

Vision Series

■ The model PACX81 (black) and PACX81W (white) are professional full-range, ultra-compact coaxial loudspeaker systems providing wide bandwidth and light weight in a low profile enclosure. The coaxial configuration of the transducers in the PACX81 provides an ideal acoustic point source, yielding smooth frequency and phase response throughout its coverage pattern. The asymmetric cabinet design allows multiple applications including use as a floor or ceiling monitor.

■ The coaxial speaker consists of an 8" high-output carbon fiber woofer with a 2" voice coil, combined with a back-mounted titanium dome high frequency transducer suitable for difficult climatic environments.

■ The system includes a high-level crossover network that features markedly lower (than conventional) inductance values in series with the woofer. We call this innovation LICC (Low Impedance Compensated Crossover). The benefit is delay reduction, reduced phase shift and superior transient response. Dynamic high-frequency driver protection is accomplished with a fast-response filament resistor, chosen to complement the power curve of the driver.

■ The Mackie Industrial PACX81 is a part of the VISION family of loudspeaker products including full-range, cost-effective, two-way loudspeakers and complementary subwoofer cabinets. These enclosures have a trapezoidal footprint for easy array configuration. All enclosures are constructed using 19mm void-free, birch plywood and finished with a scratch-resistant black or white coating. Transducer components are protected from the environment by a heavy gauge metal grille with open-cell poly fiber backing. The VISION products are eminently suited for fixed installation, ready for suspension via built-in M10 inserts with metal reinforcement and forged shoulder eyebolt hardware. The PACX81 also includes M8 inserts.

■ This Mackie Industrial product is covered by an exclusive, one-time, NO FAULT repair policy in addition to a five year limited warranty.

Coaxial, Two-Way Speaker System



Features

- **Aligned coaxial speaker, using an 8" high-output woofer and a cone loaded titanium dome tweeter**
- **Built-in LICC (Low Impedance Compensated Crossover) crossover**
- **HF driver dynamic protection**
- **Asymmetric trapezoidal enclosure for multiple configurations**
- **13 ply birch plywood construction**
- **Internal Inserts (M10 and M8) and eyebolt suspension hardware**
- **Exclusive Mackie Industrial — one-time, NO FAULT repair policy**
- **Five year limited warranty**

- **Cluster Configurations**
- **Distributed Systems**
- **Zone Delay and Fill Systems**
- **Floor Monitor**

PACX81 Coaxial, Two-Way Speaker System

Specifications

System

Freq. Range (-10 dB):	60Hz–21kHz
Freq. Response (-3 dB):	100Hz–17kHz
Symmetrical Coverage (-6 DB):	110° averaged 800Hz to 16kHz
Directivity Factor; Q(DI):	8.0 (9.0) averaged 800Hz to 16kHz
System Sensitivity ¹ :	92dB, 1W @ 1m
Rated Maximum SPL:	120dB, @ 1m
System Nominal Impedance:	8Ω
System Input Power Rating ² :	150W RMS; 600W Peak
Recommended Amplifier ³ :	250W
HF Protection:	Dynamic
Crossover:	1.3kHz

Transducers

Low-Frequency:	8" (200mm) carbon fiber woofer with 2" (50mm) coil
Nominal Impedance:	8Ω
Input Power Rating:	180W AES; 720W Peak
Sensitivity ¹ :	92dB, 1W @ 1m
High-Frequency:	Horn-loaded titanium dome tweeter
Nominal Impedance:	8Ω
Input Power Rating:	20W AES; 80W Peak
Sensitivity ¹ :	107dB, 1W @ 1m

Physical

Enclosure:	Asymmetric trapezoid, 13 ply, 19mm multilayered birch
Rigging Inserts:	4 points M10, 4 points M8 threaded hardware
Color:	Black or white (PACX81W), scratch resistant paint
Grille:	Custom perforated steel grille with acoustically transparent fiber backing
Input Connectors:	Speakon® NL4
Dimensions (HxWxD):	15" x 11.81" x 10.63" (381mm x 300mm x 270mm)
Net Weight:	25.4lb. (11.5kg)

