# SP100 and V400 Series **Speakers and Speaker/Strobes**



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SP101 Speaker

### **Features**

- Dual voltages: 25 and 70.7 Vrms
- Multiple selectable taps -SP100: 1/8 - 4 watts  $-V400: 1/_{4} - 2$  watts
- Peak dBA: -SP100: 96 @ 4 watts
  - -V400: 90 @ 2 watts



V400 Speaker with ADA Strobe



- Multiple strobe options -ADA/UL 1971 @ 15, 15/75, 75, or 110 cd (24 VDC only)
- Listed to UL Standard 1480 for speakers for fire protective signaling systems

System Sensor SP100 Series and V400 Series Speakers are the Sound Choice<sup>™</sup> for voice, tone, and visible signaling. The SP100 Series are high quality speakers and speaker/strobe combinations for evacuation signaling

designed to meet UL1480 Fire Standard Specifications. Sound Choice speakers are available with ADA/UL1971 listed strobes for public mode applications.

# **Specifications – SP100 Series**

Mechanical Input Terminals: 12 to 18 AWG Grille Size/Color: Round: 8" (203 mm)/white Square: 5" (127 mm)/red or white Weight: 1.6 lb (725 gm)  $4'' \times 4'' \times 2^{1}/s''$  backbox with Mounting:  $4'' \times 4'' \times 1^{1/2}''$  extension ring Filler Plugs: Included Operating

32° to 120° F (0° to 49° C) **Temperature Range:** 

Electrical Voltage Input:

Frequency Range:

25 volts or 70.7 volts (nominal) 400 - 4000 Hz

Although the SP100 Series speaker/strobe combination is sold as a unit, the speaker and strobe are electrically independent and require separate power sources. See chart on page 2 for strobe operating requirements.



#### **SP100 Series Speaker/Strobe Power Requirements**

	SP1W2415ADA <u>SP1R2415ADA</u>	SP1W241575ADA <u>SP1R241575ADA</u>	SP1W2475ADA <u>SP1R2475ADA</u>	SP1W24110ADA <u>SP1R24110ADA</u>
Supply Voltage:	20-30 VDC	20-30 VDC	20-30 VDC	20-30 VDC
Max. Current @ Listed Voltage: Operating Current	75 mA	93 mA	170 mA	210 mA
@ Rectified Unfiltered Voltage:	90 mA	120 mA	200 mA	245 mA
Rated Light Output	15.0 cd	15/75 cd	75.0 cd	110.0 cd

# **Specifications – V400 Series**

<u>Mechanical</u>		Operating	
Input Terminals:	14 to 18 AWG	Temperature Range:	32° to 120°F (0° to 49°C)
Grille Size/Color:	4" (102 mm)/red or beige		
Weight:	.7 lb (317 gm)	<u>Electrical</u>	
Mounting:		Voltage Input:	25 volts or 70.7 volts (nominal)
Semiflush*:	$4'' \times 4'' \times 1^{1}/2'' - 2^{1}/8''$	Frequency Range:	400 – 4000 Hz
	standard backbox**		
Flush*:	deep backbox (BBD) with		
	flush mounting plate		
*Order mounting plat	too concretely		

\*Order mounting plates separately.

\*\*For 12- or 14-gauge wire, a 2<sup>1</sup>/<sub>8</sub>" backbox is recommended.

#### **Engineering Specifications**

Speaker shall be a System Sensor Model \_\_\_\_\_ dual transformer speaker capable of operating at 25 and 70.7 Vrms. Speaker shall be listed to Underwriter's Laboratories Standard 1480 for fire protective signaling systems. Speaker shall have a frequency range of 400 to 4000 Hz and shall have an operating temperature between 32° and 120° F. Speaker shall have power taps which are selected by means of a jumper wire(s).

#### For speaker/strobe combination:

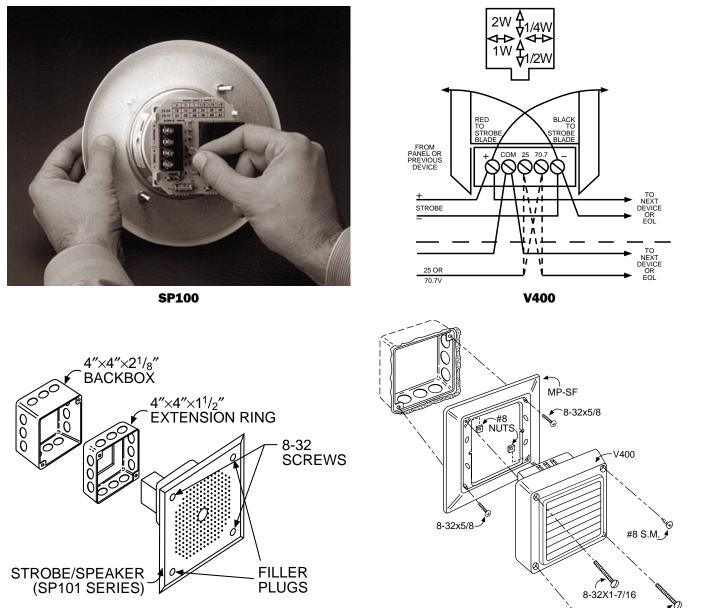
Speaker/strobe shall be a System Sensor Speaker/Strobe Model \_\_\_\_\_ dual transformer speaker capable of operating at 25 and 70.7 Vrms. Speaker/strobe shall be listed to Underwriter's Laboratories Standard 1480 for fire protective signaling systems. Speaker shall have a frequency range of 400 to 4000 Hz and shall have an operating temperature between 32° and 120° F. Speaker shall have power taps which are selected by means of a jumper wire(s). Strobe shall be powered independently of the speaker and shall operate from a 24 VDC or 24 Vrms full wave rectified unfiltered power supply. Strobe shall have a light output rating of 15, 75, or 110 candela and shall be UL 1971 listed as a primary signaling device.

