## 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  
**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, 6.8 ohms @ 9 kHz minimum  
**Coverage Pattern:** 90° H x 90° V  
**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):** 106 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.

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**APPLICATIONS**

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

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**FEATURES**

- 90° x 90° horn pattern  
- Large format waveguide delivers excellent pattern control  
- 1.4" (36mm) exit / 2.87" (72.9mm) edgewound voice coil compression driver  
- 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

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**DESCRIPTION**

The WX-1599 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 90° x 90° dispersion, and utilizes high order crossovers to minimize band overlap.

The WX-1599 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 WET X Series is designed to provide high quality music and voice reproduction in applications requiring extreme weather-resistance. The WET 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.
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.

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 90° x 90° 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 90° H x 90° 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.