

685B Professional Cardioid Microphone

685B



Features

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

FOR THE PROFESSIONAL TELECASTING — BROADCASTING — RECORDING

Flat frontal response — a feature desired by professional audio engineers — has been fully realized in the model 685B ALTEC Cardioid Microphone. This microphone features a frequency response with a rising characteristic of 4 dB from 100 to 10,000 Hz, a feature preferred by engineers for broadcasting, recording, and telecasting applications where crispness and high intelligibility of speech is desired. This feature also reduces the pickup of low frequency room reverberation and, thereby, reduces the pickup of room "rumble" and "pop" noise. Response is 40 to 16,000 Hz with an average front to back discrimination of 20 dB. The model 685B has less deviation throughout the audible spectrum than heretofore available in any dynamic cardioid microphone. Each microphone comes complete with a factory calibrated frequency response curve recorded in an ALTEC anechoic chamber, using a servo-driven recorder.


The low resonance of the 685B is made possible by incorporation of the ALTEC Mylar® polyester diaphragm. This diaphragm provides great resistance to shock or blast, assuring high quality sound pickup under the most adverse conditions. It is resistant to corrosive chemical fumes that might be encountered in many types of service. The long diaphragm tangential compliance section is the major factor in controlling the microphone's high sensitivity.

To withstand the operating conditions in broadcast and recording studios, the 685B is further protected from breath-blast, or "popping", by a rugged pop-screen filter located at the sound entrance. Minimum installation cost is made possible by the incorporation of the new 3-pin plug connector. The connector allows the microphone to be plugged directly into the standard plugs, Cannon XLR-3-11C, used by recording and broadcasting engineers. The 685B microphone has a positive "lock-in" safety feature which eliminates the possibility of the microphone slipping out of the stand adapter.

The exterior design presents an attractive slim-line appearance and the microphone is finished in non-glare black and dark green enamel. Also included with each microphone are 15-feet of two-conductor shielded cable (100% shield), and a slip-on swivel adapter for mounting on a microphone stand.

The microphone may be mounted on the ALTEC 180A Shock Mount, which is designed for simple screw-in insertion between the microphone and stand or boom. It will prevent mike-reproduction of external vibrations.



A Division of  Ling Altec, Inc.

1515 S. Manchester Ave., Anaheim, Calif. 92803
New York

ALTEC 685B

PERFORMANCE SPECIFICATIONS

Type:	Moving Coil Dynamic
Frequency Response:	40 to 16,000 Hz (calibration chart 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 ¹³ / 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 microphone on all stands. Microphone includes a 15 foot, 2-conductor shielded cable (100% shield) and plug for connection to microphone.
Accessories:	See "Microphone Accessories" sheet for desk or floor stands, on-off switches, adapters, and other microphone accessories.

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°F and shall not be susceptible to the effects of corrosive fumes. The microphone sound entrance shall be protected by a two-stage pep-screen filter to prevent breath-blast. The microphone shall be non-glare dark green and black. The case shall be dual conical taper in shape and shall not measure more than 1½" in diameter in its largest dimension and shall be no longer than 7¹³/₁₆" not including connector. The microphone shall accept the standard 3-pin connector, such as the Cannon XLR-3-11C, directly without the use of adapters. Microphones 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 output level shall be at least -54 dBm/10 dynes/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 Hz. The hum shall be no greater than -120 dB (Ref.: 10⁻³ Gauss). The frequency response shall be uniform from 40 to 16,000 Hz and with a rising characteristic of 4 dB from 10 to 10,000 Hz for crispness and high intelligibility of speech and reduced pickup of low frequency room reverberation.

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 adapted 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 Model 685B.

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.