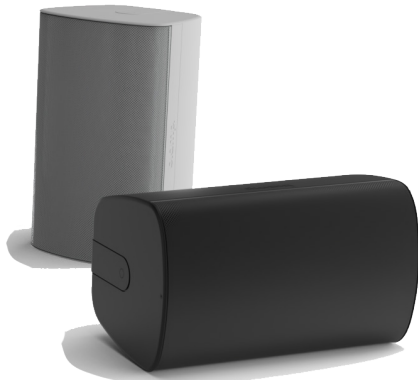


EX-S10

TWO-WAY COAXIAL 10-INCH
SURFACE MOUNT LOUDSPEAKER



APPLICATIONS

DISTRIBUTED

Bars and Restaurants · Hotels · Casinos
Shopping Malls · Health and Fitness Clubs
Houses of Worship · Presentation Spaces
Sports Facilities · Outdoor Entertainment
Exhibit Halls · Amusement and Theme Parks

DESCRIPTION

The Desono™ EX surface mount loudspeakers provide excellent acoustic performance in elegant, attractive aesthetics for a diverse range of indoor and outdoor distributed applications. EX Series includes three two-way, full-range models and one matching-enclosure subwoofer. All full-range models include 70 V/100 V transformers and low impedance inputs. They deliver high voice intelligibility, wide bandwidth and exceptional uniform coverage.

The Desono EX-S10, the largest member of the EX Series, 10" two-way surface mount loudspeaker provides excellent musicality with deep LF extension. It's perfectly suited as the front-of-house in small venues or used in distributed applications without subwoofers.

Designed for easy and fast installation, our innovative, patented ClickMount™ brackets provide installers with two distinct mounting options. The ClickMount pan-tilt bracket provides indexed aiming control and allows for mounting EX Series quickly in either vertical or horizontal orientation without moving the bracket position. The ClickMount U-Bracket is also available for low-profile mounting or exterior use and includes the ClickPlug with an integrated gland nut for weather-resistant applications. Both brackets are theft and tamper resistant.

FEATURES

- Exceptional audio clarity with small footprint and attractive styling
- Uniform coverage from coaxially mounted HF/LF drivers
- 6-position switch selects 70 V/100 V taps or low impedance bypass
- ETL listed to comply with UL 1480A, CSA 62368-1, CE marked, and RoHS compliant
- EN54-24 and ISO 7240-24 certification

TECHNICAL SPECIFICATIONS¹

Operating Mode	Passive with selectable low-impedance or 70 V/100 V operation		
Operating Environment	Indoor/Outdoor		
Operating Range (-10dB)²	48 Hz to 20 kHz		
Nominal Beamwidth (H x V)	100° x 100°		
Transducers	LF 1 x 10" (250 mm) treated paper cone HF 1 x 1.4" (35 mm) voice coil compression driver		
Sensitivity³	@ 1 m	91 dB (2.83 V)	91 dB (1 W, 8 Ω)
Nominal Continuous Power Handling⁴	49 W (300 W, 8 Ω Nominal Impedance)		
Nominal Maximum SPL⁵ (Processed)	@ 1 m	Continuous 118 dB	Peak 124 dB
Rated Continuous Voltage⁶	45.7 V (33 dBV)		
Rated Maximum SPL⁷ (Processed)	@ 1 m	Continuous 114 dB	Peak 126 dB
Transformer	70 V: 120 W, 60 W, 30 W, 15 W; 100 V: 120 W, 60 W, 30 W		
Crossover / Protection	1.48 kHz crossover, driver protection circuitry		
Required Accessories	48 Hz, 18 dB / oct. Butterworth high pass filter; DSP preset		
Recommended Amplifiers	300 W - 600 W, 8 Ω (49 V - 69 V)		

