

## C-460B PRESSURE GRADIENT CONDENSER MICROPHONE SYSTEM

The new C-460B brings the world famous AKG modular condenser microphone system into the digital age. The C-460B is to the existing C-450 system what the C-414EB/P48 is to large diaphragm condenser microphones.

The C-460B is an addition to and is compatible with all existing C-450 components (except for the CK-9 and VR-2). Standout features include:

- Wide dynamic range—Sound pressure levels of 138dB SPL over the full frequency range (148dB SPL with pad)
- Low self-noise—Measured at 15dB SPL (IEC 179-A)
- Minimum current consumption when connected to any powering voltage from 12 to 52 volts
- Stability of specifications even under extreme conditions
- Unique, built-in switching: 50, 70 and 150Hz roll-off and 0, -20dB attenuation

An electrically conductive rubber adapter ring is supplied with the C-460B as a means of using existing capsules such as the CK-1, CK-22, CK-8, etc. Its mechanical construction ensures lower sensitivity to handling noise and maintains a consistent low impedance connection between the housing of the capsule and the microphone preamplifier.



THD at 1kHz is 0.01% at maximum SPL; equivalent noise level 15dB SPL; dynamic range of 123dB and maximum SPL of 138dB at 0.5% THD over the full frequency range.

The C-460B offers better distortion figures than 16-BIT PCM equipment available today. The C-460B is designed for today's and tomorrow's requirements. It is at the leading edge of technology and the beginning of a new age in modular condenser microphones from AKG.

## TECHNICAL DATA

Transducer Type: Pressure Gradient Condenser

Directional Characteristic: Cardioid

Frequency Range:

Amplifier: 5-30,000 Hz

Capsule: 20-20,000 Hz

Nominal Output Impedance At 1kHz:  $\leq 120$  ohms

Transformer Balanced

Rated-Impedance Category: 150 ohms

Recommended Load Impedance:  $\geq 500$  ohms

Sensitivity at 1kHz

Open Circuit: 9.5 mV/Pa; -60.5 dBV\*

Tolerance:  $\pm 1$  dB

Sound Pressure Level For 0.5% THD:

138 dB SPL at 1K ohms from 30-20kHz

148 dB with attenuator switch in -20 dB position

Hum Sensitivity: 9  $\mu$ V/5  $\mu$ T at 50Hz

Equivalent Noise Level:

18 dB SPL (DIN 45405-C)

15 dB SPL (IEC 179-A)

No-Load Amplification (Amplifier):  $0.47 \pm 0.3$  dB

Polarization Voltage: +62 volts

Response of Bass-Cut Filter:

50 Hz, 70 Hz, 150 Hz : 12 dB/Octave

Preattenuation: Switchable 0, -20 dB

Weighted Noise Level (Amplifier):

1.5  $\mu$ V r.m.s. (DIN 45405-C)

0.7  $\mu$ V r.m.s. (IEC 179-A)

Total Dynamic Range (Amplifier):

123 dB (A-weighted, no attenuation)

Power Requirement: 12-52 volts phantom (DIN 45596)

Current Consumption:  $\leq 1$  mA

Operating Temperature Range: -20°C to +60°C

Permissible Humidity Level: 99% at +20°C

95% at +60°C

Dimensions (Complete Microphone):

21mm Dia. x 183mm Length

Finish: Non-Reflective Black Chromium Plated

Connector: 3 PIN XLR-Type

Net Weight: 160g (5.6 oz.)

Capsule Contact: Self-Cleaning, Gold Plated

C-460B System Includes:

C-460B Preamplifier

CK-1 Cardioid Capsule

A-60 Thread Adapter/Shock Mount

SA-30 Flex. Snap-in Stand Adapter with

5/8-in. -27 Thread

W-32 Foam Windscreen

Foam-lined Vinyl Case

Optional Accessories:

Capsules: CK-1S, CK-1X, CK-2X, CK-3, CK-5, CK-8, CK-22

Extension Tubes: VR-1, VR-11

Swivel: A-51

Stand Adapter: SA-18/3 Clamping Type

Shock Mount: H-24

Power Supplies: A-52, N-62E, N-62ET, N-66E

KM-Series Floor and Boom Stands, Stand Accessories

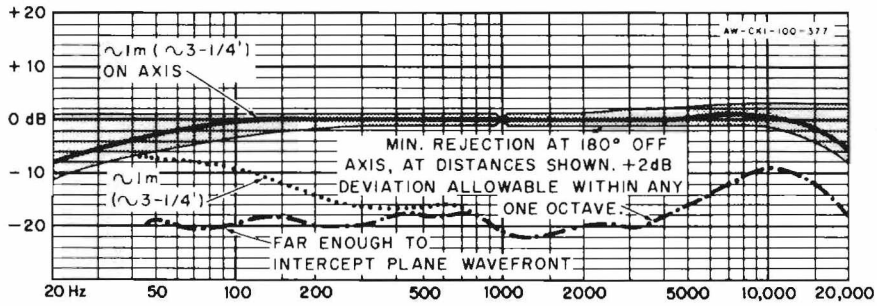
MCH-Series Heavy-duty Microphone Cable Assemblies

\*1 Pa (Pascal) = 10  $\mu$ b = 10 dynes/cm<sup>2</sup>  $\approx$  94 dB SPL

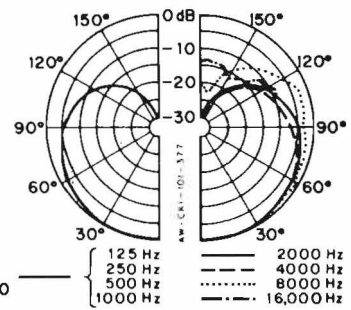
# FREQUENCY AND POLAR RESPONSE

## CK-1 CARDIOID CAPSULE

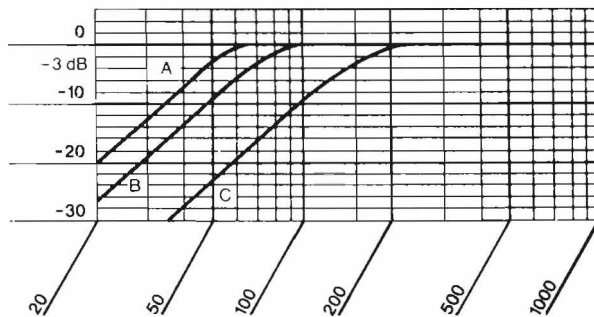
Frequency response curve



Polar diagram



## C-460B PREAMPLIFIER



- A: Bass cut at 50 Hz
- B: Bass cut at 70 Hz
- C: Bass cut at 150 Hz

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