE ALARM SYSTEMS CANNOT BE COMBINED WITH BURGLAR ALARM SYSTEMS.
2. 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).
3. FIRE ALARM DEVICES MUST BE PLACED IN PROTECTED AREAS WITH AMBIENT TEMPERATURE RANGING FROM 32 DEGREES TO 120 DEGREES F.
4. DO NOT PLACE SMOKE DETECTORS WITHIN 3 FEET OF AIR SUPPLY REGISTERS AND DIFFUSERS.
5. FIRE ALARM SYSTEM SHALL BE MONITORED BY A CLASS I CENTRAL STATION.
6. FIRE ALARM CONTROL PANEL WILL BE PLACED IN THE LOCATION SPECIFIED WITHIN THE PLAN SUBMITTAL UNLESS APPROVED BY THE LIFE SAFETY FIELD INSPECTOR.
7. CITY OF AURORA BUILDING DIVISION DOES NOT GRANT APPROVAL FOR ANY VIOLATIONS OF ADOPTED FIRE CODE. CODE VIOLATIONS UNCOVERED DURING FIELD INSPECTIONS MUST BE CORRECTED.
8. PER THE 2009 IFC AND THE 2011 NEC THE INSTALLER MUST REQUEST A ROUGH WIRING INSPECTION ON THE FIRE ALARM SYSTEM PRIOR TO REQUESTING A FIRE ALARM FINAL INSPECTION.
9. THE CONTRACTOR SHALL CONDUCT A "PRE-TEST" OF THE PROJECT AREA PRIOR TO SCHEDULING AN ACCEPTANCE TEST WITH THE BUILDING DIVISION.
10. REMOTE ALARM INDICATORS SHALL BE PROVIDED FOR ANY AUTOMATIC FIRE ALARM DETECTOR LOCATED IN A CONCEALED LOCATION WITH A NORMALLY LOCKED DOOR.
11. AT THE TIME OF FINAL FIRE ALARM INSPECTION, THE SYSTEM MUST BE SUPERVISED/MONITORED BY A CLASS I CENTRAL MONITORING AGENCY.
12. THE INSTALLING CONTRACTOR (OR DESIGNEE) MUST PROVIDE ALL NECESSARY TESTING EQUIPMENT AND PERFORM ALL TESTING REQUIRED BY THE LIFE SAFETY FIELD INSPECTOR.
13. 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 PERMENANT PLACARDING.
14. ALL NEW OR EXISTING FIRE ALARM SYSTEMS MUST BE CONNECTED TO ANY EXTERIOR HORN AND STROBE DEVICE. IF THE BUILDING IS FIRE SPRINKLED, 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.
15. 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 2009 IFC AND THE 2003 ANSI A117.1 STANDARD.
16. PROVIDE A PRIMARY AND SECONDARY POWER SUPPLY FOR THE FIRE ALARM SYSTEM PER THE 2009 IFC AND THE 2007 NFPA 72.
17. THE FIRE ALARM INSTALLATION CONTRACTOR MUST COMPLETE THE NFPA 72 "RECORD OF COMPLETION" PRIOR TO SCHEDULING THE AHJ ACCEPTANCE TEST.
18. FIELD INSPECTION CONSULTATION IS AVAILABLE UPON REQUEST. CALL 303-739-7420 TO REQUEST CONSULTATION.
19. 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.

GENERAL NOTES

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16. PROVIDE A PRIMARY AND SECONDARY POWER SUPPLY FOR THE FIRE ALARM SYSTEM PER THE 2009 IFC, SECTION 907.5 AND THE 2007 NFPA 72.

Fire Alarm SERVICES, INC.

Fire Alarm Services, Inc.
4800 W. 60th Avenue
Arvada, CO 80003

(303)466–8800 (Phone)
(303)466–8820 (Fax)
contactus@fasonline.cc (E–Mail)
www.fasonline.cc

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *J Van Essen*
Date: *Aug 06, 2013*
2009 INTERNATIONAL CODES & 2011 NEC
2007 NFPA 72
RSN: *733698*
Permit #: *2013-678816-LT*

Ray Breeland
Nicet Fire Alarm systems
Level III
Certification #111066
Date: 7/22/13

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4800 W. 60TH AVENUE
ARVADA, CO 80003
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REVISIONS

NO.	DATE

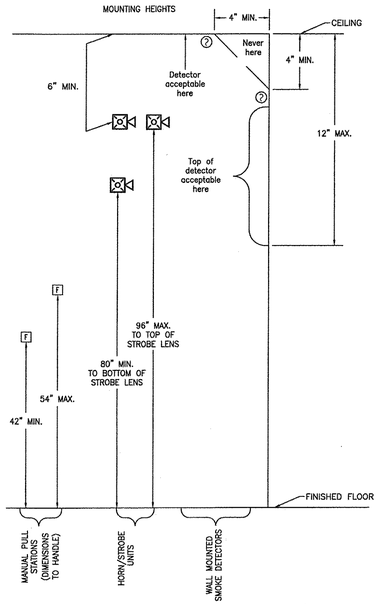
DRAWN BY: S. SPRAGUE
DATE: 7/19/13
APPR. BY: LAB
DATE: 7/19/13

