



June 30, 1998

DN-4948 • J-101

## SS12/24ADA & MASS12/24ADA UL-1971 Strobes and Horn Strobes — Including 15/75 Strobe —

Section: Audio/Visual Devices

### GENERAL

System Sensor's **SS12/24ADA Series** signaling strobes are designed to comply with the *Americans with Disabilities Act* (ADA) and the more demanding requirements of the *UL 1971 Standard for the Hearing Impaired*. A unique lens/reflector design achieves 15, 75, or 110 candela light intensities while maintaining a consistent light dispersment pattern. A "1575" model meets the requirements of ADA @ 75 candela and UL 1971 @ 15 candela.

The SS12/24ADA Series of signaling strobes is available in a choice of 12 or 24 VDC (including full wave rectified unfiltered power), in red or beige. They can be mounted directly to a standard 4" backbox. The SS12/24ADA is available with System Sensor Multi-Alert™ horns, as well as Sound Choice™ speakers for both visible and audible signaling.

### FEATURES

#### SS12/24ADA Signaling Strobe

- Complies with ADA and UL 1971 Standard for the Hearing Impaired.
- Available in 24 VDC with 15, 15/75, 75, or 110 candela light intensity; 12 VDC with 15 and 15/75 candela.
- Low current draw.
- No measurable in-rush in excess of peak current.
- "Installer Easy" features:
  - Plug-in terminal
  - Wiring strip gauge
  - Wiring diagram

#### MASS12/24ADA Strobe with Multi-Alert™ Horn

- Flash rate one flash per second (1 Hz).
- Unique design for maximum visibility and reliability.
- Use with Multi-Alert™ horn, Sound Choice™ SP100, or V400 Series speaker.
- Intended for primary signaling.
- Wall-mount only.

### MECHANICAL SPECIFICATIONS

**Input terminals:** 18 AWG (0.75 mm<sup>2</sup>) to 12 AWG (3.25 mm<sup>2</sup>).

**Dimensions:** **SS12/24ADA:** 4" (101.6 mm) x 4" x 3" (76.2 mm). See dimensions diagrams on next page for details and dimensions for **MASS12/24ADA**.

**Weight:** **SS12/24ADA:** 5 oz. (141.747 g). **MASS12/24ADA:** 10.4 oz. (294.835 g).

**Mounting:** **Surface:** 4" (101.6 mm) x 4" (101.6 mm) x 1-1/2" (38.1 mm) standard backbox (2-1/8" [53.975 mm] deep recommended). **Semiflush:** 4" (101.6 mm) x 4" (101.6 mm) x 1-1/2" (38.1 mm) standard backbox (2-1/8" [53.975 mm] deep recom-



**S4011** (MA)  
**S5512** (SS12/24ADA)  
**S4011** (MASS12/24ADA)



**CS549**  
(SS1215ADA(A),  
MASS1215ADA(A))



California  
State Fire  
Marshal

**7135-1209:124** (MA)  
**7125-1209:154**  
(SS12/24ADA and  
MASS12/24ADA)

### MEA

**53-94-E** (SS24110ADA, SS2475ADA,  
SS2415ADA, MASS24110ADA,  
MASS2475ADA, MASS2415ADA).

**102-95-E** (SS241575ADA, SS121575ADA,  
MASS241575ADA, MASS121575ADA).

**141-94-E** (SS1215ADA).

**237-94-E** (MASS1215ADA).



**0X8A3.AY** (SS24110ADA,  
SS2475ADA, SS2415ADA, SS1215ADA,  
MASS24110ADA, MASS2475ADA, MASS2415ADA,  
MASS1215ADA). **0Y9A9.AY** (SS241575ADA,  
SS121575ADA, MASS241575ADA, MASS121575ADA).



**SS12/24ADA Strobe**



**MASS12/24ADA  
Multi-Alert™  
Sounder Strobe**

mended) with MP-SF semi-flush mounting plate (order separately).

