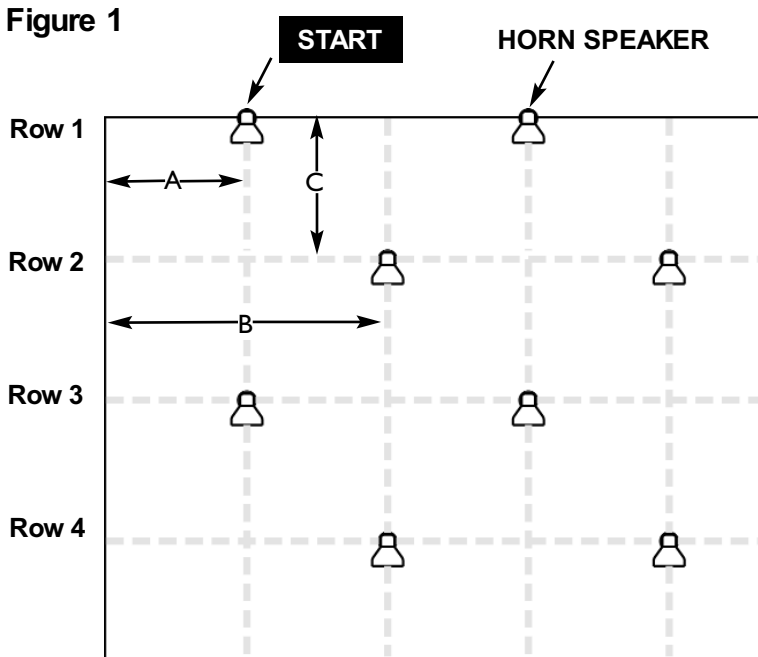


Easy Design™ Speaker Model HS15EZ, HS15EZW

Speaker Layout



The layout of the speakers should be planned prior to installation. Desired mounting height, barring obstructions, is 15 to 20 feet, with the speakers angled downward toward the listening area and facing in the same direction.

Layout starts in one corner of the area. The first speaker in Row 1 should be positioned a distance equivalent to (A) (see **Figure 2**) from the corner based on the noise level of the area. The next speaker in Row 1 should be a distance equivalent to (B) (see **Figure 2**) from the first speaker. Each additional speaker in the row should use this same spacing.

Row 2 starts a distance equivalent to (C) (see **Figure 2**) from Row 1 and, like Row 1, each speaker should be a distance apart equivalent to (B).

Row 3 starts a distance equivalent to (C) from Row 2. Continue this pattern of alternating rows until the area is appropriately covered.

For areas that include high shelving or corridors, speakers should be installed so that they project down the aisles between the shelves or down through the corridors.

The spacing of the speakers can be adjusted so that the speakers are evenly spaced in a row.

NOTE: Each environment is unique. This layout plan is general in nature and may not be applicable for every installation.

Figure 2

	PLACEMENT			
	A	B	C	Volume Setting
High Noise (75dB-85dB)	50 ft.	100 ft.	60 ft.	1/2 Rotation
Very High Noise (85dB-95dB)	30 ft.	65 ft.	40 ft.	Full Clockwise

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 chisel. It is important that the three holes be exactly aligned with the flange, otherwise you might stress the base or make the connection unsteady. Drill the necessary holes and screw the flange to the surface (see **Figure 3**). (Use appropriate hardware for your specific mounting surface.)

NOTE: The speaker may also be strap-mounted using standard 1/2-inch industrial strapping.

STEP 2 - After mounting the flange, reattach the speaker to the flange and aim the speaker for the desired coverage. A 45-degree downward angle is recommended, but this may vary depending upon speaker layout.

STEP 3 - Remove the plastic cover to make the electrical connection and set the volume control (see **Figure 4**). The suggested amplifier connections are:

Amplifier Outputs	Speaker Connections
70V	Terminal 1
COM	Terminal 2

NOTE: The speaker will also work perfectly well with these connections reversed. However, it is important to be consistent in the wiring of the speakers in the system.

STEP 4 - Adjust the volume control to the desired setting. See **Figure 2** for the suggested initial settings based on the ambient noise level of the environment. Place the plastic protective cover back over the exposed area.

NOTE: The two furthestmost clockwise settings (positions 7 & 8) on the volume control will produce the same volume.

Figure 3

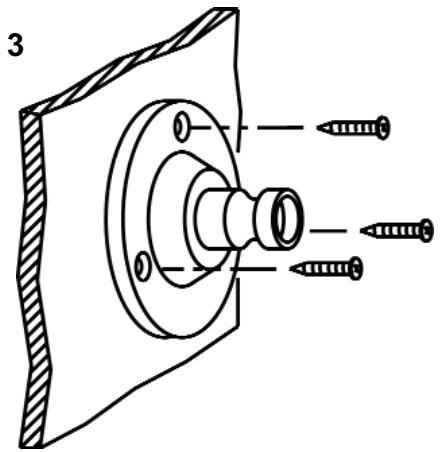
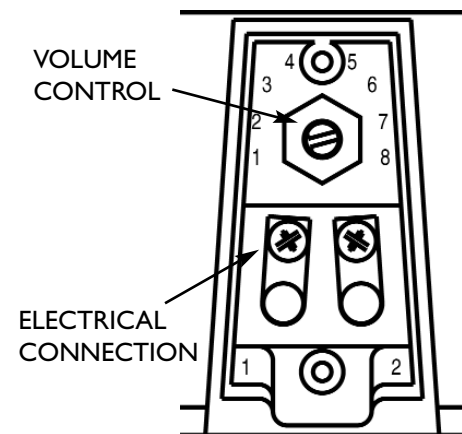


Figure 4



Limited Warranty; Exclusion of Certain Damages

The HS15EZ & HS15EZW are warranted to be free from defects in material or workmanship from the date of sale to the original purchaser for the lifetime of the products. Any part of the product covered by this warranty that, with normal installation and use, becomes defective will be repaired or replaced by Bogen, at our option, provided the product is shipped insured and prepaid to: Bogen Factory Service Department, 50 Spring Street, Ramsey, NJ 07446, USA. The product(s) will be returned to you freight prepaid. This warranty does not extend to any of our products that have been subjected to abuse, misuse, improper storage, neglect, accident, improper installation or have been modified or repaired or altered in any manner whatsoever, or where the serial number or date code has been removed or defaced.

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Products that are out of warranty will also be repaired by the Bogen Factory Service Department -- same address as above or call 201-934-8500. The parts and labor involved in these repairs are warranted for 90 days when repaired by the Bogen Factory Service Department. All shipping charges in addition to parts and labor charges will be at the owner's expense. All returns require a Return Authorization number.