

SPECIFICATIONS (See notes 1 & 2)

Loudspeaker Type: 3-way, Tri-amplified full-range, horn loaded
Operating Range: 350 Hz - 18 kHz
350 Hz - 16 kHz (+/-3 dB with EQ)

Maximum Inputs:

LF: 200W continuous, 500W program
40 volts RMS, 89 volts momentary peak
Recommended LF Power Amp:
420W to 600W @ 8 Ohms
MF: 160W continuous, 400W program
36 volts RMS, 80 volts momentary peak
Recommended MF Power Amp:
330W to 480W @ 8 Ohms
HF: 20W continuous, 50W program
13 volts RMS, 28 volts momentary peak
Recommended HF Power Amp:
40W to 60W @ 8 Ohms

Sensitivities 1W/1m:

LF: 113 dB SPL (315 Hz - 1.6 kHz 1/3 octave bands)
MF: 113 dB SPL (1.6 kHz - 6.3 kHz 1/3 octave bands)
HF: 107 dB SPL (6.3 kHz - 16 kHz 1/3 octave bands)
Overall: 113 dB SPL (250 Hz - 4 kHz speech range)

Maximum Outputs:

LF: 136 dB SPL / 143 dB SPL (peak)
MF: 135 dB SPL / 142 dB SPL (peak)
HF: 120 dB SPL / 127 dB SPL (peak)

Nominal Impedances:

LF: 8 Ohms, MF: 8 Ohms, HF: 8 Ohms

Minimum Impedances:

LF: 7.7 Ohms @ 1.2 kHz
MF: 10.5 Ohms @ 1.8 kHz
HF: 9.5 Ohms @ 7.1 kHz

Nominal -6dB Beamwidth:

30° H (+15° / -2°, 800 Hz - 16 kHz)
40° V (+6° / -5°, 800 Hz - 16 kHz)

Axial Q / DI:

40 / 16, 800 Hz - 16 kHz

Recommend Crossover Frequencies: 350 Hz / 1.5 kHz / 5 kHz

Drivers: **LF:** (1) M4 4 in / 102 mm exit, carbon fiber diaphragm
MF: (1) EM282 2.8 in / 71 mm exit, carbon fiber diaphragm
HF: (1) VHF100 1 in / 25 mm exit, mylar diaphragm

Driver Protection: None

Input Connection: (1) Neutrik NL8MP
(3) dual banana jacks

Controls: None

Enclosure: 13-ply 18 mm Baltic birch, Polane painted (see options)

Enclosure Hardware: None

Mounting / Rigging Provisions:

(8) 3/8-16 rigging points, W.L.L. 300 lb. vertical pull each

Grille: 16 gauge perforated steel (see options)

Required Accessories: Electronic system controller

Supplied Accessories: None

Optional Accessories: DSC42: digital system controller
EYBLTKIT: (4) forged 3/8-16 eyebolts

Dimensions: **Height:** 46.5 in. / 1181 mm
Width (front): 27.6 in. / 702 mm
Width (rear): 9.5 in. / 242 mm
Depth: 45.5 in. / 1156 mm

Weight: lb. / kg

Shipping Weight: lb. / kg

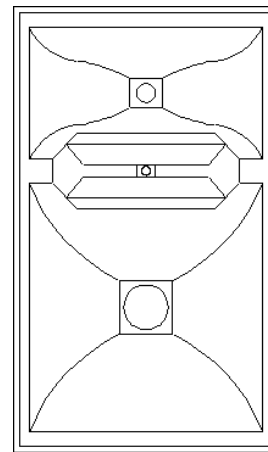
1. Sensitivities: Free field pink noise measurements at 20 ft / 6.1 m at 25% power; extrapolated to 1 meter and an input voltage = square root of the nominal impedance.

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

Options:

CBA3040FE with weather-resistant fiberglass exterior finish

CBA3040NE horn flare and drivers without wood enclosure and grille.



46.5 in.
1181 mm

DESCRIPTION

The CBA3040 is a triamplified, high power horn-loaded system designed for long throw applications in arenas, stadiums, and other large scale venues. The system is capable of extremely high output levels with superb clarity and transient accuracy. Mathematically correct horn loading for all drivers focuses the system's output in a 30 x 40 degree pattern over its entire bandwidth, maximizing efficiency throughout the operating range.

The CBA3040 is based around the powerful 4 in. M4 midrange driver for seamless coverage of the midrange from 300 Hz to 1.5 kHz. Response above the M4 is provided by a 2.8 in EM282 driver operating from 1.5 kHz to 7 kHz. The M4 and EM282 have carbon fiber diaphragms for superior internal damping, high stiffness-to-mass ratios and minimal mechanical failures. Frequencies above 7 kHz are reproduced by a 1in. VHF100 driver with a tough mylar diaphragm and a patent pending suspensionless design that extends its response to beyond 18 kHz before the first diaphragm breakup mode. Low compression ratio driver designs dramatically reduce system distortion caused by air non-linearities from high compression ratios. All drivers are designed and manufactured by Community to provide consistent quality, tight tolerances and high reliability. The unique combination of high efficiency, high power handling, and low distortion provide unprecedented, clean sound pressure levels from a single loudspeaker system.

The CBA3040's trapezoidal enclosure is made from high quality 13-ply Baltic Birch with high strength provided by robust internal bracing. The one-piece integral fiberglass horn baffle provides an extremely strong non-resonant structural mounting as well as optimum horn loading for each the driver. Four 3/8"-16 rigging points are provided on the top and bottom of the enclosure, internally inter-connected top to bottom with steel rods. A removable rear panel allows easy access to the drivers for testing or repair.