**Operating temperature range:** 0°C to 49°C (32°F to 120°F).

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. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118

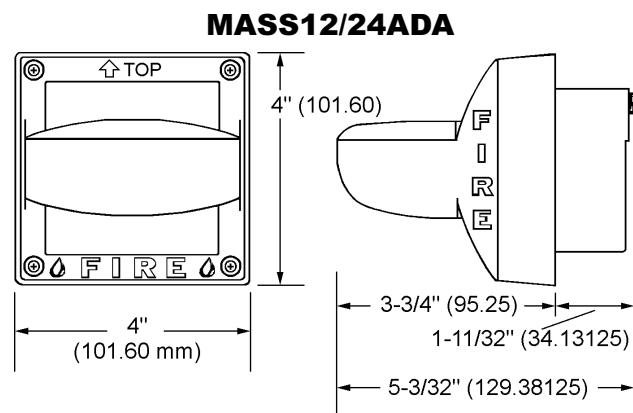
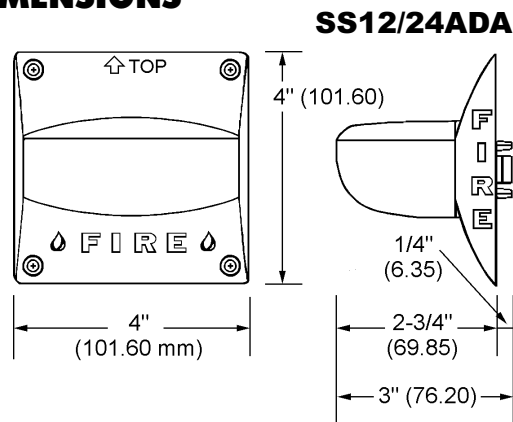


**NOTIFIER**

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**ISO 9001**  
**CERTIFIED**  
ENGINEERING & MANUFACTURING

## DIMENSIONS



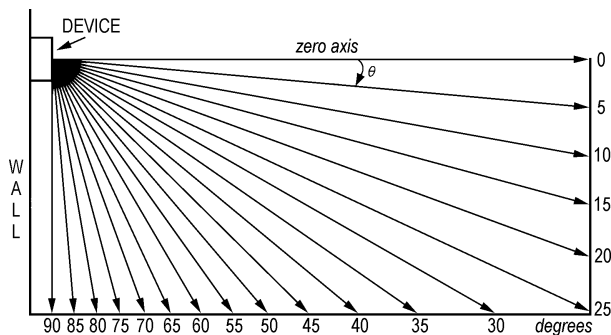
## ELECTRICAL RATINGS: STROBE ONLY

Models	Supply Voltage Range	Peak Operating Current (mA)	Inrush Current In Excess Of Peak Oper. Current (mA)	AVERAGE OPERATING CURRENT	
				From Regulated Supply (mA)	Full-Wave Rectified, Unfiltered Supply (mA)
SS24110ADA (red) SS24110ADAB (beige)	20 – 30 VDC	500	0	210	245
SS2475ADA (red) SS2475ADAB (beige)	20 – 30 VDC	400	0	170	200
SS241575ADA (red) SS241575ADAB (beige)	20 – 30 VDC	220	0	93	120
SS2415ADA (red) SS2415ADAB (beige)	20 – 30 VDC	180	0	75	90
SS1215ADA (red) SS1215ADAB (beige)	10.5 – 17 VDC	380	0	170	200
SS121575ADA (red) SS121575ADAB (beige)	10.5 – 17 VDC	560	0	225	270

## GENERAL DESCRIPTION

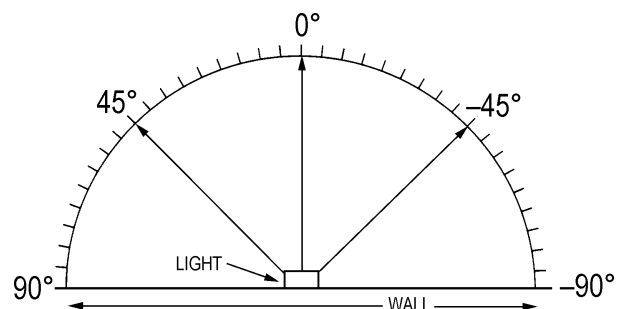
All Series SS12/24ADA signaling strobes are designed for primary signaling in public mode life safety applications. The strobes can be connected to the alarm indicating circuit of a UL listed fire alarm control panel. They are compatible with DC line supervision. Panels may have full-wave rectified, unfiltered power supplies. The strobes are available for either 24 VDC operation, with 15, 15/75, 75 or 110 cd light intensity or for 12 VDC operation with 15 and 15/75 cd light intensity. They feature low current draw with no measurable inrush current and can be used with System Sensor Multi-Alert™ horns or Sound Choice™ Series SP100 and V400 speakers. The strobe is intended for wall-mounting *only* to a 4" (101.6 mm) square (2-1/2" [63.5 mm] deep) electrical backbox. Semiflush mounting is available with the addition of an MP-SF accessory plate.

