

Model No.

CT830A-T470

Coaxial Driver with Transformer

INCLUDES:

- 8-inch 20W coaxial driver
- 70V 4W transformer



THE CT830A HIGH-PERFORMANCE DRIVER includes a mounted transformer for quality paging, public address, and background music applications that demand accurate voice/music reproduction.

FEATURES:

DESCRIPTION: High frequency speaker with first order high pass filter, ceramic magnets (12 oz. LF, 2.1 oz. HF) and permanently aligned voice coils (1-in. LF; 0.563-in. HF). 20-gauge stamped steel frame with zinc plated finish.

POWER RATING: 20W RMS

TRANSFORMER: Mounted 70V transformer has primary taps at 0.5, 1, 2, and 4W

FREQUENCY RESPONSE: 57Hz–13.3kHz (± 6 dB), 44Hz–20kHz (± 8.7 dB).

DISPERSION ANGLE: 80 degrees conical @2kHz octave (-6dB).

SENSITIVITY: Average SPL = 96.7dB (@1W/1M). Maximum SPL = 102.7dB (calculated based on 4W max. transformer power tap and measured sensitivity).

MOUNTING DEPTH: 3.20 inches

NET WEIGHT: 3.0 lbs.

COUNTRY OF ORIGIN: Assembled in the U.S.A. with global components.

A&E SPECIFICATIONS:

The 8-inch speaker driver with mounted transformer shall be Lowell Model CT830A-T470, which shall be of the coaxial type having electrically independent high and low frequency transducers and power rating of 20 watts RMS. The low frequency section shall have an 8-inch diameter cone; the high frequency section shall have a 3-inch diameter cone. A built-in electrical crossover network shall be employed to accomplish proper frequency selection between the two drivers. Crossover frequency shall be at 4000Hz. The low frequency voice coil shall have a 1-inch diameter and operate in a magnetic field derived from a strontium ferrite (ceramic) magnet with nominal weight of 12 oz. The high frequency voice coil shall have a 0.57-inch diameter and operate in a magnetic field derived from a strontium ferrite (ceramic) magnet with nominal weight of 2.1 oz. Voice coil impedance shall be 8ohms. The speaker shall have a structurally reinforced, stamped 20-gauge steel frame with 8.062-inch overall diameter and eight obround holes equally spaced at 45 degrees on a 7.625-inch diameter mounting bolt circle. External metal parts shall be zinc-plated to resist rust and corrosion. The speaker driver shall have a mounted transformer with primary taps at 0.5, 1, 2, 4W @70V. The assembly shall be capable of producing a uniform audible frequency response over the range 57Hz-13.3kHz (± 6 dB); 44Hz-20kHz (± 8.7 dB) with dispersion angle of 80 degrees @2000Hz (-6dB). Average sensitivity shall measure 96.7dB SPL (at 1W/1M). Assembly mounting depth shall not exceed 3.2 inches.

CT830A SERIES OVERVIEW

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SPEC

Model No.	Driver	Transformer	Transformer Primary Taps	Mounting Depth*	Outside Diameter	Net Weight	Sensitivity**	System Specs Frequency Response	Dispersion Angle***
CT830A	8" 20W coaxial	---	---	3.2"	8.062"	2.4 lbs.	97.0 dB	57Hz-14kHz (±6dB) 44Hz-20kHz (±7.6dB)	80°
CT830A-T72	8" 20W coaxial	25V/70V	.25, .5, 1, 2, 5W	3.2"	8.062"	2.8 lbs.	97.4 dB	57Hz-13.5kHz (±6dB) 44Hz-20kHz (±8.4dB)	80°
CT830A-T470	8" 20W coaxial	70V	.5, 1, 2, 4W	3.2"	8.062"	3.0 lbs.	96.7 dB	57Hz-13.3kHz (±6dB) 44Hz-20kHz (±8.7dB)	80°
CT830A-T870	8" 20W coaxial	70V	1, 2, 4, 8W	3.3"	8.062"	3.3 lbs.	97.1 dB	53Hz-14.3kHz (±6dB) 44Hz-20kHz (±7.1dB)	80°

* Mounting Depth: Minimum depth required for assembly to be rear-mounted to grille in an enclosure.

** Sensitivity: Average SPL (measured 2.83V @ 1M)

*** Dispersion Angle: Conical @ 2kHz octave (-6dB)

Note on Speaker Spacing: Conical dispersion measurements are provided for comparison with other speakers. To determine correct speaker spacing, see the technical paper "Distributed System Speaker Spacing for the Integrator" (www.Lowellmfg.com) which explains the difference between conical and linear dispersion and the measurements to use for best results. For quick calculations, a calculator for speaker spacing is also available online under Resources – Interactive Tools.