TECHNICAL DATA

ArenaMatch Utility AMU105
small-format foreground/fill loudspeaker

PROFESSIONAL

Product Overview

Built for zone-fill coverage or high-SPL foreground music, Bose ArenaMatch Utility loudspeakers feature similar tonal balance to ArenaMatch array modules but in compact designs. They have the same EMB2S compression driver as ArenaMatch arrays, ensuring consistent sound, and the same direct-exposure outdoor weather rating. Deploy them for zone-fill coverage in sports stadiums, arenas, outdoor entertainment centers, and more. Or use them to provide intelligible, high-level sound in any outdoor area — from niche venues such as breweries and fairgrounds to larger settings like resorts and outdoor shopping centers.



The AMU105 is an ultra-compact ArenaMatch Utility model for outdoor applications that require excellent audio from an unobtrusive loudspeaker. It provides wide, even coverage with a 100° × 100° constant-directivity high-frequency horn, 100 Hz – 18 kHz frequency response, 118 dB peak SPL, and supports the lowest vocal ranges with a Bose LF5 5.25-inch woofer.

Key Features

Deploy as zone-fill to support ArenaMatch arrays systems, delivering powerful, intelligible sound and ensuring consistent tonal balance with EMB2S compression drivers in every speaker

Deploy for high-level foreground music in any outdoor venue

Install outdoors with an IP55 weather rating, three-layer stainless steel grille, water-resistant coating on woofer cone, industrial polyurethane exterior coating, and molded cover to protect inputs

Adapt to a variety of configurations — all models ship standard with 70/100V transformer inputs and passive crossover with optimized filters for more consistent frequency and polar response

Streamline the design process by combining with complementary Bose Professional products, such as PowerMatch amplifiers and ControlSpace DSPs

Mount easily with included stainless-steel U-bracket; rear enclosure panel also includes M8 threaded inserts to accept third-party accessory mounting bracket

Provide wide, even coverage with 100° × 100° constant-directivity high-frequency horn that provides the same coverage in either horizontal or vertical installation

Perform in the most demanding applications with 100 Hz – 18 kHz frequency response and 118 dB maximum peak SPL

Support lowest vocal range with 1 × Bose LF5 5.25-inch woofer featuring a 1.5-inch long-excursion voice coil, which extends response to 90 Hz

EN 54-24 Certified: EN 54-24: 2008, Loudspeaker for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings

ArenaMatch Utility AMU105
small-format foreground/fill loudspeaker

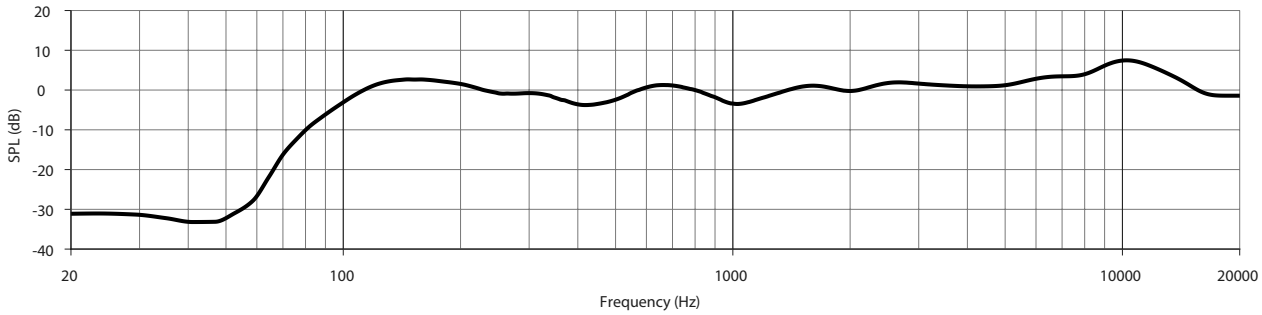
Technical Specifications

Single Module Performance				
Frequency Response (–3 dB) [1]	100 Hz to 16 kHz			
Frequency Range (–10 dB)	90 Hz to 18 kHz			
Nominal Coverage Pattern (H × V)	100° × 100°			
Recommended High-pass Filter	90 Hz with minimum 12-dB / octave filter			
Crossover	Passive (2.0 kHz crossover frequency)			
70/100V transformer tap settings	70V: 5, 10, 20, 40, 80 W; 100V: 10, 20, 40, 80 W			
	Bose Extended Lifecycle Test [2]		**AES Transducer Test [3]**	
Power Handling, long-term continuous	100 W		150 W	
Power Handling, peak	400 W		600 W	
	Free field	**Wall/Ceiling**	**Free field**	**Wall/Ceiling**
Sensitivity (SPL / 1W @ 1 m) [4]	90 dB	92 dB	90 dB	92 dB
Calculated Maximum SPL @ 1 m [5]	110 dB	112 dB	111 dB	113 dB
Calculated Maximum SPL @ 1 m, peak	116 dB	118 dB	117 dB	119 dB
Certifications				
EN 54-24 Certified	EN 54-24: 2008, Loudspeaker for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings, refer to the ArenaMatch Utility small-format foreground/fill loudspeaker installation guide for specifications			
Transducers				
Low Frequency	1 × Bose LF5 high-excursion 5.25-inch woofer (1.5-inch voice coil)			
High Frequency	1 × Bose EMB2S extended high-frequency compression driver (2-inch voice coil)			
Nominal Impedance	8 Ω			
Physical				
Enclosure Material	Exterior-grade plywood			
Finish	Two-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 EN60529; IP33C per EN 54-24)			
Connectors	1 × barrier strip, (accepts 10 to 18 wire gauge)			
Suspension/Mounting	2 × M8 threaded inserts for U-bracket; 2 × M8 threaded inserts on rear (75 mm, 2-bolt pattern)			
Dimensions (H × W × D)	152 × 304 × 229 mm (6.0 × 12.0 × 9.0 in) with input cover			
Net Weight	6.5 kg (14.4 lb) / 7.5 kg (16.5 lb) with u-bracket			
Shipping Weight	9.5 kg (21.0 lb)			
Accessories	Optional pan-and-tilt bracket			
Product Code				
Black	811433-0110			
White	811433-0210			

