# Voice ENGINEERING DATA

## MC8, MC12, MT12 MICHIGAN LOUDSPEAKERS



#### DESCRIPTION

Michigan MC8, MC12, and MT12 loudspeakers are designed to operate effectively as full-range high fidelity speakers. Full-range reproduction is enhanced by the exclusive Radax design. The dimensions, mass, and location of the coaxiallymounted Radax cone have been carefully chosen for maximum improvement of the speaker's high frequency performance. Carefully selected and specially treated cone material assures extended bass response, affording pleasing reproduction of all low frequencies normally encountered in music. The MT12 incorporates a ring diaphragm tweeter with an annular horn for improved high-frequency response and dispersion.

#### INSTALLATION

As with any quality loudspeaker, care should be taken to house Michigan speakers properly, if best results are to be obtained. Excellent results may be achieved by the use of a properly designed bass reflex enclosure. Detailed information on home construction of bass reflex enclosures is available from Electro-Voice in Technical Bulletin No.10. Any of the bass reflex enclosures described in numerous articles may be employed, provided they are intended for a speaker of the same size and resonant frequency as the Michigan speaker to be used.

To mount a Michigan speaker, cut a baffle opening and drill mounting holes as indicated. Use four carriage bolts, nuts and washers, or equivalent; use of woodscrews is not recommended. Secure the speaker to the baffle board just tightly enough to compress the speaker gasket. Excessive tightening is not necessary as the compressible gasket will form an acoustical seal with nominal pressure.

#### CONNECTIONS

Use #18 or larger fixture wire to connect the two terminals on the loudspeaker to the amplifier output. To insure proper phasing, the speaker T1 terminal should be connected to the 8-ohm amplifier tap; the T2 terminal should be connected to the amplifier common tap. The 8-ohm impedance of Michigan speakers is a standard EIA rating. A mismatch of as much as fifty-percent may be made without greatly affecting the reproduction quality or efficiency of the unit. When the speaker cable must be run under carpets, or behind moldings, etc., ordinary TV twin lead is satisfactory.

#### SPECIFICATIONS

	MC8	MC12	MT12
Frequency Response:	50-13,000 cps	40-14,000 cps	40-18,000 cps
Nominal Impedance:	8 ohms	8 ohms	8 ohms
Power Handling Capaci	ty		
Program:	12 watts	20 watts	20 watts
Peak:	24 watts	40 watts	40 watts
Voice Coil Diameter:	1 inch	2 inches	2 inches
			1 inch tweeter
Magnet Weight:	6.4 oz.	6.8 oz.	6.8 oz.
	Indox Ceramic	Alnico V	1.47 oz. tweeter
			Almico V
Nominal Resonance:	75 cps	60 cps	60 cps
ELA Sensitivity Rating:	46 db	46 db	46 db
Dimensions:	8-1/4" dia. x	12-1/4" dia. x	12-1/8" dia. x
	3-3/16" depth	3-1/2" depth	5-1/2" depth
	behind panel	behind panel	behind panel
Net Weight:	4 pounds	5-1/2 pounds	7 pounds
Baffle Opening:	7 inches	11 inches	11 inches
Mounting:	4-7/32" holes on	4-1/4"holes on	4-9/32" holes on
	7-5/8" circle	11-1/2" circle	11-1/2" circle

### ADJUSTMENT OF BALANCE CONTROL

The Model MT12 is provided with a continuouslyvariable level control which is used to adjust the very-high-frequency response (brilliance) of the speaker to varying personal tastes and acoustic environments. Setting the high-frequency control too high will produce a "metallic" sound. Your best guide to setting the control properly is, of course, a familiarity with the sound of live music. Acoustically "hard" or "live" rooms will normally require a retarded setting of the brilliance control to compensate for the greater amount of high-frequency reflection. In "soft" or "dead" rooms, with carpeting, draperies, and soft furniture, a more advanced setting of the high-frequency control will normally be required.

#### CUSTOMER SERVICE

Michigan speakers are packed to provide protection well in excess of shipping requirements of the Interstate Commerce Commission. If shipping damage does occur however, contact the carrier, or the dealer from whom the unit was purchased, requesting inspection and instructions.

#### WARRANTY

Electro-Voice high fidelity speakers, speaker systems, and accessories are guaranteed for five years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not cover finish or appearance items or malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

For correct shipping address, instructions on return of Electro-Voice products for repair, and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone:616/695-6831).

Electro-Voice also maintains complete facilities for nonwarranty service of E-V products.



MANUFACTURING PLANTS AT B BUCHANAN, MICH. B NEWPORT, TENN. SEVIERVILLE, TENN. B GANANOQUE, ONT. B LITHO IN U.S.A.