FIRE ALARM SYSTEM TENANT FINISH FOR: NEUROCLINIC OF COLORADO

PROJECT TITLE: 1400 S. POTOMAC Unit 220
BUILDING NAME & ADDRESS: 1400 S. POTOMAC ST. AURORA, CO 80012
PROJECT NUMBER: 13011303

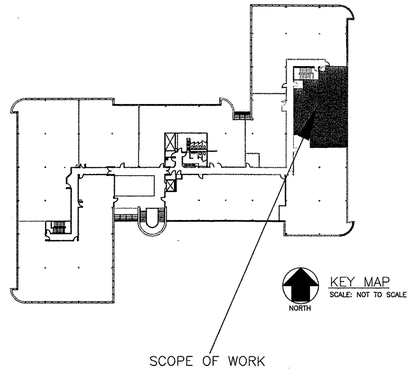
FIRE ALARM & DETECTION SYSTEM
DRAWING TITLE: SUITE 220 COVER PAGE
SCALE: N/A

PROJECT SHEET TITLE
FA–00



GENERAL NOTES:

1. THE CEILING IS A TYPICAL 9' A.F.F. DROPPED CEILING WITH NO SLOPES.



FIRE ALARM SYMBOLS LEGEND

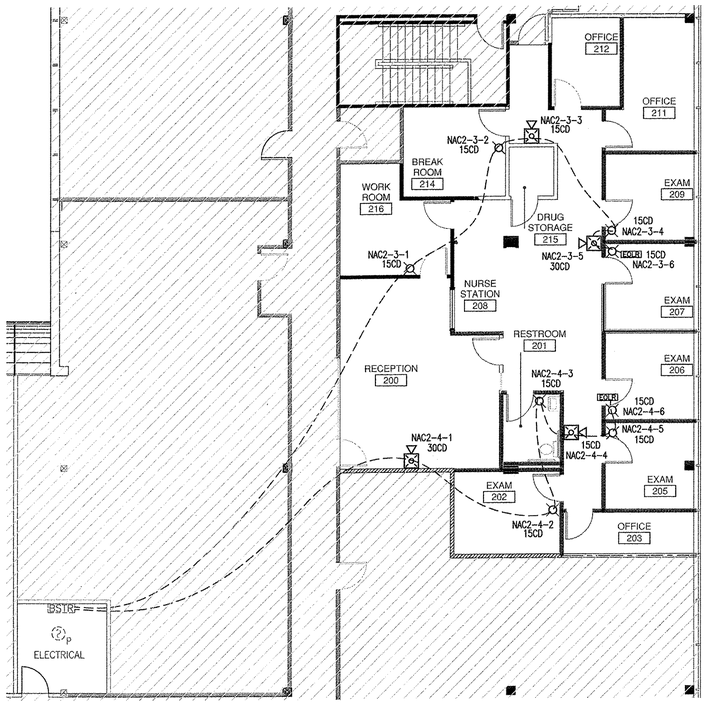
EXISTING	DESCRIPTION	PROPOSED
	STROBE – Wall Mount or CM = Ceiling Mount	
	SMOKE DETECTOR – x = photo, ion	
	HORN STROBE – Wall Mount or CM = Ceiling Mount	
EOLR	END OF LINE RESISTOR	EOLR
BSTR	BOOSTER PANEL	BSTR
F	PULL STATION	F
	HEAT DETECTOR – x =135, 200, ROR	
	TAMPER SWITCH	
	FLOW SWITCH	
MM	MONITOR–MODULE	MM

NOTIFICATION APPLIANCE CIRCUIT NUMBER
NOTIFICATION APPLIANCE PANEL NUMBER
DEVICE NUMBER

NAC1-2-3

POWER EXPANDER NUMBERING

J = J–BOX



SUITE 220 FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

NORTH 0 5 10 15 30 FEET

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: *J Van Essen*
Date: ***Aug 06, 2013***
2009 INTERNATIONAL CODES & 2011 NEC
2007 NFPA 72
RSN: *733698*
Permit #: *2013-678816-LT*

Ray Breeland
Nicet Fire Alarm systems
Level III
Certification #111066
Date: 7/22/13

Fire Alarm SERVICES, INC.
4800 W. 60TH AVENUE
ARVADA, CO 80003
phone: 303-466-8800
fax: 303-466-8820
www.fasonline.cc email: conlactus@fasonline.cc

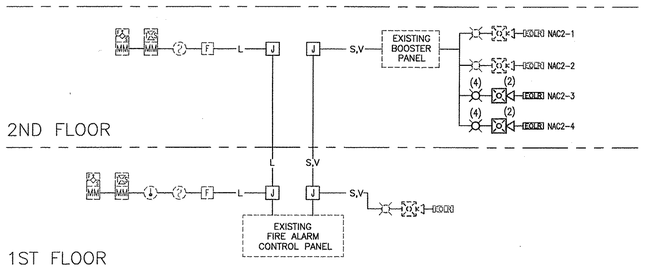
REVISIONS	NO.	DATE

DRAWN BY: S. SPRAGUE DATE: 7/19/13
APPR. BY: LAB DATE: 7/22/13

PROJECT TITLE: FIRE ALARM SYSTEM TENANT FINISH FOR: NEUROCLINIC OF COLORADO
BUILDING NAME & ADDRESS: 1400 S. POTOMAC Unit 220 — 1400 S. POTOMAC ST. AURORA, CO 80012
PROJECT NUMBER: 13011303

