DLS4



4" Dog Leg Speaker with 8 Watt Transformer



Features

- Small Footprint and Press-Fit Grilles Give Discrete Installed Appearance
- Tap Selector Switch Located Behind Speaker Magnet with Shaft Through Center of Cone. Selector Knob Doubles as a Dispersion Cone and Allows Tap Selection to be Done After the Speaker is Installed in the Ceiling
- 8 Watt, High Efficiency Internal Transformer (May Be Bypassed by Tap Selector Switch for 8Ω Operation)
- Works in Most New or Retro-Fit Ceiling Application with Atlas Sound Hardware
- UL1480 for General Signaling and are Certified for Use in Air Handling Spaces Under UL2043

Specifications

 $\begin{array}{cc} \textbf{Power Rating} & \qquad \qquad 16 \text{ Watts at } 8\Omega \end{array}$

Power Taps $.5, 1, 2, 4, \& 8 \text{ Watts} / 8\Omega \text{ Bypass}$

Frequency Response 150Hz – 17kHz (±5dB)

Sensitivity (1W/1M) 92dB Dispersion 105°

 Woofer
 4" Paper Cone

 Woofer Magnet Weight
 10oz (283g)

 Bezel Diameter
 7.75" (197mm)

 Depth
 4.25" (108mm)

 Cut-Out Diameter
 6.25" (159mm)

 Weight
 3lbs 5oz (1.5kg)

General Description

The DLS4 was specially designed for optimum use in low ceiling paging and background music applications where wide dispersion, high efficiency and ease of installation are required. The DLS4 is perfectly suited for use in airports, rail stations, retail stores, and hospitality applications.

The system consists of a 4" high efficiency driver. A unique (patent pending) tap selector switch design allows for easy system tuning. A full selection of taps up to 8 Watts as well as an 8Ω bypass setting is included for maximum system versatility. This switch "knob" also functions as a diffuser cone, providing smooth, even dispersion of the high frequency content from the center of the 4" driver. In fact, the high frequency response of the DLS4 is so natural that many would assume that the driver in the DLS4 was a coaxial design instead of a cone driver.

The easy to use DLS4 "dog leg" mounting system works with several popular Atlas Sound hardware combinations for use in new or existing drywall or acoustic ceilings with or without conduit! For mineral tile applications the popular FA81-4 tile bridge has been equipped to allow "twist lock" installation of the economical CS95-8.

Suggested Mounting Hardware:

Mineral Tile - no enclosure - FA81-4 Tile Bridge

Mineral Tile - with enclosure - FA81-4, CS95-8

Drywall Ceiling new construction - no enclosure - FA-TR4

Drywall Ceiling new construction - with enclosure - FA-TR4, E410NT

The DLS4 will also retro-fit into existing E410 & E410-11 enclosures. (Torsion tabs inside enclosure must be bent inwards to allow for complete clearance of the DLS4 dog leg mounting system)



DLS4 (Back)

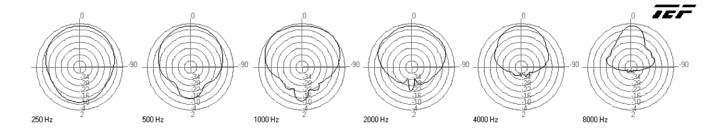
Architect & Engineer Specifications

Unit shall be Atlas Sound 4" diameter loudspeaker Model DLS4. Loudspeaker shall be listed by Underwriters Laboratories (UL1480 for General Signaling and are certified for use in Air Handling Spaces under UL2043) to U.S. and Canadian safety standards. The cone shall be the damped, high-compliance type.

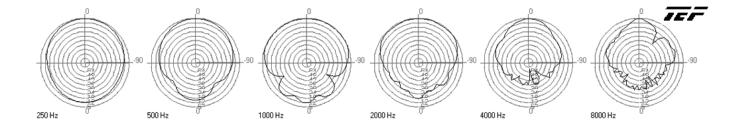
Unit shall have a smooth extended frequency response over a range of 150Hz - 15kHz and a power rating of not less than 10 Watts program. The dispersion angle shall be 105° (-6dB, 2kHz octave band). The magnet shall be a 100z. (283g) ceramic type providing the 1" (25mm) voice coil to operate in a magnetic field of at least 10,500 gauss. Voice coil impedance shall be 8Ω . Sensitivity shall be 92dB (measured at 1W/1M input). Free-air resonance shall be 125Hz. Transformer primary voltage shall be 70.7V & 100V with a frequency response range of 150Hz - 15kHz (± 5 dB) and power taps at .5, 1, 2, 4, & 8 Watts. Insertion loss shall not exceed 1.5dB. The maximum depth of the loudspeaker / transformer assembly shall not exceed 4.25° (108mm).

For mineral tile ceiling installation unit shall be used in conjunction with Atlas Sound tile bridge model FA81-4, and optional conical enclosure model CS95-8. For drywall ceiling installation unit shall be used in conjunction with Atlas Sound trim ring model FA-TR4, and optional enclosure model

DLS4 Vertical Polars (Normalized to Zero on Axis) (-6 dB)

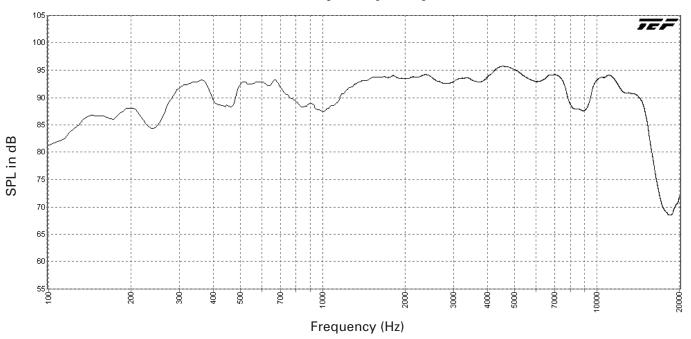


DLS4 Horizontal Polars (Normalized to Zero on Axis) (-6 dB)

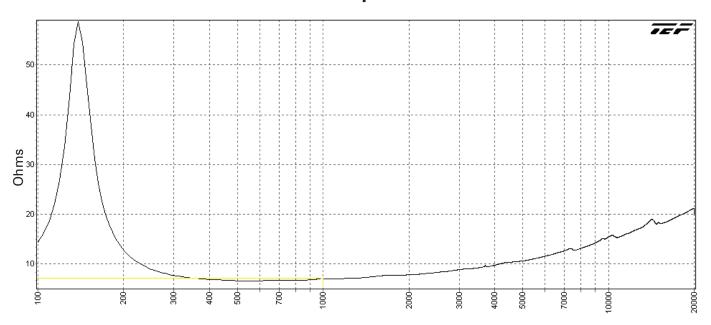




DLS4 Frequency Response



DLS4 Impedance



Frequency (Hz) Octave Smoothing = 30.0%

