



C 451 B

Small diaphragm microphone

Description

A classic by now, the CMS Series CK 1 capsule from AKG was a best seller from the moment it was launched in 1969. Comprising a range of interchangeable capsules and preamps as well as then innovative, dedicated accessories, the CMS Series from AKG quickly became a legend. It was discontinued in 1993.

Responding to growing demand from recording engineers, AKG decided to produce the C 451 B with identical acoustical behaviour of the popular original C 451 EB + CK 1 microphone again, with dramatically improved specifications and outstanding price/performance.

The capsule of the new version is fixed permanently to the preamp to eliminate the mechanical problems of the screw joint. Using an extremely light diaphragm, the new C 451 B is almost totally insensitive to handling noise. An all-metal body provides excellent protection from RF interference and the microphone is rugged enough to give excellent results even under very harsh conditions.

The C 451 B is an excellent tool for accurately capturing signals rich in transients such as drums, overhead miking, or other instruments with a percussive sound. The airy sound, high overload limit of the capsule and electronic circuitry, and improved engineering details of the C 451 B are a solid foundation for creating another legend.

Architect's and Engineer's Specifications

The microphone shall be a cardioid condenser microphone for studio use. It shall be designed specifically for the recording, or miking in sound reinforcement environments, of sound sources rich in transients such as drum kits, hi-hats, snare drums, and acoustic guitars. The microphone shall perform to the following specifications: Frequency range: 20 Hz to 20,000 Hz; sensitivity at 1 kHz: 9 mV/Pa; max. sound pressure level: 135/145/155 dB SPL for 0.5% THD; equivalent noise level: 18 dB-A; signal/noise ratio: 76 dB (A); electrical impedance: 200 Ω ; switchable preattenuation pad: 0/10/20 dB; switchable bass rolloff filter: 12 dB/octave below 75 Hz or 150 Hz; 9 to 52 V phantom powering to DIN/IEC 45 596. The body shall be 19 mm max. in diameter and 160 mm long, with a satin nickel surface finish. The microphone shall weigh 125 grams. The microphone shall be the AKG C 451 B.

Features:

Identical acoustics of the legendary CK 1. Rugged construction.

Ruler-flat on-axis frequency response.

Precise, nearly frequency independent cardioid.

Extremely accurate signal transfer.

Transformerless output stage for minimum distortion at low frequencies.

Protected against electrostatic and magnetic interference.

Selectable 10-dB and 20-dB preattenuation pads. Switchable highpass filter (75 Hz or 150 Hz, 12dB/octave).

Operates on phantom power to DIN/IEC between 12 V and 48 V.

Complete with SA 40 stand adapter and W 90 windscreens.

Each microphone comes with its own individual frequency response plot.



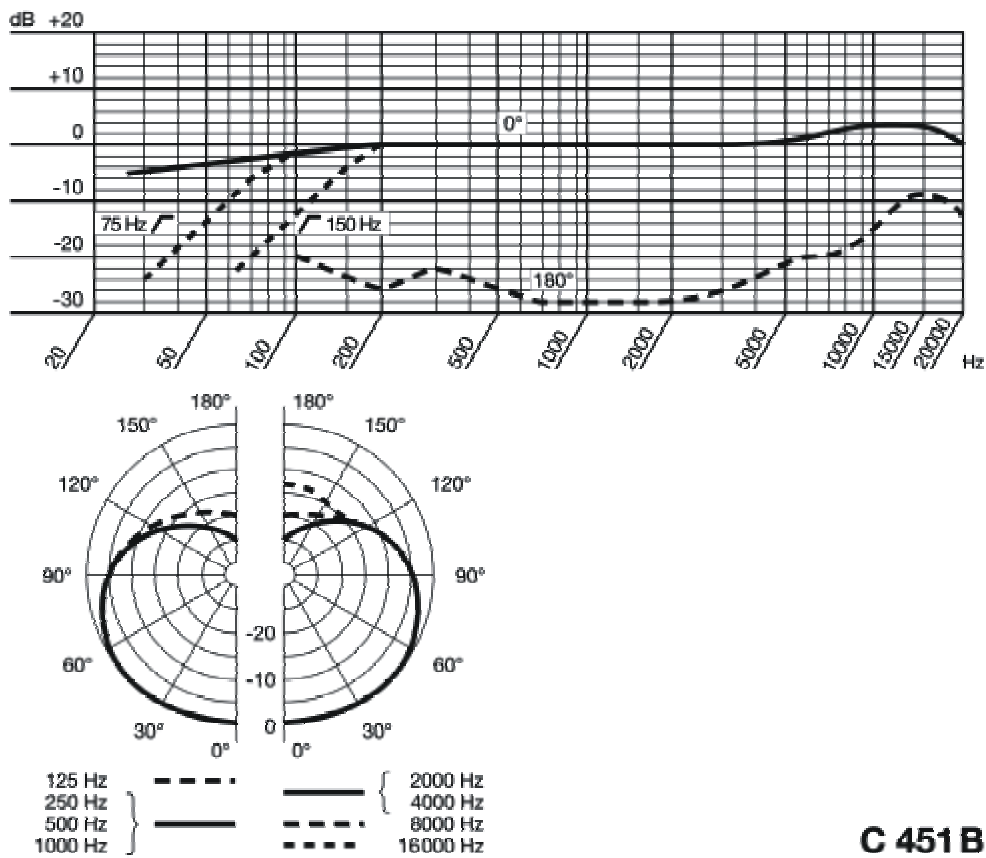
SPECIFICATIONS

POLAR PATTERN:	cardioid
FREQUENCY RANGE:	20 to 20,000 Hz \pm 1.5 dB from published curve
SENSITIVITY:	9 mV/Pa (-41 dBV re 1 V/Pa)
ELECTRICAL IMPEDANCE:	< 200 ohms
RECOMMENDED LOAD IMPEDANCE:	> 1000 ohms
MAX. SPL FOR 0.5% THD:	112 Pa (135 dB SPL) with 0 dB preattenuation*)
	355 Pa (145 dB SPL) with 10 dB preattenuation*)
	1120 Pa (155 dB SPL) with 20 dB preattenuation*)
EQUIVALENT NOISE LEVEL	
TO DIN 45 412 (A-WEIGHTED):	18 dB-A
DYNAMIC RANGE:	117 dB max. (A-weighted)*)
PREATTENUATION PAD:	switchable to 0 dB, -10 dB, -20 dB
HIGHPASS FILTER:	switchable to flat, 12 dB/octave at 75 Hz or 150 Hz
POWERING:	9 to 52 V phantom power to DIN/IEC 45 596
CURRENT CONSUMPTION:	< 2 mA
OPERATING TEMPERATURE:	-20°C to +60°C
RELATIVE HUMIDITY:	99% (+20°C); 95% (+60°C)
CONNECTOR:	3-pin male XLR
FINISH:	satın nickel plated
SIZE:	Ø: 19 mm (0.75 in.); length: 160 mm (6.3 in.)
NET/SHIPPING WEIGHT:	125 g (4.4 oz.) / 760 g (1.7 lbs.)
INCLUDED ACCESSORIES:	Carrying bag SA 40 stand adapter for cylindrical microphones 23 to 27 mm (0.9 to 1.08 in.) in diameter W 90 foam windscreen

This product conforms to EN 50 082-1 (1997) provided it is connected to CE marked equipment.

*) Values measured with 48-V phantom power. Reduce by 2 dB for 24-V or 8 dB for 12-V phantom power.

GRAPHICAL DATA



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Microphones · Headphones · Wireless Microphones · Headsets · Electroacoustical Components



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Specifications subject to change without notice.