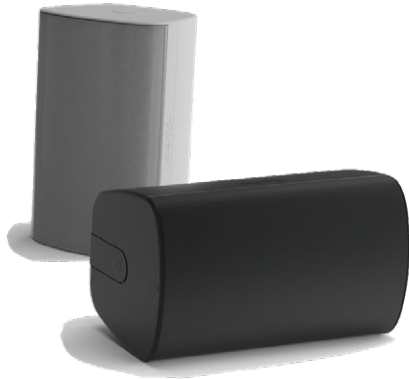


# EX-S10SUB HIGH OUTPUT 10-INCH SURFACE MOUNT SUBWOOFER



## 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-S10SUB, 10" subwoofer provides additional deep bass to the EX-S6 or EX-S8 systems for full-range, foreground music playback. With its discreet matching enclosure, EX-S10SUB easily blends in the background of an application, making it easy to hear, but difficult to spot

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 discreet styling
- Easy to install with two mounting options
- Low frequency boost for distributed applications
- ETL listed to comply with UL 1480A, CSA 62368-1, CE marked, and RoHS compliant

## TECHNICAL SPECIFICATIONS<sup>1</sup>

Operating Mode	Passive, low impedance		
Operating Environment	Indoor/Outdoor		
Operating Range (-10dB) <sup>2</sup>	38 Hz to 140 Hz		
Nominal Beamwidth (H x V)	Omnidirectional		
Transducer	LF 1 x 10" (250 mm) treated paper cone		
Sensitivity <sup>3</sup>	89 dB (2.83 V)	89 dB (1 W, 8Ω nominal impedance)	
Nominal Continuous Power Handling <sup>4</sup>	49 V (300 W, 8Ω)		
Nominal Maximum SPL <sup>5</sup> (Processed)	Crossover Presets	Continuous	Peak
	UXO 80 Hz UXO 125 Hz	112 dB 113 dB	118 dB 119 dB
Rated Continuous Voltage <sup>6</sup>	39.8 V (32 dBV)		
Rated Maximum SPL <sup>7</sup> (Processed)	Crossover Presets	Continuous	Peak
	UXO 80 Hz UXO 125 Hz	110 dB 111 dB	122 dB 123 dB
Required Processing	35 Hz, 18 dB high-pass filter; DSP preset		
Recommended Amplifiers	300 W - 600 W, 8Ω (49 V - 69 V)		

## PHYSICAL

Input Connection	Lever-actuated wire clamping 4-position terminal block with pass-through
Controls	None
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
Environmental Rating	IP54 per IEC 60529, IEC 60068-2-5 (Solar Radiation), IEC 60068-2-11 (Salt Mist), IEC 60068-2-42 (SO <sub>2</sub> ), IEC 60068-2-60 (Chlorine)
Dimensions H x W x D	529 mm x 310 mm x 312 mm [20.8" x 12.2" x 12.3"]
Weight (loudspeaker only)	12.8 kg [28.26 lbs]
Finish	Refer to the Technical Drawings (pages 2-3)
Models (Order by mounting option)	<b>EX-S10SUB-CM [-B,-W]</b> - loudspeaker with large ClickMount pan-tilt bracket <b>EX-S10SUB-UB [-B,-W]</b> - loudspeaker with ClickMount U-Bracket and ClickPlug

## OPTIONS

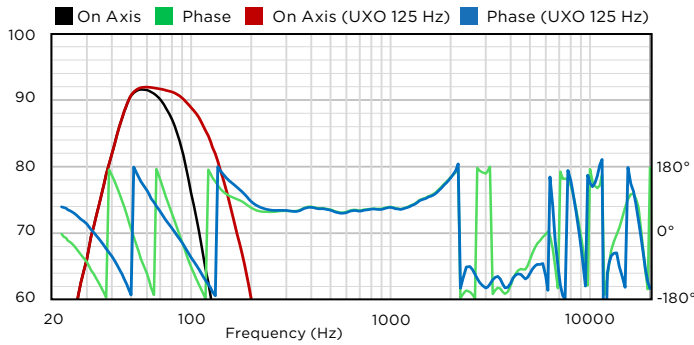
Accessories	<b>CMX-LG [-B,-W]</b> - Large ClickMount Pan-tilt Bracket Kit <b>EXUB-S10 [-B,-W]</b> - EX-S10 ClickMount U-Bracket kit
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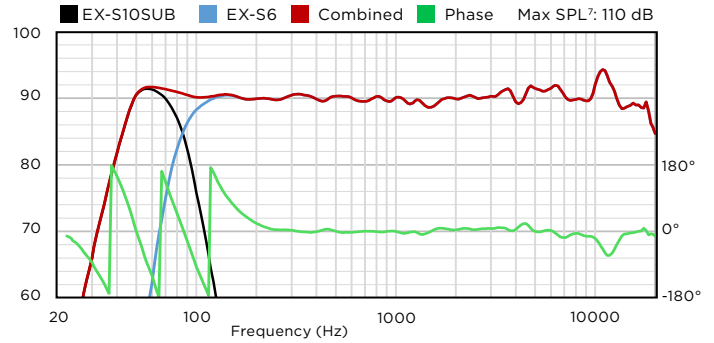
# EX-S10SUB

