C112-96
ARCHITECTS’ AND ENGINEERS’ SPECIFICATIONS

The two-way full range loudspeaker system shall incorporate one (1) McCauley 77100-8, 4" (102 mm) voice coil, 12" (303 mm) diameter LF transducer, and one (1), 1.4" (36 mm) exit, 3" (76 mm) diaphragm compression driver HF transducer. The LF driver shall be mounted in an optimally vented enclosure tuned for maximum low frequency response with vent area of such size that distortion is minimized at the rated continuous power. The high frequency transducer shall be mounted to a true constant directivity acoustic horn with a nominal horizontal coverage pattern of 90°. The vertical coverage pattern of the horn shall be 60° and shall also provide true constant directivity. The HF horn shall feature a square mounting flange, allowing the horn to be rotated by 90°.

The system frequency response shall vary no more than ±3 dB from 50 Hz to 18 kHz measured on axis. The low frequency transducer shall produce a Sound Pressure Level (SPL) of 99 dBSPL at a distance of 1 meter with an electrical power input of 2.83 Vrms, and shall be capable of producing a maximum peak output of 131 dBSPL on axis at 1 meter. The high frequency transducer shall produce a SPL of 107 dBSPL on axis at 1 meter with an electrical power input of 2.83 Vrms, and shall be capable of producing a peak output of 135 dBSPL on axis at 1 meter.

The low frequency transducer shall handle 350W of amplifier power (per AES ref Standard AES2-2012) and shall have a nominal impedance of 8.0 Ohms. The high frequency transducer shall handle 75W of amplifier power (per AES ref Standard AES2-2012) and shall have a nominal impedance of 8.0 Ohms.

The loudspeaker enclosure shall have a maximum weight of 71 lbs (32.3 kg) and shall measure 15.08" (383 mm) wide at front, 6.66" (169 mm) in width at rear, 27.5" (699 mm) in height, and 16.06"(408 mm) in depth. The enclosure sides shall taper at 15° from a maximum frontal width, narrowing to the rear. The structure of the enclosure shall be constructed of 18mm, 13-ply void-free birch hardwood plywood, and shall have a weather and wear resistant ProCoat(tm) polyurea hybrid finish.

The input connection shall be, one (1) 4-Position, 20A rated, Pheonix PC_4-4-ST-7.62, which accepts single bare wires up to 10AWG or dual 12AWG wires with a ferule. Pins (1+, 1-) shall be wired to the LF transducer, while pins (2+, 2-) shall be wired to the HF transducer. When configured with a passive network, pins (1+, 1-) shall be in parallel with (2+, 2-).

A total of fourteen 3/8"-18 UNC threaded mounting/suspension points (four on top, four on bottom, two per side and two rear) shall be provided. Six additional mounting points shall be provided on the top, bottom, and each side configured to accept an Omnimount™ Series 120 bracket or other third party hardware.

Components in the front of the enclosure are to be protected by a curved grill made from perforated steel that is coated with heat cured epoxy powder, and lined with acoustically transparent foam.

The 2-way full range loudspeaker shall be the McCauley Sound model C112-96.