



DESCRIPTION

The AKG D-160E1 is a professional-quality wide-range microphone featuring an omnidirectional pickup pattern and a presence-brilliance characteristic that can be altered simply by removing or interchanging windscreens. A ruggedized, internally shock-mounted successor to the popular D-160E, it is also an unusually compact and lightweight instrument. All of these factors combine to make the D-160E1 an ideal choice — either hand-held or stand-mounted — for a variety of specialized recording and broadcast applications.

For example, the D-160E1 is especially useful in accentuating the acoustical ambience of a relatively "live" (reverberant) location such as a church, concert hall, or auditorium. Similarly, the microphone may be used to impart a certain amount of spaciousness to recordings and broadcasts originating in acoustically "dry" studios. It is also highly recommended for uniform coverage of group and "round-table" discussions in the studio, and (with windscreen) as a non-discriminating hand-held interview microphone in the field.

The D-160E1 offers "open", natural reproduction of music and speech — without harshness, popping, or unnatural bass emphasis. Moreover, the D-160E1's omnidirectional pattern and consequent absence of proximity effect enable the microphone to retain this natural quality — regardless of the relative position, distance, or number of performers and instruments working into it.

As shown in the frequency-response curves below, the micro-

Shown with optional W-16 wire-mesh windscreen

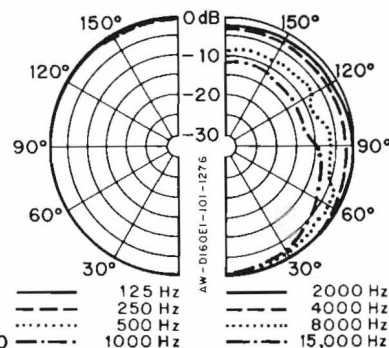
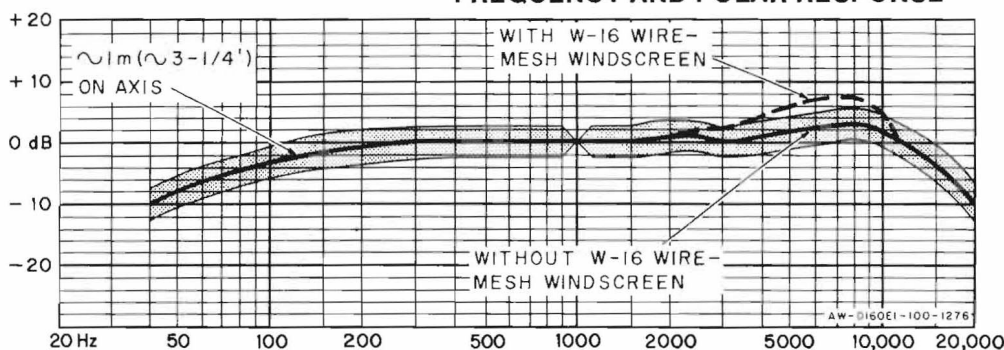


phone's presence-brilliance characteristics may be altered for different applications simply by removing or interchanging windscreens: When used with (or without) the W-20 foam windscreen included, the microphone exhibits virtually linear frequency response over most of its frequency range — with a slight amount of emphasis (2-3 dB) between 3 kHz and 12 kHz. However, with the optional W-16 wire-mesh windscreen locked on the microphone, this emphasis increases by an additional 4-5 dB.

The D-160E1's transducer element is elastically suspended within the microphone housing. This isolation technique ren-

continued overleaf

FREQUENCY AND POLAR RESPONSE



TECHNICAL DATA

Transducer Type: Dynamic
 Directional Characteristic: Omnidirectional
 Frequency Range: 40-20,000 Hz
 Nominal Impedance: 250 ohms
 Recommended Load Impedance: ≥ 500 ohms
 Sensitivity at 1 kHz:
 Open circuit: 0.115 mV/ μ b; -78.8 dBV
 Maximum power level: -58 dBm (re: 1 mW/10 dynes/cm²)
 EIA G_m: -150.5 dBm
 Tolerance: ± 2 dB
 Sound Pressure Level for 1% THD:
 1000 Hz: 134 dB
 Hum Sensitivity: -124 dBm (1 mG field)
 Case Material: Nickel-plated brass
 Dimensions: See Dimensions figure overleaf
 Schematic: See Schematic figure overleaf

Net Weight: 130 g ($\approx 4\frac{1}{2}$ oz)
 Included Accessories:
 SA-23/2 snap-out stand adapter with 5/8-in. -27 thread
 W-20 foam windscreen
 Foam-lined vinyl case
 Optional Accessories:
 SA-11/1 metal-base stand adapter with 5/8-in. -27 thread
 SA-26 clothespin stand adapter with 5/8-in. -27 thread
 SA-30 universal stand adapter with 5/8-in. -27 thread
 W-8 foam windscreen for use with W-16 below
 W-16 wire-mesh windscreen
 H-24 shock suspension for stand- or boom-mounting mic
 KM-series floor and boom stands, stand accessories
 MSH-58E 8-in. flexible gooseneck w/female XLR-type conn.
 ST-series table stands for use with gooseneck
 MCH-series heavy-duty microphone cable assemblies

