688B Professional Omnidirectional Microphone

Features

- 3-Pin Connector
- Exceptionally Uniform Frequency Response
- Designed for Music Broadcasting and Recording
- Rugged Polyester Foam Filter
- Exclusive Mylar® Diaphragm
- Omnidirectional Pickup
- Impervious to Shock and Blasts
- Withstands Humidity and Temperature Extremes
- "Non-Glare" T.V. Finish
- Sturdy Reliable Construction
- Positive "Lock-in" Safety Facility
- Light Weight — Small Size
- Attractively Styled

FOR PROFESSIONAL USAGE IN MUSIC REPRODUCTION RECORDING STUDIO — BROADCASTING — TELEVISION

Surpassing even the most exacting specifications of the critical broadcast and recording engineer, the Altec 688B omnidirectional microphone represents the answer to all situations requiring the faithful conversion of acoustical energy into electrical energy — particularly in those cases where complex musical waveforms are to be recorded or transmitted. The extremely wide range (below 30 to over 20,000 cycles), high efficiency, uniformity of response, and low hum pickup signify the finest achievement in omnidirectional microphone design.

Accompanying each 688B microphone is an automatically charted curve, recorded in one of the Altac Anechoic chambers under the most exacting conditions by a servo-driven precision graphic recorder — providing the engineer with a permanent record of the microphone's response characteristics. The output level is 

-35dbm/10dynes/cm²

In addition to its usage as a transducer for musical program material, the Altec 688B will prove a most valued component for any application requiring an omnidirectional microphone for "live performance" broadcasting or recording. The 688B has an internal pop-filter, constructed of Polyester Foam to filter breath-blasts when the microphone is to be used for speech. Because of the virtually peak-free response of the Altac Diaphragm, of Mylar® polyester, the frequencies at which acoustic feedback normally occurs are not emphasized; feedback, therefore is considerably lessened — with an attendant increase in amplification potential and overall efficiency.

A positive "lock-in" facility, enabling the microphone to be firmly anchored in the slip-on mounting adapter, is an integral part of the 688B. When in use, this feature prevents any danger of microphone slippage, such as accidental fall from a stand or boom mounting during use, yet permits instantaneous and effortless insertion and removal by the performer whenever desired.

The 688B is supplied with a 3-pin connector which connects to the Cannon XLR-3-11C plug enabling the user to directly connect the microphone to many existing cable assemblies. This added convenience lowers the installation cost. The output impedance is 150/250 ohms. The 688B is finished in two-tone green and black enamel, preventing unwanted glare from occurring when used before the television camera.

Each 688B microphone is supplied with 15 feet of professional, broadcast-type heavy duty 2-conductor shielded cable (100% shield), together with a slip-on adapter which mounts on any 5/16"-27 microphone stand. For professional applications the Altec 181B Boom mount (illustrated) is often preferred to the usual floor stand for ease of operation, optimum placement, and freedom from mechanical vibration. The Altec 688B is an omnidirectional dynamic microphone of superior quality...functionally meeting every requirement of the finest in musical reproduction...a standard of comparison.

1515 S. Manchester Ave., Anaheim, Calif.
New York
PERFORMANCE SPECIFICATIONS

Type: Moving Coil Dynamic
Frequency Response: 35 to 20,000 cycles (calibration chart included)
Output Impedance: 150/250 ohms
Output Level: -55 dbm/10 dynes/cm²
Pickup Pattern: Omnidirectional
Hum: -120 db (Ref.: 10⁻³ Gauss)
Dimensions: 1⅜” diameter at top (1½” largest diameter) 7½” long not including plug
Weight: 8 oz. (not including cable and plug)
Finish: Two-tone baked enamel, black and dark green
Mounting: Separate “Slip-on” adapter No. 13798 furnished. Adapter has standard ⅝”-27 thread. Swivel mounting permits proper positioning of the microphone on all stands. Microphone includes 15 feet, 2-conductor shielded cable (100% shield) and 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.

ARCHITECTS AND ENGINEERS SPECIFICATIONS

The microphone shall be of the dynamic moving coil type having the following specifications: The microphone shall have a diaphragm of Mylar® having tangential compliance to provide full protection against extreme shock and blasts. Protection from breath-blast shall be accomplished by use of an internal polyester foam filter. The diaphragm shall withstand exposure to temperature variations from -20 to +160 degrees Fahrenheit without noticeable effect in the quality of the transduced sound. The frequency response shall be extremely uniform from 35 to 20,000 cps. The output level shall be at least -55 dbm/10 dynes/cm² and the output impedance shall be 150/250 ohms balanced to ground. The microphone shall accept a 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 microphone case shall be dual conical taper in shape and shall not measure more than 1⅜” in diameter in its largest dimension and shall be no longer than 7⅜” excluding connector. The microphone shall be furnished with a slip-on adapter for mounting on a microphone stand and have a “lock-in” feature for positive positioning. This latter facility shall permit easy and immediate insertion and removal of the microphone by the user or performer, yet prevent accidental slippage of the microphone, regardless of position.

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

This microphone shall be Altec Lansing Model 688B.