Options

PA-A1	Forged shoulder M10 eyebolt hardware
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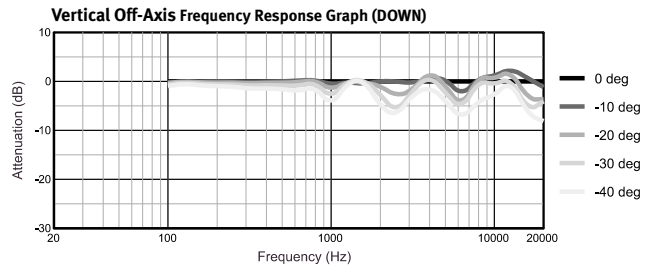
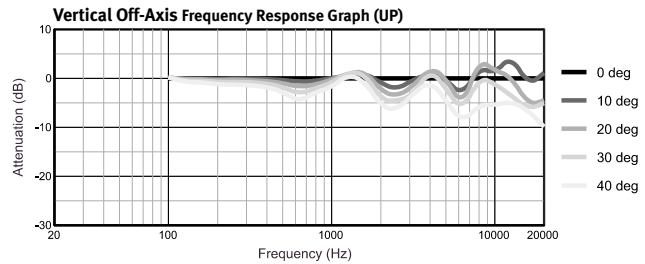
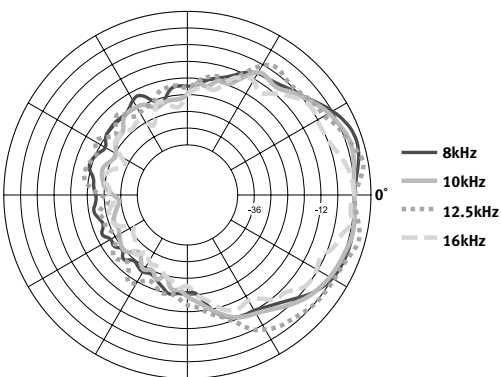
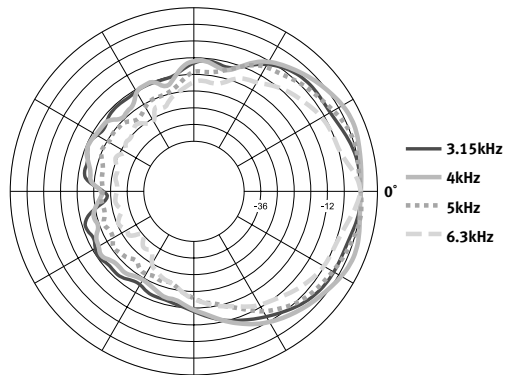
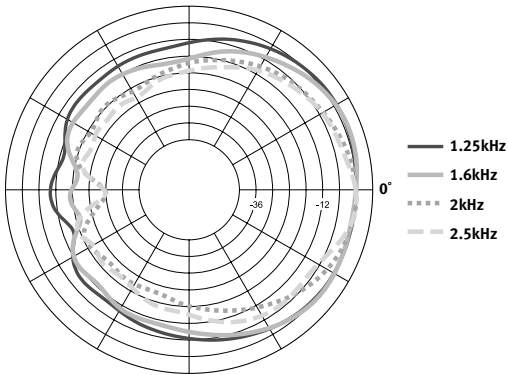
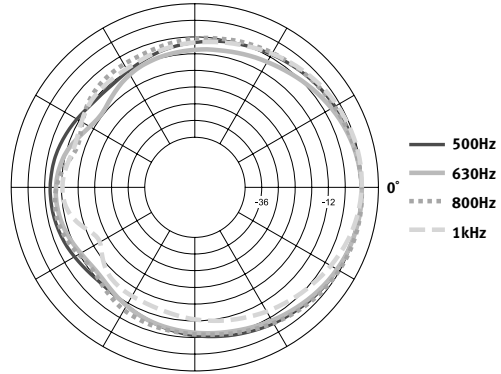
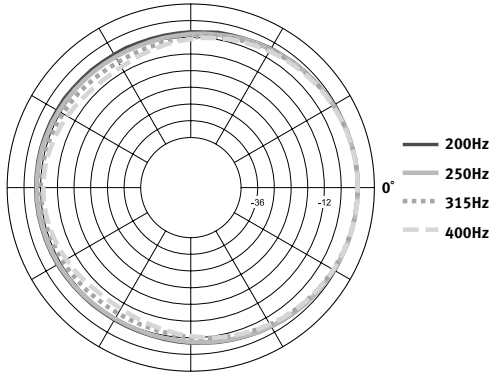
¹ Measured on axis in the far field with 1 watt (2.83V RMS, 8Ω) input and referenced to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300Hz to 3kHz.

