AMU105 compact high-performance loudspeaker

Product Overview

The newly expanded AMU multi-use loudspeaker series combines a powerful mix of driver configurations and coverage patterns with a variety of mounting options and orientations. Together with indoor/outdoor flexibility and two colors, AMU offers virtually endless installation options to solve your specific needs.

Featuring high-output sound, exceptional vocal clarity, and rich musical depth, the AMU Series shines in both large distributed and small- to mid-sized audio systems. The integrated 70/100V transformer includes a bypass switch for live sound reinforcement. Systems can be enhanced with the MB210-WR dual 10-inch weatherized subwoofer, and PowerShareX amplifiers include factory-optimized presets for peak performance and simplified installation.

AMU105 provides wide, even coverage with a $100^{\circ} \times 100^{\circ}$ constant-directivity high-frequency horn, 100 Hz – 16 kHz frequency response, and 118 dB peak SPL, all in an ultra-compact enclosure.



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PROFESSIONAL



Key Features

Two-way transducer setup, featuring a high excursion woofer and high-frequency compression driver, enhanced by a passive crossover with optimized filters

IP55 weather-rated with three-layer stainless steel grille, water-resistant woofer, industrial polyurethane exterior coating, and molded cover for input panel protection

Weather-sealed internal 70/100V transformer with tap setting switch and 8-ohm bypass

Stainless-steel U-bracket with rear-enclosure M8 threaded inserts to accept third-party accessory mounting hardware

Compatible accessories include: surface-mount pan-and-tilt bracket, single-point suspension bracket with multi-angle attachment points, and external pole adapter for portable use

Compact cabinet construction with rust-resistant suspension points

Factory-optimized loudspeaker presets when combined with Bose Professional amplifiers and processors

Easy integration with Bose Professional electronics and loudspeakers makes configuration and operation much simpler and quicker

AMU is a stocked product with no custom order or surcharge requirements

Available in black or white finish to match the design of your project

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Technical Specifications

SINGLE-LOUDSPEAKER PERFORMA	NCE			
Frequency Response (–3 dB) ¹	100 Hz – 16,000 Hz			
Frequency Range (–10 dB) ¹	90 Hz – 18,000 Hz			
Nominal Coverage Pattern	100° × 100°			
Recommended High-pass Filter	90 Hz with minimum 12-dB/octave filter			
Crossover	2.0 kHz (passive 2-way crossover)			
Transformer Taps	70V: 5, 10, 20, 40, 80 W, bypass 100V: 10, 20, 40, 80 W, bypass			
AUDIO PERFORMANCE	AES Transducer Test ⁴		Bose Professional Extended-Lifecycle Test ⁵	
Power Handling, Long-term Continuous	150 W		100 W	
Power Handling, Peak	600 W		400 W	
	Free field	Wall/Ceiling	Free field	Wall/Ceiling
Sensitivity (SPL/1W @1m) ²	90 dB	92 dB	90 dB	92 dB
Calculated Maximum SPL @ 1 m, Continuous ³	111 dB	113 dB	110 dB	112 dB
Calculated Maximum SPL @ 1 m, Peak	117 dB	119 dB	116 dB	118 dB
TRANSDUCERS	-		'	· · · · ·
Low Frequency	1 × Bose Professional LF5 high-excursion 5.25-inch (133 mm) woofer with 1.5-inch (38 mm) voice coil			
High Frequency	1 × Bose Professional EMB2S extended high-frequency compression driver with 2-inch (51 mm) voice coil			
Nominal Impedance	8 Ω (transformer bypass)			
PHYSICAL				
Enclosure Material	Exterior-grade plywood			
Finish	2-part spray polyurea coating, black or white			
Grille	3-layer: perforated stainless steel, acoustic foam, stainless steel mesh, powder-coat finish			
Environmental ⁶	Rated for direct-exposure outdoor installations (IP55 per EN 60529; IP33C per EN 54-24)			
Certifications	EN 54-24: 2008, Loudspeaker for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings. For EN 54-24 specifications, refer to the installation guide.			
Connectors	1 × barrier strip. Accepts 18 AWG (0.8 mm²) to 10 AWG (5.3 mm²) size wire. Includes input cover.			
Suspension / Mounting	2 × M8 threaded inserts for U-bracket; 2 × M8 threaded inserts on rear (75 mm, 2-bolt pattern)			
Product Dimensions (Length × Width × Depth)	152 mm × 305 mm × 229 mm (6.0 in × 12.0 in × 9.0 in) with input cover			
Net Weight, Single Loudspeaker	6.5 kg (14.4 lb); 7.5 kg (16.5 lb) with U-bracket			
Shipping Weight	9.5 kg (21.0 lb)			
Optional Accessories	AMUPOLEAT pole adapter, AMURAIL suspension rail, surface-mount pan-and-tilt bracket			

