

Bi-Directional Reentrant Horn Loudspeaker

BDT30A

Speaker Assembly

The bi-directional speaker must be assembled prior to installation. See Figure 3 on the back of this sheet for speaker assembly information. Make sure to place the washer/seals where indicated and hand tighten the various components - **do not use pliers or similar tools.**

Speaker Installation

STEP 1 - For easier installation, remove the flange (base) from the speaker by unscrewing the wing nut while at the same time pressing inwardly on the wing nut. Place the flange flush with the mounting surface and mark the location of the three holes with either a marker or punch. It is important that the three holes be exactly aligned with the flange, otherwise you might stress the base or make the connection unsteady (see Figure 1).

NOTE: Speaker may also be strap-mounted through the slot in flange (base) using standard 1/2-inch industrial strapping (not included).

STEP 2 - After mounting the flange, reattach the speaker to the flange and aim the speaker for the desired coverage. A 45° downward angle is recommended, but this may vary depending upon speaker layout. Unless otherwise indicated, do not aim speakers directly at each other or poor paging intelligibility may occur.

STEP 3 - Remove the plastic cover to make the electrical connection and set the tap set control (see Figure 2). Connect speaker wire shield to the ground (GND) terminal of the amplifier's output. Carry the ground through all speaker cables by tying the shields of the speaker cables together in a "daisy chain" fashion. **Do not connect the shield to the speaker itself.** The shield is only connected at the amplifier end and simply floats.

Connect wires as listed below:

Amplifier Outputs	Speaker Connections
70V/25V	Terminal 1
COM	Terminal 2

NOTE: The speaker will also work perfectly well with these connections reversed. However, reduced low frequency response may result.

STEP 4 - Adjust the tap set control to the desired setting. See table at right for tap settings. Replace the plastic protective cover back over the exposed area.

- Frequency Response:** 225 Hz to 14 kHz
- Dimensions:** 16 1/2" W x 9 3/4" H (41.9 x 24.8 cm)
- Shipping Weight:** 9 lb.
- Finish:** Textured Mocha Enamel
- Sound Pressure Level:** 121 dB @ four feet on axis with 30-watt input at 1000 Hz each horn

Figure 1: Mounting Speaker Base

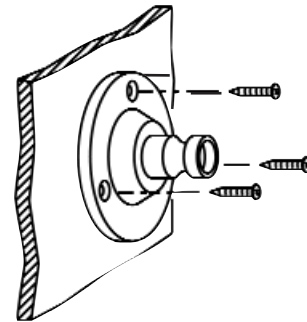
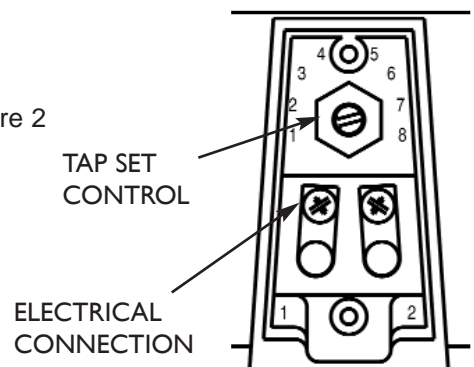


Figure 2



Position	Watts (25V)	Watts (70V)
1	.25	1.8
2	.5	3.7
3	1	7.5
4	1.8	15
5	3.7	30
6	7.5	*
7	15	*
8	*	*

*Forbidden switch settings (see text)

