Selectable Output Horns, Strobes, and Horn Strobes

System Sensor selectable output horns, strobes, and horn strobes are rich with features guaranteed to reduce installation times and maximize profits.

Features

- Mounting plate included for compatibility with a wide range of back box sizes
- Three field selectable candela settings: 15, 75, and 115
- Easy to use rotary dials for selection of candela and horn settings
- Built in synchronization feature keeps strobes in sync for up to 30 minutes
- Strobes Listed to UL 1638; Horns Listed to UL 464
- Horn settings on the horn strobe model include high and low volume, continuous or temporal 3 tone
- Round trim ring available for ceiling mount applications
- Universal Fire symbol is language independent
- Trim plate allows mini horn to mount to a variety of back boxes and fit aesthetically with the horn strobe and strobe

Agency Listings

(UL)

The System Sensor line of notification devices offers the most flexibile and easy-to-use line of horns, strobes, and horn strobes in the industry. With white and red housing, universal fire symbol and a ceiling mount accessory available these devices can meet virtually any application. They also mount to a wide variety of back box sizes to offer the most flexibility in installation.

This line of devices features a wide variety of features that simplifies installations. The mounting plate allows the devices to be compatible with a wide range of back box sizes. Settings for the strobe and horn are done using easy to set rotary switches on the back of the device. Synchronization is achieved without the use of additional modules; when powered with a filtered DC source, the strobe portion is capable of self synchronization for 30 minutes per NFPA 72.

Three candela options are available for the strobe when it works on 24 volts or full wave rectified power. Only 15 candela is available for strobe when it works on 12 volts. On the horn strobe model, high and low volume are options for the horn as well as a continuous tone or temporal 3 output. The mini horn model has a continuous tone output and one volume setting.

Available accessories include a round trim ring to adapt the wall device for ceiling mount applications. Simply install the round ring over the square device for a perfect fit on the ceiling. An adapter plate is also available for the mini horn. It fits to a wider range of back boxes and fits with the family look of the horn strobe and strobe devices.

System Sensor Specifications

General

System Sensor strobe and horn strobes shall mount to a 2"x4", 4"x4", single-gang, double-gang, 4" Octagon, 105mm x 105mm, 65mm round, 86mm x 86 mm, 60mm x 60mm back box. System Sensor devices shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12/24 volts. 12-volt-rated notification appliance circuit outputs shall operate between 8 and 17.5 volts. 24-volt-rated notification appliance circuit outputs shall operate between 17 and 33 volts. Devices operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 75 and 115 cd. When devices work on 12 volts, only 15 candela is available. The devices shall not operate on a coded power supply. Horn - strobe and strobe devices shall have built-in synchronization capability. Upon initial power up the devices shall be synchronized for up to 30 minutes.

Strobe

The strobe shall be a System Sensor Model _____ listed to UL 1638 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

Horn Strobe Combination

The horn strobe shall be a System Sensor Model _____ listed to UL 1638 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three-pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch.

Mini Horn

The mini horn shall mount to a single-gang back box. With the accessory trim plate it shall mount to a 2" $\times$ 4", 4" $\times$ 4", single-gang, double-gang, 105mm $\times$ 150mm, 65mm round, 86mm $\times$ 86mm, 60mm $\times$ 60mm back box. The mini horn shall provide a continuous tone output.

Physical/Electrical Specifications	
Standard Operating Temperature	32°F to 120 °F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 24 DC/FWR[1] or regulated 12 DC/FWR[#]
Operating Voltage Range	16 to 33 V (24 V nominal); 8 to 17.5 V (12 V nominal)
Input Terminal Wire Gauge	14 to 18 AWG*
Strobe And Horn Strobes Dimensions(including lens)	5.15" L $\times$ 5.0" W $\times$ 1.5" D (131 mm L $\times$ 127mm W $\times$ 38mm D)
Ceiling Trim ring Dimensions (sold as a pack of 5)	6.8 " dia / 1.5" depth (173 mm dia / 38mm depth)
Mini Horn Dimensions	4.6"L $\times$ 2.9" W $\times$ 0.45" D (117 mm L $\times$ 74 mm W $\times$ 11.5mm D)
Mini Horn Trim Plate (sold as a pack of 5)	5.1" L $\times$ 5.0" W $\times$ 1.73" D (131 mm L $\times$ 127 mm W $\times$ 43 mm D)

