BOSE AMU208 ArenaMatch Utility Small-format Foreground/Fill Loudspeakers Installation Guide

ArenaMatch Utility
Small-format Foreground/Fill Loudspeakers
AMU105
AMU108
AMU206
AMU208
Installation Guide

Contents

Important Safety Instructions

Please read and keep all safety and use instructions.
This product is intended for installation by professional installers only! This document is intended to provide professional installers with basic installation and safety guidelines for this product in typical fixed-installation systems. Please read this document and all safety warnings before attempting installation. Do not attempt to service this product yourself. Refer all servicing to authorized service centers, installers, technicians, dealers, or distributors. To contact Bose Professional or to find a dealer or distributor near you, visit PRO.BOSE.COM.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
6. Only use attachments/accessories specified by the manufacturer.
7.  Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

WARNINGS/CAUTIONS:

Contains small parts which may be a choking hazard. Not suitable for children under age 3.


This product contains magnetic material. Consult your physician on whether this might affect your implantable medical device.
All Bose products must be installed in accordance with local, state, federal, and industry regulations. It is the installer's responsibility to ensure the installation of the loudspeakers and mounting system is performed in accordance with all applicable codes, including local building codes and regulations. Consult the local authority having jurisdiction before installing this product. Unsafe mounting or overhead suspension of any heavy load can result in serious injury or death, and property damage. It is the installer's responsibility to evaluate the reliability of any mounting method used for their application. Only professional installers with the knowledge of proper hardware and safe mounting techniques should attempt to install any loudspeaker overhead.

Do NOT make unauthorized alterations to this product.
The AMU105 wall mounting kit is only for use with model AMU105.
The AMU108 wall mounting kit is only for use with model AMU108.
The AMU206 wall mounting kit is only for use with model AMU206.
The AMU208 wall mounting kit is only for use with model AMU208.
Do not mount on surfaces that are not sturdy, or that have hazards concealed behind them, such as electrical wiring or plumbing. If you are not sure about installing the bracket, contact a qualified professional installer. Ensure the bracket is installed according to local building codes.
Do not use hydrocarbon-based solvents, lubricants, or cleaning agents of any type on or around Bose speakers and associated mounting hardware, during installation. The use of such hydrocarbon-based lubricants, solvents, or cleaning agents on or around the mounting anchors and screws can lead to degradation of the plastic material, possibly resulting in cracking and premature failure of the product. Keep the product away from fire and heat sources. Do NOT place naked flame sources, such as lighted candles, on or near the product.

Regulatory Information

CE This product conforms to all applicable EU directive requirements. The complete Declaration of Conformity can be found at **www.Bose.com/compliance**.

UK CA This product conforms to all applicable Electromagnetic Compatibility Regulations 2016 and all other applicable UK regulations. The complete declaration of conformity can be found at: **www.Bose.com/compliance**

This symbol means the product must not be discarded as household waste and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling help protect natural resources, human health, and the environment. For more information on the disposal and recycling of this product, contact your local municipality, disposal service, or the shop where you bought this product.

China Restriction of Hazardous Substances Table

Names and Contents of Toxic or Hazardous Substances or Elements						
	Toxic or Hazardous Substances and Elements					
Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent (CR(VI))	Polvbrominated Biphenyl (PBB)	Polybrominated diphen(PBylether DE)
PCBs	X	0	0	0	0	0
Metal Parts	X	0	0	0	0	0
Plastic Parts	0	0	0	0	0	0
Speakers	X	0	0	0	0	0
Cables	X	0	0	0	0	0
This table is prepared in accordance with the provisions of SJ/T 11364. 0: Indicates that this toxic or hazardous substance contained in all of the homogeneous m aterials for this part is below the limit requirement of GB/T 26572.						
X: Indicates that this toxic or hazardous substance contained in at last one of the homoge neous materials used for this part is above the limit requirement of GB/T 26572.						

Taiwan Restriction of Hazardous Substances Table

Equipment name: ArenaMatch DeltaQ Utility Loudspeakers , Type designation: 811433, 811434, 811435, 811436						
	Restricted substances and its chemical symbols					
Unit	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr+6)	Polybrominated biphenyls (PBB)	Polybrominated Biphenyl ethers (PBDE)
PCBs	–	0	0	0	0	0
Metal Parts	–	0	0	0	0	0
Plastic Parts	0	0	0	0	0	0
Speakers	–	0	0	0	o	0
Cables	–	0	0	0	0	0
Note 1: “o” indicates that the percentage content of the restricted substance does not exceed the percentage of the reference value of presence. **Note 2:** The “—” indicates that the restricted substance corresponds to the exemption.						

Date of Manufacture: The eighth digit in the serial number indicates the year of manufacture; “7” is 2007 or 2017.
China Importer: Bose Electronics (Shanghai) Company Limited, Part C, Plan 9, No. 353 North Rising Road, China (Shanghai) Pilot Free Trade Zone
EU Importer: Bose Products B.V., Gorslaan 60, 1441 RG Purmerend, The Netherlands
Mexico Importer: Bose de México, S. de R.L. de C.V. , Paseo de las Palmas 405-204, Lomas de Chapultepec, 11000 México, D.F. For importer & service information: +5255 (5202) 3545
Taiwan Importer: Bose Taiwan Branch, 9F-A1, No. 10, Section 3, Minsheng East Road, Taipei City 104, Taiwan. Phone Number: +886-2-2514 7676
UK Importer: Bose Limited, Bose House, Quayside Chatham Maritime, Chatham, Kent, ME4 4QZ, United Kingdom

Warranty Information
This product is covered by a limited warranty. For warranty details, visit **PRO.BOSE.COM.**

Overview

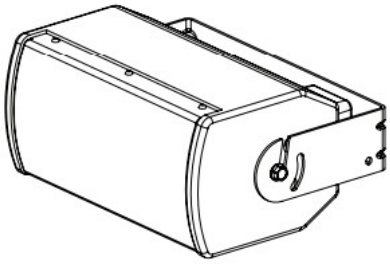
Built for zone-fill coverage or high-SPL foreground music, Bose ArenaMatch Utility loudspeakers feature similar tonal balance to ArenaMatch array modules but in compact designs. With an outdoor direct-exposure rating and the same EMB2S compression driver as ArenaMatch arrays, ArenaMatch Utility loudspeakers ensure consistent and intelligible high-level sound for any outdoor venue.

Product Features

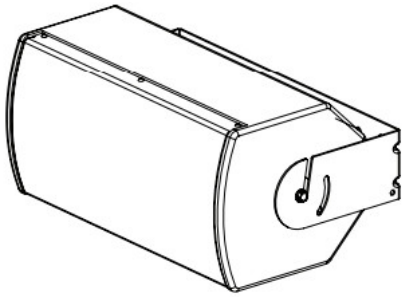
Deploy as zone-fill to support ArenaMatch arrays systems, delivering powerful, intelligible sound and ensuring consistent tonal balance with EMB2S compression drivers in every speaker.
Deploy for high-level foreground music in any outdoor venue.
Install outdoors in direct-exposure applications with a 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 each transducer for more consistent frequency and polar response.
Streamline the design process by combining with complementary Bose Professional products, such as

PowerMatch amplifiers and ControlSpace DSP.
Mount easily with included powder-coated steel U-bracket; rear enclosure panel also includes M8 threaded inserts to accept third-party accessory mounting bracket.
EN 54-24 Certified: EN 54-24: 2008, Loudspeaker for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings

