

W2-228 QUASI THREE-WAY 8-INCH FULL-RANGE WEATHER-RESISTANT LOUDSPEAKER



APPLICATIONS

MAIN PA or DISTRIBUTED

Theme and amusement parks · Water parks ·
Outdoor entertainment centers · Cruise ships ·
Music pavilions and musical fountains

FILL or DELAY

Stadiums · Themed entertainment ·
Cruise ships

DESCRIPTION

As a quasi three-way, full-range loudspeaker system, the W2-228 provides three-way performance in a compact form factor. It includes 8" LF and 8" MF/LF cones made of carbon fiber. The coaxially-mounted 1" HF driver has a weather-resistant, non-metallic, non-resonant polyimide diaphragm. Drivers are ferrofluid-cooled to improve heat transfer, resulting in higher power handling and reduced distortion. The W2-228 is ideal for short-throw applications where both full-range reproduction and high weather-resistance are needed, providing an uncompromised musical system in a compact, attractive package.

Engineered for permanent installation, the loudspeaker enclosure and faceplate are constructed of multilayer fiberglass composite, resulting in extreme structural strength. A three-layer Weather-Stop™ grille protects internal components, while all exposed hardware is stainless steel or powder-coated aluminum. A weather-resistant stainless steel mounting yoke is included. An optional "autoformer" version (W2-228T) is available, with a built-in 200-watt autoformer for 70V/100V lines with selectable taps at 200W, 100W, 50W and 25W. The W2-228 is backed by a five-year product warranty plus a fifteen-year warranty on the structural integrity of the enclosure.

FEATURES

- All-weather, multilayer fiberglass composite enclosure with stainless steel hardware
- Integral mounting points, included mounting yoke
- High power passive crossover and ferrofluid-cooled drivers
- Available in black or white finishes
- Powder-coated weather-resistant marine-grade aluminum grille and stainless steel yoke
- Available with built-in 200W autoformer for 70V/100V applications

TECHNICAL SPECIFICATIONS

Operating Mode	Passive, low impedance model (W2-228) or 70V/100V model (W2-228T)	
Operating Environment	All conditions, suitable for continuous outdoor direct exposure	
Operating Range	70 Hz to 18 kHz	
Frequency Response	80 Hz - 15 kHz (±3 dB)	
Nominal Beamwidth	85° H x 85° V	
Transducers	LF 1 x 8" (203 mm) carbon fiber LF/MF 1 x 8" (203 mm) carbon fiber HF 1 x 1" (25.4 mm) exit, non-metallic diaphragm	
Max Input Ratings (8 ohm)	250W continuous, 500W program	
Sensitivity (1W/1m)	96 dB SPL (100 Hz to 13 kHz 1/3 octave bands) 96 dB SPL (250 Hz to 4 kHz speech range)	
Maximum Output	121 dB SPL / 127 dB SPL (peak)	
Nominal Impedance	4 ohms	
Minimum Impedance	3.2 ohms @ 180 Hz	
Crossover Frequency	2 kHz	
W2-228T Autoformer Taps	70V Taps: 200W, 100W, 50W, 25W	100V Taps: 200W, 100W, 50W
Required Accessories	Electronic high pass filter (60 Hz, 24dB/octave)	

PHYSICAL

Input Connection	W2-228: 16-2 SJOW (12 ft / 4m)	W2-228T: 18-5 SJOW
Mounting Provisions	Two (2) 1/2-13 threaded mounting points; yoke included	
Environmental	IP 55W rated per IEC 60529	
Dimensions H x W x D	10.13" x 20" x 11.5" (257 x 508 x 292 mm)	
Weight (with yoke)	W2-228: 36 lbs (16.3 kg)	W2-228T: 40 lbs (18.1 kg)
Unit Weight	36 lbs (16.3 kg)	40 lbs (18.1 kg)
Shipping Weight	40 lbs (18.1 kg)	46 lbs (20.9 kg)
Enclosure	Hand-laminated fiberglass	
Grille	Powder-coated, zinc-plated marine grade aluminum (5052 alloy), black or white finish (three-layer Weather-Stop™)	
Finish	Black or white gelcoat	
Accessories (included)	Mounting yoke	

OPTIONS

Accessories (optional)	PMB-1RR pole mount bracket for a single loudspeaker PMB-2RR pole mount bracket for mounting 2 loudspeakers
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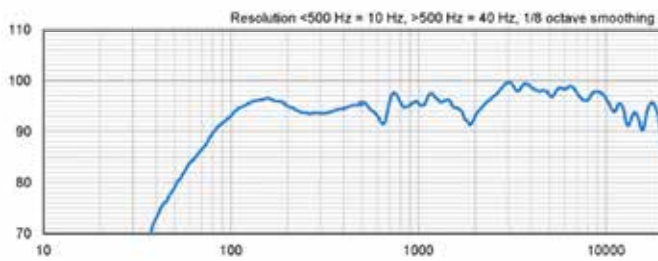
Recommended signal processing is available at www.biamp.com/community.

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.

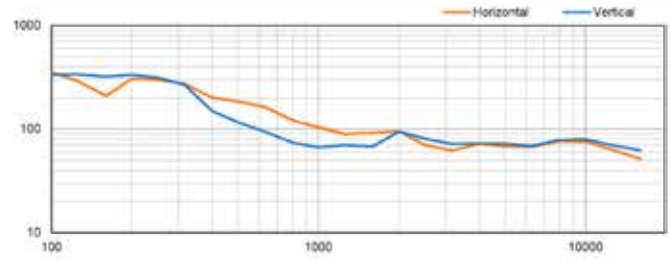
Data presented on this spec sheet represents the basic performance specifications for the model. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from www.biamp.com.

