

Art Series

■ Careful acoustic design and advanced materials have resulted in an exceptional full range, full fidelity, self-contained sound system. The ART200A provides an ideal combination of high power, low distortion and wide bandwidth for permanent installations.

■ The two-way design consists of a 12" woofer that uses a massive magnet structure for accurate bass reproduction and a CD horn loaded to a 1" exit compression driver. The CD horn is a part of the molded enclosure. Two discrete power amplifiers and an electronic crossover are matched to the two transducers and provide time correction, CD horn compensation and peak-limiting, as well as over-excursion and thermal protection.

■ The ART200A will accept a balanced or unbalanced (switch selected) microphone or line input, adjusted by a single rotary control.

■ All components are housed in a lightweight, vented enclosure formed from polypropylene that is extremely rigid. The woofer is protected by a metal grille. All controls and connectors are recessed on the rear. A 1-3/8" stand socket and M10 threaded inserts are molded into the cabinet to provide quick and easy installation using specially designed accessory mounting hardware.

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

Two-Way Active Speaker System



Features

- 90° x 70° constant-directivity horn with 1" exit compression driver
- 12" high-efficiency woofer
- Internal bi-amplifier: 120W LF, 40W HF, and driver-optimized electronic crossover
- Switchable balanced mic/line input
- Total system protection: over-excursion, thermal, short circuit and peak limiting
- Compact, lightweight polypropylene enclosure
- Built-in hand grip, M10 fly points and stand socket
- Optional installation accessories available
- Exclusive Mackie Industrial — one-time, NO FAULT repair policy
- Five year limited warranty

- Live Sound/Music Reinforcement
- High-Level AV Playback
- Large Speech Systems
- Active Floor Monitors

ART200A Two-Way Active Speaker System

Specifications

System Acoustic

Frequency Range (-10 dB):	50Hz-19kHz
Frequency Response (-3 dB):	70Hz-17kHz
Horz. Coverage Angle (-6 dB):	90°, averaged 1kHz to 10kHz
Vert. Coverage Angle (-6 dB):	70°, averaged 1kHz to 10kHz
Directivity Factor; Q(DI):	9.5 (9.8), averaged 1kHz to 10kHz
System Sensitivity ¹ :	101dB 1W @ 1m
Rated Maximum Peak ² :	122dB @ 1m
Crossover:	1.8kHz, 24dB/octave, 0.3mS HF delay
Speaker Protection:	Thermal, over-excursion

Transducers

Low-Frequency:	12" (300mm) woofer
High-Frequency:	Polynomial horn-loaded 1" (25mm) compression driver

Electronics

Power Amplifier Rating:	LF: 120W, HF: 40W
Distortion:	0.1% THD, nominal power @ 1kHz and 10kHz
Inputs:	Mic: 8mV, 1.3k Ω balanced, 650 Ω unbalanced, XLR Line: 125mV, 19k Ω balanced, 10k Ω unbalanced
Output:	XLR connector, parallel to input
Indicators:	Power On, Limiter active
Controls, Switch:	Mic/Line, Music/Voice EQ, Power On/Off, Voltage Selector Music EQ: Off/+4dB @ 65Hz, +4dB @ 12kHz Voice EQ: Off/+4dB @ 3kHz, +4dB @ 6kHz
Controls, Rotary:	Input Volume
Electronics Protection:	Thermal, limiting, short circuit
Power Requirements:	115/230 VAC, 2A, 50/60Hz

Physical

Enclosure:	Gray, semi-trapezoidal, reinforced polypropylene
Dimensions (HxWxD):	24.42" x 15.36" x 12.29" (620mm x 390mm x 312mm)
Weight:	39.7lbs. (18kg)
Mounting:	Four M10 metal threaded inserts, 1.375" (35mm) lockable stand mount

¹ Measured on axis in the far field, referenced back to 1 watt RMS from maximum power and to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300Hz to 3kHz.