[#] Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

* Mini horn is rated for 12 to 18 AWG

UL Current Draw Data

HORN/STROBE CURRENT DRAW （mA）				
DC Input	**16–33 Volts**			**8-17.5 Volts**
	15 cd	**75 cd**	**115 cd**	**15 cd**
Temporal High	48	80	98	63
Temporal Low	43	75	95	63
Continuous High	48	80	98	65
Continuous Low	43	75	95	63
FWR Input				
Temporal High	55	89	108	62
Temporal Low	50	84	103	62
Continuous High	55	89	108	65
Continuous Low	50	84	103	63

STROBE CURRENT DRAW （mA）						
Switch Position	**Candela**	**16–33 Volts**		**8–17.5 Volts**	
		DC	**FWR**	**DC**	**FWR**
Standard Candela Range	Position 1	15	37	45	58	58
	Position 2	75	71	71	N/A	N/A
	Position 3	115	89	92	N/A	N/A

Horn Tones and Sound Output Data

HORN OUTPUT （dBA） IN UL REVERBERANT ROOM														
Switch Postition	**Sound Pattern**	**Volume**	**16–33 Volts †**		**24 V Nominal Measurements**				**8-17.5 Volts †**		**12V Nominal Measurements**			
					Reverberant		**Anechoic**				**Reverberant**		**Anechoic**	
			DC	**FWR**	**DC**	**FWR**	**DC**	**FWR**	**DC**	**FWR**	**DC**	**FWR**	**DC**	**FWR**
1	Temporal	High	78	77	78	77	103	104	72*	71*	76	73*	88	85
2	Temporal	Low	74*	73*	74*	73*	100	101	70*	69*	72*	70*	86	83
3	Continuous	High	82	80	82	80	103	104	76	75	80	77	87	85
4	Continuous	Low	80	78	80	78	100	101	74*	72*	77	75	86	82

† Minimum dB rating for Operational Voltage Range as per UL 464.
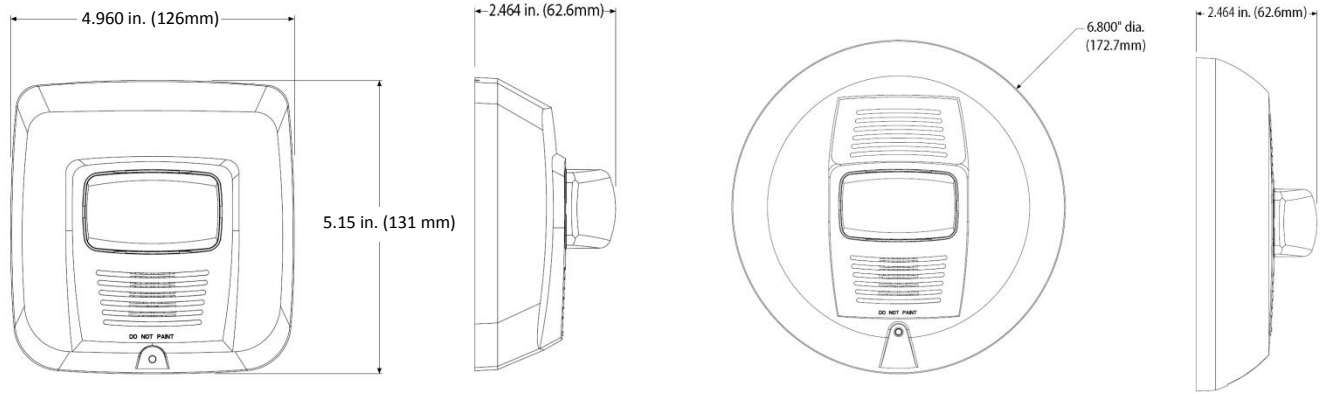*For Private Mode use only.

