



Fire-LITE[®] Alarms
INCORPORATED

June 23, 1998

G-285

MA, MA/SS, SS
Multi-Alert™ Sounder, Sounder/Strobe,
and SS Signal Strobe

Section: Audio/Visual Devices

GENERAL

System Sensor's Multi-Alert™ sounders and sounder/strobes are uniquely suited to provide primary or secondary signaling for fire and security applications.

Sounders — System Sensor's Multi-Alert™ Sounder (MA) and combination Sounder/Strobe (MA/SS), and Signal Strobe (SS) are UL listed for primary or secondary signaling in life safety systems. The MA Series and MASS Series provide eight different warning tones which can be selected during installation by arranging clips on tabs (see *MA Sounder Tone Selection* diagram). These clips can be reconfigured in the field, allowing the user to change the warning sound at any time after installation. The Multi-Alert mounts directly to 4" (101.6 mm) square backboxes. Optional mounting plates are available for either flush or semi-flush installations. Flush installations require a 2-3/4" (69.85 mm) deep backbox (model BB-D). The UL 464 compliant sounder has a low current consumption and is listed for 12 and 24 VDC and full wave rectified unfiltered operation. Model MA12/24D is suitable for outdoor applications when installed in the optional **System Sensor WBB Weatherproof Back Box**. In Canada, a rigid steel conduit must be used when installing the WBB Weatherproof Back Box.

Strobes — The UL 1638 compliant SS Series signal strobe is an electronic visible warning signal that flashes approximately once every 1.5 seconds. Available in either a 1.5 cd or 15 cd light intensity at 24 VDC or 15 cd at 12 VDC, the strobe light uses an extremely reliable xenon flash tube with low current requirements. The electronic circuit is enclosed within the durable polycarbonate lens.

FEATURES

- Field-programmable for one of eight distinctive sounds.
- Eight field-selectable and reversible tone outputs (Multi-Alert™ sounder).
- Strobe available in 1.5 or 15 cd.
- Low current consumption.
- May be surface mounted on standard 4" square backbox.
- Flush or semi-flush mounting available with optional mounting plates.
- Sounder and strobe can each be operated independently.
- SS strobe UL listed to Standard 1638.
- Three-year warranty.

APPLICATIONS

Use for protection of life and property. Intended for use in the alarm notification circuit of a UL listed fire alarm control panel. For further information, refer to NFPA standards and recommended practices for installation and use of these appliances.



S4011
(MA and MASSLO/M)
S3593 (SSLO/M)



California
State Fire
Marshal
7135-1209:124
(MA, MASSLO/M)
7300-1209:123
(SSLO/M)

MEA

427-91-E Vol. II
(MA)



CS548 (MA only)
CS549 (SS24LO,M)



0X8A3.AY(MA)
0W4A5.AY
(SSLO/M, MASSLO/M)



CONSTRUCTION AND OPERATION

The Signal Strobe is an electronic visual warning signal that flashes approximately once every 1.5 seconds. The high intensity strobe light uses an extremely reliable xenon flash tube with low current requirements. The electronic circuit is enclosed within the durable polycarbonate lens. All circuits are polarized to be compatible with DC alarm supervision and satisfy code requirements for visual signaling.

The strobe works independently, but it may be mounted on top of the horn. When mounted alone, it may be either semi-flush or surface mounted, depending on the choice of mounting plate options.

INSTALLATION

Installation instructions are packaged with each unit. Screws are included with each device. Phillips head screws are used to attach accessories. Mounting options include:

- Surface mounting.
- Semi-flush mounting.
- Flush mounting (deep box required).
- Plaster ring mounting.
- Weatherproof (use WBB box, sounders only — strobes are not approved for weatherproof applications).

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 **Fire-Lite**. Phone: (203) 484-7161 FAX: (203) 484-7118



12 Clintonville Road, Northford, Connecticut 06472

ISO-9001
Engineering and Manufacturing
Quality System Certified to
International Standard ISO-9001

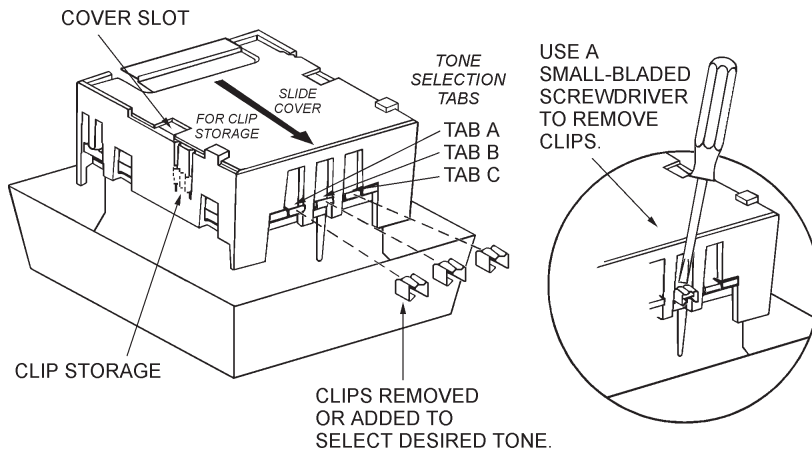


Made in the U.S.A.