FIRE ALARM & DETECTION SYSTEM
DRAWING TITLE: SUITE 220 FIRE ALARM PLAN
SCALE: AS SHOWN

PROJECT SHEET TITLE
FA–01



ONE-LINE RISER DIAGRAM

FIRE ALARM WIRE COLOR CODE CHART				
Code	Description	Wire Type	Color (+)	Color (–)
AC	120VAC Power Wiring	3#12 AWG Solid (w/ Green Ground)	Black (hot)	White (neu)
A	Annunciator Wiring	#18 AWG Twisted/Shielded Pair	Red	Black
D	Door Holder Wiring	2#14 AWG Solid	Red	Black
L	SLC Wiring (Signaling Line Circuit)	2#18 AWG Solid	Red	Black
P	24VDC Power Wiring	2#16 AWG Solid	Red	Black
R	Remote Light/Test Wiring	2#18 AWG Solid	Red	Black
S	Notification Appliance (Horns) Wiring	2 or 4#14 AWG Solid	Red	Black
S	Notification Appliance (Speaker) Wiring	2#16 AWG Twisted/Shielded Pair	Red	Black
T	Telephone Circuit Wiring	2#16 AWG Twisted/Shielded Pair	Red	Black
V	Notification Appliance (Strobe) Wiring	2 or 4#14 AWG Solid	Red	Black
X	Auxiliary Circuit (Relay) Wiring	2#14 AWG Solid	Red	Black
Z	IDC Wiring (Initiating Device Circuit)	2#18 AWG Solid	Red	Black
WIRE TYPE CLASS & STYLE	SLC – CLASS B – STYLE 4	NAC – CLASS B		

INCREMENTAL VOLTAGE DROP CALCULATIONS FOR AUDIBLE/ VISUAL CIRCUITS
MINIMUM UL RATED VOLTAGE: 16 VOLTS
Current shown in calculations is RMS current at 16 volts.

Resistance	12 Gauge	2.01
	14 Gauge	3.19
	16 Gauge	5.08

Circuit Number: NAC2-3
Location: 2nd Floor Booster Panel — INPUT VOLTAGE = 20.4 VOLTS

Notification Circuit	Current (in amps)	Wire Distance (in feet)	Total Distance (in feet)	Wire Size (AWG)	Resistance (Ohms)	Voltage Drop	From Baseline Voltage
Strobe 15CD	0.103	63	63	14	0.4019	0.2850	20.1150
Strobe 15CD	0.103	33	96	14	0.6125	0.3712	19.7439
Horn/Strobe 15CD	0.129	14	110	14	0.7018	0.3530	19.3909
Strobe 15CD	0.103	29	139	14	0.8868	0.3317	19.0592
Horn/Strobe 30CD	0.167	11	150	14	0.9570	0.2593	18.7998
Strobe 15CD	0.103	12	162	14	1.0336	0.1075	18.6923
End of Line Resistor	0.001	0	162	14	1.0336	0.0010	18.6913
Totals:	**0.709**	**162**			5.6272	1.7087	18.6913
Total Devices:	6						

Circuit Number: NAC2-4
Location: 2nd Floor Booster Panel — INPUT VOLTAGE = 20.4 VOLTS

Notification Circuit	Current (in amps)	Wire Distance (in feet)	Total Distance (in feet)	Wire Size (AWG)	Resistance (Ohms)	Voltage Drop	From Baseline Voltage
Horn/Strobe 30CD	0.167	51	51	14	0.3254	0.2307	20.1693
Strobe 15CD	0.103	31	82	14	0.5232	0.2836	19.8858
Strobe 15CD	0.103	23	105	14	0.6699	0.2941	19.5917
Horn/Strobe 15CD	0.129	15	120	14	0.7656	0.2572	19.3344
Strobe 15CD	0.103	16	136	14	0.8677	0.1796	19.1548
Strobe 15CD	0.103	12	148	14	0.9442	0.0982	19.0566
End of Line Resistor	0.001	0	148	14	0.9442	0.0009	19.0557
Totals:	**0.709**	**148**			5.0402	1.3443	19.0557
Total Devices:	6						