HIGH OUTPUT 10-INCH  
SURFACE MOUNT SUBWOOFER

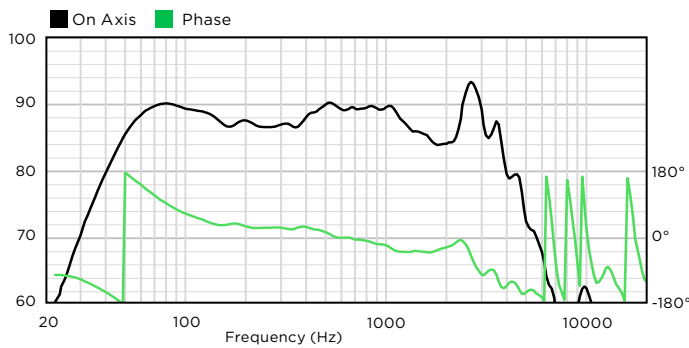
## AXIAL PROCESSED SENSITIVITY (dB SPL)<sup>8</sup>



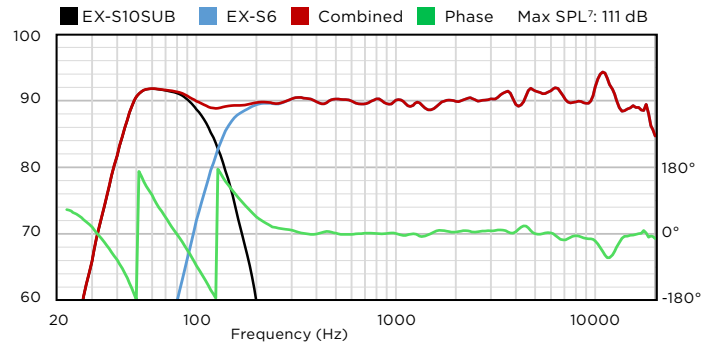
## PROCESSED SENSITIVITY w/EX-S6 UXO 80 Hz (dB SPL)<sup>8</sup>



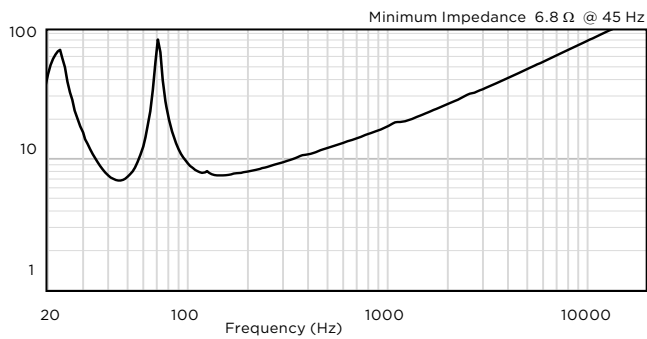
## AXIAL SENSITIVITY (dB SPL)<sup>8</sup>



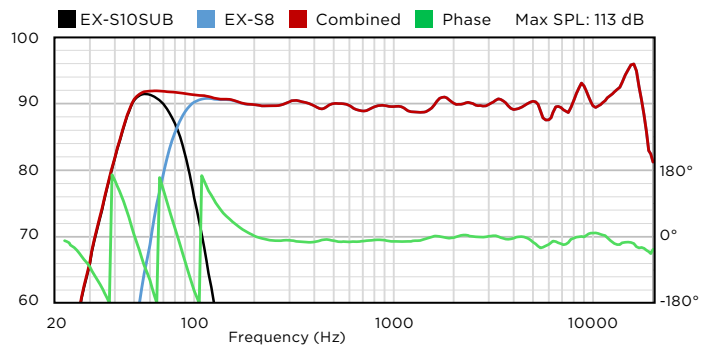
## PROCESSED SENSITIVITY w/EX-S6 UXO 125 Hz (dB SPL)<sup>8</sup>



