659A Professional Cardioid Microphone



The ALTEC 659A Professional Cardioid Microphone was developed for application in equalized sound systems that use the Altec Acousta-Voicing[®] process or in any sound system where a microphone with exceptional smooth and uniform response characteristics are required.

Unusually smooth, the 659A achieves a high level of microphone performance, incorporating all the advanced engineering benefits of dual dynamic moving coil units. These dual cartridges divide the low and high frequency bands of the audio spectrum for improved frequency response and reduced proximity effect.

The individual response curve of each 659A microphone is charted on a precision, servodriven recorder with the microphone operating in an anechoic chamber. This curve is supplied with its respective microphone.



The ALTEC 659A microphone has a nominal output impedance of 200 ohms for operation with low impedance input equipment. The high sensitivity of -53 dBm/10 dynes/cm² provides an increased signal-to-noise ratio in many situations. Average front-to-back discrimination is 20 dB.

The diaphragms are rugged and durable; highly resistant to the effects of shock, blast or corrosive fumes and are able to withstand wide humidity and temperature variations. A built-in hum-bucking coil provides superior hum rejection.

The 659A microphone has a standard 3-pin XLR-type connector that allows most existing studio cable assemblies to be plugged into the connector. It is supplied with a cable set consisting of 25 feet of 2-conductor shielded cable with a mating XLR-3 type connector on each end.

SPECIFICATIONS

Type:

Dual dynamic moving coil, cardioid

Frequency Response:

40 to 16,000 Hz (see Figure 2)

Impedance:

200 ohms, nominal

Output Level:

-53 dBm (Ref.: 10 dynes/cm²

Average Discrimination: 20 dB (front to back)

Pickup Pattern:

Cardioid (see Figure 1)

Hum:

Less than -120 dB (Ref.: 10⁻³ Gauss)

Dimensions (excluding

cable and plug):

1.6" maximum diameter x 7-13/16" long

Weight (excluding

cable and plug):

10 ounces

Finish:

Matte black and satin nickel

Mounting:

Supplied with an Altec slip-on adapter fitted with standard 5/8"-27

threads. Swivel mounting permits proper positioning

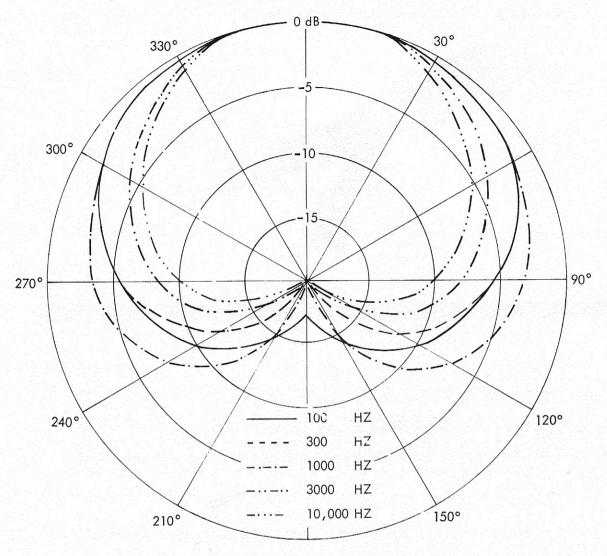


Figure 1. Cardioid Polar Pattern

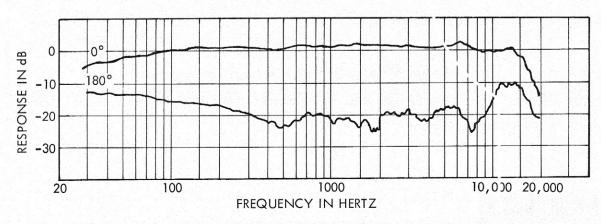


Figure 2. Frequency Response

ALTEC 659A

Altec Cable Set:

25 feet of 2-conductor shielded cable with XLR-3 type connector

on each end

Accessories:

See "Microphone Accessories" catalog sheet AL-1439 for desk or

floor stands, on-off switches, adapters, shock mounts, etc.

NOTE

ACCESSORIES MUST BE ORDERED SEPARATELY.

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS.

The microphone shall be of the cardioid type employing dual dynamic moving coil cartridges. Each cartridge shall be shock mounted. Frequency response shall be uniform from 40 to 16,000 Hz. The output level shall be at least -53 dBm/10 dynes/cm² and the nominal impedance shall be 200 ohms balanced to ground. Average front-to-back discrimination shall be 20 dB over the range of 40 to 16,000 Hz. A humbucking coil shall be used to ensure hum of not greater than -120 dB when referenced to 10^{-3} Gauss.

The largest diameter of the microphone housing shall be 1.6" and the length of the housing shall be 7-13/16". The finish of the housing shall be nonglare matte black and satin nickel.

The microphone shall be furnished with an individual calibration curve. The 659A shall be furnished with a separate Altec stand adapter and 25 feet of 2-conductor shielded cable with an XLR-3 type connector on each end.

The microphone shall be the Altec Model 659A Professional Cardioid Microphone.