² RMS using 20Hz to 20kHz, PN Spectrum, Peak for 2 hours with +6dB crest factor.

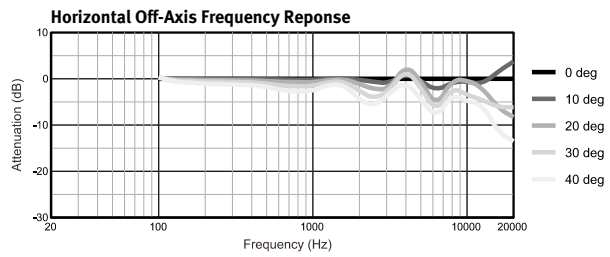
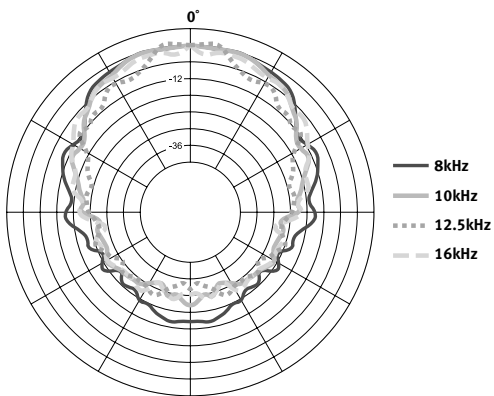
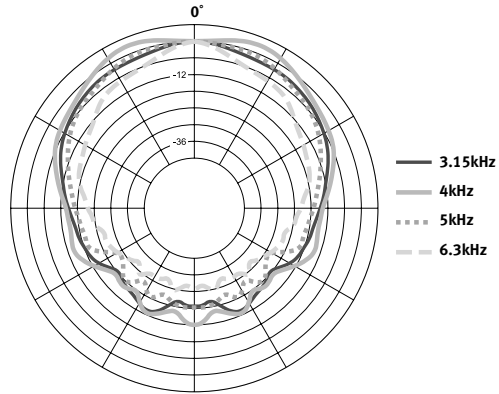
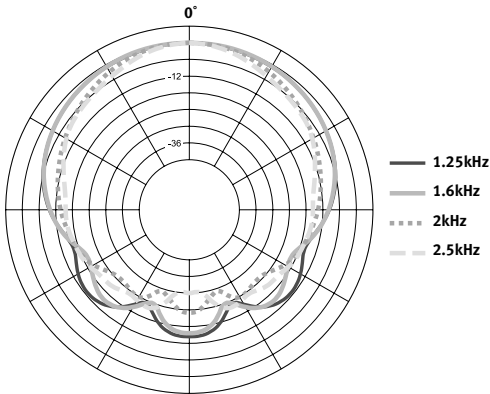
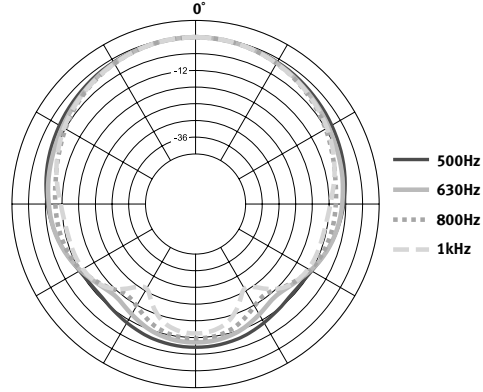
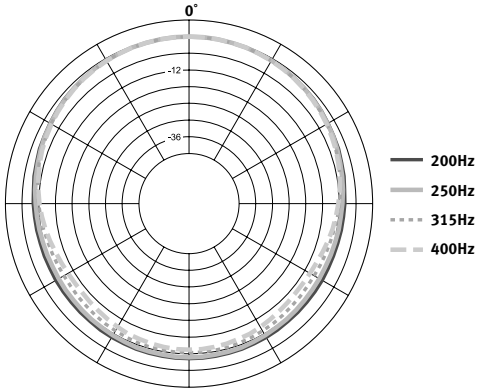
³ Recommended Amplifier is a power capability value that should be taken as a guide.

