

# C 562 BL Boundary Layer Condenser Microphone

# Description

The AKG Model C 562 BL condenser microphone is designed for boundary layer mounting in environments where a natural sound balance exists at one or more wall or floor boundaries. Primary applications include front-of-stage floor mounting, where proscenium and stage shell reflections often provide an accurate "mix" of all musical details, suitable for recording. Another primary application is as a table mounted microphone for picking up conversations from all directions, with none of the reflections, and consequent comb filtering, that plague microphones mounted on desk stands. In its role as a "half space" mounted microphone, its sensitivity is 6 dB greater than if it were placed in free space. Its balance between mid-frequency and low-frequency response is directly related to the boundary perimeter. If it is used on a temporary boundary, that boundary should have a perimeter of 20 feet (6 meters) if smooth response is to be ensured down to the lowest frequencies. The extremely small diameter of the entrance to the electret transducer ensures that the difference between on-axis and off-axis frequency balance will be virtually zero. That is, sounds arriving from all angles will maintain their spectral integrity.

Since the microphone normally operates in the transition region between direct and reverberant fields, a random incidence "correction" has been incorporated into the microphone's response. This consists of a smoothly rising response above 3 kHz that reaches an average level of +6 dB over the range from 5 to 15 kHz. This provides a subjective improvement in overall musical balance. In the recording studio, boundary layer microphones provide a handy solution to problems of micing the piano. They may be positioned in pairs on the underside of the cover, with the cover up or down, for surprisingly good stereo pickup.

## **Specifications**

Transducer Principle:	Pre-polarized condenser
Frequency Range:	20–20,000 Hz
Polar Pattern:	Hemispherically omnidirectional
Sensitivity at 1,00 Hz:	20 mV/Pa -34 dBV measured on a boundary at least 1.5 m by 1.5 m
Equivalent Noise Level: 16 dB-A	
Sound Pressure Level for 1% THD: 130 dB	
S/N Ratio (A-weighted): 78 dB	
Electr. Impedance:	
Load Impedance:	> 2,000 ohms
Power Requirement:	Phantom powering, 9–52 volts
Connector:	3-pin XLR type
Cable Length:	10 ft. (3 m)
Finish:	Dark gray
Size:	6.3 in. (160 mm) diameter; thickness of plate 0.35 in. (9 mm)
Net/Shipping Weight:	2.1 lbs. (0.95 kg)/4.2 lbs. (1.9 kg)

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### **Features**

- Flat profile for accurate boundary mounting
- Extended low and high frequency response
- Uniform hemispherical response
- High sensitivity (20 mV/Pa)
- High acoustic level capability (130 dB-SPL for 1.0% THD)

Included Accessories: Foam-type windscreen

### **Architects and Engineers Specifications**

The microphone shall be of the boundary layer type suitable for temporary or permanent mounting on flat surfaces.

The microphone shall have a flat circular profile, with the condenser element mounted in the middle. The transducing element shall communicate directly to the outside through small openings. The sensitivity of the microphone shall be at least 20 mV/Pa when mounted on a boundary 4.95 feet (1.5 meters) on a side, and the frequency range shall extend from 20 Hz to 20 kHz. The response shall exhibit an average rise of 6 dB in the range

from 5 kHz to 15 kHz to compensate for losses normally encountered in the operation of boundary layer microphones in the transition region between direct and reverberant fields. The self noise level of the microphone shall be no greater than 16 dB, as measured with A-weighting, and the total harmonic distortion shall be no greater than 1% at operating levels of 130 dB-SPL. The microphone shall accept phantom powering over the range from 9 to 52 volts. The microphone shall be the AKG Acoustics Model C 562 BL.

### **Graphical Data**



#### **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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