ArenaMatch Utility Loudspeakers



AMU105



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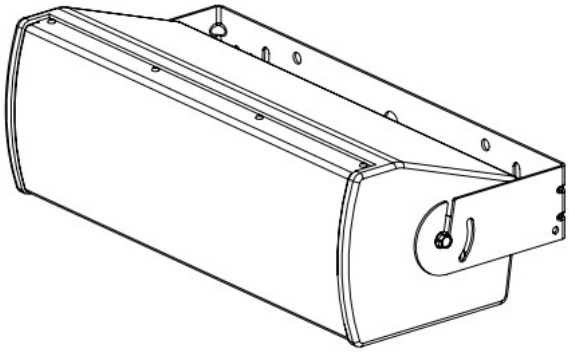
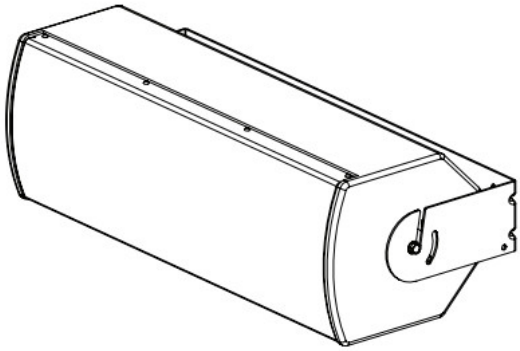


AMU206



AMU208

Package Contents

Each ArenaMatch Utility loudspeaker carton includes the following:

	AMU105	AMU108	AMU206
Loudspeaker	1	1	1
U-bracket	1	1	1
M8 screws	4	4	4
M4 screws	4	4	4
Input cover	1	1	1
Rubber washers	2	2	2
T3 square drive	1	1	1

Optional Accessories
ArenaMatch Utility loudspeakers are compatible with the RMU pan-and-tilt bracket (WBPWR-50) and various third-party pole-mount kits.
Note: The optional mounting accessories have not been assessed to EN 54-24 specifications.

Inspection & Maintenance

WARNING: The loudspeaker and all mounting components must be inspected annually by a qualified professional who is trained and certified in suspending loudspeaker systems. All rigging parts and components used in the suspension of the loudspeaker system should be visually inspected for signs of cracking, bending, water damage, corrosion, de-lamination, or any other condition that could compromise the system's integrity and create a dangerous falling hazard.

Maintaining Weather Resistance

ArenaMatch Utility loudspeakers are rated for direct-exposure outdoor installations. To maintain weather resistance, please observe the following precautions:

1. Before, during, and after installation, check the surface of the loudspeaker enclosure to ensure that the factory-applied, weather-resistant coating has not been damaged.
2. During installation, angle the loudspeaker at least 5° downward to reduce the potential of rain compromising the performance of the loudspeaker.
3. All mounting holes must be sealed off with steel screws (included with applicable accessories) or the included plastic plugs (pre-installed).
4. The gland nut that secures the loudspeaker cable is factory sealed. Do not remove the gland nut or the weather-resistant seal will be broken.
5. The loudspeaker is rated for direct-exposure installations, which means the grille is designed to withstand normal and wind-driven rain. The grille is not designed to withstand direct spraying of water from a hose or pressure washer.

CAUTION: If the above instructions are not observed, the weather-resistant integrity of your ArenaMatch Utility loudspeaker could be compromised.

For fire and evacuation notification applications, environmentally rated to IP33C per EN 54-24.
For general purpose audio installation applications, environmentally rated to IP55 per EN60529.

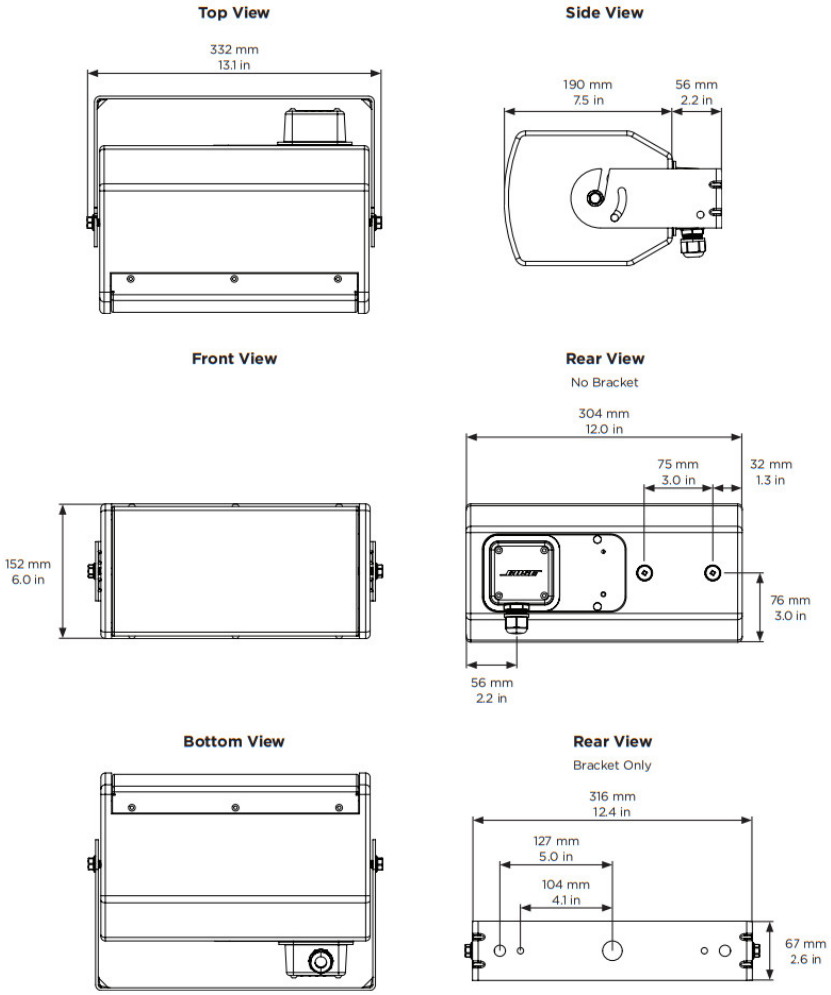
Recommended Tools

The following tools are recommended for the assembly of an ArenaMatch Utility loudspeaker system:
Flathead screwdriver
#2 Phillips-head screwdriver
10-millimeter socket or wrench
5-millimeter hex key
T3 square drive (included)

