MICROPHONES · HEADPHONES
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Condenser Microphone

C-451E

DESCRIPTION

The AKG C-451E is a newly developed Condenser Microphone System using audio frequency circuitry with Field Effect Transistors.

Low noise level, extremely high reliability and life-long stability are inherent features of the C-451E.

Low current consumption at low voltage and Phantom circuit powering permits feeding the microphone supply voltage via a standard two-conductor plus shield audio cable.

In addition to the central feeding technique, directly off the d.c. supply of the associated amplifier, the microphone may be powered by the AKG N-46E a.c. power supply or the AKG B-46E d.c. battery supply.

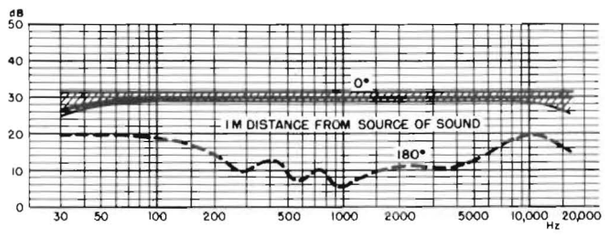
The basic C-451E system consists of the C-451E preamplifier, CK-1 miniaturized cardioid condenser microphone capsule, stand adapter and windscreen.

The C-451E offers interchangeable capsules, allowing the selection of different response characteristics to adapt the microphone to various types of environments and recording applications.

Its highest professional reproduction qualities makes it eminently suitable for recording studios, television and radio broadcast, motion picture studios, stage and concert hall applications as well as high quality commercial sound installations.

TECHNICAL DATA

Sensitivity	—39 dB (1 mw/10 dynes/cm²) 1.1 mv/μbar
Distortion	0.5% (200 μbar = 120 db SPL)
Equivalent noise level	22 dB (DIN 45405) (RMS)
Impedance	200/60 ohms
Supply voltage	7.5-52v
Current consumption	3-12 mA
Temperature range	—5 to +160° F
Humidity	90%/+80° F
Dimension	5-7/16" X 3/4" dia.
Weight	4-1/2 oz.
Connections	XLR-3



COMPONENTS & ACCESSORIES

N-46E	a.c. power supply, for 2 microphones	**VR-1**	Extension tube, 12" lg.
B-46E	d.c. battery supply	**VR-2**	Extension tube, 52" lg.
CK-2	Omni-directional capsule	**H-60**	Suspension
CK-6	Variable pattern capsule	**ST-4**	Table stand
CK-9	Interference tube (shot gun attachment)	**ST-200**	Floor stand
		W-17	Windscreen, Metal

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a condenser type. The microphone preamplifier shall be designed to accept interchangeably, 1) a cardioid directional pattern capsule, 2) an omni-directional pattern capsule, 3) a variable pattern capsule switchable from omni-directional to cardioid to figure-eight pick-up characteristics, 4) a narrow pattern shotgun type interference tube attachment.

The microphone capsule shall incorporate a gold vapored ceramic electrode with a permanently mounted metallic diaphragm. The electrode shall be provided with an insulating coating.

The cardioid condenser microphone system shall have a frequency range from 30-20,000 Hz and the frequency shall not deviate by more than ±2.5 dB. The front-to-back discrimination shall be 20 dB at 1,000 Hz and shall be uniform over the entire frequency range.

The output level shall be —39 dB (re 1mw/10 dynes/cm²) at an impedance of 200 ohms ±15%. The impedance shall be changeable to 60 ohms.

The microphone preamplifier shall incorporate an audio frequency circuit with Field Effect Transistors. It shall incorporate a stabilizing circuit which limits the operating voltage to 9.1 v, independent of supply voltage. The microphone preamplifier shall be capable of being powered via a Phantom circuit from amplifier d.c. sources of up to 52 volts by means of a simple, appropriate dropping resistor network.

The microphone cable shall be of standard two-conductor plus shield type with no additional conductors required. Powering method shall be such that dynamic microphones may be used interchangeably on the standard microphone cable.

An a.c. power supply for two microphones and a d.c. battery power supply for one microphone shall be available.

The microphone shall be equipped with XLR-3 connector.

The dimension of the microphone shall not exceed 3/4" diameter by 5-7/16" long and the weight shall not exceed 4-1/2 oz.
The microphone specified shall be the AKG C-451E.

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