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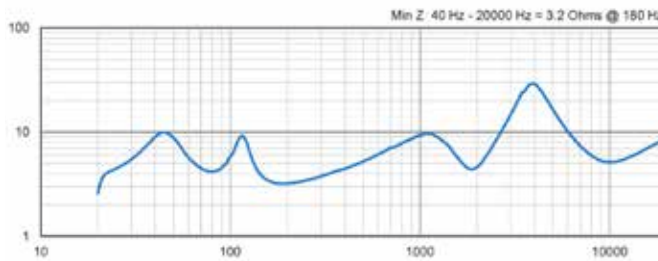
FREQUENCY RESPONSE (dB SPL)



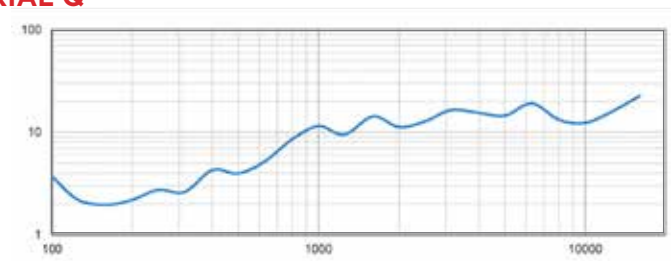
BEAMWIDTH (Degrees)



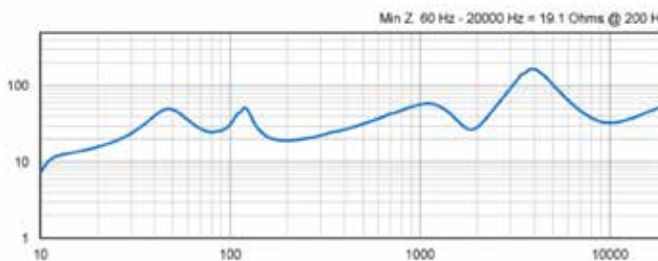
IMPEDANCE (Ohms)



AXIAL Q



IMPEDANCE 100W AUTOFORMER (Ohms)



ARCHITECTS & ENGINEERS SPECIFICATIONS

The loudspeaker system shall be a full-range, three-way weather-resistant bass reflex design with one 8-inch carbon fiber low frequency woofer, one 8-inch carbon fiber low/mid frequency woofer and one 1-inch exit high frequency driver with a non-metallic diaphragm coaxially mounted on a fiberglass high frequency horn. Drivers shall be connected to an integral crossover with crossover frequency of 2 kHz and integral over-current protection circuitry using high positive current coefficient resistors. The input connection shall be one 12-foot (4 m) SJOW #16 gauge cable with stripped ends. The loudspeaker enclosure shall be a molded multilayer fiberglass composite with a powder-coated perforated zinc-plated marine grade aluminum grille backed by weather-resistant material. There shall be two ½-13 rigging points. The system shall have an amplitude response of 80 Hz - 15 kHz (± 3 dB), input capability of 32 volts RMS, 96 dB sensitivity at one meter / 2 V / 4 ohms nominal impedance. The nominal dispersion shall be 85° H x 85° V from 2 kHz - 12.5 kHz. The loudspeaker shall measure 10.13" (257 mm) high, 20" (508 mm) wide, and 11.5" (292 mm) deep. Warranty shall be 5 years for the loudspeaker system and 15 years for the structural integrity of the enclosure. The loudspeaker shall be Community W2-228.

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TECHNICAL DRAWING / DIMENSIONS / FINISH

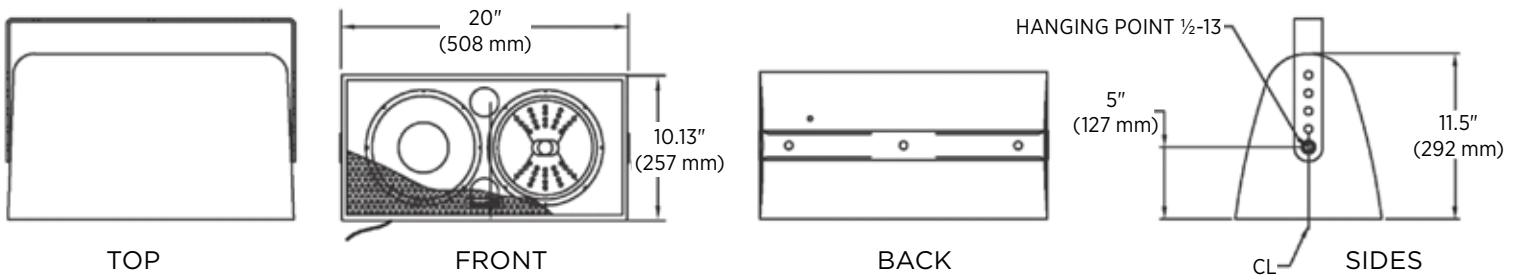
H x W x D
 10.13" x 20" x 11.5"
 (257 x 508 x 292 mm)

Unit Weight
 W2-228: 36 lbs (16.3 kg) (includes yoke)
 W2-228T: 40 lbs (18.1 kg) (includes yoke)

Shipping Weight
 W2-228: 40 lbs (18.1 kg) (includes yoke)
 W2-228T: 46 lbs (20.9 kg) (includes yoke)

Grille:
 Three-layer Weather-Stop™ powder-coated, zinc-plated marine grade aluminum (5052 alloy)

Enclosure / Finish
 Hand-laminated fiberglass with gelcoat finish; White (RAL 9003) or Black (RAL 9005)



YOKE DETAIL

