



Electro-Voice®

a MARK IV company

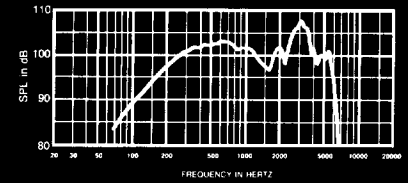


FIGURE 1 — Axial Amplitude Response
(1 watt/1 meter)

M-12G

Guitar Monitor Speaker System

SPECIFICATIONS

Frequency Response, Measured At 10 Feet on Axis, Swept 1/3-Octave, Half-space Anechoic Environment (see Figure 1. Curve shown has been normalized for 1 Watt/1 Meter.):

80-6,000 Hz
Usable Low-Frequency Limit (10-dB-down point):

80 Hz
Half-Space Reference Efficiency:

4.3%
Long-Term Average Power Handling Capacity per EIA Standard RS-426A (see Power Handling Capacity Section):

200 Watts / 800 Watts (short term)
Maximum Acoustic Output:
8.6 Watts
Sound Pressure Level at 1 Meter, 1 Watt Input, Anechoic Environment, Band-Limited Pink Noise Signal, 300 to 2,000 Hz:

100 dB
Distortion, 0.1 Full Power Input
Second Harmonic,

100 Hz: 5.0%
1,000 Hz: 2.0%
10,000 Hz: 4.0%
Third Harmonic,

100 Hz: 4.5%
1,000 Hz: 1.5%
10,000 Hz: 3.0%
Transducer Complement:

EVM® -12L Series II speaker

Impedance,

Nominal:

8 ohms

Minimum:

6.4 ohms

Input Connectors:

Two 1/4-inch phone jacks wired in parallel

(allows paralleling of multiple speakers)

Enclosure Materials and Colors:

Sealed, one-piece molded black textured polyethylene enclosure.

Dimensions:

41.4 cm (16.3 in.) high,
45.7 cm (18.0 in.) wide,
39.1 cm (15.4 in.) deep

Net Weight:

14.3 kg (31.5 lb)

Shipping Weight:

16.4 kg (36.0 lb)

DESCRIPTION

The M-12G is a compact stage monitor for guitar. The monitor features the EVM-12L Series II speaker, widely used by guitarists in live performance and studio settings. The monitor's small size and floor-wedge shape allows unobtrusive placement on stages, and aims the sound of the guitar directly to the player's ears rather than along the floor.

The player hears exactly what is miked and the monitors do not have to be as loud for the player to hear the same level of output. Stage levels are therefore controlled and interference in the room is lessened between the sound from the stage and the sound from the main speaker systems. Cleaner monitor and house mixes are possible.

The M-12G is sealed rather than vented. The rolloff that this acoustic suspension design provides is gradual, beginning just above the low E string of the guitar. The low end is tight and clean, without excess "woofiness," and the midrange and highs are well balanced.

ENCLOSURE

The enclosure is molded of polyethylene, providing durability and light weight. Monitor-

ing angles of 35°, 45°, or 50° are available, depending on which side of the cabinet is placed on the floor. An integrally molded handle provides precise, comfortable balance when carrying the 31.5-pound monitor. A steel grille screen protects the speaker.

CONNECTIONS

The M-12G guitar monitors are designed to receive speaker-level signals from the external speaker jack of a combo amp or amp head, as well as from the power amplifier in a rack system. Quarter-inch parallel jacks are provided at the rear of the enclosure; two monitors may be paralleled on one amplifier channel for a 4-ohm load. A pair of M-12G monitors on two amplifier channels provides the player a high-level stereo image while using a minimum of floor space.

EVM-12L SERIES II

The EVM-12L Series II is a very efficient speaker designed for reinforcement of electric guitar. It has become a standard among touring and studio guitarists, and is a premium option offered by several manufacturers of guitar amplifiers. Power handling capacity is 200 watts long-term, and 800 watts peak. The low-mass edgewound voice coil is driven by a 16-pound magnetic structure. The speaker features a heavy-duty curvilinear cone and fatigue-resistant suspension for accurate reproduction and long life. The rugged frame is diecast aluminum.

