

# Electro-Voice®

ELECTRO-VOICE, INC.  
BUCHANAN, MICHIGAN



## Specifications

### Model 654 Microphone



Fig. 1 — Model 654 Microphone

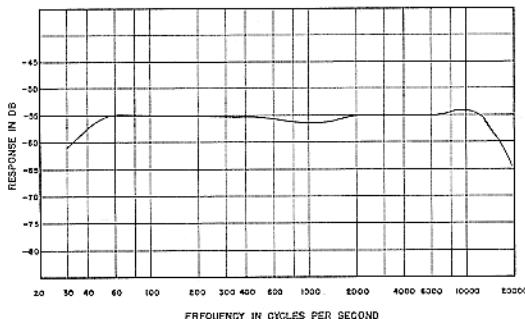


Fig. 2 — Response

The Electro-Voice Model 654 Microphone is a dynamic, omnidirectional type designed for all commercial uses — FM, AM, and TV broadcasting, studio, remote, PA, and recording. Its slim design is made possible without the necessity for closely associated auxiliary equipment. Wide frequency response, wide pickup range, and light weight make it ideal for TV staging and for pass-around use in audience participation. The microphone can be worked from any direction with negligible audible frequency discrimination.

The Model 654 is mounted on a swivel which permits tilting the microphone through a 90° arc toward sound source. It can be mounted on a floor or desk stand, on a boom, or carried in the hand.

This microphone features the exclusive Electro-Voice Acoustalloy diaphragm. This nonmetallic diaphragm permits smooth response over a wide frequency range and withstands high humidity, temperature extremes, corrosive effects of salt air, and severe mechanical shocks. It is practically indestructible with normal use.

## SPECIFICATIONS

**Type:** Dynamic

**Frequency Response:** Uniform from 50 to 16,000 cps. See fig. 2.

**Impedance:** Recessed switch in microphone stud permits quick selection of 50 or 250 ohms. Line balanced to ground and phased.

**Output Level:**

50-ohms impedance: -55db\*; RETMA sensitivity rating, -148db

250-ohms impedance: -55db\*; RETMA sensitivity rating, -147db

\*0 db = 1 mw/10 dynes/cm<sup>2</sup>

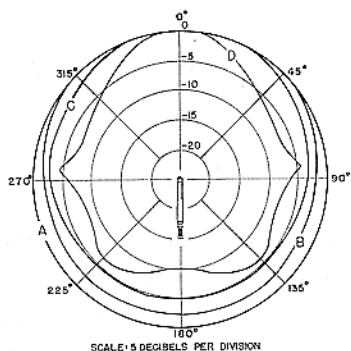
**Polar Pattern:** Essentially omnidirectional, becoming directional with rise in frequency. See fig. 3.

**Diaphragm:** Electro-Voice Acoustalloy

**Magnetic Circuit:** Employs Alnico V and Armco magnetic iron in a non-welded circuit.

**Case:** Steel

# Electro-Voice Specifications / Model 654 Microphone



A — 500 cps      C — 5,000 cps  
 B — 1,500 cps    D — 10,000 cps

Fig. 3 — Polar Pattern

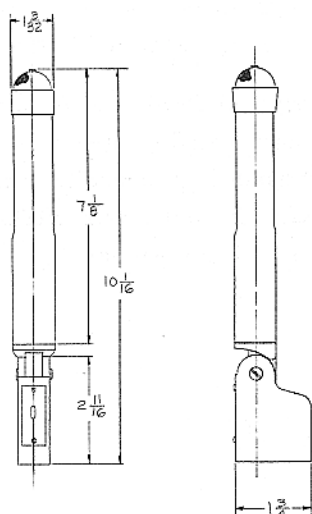


Fig. 4 — Dimensions

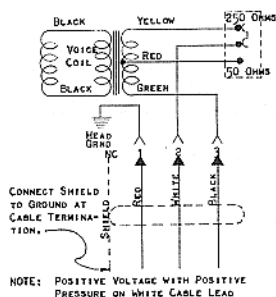


Fig. 5 — Wiring Diagram

**Finish:** Nonreflecting gray

**Dimensions:**

Diameter:  $1\frac{3}{32}$  in.

Length:  $10\frac{1}{16}$  in. including stud

See fig. 4.

**Net Weight:** 16 oz

**Cable:** 18-ft, three-conductor, shielded, neoprene jacketed, broadcast type.

**Cable Connector:** XL-3-11 Cannon, locking, three-contact wiping type built into the microphone. Permits tilting microphone towards sound source without strain on connector or cable.

**Stand Coupler:**  $\frac{5}{8}$  in. — 27 thread

**Optional Accessories:** Electro-Voice Model 345 Shock Mount

**Warranty:** The Electro-Voice Model 654 Microphone is guaranteed against defects in workmanship and materials.

## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an Electro-Voice Model 654 or equivalent. The microphone shall be an omnidirectional, dynamic type with wide-range uniform frequency response from 50 to 16,000 cps. The diaphragm shall be nonmetallic Acoustalloy and shall have a magnetic shield to prevent dust and iron particles from reaching the diaphragm. The available impedances shall be 50 or 250 ohms. It shall be possible to select either impedance by means of a recessed switch in microphone stud. Line shall be balanced to ground and phased.

The output level shall be -55 db with 0 db equalling 1 mw/10 dynes/cm<sup>2</sup>. RETMA sensitivity rating shall be -148 db for 50-ohm impedance and -147 db for 250-ohm impedance. The magnetic circuit shall be a nonwelded circuit and employ Alnico V and Armco magnetic iron.

The case shall be made of steel. The microphone shall have a diameter of  $1\frac{3}{32}$  in., a length including stud of  $10\frac{1}{16}$  in., and a net weight of 16 oz. Finish of the microphone shall be a nonreflecting gray. An 18 ft, three-conductor, shielded, neoprene jacketed, broadcast-type cable shall be provided. The microphone shall have a built-in, three-contact, wiping-type cable connector. It shall be possible to tilt the microphone through a 90-degree arc without strain on connector or cable.

The microphone shall include a stand coupler with a  $\frac{5}{8}$  in. — 27 thread to permit use with a shock mount such as the Electro-Voice Model 346, a floor or desk stand.