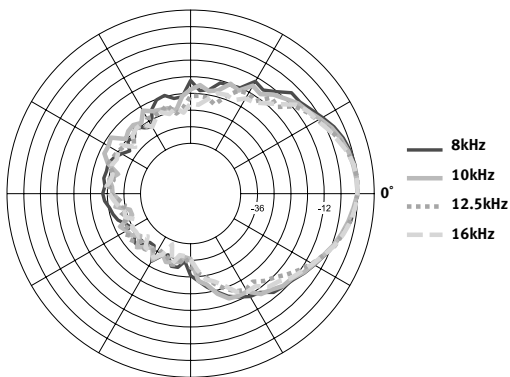
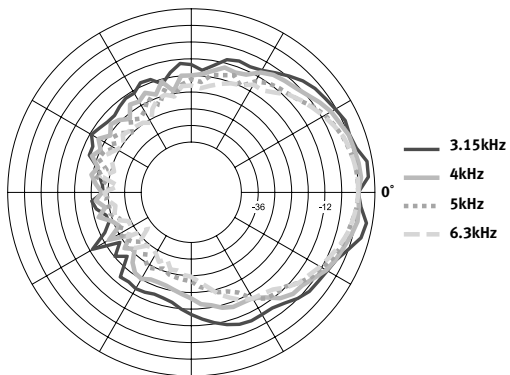
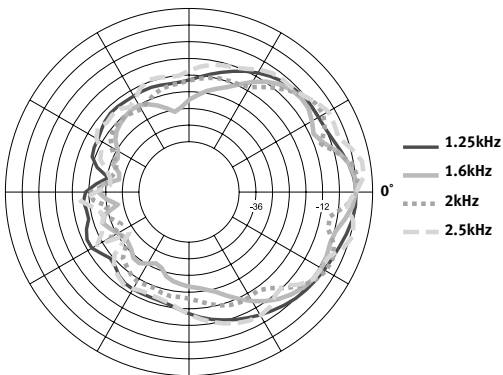
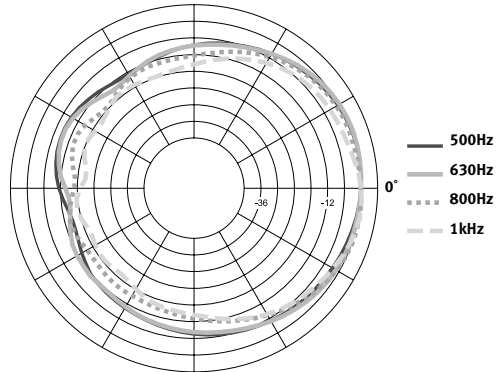
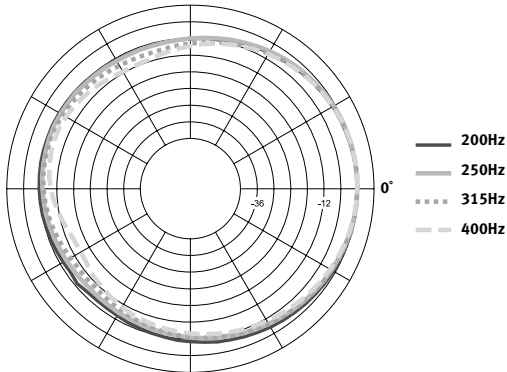
² RMS using 20Hz to 20kHz, PN Spectrum, Peak for 2 hours with +6 dB crest factor.

Options

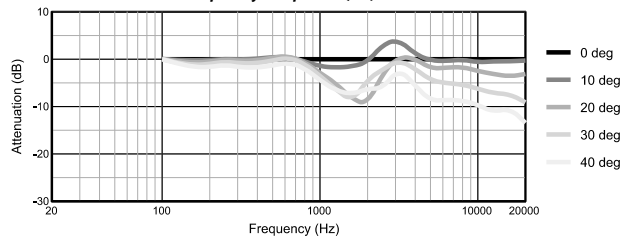
ART A-2	Wall mount bracket, black
ART A-5	Swivel, tilt, wall mount hardware, black
ART A-7	Full front metal grille, black
ART A-11	U-bracket, black