1400 S. POTOMAC BUILDING SEQUENCE OF OPERATIONS

SYSTEM OUTPUTS

		FACP Annunciation							Notification				FSC			Monitoring			
	SYSTEM INPUTS	Actuate Common Alarm Signal Indicatior	Actuate Audible Alarm Signal	Actuate Common Supervisory Signal Indicator	Actuate Audible Supervisory Signal	Actuate Common Trouble Signal Indicator	Actuate Audible Common Trouble Signal	Display Change of Status	Actuate 1st Floor Evacuation Signals (Horn/Strobes)	Actuate 2nd Floor Evacuation Signals (Horn/Strobes)	Actuate Exterior Horn/Strobe	Silence Audible Signal (Horns)	Release Magnetically Held Smoke Doors	Recall Elevator(s) to 1st Floor – Primary Recall	Recall Elevator(s) to 2nd Floor – Alternate Recall	Transmit Fire Alarm Signal to Supervising Station	Transmit Trouble Signal to Supervising Station	Transmit Supervisory Signal to Supervising Station	Transmit Waterflow Signal to Supervising Station	
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1	Manual Pull Station – 1st Floor	X	X					X	X	X			X			X				1
2	Manual Pull Station – 2nd Floor	X	X					X	X	X			X			X				2
3	Smoke Sensor – 1st Floor Elev Lobby	X	X					X	X	X			X		X	X				3
4	Smoke Sensor – 2nd Floor Elev Lobby	X	X					X	X	X			X	X		X				4
5	Smoke Sensor – All Other Locations	X	X					X	X	X			X			X				5
6	Heat Sensors – 1st Floor	X	X					X	X	X			X			X				6
7	Sprinkler Waterflow – 1st Floor	X	X					X	X	X	X		X			X			X	7
8	Sprinkler Waterflow – 2nd Floor	X	X					X	X	X	X		X			X			X	8
9	Sprinkler Control Valve			X	X			X										X		9
10	FACP AC Power Failure					X	X	X					X				X			10
11	FACP Low Battery					X	X	X									X			11
12	Open Circuit					X	X	X									X			12
13	Ground Fault					X	X	X									X			13
14	Notification Appliance Circuit Short					X	X	X									X			14
15	Alarm Signal Silence											X								15
		A	B	C	D	E	F	G	H	I	K	L	M	N	O	R	S	T	U	

FSC = Fire Safety Control

BOOSTER CALCULATIONS

FOR: 1400 S. Potomac St.
Aurora, CO

HOURS OF SUPERVISION: 24 HOURS
MINUTES OF ALARM: 5 MINUTES

PANEL: EST BPS-6

ITEM	QTY	PART NUMBER	DESCRIPTION	Device Supervisory Current	Device Alarm Current	Total Supervisory Current	Total Alarm Current
1	1	EXISTING	Notification Booster Panel	0.070000	0.190000	0.070000	0.190000
			TOTAL:			0.070000	0.190000

PERIPHERAL:

ITEM	QTY	PART NUMBER	DESCRIPTION	Device Supervisory Current	Device Alarm Current	Total Supervisory Current	Total Alarm Current
1	4	EXISTING	15cd Strobe	0.000000	0.103000	0.000000	0.412000
2	5	EXISTING	15cd Horn/Strobe	0.000000	0.129000	0.000000	0.645000
3	1	EXISTING	30cd Horn/Strobe	0.000000	0.167000	0.000000	0.167000
4	8	G1RF-VM	15cd Strobe	0.000000	0.103000	0.000000	0.824000
5	2	G1RF-HDVM	15cd Horn/Strobe	0.000000	0.129000	0.000000	0.258000
6	2	G1RF-HDVM	30cd Horn/Strobe	0.000000	0.167000	0.000000	0.334000
			TOTAL:			0.000000	2.640000

SUPERVISORY:
PANEL: 0.070000 AMPS
PERIPHERAL 0.000000 AMPS
SUB-TOTAL: 0.070000 AMPS
X HOURS OF SUPERVISORY: 24.0000 HOURS
SUB-TOTAL: 1.680000 AMP HOURS

ALARM:
PANEL: 0.190000 AMPS
PERIPHERAL: 2.640000 AMPS
SUB-TOTAL: 2.830000 AMPS
X MINUTES OF ALARM: 0.08333 HOURS
SUB-TOTAL: 0.235833 AMP HOURS

TOTALS:
TOTAL SUPERVISORY: 1.680000 AMP HOURS
TOTAL ALARM: 0.235833 AMP HOURS
TOTAL: 1.915833 AMP HOURS
TOTAL PLUS SAFETY FACTOR(20%) 2.29900 AMP HOURS
Batteries Supplied – 1 Set of: 7.00000 AMP HOURS

City of Aurora Building Division
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www.fasonline.cc email: contactus@fasonline.cc

REVISIONS | NO. | DATE

DRAWN BY: S. SPRAGUE | DATE: 7/19/13
APPR. BY: LAB | DATE: 7/22/13

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BUILDING NAME & ADDRESS: 1400 S. POTOMAC Unit 220, 1400 S. POTOMAC ST., AURORA, CO 80012
PROJECT NUMBER: 13011303

FIRE ALARM & DETECTION SYSTEM
DRAWING TITLE: SUITE 220 RISER/SEQUENCE/CALCS
SCALE: N/A

PROJECT SHEET TITLE
FA-02

RSN: *733698*
Permit #: *2013-678816-LT*

Fire Alarm Services, Inc.
4800 W. 60th Avenue
Arvada, CO 80003

Phone (303) 466-8800
Fax (303) 466-8820

Fire Alarm System Addition at:

Project: Neuroclinic of Colorado
1400 S. Potomac Street, Suite 200
Aurora, CO 80012

Scope of Work:

1. Provide and install four (4) horn strobes.
2. Provide and install eight (8) strobes.

Ray Breeland
Nicet Fire Alarm systems
Level III
Certification #111066
Date: 7/22/13
RBL

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: 2013-678816-LT

Business/Building Name: Neuroclinic of Colorado Address of Project: 1400 S Potomac St, Unit 220

Contractor: Fire Alarm Services Inc. Contractor's Phone: 303-466-8800

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.