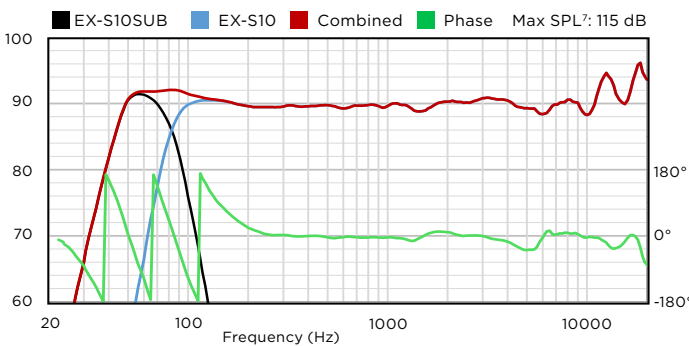
## IMPEDANCE (Ω)



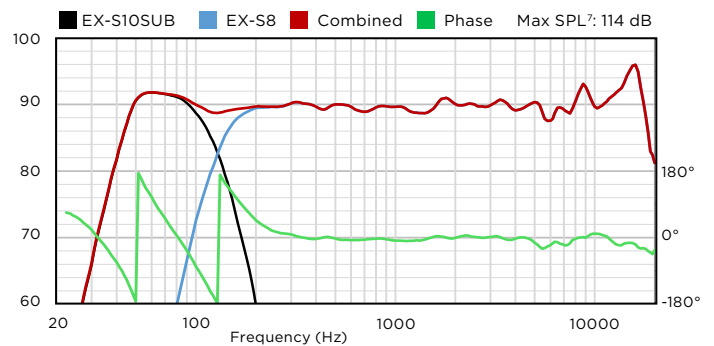
## PROCESSED SENSITIVITY w/EX-S8 UXO 80 Hz (dB SPL)<sup>8</sup>



## PROCESSED SENSITIVITY w/EX-S10 UXO 80 Hz (dB SPL)<sup>8</sup>



## PROCESSED SENSITIVITY w/EX-S8 UXO 125 Hz (dB SPL)<sup>8</sup>



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# EX-S10SUB

HIGH OUTPUT 10-INCH  
SURFACE MOUNT SUBWOOFER

**TECHNICAL DRAWING / DIMENSIONS / FINISH [EX-S10SUB-CM]**

**H x W x D**

529 mm x 310 mm x 312 mm  
[20.8" x 12.2" x 12.3"]

