WX-1566 WET X FULL-RANGE TWO-WAY
15-INCH LOUDSPEAKER (60° X 60°)

TECHNICAL SPECIFICATIONS

SYSTEM

Loudspeaker Type: Full-range, two-way, weather-resistant
Operating Range: 40 Hz to 22 kHz (-10 dB)
Frequency Response: 50 Hz to 18 kHz (-3 dB)
Max Input Ratings: 600W RMS, 1200W Program
69 volts RMS, 138 volts momentary peak
Maximum Output: 126 dB SPL / 132 dB SPL (peak)
Sensitivity (1W / 1m): 98 dB (63 Hz - 16 kHz 1/3 octave bands)
Free Space SPL: 98 dB (250 Hz - 4 kHz speech range)
Nominal Impedance: 8 ohms, 8.1 ohms @ 130 Hz minimum
Coverage Pattern: 60° H x 60° V
Axial Q / DI: 17.10 / 12.33, 2 kHz to 16 kHz
Crossover Frequency: 1.5 kHz
Recommended High Pass: 50 Hz 24 dB / Octave

TRANSDUCERS

LOW FREQUENCY

Driver: 1 x 15" cone, 3" voice coil, weather-treated
Sensitivity (1W / 1m): 96 dB (60 Hz - 1.1 kHz)
Power Capacity (Cont/Peak): 600W / 2400W
Nominal Impedance: 8 ohms

HIGH FREQUENCY

Driver: 1 x 2.87" voice coil / 1.4" exit
Sensitivity (1W / 1m): 109 dB (1 kHz - 20 kHz)
Power Capacity (Cont/Peak): 90W / 360W
Nominal Impedance: 8 ohms

PHYSICAL

Input Connection: 12' (4m) SJOW #16-gauge cable with stripped ends
Enclosure: Trapezoidal fiberglass outer shell and face lined and reinforced with 18mm (7-layer) marine grade plywood
Finish: Black or White gel coat fiberglass
Mounting/Rigging Provisions: Two 1/2"-13 rigging points; 304SS zinc-rich dual-layer powder-coated bracket included; Integral 1/2"-13 safety cable mounting point
Grille: 3-Layer Weather-Stop™ backing, 304SS zinc-rich dual-layer powder-coated
Environmental: IP56 per IEC 529
Dimensions – H x W x D: 19.5" x 33.63" x 20.5" (495.3 x 854.1 x 520.7 mm)
Loudspeaker / Unit Weight: 115 lbs (52.3 kg) / 133 lbs (60.3 kg) with bracket
Shipping Weight: 162 lbs (73.5 kg)

CONFIGURE-TO-ORDER (CTO) OPTIONS

Custom Colors: Custom color exterior-grade paint finish, RAL or custom color matching available
Extra Hang Points: 2 or 3 additional per side (several options available)
Bi-amp: Includes 4-conductor, 4-color SJOW cable
Transformer: 70V: 400W / 200W / 100W
100V: 400W / 200W
Cable: Custom length

NOTE: All wattage figures are calculated using the rated impedance.

APPLICATIONS

- Theme and Amusement Parks
- Outdoor Entertainment Centers
- Cruise Ships
- Multipurpose outdoor and indoor venues
- Stadiums
- Music Pavilions
- Musical Fountains
- Water Parks

FEATURES

- 60° x 60° horn pattern
- Large format waveguide delivers excellent pattern control
- 1.4" (36mm) exit / 2.87" (72.2mm) VC HF transducer
- 15" (381mm) / 3" VC LF weather-treated transducer
- Passive operating mode standard
- All-weather, multi-layer glass composite shell over 18mm 7-layer marine grade plywood interior
- Dual-layer powder-coated 304 stainless steel mounting bracket included
- Stainless steel hardware
- Available with optional built-in 400W transformer for 70V / 100V applications

DESCRIPTION

The WX-1566 is a premium quality, large format, full-range loudspeaker system. The driver complement consists of a 15" (381mm) high power low frequency driver and a 1.4" (36mm) exit / 2.87" (72.9mm) edgewound voice coil compression driver. The large format horn flare delivers well controlled 60° x 60° dispersion, and utilizes high order crossovers to minimize band overlap.

The WX-1566 is used in passive operating mode. The passive mode is designed to deliver outstanding performance without the use of a processor. A custom bi-amp option can allow greater system flexibility allowing a compatible processor to enhance the LF response.

The WX-1566 is designed to provide high quality music and voice reproduction in applications requiring extreme weather-resistance. The WX X enclosure features unmatched durability and ruggedness and is engineered for use in permanent installations.

The loudspeaker enclosure and faceplate are constructed of multi-layer glass composite lined with 18mm (7-layer) marine grade plywood, resulting in extreme structural strength. All exposed hardware is stainless steel or powder-coated aluminum extrusion. A weather-resistant 304SS, dual-layer powder-coated horizontal bracket is included for mounting.
WX-1566 WET X FULL-RANGE TWO-WAY 15-INCH LOUDSPEAKER (60° X 60°)

FREQUENCY RESPONSE

6 Hz Resolution, 1/6 Octave Smoothing, 1W/1m

IMPEDANCE

Min Z 30 Hz - 16kHz = 8.1 Ohms @ 130 Hz

BEAMWIDTH

HORIZONTAL OFF-AXIS FREQUENCY RESPONSE LEFT

HORIZONTAL OFF-AXIS FREQUENCY RESPONSE RIGHT

AXIAL Q

Q

VERTICAL UP/DOWN OFF-AXIS FREQUENCY RESPONSE

DIMENSIONS

ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way, full-range bass reflex trapezoid-shaped design with one 15 in. (381 mm) LF driver and one 1.4 in. exit HF driver with a titanium diaphragm mounted to a 60° x 60° HF fiberglass horn. Drivers shall be connected to an integral crossover with a crossover frequency of 1.5 kHz. The input connection shall be one 12’ (4m) SJOW #16-gauge cable with stripped ends. The loudspeaker enclosure shall be a multi-layer glass composite with a 16-gauge perforated stainless steel grille backed by open cell foam and a high density polyester mesh cloth. There shall be two 1/2”-13 rigging points. 95% of the shell interior shall be lined with wood, with 18mm 7-layer cross-laminated marine grade plywood on all interior flat surfaces. All wood shall be sealed with fiberglass resin. The system shall have a frequency response of 50 Hz to 18 kHz (-3 dB SPL), an input capability of 69V RMS, 98 dB sensitivity at 1W / 1m at 8 ohms nominal impedance. The nominal dispersion shall be 60° H x 60° V from 2 kHz to 16 kHz. The loudspeaker shall be 19.5” (495.3 mm) H x 33.63” (854.1 mm) W (front) x 20.5” (520.7 mm) deep and shall weigh 115 lbs (52.3 kg).

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.