



# XP502

PROFESSIONAL LOUDSPEAKERS TWO-WAY, BI-AMPABLE MULTI-ANGLE MONITOR WITH 90° X 40° HF HORN

## SPECIFICATIONS (See notes 1 and 2)

**Loudspeaker Type:** 2-way, full-range, bass ported  
**Operating Range:** 70 Hz - 18 kHz  
90 Hz - 15 kHz (+/- 6 dB)

### Max Input Ratings:

400W continuous, 1000W Program  
57 volts RMS, 126 volts momentary peak

### Recommended Power Amplifier:

For maximum SPL: 800W to 1200W @ 8 Ohms

### Sensitivity 1W/1m:

98 dB SPL (80 Hz - 16 kHz 1/3 octave bands)  
99 dB SPL (250 Hz - 4 kHz speech range)

### Maximum Inputs (biamp):

LF (same as for passive mode)  
HF: 50W continuous, 125W PGM @ 4 Ohms.

**Maximum Output:** 124 dB SPL / 131 dB SPL (peak)

**Nominal Impedance:** 8 Ohms

**Min Impedance:** 3.6 Ohms @ 11.6 kHz

### Nominal -6dB Beamwidth:

90° H (+9° / -30° (2 kHz - 12.5 kHz)  
40° V (+17° / -6° (2 kHz - 12.5 kHz)

**Axial Q / DI:** 18.9 / 12.8, 2 kHz - 12.5 kHz

**Crossover Frequency:** 2 kHz

### Recommended Signal Processing:

50 Hz high pass filter

**Drivers:** LF (1) 12" woofer

HF (1) 1" exit, non-metallic diaphragm, Ferrofluid-cooled

**Driver Protection:** IntelliSense™

**Input Connection:** (2) Locking connectors  
(compatible with Speakon™ NL4)  
(2) 1/4" jacks

**Controls:** HF presence switch  
Bi-amp/Full-range switch

**Enclosure:** Black carpeted 3/4" Luaun-core plywood

**Enclosure Hardware:** (1) Steel spring handle  
(8) Interlocking corner protectors

**Mounting / Rigging Provisions:** (1) 1-3/8" metal stand socket

**Grille:** 16 gauge perforated steel, black powder coated

**Required Accessories:** None

**Supplied Accessories:** None

**Optional Accessories:** None

### Dimensions:

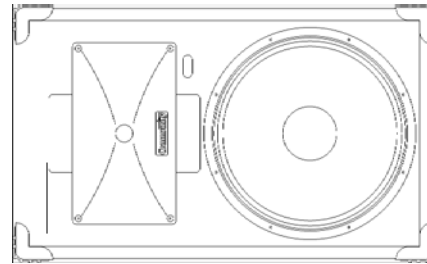
Height: 14.9" / 378 mm  
Width (front): 24.4" / 620 mm  
Width (rear): 24.4" / 620 mm  
Depth: 15.5" / 394 mm

**Weight:** 37 lb. / 16.8 kg

**Shipping Weight:** 44 lb. / 20 kg

1. Sensitivity: Free field pink noise measurement at 40 ft / 12.2 m at 50% power; extrapolated to 1 meter and an input voltage of 2.83 volts RMS.

2. Watts: All wattage figures are calculated using the rated nominal impedance.



## APPLICATIONS:

- Sound Reinforcement/Portable PA
- Portable PA
- Houses of Worship
- Clubs/DJ
- Bands
- Sport Facilities & Health Clubs

## FEATURES:

- Multiangle
- 1" Exit Proprietary, Ferrofluid-cooled UC1 HF Driver, Non-metallic Diaphragm
- Three Color PowerMeter™ LEDs
- IntelliSense™ Three Stage Solid State Protection Circuitry with Front/Rear Indicators
- Black Carpeted Exterior
- Steel Spring Handle and Input Panel
- Switchable High Frequency Boost and Cut Switch
- Full-range/Biamp Operation

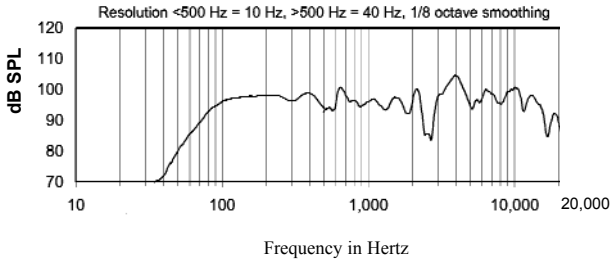
## DESCRIPTION

The XP502 is a small and versatile two-way, bi-ampable, multi-angle loudspeaker system. The HF horn is rotatable for narrower horizontal coverage or for horizontal mounting. The XP502 features an improved IntelliSense™ circuitry, which operates in conjunction with PowerMeter™ LED indicators. Found on both front and rear panels, the LEDs flash green to indicate signal presence, yellow to warn that the loudspeaker is entering its first stages of protection and red to show that full protection has been activated. Within protection mode, IntelliSense automatically attenuates speaker levels to within a safe operating range. Once volume has been reduced, the circuit resets itself, restoring full power and operation to the speaker. The black carpeted enclosure and perforated steel grille present an attractive package. Five year warranty.

