



PROFESSIONAL LOUDSPEAKERS

# CPL46

THREE-WAY TRAPEZOIDAL LOUDSPEAKER SYSTEM

AF CB **CP** CS CV HD HS R SL WE XE XL

## SPECIFICATIONS (See notes 1 and 2)

**Loudspeaker Type:** 3-way, Full-range, bass ported  
**Operating Range:** 50 Hz - 18 kHz  
50 Hz - 18 kHz (+/-5dB)

**Max Input (Passive):**  
200W continuous, 500W Program  
28 volts RMS, 63 volts momentary peak

**Recommended Power Amplifier:**  
420W to 600W @ 4 Ohms

**Max Inputs (Biamp):**  
LF: (Same as for Passive mode)  
Recommended LF Power Amp:(Same as for Passive mode)  
MF/HF: 80W continuous, 200W program  
25 volts RMS, 57 volts momentary peak  
Recommended MF/HF Power Amp: 170W to 240W @ 8 Ohms

**Sensitivity 1W/1m:**  
97dB SPL (50 Hz - 18 kHz 1/3 octave bands)  
97dB SPL (250 Hz - 4 kHz speech range)

**Maximum Output:**120 dB SPL / 127 dB SPL (peak)

**Nominal Impedance (Passive):** 4 Ohms

**Min Impedance:** 5.1 Ohms @ 120 kHz

**Nominal Impedance (Biamp):** LF: 4 Ohms, HF: 8 Ohms

**Nominal -6 dB Beamwidth:**  
65° H (+5° / -5°, 2 kHz - 10 kHz)  
30° V (+7° / -7°, 2 kHz - 10 kHz)

**Axial Q / DI:** 25.1 / 14, 2 kHz - 10 kHz

**Crossover Frequency:** 500 Hz / 2.5 kHz

**Recommended Signal Processing:** 40 Hz high pass filter

**Drivers:**  
LF (1) 15" cone, Ferrofluid-cooled  
MF (1) 6.5" cone, Ferrofluid-cooled  
HF (1) 1" exit, titanium diaphragm

**Driver Protection:** PowerSense™ DDP

**Input Connection:** (+3 Flat -3)

**Controls:** Passive / Biamp switch, 3 position HF level switch

**Enclosure:** 13-ply 18 mm Baltic birch, Tuf-Coat™ finish (see options)

**Enclosure Hardware:** None

**Mounting / Rigging Provisions:**  
(6) 3/8-16 rigging points, W.L.L. 150 lb. vertical pull each

**Grille:** 16 gauge perforated steel, black powder coated (see options)

**Required Accessories:** None

**Supplied Accessories:** None

**Optional Accessories:** 3/8EYBLTKIT: (4) 3/8-16 forged eyebolts

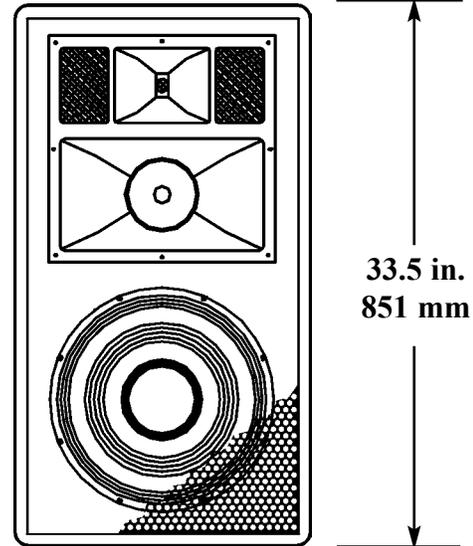
**Dimensions:**  
Height: 33.5 in. / 851 mm  
Width (front): 19.75 in. / 502 mm  
Width (rear): 13 in. / 331 mm  
Depth: 17.9 in. / 455 mm

**Weight:** 83 lb. / 37.6 kg

**Shipping Weight:** 93 lb. / 42.2 kg

1. **Sensitivity:** Free field pink noise measurement at 20 ft / 6.1 m at 25% power; extrapolated to 1 meter and an input of 2 volts RMS.

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



## APPLICATIONS:

- Sound Reinforcement
- Houses of Worship
- Sport Facilities & Health Clubs
- Performance Venues
- A/V Systems

## FEATURES:

- Black, White Tuf-Coat™, or Unfinished Exterior
- 1" Titanium HF With 3 Position Level Switch
- 60°H x 40°V Pattern Rotatable Horn
- Passive or Biamp Operating Modes
- PowerSense™ DDP (Dynamic Driver Protection)
- Small Profile Trapezoidal Enclosure for Tight Spaces
- Load-rated 3/8" Rigging Points
- No Handles for Clean Appearance
- Barrier Strip Input on Steel Input Panel

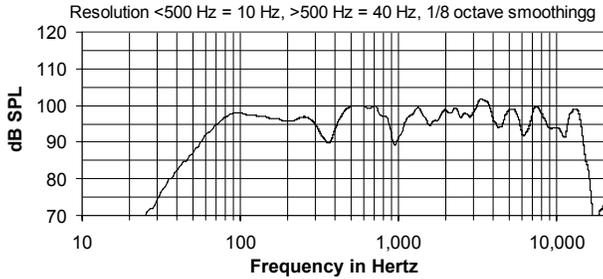
## DESCRIPTION

The CPL46 is a versatile, three-way full-range bass reflex loudspeaker system engineered for installation in theaters, houses of worship and corporate applications. CPL systems may be ordered to match your specific applications. The 60 x 40 HF horn is rotatable for narrower horizontal coverage or for vertical mounting. CPL systems may be ordered with a variety of finishes - black Tuf-Coat™ finish with a black perforated steel grille, white Tuf-Coat™ finish with removable white grille cloth covering the grille, and unfinished wood surface with removable brown grille cloth covering the metal grille. Five year limited warranty.