Specifications are subject to change. For additional specifications and application information, visit BoseProfessional.com. 11/2024

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PRODUCT CODES 811433-0110 AMU105 100X100 OUTDOOR LDSPK BLK AMU105, black AMU105, white 811433-0210 AMU105 100X100 OUTDOOR LDSPK WHT AMUPOLEAT pole adapter 893630-0100 KIT, AMU POLE CUP, BLK 893631-0100 KIT, AMU SUSPENSION BRACKET, BLK AMURAIL suspension rail, black AMURAIL suspension rail, white 893631-0200 KIT, AMU SUSPENSION BRACKET, WHT Surface-mount pan and tilt bracket, black 889687-0100 PAN & TILT BRACKET, BLK 889687-0200 PAN & TILT BRACKET, WHT Surface-mount pan and tilt bracket, white

Footnotes

Frequency response and range measured on-axis in anechoic enviornment with recommended high-pass filter. Frequency response graphs display SPL axis with 0 dB line reference to sensitivity SPL value. 1

- 2. Bose Professional extended-lifecycle test using pink noise filtered to meet IEC 268-5, 6-dB crest factor, 500-hour duration.

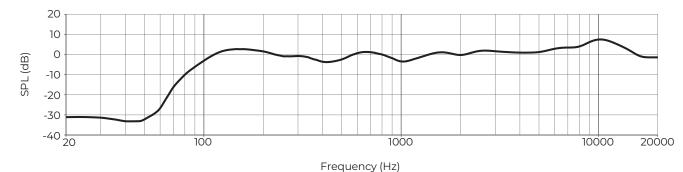
3. AES standard 2-hour duration with IEC system noise.

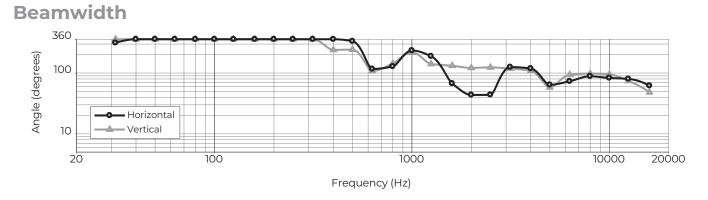
4. Sensitivity measured in anechoic environment with recommended bandpass and EQ.

5. Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.

6. Tested to IP55 per EN 60529 when used in general purpose audio installation.

Frequency Response

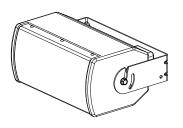




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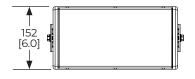
Dimensions⁷

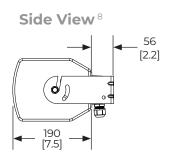


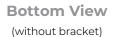
Top View

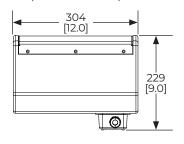


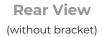
Front View

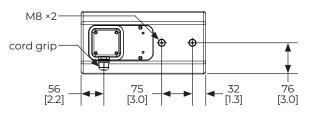




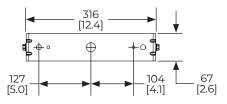








Rear View (bracket only)



Dimensions are shown in millimeters over inches.
Dimensions apply to both left and right sides.

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