Product Dimensions

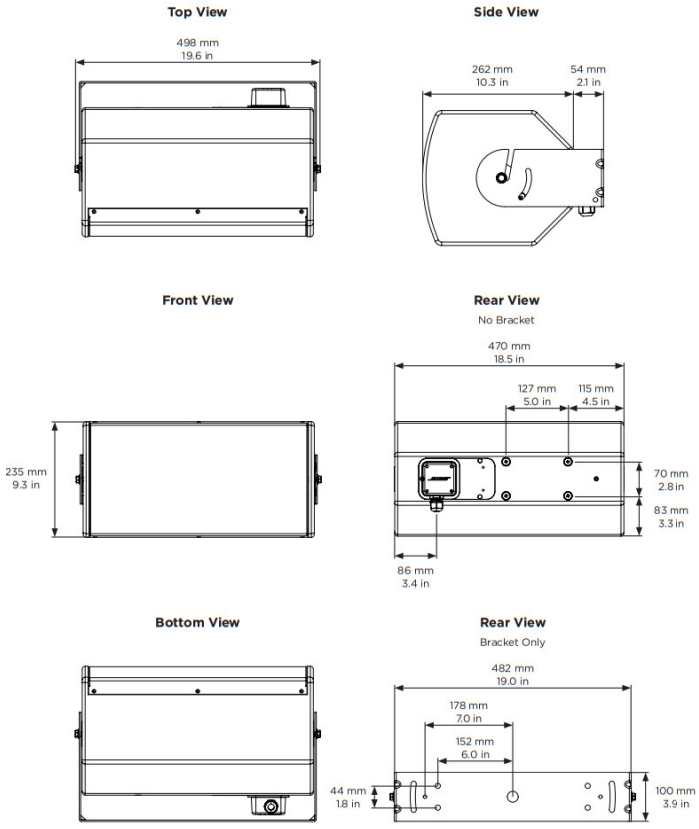
ArenaMatch Utility AMU105

Product net weight: 6.5 kg (14.4 lb) / 7.5 kg (16.5 lb) with U-bracket

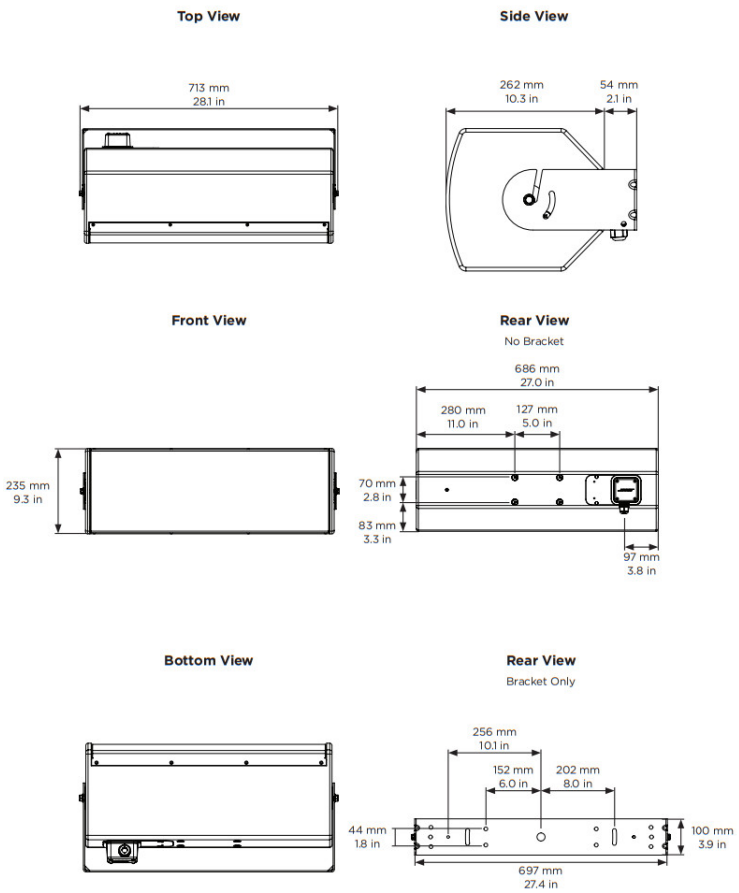


ArenaMatch Utility AMU108

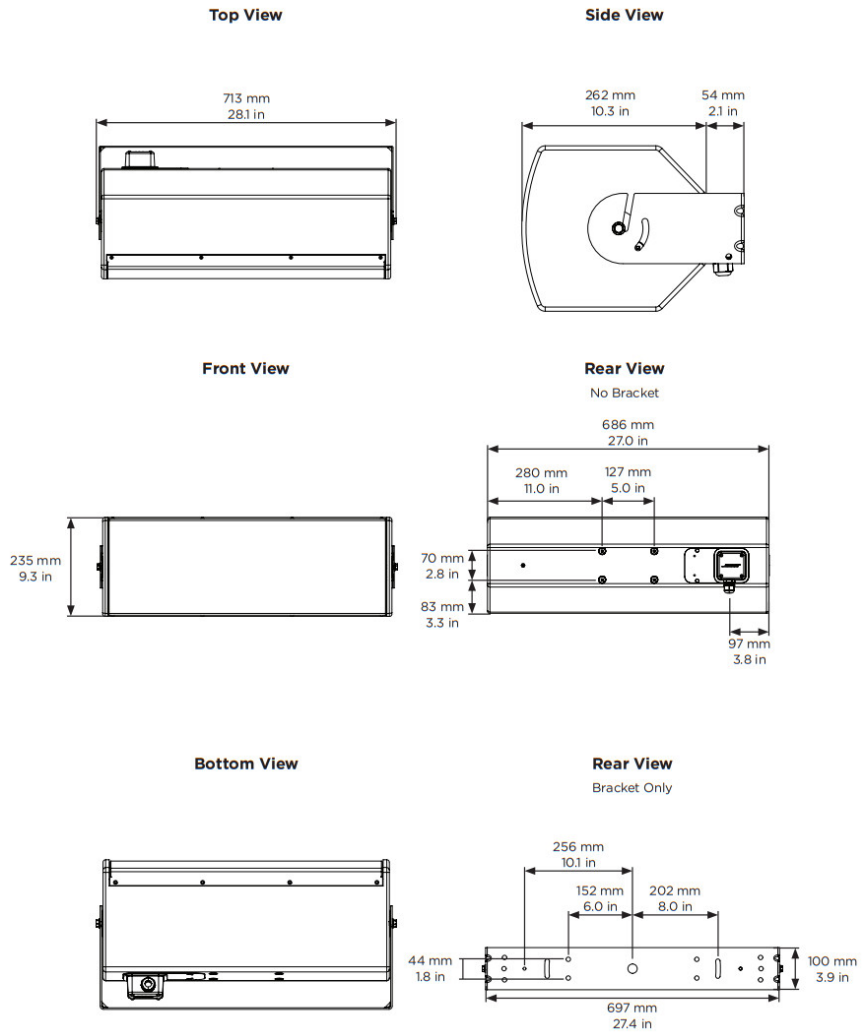
Product net weight: 10.6 kg (23.3 lb) / 12.6 kg (27.7 lb) with U-bracket



ArenaMatch Utility AMU206
Product net weight: 12.2 kg (26.8 lb) / 13.8 kg (30.5 lb) with U-bracket



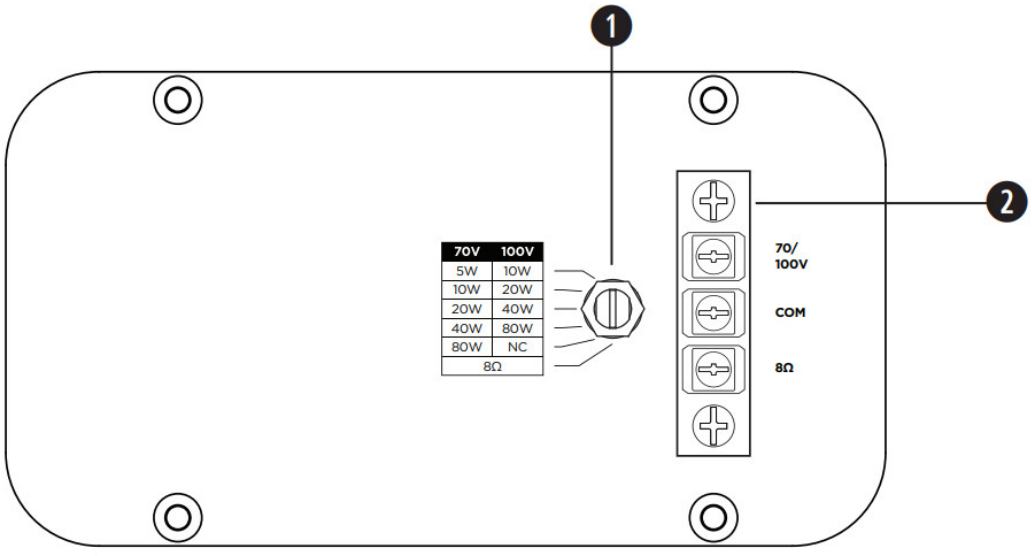
ArenaMatch Utility AMU208
Product net weight: 17.0 kg (37.5 lb) / 19.5 kg (43.0 lb) with U-bracket



Installation

Input Panel

The input panel for all models is identical. They include a single screw-terminal barrier strip. Each terminal accepts a wire gauge of 10 AWG to 18 AWG.