ENGINEERING SPECIFICATIONS

Sounder shall be a System Sensor Model _____, capable of operating at 12 and 24 VDC. Sounder shall be listed to Underwriter's Laboratories Standard 464 for fire protection signaling systems. Sounder shall have an operating temperature between -31°F and 151°F (-35°C and 66°C). Sounder shall have eight tone options, selected by means of clip(s).

For Sounder/Strobe Combination — Sounder/strobe shall be a System Sensor Sounder/Strobe Model _____, capable of operating at 12 or 24 VDC. Sounder/strobe shall be listed to Underwriter's Laboratories Standard 464/1638 for fire protection signaling systems. Sounder/strobe shall have an operating temperature between 32°F and 120°F (0°C and 49°C). Sounder shall have eight tone options which are selected by means of clip(s). Strobe shall be powered independently of the sounder and shall operate on 12 or 24 VDC. Strobe shall have a minimum light output of 1.5 or 15 candela and shall be UL listed as a primary signaling device.

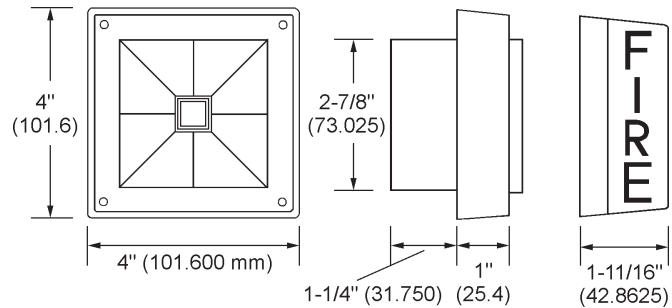


MA SOUNDER TONE SELECTION

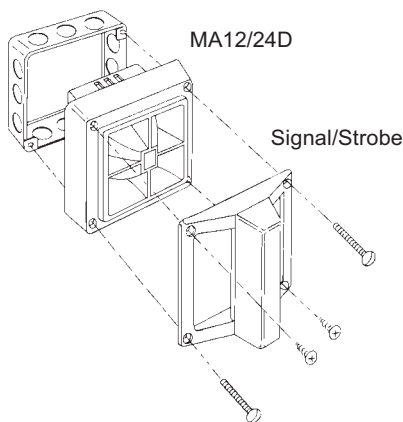
See chart on page 3.

**FOR STORING
UNUSED CLIPS:**
SLIDE COVER BACK TO
ALIGN COVER SLOT WITH
CLIP STORAGE POST.

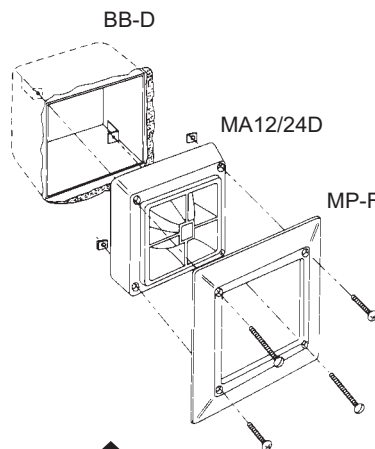
DIMENSIONS (mm) ▶ Multi-Alert



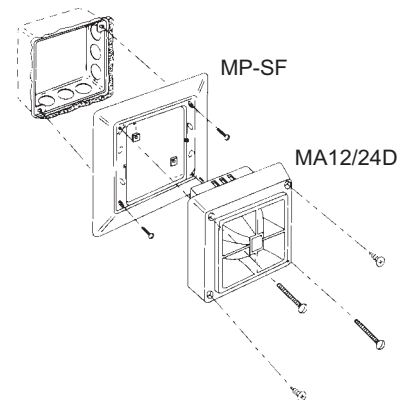
MOUNTING DIAGRAMS ▼ System Sensor WBB Weatherproof Back Box also available.



**Sounder/Strobe
Surface Mount**



**Sounder Flush Mount
(deep box required)**



**Sounder or
Sounder/Strobe
Semiflush Mount**

SPECIFICATIONS

Multi-Alert™ Sounder*

*NOTE: Listed for outdoor applications when used with the WBB weatherproof backbox.

Input terminals: 12 AWG (3.25 mm²) to 18 AWG (0.75 mm²).

Size: 4" (101.6 mm) x 4" (101.6 mm) x 2-1/4" (57.15 mm).

Weight: 5.7 oz. (161.6 g).

