The AM604 is an extended range mid/high system which has been developed specifically for large scale install applications such as arenas and stadia. It can be used in either a bi-amplified or optional 2-way passive configuration. As a stand-alone system it provides exceptional intelligibility over its uniform 60° x 40° coverage pattern. For full-range music reproduction, it can also be used in conjunction with the AS118 low-frequency loudspeaker.

The mid horn section utilises a 10" (250mm) cone driver loaded by a unique "phase-ball" device which ensures consistent off-axis performance across the midband and avoids "beaming" at the upper end of the frequency range. Extended performance down to 120Hz @ -10dB is achieved by reflex porting the rear chamber of the driver. A low distortion motor system ensures clarity of output and consistency of tonal balance even at extreme power levels.

High frequencies are reproduced by a 1.4" (35mm) exit compression driver loaded by a 60° x 40° horn with a dispersion pattern which exactly matches the mid.

The mid and high frequency sections feature large-format, square-mouth horn designs to ensure that their constant directivity characteristics are maintained down to the same frequency in both horizontal and vertical planes.

The AM604 is constructed from a weather resistant, lightweight composite material and is equipped with comprehensive mounting points to allow for flexible install and arraying requirements.
AM604
Large format mid/high horn

AM604 Vertical

AM604 Horizontal
AM604
Large format mid/high horn

frequency responses

AM604 Horizontal Magnitude in dB SPL/2.33V at 1 meter

0° & 1/3 oct. smoothing  5° & 1/3 oct. smoothing  15° & 1/3 oct. smoothing  20° & 1/3 oct. smoothing  30° & 1/3 oct. smoothing

Frequency in Hz
AM604
Large format mid/high horn

overall dimensions

architectural

597mm [23.49"]
641mm [25.24”]
857mm [33.73”]
418mm [16.44”]
494mm [19.43”]
411mm [16.17”]
403mm [15.86”]
132mm [5.21”]
248mm [9.78”]
237mm [9.31”]

AM604
Performance of the loudspeaker system with its electronic controller shall meet or exceed the following criteria:

**Technical Specifications**

- **Frequency Response (1)**
  - Measured on-axis in half space at 2 metres, then referred to 1 metre.
  - $120\text{Hz} @ -10\text{dB}$

- **Drivers**
  - 10" (250mm) midrange driver
  - 1.4" (35mm) exit HF compression driver

- **Rated Power (2)**
  - MF: 400W AES, 1600W peak
  - HF: 150W AES, 600W peak
  - Passive 2-way: 400W AES, 1600W peak

- **Sensitivity (3)**
  - MF: 109dB
  - HF: 109dB
  - Passive 2-way: 108dB

- **Maximum SPL (calculated)**
  - MF: 135dB continuous, 141dB peak
  - HF: 131dB continuous, 137dB peak
  - Passive 2-way: 134dB continuous, 140dB peak

- **Nominal Impedance**
  - MF & HF: 8 ohms
  - Passive 2-way: 8 ohms

- **Dispersion (-6dB)**
  - 60° horizontal, 40° vertical

- **Crossover**
  - 1.5kHz active or passive

- **Construction**
  - Lightweight weather resistant composite

- **Connectors**
  - 3m flying leads

- **Mounting**
  - Yoke or via 8 flying points to fit M12 bolts

- **Dimensions (W)**
  - 597mm x (H) 857mm x (D) 641mm
  - (W) 23.5ins x (H) 33.7ins x (D) 25.2ins

- **Weight**
  - 35kg (77lbs)

- **Options**
  - Passive 2-way crossover
  - 150W 70/100 volt line transformer

**Notes**

1. Measured on-axis in half space at 2 metres, then referred to 1 metre.
3. Measured in half space conditions at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
4. Measured in half space conditions at 2 metres using band limited pink noise, then referred to 1 metre.

**Architectural and Engineering Specifications**

- **Type**
  - Two-way large format mid/high horn

- **Performance of the loudspeaker system with its electronic controller shall meet or exceed the following criteria:**
  - **Frequency response measured 1 metre on axis shall be 150Hz-18kHz ± 3dB.**
  - **High frequency dispersion at -6dB points shall be 60°H x 40°V.**
  - **Power handling shall be 400W AES, 1600W peak MF, 150W AES, 600W peak HF.**
  - **Rated impedance shall be 8 ohms MF & HF.**
  - **Maximum SPL calculated at 1 metre on axis shall be 135dB continuous, 141dB peak MF, 131dB continuous, 137dB peak HF.**
  - **Dimensions (W) 597mm x (H) 857mm x (D) 641mm.**
  - **Weight 35kg (77lbs).**

The loudspeaker system shall be the Martin Audio AM604.