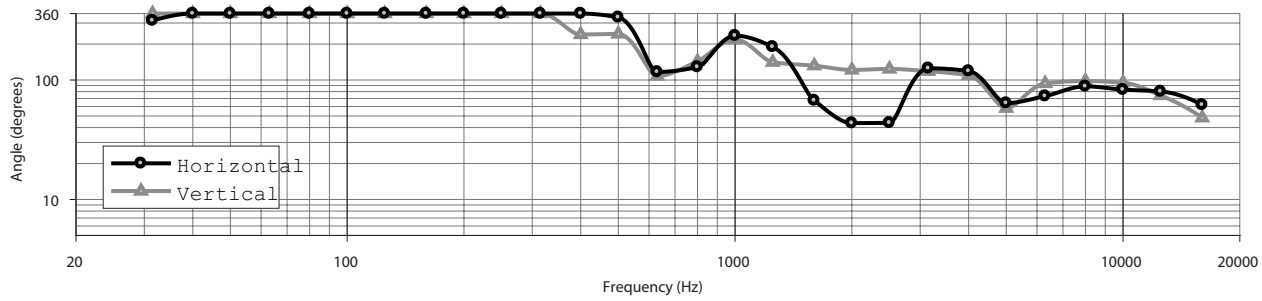
Footnotes
(1) Frequency response and range measured on-axis in anechoic environment with recommended high-pass filter. Frequency response graphs display SPL axis with 0 dB line reference to sensitivity SPL value.
(2) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest 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 EN60529 when used in General Purpose Audio installation.

ArenaMatch Utility AMU105
small-format foreground/fill loudspeaker

Frequency Response

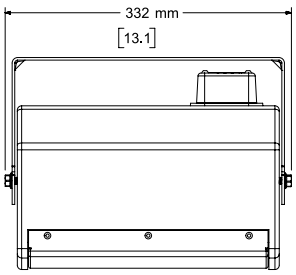


Beamwidth

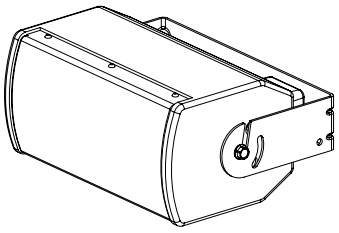


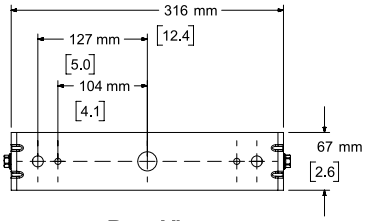
ArenaMatch Utility AMU105

small-format foreground/fill loudspeaker

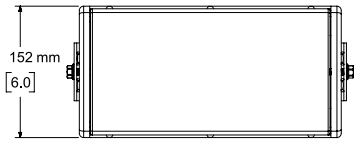


Top View

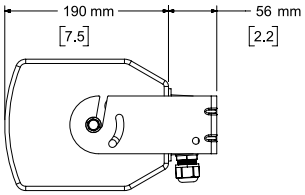




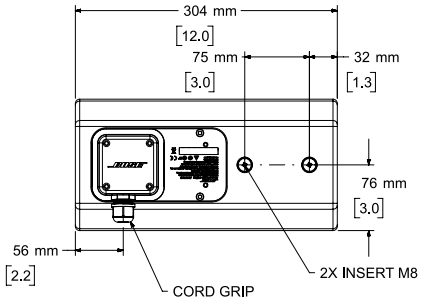
Rear View
BRACKET ONLY



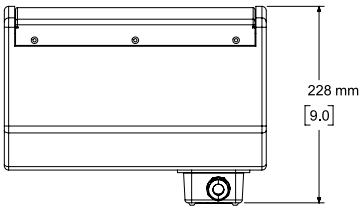
Front View



Right View
DIMENSIONS APPLY TO BOTH SIDES



Rear View
BRACKET REMOVED FOR CLARITY



Bottom View
BRACKET REMOVED FOR CLARITY

NOTES:
1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES
2. WEIGHT APPROX. 6.5kg [14.4lbs] (SPEAKER ONLY)
   WEIGHT W/BRACKET 7.4kg [16.4lbs]

For additional specifications and application information, please visit PRO.BOSE.COM. Specifications subject to change without notice. 03/2021