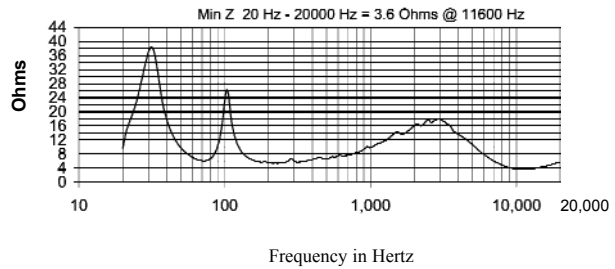
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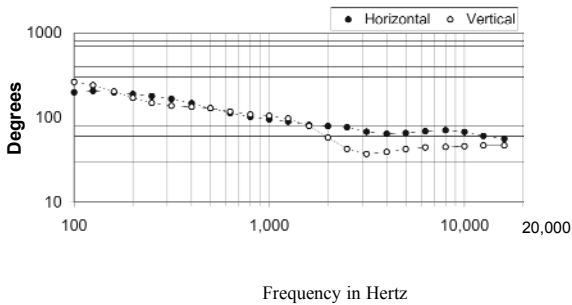
## Frequency Response



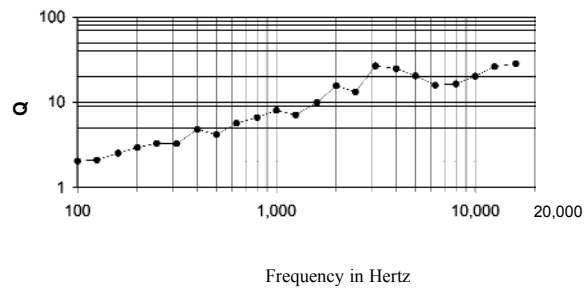
## Impedance



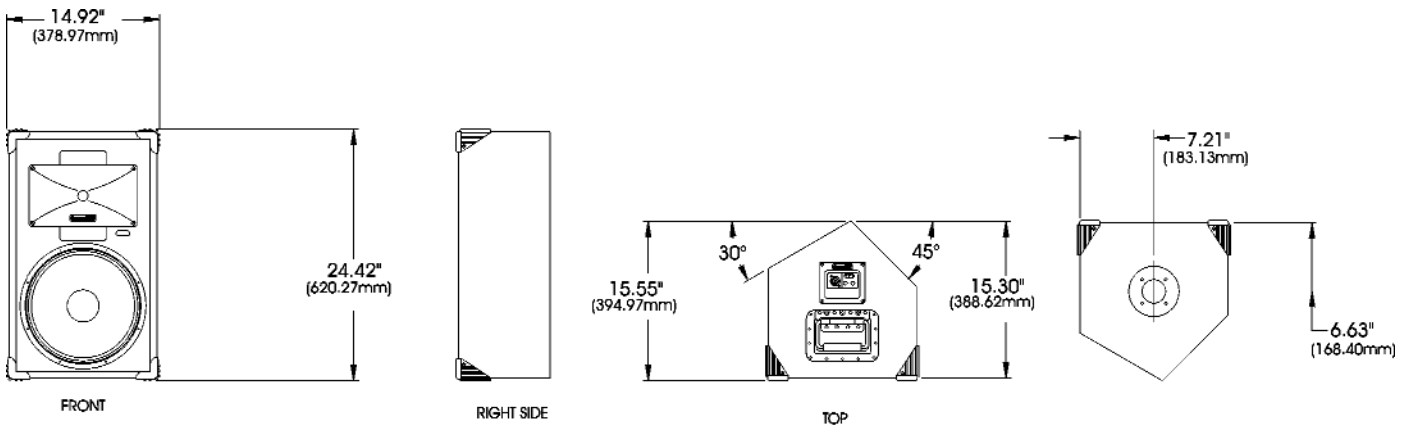
## Beamwidth



## Axial Q



## DIMENSIONS



## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The loudspeaker system shall be a two-way, bi-ampable, full-range bass reflex design with angled back panels allowing 30° and 45° front slant when used as a PA monitor. The loudspeaker system shall have one 12" woofer and one 1" exit HF driver with a non-metallic diaphragm mounted to a 90°H x 40°V rotatable molded horn. Drivers shall be connected to an integral crossover with a crossover frequency of 2 kHz and integral three stage protection circuitry. There shall be two locking connectors and two 1/4" phone jack connectors. The loudspeaker enclosure shall be black carpeted 3/4" plywood with a 16 gauge perforated steel grille. The system shall have an amplitude response of 90 Hz to 15 kHz (+/- 6 dB), input capability of 57V RMS, 98 dB sensitivity at one meter and 2.83V / 8 ohms nominal impedance. The nominal dispersion shall be 90°H x 40°V from 2 kHz to 12.5 kHz. The loudspeaker shall be 24.4" (620 mm) W x 14.9" (378 mm) H x 15.6" (395 mm)D and weigh 37 lbs (16.8 kg).