



H A Harman International Company

# C 451 B

## Studio Cardioid Condenser Microphone

### Description

The C 451 B is the latest model in the C 451 series that dates back to 1969. It is a cardioid only design with a permanently fixed capsule (a departure from the previous modular system). The acoustics of the original cardioid capsule, CK 1, are modeled and matched in the current version, producing the unique overall rising frequency characteristics. The rise is no more than 3 dB and is broadly centered around 12 kHz.

Its transformerless preamp uses surface mount technology and, therefore is lighter, yet more rugged than its predecessor. Switchable 10 and 20 dB pads are now integrated. Maximum sound pressure levels in the range of 155 dB (in the 20 dB sensitivity position) can be attained with no greater than 0.5% distortion. A selectable low frequency, or bass roll-off option, provides 12 dB per octave attenuation below 75 or 150 Hz.

The C 451 B, like its predecessor, is most commonly used in studio and tour sound applications such as micing choirs, drums, percussion and acoustic guitars.

It is available as a single piece or in computer matched stereo pairs, and operates on all phantom voltages between 9 and 52 volts.

The SA 40 stand adapter and W 90 windscreens are included as standard accessories.



### Specifications

<b>Transducer type:</b>	condenser
<b>Frequency response:</b>	20 Hz to 20 kHz
<b>Sensitivity at 1 kHz:</b>	9 mV/Pa (-41 dBV)
<b>Self noise level:</b>	18 dB-A
<b>Dynamic range:</b>	117 dB
<b>Polar pattern:</b>	cardioid
<b>Impedance:</b>	200 ohms
<b>Load impedance:</b>	>1000 ohms
<b>Switchable pad:</b>	-10 and -20 dB
<b>Sound pressure level for 0.5% THD:</b>	135 dB SPL (unpadded) 145 dB SPL (-10 dB pad) 155 dB SPL (-20 dB pad)
<b>LF roll-off:</b>	12 dB/octave at 75 and 150 Hz
<b>Power requirement:</b>	Phantom powering, 9 to 52 Vdc
<b>Output connector:</b>	3-pin XLR-M
<b>Finish:</b>	Satin nickel
<b>Size:</b>	.75 inches diameter (19 mm) 6.3 inches length (160 mm)
<b>Net/shipping weight:</b>	4.4 oz. (125 g)/1.7 lbs. (760 g)
<b>Included accessories:</b>	SA 40 stand adapter W 90 foam windscreen padded carrying case H 50 stereo bar (stereo pair only)

### Features

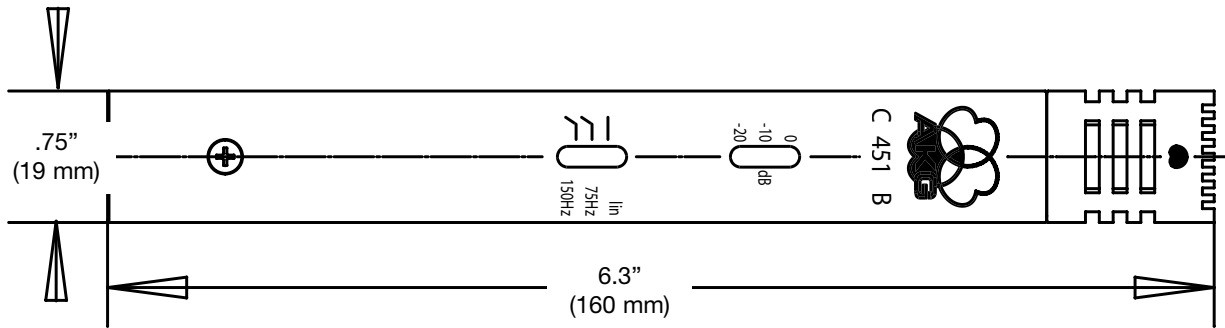
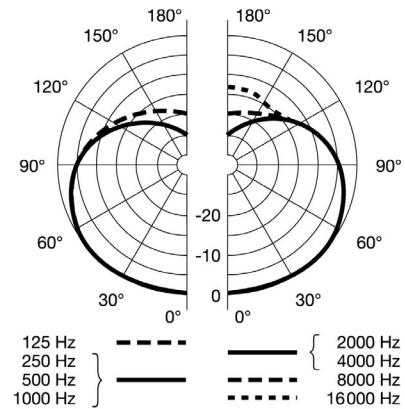
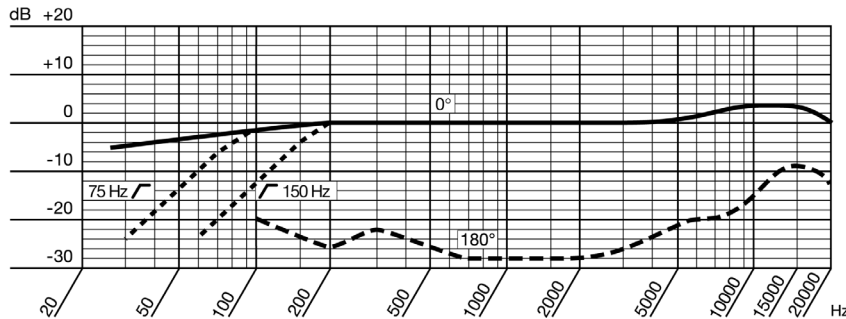
- Ultra-smooth response with slight rising on-axis frequency characteristic
- High front-to-back rejection ratio
- Transformerless output for low distortion at high operating levels
- 10 and 20 dB pad
- Switchable 12-dB roll-off at 75 or 150 Hz

# Architects and Engineers Specifications

The microphone shall have a cardioid pattern. The microphone's sensitivity shall be no less than 9 mV/Pa. At an operating level of 135 dB SPL the microphone's total harmonic distortion shall be no greater than 0.5%. The microphone's self noise level shall be no higher than 18 dB-A. Output padding switchable at -10 and -20 dB shall be integral to the microphone. Low frequency attenuation at 12 dB/octave commencing at either 150 or 75 Hz shall be

integral to the microphone. The microphone shall operate with phantom power over the range from 9 Vdc to 52 Vdc. The diameter of the microphone shall be no greater than .75 inches (19 mm), and the body length shall be no longer than 6.3 inches (160 mm). The net weight of the microphone shall be no greater than 4.4 ounces (125 g). The microphone shall be the AKG Acoustics Model C 451 B.

## Graphical Data



AKG is constantly improving and modifying its products, therefore, specifications are subject to change without notice.

### Limited Warranty

Valid only in the United States. AKG Acoustics warrants AKG products against defects in material or workmanship for a period of two years from the date of original purchase for use, and agrees to repair or, at our option, replace any defective unit without charge for either parts or labor. Important: This warranty does not cover damage resulting from accident, misuse or abuse, lack of reasonable care, the affixing of any attachment not provided with the product, loss of parts or connecting the product to any but the specified receptacles. This warranty is void unless service or repairs are performed by an authorized service center. No responsibility is assumed for any special, incidental

or consequential damages. However, the limitation of any right or remedy shall not be effective where such is prohibited or restricted by law. Simply take or ship your AKG product prepaid to our service department. Be sure to include your sales slip as proof of purchase date. (We will not repair transit damage under the no-charge terms of this warranty.) Note: No other warranty, written or oral is authorized by AKG Acoustics, Inc. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation on how long an implied warranty lasts, so the above exclusions and limitation may not apply to you.

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