PHYSICAL

Input Connection	Lever-actuated wire clamping 4-position terminal block with pass-through
Controls	Wattage / low impedance selector switch
Mounting Provisions	ClickMount pan-tilt bracket <u>or</u> ClickMount U-Bracket
Compliance	ETL listed to comply with UL 1480A, CSA STD C22.2# 62368-1, EN54-24, ISO 7240-24, IEC 62368-1
Environmental Rating	IP54 per IEC 60529, IEC 60068-2-5 (Solar Radiation), IEC 60068-2-11 (Salt Mist), IEC 60068-2-42 (SO2), IEC 60068-2-60 (Chlorine)
Dimensions H x W x D (including ClickMount)	529 x 309 x 439 mm (20.82" x 12.17" x 17.28")
Dimensions H x W x D (including U-bracket)	548 x 309 x 355 mm (21.58" x 12.17" x 14.00")
Weight (loudspeaker only)	15.2 kg [33.43 lbs]
Finish	Refer to the Technical Drawings (pages 3-4)
Models (Order by mounting option)	EX-S10-CM [-B,-W] - loudspeaker with large ClickMount pan-tilt bracket EX-S10-UB [-B,-W] - loudspeaker with ClickMount U-Bracket and ClickPlug

OPTIONS

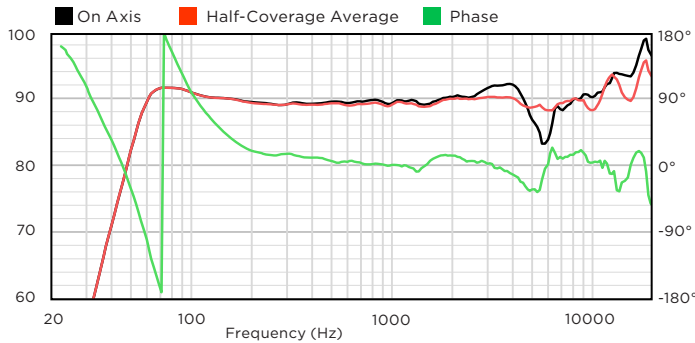
Accessories	CMX-LG [-B,-W] - Large ClickMount Pan-tilt Bracket Kit EXUB-S10 [-B,-W] - EX-S10 ClickMount U-Bracket kit
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DESONO

