



DESCRIPTION

The AKG D-1000E is an extraordinarily versatile microphone that is virtually a "system within a single package." It has been expressly designed as a problem-solver for use in those diverse applications and difficult environments that cannot be handled effectively by a single microphone of more conventional design.

A rugged, shock-mounted cardioid-dynamic unit featuring built-in facilities for adjusting frequency response, the D-1000E is an instrument whose range of usefulness is limited only by its user's creativity and imagination; For contemporary-music recording sessions and concerts, it is an ideal hand-held vocalist's microphone or an excellent wide-range general-coverage microphone; in radio and TV broadcasting, it can double as both a studio and in-the-field microphone; in general sound-reinforcement applications, it is an extremely effective feedback-cancelling microphone; in film and videotape production, it is an outstanding indoor or outdoor dialog-recording microphone; and as a paging microphone, it can provide a high degree of speech intelligibility and noise penetration.

The key to the D-1000E's versatility is its integral B-M-S mode switch. This switch, an AKG exclusive, provides up to 13 dB bass rolloff at 100 Hz and up to 6 dB midrange shelf attenuation at 1000 Hz, as shown in the frequency-response curves below. (This adjustable-response feature is especially useful when the microphone must be used with certain types of amplifying or recording equipment that lack the necessary low- and mid-frequency equalization facilities.) By combining selective use of these adjustable-response characteristics with different microphone-to-source working distances, the user can create an almost endless variety of tone-control possibilities to suit a wide range of problem applications and environments:

B (BASS) POSITION: *Flat, wide-range response at medium to long distances, pronounced bass emphasis (proximity effect) at close distances.* This switch position is excellent for contemporary-music recording sessions and concerts, as well as for general-purpose broadcast-studio applications. When used for general coverage, the microphone provides essentially flat, full-range reproduction of instruments and vocalists at least 1 m ($\approx 3\text{--}1/4$ ft) away. As a hand-held microphone, it permits the vocalist to control both the tonal quality and dynamics of his or her voice simply by varying the mouth-to-microphone working distance (closer during soft vocal passages for a warmer, fuller sound with sufficient volume to be heard over instrumental accompaniment; farther away during loud passages for increased vocal brilliance or "punch," lower distortion, and

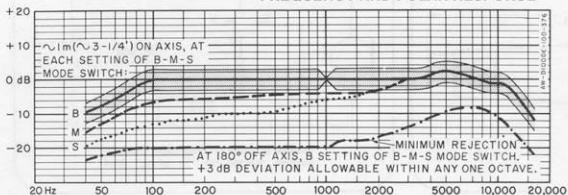


less likelihood of drowning out — or being drowned out by — instruments and other vocalists).

M (MEDIUM) POSITION: *Moderately reduced bass and mid-range at medium to long distances, normal bass (neutralized proximity effect) at close distances.* For general sound-reinforcement applications in a feedback-prone environment, this switch position permits the microphone to be used close to the speaker's mouth for increased volume without acoustic feedback — but without the increased bass emphasis normally encountered at such close working distances. Similarly, in radio and TV remote applications, this position enables the microphone, when close-talked, to retain relatively natural speech quality and to reject large amounts of background noise. At the medium to long working distances usually imposed when the microphone is used for indoor dialog recording in film and videotape production (on a fishpole or boom, just out of camera range), the moderate rolloff characteristics reduce "hollowness" for improved speech clarity and crispness, while simultaneously reducing pickup of low-frequency ambient room noise.

S (SHARP) POSITION: *Sharply reduced bass and midrange at medium to long distances, moderately reduced bass at close distances.* Recommended for all previously mentioned applications in which the M position does not provide enough rejection of acoustic feedback or background noise. Also useful for reducing the effects of excessive wind noise in outdoor film and videotape dialog recording and — because of its rising response characteristic between 1 kHz and 5 kHz — for improved speech intelligibility and noise penetration in paging applications where the loudspeakers are likely to be in extremely noisy areas.

FREQUENCY AND POLAR RESPONSE



Other carefully integrated factors also add to the D-1000E's versatility. Its tight cardioid pattern renders the microphone inherently less susceptible to acoustic feedback (even in the B position of the mode switch) and contributes to cleaner, more controllable multitrack studio recordings by increasing isolation between instruments. The transducer element is elastically suspended for relative insensitivity to handling noise, mechanical shock, and spurious vibrations. An integral sintered-bronze windscreen minimizes the effects of breath "pop" and moderate wind noise while effectively encapsulating the transducer element against metal particles and dust. The D-1000E may be safely used at the extremely close working distances suggested because its harmonic distortion remains low even at high sound-pressure levels.