## STANDARD LIGHT DISTRIBUTION



**VERTICAL DISPERSION**

Degree	% of Rating	Degree	% of Rating	Degree	% of Rating	Degree	% of Rating
0°	100%	45°	34%	65°	16%	85°	12%
5° - 30°	90%	50°	27%	70°	15%	90°	12%
35°	65%	55°	22%	75°	13%		
40°	46%	60°	18%	80°	12%		

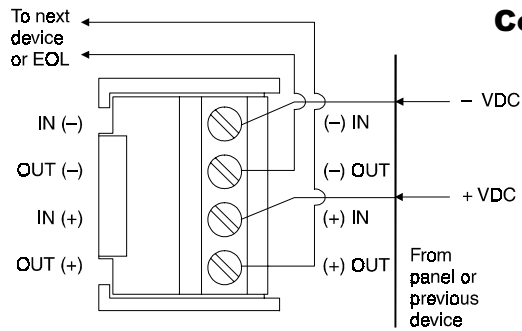


**HORIZONTAL DISPERSION**

Degree	% of Rating	Degree	% of Rating	Degree	% of Rating	Degree	% of Rating
0°	100%	50°	55%	65°	35%	80°	30%
5° - 25°	90%	55°	45%	70°	35%	85°	25%
30° - 45°	75%	60°	40%	75°	30%	90°	25%

A polar light distribution in both horizontal and vertical directions is mandated for the strobes by the UL 1971 Standard for the Hearing Impaired, with specific minimum intensity percentages as shown in the graphs above. With its specially designed lens/reflector system, the SS12/24ADA strobe meets or exceeds these requirements at all angles.

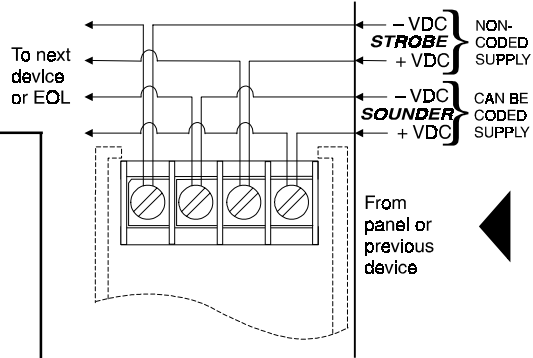
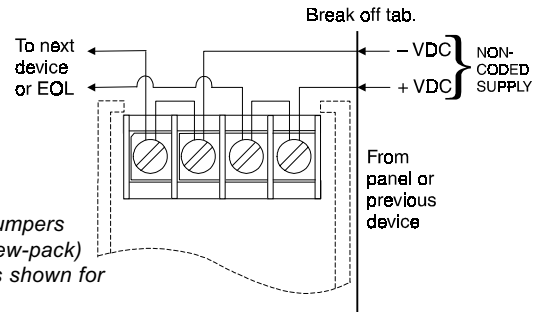
## WIRING



### Strobe Only

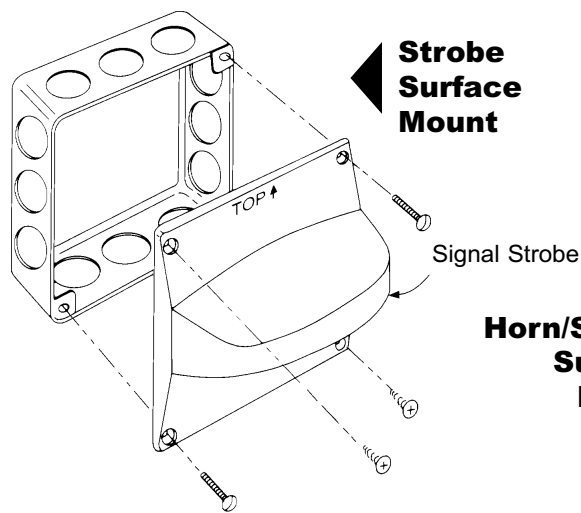
## Horn/Strobe Combination

**NOTE FOR HORN/STROBE COMBINATION:** Jumpers (included in the screw-pack) must be installed as shown for tandem operation.