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 #: 2013-678816-LT Date: _____

	Property Protected	System Installer	System Supplier
Business Name:	Neuroclinic of Colorado		
Address:	1400 S Potomac St, Unit 22		
	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: _____

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Overview

The Genesis line of signals are among the smallest, most compact audible-visible emergency signaling devices in the world. About the size of a deck of playing cards, these devices are designed to blend with any decor.

Thanks to patented breakthrough technology, GE Security Genesis strobes do not require bulky specular reflectors and lenses. Instead, an exclusive cavity design conditions light to produce a highly controlled distribution pattern. Significant development efforts employing this new technology have given rise to a new benchmark in strobe performance – FullLight technology.

FullLight strobe technology produces a smooth light distribution pattern without the spikes and voids characteristic of specular reflectors. This ensures the entire coverage area receives consistent illumination from the strobe flash. As a result, Genesis strobes with FullLight technology go well beyond the minimum UL-required "T" pattern, significantly exceeding UL-1971 and ULC-S526 light distribution requirements.

Genesis strobes and horn-strobes offer 15 to 110 candela output, which is selectable with a conveniently-located switch on the side of the device. Models are also available that offer fixed 15/75 cd output. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering.

Genesis signals feature textured housings in architecturally neutral white or traditional fire red. An ingenious iconographic symbol indicates the purpose of the device. This universal symbol is code-compliant and is easily recognized by all building occupants regardless of what language they speak. Models with "FIRE" markings are also available.

Standard Features

- Unique low-profile design
  - The most compact UL-1971/ULC-S526 listed strobe available
  - Ultra-slim - protrudes less than one inch
  - Attractive appearance
  - No visible mounting screws
- Four field-configurable options in one device
  - Select 15, 30, 75, or 110 cd strobe output
  - Select high (default) or low dB horn output
  - Select temporal (default) or steady horn output
  - Select public mode flash rate (default) or private mode temporal flash
- Fixed 15/75 cd model available
- Easy to install
  - Fits standard 1-gang electrical boxes – no trim plate needed
  - Optional trim plate accommodates oversized openings
  - Pre-assembled with captive hardware
  - #12 AWG terminals - ideal for long runs or existing wiring
- Unparalleled performance
  - Industry's most even light distribution
  - Meets tough synchronizing standards for strobes
  - Single microprocessor controls both horn and strobe
  - Low current draw minimizes system overhead
  - Independent horn control over a single pair of wires
  - Highly regulated in-rush current
  - Multiple frequency tone improves sound penetration
  - Industry's first temporal strobe output

Field Configurable Horns and Strobes

Genesis Series



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Application

Genesis strobes are UL 1971-listed for use indoors as wall-mounted public-mode notification appliances for the hearing impaired. Prevailing codes require strobes to be used where ambient noise conditions exceed 105 dBA (87dBA in Canada), where occupants use hearing protection, and in areas of public accommodation as defined in the *Americans with Disabilities Act (see application notes - USA).*

Combination horn-strobe signals must be installed in accordance with guidelines established for strobe devices.

Strobes

Genesis strobes are UL 1971-listed for use indoors as wall-mounted public-mode notification appliances for the hearing impaired. Prevailing codes require strobes to be used where ambient noise conditions exceed specified levels, where occupants use hearing protection, and in areas of public accommodation. Consult with your Authority Having Jurisdiction for details.

All Genesis strobes exceed UL synchronization requirements (within 10 milliseconds other over a two-hour period) when used with a synchronization source. Synchronization is important in order to avoid epileptic sensitivity.

NOTE: The flash intensity of some visible signals may not be adequate to alert or waken occupants in the protected area. Research indicates that the intensity of strobe needed to awaken 90% of sleeping persons is approximately 100 cd. GE Security recommends that strobes in sleeping rooms be rated at at least 110 cd.

WARNING: These devices will not operate without electrical power. As fires frequently cause power interruptions, further safeguards such as backup power supplies may be required.

Horns

Genesis horn output reaches as high as 99 dB and features a unique multiple frequency tone that results in excellent sound penetration and an unmistakable warning of danger. Horns may be configured for either coded or non-coded signal circuits. They can also be set for low dB output with a jumper cut that reduces horn output by about 5 dB. Horn-only models may be ceiling-mounted or wall-mounted.

The suggested sound pressure level for each signaling zone used with alert or alarm signals is at least 15 dB above the average ambient sound level, or 5 dB above the maximum sound level having a duration of at least 60 seconds, whichever is greater, measured 5 feet (1.5 m) above the floor. The average ambient sound level is, A-weighted sound pressure measured over a 24-hour period.

Doubling the distance from the signal to the ear will theoretically result in a 6 dB reduction of the received sound pressure level. The actual effect depends on the acoustic properties of materials in the space. A 3 dBA difference represents a barely noticeable change in volume.

Installation

Genesis horns and strobes mount to any standard one-gang surface or flush electrical box. Matching optional trim plates are used to cover oversized openings and can accommodate one-gang, two-gang, four-inch square, or octagonal boxes, and European 100 mm square.



Genesis Horn/Strobe with optional trim plate

All Genesis signals come pre-assembled with captive mounting screws for easy installation. Two tabs at the top of the signal unlock the cover to reveal the mounting hardware. The shallow depth of Genesis devices leaves ample room behind the signal for extra wiring. Once installed with the cover in place, no mounting screws are visible.

