DESCRIPTION AND APPLICATIONS

The model 666 is an all-purpose microphone designed to provide wide-range reproduction under a great variety of conditions. Because of its excellent and uniform polar response, it is especially useful in locations where ambient noise and severe reverberation exist.

The markedly superior background noise rejection and smooth wide-range response of the 666 result from the use of three sound entrances located at different distances from the back of the diaphragm. These constitute the E-V Variable-D microphone.* In combination, these three entrances form one effective back entrance which varies in distance from the diaphragm inversely with frequency. The resulting phase and amplitude conditions produce a uniform cardioid pattern over a wide frequency range. Adverse effects of high ambient noise, reverberation and proximity are eliminated.

TV panel shows and roundtable discussion programs utilize the outstanding separation afforded by the 666. Its superior side and rear sound cancellation permits the placement of orchestra members for best TV picture composition when the 666 is used for individual instrument pickup. Recording studios find the E-V 666 excellent for stereo.

A tailored low-frequency response distinguishes the 666R from the 666. Attenuation of the low frequencies has proved to be an excellent method for reinstating sound spectrum balance when excessive drum and bass instrument sound might otherwise constitute a problem. Because the 666R response rises smoothly about 4-1/2 db in the 100 to 1,000 Hz range, room rumble also is minimized.

* U.S. Patent No. 3,115,207

The microphone features the exclusive non-metallic Electro-Voice Acoustalloy® diaphragm which 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 in normal use.

SPECIFICATIONS

Generating Element: Dynamic

Frequency Response: Model 666: 40 to 15,000 Hz
Model 666R: 40 to 15,000 Hz
(rising 4-1/2 db 100 to 1,000 Hz)

Output Level:

Model 666

Impedance	Rating
50 ohm: -58 db*	EIA sensitivity: -151 db
150 ohm: -58 db*	EIA sensitivity: -152 db
250 ohm: -58 db*	EIA sensitivity: -150 db

Model 666R

Impedance	Rating
50 ohm: -56 db*	EIA sensitivity: -149 db
150 ohm: -56 db*	EIA sensitivity: -150 db
250 ohm: -56 db*	EIA sensitivity: -148 db

(*0 db=1 mw/10 dynes/cm^2)

Polar Pattern: Cardioid

Impedance: 50, 150, 250 ohms, connected for 150 ohms when shipped.

Hum Pickup Level: -125 dbm ref: relative to 0.001 gauss field. Shielded transformer with special hum bucking coil almost totally eliminates hum pickup when in vicinity of AC fields.

Diaphragm: Electro-Voice Acoustalloy®

Case Material: Die Cast Aluminum

Dimensions: 1-11/16 inch maximum diameter, 7-11/16 inches long

Net Weight: 11 ounces, without cable

Cable: 20-foot, three conductor, shielded, neoprene jacketed broadcast type, with UA-3-11 connector.

Cable Connector: Cannon UA-3-12

Accessories: Model 300 detachable stand clamp, deluxe carrying case.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an Electro-Voice model 666 (or 666R) or equivalent. The microphone shall be a cardioid dynamic type with wide range, uniform response from 40 to 15,000 Hz. 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, 150, and 250 ohms. It shall be possible to select desired impedance by changing one soldered connection in removable insert at end of microphone. Lines shall be balanced to ground and phased.