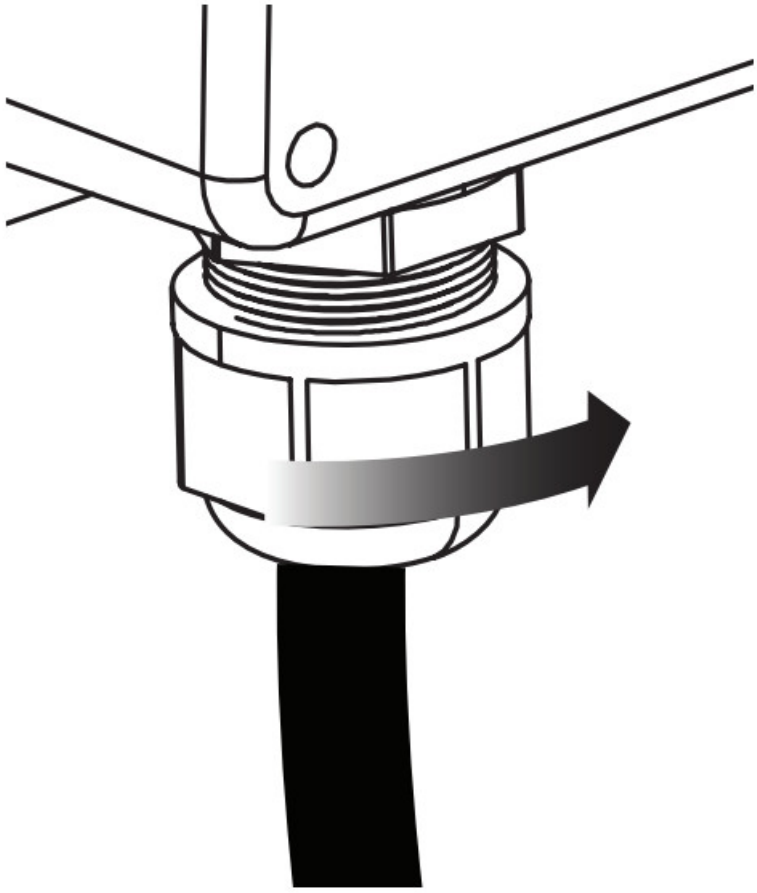
1. Tap switch: Rotate to adjust the tap setting. Use a flathead screwdriver.
2. Barrier strip

Securing the Wiring

Feed the wiring through the gland nut on the bottom of the input panel. Once you are done wiring your loudspeaker, rotate the gland nut clockwise to seal the wire. ighten the gland nut by hand until the wire is held firmly in place, then tighten the gland nut an additional quarter turn. Do not over-tighten.

Note: Gland nut is rated IP68.

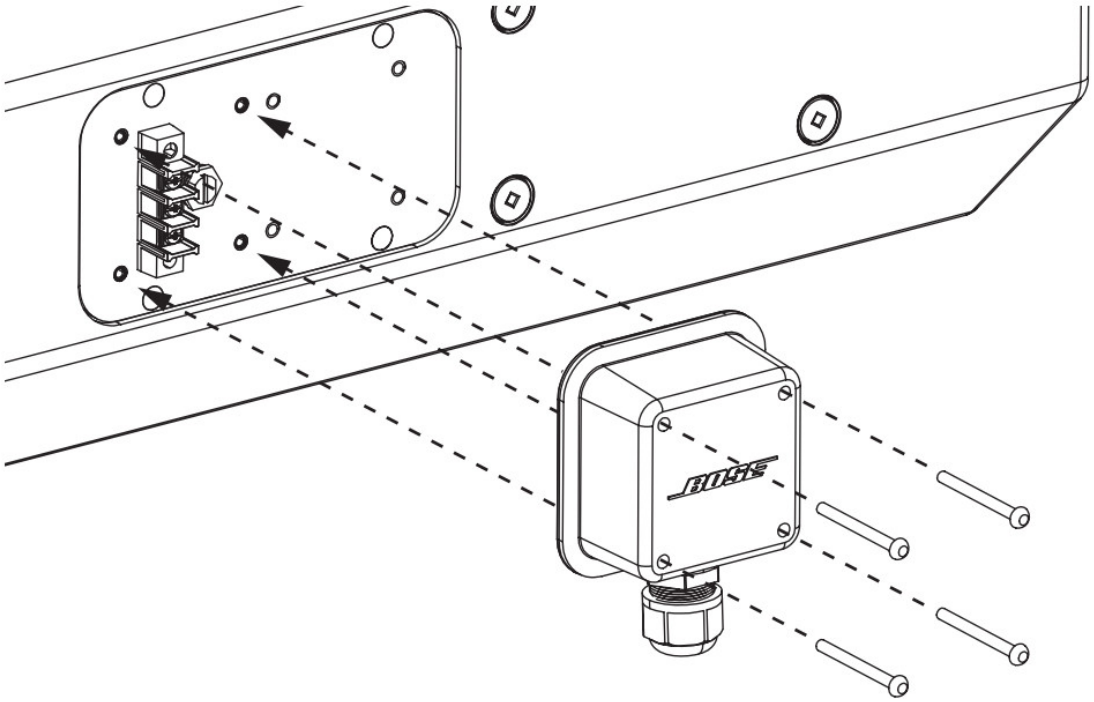
CAUTION: If the gland nut is not properly fastened, water could get into the input panel and damage the loudspeaker.



Attaching the Input Panel Cover

ArenaMatch Utility loudspeakers are shipped with the rear input panel cover not installed. Once you've made input wiring connections, secure the cover over the input panel with the included M4 screws.

Note: The input cover can be rotated to support four different orientations. Always be sure the gland nut and wiring are facing downward.



Loudspeaker Pitch Angles
The maximum pitch angles for AMU loudspeakers when horizontally mounted with the included U-bracket are as follows:

	Wall-mounted	Ceiling-mounted
AMU105	–110°	–110°
AMU108	–110°	–110°
AMU206	–110°	–110°
AMU208	–110°	–110°

Note: The pitch angle is defined between the loudspeaker reference axis and the perpendicular axis to the mounting surface.