Field Configuration

Temporal horn and horn-strobe models are factory set to sound in a **three-pulse temporal pattern**. Units may be configured for use with coded systems by cutting a jumper on the circuit board. This results in a **steady output** that can be turned on and off (coded) as the system applies and removes power to the signal circuit. A Genesis Signal Master is required when horn-strobe models are configured for coded systems. Non-temporal, horn-only models sound a steady tone.

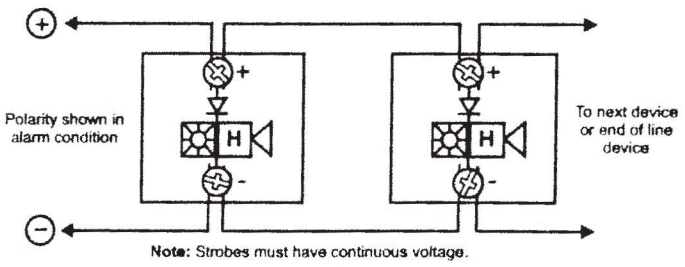
Genesis strobes and horn-strobes are shipped from the factory ready for use as **UL 1971 compliant** signals for public mode operation. These signals may be configured for **temporal flash** by cutting a jumper on the circuit board. This battery-saving feature is intended for private mode signaling only.

Genesis strobes and horn-strobes may be set for **15, 30, 75, or 110 candela output**. The output setting is changed by simply opening the device and sliding the switch to the desired setting. The device does not have to be removed to change the output setting. The setting remains visible through a small window on the side of the device after the cover is closed.

Horns and horn-strobes are factory set for **high dB output**. **Low dB output** may be selected by cutting a jumper on the circuit board. This reduces the output by about 5 dB.

Wiring

Field wiring terminals accommodate #18 to #12 AWG (0.75 mm² to 2.5 mm²) wiring. Horns, strobes, and combination horn-strobes are interconnected with a single pair of wires as shown below.



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Current Draw

Strobes, Horn-Strobes

Multi-cd Wall Strobes (G1-VM)

UL Rating	15 cd*	30 cd*	15/75 cd**	75 cd*	110 cd*
	RMS	RMS	RMS	RMS	RMS
16 Vdc	103	141	152	255	311
16 Vfwr	125	179	224	346	392

*G1-VM multi-cd; **G1F-V1575 fixed 15/75 cd

Typical Current	15 cd		30 cd		15/75		75 cd		110 cd	
	RMS	Mean	RMS	Mean	RMS	Mean	RMS	Mean	RMS	Mean
16 Vdc	85	79	127	124	150	140	245	243	285	283
20 Vdc	71	66	98	96	123	114	188	186	240	238
24 Vdc	59	55	82	80	104	97	152	150	191	190
33 Vdc	46	44	64	63	84	77	112	111	137	136
16 Vfwr	119	64	169	97	223	126	332	203	376	240
20 Vfwr	103	51	143	76	189	100	253	150	331	198
24 Vfwr	94	44	129	65	169	85	218	121	262	152
33 Vfwr	87	37	112	52	148	68	179	89	205	106

Wall Temporal Horn-strobes – High dB Setting

UL Rating	15 cd*	30 cd*	15/75 cd**	75 cd*	110 cd*
	RMS	RMS	RMS	RMS	RMS
16 Vdc	129	167	172	281	337
16 Vfwr	176	230	269	397	443

*G1-HDVM multi-cd
**G1F-HDV1575 fixed 15/75 cd

Typical Current	15 cd		30 cd		15/75		75 cd		110 cd	
	RMS	Mean	RMS	Mean	RMS	Mean	RMS	Mean	RMS	Mean
16 Vdc	102	89	135	129	160	152	246	242	309	305
20 Vdc	88	77	109	104	137	129	193	190	248	243
24 Vdc	81	71	94	90	122	114	161	158	203	200
33 Vdc	74	64	72	74	106	98	124	121	154	151
16 Vfwr	144	77	182	106	247	143	352	212	393	249
20 Vfwr	141	68	162	87	220	120	274	158	362	210
24 Vfwr	136	65	152	76	203	106	235	133	282	165
33 Vfwr	125	54	144	65	196	94	201	101	232	123

Wall Temporal Horn-strobes – Low dB Setting

UL Rating	15 cd*	30 cd*	15/75 cd**	75 cd*	110 cd*
	RMS	RMS	RMS	RMS	RMS
16 Vdc	122	160	146	274	330
16 Vfwr	162	216	231	383	429

*G1-HDVM multi-cd
**G1F-HDV1575 fixed 15/75 cd

Typical Current	15 cd		30 cd		15/75		75 cd		110 cd	
	RMS	Mean	RMS	Mean	RMS	Mean	RMS	Mean	RMS	Mean
16 Vdc	96	84	130	124	158	149	243	240	302	297
20 Vdc	79	70	104	99	133	124	189	186	241	237
24 Vdc	68	61	88	84	119	110	156	154	197	193
33 Vdc	56	52	71	68	100	93	118	116	146	143
16 Vfwr	128	69	180	104	241	139	344	204	389	244
20 Vfwr	118	60	157	84	213	115	266	156	343	200
24 Vfwr	113	54	144	74	195	101	230	128	279	161
33 Vfwr	112	48	137	64	182	87	197	99	226	117