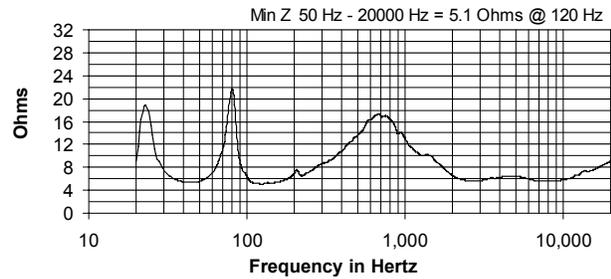
## OPTIONS:

- CPL46B = black Tuf-Coat™ finish
- CPL46W = white Tuf-Coat™ finish
- CPL46U = unfinished
- Grille: white has white cloth covering, unfinished has brown cloth covering

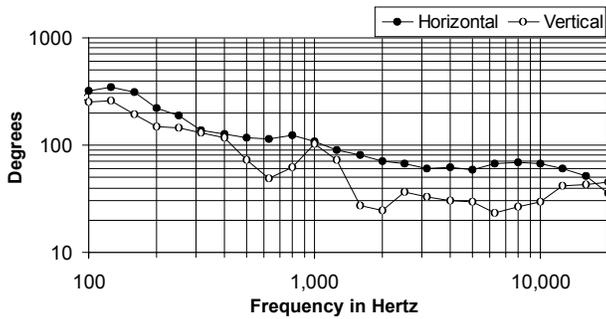
## FREQUENCY RESPONSE



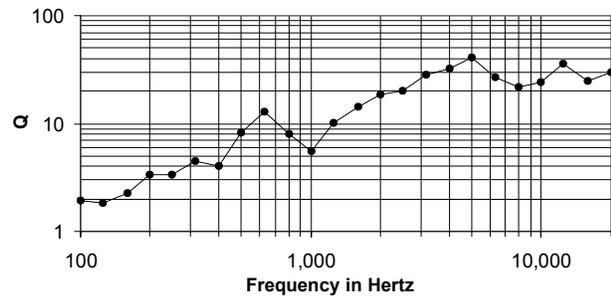
## IMPEDANCE



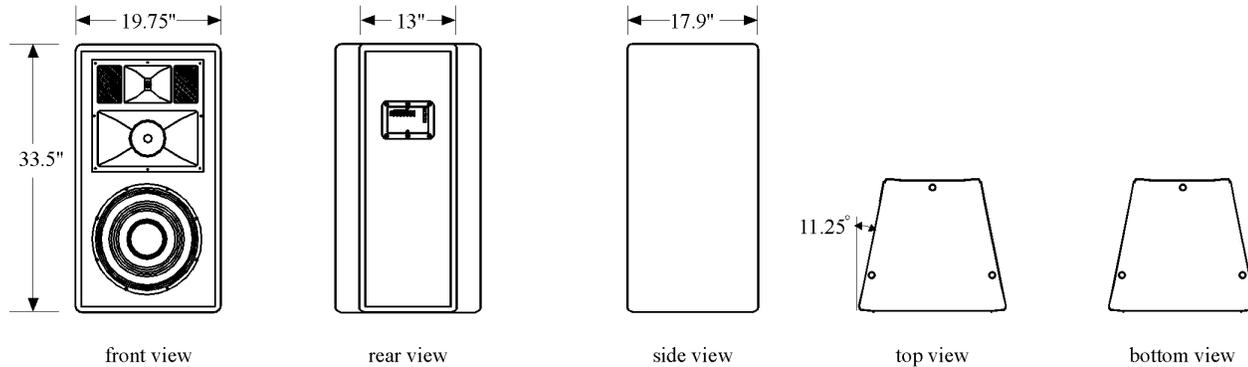
## BEAMWIDTH



## AXIAL Q



## DIMENSIONS



## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The loudspeaker system shall be a three-way, full-range bass reflex trapezoidal design with one 15 in. Ferrofluid-cooled woofer, 1 6.5" Ferrofluid-cooled cone and one 1 in. exit HF driver with a titanium diaphragm mounted to a 65° HF fiberglass horn. Drivers shall be connected to an integral crossover with crossover frequencies of 500 Hz and 2 kHz and integral over-current protection circuitry using high positive current coefficient resistors. There shall be one five-terminal barrier strip input connector with built-in jumpers for bi-amplified connection. The loudspeaker enclosure shall be 13-ply Baltic birch plywood with a 16 gauge perforated steel grille {with a white {brown} cloth cover} and {unfinished.} finished with black Tuf-Coat™ {white} finish. paint. The system shall have an amplitude response of 50 Hz to 18 kHz (+/- 5 dB), input capability of 28V RMS, 97 dB sensitivity at one meter and 2V / 4 ohms nominal impedance. The nominal dispersion shall be 65°H x 30° V from 2 kHz to 10 kHz. The loudspeaker shall be 33.5 in. (851 mm) H x 19.75 in. (502 mm) W (front) x 13 in. (331 mm) W (rear) x 17.9 in. (455 mm) D and weigh 83 lbs (37.6 kg).