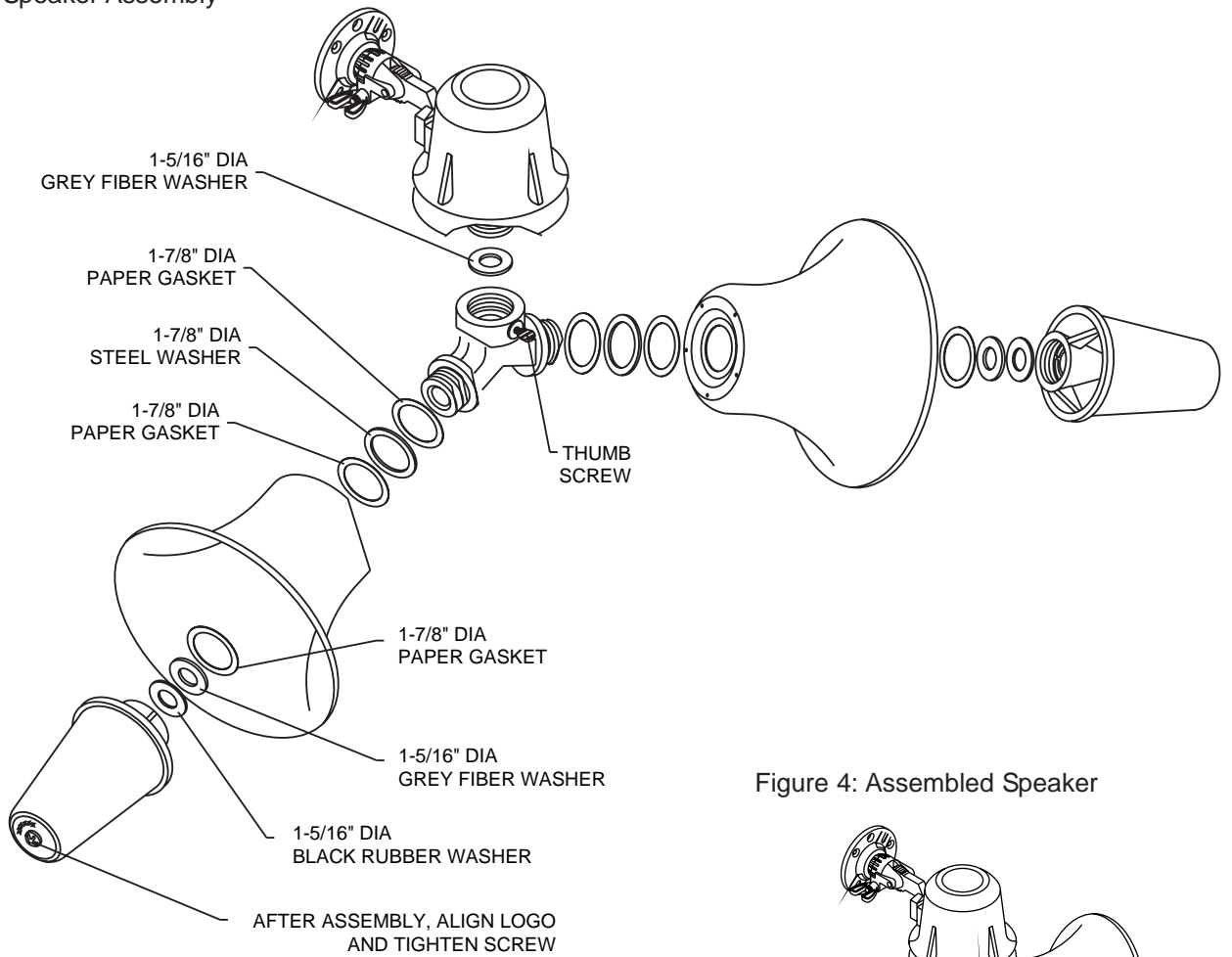
CAUTION

Switch settings marked with an asterisk (*) must not be used. Failure to comply with these restrictions may cause damage to components and will void the warranty.



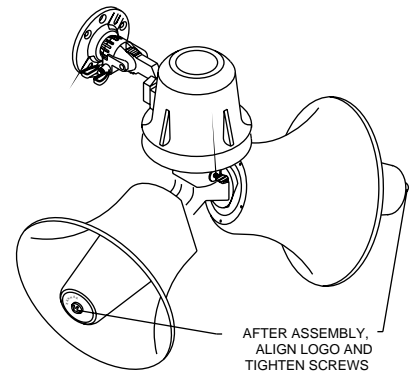
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Figure 3: Speaker Assembly



NOTE: Extra gaskets may be included in hardware pack.

Figure 4: Assembled Speaker



BOGEN[®]
COMMUNICATIONS, INC.

50 Spring Street, Ramsey, NJ 07446
Tel. 201-934-8500, Fax: 201-934-9832
Web Site: www.bogen.com