ART200A Two-Way Active Speaker System

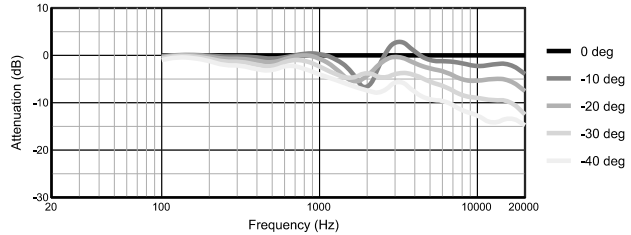
ART200A Vertical Polars



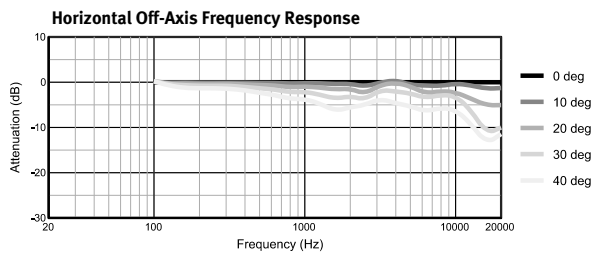
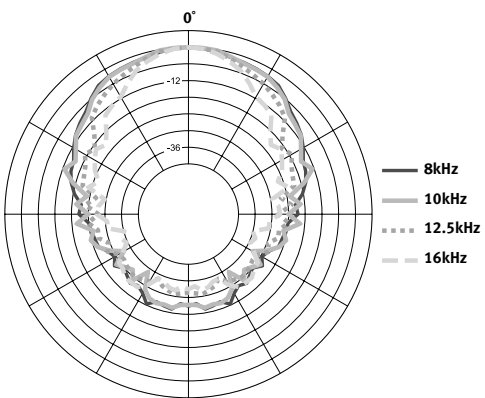
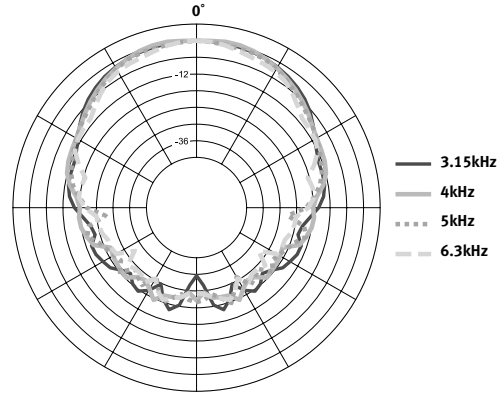
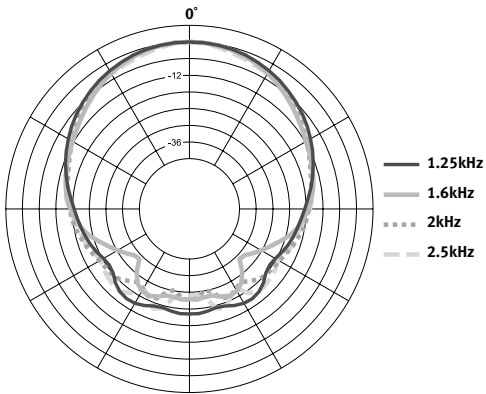
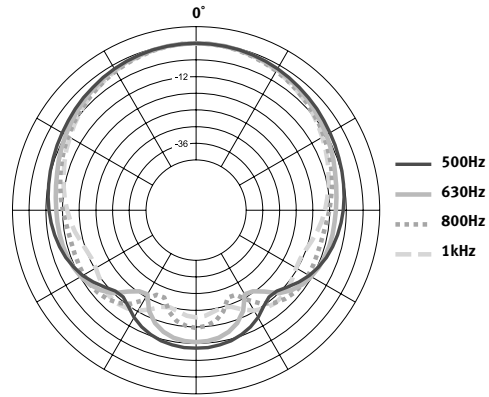
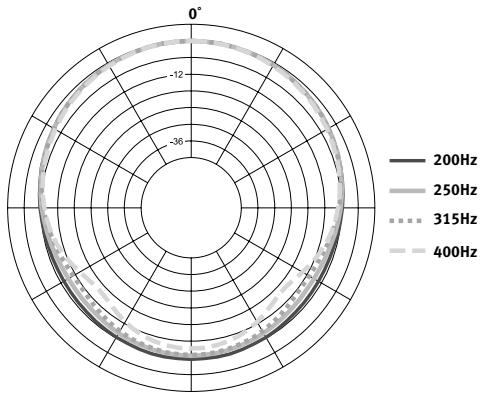
Vertical Off-Axis Frequency Response (UP)



Vertical Off-Axis Frequency Response (DOWN)