# **Power Tap Selection and Sound Output**

	SP100*				V400					
	4 W	2 W	1 W	$^{1}/_{2}$ W	¹∕₄ W	¹∕8 W	2	1	1/2	$^{1}/_{4}$
Jumper Wire, 25 V:	1 B	1 A	2 B	2 A	3 B	4 B	-	-	-	-
Jumper Wire, 70.7 V:	2 A	3 B	4 B	5 B	6 B	6 A	-	-	-	-
UL Reverberant										
(dBA @ 10 ft):	90	87	84	81	78	75	84	81	78	75
Anechoic										
(dBA @ 10 ft):	93	90	87	84	81	78	87	84	81	78
Peak Anechoic										
(dBA @ 10 ft):	96	93	90	87	84	81	90	87	84	81

\* Example: To select 1/4 watt output @ 25 V connect blue lead to post #3, yellow to post B.

# **Power Tap Selection**



**SP101** Mounting Diagram

V400 Semiflush Mounting Diagram

<sup>~</sup>#8 S.M. 8-32X1-7/16

#### Ordering Information – Sound Choice<sup>™</sup> Speakers

			Description	Speaker Voltage	Strobe Voltage	Candela			
SP100 Series Speakers									
Red	White								
-	SP100W		Round, 8" grille, 1/8–4 watt power taps	25/70.7 Vrms	-	-			
SP101R	SP101W		Square, 5" grille, 1/8-4 watt power taps	25/70.7 Vrms	-	-			
SP1R2415ADA	SP1W2415ADA		Square, 5" grille, 1/8-4 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	15 cd			
SP1R241575ADA	A SP1W241575ADA		Square, 5" grille, 1/8-4 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	15/75 cd			
SP1R2475ADA	SP1W2475ADA		Square, 5" grille, 1/8-4 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	75 cd			
SP1R24110ADA	SP1W24110ADA		Square, 5" grille, 1/8-4 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	110 cd			
V400 Series Speal	kers								
Red	Beige	White							
V400R	V400B	V400W	Square, 4" grille, $\frac{1}{4}$ -2 watt power taps	25/70.7 Vrms	_	_			
V4R2415ADA	-	_	Square, 4" grille, <sup>1</sup> / <sub>4</sub> –2 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	15 cd			
V4R241575ADA	_	-	Square, 4" grille, <sup>1</sup> / <sub>4</sub> –2 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	15/75 cd			
V4R2475ADA	_	-	Square, 4" grille, <sup>1</sup> / <sub>4</sub> –2 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	75 cd			
V4R24110ADA	-	-	Square, 4" grille, <sup>1</sup> / <sub>4</sub> –2 watt power taps, wall strobe, UL 1971	25/70.7 Vrms	24 VDC	110 cd			
MP-F	MP-FB	MP-FW	Flush mounting plate						
BB-D	-	-	Flush mounting deep backbox, 2 <sup>3</sup> / <sub>4</sub> " deep						
MP-SF	MP-SFB	MP-SFW	Semi-flush mounting plate						
UL 1638 Strobe a	ttachments	for V400*							
Red	Beige	101 1400							
SS12LO	-		Signal strobe	_	12 VDC	1.5 cd			
SS24LO	SS24LOB		Signal strobe	_	24 VDC	1.5 cd			
SS24LOC	-		Ceiling mount signal strobe	_	24 VDC	1.5 cd			
SS24M	_		Signal strobe	_	24 VDC	15 cd			
SS24MC	_		Ceiling mount signal strobe	_	24 VDC	15 cd			

\* Although the SSLO and SSM Series signal strobes are UL listed as primary signaling devices, when combined with the V400 speaker they are considered as a secondary signaling device only.

#### How to Order SP100 Series Speakers with Strobes

#### SP1R2415ADA

15 = 15 cd, UL 1971 Strobe

\_ 1575 = 15 cd, UL 1971, 75 cd on axis

75 = 75 cd, UL 1971 Strobe

110 = 110 cd, UL 1971 Strobe

\_\_\_\_\_ 24 = 24 VDC Strobe

SP1R = Square Grille, Red Speaker SP1W = Square Grille, White Speaker V4R = V400 Square, Red Speaker

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