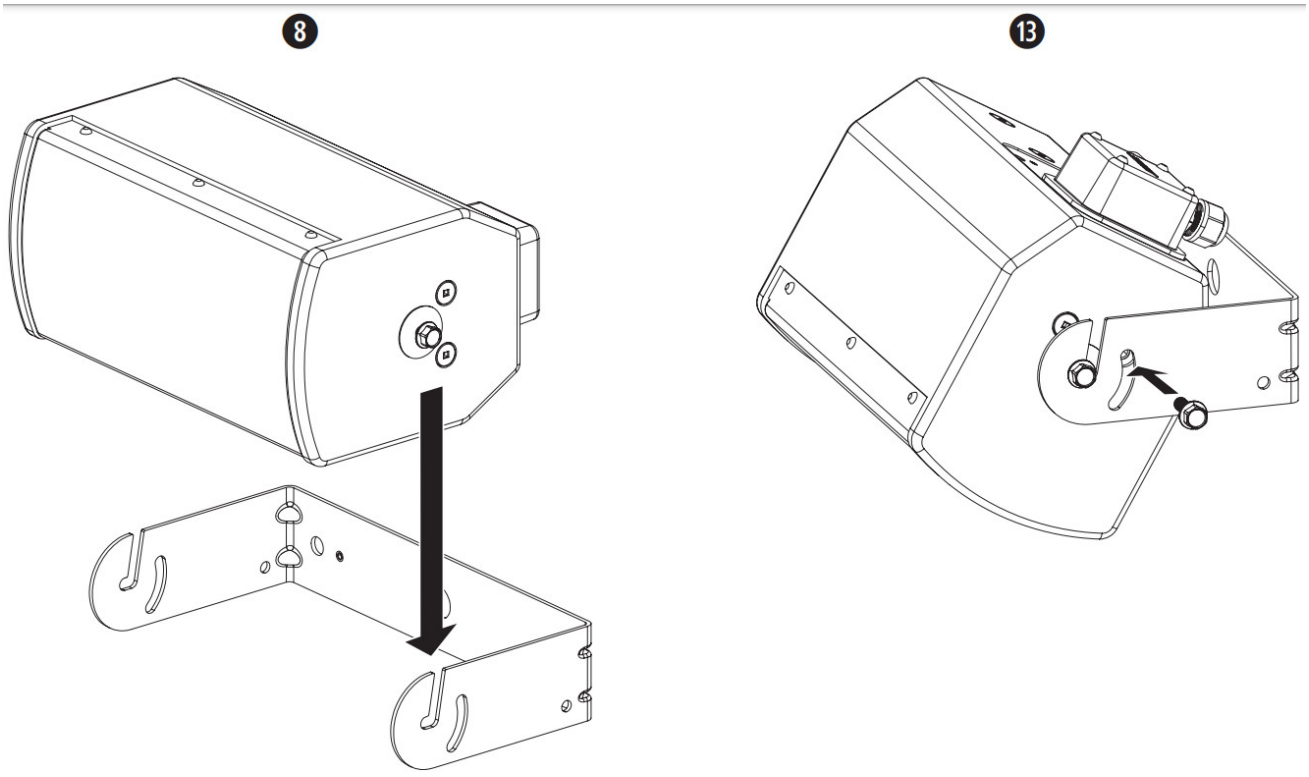
Mounting AMU Loudspeakers with the U-bracket

CAUTION: Before installation, determine the location and position of your AMU loudspeaker. Only remove the plastic inserts that are necessary for your installation. The plastic inserts are factory sealed to prevent water damage. If any insert is left unsealed after installation, the weather-resistant integrity of your loudspeaker could be compromised.

1. Choose a mounting location that will safely support the weight of the loudspeaker.
2. Remove packing materials and place the loudspeaker on the floor beneath the planned suspension point.
3. Using the included T3 square drive, remove the center plastic insert and one other insert (determined by your loudspeaker installation design) on each side of the loudspeaker.
4. Insert an M8 screw through a rubber washer and into the center threaded hole on each side of the loudspeaker. Do not tighten.
5. Hold the U-bracket in the mounting location and mark the holes.

6. Drill holes into the mounting surface using previously marked positions.
7. Attach the U-bracket to the building surface using appropriate fasteners (not included).

   CAUTION: For attaching U-brackets to a surface, choose fasteners that are consistent with all local building codes and requirements to support the weight of the loudspeaker.
8. Hang the loudspeaker on the bracket by lowering the M8 screws into the bracket slots, keeping the rubber washers between the bracket and the speaker enclosure.
9. Connect your wiring to your loudspeaker.
10. Feed the wiring through the gland nut on the input panel cover and tighten the gland nut (see Securing the Wiring on page 16).
11. Attach the input cover using the included M4 screws (see Attaching the Input Panel Cover on page 17).
12. Position the loudspeaker in your desired pitch angle.
13. Insert an M8 screw through the remaining open insert on each side of the loudspeaker.
14. Tighten the four M8 screws with a 10-millimeter socket tool using a torque not to exceed 13.6 to 20.3-newton ·meters (10 to 15-pound ·feet).

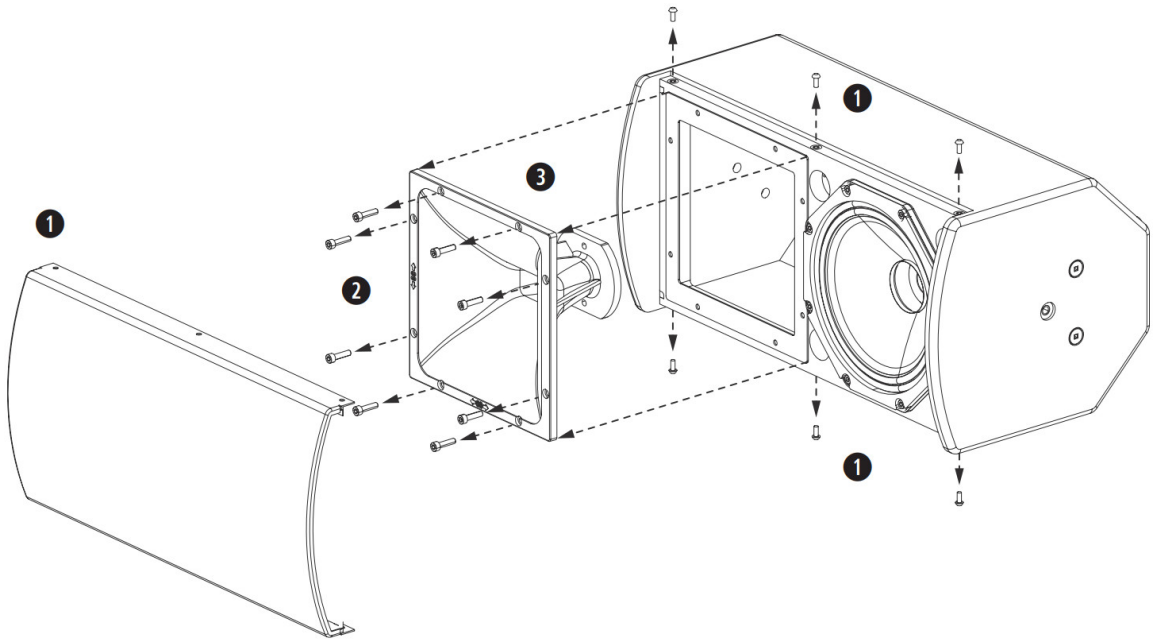


Rotating the High-frequency Waveguides

Note: Only the horizontal mounting orientation has been assessed to EN 54-24 specifications. The high-frequency waveguide in the AMU108, AMU206, and AMU208 loudspeakers can be rotated to provide the desired coverage pattern for horizontal or vertical loudspeaker mounting. These loudspeakers are assembled in the factory for horizontal mounting. To rotate the waveguide for vertical mounting, do the following.

1. Remove the screws (AMU108: 6 screws; AMU206/AMU208: 8 screws) from around the loudspeaker grille and remove the grille from the enclosure.
2. Remove the eight waveguide screws.
3. Pull the waveguide forward, rotate it 90°, and place it back into the enclosure.
4. Secure the waveguide using the screws removed in Step 2.