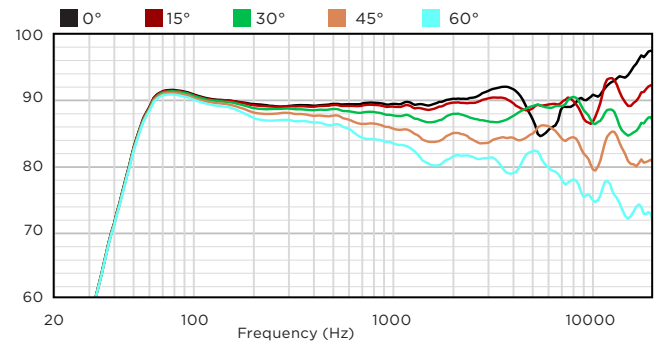
EX-S10

TWO-WAY COAXIAL 10-INCH
SURFACE MOUNT LOUDSPEAKER

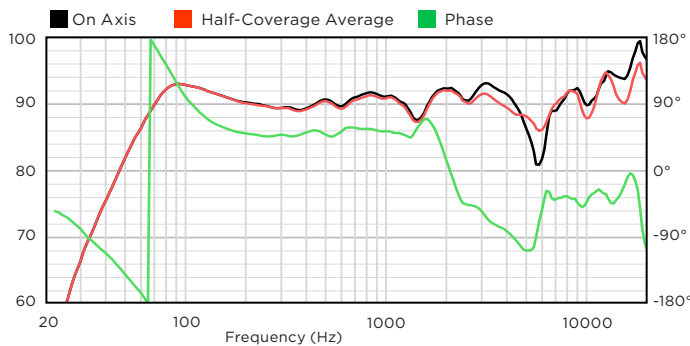
AXIAL PROCESSED SENSITIVITY (dB SPL)⁸



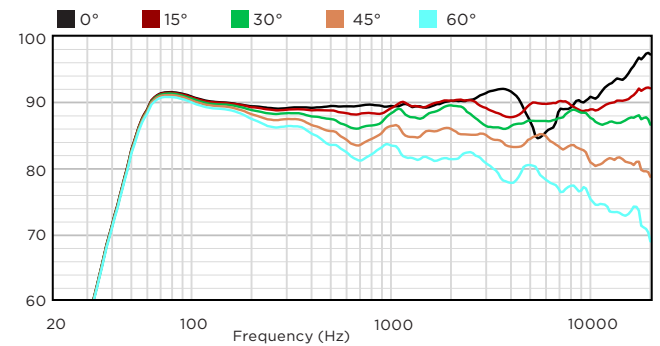
HORIZONTAL OFF-AXIS RESPONSE (dB SPL)⁹



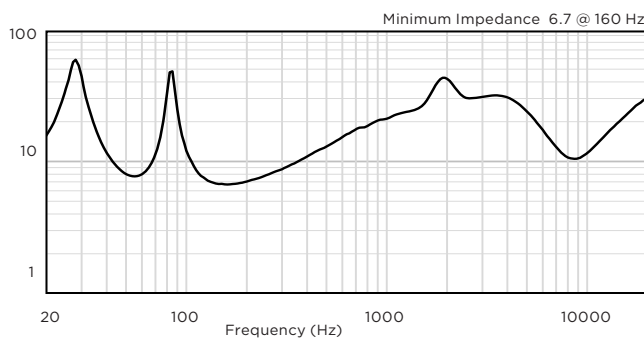
AXIAL SENSITIVITY (dB SPL)⁸



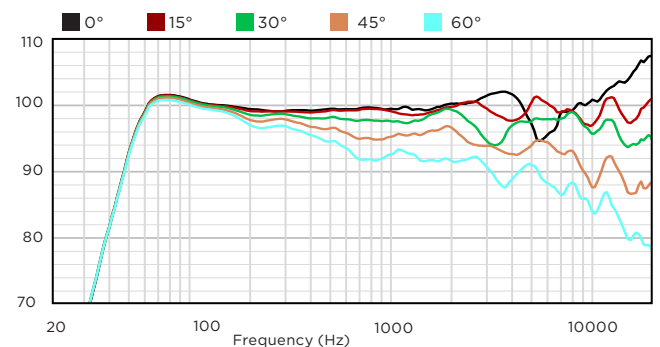
VERTICAL OFF-AXIS UP RESPONSE (dB SPL)⁹



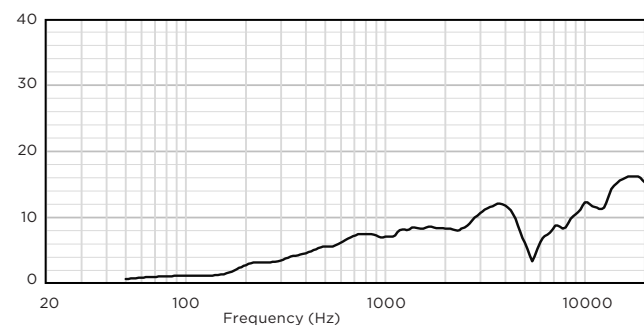
IMPEDANCE (Ω)



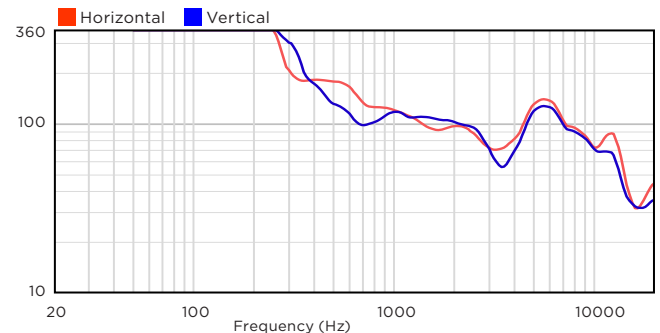
VERTICAL OFF-AXIS DOWN RESPONSE (dB SPL)⁹