Mini Horn Sound Output Data （dBA）

Tone	Power Supply	12V	24V
Continuous	DC	75	82
	FWR	75	80

Mini Horn Current Draw （mA）

Tone	Power Supply	12V	24V
Continuous	DC	13	21
	FWR	13	22

Candela Settings

Rotary Switch Position	Candela Output - Clear lens	Candela Output - Red lens
1	15	3
2	75	16
3	115	25

Wall Mount Horn Strobe Product — 4.960 in. (126mm) · 2.464 in. (62.6mm) · 5.15 in. (131 mm)

Wall Mount Horn Strobe with Optional Ceiling Trim Ring — 6.800" dia. (172.7mm) · 2.464 in. (62.6mm)

Mini Horn — 2.90 in. (74mm) · 0.45 in. (11.5mm) · 4.600 in. (117mm)
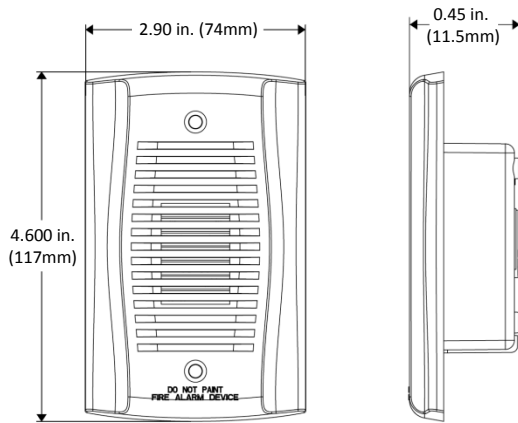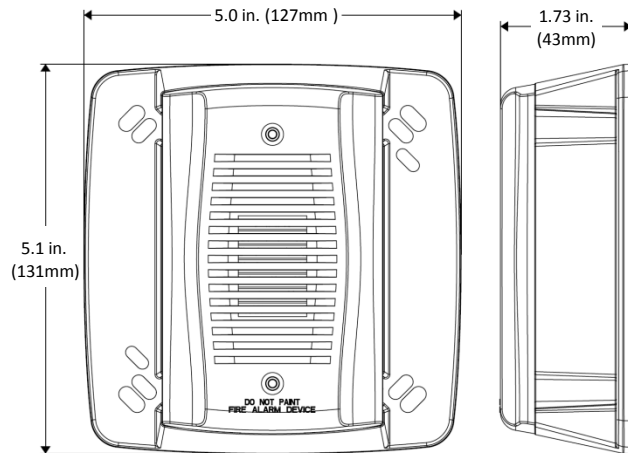
Mini Horn with Optional Trim Plate — 5.0 in. (127mm) · 1.73 in. (43mm) · 5.1 in. (131mm)

System Sensor Ordering Information

Model	Type				Housing Color		Lens Color		Lettering		House on Fire Symbol
	Horn Strobe	Horn	Strobe	Trim Plate	Red	White	Red	Clear	Chinese	English	
SYS-HS	√				√			√			√
SYS-HS-FIRE*	√				√			√		√	√
SYS-HSR	√				√		√		√		√
SYS-HSR-FIRE	√				√		√			√	√
SYS-HSW	√					√		√			√
SYS-HSRW	√					√	√		√	√	√
SYS-HSRW-FIRE	√					√	√			√	√
SYS-ST			√		√			√			√
SYS-ST-FIRE*			√		√			√		√	√
SYS-STR			√		√		√		√		√
SYS-STR-FIRE			√		√		√			√	√
SYS-STW			√			√		√			√
SYS-STRW			√			√	√		√	√	√
SYS-STRW-FIRE			√			√	√			√	√
SYS-CTP				√	√						√
SYS-CTPR				√	√				√		√
SYS-CTPR-FIRE				√	√					√	√
SYS-CTPW				√		√					√
SYS-CTPRW				√		√			√	√	√
SYS-CTPRW-FIRE				√		√				√	√
MHR1		√			√						
SYS-MHTP				√	√						

*The marked models are only ordering model number. The model number on the product label, UL approval and instruction manual remains without "-FIRE"