The D-1000E is a low-impedance balanced-output unit fitted with a standard 3-pin male XLR-type connector. The microphone is supplied complete with an SA-12 stand adapter and a foam-lined vinyl protective case. Several optional accessories — listed in the Technical Data section — are available.

Also listed in this sheet are several mating AKG cable assemblies for use with low-impedance amplifying equipment, and two low-to-high-impedance transformer/cable assemblies for use with high-impedance amplifying equipment. (Each of these transformer/cable assemblies retains all the advantages of a low-impedance balanced microphone over the full cable run to the high-impedance equipment.)

TECHNICAL DATA

Transducer Type: Dynamic

Directional Characteristic: Cardioid

Frequency Range: 40-17,000 Hz (mode switch at B)

Nominal Impedance: 200 ohms

Recommended Load Impedance: ≥ 700 ohms

Sensitivity at 1 kHz:

Open circuit: 0.23 mV/ μ b; -72.8 dBV

Maximum power level: -52 dBm (re: 1 mW/10 dynes/cm²)

EIA G_m: -119.5 dBm

High-Z output w/MC-

20T, -20TS (optional): -63 dBV at 1 μ b

Tolerance: ± 2 dB

Sound Pressure Level for 1% THD:

40 Hz: 125 dB

1000 Hz: 130 dB

Hum Sensitivity: -102 dBm (1 mG field)

Case Material: Nickel-plated brass; sintered bronze

Dimensions: See Dimensions figure below

Schematic: See Schematic figure below

Net Weight: 240 g (\approx 8-1/2 oz)

Included Accessories:

SA-12 stand adapter with 5/8-in. -27 thread

Foam-lined vinyl case

Optional Accessories:

SA-12/1 metal-base stand adapter with 5/8-in. -27 thread

MSH-58E 8-in. flexible gooseneck w/female XLR-type conn.

KM-221C flange adapter

KM-237 clamp adapter

KM-238 clamp adapter

ST-4A table stand

ST-305 anti-shock table stand

W-4 foam windscreen

MC-series cable assemblies (listed below)

} for use with gooseneck

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a dynamic pressure-gradient type. It shall incorporate an equalizer network with a three-position selector switch to shape frequency-response characteristics at 1 m (\approx 3-1/4 ft) on axis as follows: (1) the B (Bass) position of the switch shall produce an unmodified frequency range of 40-17,000 Hz with essentially flat response at 100 Hz, 1000 Hz, and 10,000 Hz accompanied by a 2-dB rise centered at 5000 Hz; (2) the M (Medium) position of the switch shall produce 6 dB rolloff attenuation at 100 Hz and 4 dB shelf attenuation at 1000 Hz; (3) the S (Sharp) position of the switch shall produce 13 dB rolloff attenuation at 100 Hz and 6 dB shelf attenuation at 1000 Hz. The microphone shall have a cardioid directional pattern. The front-to-rear discrimination shall exceed 20 dB at 1000 Hz at a sound-incidence angle of 180 degrees, and an effective cardioid pattern shall be maintained over the entire frequency range.

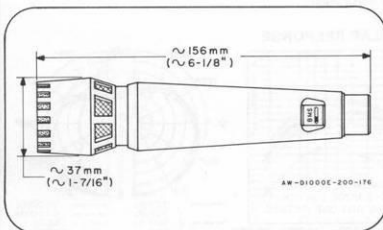
The microphone shall have a nominal impedance of 200 ohms. The output level shall be -52 dBm (re: 1 mW/10 dynes/cm²), and the microphone shall be capable of handling a maximum sound-pressure level of 630 μ bar (130 dB SPL) at 1000 Hz with distortion not exceeding 1%. The EIA sensitivity rating (G_m) shall be -119.5 dBm.

An integral sintered-bronze screen and a wire-mesh grille, commensurate with the acoustical properties of the unit, shall protect the microphone system from metal particles and dust. The transducer element shall be elastically suspended to isolate the element from the effects of handling noise, mechanical shocks, and spurious vibrations. The diaphragm material shall be nonmetallic MAKROFOL.

The microphone shall incorporate a 3-pin male audio connector designed to mate with Cannon XLR, Switchcraft A3, or equivalent connectors. An AKG model SA-12 swivel stand adapter with standard 5/8-in. -27 thread, and a foam-lined vinyl carrying case shall also be provided. The finish of the microphone shall be matte nickel and shall not create specular light reflections.

The microphone shall be 156 mm (\approx 6-1/8 in.) long by 37 mm (\approx 1-7/16 in.) in windscreen diameter, and the net weight shall not exceed 240 g (\approx 8-1/2 oz). The microphone herein specified shall be the AKG D-1000E.

DIMENSIONS



SCHEMATIC

