



- UL and cUL listed
- 12 VDC with 15, 35 or 60 cd setting
- 24 VDC with 15, 35, 60, 75, 95 or 110 cd settings
- 6 distinct candela settings
- Candela selection view window
- 15/75 ADA compliant on 60cd setting
- 33 sound output settings
- Horn or chime sound output
- Pre-wire back plate
- Universal back plate mounting (single gang, double gang, octagon, or 4" square)
- Single screw mounting
- Indoor only
- Low current draw



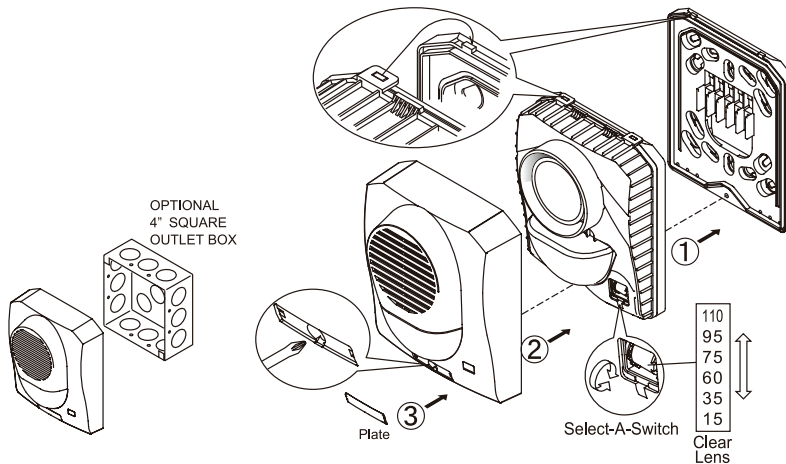
The SH-1224 Strobe/Horn Series provides a wide range of candela light output options in a single device. The candela settings include a 12 or 24 volt DC operation for the 15, 35 and 60 (75 on axis) candela settings and 24 volt DC operation for the 15, 35, 60, 75, 95 and 110 candela settings. The candela setting is displayed through the front window and is selectable using a drum wheel.

The horn settings include Temporal, Non-Temporal, March Time and a Chime sound. The horn also has Low, Mid and High volume settings for each pattern and tone. The tones include 2400 Hz, Electro-Mechanical, Broadband and Chime.

The voltage input can be either regulated DC or full wave rectified (FWR) 12 volt or 24 volt operation with an operating range from 8 to 33 V DC. The strobes can be synchronized using a control panel with the Potter (Amseco) sync protocol or a SMD10-3A sync module.

The SH-1224 utilizes a universal mounting plate that will mount on a single gang, double gang, octagon and 4" square electrical boxes. The back plate allows the installer to mount the plate and connect the wire connections. The strobe attaches in a hinge fashion from the top and is secured by a single mounting screw. The strobe completely covers the mounting back plate, therefore it can be mounted before other trades work is completed and not affect the final look.

### Installation



**CAUTION**

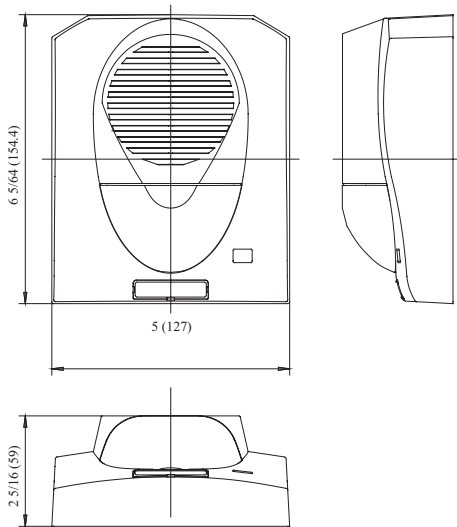
A jumper plug is provided to test for correct wiring in the supervisory mode only. Do not pass alarm current through the jumper.

**Note:** Installation must comply in accordance with applicable standards.

### Ordering Information

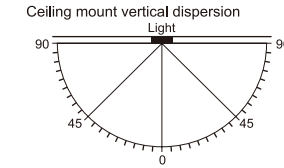
Stock Number	Model Number	Description	Color
4560070	SH-1224R	Selectable strobe/horn/chime	Red
4560071	SH-1224W	Selectable strobe/horn/chime	White

**Dimensions: inches (mm)**

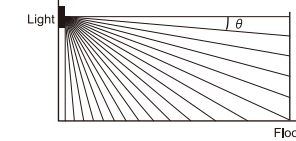


Light output in percentage when measured from the following directions per UL 1971.