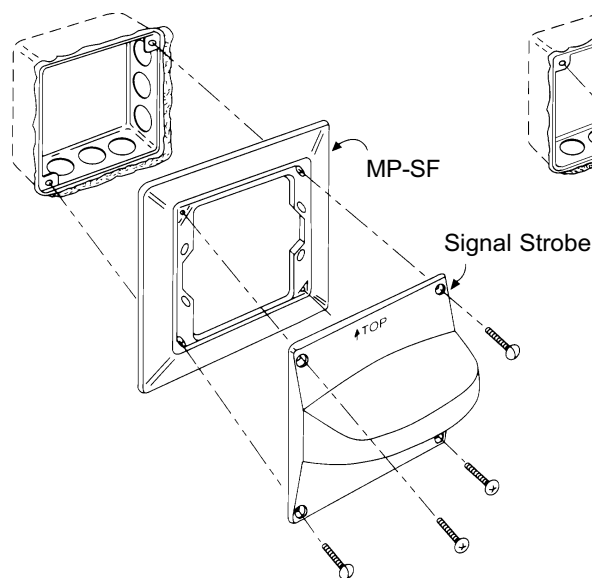
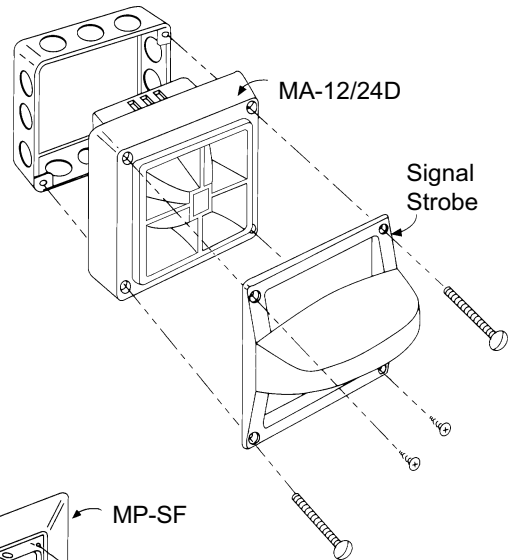
## Horn/Strobe Independent

## MOUNTING

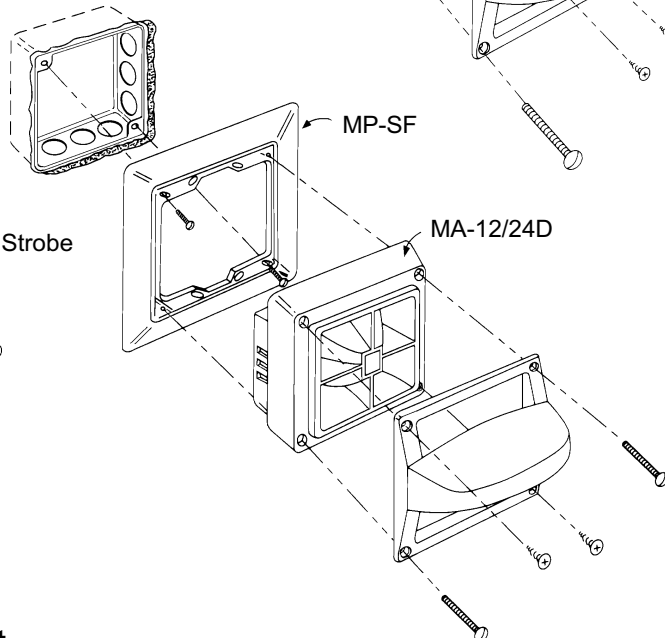


### Strobe Surface Mount

## Horn/Strobe Surface Mount



### Strobe Semiflush Mount



### Horn/Strobe Semiflush Mount

## ENGINEERING SPECIFICATIONS

Strobe shall be a System Sensor Model \_\_\_\_\_ listed to UL 1971 Standard for the Hearing Impaired and shall be approved for Fire Protective Service. Strobe shall be wired as a Primary Signaling Notification appliance. Strobe shall also comply with the Americans with Disabilities Act requirements for visible signaling appliances. Strobe shall operate on 12 or 24 VDC from a regulated DC supply or full-wave rectified, unfiltered supply. The signaling strobe shall be powered from a non-coded power supply when powered from the horn or powered independently. Strobe shall have no measurable inrush current in excess of operating peak current. Visual signaling devices are to be installed in all non-sleeping/corridor and sleeping areas per plans and specifications. Alarm devices to be installed in non-sleeping/corridor areas shall provide 15 cd minimum light output. Devices for sleeping areas shall be rated for 110 cd. The strobe light shall consist of a Xenon flash tube and associated lens/reflector system. Each strobe shall be designed for one flash per second with continuously applied minimum voltage. All strobes shall be capable of mounting to a standard 4" (101.6 mm) x 4" (101.6 mm) x 1-1/2" (38.1 mm) backbox, in either a surface-mount or semiflush-mount with separate mounting plate, to the wall only.