5. Reattach the grille using the screws removed in Step 1.



Recommended Amplifier Power
Selecting the proper amplifier size for a given loudspeaker requires analysis of the transducer long-term (RMS) power rating, the dynamic range of the input-source material (crest factor), desired sound pressure levels, and other factors. As a general guideline, to optimize ArenaMatch Utility system performance, the following amplifier configurations are recommended.

Loudspeaker	Nominal Impedance	Amp I
AMU105	8 Ω	100 W to 400 W
AMU108	8 Ω	200 W to 800 W
AMU206	8 Ω	250 W to 1000 W
AMU208	8 Ω	300 W to 1200 W

Recommended Signal Processing
Digital signal processing (DSP) equipment is required for infrasonic protection, equalization, and voltage limiting protection.
Recommended loudspeaker DSP presets are available in Bose ControlSpace Designer software and are designed for use with Bose PowerMatch configurable professional amplifiers and ControlSpace ESP and EX processor hardware (sold separately).

Technical Specifications

AMU105

System Performance **Frequency Response (–3 dB)** **1Frequency Range (–10 dB)** **Nominal Coverage Pattern (H × V)** **Recommended High-pass Filter** **Crossover** **70V/100V transformer tap settings**	100 Hz to 16 kHz 90 Hz to 16 kHz 100° × 100° 80 Hz with minimum 12-dB/octave filter Passive (2.0 kHz crossover frequency) 70V: 5W (862 Ω), 10W (455 Ω), 20W (237 Ω), 40W (118 Ω), 80W (58 Ω); 100V: 10W (862 Ω), 20W (455 Ω), 40W (237 Ω), 80W (118 Ω)

Power Handling, long-term con tinuous **Power Handling, peak**	**Bose Extended Lifecycle Test** 2100 W 400 W	**AES Transducer Test** 3150 W 600 W

Sensitivity (SPL / 1 W @ 1 m) **4Calculated Maxi mum SPL@1m5C alculated Maximu m SPL @ 1 m, peak**	**Free Field** 90 dB 110 dB 116 dB	**Wall/Ceiling** 92 dB 112 dB 118 dB	**Free Field** 90 dB 111 dB 117 dB	**Wall/Ceiling** 92 dB 113 dB 119 dB

Sensitivity (1 W @ 4 m) **Measured max. SPL @ 4 m** **Coverage Angle Octave Band** **Horizontal Coverage**	**100V/80W** 75.3 dB 93.1 dB	**Passive** 75.5 dB 93.8 dB
Vertical Coverage **Passive Nominal Impedance** **Rated Noise Voltage / Transformer Rated Noise Power**	**500 Hz** 230° 204° 8 Ω 100V / 80W	**1000 Hz 4000 Hz** 106° 100° 342° 162° 2000 Hz 54° 106°

Transducers **Low Frequency** **High Frequency** **Nominal Impedance**	1 × Bose LF5 high-excursion 5-inch woofer (2-inch voice coil) 1 × Bose EMB2S titanium-diaphragm, neodymium compression drivers (2-inch voice coil) 8 Ω
Enclosure Material **Finish** **Grille** **Environmental** **7Connectors** **Suspension/Mounting** **Dimensions (H × W × D) – millimeters** **Dimensions (H × W × D) – inches** **Net Weight (loudspeaker only)** **Net Weight (with U-bracket)** **Shipping Weight** **Accessories**	Exterior-grade birch plywood Two-part polyurethane coating, black or white Powder-coated perforated stainless steel, acoustic foam, stainless steel mesh Rated for direct-exposure outdoor installations (IP55 per EN60529; IP33C per EN54-24) 1 × barrier strip (accepts 10 to 18 wire gauge) 3 × M8 threaded inserts for U-bracket (per side); 2 × M8 threaded inserts on rear surface (75 mm, 2-bolt pattern) 152 × 332 × 246 with U-bracket 6.0 × 13.1 × 9.7 with U-bracket 6.5 kg (14.4 lb) 7.5 kg (16.5 lb) 9.5 kg (21.0 lb) Included powder-coated steel U-bracket; optional pan-and-tilt bracket

Footnotes

1. Frequency response and range measured on-axis (reference axis) in an anechoic environment with recommended bandpass and EQ.
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 an anechoic environment with a recommended high-pass filter.
5. Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.
6. The specifications data was measured in an anechoic chamber, free-field. The reference plane is on the grille surface. The reference axis is perpendicular to the center of the grille surface. The horizontal plane contains the reference axis and is parallel to the horizontal axis defined by the longest baffle dimension.
7. Tested to IP55 per EN60529 when used in General Purpose Audio installation, not for Fire and Evacuation notification applications. Notified Body certified by UL per the EN54-24 the standard for an IP33C rating, acceptable for use in a Fire and Evacuation Notification System application.

AMU108

System Performance **Frequency Response (–3 dB)** **1Frequency Range (–10 dB)** **Nominal Coverage Pattern (H × V)** **Recommended High-pass Filter** **Crossover** **70V/100V transformer tap settings**	90 Hz to 16 kHz 80 Hz to 16 kHz 90° × 60° (rotatable high-frequency horn) 80 Hz with minimum 12-dB/octave filter Passive (1.4 kHz crossover frequency) 70V: 5W (763 Ω), 10W (414 Ω), 20W (216 Ω), 40W (108 Ω), 80W (53 Ω); 100V: 10W (763 Ω), 20W (414 Ω), 40W (216 Ω), 80W (108 Ω)

Power Handling, long-term continuous **Power Handling, peak**	**Bose Extended Lifecycle Test** 2200 W 800 W	**AES Transducer Test3** 250 W 1000 W

Sensitivity (SPL / 1 W @ 1 m)4 **Calculated Maximum SPL @ 1 m5** **Calculated Maximum SPL @ 1 m peak**	**Free Field** 91 dB 114 dB 120 dB	**Wall/Ceiling** 93 dB 116 dB 122 dB	**Free Field** 91 dB 115 dB 121 dB	**Wall/Ceiling** 93 dB 117 dB 123 dB

EN 54-24 Certified Ratings6 **Sensitivity (1 W @ 4 m)** **Measured max. SPL @ 4 m**	1**00V/80W** 77.3 dB 96.7 dB	**Passive** 77.8 dB 99.4 dB
Coverage Angle Octave Band **Horizontal Coverage** **Vertical Coverage** **Passive Nominal Impedance** **Rated Noise Voltage / Transformer Rated Noise Power**	**500 Hz** 172° 182° **1000 Hz** 106° 106°	**2000 Hz** 84° 86° **4000 Hz** 72° 64°

Transducers **Low Frequency** **High Frequency** **Nominal Impedance**	1 × Bose LF8 high-excursion 8-inch woofer (2-inch voice coil) 1 × Bose EMB2S titanium-diaphragm, neodymium compression drivers (2-inch voice coil)8 Ω

Physical **Enclosure Material** **Finish** **Grille** **Environmental7** **Connectors** **Suspension/Mounting** **Dimensions (H × W × D) – millimeters** **Dimensions (H × W × D) – inches** **Net Weight (loudspeaker only)** **Net Weight (with U-bracket)** **Shipping Weight** **Accessories**	Exterior-grade birch plywood Two-part polyurethane coating, black or white Powder-coated perforated stainless steel, acoustic foam, stainless steel mesh Rated for direct-exposure outdoor installations (IP55 per EN60529; IP33C per EN54-24) 1 × barrier strip (accepts 10 to 18 wire gauge) 3 × M8 threaded inserts for U-bracket (per side); 4 × M8 threaded inserts on rear surface (127 × 70 mm, 4-bolt pattern) 235 × 498 × 316 with U-bracket 9.3 × 19.6 × 12.4 with U-bracket 10.6 kg (23.3 lb) 12.6 kg (27.7 lb) 14.2 kg (31.2 lb) Included powder-coated steel U-bracket; optional pan-and-tilt bracket

Footnotes

1. Frequency response and range measured on-axis in an anechoic environment with recommended bandpass and EQ.

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 an anechoic environment with a recommended high-pass filter.
5. Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.
6. The specifications data was measured in an anechoic chamber, free-field. The reference plane is on the grille surface. The reference axis is perpendicular to the center of the grille surface. The horizontal plane contains the reference axis and is parallel to the horizontal axis defined by the longest baffle dimension.
7. Tested to IP55 per EN60529 when used in General Purpose Audio installation, not for Fire and Evacuation notification applications. Notified Body certified by UL per the EN54-24 the standard for an IP33C rating, acceptable for use in a Fire and Evacuation Notification System application.

