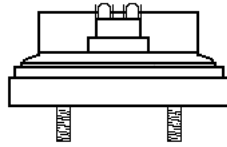


ALTEC LANSING®

PROFESSIONAL

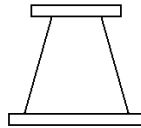
909-8B/16B

1" Exit High Frequency
Compression Driver



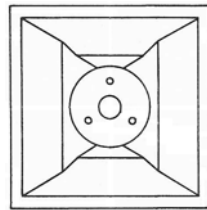
21216B

1" Throat To 1.4" Throat
Adaptor



MR II 564B

Medium Throw 60° x 40°
Mantaray™ 1.4" Throat
High Frequency Horn



FEATURES - THE ALTEC LANSING DIFFERENCE

- Superior Bandwidth
- High Performance 30W AES / 120W Peak Power Handling
- Smooth and Transparent

909-8B/16B GENERAL PRODUCT DESCRIPTION

Altec Lansing's 909-8B and 909-16B small format, high frequency, compression drivers are designed for use in professional sound reinforcement systems where both wide bandwidth and high acoustic output level are essential. When used with Altec Lansing Mantaray™ high frequency horns, the energy produced by these drivers can be directed to cover an audience accurately to the highest threshold of human hearing. Their wide range response, when complemented by Altec Lansing low frequency loudspeaker systems, will provide smooth reproduction of speech and music for installations in auditoriums, churches, stadiums, and arenas.

The robust Pascalite diaphragm extends the driver's power handling capability, while maintaining superior high frequency bandwidth. The compact magnetic motor-structure, utilizing a 2.5 lbs. (1.1 kg) ferrite magnet, provides a 1.8 T gap flux density. An exclusive Tangerine™ radial phasing-plug assures a smooth upper range response.

The excellent performance characteristics of these drivers make them the high frequency component of choice for small to medium size sound systems when premium dynamic reproduction is required.

MR II 564B GENERAL PRODUCT DESCRIPTION

Altec Lansing's MR II 564B Mantaray™ constant-directivity horn features efficient mid and high frequency response with proper loading down to 500 Hz, plus excellent directivity control over its 60°H x 40°V coverage pattern.

The geometry of the MR II 564B reduces the problem of high frequency beaming and maintains uniform dispersion at all frequencies within the rated frequency range. Therefore, the same quality sound will be heard by listeners sitting off-axis and on-axis to the MANTARAY™ horn.

Altec Lansing's 21216B adaptor is constructed of heavy gauge aluminum. This adaptor is the perfect choice for coupling the 909-8B and 909-16B to our MANTARAY™ series horns.

FREQUENCY RESPONSE ^{1, 2}

909-8B with MR II 564B: 500 Hz – 20 kHz
(flat 500 Hz – 6 kHz)

USABLE LOW FREQUENCY LIMIT ^{1, 2}

500 Hz

USABLE HIGH FREQUENCY LIMIT ^{1, 2}

20 kHz

SENSITIVITY ³

909-8B with MR II 564B: 110 dB SPL

POWER HANDLING ⁴

≥ 500 Hz: 30 W continuous; 120 W peak
≥ 1 kHz: 60 W continuous; 240 W peak

MAXIMUM OUTPUT (1 m) ⁵

909-8B with MR II 564B: 130 dB SPL

COVERAGE ANGLES ⁶

MR II 564B: 60° (horizontal) by 40° (vertical)

DIRECTIVITY FACTOR, Q ⁶

MR II 564B: 23.0

DIRECTIVITY INDEX, DI ⁶

MR II 564B: 13.6 dB

IMPEDANCE ⁷

Nominal: 8.0 Ohms or 16.0 Ohms
Minimum: 8.0 Ohms or 16.0 Ohms at 6 kHz

HARMONIC DISTORTION ⁸

THD: 1.59%

INPUT CONNECTIONS

1 x 2 position barrier strip with 0.250 in.
blade type terminals

FINISH

Dark gray enamel

REPLACEMENT HF DIAPHRAGM ASSEMBLY

26420: 8 Ohms
26421: 16 Ohms

MOUNTING DATA (DRIVERS)

Two 3/8-24 studs on a 3.0 in. diameter bolt circle
(Altec Lansing Standard)

DIMENSIONS

909-8B/16B	Diameter: 5.5 in. (140 mm) Depth: 2.7 in. (69 mm)
MR II 564B	Height: 12.75 in. (324 mm) Width: 12.75 in. (324 mm) Depth: 12.50 in. (318 mm)
21216B	Height: 3.25 in. (83 mm) Maximum Diameter: 5.5 in. (140 mm)

NET WEIGHT

909-8B/16B:	6.4 lbs. (2.9 kg)
MR II 564B:	5 lbs. (2.3 kg)
21216B:	1 lbs. (0.5 kg)

SHIPPING WEIGHT

909-8B/16B:	7.2 lbs. (3.3 kg)
MR II 564B:	7 lbs. (3.2 kg)
21216B:	1.6 lbs. (0.7 kg)

