

#### TECHNICAL DATA

### AMU108 & AMU108-120

# compact high-performance loudspeakers

### **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.

AMU108 provides even coverage with a rotatable  $90^{\circ} \times 60^{\circ}$  constant-directivity high-frequency horn, 90 Hz - 16 kHz frequency response, and 122 dB peak SPL, delivering excellent output in a compact enclosure.

AMU108-120 provides wide, even coverage with a rotatable  $120^{\circ} \times 60^{\circ}$  constant-directivity high-frequency horn, 90 Hz – 16 kHz frequency response, and 121 dB peak SPL, delivering excellent output in a compact enclosure.





### **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

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

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# AMU108 & AMU108-120

# compact high-performance loudspeakers

# **Technical Specifications**

Frequency Response (–3 dB) <sup>1</sup>	90 Hz – 16,000 Hz							
Frequency Range (–10 dB) <sup>1</sup>	80 Hz –18,000 Hz							
Nominal Coverage Pattern	AMU108: 90° × 60° in horizontal configuration (rotatable high-frequency horn) AMU108-120: 120° × 60° in horizontal configuration (rotatable high-frequency horn)							
Recommended High-pass Filter	80 Hz with minimum 12-dB/octave filter							
Crossover	1.4 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 <sup>4</sup> Bose Professional Extended-Lifecycle Test <sup>5</sup>							
Power Handling, Long-term Continuous	250 W 200 W							
Power Handling, Peak	1000 W				800 W			
	Free field Wall/Ceili		/Ceiling	Free field		Wall/Ceiling		
	AMU108	AMU108-120	AMU108	AMU108-120	AMU108	AMU108-120	AMU108	AMU108-120
Sensitivity (SPL/1W @ 1 m) <sup>2</sup>	91 dB	90 dB	93 dB	92 dB	91 dB	90 dB	93 dB	92 dB
Calculated Maximum SPL @ 1 m, Continuous <sup>3</sup>	115 dB	114 dB	117 dB	116 dB	114 dB	113 dB	116 dB	115 dB
Calculated Maximum SPL @ 1 m, Peak	121 dB	120 dB	123 dB	122 dB	120 dB	119 dB	122 dB	121 dB
TRANSDUCERS								
Low Frequency	1 × Bose Professional LF8 high-excursion 8-inch (203 mm) woofer with 2-inch (51 mm) voice coil							
High Frequency	1 × Bose Professional EMB2S extended high-frequency compression driver with 2-inch (51 mm) voice coil							
Nominal Impedance	$8\Omega$ (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 <sup>6</sup>	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	$2 \times M8$ threaded inserts for U-bracket; $4 \times M8$ threaded inserts on rear (127 mm $\times$ 70 mm 4-bolt pattern)							
Product Dimensions (Length × Width × Depth)	235 mm × 470 mm × 279 mm (9.3 in × 18.5 in × 11.0 in) with input cover							
Net Weight, Single Loudspeaker	10.6 kg (23.3 lb); 12.6 kg (27.7 lb) with U-bracket							
Shipping Weight	14.2 kg (31.2 lb)							

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PRODUCT CODES				
AMU108, black	811434-0110 AMU108 90X60 OUTDOOR LDSPK BLK			
AMU108, white	811434-0210 AMU108 90X60 OUTDOOR LDSPK WHT			
AMU108-120, black	893798-0100 AMU108-120 120x60, OUTDOOR LDSPK BLK			
AMU108-120, white	893798-0200 AMU108-120 120x60, OUTDOOR LDSPK WHT			
AMUPOLEAT pole adapter	893630-0100 KIT,AMU POLE CUP,BLK			
AMURAIL suspension rail, black	893631-0100 KIT,AMU SUSPENSION BRACKET,BLK			
AMURAIL suspension rail, white	893631-0200 KIT,AMU SUSPENSION BRACKET,WHT			
Surface-mount pan and tilt bracket, black	889687-0100 PAN & TILT BRACKET,BLK			
Surface-mount pan and tilt bracket, white	889687-0200 PAN & TILT BRACKET,WHT			

#### **Footnotes**

- 1. 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.
- Sose Professional extended-lifecycle test using pink noise filtered to meet IEC 268-5, 6-dB crest factor, 500-hour duration.
   AES standard 2-hour duration with IEC system noise.
   Sensitivity measured in anechoic environment with recommended bandpass and EQ.
   Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.
   Tested to IP55 per EN 60529 when used in general purpose audio installation.

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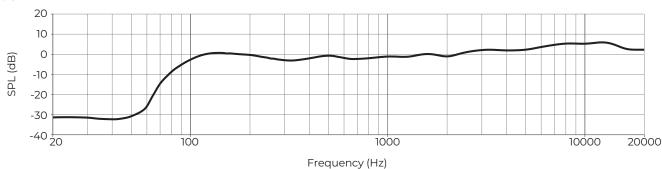
### TECHNICAL DATA

## AMU108 & AMU108-120

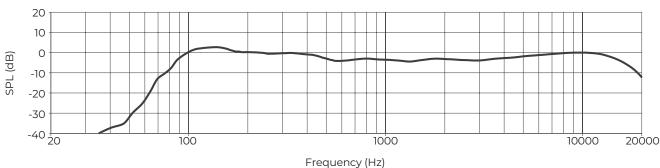
compact high-performance loudspeakers

## **Frequency Response**

### **AMU108**

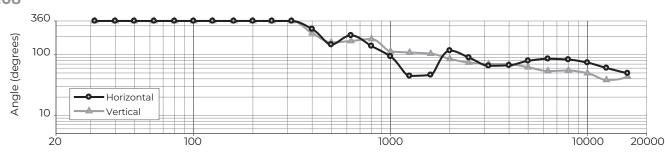


### AMU108-120



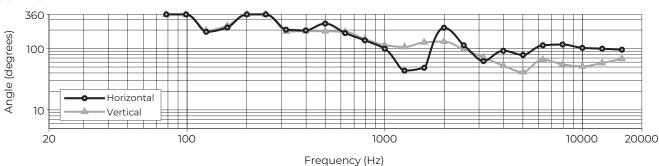
## **Beamwidth**

### **AMU108**



#### Frequency (Hz)





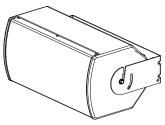
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## AMU108 & AMU108-120

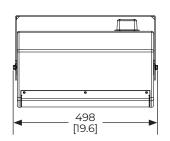
# compact high-performance loudspeakers

## **Dimensions** <sup>7</sup>

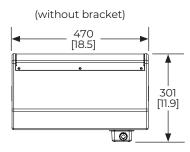


Side View<sup>8</sup> [2.1] ď 262 [10.3]

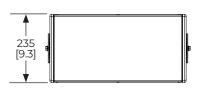
**Top View** 



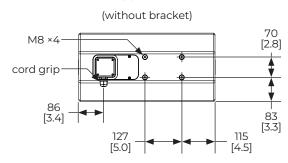
**Bottom View** 



**Front View** 

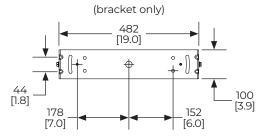


### **Rear View**



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### **Rear View**



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