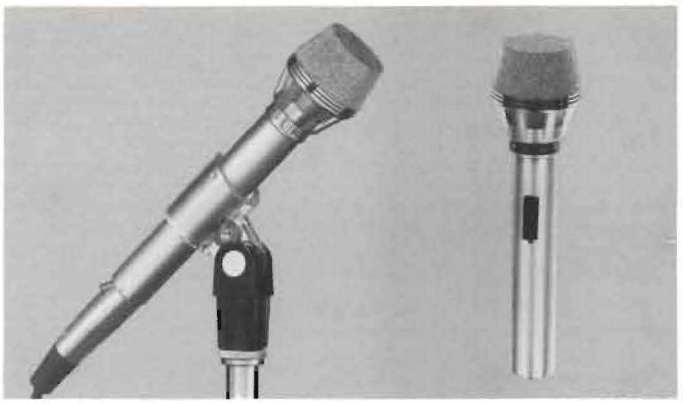
DESCRIPTION

The AKG D-190E cardioid dynamic microphone has been designed for the serious recordist or performer who, though limited by his budget, is unwilling to compromise quality. A rugged, versatile unit, the D-190E is an excellent general-purpose speech or music microphone as well as an ideal hand-held vocalist's microphone for contemporary-music recording sessions and concerts.

The microphone's smooth frequency response and uniform cardioid directional pattern produce an open, effortless sound and relative immunity to feedback even under acoustically unfavorable conditions. Bass response is intentionally tailored to compensate for proximity effect when the microphone is used within close working distances, and to reduce pickup of low-frequency room rumble, floor vibrations, and acoustic-feedback components. To add brilliance and permit pickup of instruments and voices from greater distances, the on-axis response is slightly emphasized at 4 kHz.

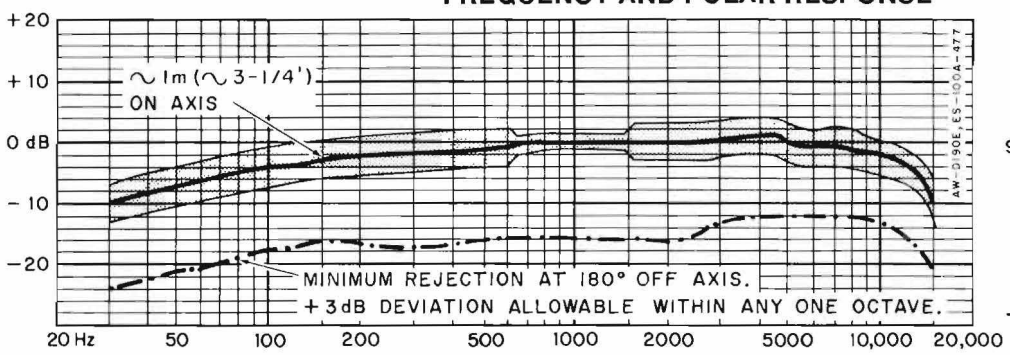
The transducer element is elastically suspended within the housing, a feature which greatly reduces sensitivity to handling noise, mechanical shock, and spurious vibrations. An integral sintered-bronze windscreen reduces the effects of breath "pop" and wind noise. It also protects the transducer from dust, metal particles, and moisture.

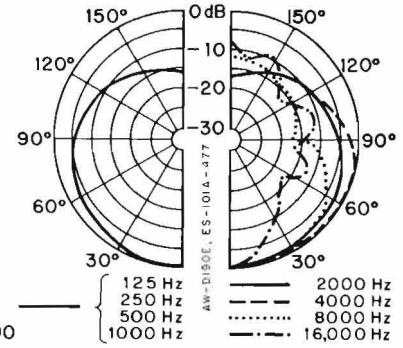
The D-190ES is identical to the D-190E, but incorporates a noiseless, rugged on/off switch. Both microphones are low-impedance balanced-output units, each fitted with a standard 3-pin male XLR-type connector. Each microphone is supplied complete with an SA-11 stand adapter and a foam-lined vinyl protective 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.)