POWER HANDLING CAPACITY

To our knowledge, Electro-Voice was the first U.S. manufacturer to develop and publish a power test closely related to real-life conditions. First, we use a random noise input signal because it contains many

frequencies simultaneously, just like real voice or instrument program. Second, our signal contains more energy at extremely high and low frequencies than typical actual program, adding an extra measure of reliability. Third, the test signal includes not only the overall "long-term average" or "continuous" level - which our ears interpret as loudness - but also short-duration peaks which are many times higher than the average, just like actual program. The long-term average level stresses the speaker thermally (heat). The instantaneous peaks test mechanical reliability (cone and diaphragm excursion). Note that the sine wave test signals sometimes used have much less demanding peak value related to their average level. In actual use, long-term average levels exist from several seconds on up, but we apply the long-term average for several hours, adding another extra measure of reliability.

Specifically, the M-12G is designed to withstand the power test described in the revised EIA Standard RS-426A. The EIA test spectrum is applied for eight hours. To obtain the spectrum, the output of a white noise generator (white noise is a particular type of random noise with equal energy per bandwidth in Hz) is fed to a shaping filter with 6-dB-per-octave slopes below 40 Hz and above 318 Hz. When measured with the usual constant-percentage bandwidth analyzer (one-third-octave), this shaping filter produces a spectrum whose 3-dB-down points are at 100 Hz and 1,200 Hz with a 3-dB-per-octave slope above 1,200 Hz. This shaped signal is sent to the power amplifier with a continuous power set at 200 watts into 7.4 ohms EIA equivalent impedance, (38.5 volts true RMS). Amplifier clipping sets peaks at 6 dB above the continuous power, or 800 watts peak (77.0 volts peak). This procedure provides a rigorous test of both thermal and mechanical failure modes.

MICROPHONE MOUNTING

The M-12G guitar monitor is equipped with a 5/8-inch, 27 thread microphone attachment, mounted to the grille with a #8 x 2-inch screw. This attachment permits the user to mount a goose-neck or a mic clip on the speaker. The monitor may then be easily miked, eliminating the need for a mic stand and keeping the floor clear around the performer.

GRILLE REMOVAL AND ADJUSTMENT

The grille assembly of the M-12G is fastened to the enclosure using three #8 x 1 1/2-inch and one #8 x 2-inch screws. The grille assembly can be quickly and easily removed by using a phillips screw driver, allowing access to the drivers or to rotate the grille so the orientation of the Electro-Voice logo can be changed.

ELECTRO-VOICE UNIFORM LIMITED WARRANTY STATEMENT

Electro-Voice products are guaranteed against malfunction due to defects in materials and workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. Exclusions and Limitations: The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than Electro-Voice or any of its authorized service representatives. Obtaining Warranty Service:

To obtain warranty service, a customer must deliver the product, prepaid, to Electro-Voice or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from Electro-Voice Inc., 600 Cecil Street, Buchanan, MI 49107 (616/695-6831); and/or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (209/651-7777). Incidental and Consequential Damages Excluded: Product repair or replacement and return to the customer are only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. Other Rights: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Electro-Voice Speakers and Speaker Systems are guaranteed against malfunction due to defects in materials or workmanship for a period of five (5) years from the date of original purchase. The Limited Warranty does not apply to burned voice coils or malfunctions such as cone and/or coil damage resulting from improperly designed enclosures. Electro-Voice active electronics associated with the speaker system are guaranteed for three (3) years from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

Service and repair address for this product: Electro-Voice Inc., 600 Cecil Street, Buchanan, MI 49107

Specifications subject to change without notice.



ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107

MANUFACTURING PLANTS AT ■ BUCHANAN, MI ■ NEWPORT, TN ■ SEVIERVILLE, TN ■ OKLAHOMA CITY, OK ■ GANANOQUE, ONT.
©Electro-Voice Inc. 1991 ■ Litho in U.S.A. Part Number 531825 - 150

a MARK IV company