Proper application of the loudspeaker requires a 3-way electronic crossover and driver alignment signal delay along with appropriate equalization. Community's DSC42 Digital System Controller is ideally suited to provide these functions. The DSC42 can also provide the full 4-way configuration required when the CBA3040 is used with the matching CBS315 bass horn system.

FREQUENCY RESPONSE

dB SPL

NOT AVAILABLE

Frequency in Hertz

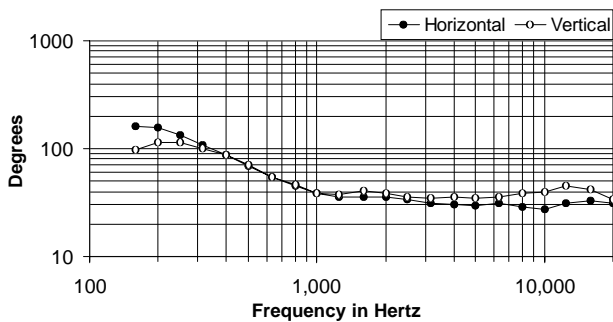
IMPEDANCE

Ohms

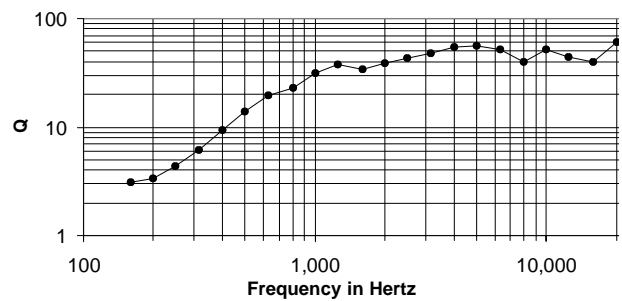
NOT AVAILABLE

Frequency in Hertz

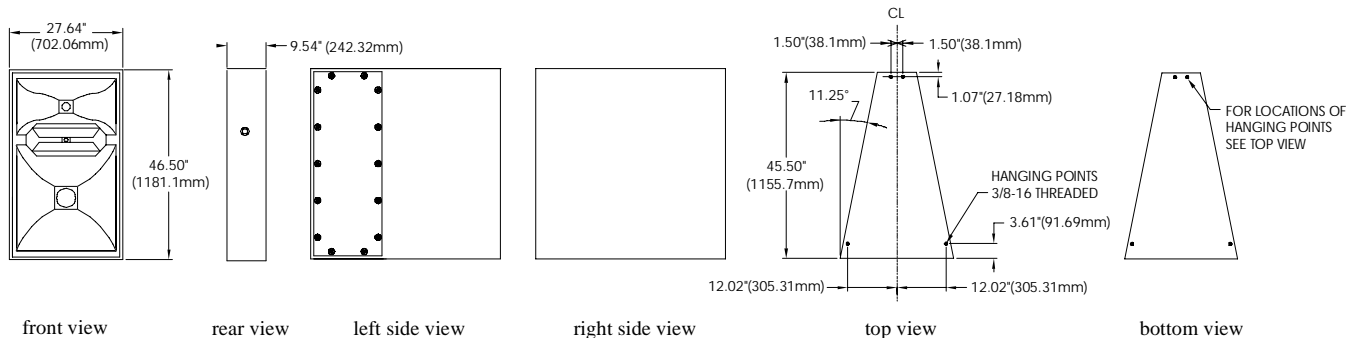
BEAMWIDTH



AXIAL Q



DIMENSIONS



ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The loudspeaker system shall be a horn-loaded, three-way, tri-amplified trapezoidal design with a 4 in. exit carbon fiber diaphragm LF compression driver, a 2.8 in exit carbon fiber MF compression driver and a 1 in. exit non-metallic diaphragm HF compression driver. All drivers shall be mounted on a single piece fiberglass waveguide. There shall be one Neutrik NL8MP input connector with three dual banana test point connectors. [There shall be one Neutrik NL8MP input connector.] {Input connection shall be via the driver terminals} The loudspeaker enclosure shall be well-braced 18 mm 13-ply Baltic birch with a 16 gauge perforated steel grille and finished with black paint. The enclosure shall have eight 3/8-16 integral threaded mounting points connected to internal steel bracing. [The loudspeaker enclosure shall be well-braced outdoor grade 18 mm 13-ply Baltic birch with a 16 gauge 3-layer Weather-Stop grille and finished with a weather resistant laminated fiberglass cladding. The enclosure shall have integral threaded mounting points connected to internal steel bracing.] {The loudspeaker shall consist of the drivers and the waveguide with no enclosure}. The system shall have an amplitude response of 300 Hz to 18 kHz (+/- 3 dB) with appropriate electronic crossover and signal processing. It shall have input capabilities of 40V RMS LF, 36V RMS MF, and 13V RMS HF with sensitivities of at least 113 dB LF, 113 dB MF, and 107dB HF at one meter with a 2.83V input. All drivers shall be 8 ohms nominal impedance. The nominal dispersion shall be 30° H x 40° V from 800 Hz to 16 kHz. The loudspeaker shall be 46.5 in. (1181 mm) H x 27.6 in. (702 mm) W (front) x 9.5 in. (242 mm) W (rear) x 45.5 in. (1156 mm) D and weigh ?? lbs. (?? kg).