ders the unit relatively insensitive to handling noise, mechanical shocks, and spurious vibrations. An integral wire-mesh grille and a rugged nickel-plated rust-free brass case effectively encapsulate the transducer against metal particles and dust. The D-160E1 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-23/2 stand adapter, a W-20 foam windscreen, and a foam-lined vinyl protective case. Several optional accessories — listed in the Technical Data section — are available.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a dynamic moving-coil type. It shall have an on-axis frequency range of 40-20,000 Hz, and its presence-brilliance emphasis between 3000 Hz and 12,000 Hz shall vary with the type of windscreen used as follows: (1) when used with (or without) the AKG model W-20 foam windscreen included, the microphone shall exhibit approximately 2-3 dB emphasis; (2) when used with the optional AKG model W-16 wire-mesh windscreen, the microphone shall exhibit an additional 4-5 dB emphasis for a total emphasis of approximately 6-8 dB. The microphone shall have an effective omnidirectional pattern maintained over the entire frequency range.

The microphone shall have a nominal impedance of 250 ohms. The output level shall be -58 dBm (re: 1 mW/10 dynes/cm²), and the microphone shall be capable of handling a maximum sound-pressure level of 1000 μbar (134 dB SPL) at 1000 Hz with distortion not exceeding 1%. The EIA sensitivity rating (G_m) shall be -150.5 dBm.

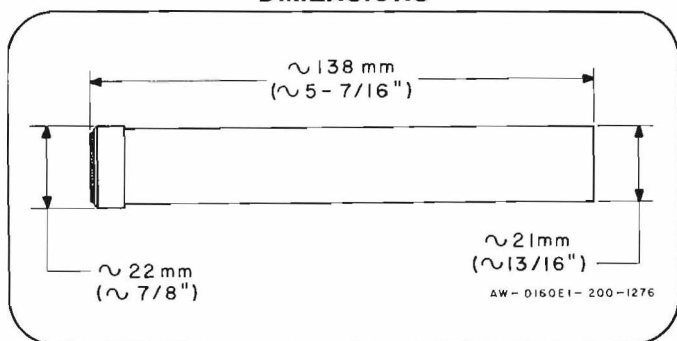
An integral wire-mesh grille, commensurate with the acoustical proper-

ties 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 transducer diaphragm material shall be nonmetallic MAKROFOL.

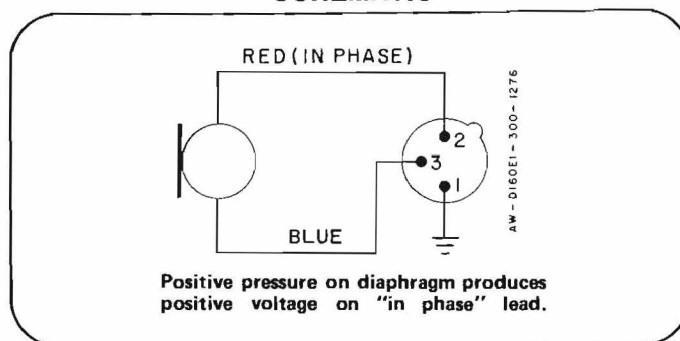
The microphone shall incorporate a 3-pin male audio connector designed to mate with Cannon XLR, Switchcraft A3, or equivalent connectors. An AKG model SA-23/2 swivel stand adapter with standard 5/8-in. -27 thread, an AKG model W-20 foam windscreen, and a foam-lined vinyl carrying case shall also be provided. The finish of the microphone shall be matte nickel and shall not create specular light reflections.

The microphone shall be 138 mm (≈5-7/16 in.) long by 22 mm (≈7/8 in.) in maximum diameter by 21 mm (≈13/16 in.) in shaft diameter and the net weight shall not exceed 130 g (≈4-1/2 oz) less stand adapter and windscreen. The microphone herein specified shall be the AKG D-160E1.

DIMENSIONS



SCHEMATIC



OPTIONAL AKG HEAVY-DUTY SHIELDED CABLE ASSEMBLIES FOR THIS MICROPHONE

NOTE: All cable assemblies except the MCH-50 are 6.1 m (≈20 ft) long. All are available in black. Model numbers with an asterisk (*) are also available in red, green, and blue — please specify cable-color choice in such cases.

- MCH-20*** Low-impedance cable assembly w/o switch (female XLR-type connector to male XLR-type connector)
- MCH-20F** Low-impedance cable assembly w/o switch (female XLR-type connector to stripped-and-tinned ends)
- MCH-20P** Low-impedance cable assembly w/o switch (female XLR-type connector to phone plug)
- MCH-20S** Low-impedance cable assembly w/switch (female XLR-type connector to male XLR-type connector)
- MCH-20T** High-impedance cable assembly w/o switch (female XLR-type connector to transformer w/phone plug)
- MCH-20TS*** High-impedance cable assembly w/switch (female XLR-type connector to transformer w/phone plug)
- MCH-50*** Low-impedance 15.2 m (≈50 ft) cable assembly (female XLR-type connector to male XLR-type connector)



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