

# RMG200A Voice-Range Horn System

Specifications (See notes 1 and 2)

Loudspeaker Type: Voice-Range Horn System

**Operating Range:** 400 Hz - 4700 Hz

500 Hz - 4 kHz (+/-3dB)

**Max Input Ratings:** 75W Continuous, 120W Program

120 / 60 / 30 / 15 watt transformer taps

Recommended Power Amplifier: 100W to 140W @ 70v

Sensitivity 1W/1m:

115 dB SPL (400 Hz - 4K Hz 1/3 octave bands)

**Maximum Output:** 

134 dB SPL / 141 dB SPL (peak)

**Nominal Impedance:** 11 ohms Min Impedance: 11.1 ohms

Nominal -6dB Beamwidth:  $50^{\circ}$  H (+14 $^{\circ}$  / -9 $^{\circ}$ , 2 kHz - 4kHz)

40° V (+10° / -10°, 2 kHz - 4 kHz)

Axial Q / DI: 35 / 15.4, 2 kHz - 4 kHz

**Crossover Frequency:** 500 Hz / 5 kHz

Recommended Signal Processing: 400 Hz high pass filter

**Drivers:** MF (1) M200A, Ferrofluid-cooled

**Driver Protection:** 

**Input Connection:** 16 gauge, 2 conductor, 12'(4m)

SJOW cable through gland nut

**Controls:** None **Enclosure:** Fiberglass **Enclosure Hardware:** None

Mounting / Rigging Provisions: (4) 1/4" holes at the corners

of the horn mouth

Grille: None

**Required Accessories:** 400 Hz high pass filter

**Supplied Accessories:** 

**Optional Accessories:** DSC52 digital crossover/processor

**Dimensions:** Height: 9.75 in. / 248 mm

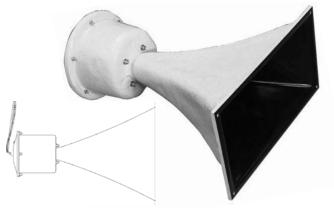
> Width (front): 17.5 in. / 445 mm Width (rear): 10.5 in. / 267 mm

Depth: 25 in. / 635 mm

Weight: 20 lb. / 9 kg 24 lb. / 10.8 kg **Shipping Weight:** 

1. Sensitivity: Free field pink noise measurement at 40 ft / 12.2 m at 50% power; extrapolated to 1 meter and an input of 2.83 volts RMS.

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



### **APPLICATIONS:**

- Voice Warning Systems
- Large Public Gatherings
- Industrial Paging

## FEATURES:

- 2 in. (51 mm) Throat Exit M200A
- Low Distortion, High Efficiency
- High Power Output
- Non-metallic Diaphragm
- Highly Resistant to Harsh Environments

## DESCRIPTION

The RMG200A is a complete horn/driver system designed for use in stand-alone voice-range sound reinforcement and announcement / signaling applications.

The RMG200A provides focused, high output sound projection, with predictable performance and exceptional long-term durability.

The horn portion of the assembly is a handcrafted one-piece waveguide, precision molded in hand-laminated, fiber-reinforced fiberglass for optimum performance. With substantial fiberglass layering and integral throat and driver flange construction, the horn is built to withstand substantial torque loads. The inherent strength and rigidity of the fiberglass construction enhances sonic efficiency by preventing sound energy loss, as well as providing inherently weatherproof fabrication.

The compression driver is a high output, high sensitivity loudspeaker that is configured with the diaphragm facing forward, isolating the voice coil and magnetic structure from the environment. The one-piece, non-metallic diaphragm/suspension offers exceptional resistance to the effects of humidity, dust, and corrosive atmospheres. The large area, low compression phase plug loading and large magnet structure exhibits extremely low distortion at high outputs while maintaining high efficiency and low power compression.

A fiberglass rear cover protects the driver and transformer from the effects of weather and corrosion.

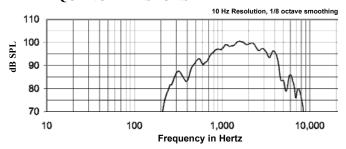
There is a five-year warranty against manufacturing defects on all components of the system. RMG200A Page 1 of 2

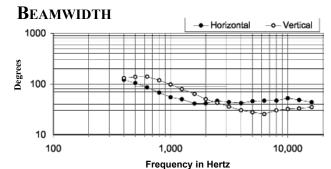
012004



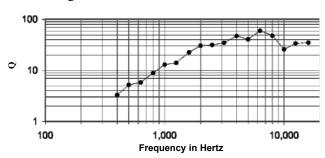
# RMG200A Voice-Range Horn System

# FREQUENCY RESPONSE

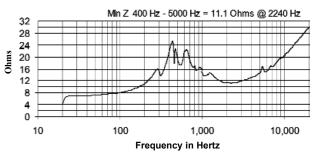




# AXIAL Q



## **IMPEDANCE**



### ARCHITECTS AND ENGINEERS SPECIFICATIONS

The driver shall be a 2 inch (51 mm) exit compression type, specifically designed for midrange frequency response. The 2 inch (51 mm) driver shall be mounted within a fiberglass exponential horn with an integral fiberglass weather resistant cover incorporating gland nut cable ingress. The horn and driver combination shall have an amplitude response of 500 Hz to 4 kHz dB (+/- 3.0 dB), with an input capability of 24V RMS, 115 dB sensitivity at 1 meter / 2.83V, and a nominal impedance of 8 Ohms when the coupling transformer is bypassed. The system shall incorporate a high quality 120W 70V/100V transformer with multiple power taps. The driver shall incorporate a large magnet structure, a one-piece, non-metallic diaphragm / suspension, and a copper-clad aluminum edgewound voice coil on a Kapton former immersed in Ferrofluid. The compression ratio shall be 1.84 to 1. The diaphragm assembly shall be field replaceable. The driver shall be 6 in. (152 mm) diameter, 2 in. (51 mm) depth plus 1 in. (25 mm) mounting stud projection, and weigh 8 lb (3.6 kg). The horn/driver system shall weigh 22 lbs./10 kg.