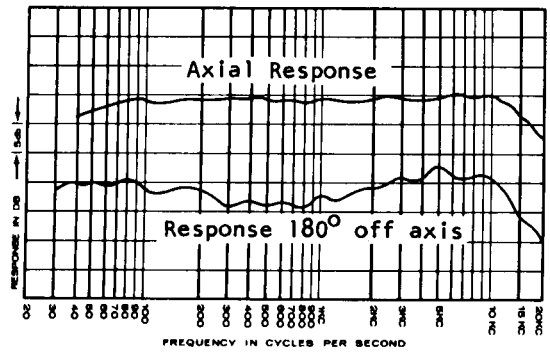

Figure 1 - 666 Frequency Response

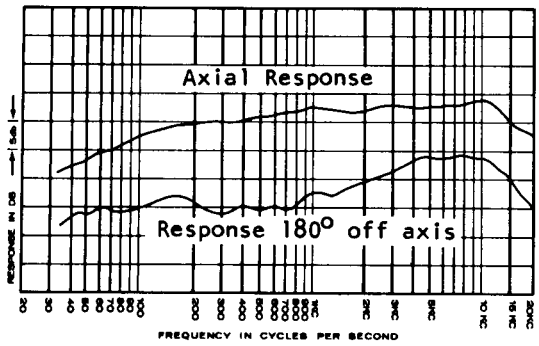

Figure 2 - 666R Frequency Response

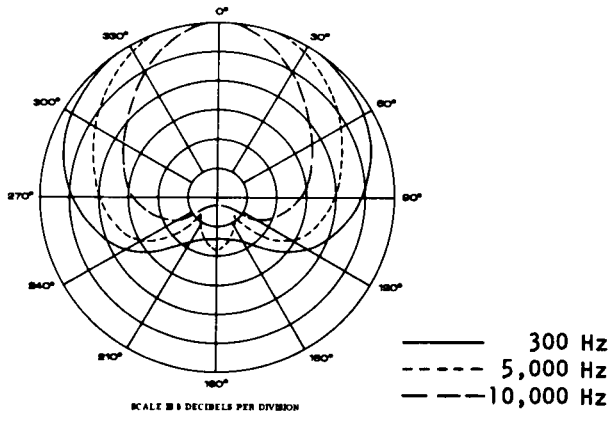

Figure 3 - Polar Pattern

The output levels shall be -58 db at all impedances, with 0 db=1 mw/10 dynes/cm^2. (For model 666R, output level shall be -56 db at all impedances, with 0 db=1 mw/10 dynes/cm^2.) The magnetic circuit shall be a nonwelded circuit employing Alnico V and Armco magnetic iron.

The case shall be of cast aluminum. The microphone shall have a maximum diameter of 1-11/16 inch and a length of 7-11/16 inches. Weight shall be 11 ounces. Finish shall be abrasion-proof, nonreflecting gray. A 20-foot, three conductor, shielded neoprene jacketed broadcast type cable shall be provided. The microphone shall have a built-in cable connector similar or equivalent to the model UA-3-12 which will mate with a connector similar or equivalent to model UA-3-11 on the cable. Model 300 detachable clamp and deluxe carrying case shall be provided.

Electro-Voice model 666 (666R) is specified.

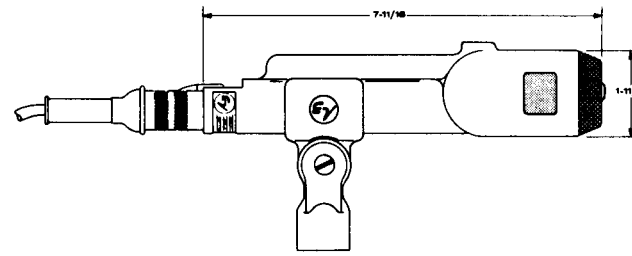

Figure 4 - Dimensions

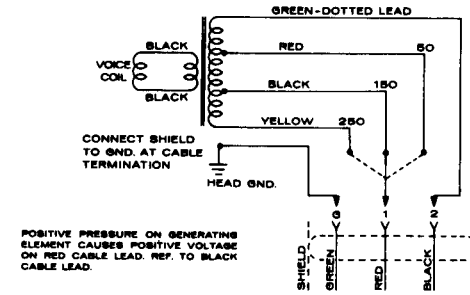

Figure 5 - Wiring

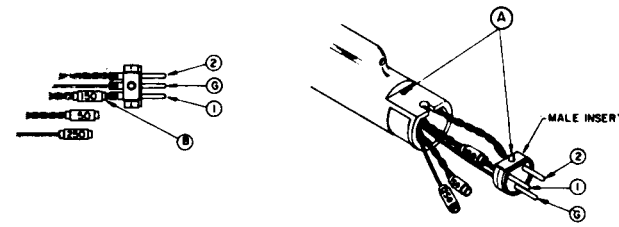

Figure 6 - Impedance adjustment