Reentrant Horn Loudspeakers

Models SPT15A and SP158A



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· High intelligibility and efficiency; ideal for both one-way and talk back applications

Features

- Weatherproof, all metal construction
- 15 watts; 25/70 volt or 8-ohm operation
- Variable-tap impedance selector on SPT15A

Description

The Bogen SPT15A and SP158A are compact, high intelligibility, reentrant type loudspeakers, designed for one-way or two-way* sound and communication systems. Their sturdy, weatherproof, all metal construction is ideal for indoor and outdoor use in industrial plants, warehouses, schools, construction sites, transportation terminals, and recreational areas. Screw terminals make installation fast and easy.

The Model SPT15A has a built-in, variable impedance selector switch for matching the speaker power requirements to a 25V or 70V constant-voltage line. The model SP158A has an 8-ohm impedance.

Engineered to simplify installation (with a uniquely designed all-purpose mounting bracket) and field maintenance (with a self-aligning, field replaceable diaphragm), use of Bogen horn-type loudspeakers saves both time and money.

The speaker and mounting bracket are handsomely finished in textured mocha enamel. It has a 9" diameter and is 9-1/4" deep.

^{*} These are not talk back horns. Their use in two-way applications requires additional equipment.

Power Rating (RMS): 15 watts continuous, 20 watts equalized

Frequency Response: 275Hz to 14kHz

Impedance:

SPT 15A — 25/70 volts SP 158A ---8 ohms

Sound Pressure Level: 121dB @ four feet on axis with 15 watt input

@ 1000Hz

Dispersion: 110°

Sensitivity as Microphone: -22dBm [Ref: 10 dynes/cm2]

> **Dimensions:** 9" Diameter x 9-1/4"D

Shipping Weight:

SPT 15A — 4-1/2 lbs. SP 158A ---4 lbs.

> Finish: Textured mocha enamel

Impedance Selector Switch Settings: 25V @ 15, 7.5, 1.8, .94, .46 watts

70V @ 15, 7.5, 3.8, 1.8, .9 watts (SPT15A)

Sound Pressure Level in dB @ 1000Hz:

Watts	Feet on Axis				
Input:	4	8	16	32	64
15 —	121	115	109	103	97
7.5 —	118	112	106	100	94
3.8 —	115	109	103	97	91
1.8 —	112	106	100	94	88
0.9 —	109	103	97	91	85
.48 —	106	100	94	88	82

Architect and Engineer **Specifications**

Technical

Specifications

The loudspeaker shall be a Bogen Model ify SPT15A or SP158A), or approved equal, reentrant type horn loudspeaker. The frequency response shall be 275Hz to 14kHz. Rated power output shall be 15 watts, RMS continuous. Dispersion shall be 110°. Sound pressure level, measured four feet on axis with 15 watt input @ 1000Hz, shall be at least 121dB.

Use for SPT15A. The unit shall incorporate a seven-position weather-sealed switch, to allow matching the loudspeaker to a 25V or 70V constantvoltage line. Power handling capacity shall be adjustable at 70V to 0.9, 1.8, 3.8, 7.5, or 15 watts, and at 25V to 0.48, 0.94, 1.8, 7.5, or 15 watts. Impedance shall be adjustable to 5000, 2500, 1300, 666, 333, 89, or 45 ohms.

Use for SP158A. The unit shall have an impedance of 8 ohms.

The loudspeaker shall be of weatherproof, all metal construction, with driver enclosed within a waterproof housing. The loudspeaker shall include a selfaligning, field-replaceable diaphragm.

Screw terminals shall be provided for connection to the audio line. A plastic cover shall be provided to protect the connectors and impedance selector switch, and provide strain relief for the audio line.

An all-purpose mounting bracket shall provide precise positioning in the vertical and horizontal planes with a single adjustment. The bracket shall include banding slots to permit mounting the loudspeaker on beams or pillars. Bracket and loudspeaker shall be finished in textured mocha enamel. The unit shall measure 9" diameter by 9-1/4"D. Shipping weight shall be (insert 4-1/2 lbs. for SPT15A, 4 lbs. for

SP158A).