AMU206

System Performance	
Frequency Response (1–3 dB)	90 Hz to 16 kHz
Frequency Range (–10 dB)	80 Hz to 16 kHz
Nominal Coverage Pattern (H ×V)	120° × 60° (rotatable high-frequency horn)
Recommended High-pass Filter	80 Hz with minimum 12-dB/octave filter
Crossover	Passive; separate bandpass filters per transducer (300 Hz and 1.5 kHz)
70V/100V transformer tap settings	70V: 5W (882 Ω), 10W (476 Ω), 20W (242 Ω), 40W (120 Ω), 80W (58 Ω); 100V: 10W (882 Ω), 20W (476 Ω),40W (242 Ω), 80W (120 Ω)

Power Handling, long-term continuous	**Bose Extended Lifecycle Test**	**AES Transducer Test**
Power Handling, peak	250 W	300 W
	1000 W	1200 W

	Free Field	Wall/Ceiling	Free Field	Wall/Ceiling
Sensitivity (SPL / 1 W @ 1 m) 4	90 dB	92 dB	90 dB	92 dB
Calculated Maximum SPL @ 1m 5	114 dB	116 dB	115 dB	117 dB
Calculated Maximum SPL @ 1 m, peak	120 dB	122 dB	121 dB	123 dB

EN 54-24 Certified Ratings 6	**100V/80W**		**Passive**	
Sensitivity (1 W @ 4 m) Measured max. SPL @ 4 m Coverage Angle Octave Band Horizontal Coverage Vertical Coverage Passive Nominal Impedance Rated Noise Voltage / Transformer Rated Noise Power	77.0 dB		77.5 dB	
	96.3 dB		99.8 dB	
	500 Hz	**1000 Hz**	**2000 Hz**	**4000 Hz**
	110°	134°	72°	94°
	192°	138°	92°	58°
	8 Ώ 100V / 80W			

Transducers	
Low Frequency	2 × Bose LF6 high-excursion 6-inch woofer (2-inch voice coil)
High Frequency	1 × Bose EMB2S titanium-diaphragm, neodymium compression drivers (2-inch voice coil)
Nominal Impedance	8 Ω

Physical	
Enclosure Material	Exterior-grade birch plywood
Finish	Two-part polyurethane coating, black or white
Grille	Powder-coated perforated stainless steel, acoustic foam, stainless steel mesh
Environmental 7	Rated for direct-exposure outdoor installations (IP55 per EN60529; IP33C per EN54-24)
Connectors	1 × barrier strip (accepts 10 to 18 wire gauge)
Suspension/Mounting	3 × M8 threaded inserts for U-bracket (per side); 4 × M8 threaded inserts on the rear surface (127 × 70 mm, 4-bolt pattern)
Dimensions (H × W × D) – millimeters	191 × 580 × 289 with U-bracket
Dimensions (H × W × D) – inches	7.5 × 22.8 × 11.4 with U-bracket
Net Weight (loudspeaker only)	12.2 kg (26.8 lb)
Net Weight (with U-bracket)	13.8 kg (30.5 lb)
Shipping Weight	16.1 kg (35.5 lb)
Accessories	Included powder-coated steel U-bracket; optional pan-and-tilt bracket

Footnotes

1. Frequency response and range measured on-axis in an anechoic environment with recommended bandpass and EQ.
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 an anechoic environment with a recommended high-pass filter.
5. Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.
6. The specifications data was measured in an anechoic chamber, free-field. The reference plane is on the grille surface. The reference axis is perpendicular to the center of the grille surface.

   The horizontal plane contains the reference axis and is parallel to the horizontal axis defined by the longest baffle dimension.
7. Tested to IP55 per EN60529 when used in General Purpose Audio installation, not for Fire and Evacuation notification applications. Notified Body certified by UL per the EN54-24 standard for an IP33C rating, acceptable for use in a Fire and Evacuation Notification System application.

AMU208

System Performance	
Frequency Response (–3 dB)	80 Hz to 16 kHz
Frequency Range (–10 dB)	70 Hz to 16 kHz
Nominal Coverage Pattern (H × V)	90° × 60° (rotatable high-frequency horn)
Recommended High-pass Filter	70 Hz with minimum 12-dB/octave filter
Crossover	Passive; separate bandpass filters per transducer (200 Hz and 1.2 kHz)
70V/100V transformer tap settings	70V: 5W (876 Ω), 10W (485 Ω), 20W (250 Ω), 40W (125 Ω), 80W (62 Ω); 100V: 10W (876 Ω), 20W (485 Ω), 40W (250 Ω), 80W (125 Ω)

	Bose Extended Life cycle Test	AES Transducer Test
Power Handling, long-term continuous	300 W	400 W
Power Handling, peak		

	Free Field	**Wall/Ceiling**	**Free Field**	**Wall/Ceiling**
Sensitivity (SPL /1W @1 m)4	94 dB	96 dB	94 dB	96 dB
Calculated Maximum SPL@1m 5	119 dB	121 dB	120 dB	122 dB
Calculated Maximum SPL @ 1 m, peak	125 dB	127 dB	126 dB	128 dB

EN 54-24 Certified Ratings 6	**100V/80W**		**Passive**	
Sensitivity (1 W @ 4 m)	81.0 dB		81.0 dB	
Measured max. SPL @ 4 m	99.3 dB		103.8 dB	
Coverage Angle Octave Band	**500 Hz**	**1000 Hz**	**2000 Hz**	**4000 Hz**
Horizontal Coverage	68°	38°	110°	74°
Vertical Coverage	186°	124°	80°	64°
Passive Nominal Impedance Rated Noise Voltage / Transformer Rated Noise Power	8 Ω 100V / 80W			

Transducers	
Low Frequency	2 × Bose LF8 high-excursion 8-inch woofer (2-inch voice coil)
High Frequency	1 × Bose EMB2S titanium-diaphragm, neodymium compression drivers (2-inch voice coil)
Nominal Impedance	8 Ω