DIRECTIVITY INDEX (dB)¹⁰



BEAMWIDTH (degrees)¹¹



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TWO-WAY COAXIAL 10-INCH
SURFACE MOUNT LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH [EX-S10-CM]

H x W x D

529 x 309 x 439 mm

[20.82" x 12.17" x 17.28"] (including ClickMount)

Unit Weight

15.2 kg [33.43 lbs] loudspeaker only

16.7 kg [36.77 lbs] loudspeaker + bracket

Shipping Weight

TBD

Grille

Powder-coated perforated Marine Grade aluminum backed with

hydrophobic cloth

Black or White

Enclosure / Bracket / Finish

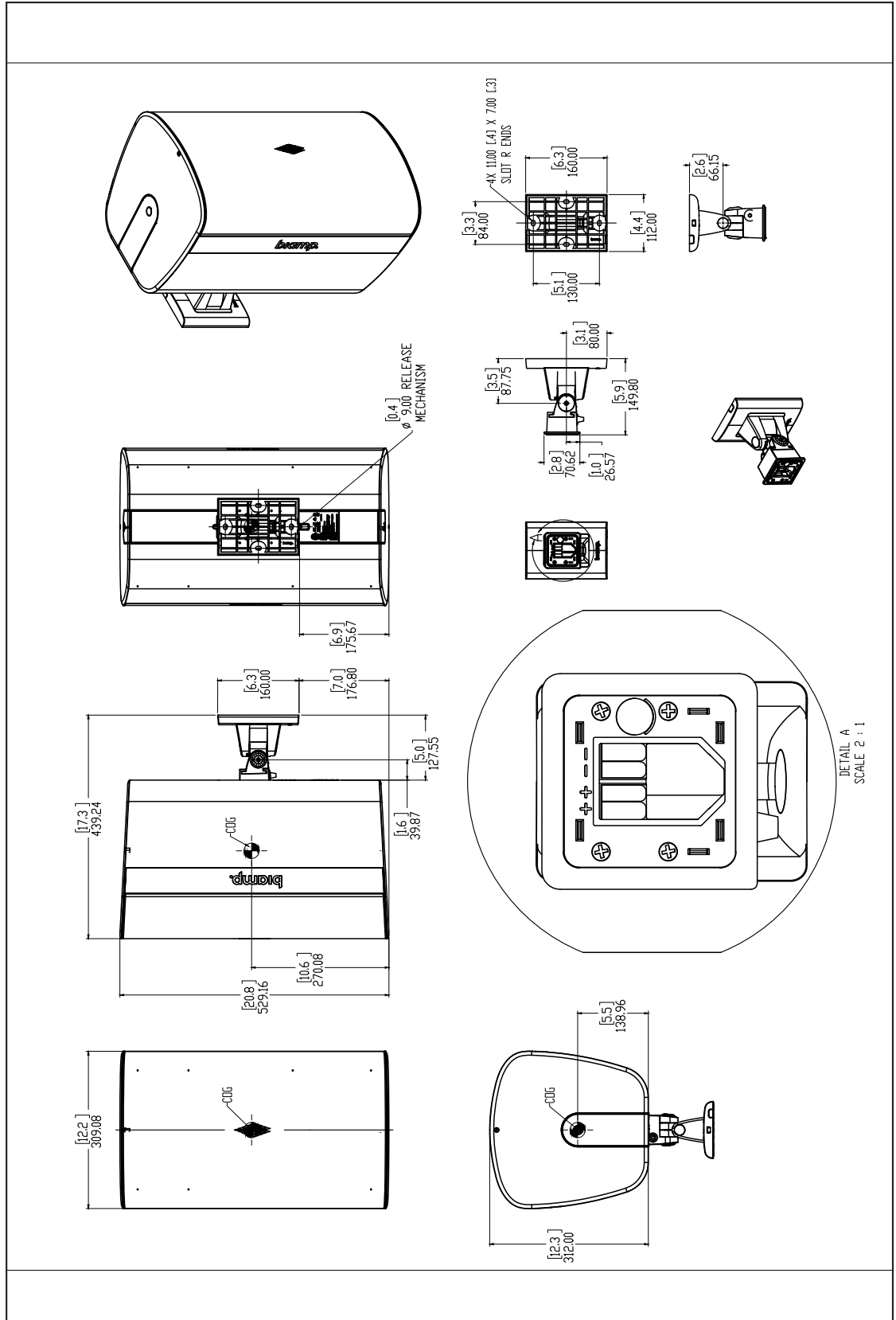
High-impact UL94 V0 rated polycarbonate/ABS blend, painted UV