Horns

Wall or Ceiling Mounted Temporal Horns (G1-HD)

UL Rating	High dB (RMS)	Low dB (RMS)
16 Vdc	26	19
24 Vdc	36	27
33 Vdc	41	33
16 Vfwr	51	37
24 Vfwr	69	52
33 Vfwr	76	70

Typical Current	High dB		Low dB	
	RMS	Mean	RMS	Mean
16 Vdc	22	17	17	14
20 Vdc	24	19	19	16
24 Vdc	27	21	22	18
33 Vdc	32	25	26	22
16 Vfwr	34	15	30	14
20 Vfwr	40	19	34	16
24 Vfwr	45	21	38	18
33 Vfwr	52	24	47	22

Wall or Ceiling Mounted Horns (G1-P)

UL Designation	Voltage Range	Max. Current, RMS
Regulated 24 Vdc	16 - 33 Vdc	13 mA
24 fwr	16 - 33 Vfwr	11 mA

Typical Current	RMS	Mean
24 Vdc	10	10
24 Vdc	11	11
31 Vdc	12	12
20 Vfwr	9	8
24 Vfwr	10	9

Notes and Comments

1. Current values are shown in mA.
2. UL Nameplate Rating can vary from Typical Current due to measurement methods and instruments used.
3. GE Security recommends using the Typical Current for system design including NAC and Power Supply loading and voltage drop calculations.
4. Use the Vdc RMS current ratings for filtered power supply and battery AH calculations. Use the Vfwr RMS current ratings for unfiltered power supply calculations.
5. Fuses, circuit breakers and other overcurrent protection devices are typically rated for current in RMS values. Most of these devices operate based upon the heating affect of the current flowing through the device. The RMS current (not the mean current) determines the heating affect and therefore, the trip and hold threshold for those devices.
6. Our industry has used 'mean' currents over the years. However, UL will direct the industry to use the 2004 RMS values in the future.

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dBA output

Temporal Horns, Horn-strobes (G1-HD, G1-HDVM series)

High dB Setting	UL464		Average	Peak
	Temporal	Steady	Temporal/ Steady	Temporal/ Steady
16 Vdc	81.4	85.5	91.4	94.2
24 Vdc	84.4	88.6	94.5	97.6
33 Vdc	86.3	90.4	96.9	99.5

Low dB Setting	UL464		Average	Peak
	Temporal	Steady	Temporal/ Steady	Temporal/ Steady
16 Vdc	76.0	80.1	86.3	89.2
24 Vdc	79.4	83.5	89.8	92.5
33 Vdc	82.1	86.5	92.5	95.3

Steady Tone Horns (G1-P series)

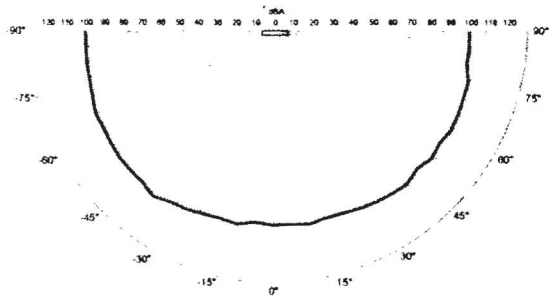
	UL464	Average	Peak
16 Vdc	77 dBA, min	85 dBA	91 dBA
16 Vfwr	77 dBA, min	85 dBA	91 dBA

Notes

1. All values shown are dBA measured at 10 feet (3.01m).
2. UL464 values measured in reverberation room.
3. Average and Peak values are measured in anechoic chamber.

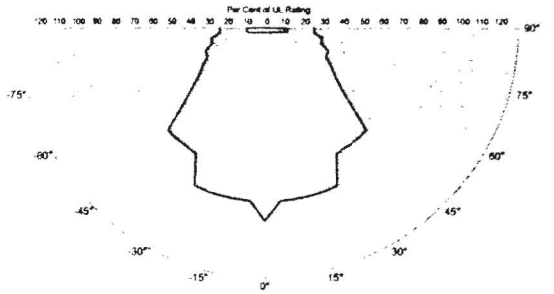
Average Sound Output (dBA)

(High dB setting, anechoic, 24V, measured at 10ft)



Light output - (effective cd)

