Table of Contents

1 Safety 9

2 Description 10

Introduction 10
Packing List 10
Optional Accessories 10
Brief Description 10
Controls 11

3 Powering 12

4 Cleaning 12

Microphone 12

5 Specifications 13

1 Safety



Risk of damage

Please make sure that the piece of equipment your microphone will be connected to fulfills the safety regulations in force in your country and is fitted with a ground lead.

2 Description

Introduction

Thank you for purchasing an AKG product. This manual contains important instructions for setting up and operating your equipment. Please take a few minutes to **read the instructions below carefully before operating the equipment**. Please keep the Manual for future reference. Have fun and impress your audience!

Packing List

- **C**3000 microphone
- **H**85 shock mount
- Check that the packaging contains all of the components listed above. Should anything be missing, please contact your AKG dealer.

Optional Accessories

For optional accessories, refer to the current AKG catalog or folder, or visit www.akg.com. Your dealer will be glad to help.

Brief Description

This large-diaphragm condenser microphone has been designed on the basis of feedback from sound engineers who have used the **C**12, **C**12 A, **C**414 EB and **C**414 B-ULS microphones in recording studios around the world for years. Using hand-selected state-of-the-art, reliable components as well as advanced manufacturing processes, the **C**3000 meets the highest professional standards and will withstand severe handling in the recording studio for many years.

The electronic circuitry of the microphone has been redesigned to achieve maximum dynamic range and a flat frequency response. Low self-noise and high headroom add up to a dynamic range of 136 dB (A-weighted).

The transducer element uses advanced backplate technology and a diaphragm that is gold-sputtered on one side only to prevent local shorting to the back electrode even at extremely high sound pressure levels.

The all-metal body ensures efficient rejection of RF interference so you can use the microphone near transmitter stations, along with wireless microphones or other communications equipment.

Controls

The C3000 provides selector switches for the preattenuation pad and bass cut filter.

Preattenuation Selector

The selector switch on the left-hand side of the microphone (fig. 1) lets you increase the microphone's headroom by 10 dB for distortion free recordings of very loud sound sources or close to sound sources. The preattenuation pads prevent the microphone's output level, particularly at low frequencies, from overloading the miniature transformers used in mixer input stages, etc.



Figure 1: Preattenuation selector

Bass Cut Selector

Rumbling or wind noise may cause distortion at very low frequencies. The microphone's switchable bass cut filter (refer to fig. 2) further reduces low-end distortion. The filter slope is more than 6 dB/octave at 500 Hz and below. The bass cut also minimizes the proximity effect that may arise when close-in miking from less than 6 inches.



Figure 2: Bass cut selector

3 Powering

The C3000 provides low self-noise (just 14 dB(A)!) yet high headroom. The microphone requires a phantom power source providing 9 to 52 V as per IEC 61938.



Risk of damage

Do not connect the microphone to any power supply other than a phantom power source (input with phantom power or external IEC standard phantom power supply) with a floating connector, using a balanced cable with studio grade connectors to IEC 268-12 only. This is the only way to ensure safe and reliable operation.

4 Cleaning

Microphone

- Use a soft cloth moistened with water to clean the surface of the microphone body.

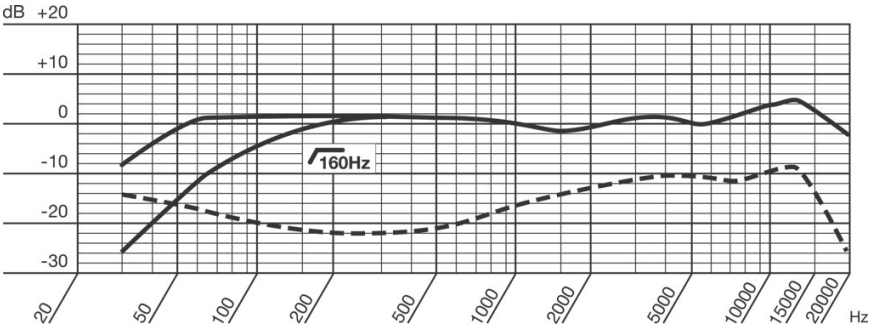
5 Specifications

Type:		1-inch large-diaphragm pressure gradient microphone
Polar patterns:		cardioid
Sensitivity at 1000 Hz:		20 mV/Pa (-32 dBV)
Frequency range:		20 to 20,000 Hz (refer to frequency response curve)
Electrical impedance:		≤ 200 ohms
Recommended load impedance:		≥ 1000 ohms
Bass cut filter slope:		6 dB/octave below 500 Hz
Preattenuation pad:		-10 dB, switchable
Equivalent noise level to IEC 60268-4 (A-weighted):		14 dB-A
Signal/noise ratio re 1 Pa (A-weighted):		80 dB*)
Max. SPL for 0.5% THD (0/-10 dB):		200 / 630 Pa ≙ 140 / 150 dB SPL*)
Dynamic range:		126 dB (A-weighted)*)
Environment:	- temperature:	-10°C to +60°C (14°F to 140°F)
	- relative humidity:	90% (+20°C/68°F), 85% (+60°C/140°F)
Power requirement:		9 to 52 V phantom power to IEC 61938
Current consumption:		≤ 2 mA
Connector pinout:		3-pin male XLR to IEC standard
Size:		max. dia.: 53 mm (2.1 in.), length: 162 mm (6.4 in.)
Net weight:		320 g (14.1 oz.)

*) Values for 48 V phantom power; reduce by 3 dB for 24 V and 6 dB for 12 V phantom power.

This product conforms to the standards listed in the Declaration of Conformity. To order a free copy of the Declaration of Conformity, visit http://www.akg.com or contact sales@akg.com.

Frequency Response Curve



Polar Pattern