resistant matte finish

Bracket: Heavily reinforced glass-filled nylon with UV-resistant painted

matte finish cover

Color: Black (RAL 9017) or White (RAL 9016)



DESONO

EX-S10

TWO-WAY COAXIAL 10-INCH
SURFACE MOUNT LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH [EX-S10-UB]

H x W x D

548 x 309 x 355 mm

[21.58" x 12.17" x 14.00"] (including U-bracket)

Unit Weight

15.2 kg [33.43 lbs] loudspeaker only

16.7 kg [36.77 lbs] loudspeaker + bracket

Shipping Weight

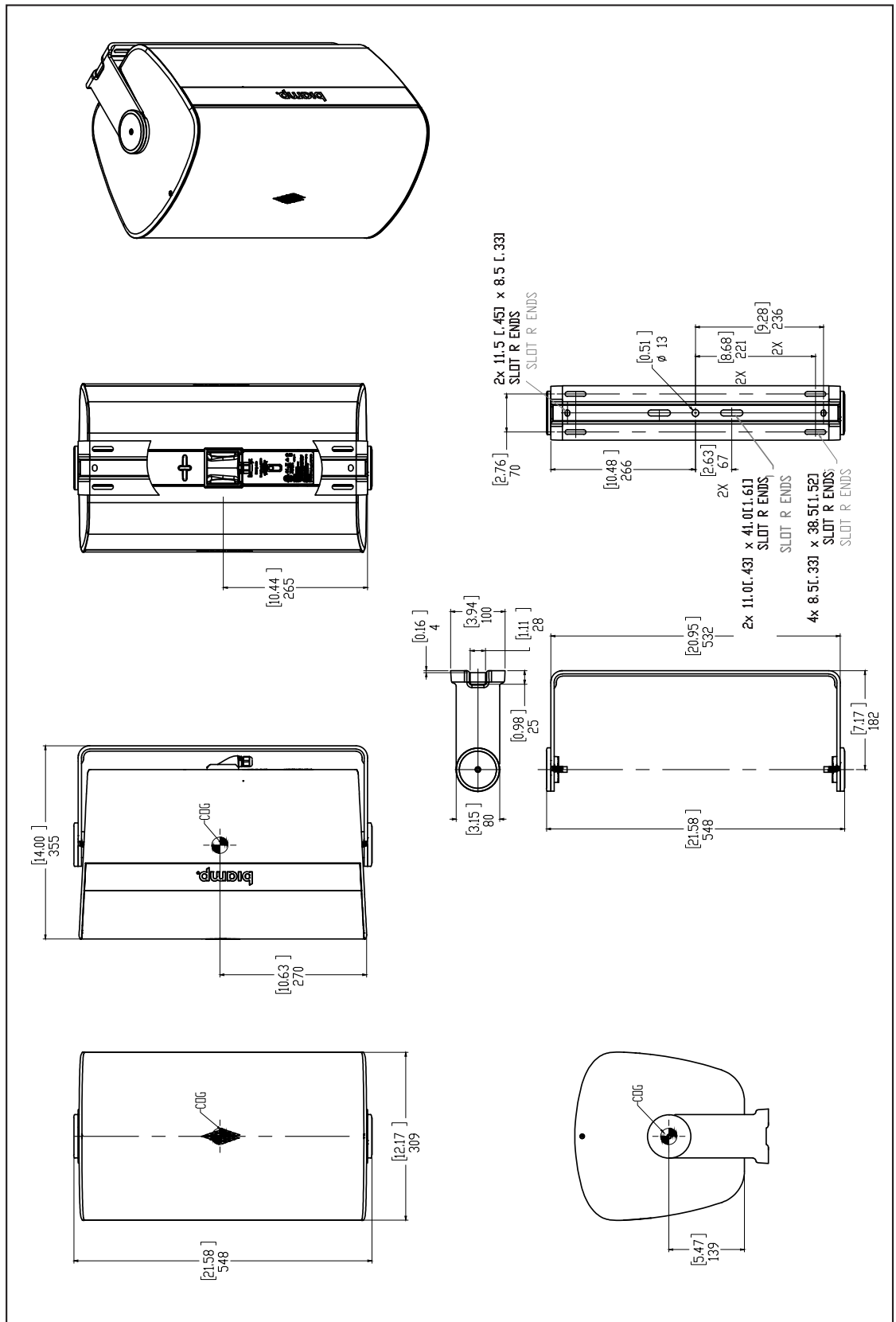
TBD

Grille and U-Bracket