**Unit Weight**

12.8 kg [28.26 lbs] loudspeaker only  
13.4 kg [29.49 lbs] loudspeaker + bracket

**Shipping Weight**

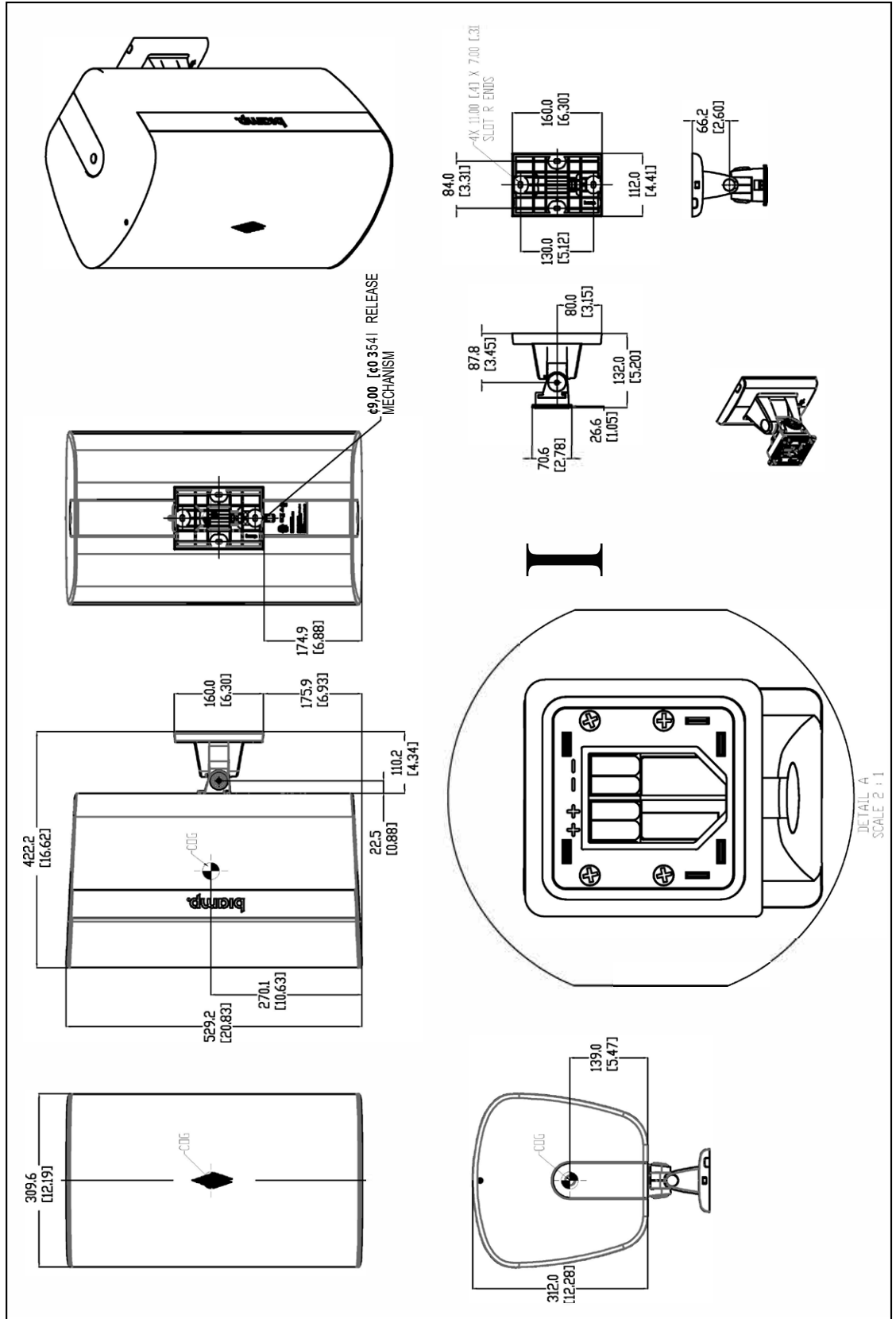
TBD

**Grille**

Powder-coated perforated Marine Grade aluminum backed with hydrophobic cloth  
Black or White

**Enclosure / Bracket / Finish**

High-impact UL94 5VB 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)



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# EX-S10SUB

HIGH OUTPUT 10-INCH  
SURFACE MOUNT SUBWOOFER

**TECHNICAL DRAWING / DIMENSIONS / FINISH [EX-S10SUB-UB]**

**H x W x D**

529 mm x 309 mm x 312 mm  
[20.8" x 12.2" x 12.3"]

