

Features

- Reliable 12W 8" (5oz.) speaker for a value price.
- Dual cone 8-inch driver provides clear and accurate reproduction of music and voice communications.
- Factory-wired dual voltage transformer for fast installation using color-coded leads.

Description

This commercial industry standard 8" full range, dual cone speaker with a 1" voice coil and a 5 oz magnet is often specified for reliable paging and background music performance in commercial, industrial, and institutional applications including offices, public buildings, educational, and medical facilities. This workhorse of the industry provides good value in basic paging or background music systems. Standard features include a plated steel basket and copper voice coil. Also includes a factory-wired transformer and will fit all standard 8-inch ceiling grilles and backboxes.

The dual cone loudspeaker assembly employs a highly efficient magnetic structure energized by a 5 oz ceramic magnet. The use of a hard fiber whizzer cone mechanically coupled to the 1" voice coil provides extended high frequency response with fine clarity, while the molded fibre cone enhances mid and low range frequency performance. The loudspeaker frame is stamped 20 gauge steel with a zinc plated finish to prevent corrosion. The frame includes pre-punched holes for transformer mounting.

A&E Specifications

The dual cone 8-inch loudspeaker shall be Lowell Model 805-T25. Loudspeaker shall be furnished and installed at each designated location on the architectural plans and/or as specified herein. The loudspeaker shall be of the permanent magnet type having a seamless molded fiber cone with a hard fiber whizzer cone mechanically coupled to the voice coil for extended high frequency response. The loudspeaker shall be capable of producing a uniform audible frequency response over the range of 55Hz-18kHz nominal, 55Hz-12.5kHz ± 6 dB with a dispersion angle of 120-degrees @ 2000Hz-6dB. The average sensitivity shall measure 93dB (SPL at 1W/1M). Rated power handling capacity shall be 12 watts RMS. The voice coil shall have a diameter of 1 inch and shall operate in a magnetic field derived from a strontium ferrite (ceramic) magnet having a nominal weight of 5oz. The voice coil impedance shall be 8 ohms. The loudspeaker shall have a round, structurally reinforced stamped 20 gauge steel frame to

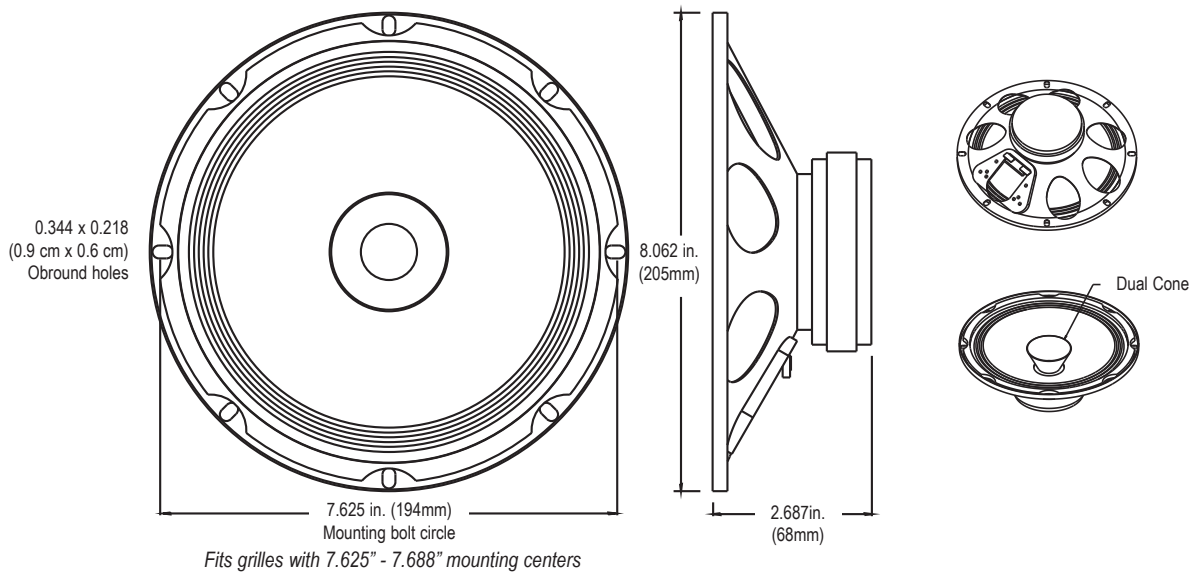


Model 805-T25 includes a factory-mounted transformer (not pictured).

maintain precise mechanical alignment. The loudspeaker shall have an overall diameter of 8.062 inches with eight obround holes equally spaced at 45-degrees on a 7.625 inch diameter mounting bolt circle. The overall depth shall not exceed 2.688 inches (not including transformer). All external metal parts shall be zinc plated to resist rust and corrosion. The loudspeaker shall be equipped with a factory-mounted and wired transformer. The transformer's primary voltage shall be 25V with selectable power taps of .25, .5, 1, 2 and 4 watts. The transformer frequency response shall be 100Hz -10kHz ± 1 dB.

Model	Mounted Xfmr	Assembly Depth*	Assembly Weight	Xfmr Power Rating	Xfmr Primary Voltage	Xfmr Primary Taps	Xfmr Response	Xfmr Insertion Loss
805-T25	TLM25	2.68"	1.7 lb	4 Watts	25V	.25, .5, 1, 2, 4W	100Hz -10kHz ± 1 dB	1dB

*Minimum depth required for the speaker transformer assembly to be rear mounted in an enclosure.



Specifications: Lowell Model 805 - Dual Cone Speaker

PERFORMANCE

Power Handling	12 watts RMS (nominal) measured per EIA Standard RS-426A
Sensitivity	98dB SPL (peak), 93dB SPL (avg) measured 2.83V @ 1m
Impedance	8 ohms (nominal), 8.6 ohms @ 235Hz (minimum)
Frequency Response	55Hz-18kHz (nominal), 55Hz-12.5kHz (±6dB)
Dispersion Angle	120° @ 2000Hz octave (-6dB)

PHYSICAL - WOOFER

Magnet Weight, Material	5oz. (134g), strontium ferrite ceramic
Voice Coil Diameter, Material	1 inch (26mm), copper wire
Cone Material	Dual cone paper with self edge surround
Terminals	Quick disconnect type - spade lugs

MECHANICAL

Basket	20 gauge stamped steel with zinc plating
Outside Diameter	8.062 inch (205mm)
Mounting Bolt Circle	7.625 inch (194mm) with 8 obround holes equally spaced at 45 degrees.
Cutout Diameter	7.15 inch (182mm)
Mounting Depth	2.68 inch (68mm)
Net Weight	1.3 lbs. (0.58kg)

THIELE-SMALL PARAMETERS

Pe12W	Qts1.9	BL3.9Tm	Sd33.2 in ² , 214cm ²
Fs105Hz	Qes2.9	Efficiency, η0.68%	Mms8.6g
Xmax0.08 in., 2mm	Qms6.2	Vas17.3 liters, 1056 cu.in.	Cms0.27mm/N
Re7.8Ω			