Powder-coated Marine Grade aluminum. Grille is perforated and backed with hydrophobic cloth
Black (RAL 9017) or White (RAL 9016)

Enclosure / Finish

High-impact UL94 5VB rated polycarbonate/ABS blend, painted
UV resistant matte finish
Black (RAL 9017) or White (RAL 9016)



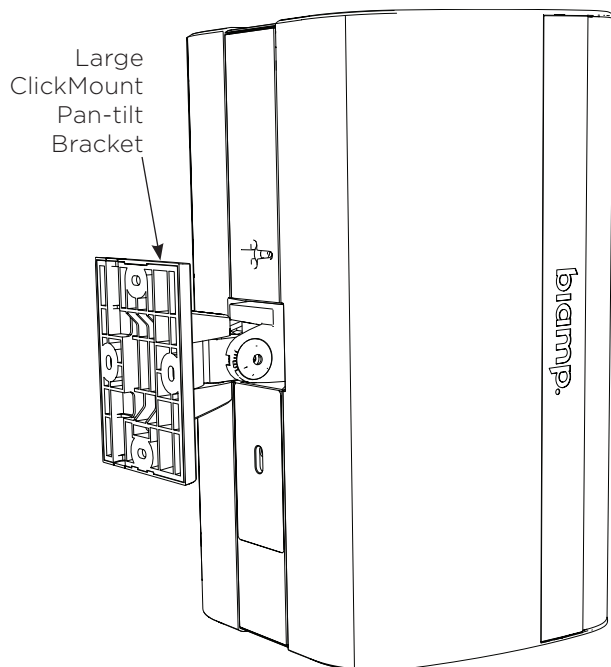
DESONO

EX-S10

TWO-WAY COAXIAL 10-INCH
SURFACE MOUNT LOUDSPEAKER

EX-S10-CM, EX-S10SUB-CM

EX-S10 Loudspeaker with ClickMount pan-tilt bracket



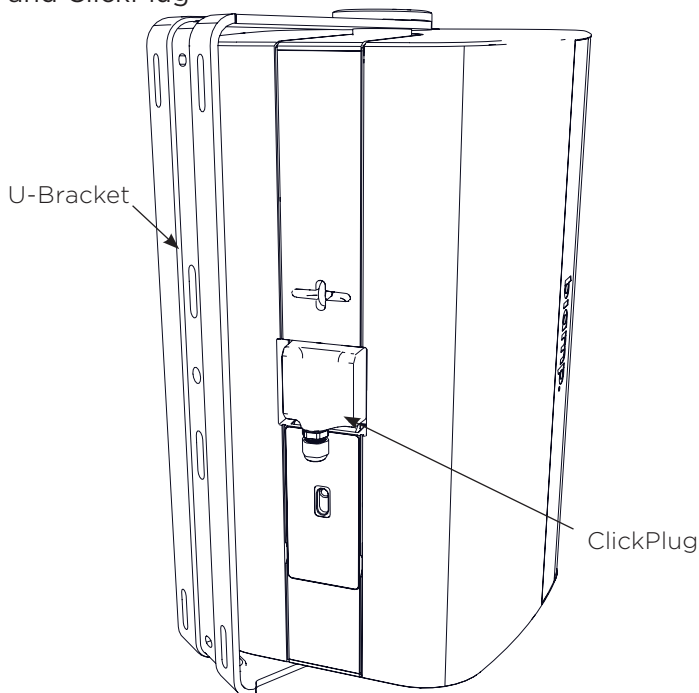
Pivot angle (portrait orientation)