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

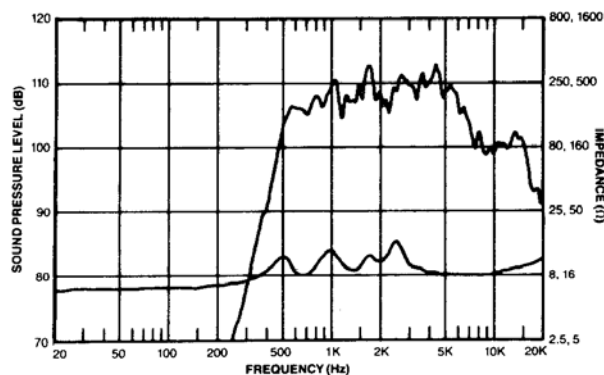
The motors shall be a small format high frequency compression driver. These drivers shall have an operating bandwidth of 500 Hz to 20 kHz. The power handling capability of these drivers shall be 30W AES (120 W peak) \geq 500 Hz and 60W AES (240W peak) \geq 1 kHz. One driver shall have a minimum impedance of 8 ohms (at 6 kHz), and the other driver shall have a minimum impedance of 16 ohms (at 6 kHz). The voice-coil for these drivers shall be an edge-wound, aluminum ribbon, which is 1.75 inches (44 mm) in diameter. The drivers shall have a diaphragm that features an all-metal, Pascalite dome and tangential compliance. The magnetic gap of the drivers shall have a flux density of 1.8 T, resulting from a 2.5 lbs. (1.1 kg) ferrite magnet. A Tangerine™ phasing-plug with eleven radial acoustic slots shall provide the proper phase relationship between sound emanating from the center and edges of the diaphragm's dome on these drivers. The entire diaphragm and voice-coil assembly for these drivers shall be field replaceable without requiring special tools. The drivers shall be 5.5 inches (140 mm) in diameter by 2.7 inches (69 mm) deep, excluding the one inch (25.4 mm) depth of the mounting studs. The drivers shall

weigh 6.4 pounds (2.9 kg). The high frequency compression drivers shall be the Altec Lansing model 909-8B and the Altec Lansing model 909-16B.

The projector shall be a constant-directivity mid and high frequency horn. The horn shall have an operating bandwidth of 500 Hz – 20 kHz. The horn shall have a mean horizontal dispersion angle of 60° and a mean vertical dispersion angle of 40°. When the 909-B series drivers are coupled to the 60° x 40° horn, this combination shall have a sensitivity of at least 110 dB, when measured on-axis, at a distance of one meter, with a one Watt input. The constant-directivity mid and high frequency horn shall be the Altec Lansing model MR II 564B.

The adaptor shall be designed to couple Altec Lansing's small format drivers to large format 1.4" horns. The adapter shall be constructed of heavy gauge aluminum. The adaptor shall have a maximum diameter of 5.5 in. (140 mm) and a height of 3.25 in. (83 mm). The adaptor shall weigh 1 lbs. (0.5 kg). This adapter shall be Altec Lansing's model 21216B.

FREQUENCY RESPONSE AND IMPEDANCE MAGNITUDE OF 909-8B ON MR II 564B



As we are continually striving to improve Altec Lansing products, specifications are subject to change without notice. Please visit www.altecp.com for the latest information on Altec Lansing Professional products.

SPECIFICATION NOTES

- 1 The frequency response of the loudspeaker is measured at a distance of no less than 3 meters to obtain full range data. The level is then corrected to be equivalent to a 2.83 V 1 m measurement.
- 2 The limits of the frequency response are referenced to -10 dB of the loudspeaker's rated sensitivity.
- 3 The sensitivity of the loudspeaker is the log based average SPL taken over the intended bandwidth of operation for the loudspeaker with a 2.83 V swept sine stimulus. The data is measured and level corrected in a manner consistent with note 1.
- 4 The power handling capacity of the loudspeaker is tested using a full range form of AES Standard 2-1984. The test stimulus is band limited (500 Hz – 16 kHz) pink noise with a 6 dB crest factor. The applied RMS voltage is determined using the minimum impedance of the loudspeaker. The amplifier used to drive the loudspeaker has a minimum operating headroom of 6 dB referenced to the RMS voltage.
- 5 The peak output level of the loudspeaker is calculated based on the sensitivity and the peak power handling capabilities of the loudspeaker.
- 6 The coverage angles for the loudspeaker are taken as the -6 dB points of the directivity response and averaged from 500 Hz – 16 kHz.
- 7 The minimum impedance of the loudspeaker is taken over its intended band of operation.
- 8 The distortion measurements of the loudspeaker are performed at a distance of 1 m with RMS input voltages corresponding to 10% of rated power handling calculated using minimum loudspeaker impedance. The distortion percentages are log based averages from 500 Hz – 10 kHz.

VISIT WWW.ALTECP.COM FOR

- Authorized EASE data on all Altec Lansing Professional loudspeakers
- Specification sheets in .pdf format. Download page 1 of the specification sheet for you submittals.
- One paragraph A&E Specifications in .doc format

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