## SOUND OUTPUT SELECTION GUIDE

AVAILABLE SOUNDS	CLIPS ON TABS <sup>1</sup>	CURRENT (mA) <sup>3</sup>			SOUND OUTPUT (dBA)					
		DC Regulated/FWR Unfiltered			Average <sup>4</sup>		Peak <sup>4</sup>		Rev. Room <sup>5</sup>	
		12 V	24 V	30 V	12 V	24 V	12 V	24 V	12 V	24 V
Slow Whoop	ABC	21/40	38/56	46/72	85	92	93	100	79	85
<b>800 Hz Continuous (FACTORY SETTING)</b>	<b>BC</b>	<b>15/24</b>	<b>28/45</b>	<b>35/55</b>	<b>87</b>	<b>93</b>	<b>94</b>	<b>99</b>	<b>79</b>	<b>85</b>
800-1000 Hz Alternating	AC	17/32	34/46	43/58	85	92	91	98	79	85
2400 Interrupted	AB	19/23	35/56	43/64	89	90	96	98	79	85
2400 Continuous	C	21/31	38/59	46/73	85	94	93	104	79	85
1200 Interrupted <sup>2</sup>	B	13/19	23/33	27/41	85	91	95	101	75	82
Swept Frequency	A	17/24	34/47	43/60	85	92	96	101	79	85
Fast Warble	NONE	15/27	30/47	38/59	85	92	93	100	79	85

**SOUNDER OUTPUT NOTES:** 1) See tone selection diagram below for tab clip removal and storage. 2) This selection was previously identified as "Bell/Chime." This tone may be used for private or public mode in the fire alarm service when used with a 24-volt panel. 3) All models can be powered using full-wave rectified unfiltered supplies. Under no circumstances can SS24ADA or MASS24ADA series devices input voltage exceed 33 VDC or be less than 16 VDC (18 to 33 V<sub>RMS</sub> for full-wave rectified, unfiltered supplies). Under no circumstances can the MA12/24D input voltage exceed 33 VDC or be less than 9.6 VDC. Under no circumstances can a SS12ADA or MASS12ADA series device input voltage exceed 18.7 or be less than 9.6 VDC (9.6 to 18.7 V<sub>RMS</sub> for full-wave rectified, unfiltered supplies). 4) Measured at 10 feet (3.048 m) in an anechoic chamber. For average outputs, the acoustical output shall meet the current requirements of UL Standard 464. 5) Measured in a UL reverberant room.

	Red Models	(B)eige or (W)hite Models	Product	Operating Voltage	Current (Avg. mA)	Candela
<b>Signaling Strobes — UL 1971 Compliant</b>	SS1215ADA	SS1215ADAB	Signaling Strobe	12 VDC	170	15
	SS121575ADA	SS121575ADAB	Signaling Strobe	12 VDC	225	15/75
	SS2415ADA	SS2415ADAB	Signaling Strobe	24 VDC	75	15
	SS241575ADA	SS241575ADAB	Signaling Strobe	24 VDC	93	15/75
	SS2475ADA	SS2475ADAB	Signaling Strobe	24 VDC	170	75
	SS24110ADA	SS24110ADAB	Signaling Strobe	24 VDC	210	110
<b>Multi-Alert Sounder with Signaling Strobe*</b>	MASS1215ADA	MASS1215ADAB	Sounder w/ Signaling Strobe	12 VDC	*	15
	MASS121575ADA	MASS121575ADAB	Sounder w/ Signaling Strobe	24 VDC	*	15/75
	MASS2415ADA	MASS2415ADAB	Sounder w/ Signaling Strobe	24 VDC	*	15
	MASS241575ADA	MASS241575ADAB	Sounder w/ Signaling Strobe	24 VDC	*	15/75
	MASS2475ADA	MASS2475ADAB	Sounder w/ Signaling Strobe	24 VDC	*	75
	MASS24110ADA	MASS24110ADAB	Sounder w/ Signaling Strobe	24 VDC	*	110

\*Listed current is strobe only. Add horn current from **Sound Output Selection Guide** (above).

## ORDERING INFORMATION

### MASS2475ADAB

B = Beige  
 15 = 15 Candela  
 1575 = 15 cd per UL 1971/  
 75 cd per ADA  
 75 = 75 Candela  
 110 = 110 Candela  
 12 = 12-Volt  
 24 = 24-Volt  
 SS = Signal Strobe  
 MASS = Multi-Alert Sounder Strobe

## MA SOUNDER TONE SELECTION