Horizontal 120° in 10° increments

Vertical 56° in 8° increments (32° down-tilt)

EX-S10-UB, EX-S10SUB-UB

EX-S10 Loudspeaker with ClickMount U-Bracket and ClickPlug



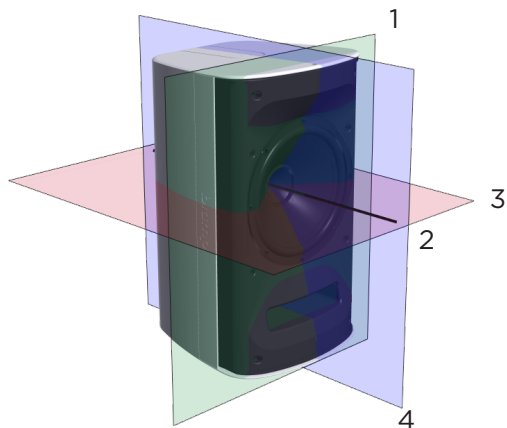
Pivot angle

200° in 10° increments

SPECIFICATIONS FOR EN54-24

Sensitivity (1 W, 4 m)	77.7 dB	
Maximum SPL (4 m)	99.9 dB (Low Z)	98.1 dB (120 W tap)
Coverage (~6 dB) Horiz/Vert	500 Hz: 175°/140° 1 kHz: 110°/110°	2 kHz: 105°/105° 4 kHz: 90°/90°
Rated Impedance for Taps	Low Z: 8 Ω 120 W: 35 Ω; 60 W: 70 Ω; 30 W: 150 Ω; 15 W: 300 Ω	

AXES AND PLANES



1. Reference Plane (green) is coincident with the front of the LF mounting ring
2. Reference Axis (black) perpendicular to the reference plane, passing through the center of the coaxial LF/HF driver
3. Horizontal Plane (red) intersects the reference plane and the vertical plane at a right angle and includes the reference axis
4. Vertical Plane (blue) intersects the reference plane at a right angle including the reference axis and the center point of the cabinet's front radius

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice. Data presented on this data sheet represents the basic performance specifications for the model. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: biamp.com

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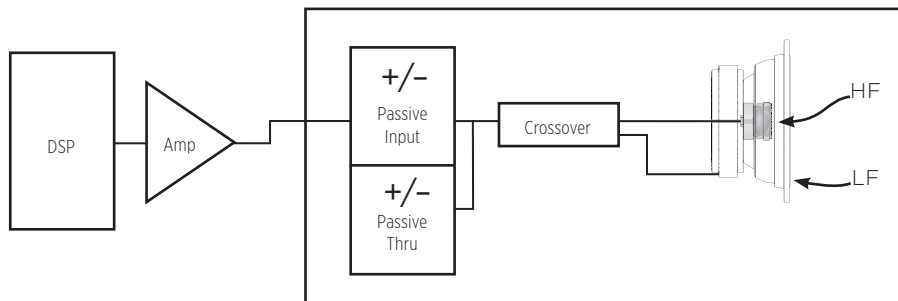
DATA SHEET

DESONO™

EX-S10

TWO-WAY COAXIAL 10-INCH
SURFACE MOUNT LOUDSPEAKER

CONNECTION DIAGRAMS



Single amp

