

689B & 689BX Professional Cardioid Microphones

689B
689BX



Features

- Exceptionally Uniform Response
- Standard 3-Pin Connector
- Special Mylar® Diaphragm
- Shock and Blast Resistant
- Unaffected by Humidity Extremes
- Withstands Temperature Variations
- Positive "Lock-In" Safety Feature
- Effortless Insertion and Removal From Swivel Mounting Adapter
- Cardioid Pickup Pattern
- Professional Quality
- Sturdy Compact Styling
- Pop-Screen Filter
- "Non-Glare" T.V. Finish

PROFESSIONAL QUALITY MUSIC REPRODUCTION BROADCASTING — TELECASTING — RECORDING

Created for the broadcast and recording industry, particularly in those cases where the pickup of musical program material requires an extremely uniform response, with minimum pickup effect of the surrounding audience background noise, the Altec 689B represents the finest cardioid dynamic microphone which meets the specifications of those professionals who demand equipment of laboratory-standard quality. The output level is $-54\text{dbm}/10\text{dynes}/\text{cm}^2$ and the output impedance is 150/250 ohms. Front-to-back discrimination of the 689B averages over 20 db throughout the greater portion of the audible spectrum from 40 to 16,000 cycles. When used with reproducing equipment of comparable high quality, sound acoustically received by the 689B is converted to an electrical signal with highest fidelity, owing to the inherent low resonance and peak-free response of the exclusive Altec Diaphragm of Mylar® polyester having tangential compliance.

The exterior design combines functional engineering with an attractive slimline appearance. The finish is a non-glare green and black enamel, suitable for all T.V. applications. A locking facility on the microphone prevents inadvertent slippage, and subsequent possibility of damage, when installed in the slip-on swivel adapter — yet permits instantaneous insertion and removal with minimum effort on the part of the performer or user.

Many professional applications require the usage of a boom mount for ease of operation, correct placement, and minimum mechanical vibration. The Altec 181B boom mount (illustrated) meets such requirements admirably.

A precision, servo-driven recorder, in conjunction with an Altec anechoic chamber is used to chart the individual response curve for each 689B microphone; this curve is then supplied to the consumer, providing a permanent record of the unit's response characteristics for immediate reference.

The 689B Microphone comes with a 3-pin connector which accepts the Cannon XLR-3-11C plug, the standard of the industry. The new 3-pin connector allows easy, convenient connection of the microphone to existing cable assemblies commonly used in recording, broadcasting, and public address systems without the need for adapters. These features lower the initial installation cost. By using a 3-pin connector, the microphones may be used in a balanced or unbalanced line without the need for internal wiring changes.

Fifteen feet of heavy-duty broadcast-quality two conductor cable (100% shield) is supplied with the microphone and a plug for connection to the microphone.

Versatile — compact — lightweight — adaptable — rugged — wide range — peak-free response... these qualities characterize the Altec 689B, designed especially for the recording and transmission of complex musical waveforms where no compromise from the highest established standards is possible.

*Note: The 689BX Microphone is a special version of the 689B for application in equalized sound systems utilizing the Boner Process or for stereo systems requiring matched microphones.



A Division of *LSV* Ling Altec, Inc.

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PERFORMANCE SPECIFICATIONS

Type:	Moving Coil Dynamic
Frequency Response:	40 to 16,000 cps. (Calibration Curve Included)
Output Impedance:	150/250 ohms
Output Level:	-54 dbm/10 dynes/cm ²
Discrimination:	Average front to back, 20 db
Pickup Pattern:	Cardioid
Hum:	-120 db (Ref.: 10 ⁻³ Gauss)
Dimensions:	1½" diameter at top, 7 ³ / ₁₆ " long not including plug
Weight:	11 ozs. (not including cable and plug)
Finish:	Two-tone baked enamel, black and dark green
Mounting:	Separate "Slip-on" adapter No. 13798 (black) furnished. Adapter has standard 5/8"-27 thread. Swivel mounting permits proper positioning of the microphone on all stands. 15 feet of two-conductor, shielded cable is supplied with the microphone along with a plug for connection to the microphone.
Accessories:	See "Microphone Accessories" sheet for desk or floor stands, on-off switches, adapters, and other microphone accessories.

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ARCHITECTS AND ENGINEERS SPECIFICATIONS

The microphone shall be of the cardioid type, employing the moving coil dynamic principle with a diaphragm of Mylar® having tangential compliance to provide full protection against extreme shock and blasts. The diaphragm shall withstand exposure to temperature variations from -20 to +160 degrees Fahrenheit and shall not be susceptible to the effects of corrosive fumes. The acoustical element shall be protected from breath-blast by an internal pop-screen filter. The frequency response shall be uniform from 40 to 16,000 cps. The output level shall be at least -54dbm/10dynes/cm² and the output impedance shall be 150/250 ohms balanced to ground. The average discrimination between the front and back of the microphone shall be in the order of 20 db over the range of 40 to 16,000 cps. The hum shall be no greater than -120 db (Ref.: 10⁻³ Gauss).

The microphone shall accept the standard 3-pin connector, such as the Cannon XLR-3-11C, directly without the use of adapters. The microphone supplied under this specification shall not be of the multiple impedance type thereby eliminating the possibility of the microphone being installed with the improper matching impedance. The microphone serial number shall be clearly stated on the microphone and on the accompanying factory calibration curve. The factory calibration curve shall be a complete record of the frequency response of the microphone and shall be submitted to the owner upon completion of the installation. The microphone shall be furnished complete with 15 feet of 2-conductor shielded cable (100% shield) and a plug for connection to the microphone.

The case shall be dual conical taper in shape and shall not measure more than 1½" in diameter at its largest dimension and shall be no longer than 7³/₁₆" not including connector. The microphone shall be furnished complete with a slip-on swivel adapter for mounting on a microphone stand. The microphone shall utilize a special "lock-in" facility, permitting instantaneous insertion and removal from the swivel adapter with a minimum of effort on the part of the performer or user, yet providing complete protection from accidental slippage of the microphone, regardless of positioning.

Any microphone not meeting all of these requirements shall be deemed unacceptable under these specifications.

This microphone shall be Altec Lansing Model 689B; 689BX.

NOTICE

We recommend that you obtain your Altec products from factory trained authorized Altec Sound Contractors and Distributors. This will assure you of proper installation, a continuing source of knowledgeable advice, service, and quick warranty protection.