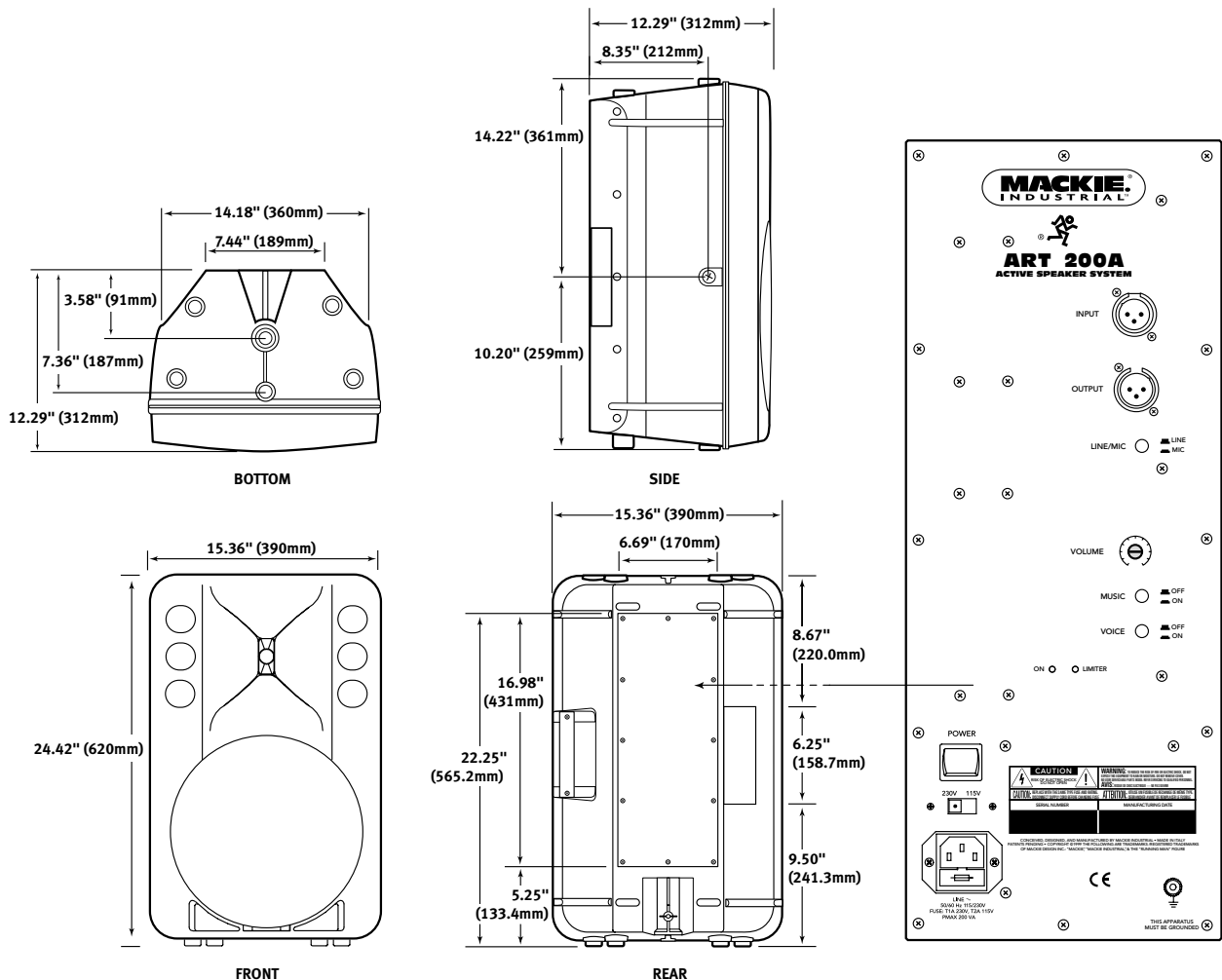
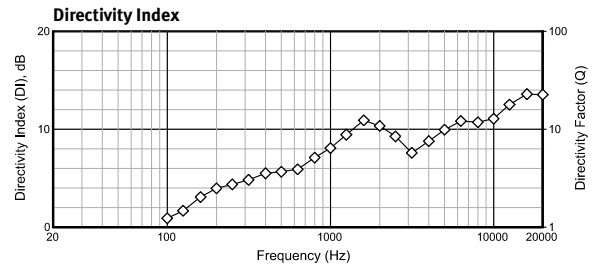
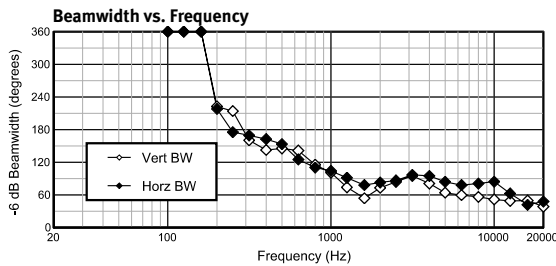
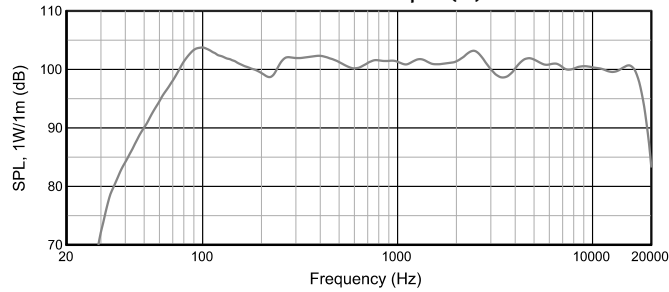