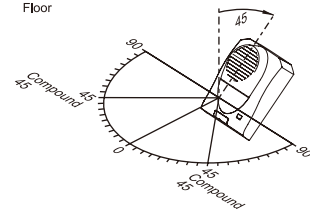
Wall and ceiling mount horizontal dispersion



Wall mount vertical dispersion



Degrees	% of Rating	
	Horizontal	Vertic
0	100	100
5-25	90	90
30	75	90
35	75	65
40	75	46
45	75	34
50	55	27
55	45	22
60	40	18
65	35	16
70	35	15
75	30	13
80	30	12
85-90	25	12



**WARNING**

High voltage may be present inside the light assembly even though power is not connected. If access to the component board is required (removal or replacement), the capacitor must be discharged by touching a wire to both ends of the flashtube.

DO NOT attempt to touch or move the assembly until the capacitor has been discharged.

**Specifications**

**Strobe Current**

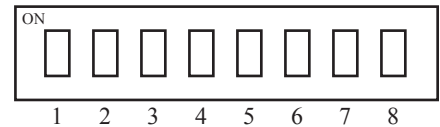
Light Output	Max. RMS Operating Current (mA RMS)			
	Reg. 12 VDC	Reg. 12 FWR	Reg. 24 VDC	Reg. 24 FWR
15cd	116	152	62	99
35cd	209	267	102	152
60/75cd	254	258	131	190
75cd	NA	NA	146	208
95cd	NA	NA	177	243
110cd	NA	NA	196	268

Voltage	12/24V	
UL Designation	Regulated 12 DC/FWR	Regulated 24 DC/FWR
Operating Voltage Range	8 - 17.5V	16 - 33V
Flash Rate	60 times/min.	
Sync Module (SMD10-3A)	NA	Available
Operating Temperature Range	Indoor model: 32°F to 120°F (0°C to 49°C)	

**Horn Dipswitch**

**Pattern**

- 1 ON - Non-temporal
- 1 OFF - Temporal
- Both 2 = OFF
- 1 and 2 ON = March Time



**Tone**

- 3 and 4 ON = 2400Hz
- 3 ON and 4 OFF = Electromechanical
- 3 and 4 OFF = Chime
- 3 OFF and 4 ON = Broadband

**Volume**

- 5 and 6 ON = High
- 5 ON and 6 OFF = Mid
- 5 and 6 OFF = Low
- 7 and 8 ON = Horn/strobe on 2 wires
- 7 and 8 OFF = Horn and strobe on 4 wires

**Note:** To determine total current draw, add desired strobe setting and horn selection. Refer to the installation instructions for further information.

**Non-Temporal Horn Current**

Pattern	Volume	Max. RMS Current (mA RMS Current)		dBA Reverberant Ratings per UL464 (dBA @ 10 ft.)		dBA Anechoic Ratings per CAN/ULC S525 (dBA @ 10 ft.)	
		Reg 12 VDC	Reg 24 VDC	Reg 12 VDC	Reg 24 VDC	Reg 12 VDC	Reg 24 VDC
2400 Hz	High	119	87	87	87	99	100
	Mid	44	28	82	82	94	96
	Low	30	18	79	80	92	92
Electro-Mechanical	High	118	81	86	87	100	100
	Mid	43	26	82	84	96	97
	Low	27	16	79	80	93	93
Broadband	High	146	78	86	86	101	102
	Mid	41	26	81	82	96	98
	Low	28	16	77	79	94	95
Chime	High	27	21	70	70	86	86
	Mid	11	8	62	62	79	80
	Low	9	7	58	57	75	75

**Temporal Horn Current**

Pattern	Volume	Max. RMS Current (mA RMS Current)		dBA Reverberant Ratings per UL464 (dBA @ 10 ft.)		dBA Anechoic Ratings per CAN/ULC S525 (dBA @ 10 ft.)	
		Reg 12 VDC	Reg 24 VDC	Reg 12 VDC	Reg 24 VDC	Reg 12 VDC	Reg 24 VDC
2400 Hz	High	124	87	82	82	100	100
	Mid	46	30	77	79	95	96
	Low	30	18	74	75	92	92
Electro-Mechanical	High	114	80	83	82	100	101
	Mid	42	27	78	80	95	96
	Low	28	16	75	76	93	93
Broadband	High	151	80	82	82	101	102
	Mid	45	26	77	78	97	98
	Low	30	16	75	76	94	95
Chime	High	29	21	68	70	86	86
	Mid	10	9	61	61	79	79
	Low	9	8	55	55	75	76