PACX81 Coaxial, Two-Way Speaker System

PACX81 Vertical Polars

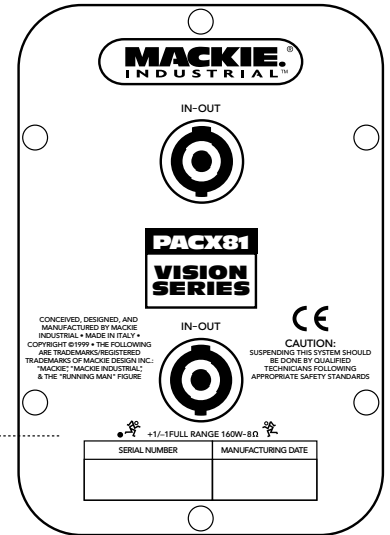
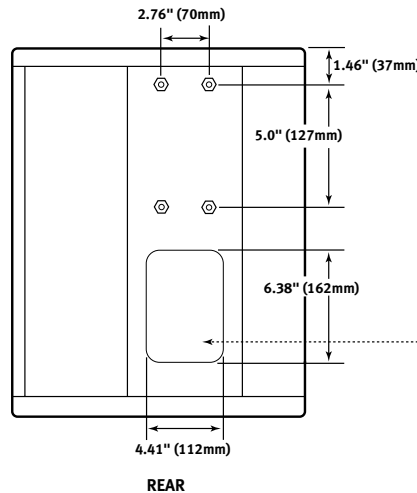
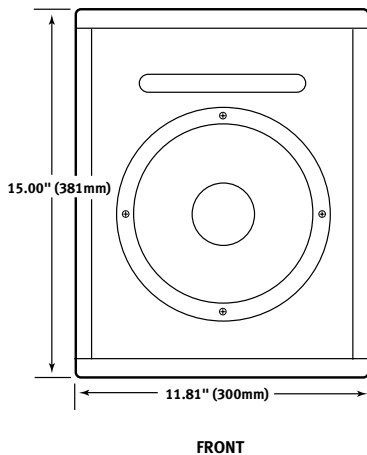
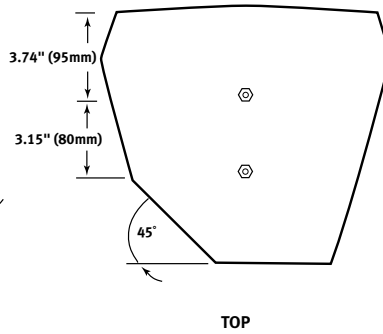
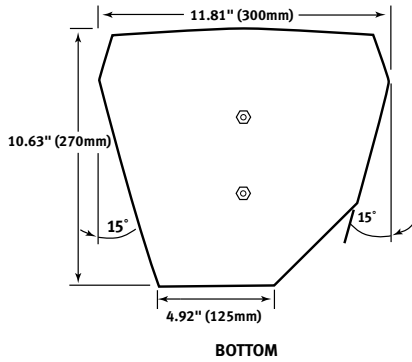
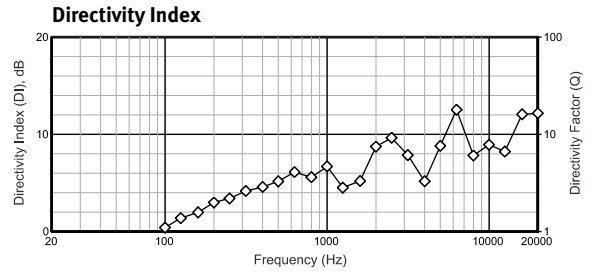
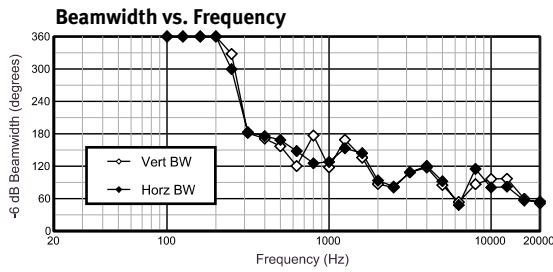
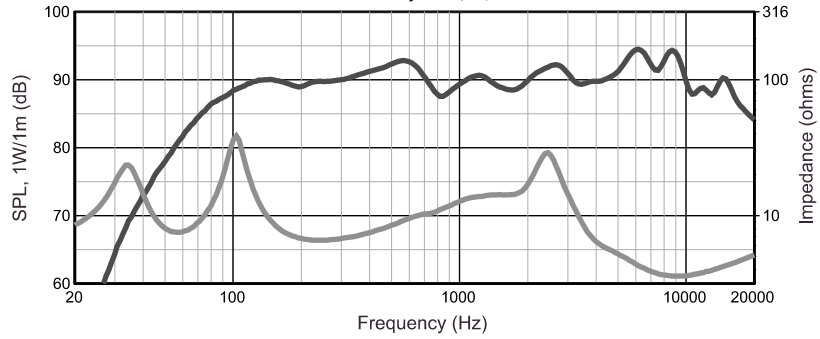