**Unit Weight**

12.8 kg [28.26 lbs] loudspeaker only  
14.3 kg [31.60 lbs] loudspeaker + bracket

**Shipping Weight**

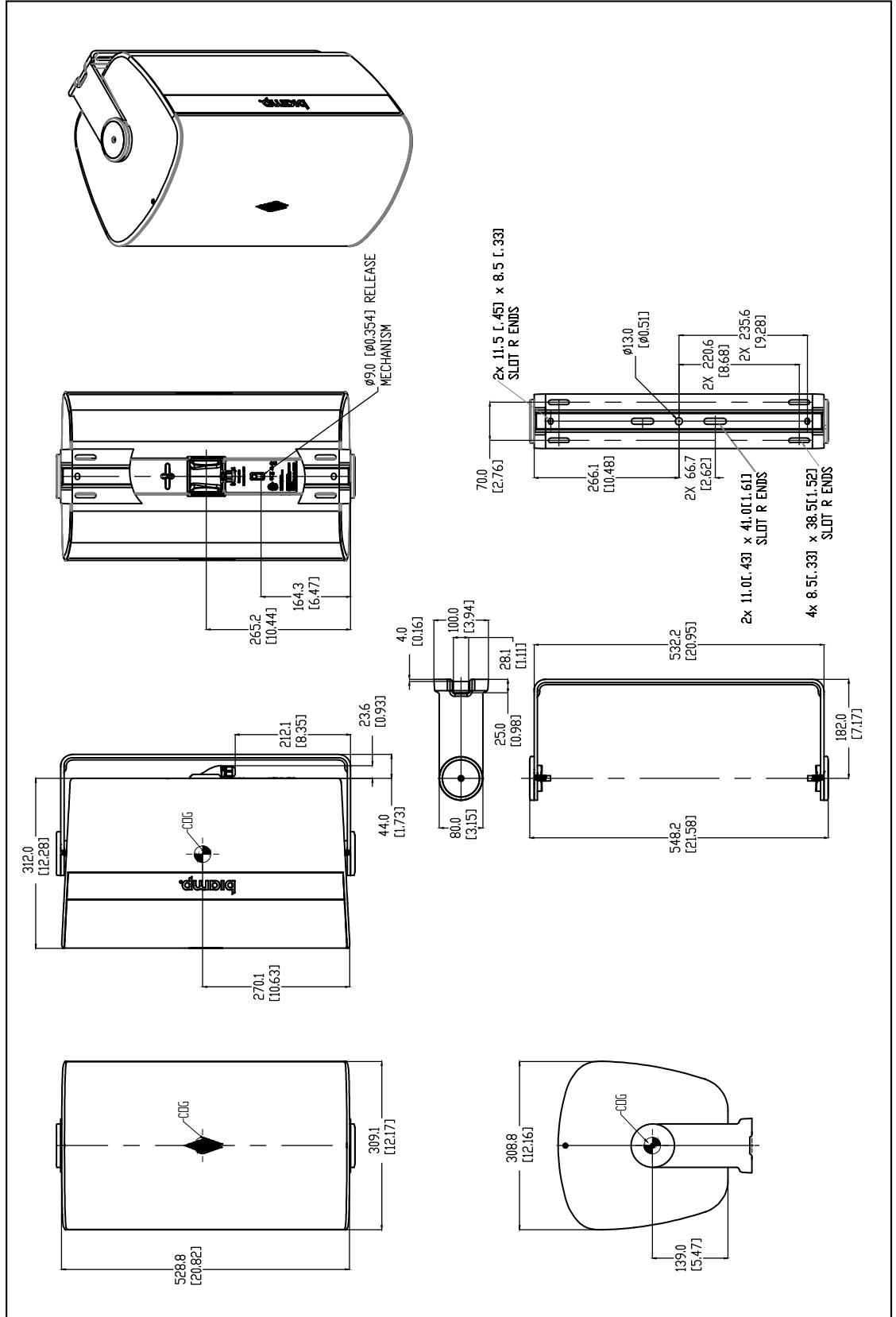
TBD

**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)



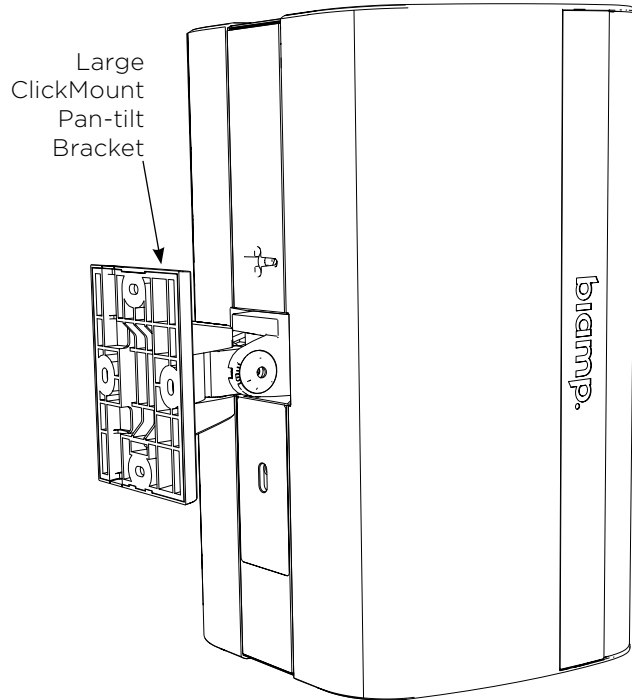
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# EX-S10SUB

