



MLA2

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The two-way full range loudspeaker system shall incorporate two 2" (51 mm) aluminum voice coil, 8" (204 mm) diameter LF transducers and two 1" (25 mm) exit, 1.75" (45 mm) diaphragm HF compression drivers. The devices shall be loaded axisymmetric within the acoustic horn.

The high frequency transducer shall be mounted to a true constant directivity acoustic horn with a nominal horizontal coverage pattern of 100°. The vertical coverage pattern of the horn will vary with array height and curvature.

The LF transducers shall be mounted in an optimally vented enclosure tuned for maximum low frequency response. The midrange is extended via a Hybrid Horn Phase Correction Device within the constant directivity acoustic horn.

The system frequency response shall vary no more than ± 3 dB from 80 Hz to 18 kHz measured on axis. The low frequency transducers shall produce a Sound Pressure Level (SPL) of 101 dB SPL at a distance of 1 meter with an electrical power input of 1 Watt, and shall be capable of producing a maximum peak output of 136 dB SPL on axis at 1 meter. The high frequency transducer shall produce an acoustic Sound Pressure Level (SPL) of 110 dB SPL on axis at 1 meter with an electrical power input of 1 Watt, and shall be capable of producing a peak output of 139 dB SPL on axis at 1 meter.

The low frequency transducers shall handle 400 Watts of amplifier power (per AES Standard AES2-2012) and shall have a nominal impedance of 8 Ohms. The high frequency transducers shall handle 100 Watts of amplifier power (per AES ref Standard AES2-2012) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall have a maximum weight of 85 lbs. (38.64 kg) and shall measure 10.97" (279 mm) high at front, 8" (204 mm) in height at rear, 27.25" (693 mm) wide, and 23.5" (597 mm) in depth. The enclosure top and bottom shall taper at 7° from a maximum frontal height, narrowing in the vertical plane toward the rear. The structure of the enclosure shall be constructed of 13-ply void-free birch hardwood plywood and shall have a weather and wear resistant ProCoat(tm) polyurea hybrid finish.

Input connectors shall be two, Neutrik Speakon NL8 locking connectors, wired together in parallel using AWG12 braided wire. Pins 1+ ,1- , and 2+ , 2- shall be wired to pass through between two connectors. Pins 3+ , 3- shall be wired to the LF transducers, while Pins 4+ , 4- shall be wired to the HF transducers.

Components in the front of the enclosure are to be protected by a compound-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 MLA2.