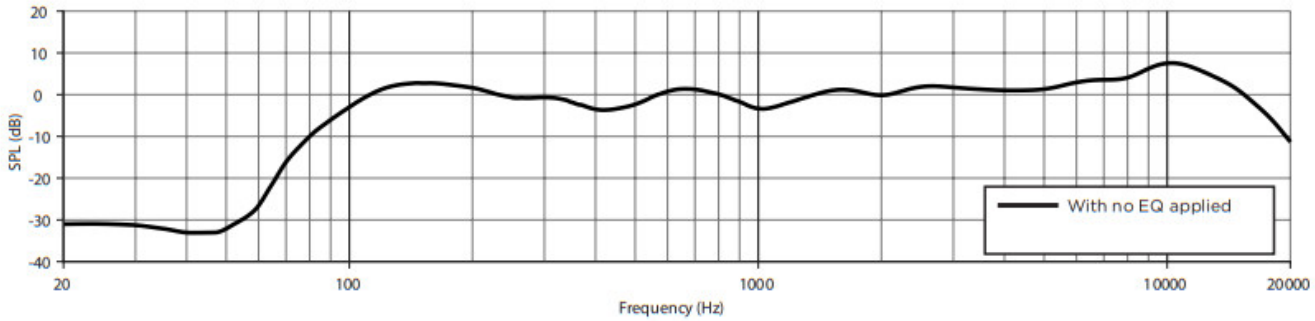
Enclosure Material	Exterior-grade birch plywood
Finish	Two-part polyurethane coating, black or white
Grille	Powder-coated perforated stainless steel, acoustic foam, stainless steel mesh
Environmental 7	Rated for direct-exposure outdoor installations (IP55 per EN60529; IP33C per EN54-24)
Connectors	1 × barrier strip (accepts 10 to 18 wire gauge)
Suspension/Mounting	3 × M8 threaded inserts for U-bracket (per side); 4 × M8 threaded inserts on the rear surface (127 × 70 mm, 4-bolt pattern)
Dimensions (H × W × D) – millimeters	235 × 713 × 316 with U-bracket
Dimensions (H × W × D) – inches	9.3 × 28.1 × 12.4 with U-bracket
Net Weight (loudspeaker only)	17.0 kg (37.5 lb)
Net Weight (with U-bracket)	19.5 kg (43.0 lb)
Shipping Weight	23.1 kg (51.0 lb)
Accessories	Included powder-coated steel U-bracket; optional pan-and-tilt bracket

Footnotes

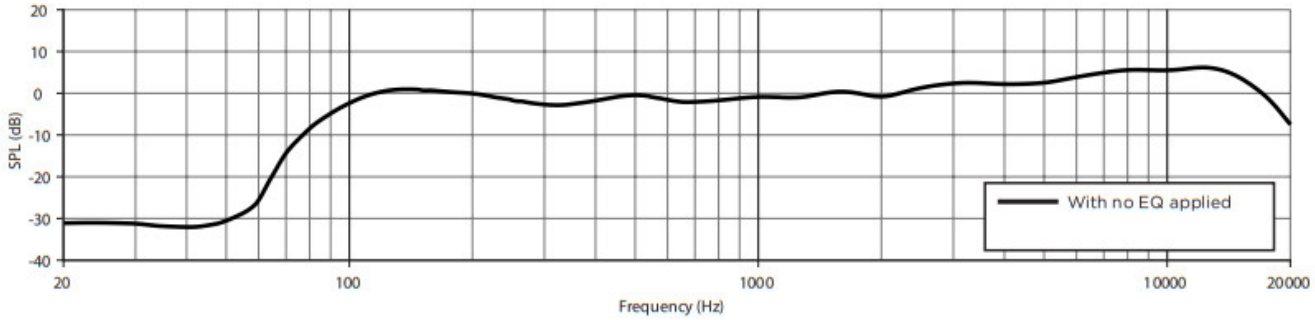
1. Frequency response and range measured on-axis in an anechoic environment with recommended bandpass and EQ.
2. Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration.
3. AES standard 2-hour duration with IEC system noise.
4. Sensitivity measured in an anechoic environment with a recommended high-pass filter.
5. Maximum SPL calculated using sensitivity and power ratings, exclusive of power compression.
6. The specifications data was measured in an anechoic chamber, free-field. The reference plane is on the grille surface. The reference axis is perpendicular to the center of the grille surface.

   The horizontal plane contains the reference axis and is parallel to the horizontal axis defined by the longest baffle dimension.
7. Tested to IP55 per EN60529 when used in General Purpose Audio installation, not for Fire and Evacuation notification applications. Notified Body certified by UL per the EN54-24 standard for an IP33C rating, acceptable for use in a Fire and Evacuation Notification System application.

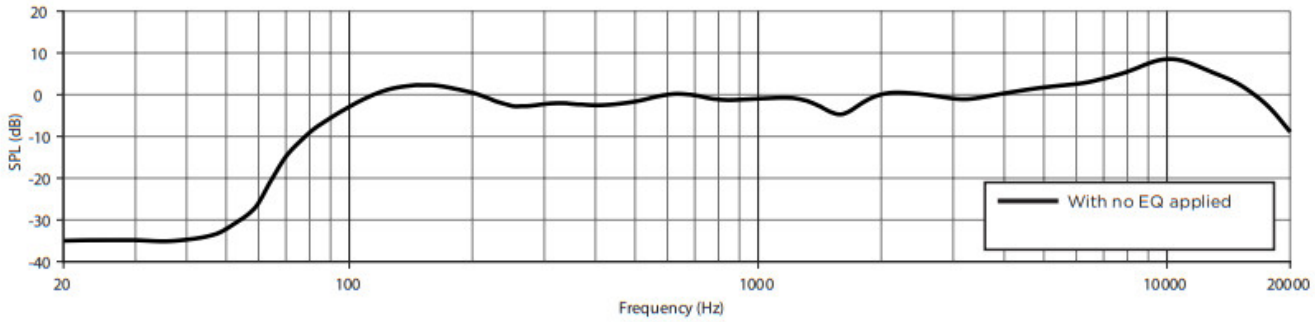
AMU105 Frequency Response



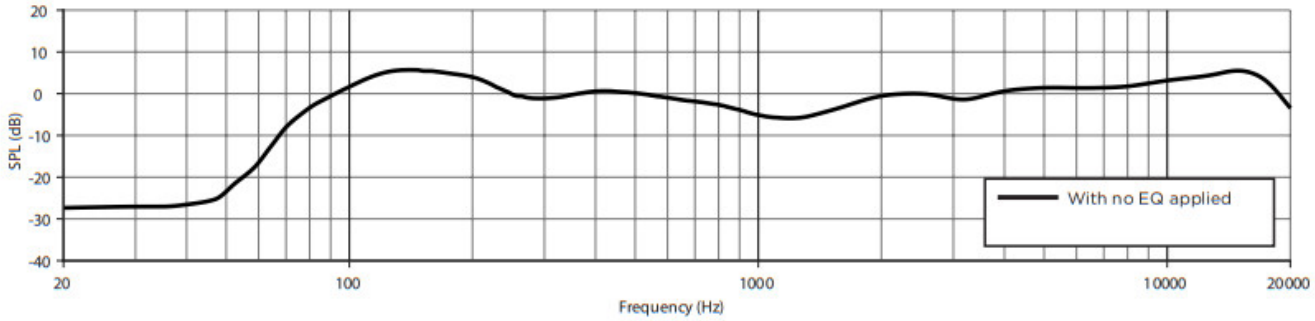
AMU108 Frequency Response



AMU206 Frequency Response



AMU208 Frequency Response



UK CA 0843	CE 2821
Bose Corporation 100 The Mountain Rd, Framingham, MA 01701 21 DOP 429534-9	
EN 54-24: 2008 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings ArenaMatch Utility AMU105 Provided options: Type B For DOP 429534-9, see pro.Bose.com/AMU105DOP_NL	

Framingham, MA 01701-9168 the USA
PRO.BOSE.COM
AM830462 Rev. 03
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830462-0040

Documents / Resources

	BOSE AMU208 ArenaMatch Utility Small-format Foreground/Fill Loudspeakers [pdf] Installation Guide AMU105, AMU108, AMU206, AMU208, AMU208 ArenaMatch Utility Small-format Foreground, Fill Loudspeakers, ArenaMatch Utility Small-format Foreground, Fill Loudspeakers