Percent of UL rating versus angle



Specifications

Housing	Red or white textured UV stabilized, color impregnated engineered plastic. Exceeds 94V-0 UL flammability rating.
Lens	Optical grade polycarbonate (clear)
Mounting (indoor only)	Strobes and horn-strobes are for wall-mount installation only. Horn-only models may be ceiling- or wall-mounted. Flush mount: 2½ inch (64 mm) deep one-gang box Surface mount: Model 27193 surface mount box, wiremold box, or equivalent surface-mount box With optional trim plate: One-gang, two-gang, four-inch square, octagonal, or European single-gang box
Wire connections	Screw terminals: single input for both horn and strobe. #18 to #12 AWG (0.75 mm² to 2.5 mm²) wire size
Operating environment	Indoor only: 32-120°F (0-49°C) ambient temperature. 93% relative humidity
Agency listings/approvals	UL 1971, UL 1638, UL 464, ULC S525, ULC S526, CSFM, CE, FCC, MEA (FM pending). (All models comply with ADA Code of Federal Regulation Chapter 28 Part 36 Final Rule.)
Dimensions (HxWxD)	Signal: 4-1/2" x 2-3/4" x 13/16" (113 mm x 68 mm x 21 mm) Trimplate: 5" (127 mm); Height – 5-7/8" (149 mm); Depth – ½" (13 mm)
Operating voltage	G1-HD series temporal-tone horns: non-coded, filtered 16-33 Vdc or unfiltered 16-33 Vdc FWR (or coded when horn set to steady tone) G1-HDVM series temporal-tone horn-strobes: non-coded, filtered 16-33 Vdc or unfiltered 16-33 Vdc FWR (or coded (audible NAC only) when used with optional G1M Genesis Signal Master) G1-VM series strobes: non-coded, filtered 16 - 33 Vdc or unfiltered 16-33 Vdc FWR G1-P series steady-tone horns: coded or non-coded, filtered 20-31 Vdc or unfiltered 20-27 Vfwr
Strobe output rating	UL 1971, UL 1638, ULC S526: selectable 15 cd, 30 cd, 75 cd, or 110 cd output UL 1971: 15 cd (fixed 15/75 cd models) UL 1638, ULCS526: 75 cd (fixed 15/75 cd models)
Strobe flash rate	G1-VM strobes and G1-HDVM series temporal-tone horn-strobes: one flash per second synchronized with optional G1M Genesis Signal Master indefinitely within 10 milliseconds (or self-synchronized within 200 milliseconds over thirty minutes on a common circuit without G1M Genesis Signal Master) Temporal setting (private mode only): synchronized to temporal output of horns on same circuit
Synchronization Sources	G1M, G1M-RM, SIGA-CC1S, SIGA-MCC1S, BPS6A, BPS10A
Horn pulse rate	G1-HD temporal-tone horns and G1-HDVM series temporal-tone horn-strobes: temporal rate synchronized with optional G1M Genesis Signal Master indefinitely within 10 milliseconds (or self-synchronized within 200 milliseconds over thirty minutes on a common circuit without G1M Genesis Signal Master) G1-P steady-tone horns: continuous, steady tone only
Temporal audible pattern	½ sec ON, ½ sec OFF, ½ sec ON, ½ sec OFF, ½ sec ON, 1½ sec OFF, then repeat cycle

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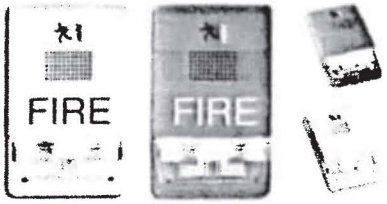
Ordering Information

Catalog Number		Description	Ship Wt. lbs (kg)
White Finish	Red Finish		
G1-HDVM	G1R-HDVM	Genesis Horn-Strobe (selectable 15, 30, 75, or 110 cd output, selectable high/low dB output)	0.25 (0.11)
G1-VM	G1R-VM	Genesis Strobe (selectable 15, 30, 75, or 110 cd output)	
G1-HD	G1R-HD	Genesis Temporal Horn (selectable high/low dB output)	
G1-P	G1R-P	Genesis Steady Horn (not compatible with Genesis Signal Master)	
G1F-HDVM	G1RF-HDVM	Genesis Horn-Strobe (selectable 15, 30, 75, or 110 cd output, selectable high/low dB output) - with "FIRE" marking	
G1F-VM	G1RF-VM	Genesis Strobe (selectable 15, 30, 75, or 110 cd output) - with "FIRE" marking	
G1F-HD	G1RF-HD	Genesis Temporal Horn (selectable high/low dB output) - with "FIRE" marking	
G1F-P	G1RF-P	Genesis Steady Horn with "FIRE" marking (not compatible with Genesis Signal Master)	
G1F-HDV1575	G1RF-HDV1575	15/75 cd temporal horn-strobe, hi/lo dB-24V - with "FIRE" marking (see note 1)	
G1F-V1575	G1RF-V1575	15/75 cd strobe - with "FIRE" marking (see note 1)	
Mounting Accessories			
G1T	G1RT	Genesis Trim Plate (for two-gang or 4" square boxes)	0.15 (0.7)
G1T-FIRE	G1RT-FIRE	Genesis Trim Plate (for two-gang or 4" square boxes) with "FIRE" markings	0.15 (0.7)
27193-16	27193-11	One-gang surface mount box	1 (0.4)
Synchronization Modules			
G1M		Genesis Signal Master - Snap-on Mount	0.2 (0.1)
G1M-RM		Genesis Signal Master - Remote Mount (1-gang)	
SIGA-CC1S		Intelligent Synchronization Output Module (2-gang)	0.5 (0.23)
SIGA-MCC1S		Intelligent Synchronization Output Module (Plug-in UIO)	0.18 (0.08)

Note 1: These 15/75 cd models provide fixed output and are not multi-candela devices. The 15 cd output component complies with UL1971, while the 75 cd output component complies with UL 1638.





Genesis Horn-Strobes may be ordered in red or white, with or without 'FIRE' marking. Order matching trim plates separately.

RSN: *733698*
Permit #: *2013-678816-LT*

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