MOUNTING: Surface: 4" (101.6 mm) x 4" (101.6 mm) standard backbox (1-1/2" [38.1 mm] to 2-1/8" [53.975 mm] deep).** **Flush:** 4" (101.6 mm) x 4" (101.6 mm) BB-D deep backbox (2-3/4" [69.85 mm]) with MP-F mounting plate. **Semiflush:** 4" (101.6 mm) x 4" (101.6 mm) standard backbox (1-1/2" [38.1 mm] to 2-1/8" [53.975 mm] deep)** with MP-SF mounting plate.

**NOTE: For 12-gauge (3.25 mm²) or 14-gauge (2.00 mm²) wire, a 4" (101.6 mm) x 4" (101.6 mm) x 2-1/8" (53.975 mm) backbox is recommended.

Operating temperature range: -31°F to 151°F (-35°C to 66°C).

Operating voltage: 12 or 24 VDC full-wave rectified unfiltered. Actual 12-volt operating voltage cannot be less than 9.6 VDC or greater than 15.4 VDC; actual 24-volt operating voltage cannot be less than 18 VDC or greater than 33 VDC.

SPECIFICATIONS

SS Strobe

Input terminals: 12 AWG (3.25 mm²) to 18 AWG (0.75 mm²).

Size: 4" (101.6 mm) x 4" (101.6 mm) x 2-15/16" (74.6125 mm).

Weight: 8.2 oz. (232.466 g).

MOUNTING: Surface: 4" (101.6 mm) x 4" (101.6 mm) standard (1-1/2" [38.1 mm] to 2-1/8" [53.975 mm] deep) backbox. **Semiflush:** 4" (101.6 mm) x 4" (101.6 mm) standard backbox (1-1/2" [38.1 mm] to 2-1/8" [53.975 mm] deep) with MP-SF mounting plate.

Operating temperature range: -31°F to 151°F (-35°C to 66°C).

Operating voltage: 12 or 24 VDC full-wave rectified unfiltered. Actual 12-volt operating voltage cannot be less than 9.6 VDC or greater than 15.4 VDC; actual 24-volt operating voltage cannot be less than 18 VDC or greater than 33 VDC.

CURRENT DRAW/SOUND OUTPUT

Multi-Alert™ Sounder — MA12/24D

AVAILABLE SOUNDS	CLIPS ON TABS ¹	CURRENT (mA) ³			SOUND OUTPUT (dBA)					
		DC Regulated/FWR Unfiltered			Average ⁴		Peak ⁴		Rev. Room ⁵	
		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
800 Hz Continuous (FACTORY SETTING)	BC	15/24	28/45	35/55	87	93	94	99	79	85
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 ²	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

NOTES:

- 1) See tone selection diagram on facing page 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 MA12/24, SS12/24, PA400, or PS series devices input voltage exceed 33 VDC or be less than 9.6 VDC.
- 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.

ORDERING INFORMATION

RED MODEL NUMBER	BEIGE MODEL NUMBER	PRODUCT	OPERATING VOLTAGE	CURRENT (AVERAGE)	CANDELA
Multi-Alert					
MA12/24D	MA12/24DB	Sounder	12/24 VDC	*	—
SS12LO	—	Strobe	12 VDC	50 mA	1.5
SS24LO	SS24LOB	Strobe	24 VDC	25 mA	1.5
SS24LOC	—	Strobe (ceiling)	24 VDC	25 mA	1.5
SS24M	—	Strobe	24 VDC	75 mA	15.0
SS24MC	—	Strobe (ceiling)	24 VDC	75 mA	15.0
MASS12LO	—	Sounder with Strobe	12 VDC	*	1.5
MASS24LO	—	Sounder with Strobe	24 VDC	*	1.5
MASS24LOC	—	Sounder with Strobe (ceiling)	24 VDC	*	1.5
MASS24LOLA	—	Sounder with Strobe ("FUEGO" lens)	24 VDC	*	1.5
MASS24M	—	Sounder with Strobe	24 VDC	*	15.0
MASS24MC	—	Sounder with Strobe (ceiling)	24 VDC	*	15.0
Accessories					
MP-F/R	MP-F/B	Flush-mounting plate			
MP-SF/R	MP-SF/B	Semi-flush-mounting plate			
BB-D	—	Flush-mounting deep backbox			
WBB	—	Weatherproof backbox for MA sounder			
BB-STD	—	Backbox, standard (galvanized)			
*Current ranges depending on voltage and sound selected (see chart on previous page).					

HOW TO ORDER

Legend:

MA = Multi-Alert sounder
 12/24 = 12 and 24 volt operation
 LO = 1.5 Candela
 M = 15.0 Candela

Example:

MASS24LOC

 C = Ceiling mount
 LO = 1.5 Candela
 24 = 24 volt strobe
 MASS = Multi-Alarm Sounder Strobe