PACX81
HorizontalPolars



PACX81 Coaxial, Two-Way Speaker System

Frequency response is measured on-axis at a distance referenced back to 1m at 1-watt drive. Shown as a half space (2π) environment.



PACX81 Coaxial, Two-Way Speaker System

Architects' and Engineers' Specifications

The two-way loudspeaker system shall be self-contained and consist of the following components: (1) an 8 inch, two-way coaxial loudspeaker; (2) a two-way crossover network; (3) a vented enclosure.

The low-frequency section of the transducer shall be a cone type loudspeaker having a cone diameter of at least 8 inches (200mm). It shall have a voice coil of at least 2 inches (50mm) in diameter. It shall present a nominal impedance load of 8Ω.

The high-frequency section of the transducer shall be a dome tweeter. It shall have a titanium voice coil of at least 1 inch (25mm) in diameter. It shall present a constant-impedance load of 8Ω.

The system shall be crossed over by an internal, high-level, passive network having a response of 12dB/octave. The nominal crossover frequency shall be 1.3kHz. The low-pass section of the network shall have minimum inductance in series with the low frequency driver component. A dynamic high-frequency protection circuit based on a low-value, low mass filament resistor shall limit the current available to the high-frequency driver component. A switch shall be provided to disconnect the crossover network, but not the high-frequency protection circuit, from the drivers to allow bi-amp operation.

The enclosure shall be a vented design with an internal volume of at least 0.53 cu. ft. The vent shall be tuned to 60Hz. It shall be constructed using 0.75 inch (19mm), void-free birch plywood and finished with black, scratch resistant paint. A model finished in white scratch-resistant paint shall be available from the manufacturer. It shall be an asymmetrically shaped trapezoid to facilitate various monitor and mounting configurations. A full size, detachable, perforated steel grille, finished in black scratch-resistant paint shall be provided. At least 8 reinforced threaded metal sockets (M10 & M8) for attaching mounting hardware shall also be provided. The overall dimensions of the enclosure shall not exceed 15 x 11.81 x 10.63 inches (381mm x 300mm x 270mm). Connections to the loudspeaker shall be Speakon® NL4 connectors.

(continued Architects' & Engineers' Specs)

The performance of the two-way loudspeaker system shall be as follows: long-term power handling, at least 150 Watts RMS; peak power handling, at least 600 Watts; frequency response, 100Hz–17kHz at –3dB; maximum SPL, 120dB (anechoic–1m); sensitivity, 92dB SPL (1W/1m anechoic); –6dB coverage, measured average 800Hz–16kHz, 110° horizontal by 110° vertical. The two-way loudspeaker system shall be a model PACX81 (PACX81W, white) manufactured by Mackie Industrial.



www.mackieindustrial.com


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This Specification Sheet

PACX81.PDF

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