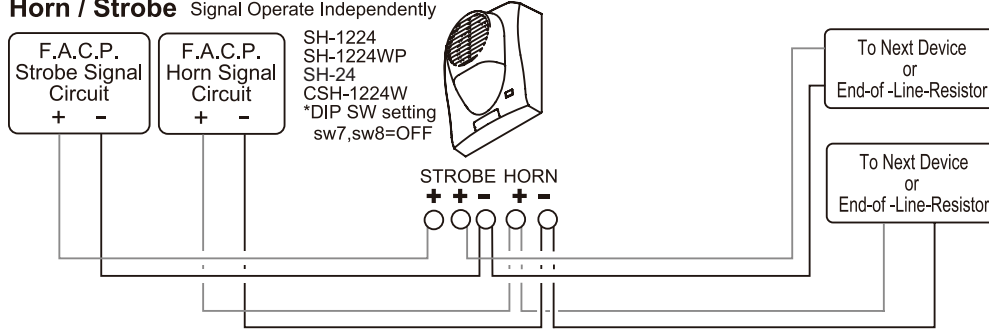
**March Time Horn Current**

Pattern	Volume	Max. RMS Current (mA RMS Current)		dBA Reverberant Ratings per UL464 (dBA @ 10 ft.)		dBA Anechoic Ratings per CAN/ULC S525 (dBA @ 10 ft.)	
		Reg 12 VDC	Reg 24 VDC	Reg 12 VDC	Reg 24 VDC	Reg 12 VDC	Reg 24 VDC
2400 Hz	High	121	92	83	84	99	100
	Mid	47	31	79	81	95	96
	Low	36	19	76	77	92	92
Electro-Mechanical	High	114	86	83	83	100	100
	Mid	42	27	80	81	95	96
	Low	30	19	77	77	92	93
Broadband	High	153	77	83	84	101	102
	Mid	42	28	79	80	97	98
	Low	29	16	76	77	94	95

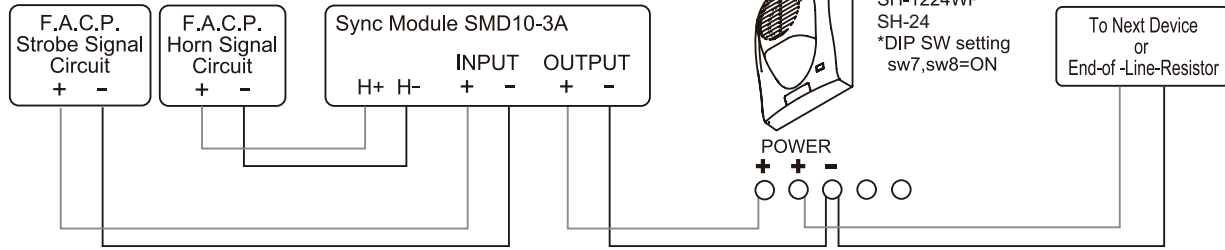
**Wiring Diagram**

Wiring Observe Polarity Use both terminals (or Lead) for connection. Break wire run to provide electrical supervision.

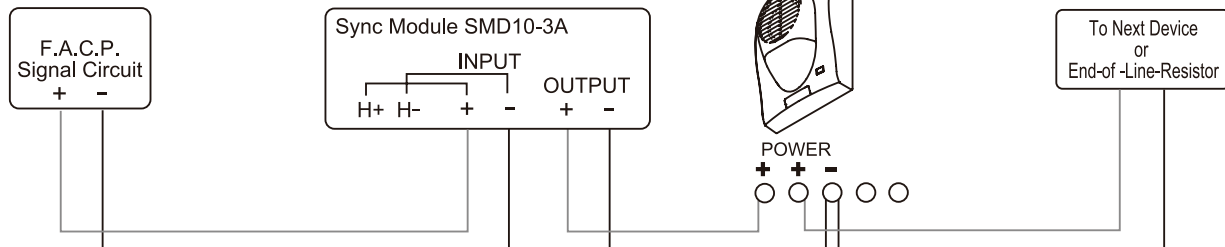
**Horn / Strobe** Signal Operate Independently



**Horn / Strobe** Wiring Diagram for Audible Strobe Class "B" Circuit with Audible Silence Feature. (SH-1224, SH1224W)



**Horn or Strobe** Wiring Diagram for Audible Strobe Class "B" Circuit without Audible Silence Feature.



Refer to the SMD 10-3A Sync Module instruction manual for Class "A" wiring or other application diagrams.

DWG# 8910004-1

**Engineering Specifications**

The installer shall provide and install the Potter SH-1224 selectable strobe/horn. The strobe shall have six (6) candela settings. The candela settings shall be selectable using a drum roller and shall display the candela setting on the front of the device. The horn shall have 33 selectable settings configurable by dip switches. The sounder shall be capable of ANSI Temporal Code 3, March Time and produce a chime output. The horn shall have three distinct volume levels. The strobe/horn shall operate at 12 or 24 VDC regulated or full wave rectified. The strobe/horn shall have an operating range between 8 and 33 VDC. the strobes an by synchronized using a control panel with

the Potter sync protocol or the SMD10-3A sync module. The strobe shall utilize a mounting plate that allows the installer to pre-wire the mounting plate. The mounting plate shall be universal and mount on a single gang, double gang, octagon or 4 inch square box. The mounting plate shall be completely covered by the strobe and shall be secured by a single screw. The strobe shall be UL listed to standard 1638, General Signaling, and standard 1971, Signaling Devices for the Hearing Impaired. In addition, the strobes shall be cUL listed to CAN-ULC S526. The horn shall be UL listed to standard 464, Audible Signaling Devices.