



TECHNICAL SPECIFICATIONS MQV2394

FEATURES

- Full Range VA4™ loudspeaker system
- Optimized for permanent install only
- Dual direct radiating 15-inch woofer in optimally vented enclosure
- Dual Horn loaded 10-inch cone with VA4™ phase plug
- 2-inch exit/75mm voice coil compression driver on constant directivity horn

DESCRIPTION

The MQV Series is part of the next generation of permanent installation loudspeakers. Using VA4™ Technology developed for the KF700 series, the MQV range replaces the ASV range of virtual array systems.

The MQV2394 uses dual direct radiating 15-inch woofers in an optimally vented enclosure.

Two horn loaded 10-inch midrange cones with special geometry are used that produce a time coherent wavefront through the upper portion of the midrange that is critical to vocal articulation. A phase plug with radial slots then serves to reduce the mechanical resistance of the subsystem without affecting the directivity of the source, allowing flawless vertical arraying of multiple MQV modules

A high power 2-inch exit/75mm voice coil compression driver is mounted on a constant directivity horn for consistent, accurate dispersal of HF information.

APPLICATIONS

The MQV2364 is engineered as a full range component for very large format arrays and is an effective tool in large-scale permanent installations. Comprehensive mounting points allow for flexible installation.

Applications include:
 Large Church Large Arenas
 Stadiums

DESCRIPTIVE DATA

| | |
|----------------------|---|
| LF | 2x 15-in Vented |
| MF | 2x 10-in Horn Loaded Cone, Radial Phase Plug |
| HF | 2-in Exit/75mm Voice Coil Compression Driver on Constant Directivity Horn |
| Configuration | Three Way, Full Range |
| Powering | Bi-amplified |
| Cabinet Type (shape) | Trapezoid |
| Enclosure Materials | Baltic Birch Plywood |
| Finish | Wear-resistant Textured Black Paint |
| Connectors | 1x 6-Terminal Barrier Strip & 1x Neutrik NL8 Speakon |
| Suspension Hardware | (16) 3/8"-16 Threaded Mounting Points (4 each on top, bottom and sides) |
| Grill | Powder Coated Perforated Steel |



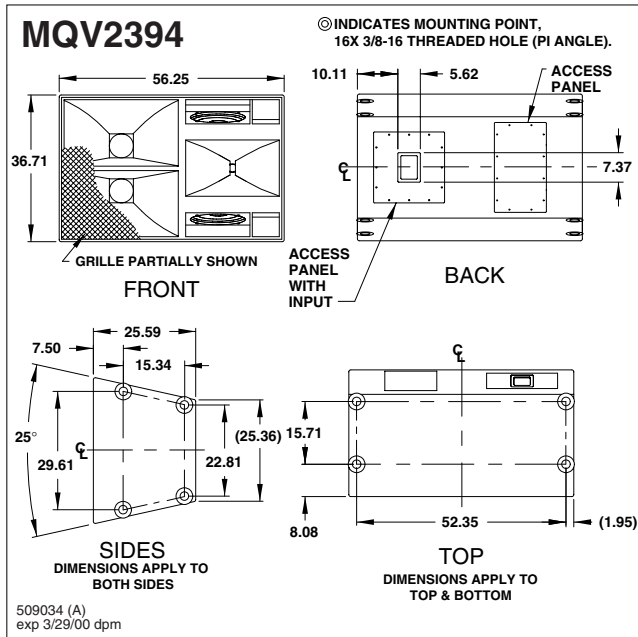
| Dimensions | Inches | Millimeters |
|-----------------|-----------------------|-------------|
| Height (front) | 36.71 | 932 |
| Height (rear) | 25.36 | 644 |
| Width | 56.25 | 1429 |
| Depth | 29.75 | 756 |
| Trapezoid Angle | 12.5 Degrees per Side | |
| Weights | Pounds | Kilograms |
| Net Weight | 295 | 133.8 |
| Shipping Weight | 330 | 149.7 |





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DIMENSIONAL DRAWING



NOMINAL DATA

Frequency Response

| | |
|--------|-----------------|
| ±3 dB | 50 Hz to 16 kHz |
| -10 dB | 34 Hz |

Axial Sensitivity (dB SPL, 1 Watt @ 1m)

| | |
|----|-----|
| LF | 100 |
| MF | 111 |
| HF | 110 |

Impedance (Ohms)

| | |
|----|---|
| LF | 4 |
| MF | 4 |
| HF | 8 |

Power Handling, AES Standard (Watts)

| | |
|----|------|
| LF | 1100 |
| MF | 800 |
| HF | 200 |

Calculated Maximum Output (dB SPL @ 1m)

| | |
|--------------|-------|
| LF Peak | 133.4 |
| MF Peak | 143.0 |
| HF Peak | 139.0 |
| LF Long Term | 127.4 |
| MF Long Term | 137.0 |
| HF Long Term | 133.0 |

Nominal Coverage Angle, -6 dB Points (degrees)

| | |
|------------|----|
| Horizontal | 90 |
| Vertical | 45 |

Recommended High-Pass Frequency

| | |
|--------------|------|
| 24 dB/Octave | 35Hz |
|--------------|------|

ARCHITECTURAL SPECIFICATIONS

The three-way full range loudspeaker system shall incorporate 2x 15-in woofer (vented), 2x 10-in cone MF transducer, and a 2-in exit compression driver HF transducer.

The MF driver shall be loaded into a midrange horn constructed of 3mm birch plywood reinforced with high density polyurethane foam. The MF horn shall incorporate a radial phase plug. The HF driver shall be loaded on constant directivity horn with a nominal coverage pattern of 90° (h) x 45° (v).

System frequency response shall vary no more than ±3 dB from 50 Hz to 16 kHz measured on axis. The midrange frequency section shall produce a Sound Pressure Level (SPL) of 111 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 143 SPL on axis at 1 meter. The high frequency section shall produce a Sound Pressure Level (SPL) of 110 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 139 SPL on axis at 1 meter. The midrange frequency section shall handle 800 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms. The high frequency section shall handle 200 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 15mm thickness void-free cross-grain-laminated Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in wear-resistant textured black paint. Input connectors shall be 1x 6-terminal barrier strip and 1x Neutrik NL8 Speakon. A total of sixteen 3/8"-16 threaded mounting points (4 each top, bottom and sides) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grill.

The two-way three-way loudspeaker shall be the EAW model MQV2394.