HIGH OUTPUT 10-INCH  
SURFACE MOUNT SUBWOOFER

## EX-S10-CM, EX-S10SUB-CM

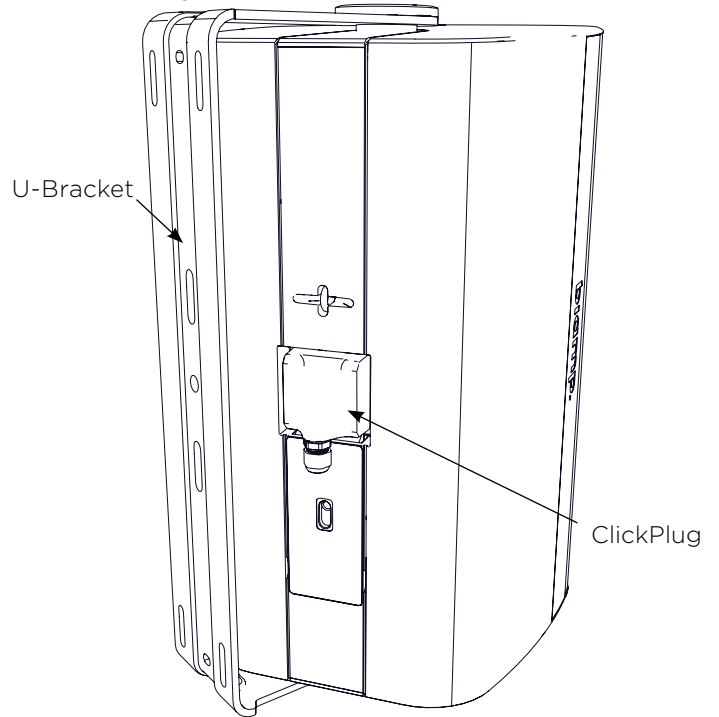
EX-S10 Loudspeaker with ClickMount pan-tilt bracket



**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

*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](http://biamp.com)*

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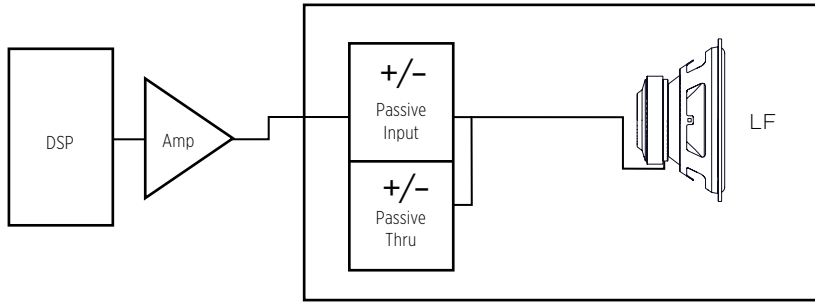
# DATA SHEET

## DESONO™

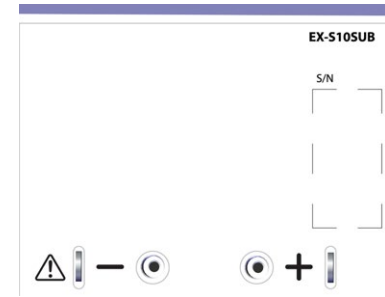
# EX-S10SUB

## HIGH OUTPUT 10-INCH SURFACE MOUNT SUBWOOFER

### CONNECTION DIAGRAMS



Single amp



Input Panel

### NOTES

- 1. PERFORMANCE SPECIFICATIONS** All measurements are performed using a time-windowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- 2. OPERATING RANGE** The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- 3. SENSITIVITY** The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V, in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the nominal impedance. Measured in whole space with no external processing applied, except where indicated.
- 4. NOMINAL CONTINUOUS POWER HANDLING** The maximum continuous input voltage at the stated nominal impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-5 defined spectrum with recommended signal processing and protection filters.
- 5. NOMINAL MAXIMUM SPL** The SPL produced when an IEC 60268-5 signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its nominal continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-5 test signal.
- 6. RATED CONTINUOUS VOLTAGE** The maximum continuous input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 7. RATED MAXIMUM SPL** The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. AXIAL (PROCESSED) SENSITIVITY** The variation in acoustic output level with frequency for a swept-sine measurement signal. The Processed measurement uses the recommended signal processing for the loudspeaker system. The other sensitivity measurements use no additional external processing. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: [www.biamp.com](http://www.biamp.com)

**CAUTION:** Installation of loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting design.

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