Bi-Directional Reentrant Horn Loudspeaker

Model BDT30A



Description

The BDT30A is a compact loudspeaker designed for one- or two-way sound and communication systems. Ideal for use in industrial plants, warehouses, schools, construction sites, transportation terminals, and recreational areas.

Speaker assembly required.

Features

- Twin reentrant horns for bi-directional projection
- · High intelligibility and efficiency
- Ideal for both one-way and talkback paging applications
- Weatherproof
- Sturdy, all-metal construction
- 30 watts at 70V operation or 15 watts at 25V operation

- Variable tap impedance selector switch
- · Screw terminals make installation fast and easy
- For indoor and outdoor use
- Uniquely designed all-purpose mounting bracket for simple installation
- Self-aligning, field-replaceable diaphragm for easy maintenance

Technical Specifications

Power Rating (RMS): 30 watts continuous; 40 watts equalized

Frequency Response: 225Hz to 14kHz

Impedance: 25/70 volts

Sound Pressure Level: 121dB @ four feet on axis with 30 watt

input @ 1000Hz, each horn

Dispersion: 100° each horn

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

Dimensions: 9-5/8" dia. (each horn) x 12-1/8" D

Shipping Weight: 8 lb. (3.6kg)

Finish: Textured mocha enamel

Impedance Selector Switch Settings: 25V @ 15, 7.5, 3.7, 1.8 watts

70V @ 30, 15, 7.5, 3.7, 1.8 watts

Sound Pressure Level in dB @ 1000Hz:

Watts Input:	Feet on Axis				
	4	8	16	32	64
30 —	121	115	109	103	97
15 —	118	112	106	100	94
7.5 —	115	109	103	97	91
3.7 —	112	106	100	94	88
1.8 —	109	103	97	91	85

Architect & Engineer Specifications

The loudspeaker shall be a Bogen Model BDT30A, or approved equivalent, reentrant horn type loudspeaker. The frequency response shall be from 225Hz to 14kHz. Rated power output shall be 30 watts RMS continuous. Dispersion shall be 100°, each horn. Sound pressure level, measured four feet on axis with 30 watt input @ 1000Hz, shall be at least 121dB for each horn.

The unit shall incorporate a seven-position weather-sealed switch, to allow matching the loudspeaker to a 25V or 70V constant-voltage line. Power handling capacity shall be adjustable at 70V to 30, 15, 7.5, 3.7 or 1.8 watts, and at 25V to 15, 7.5, 3.7 or 1.8 watts. Impedance shall be adjustable to 2,500, 1,300, 666, 333, 167, 89, or 45 ohms.

The loudspeaker shall be of weatherproof all-metal construction, with driver enclosed within a water-proof housing. The loudspeaker shall include a self-aligning, 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 to 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 9-5/8" dia. (each horn) x 12-1/8" D. Shipping weight shall be 8 lb.