ART200A
Horizontal Polars



ART200A Two-Way Active 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.



ART200A Two-Way Active Speaker System

Architects' and Engineers' Specifications

The amplified loudspeaker system shall be a self-contained unit, housed in a reinforced polypropylene enclosure and consisting of the following sub-systems: (1) vented two-way loudspeaker system, (2) integrated power amplifiers and crossover network, (3) integrated mic/line input with music and voice equalizers.

The loudspeakers shall consist of a 12 inch low-frequency, cone driver, and a 90° x 70° high-frequency, constant-directivity polynomial horn with a horn-loaded, 1 inch compression driver. The drivers shall be aligned with an analog circuit and crossed over at 1.8kHz by a 4-pole network built into the power amplifiers. Together they shall be capable of producing 122dB SPL (1m, anechoic).

Two discrete amplifiers shall be provided, capable of continuously delivering 120W RMS to the low-frequency driver and 40W RMS to the high-frequency driver. Distortion shall be less than 0.1% when measured at 1kHz and 10kHz. They shall be equipped with a multi-function protection circuit to peak limit and protect the loudspeakers from overheating, over-excursion, short circuits and extreme operating temperatures. An indicator lamp shall illuminate when any aspect of the protection circuit engages.

The integrated mic/line input shall be actively balanced, may accept an unbalanced input, and shall be paralleled to an output. Both shall have XLR connectors. The input shall have a switch to select between 8mV mic and 125mV line levels. The unit shall be provided with both voice and music optimization equalization that can be activated with buttons on the rear panel. The voice equalizer shall provide +4dB at 3kHz and 6kHz. The music equalizer shall provide +4dB at 65Hz and +4dB at 12kHz. A continuously variable, rotary master volume control shall be provided.

The power supply shall be internal and connected to 50 or 60Hz source current through a detachable IEC power cord. It shall have an on/off switch, fuse holder, and threaded grounding screw on the rear panel. AC voltage shall be selectable between 115 and 230VAC. The power supply shall draw a maximum of 2A and illuminate an indicator light when on.

The reinforced polypropylene enclosure shall have a volume of at least 1.65 cu. ft., be trapezoidal in shape and equipped with a grille to protect the cone driver. At least four M10 threaded sockets shall be molded into the cabinet for attaching mounting hardware, designed for the unit and

(continued Architects' & Engineers' Specs)

available from the manufacturer. A full metal grille assembly, covering the front of the enclosure shall be available from the manufacturer. The amplified loudspeaker system shall be a model ART200A manufactured by Mackie Industrial.



www.mackieindustrial.com

16220 Wood-Red Rd. NE, Woodinville, WA 98072 USA
888.337.7404, fax 425.487.4337, industrial@mackie.com

UK +44.1268.571.212, fax +44.1268.570.809, info@rcf-uk.com
ITALY +39.0522.354.111, fax +39.0522.926.208, industrial@rcf.it
FRANCE +33.3.8546.9160, fax +33.3.8546.9161, rcf.commercial@wanadoo.fr
GERMANY +49.2572.96042.0, fax +49.2572.96042.10, industrial@mackie.de


Electronic files for this product available at:
www.mackieindustrial.com

This Specification Sheet

ART200A.PDF

Quick-Start Manual

ART200AQS.PDF

Mackie Designs continually engages in research related to product improvement. New material, production methods, and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current Mackie Industrial product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated. ©1999-2001 Mackie Designs Inc. All rights Reserved. **MACKIE** and  are registered trademarks of Mackie Designs Inc. Mackie Industrial is a trademark of Mackie Designs Inc.

part no. 910-161-10 Rev.B