FREQUENCY AND POLAR RESPONSE





TECHNICAL DATA

Transducer Type: Dynamic
Directional Characteristic: Cardioid
Frequency Range: 30-15,000 Hz
Nominal Impedance: 200 ohms
Recommended Load Impedance: ⩾500 ohms
Sensitivity at 1 kHz:
- Open circuit: 0.23 mV/μb; -72.8 dBV
- Maximum power level: -52 dBm (re:1 mW/10 dynes/cm²)
- EIA G_m: -144.5 dBm
- High-Z output w/MCH-20T, -20TS (optional): -63 dBV at 1 μb
- Tolerance: +0, -1.5 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 overleaf
Schematic: See Schematic figure overleaf
Net Weight: 185 g (≈6-1/2 oz)

Included Accessories:
- SA-11 stand adapter with 5/8-in. -27 thread
- Foam-lined vinyl case

Optional Accessories:
- SA-11/1 metal-base stand adapter with 5/8-in. -27 thread
- SA-23/2 snap-out stand adapter with 5/8-in. -27 thread
- H-24 shock mount
- 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

(KM-221C, KM-237, KM-238, ST-4A, ST-305: for use with gooseneck)

- W-8 foam windscreen
- MCH-series heavy-duty cable assemblies (listed overleaf)

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a dynamic pressure-gradient type with a frequency range of 30-15,000 Hz. Its on-axis response shall be slightly emphasized at 4000 Hz for added brilliance and improved pickup of distant instruments and voices. It shall have a cardioid directional pattern. The front-to-rear discrimination shall exceed 16 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/cm^2), and the microphone shall be capable of handling a maximum sound-pressure level of 630 μbar (130 dB SPL) at 1000 Hz with distortion not exceeding 1%. The EIA sensitivity rating (G_m) shall be −144.5 dBm.

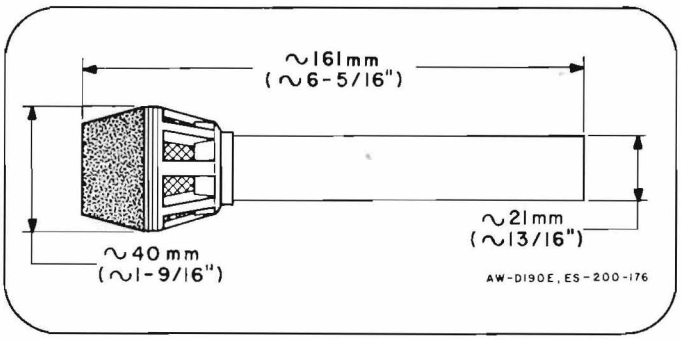
An integral sintered-bronze screen and a wire-mesh grille, commensurate with the acoustical properties of the unit, shall protect the microphone system from metal particles and dust. The transducer element shall be elastically suspended to isolate the element from the effects of handling noise, mechanical 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-11 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.

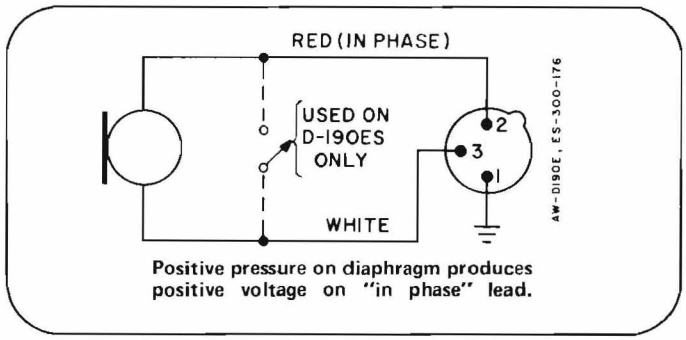
The microphone shall be 161 mm (≈6-5/16 in.) long, by 40 mm (≈1-9/16 in.) in windscreen diameter, by 21 mm (≈13/16 in.) in shaft diameter, and the net weight shall not exceed 185 g (≈6-1/2 oz). The microphone herein specified shall be the AKG D-190E.

The microphone shall also be available in an alternate version employing an integral on/off switch. The switch shall be a low-noise SPST type, connected in parallel with the transducer element, in an arrangement that short-circuits both the transducer output and the associated amplifier input when the switch is off. The microphone herein specified shall be the AKG D-190ES.

DIMENSIONS



SCHEMATIC



Positive pressure on diaphragm produces positive voltage on "in phase" lead.

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)

AKG® acoustics

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