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1 Safety and Environment


ATTENTION

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.

Environment



- When the product reaches the end of its life, separate the housing, electronics and cables and dispose of all components in accordance with local waste disposal regulations.



- The packaging can be recycled. Dispose of the packaging in a suitable collection system.

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!

Scope of supply

- C1000S Microphone
- SA63 Tripod adapter
- W1001 Foam wind guard
- PPC1000 Polar pattern converter
- PB1000 Presence boost adapter
- Carrying bag

Please check that the packaging contains all the components listed above. If anything is 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.

Summary

The C1000S cardioid/hypercardioid condenser microphone has been specifically designed for professional live, recording, and broadcast use with vocals and instruments. You can power the microphone either from external phantom power (9 to 52 V to IEC 61938) or use two AA batteries and connect the microphone directly to a mixer, recording device, etc.

The combination of a high quality backplate condenser transducer and capsules shock mount optimises handling and cable noise rejection. The microphone body consists of a solid aluminium shaft and screw-on front tube with a rugged stainless steel mesh cap. The microphone uses an internationally standardised 3-pin male XLR output connector.



PPC1000 Polar pattern converter

Slipping the PPC1000 Polar Pattern converter onto the capsule will change the microphone's pickup pattern from cardioid to hypercardioid. This makes the microphone even less sensitive to sounds from the sides and rear, which is particularly beneficial when using the monitor speakers on stage.



PB1000 Presence boost adapter

The PB1000 Presence Boost Adapter boosts the sensitivity of the microphone by approx. 5 dB between 5 kHz and 9 kHz for optimum intelligibility of speech.

Controls

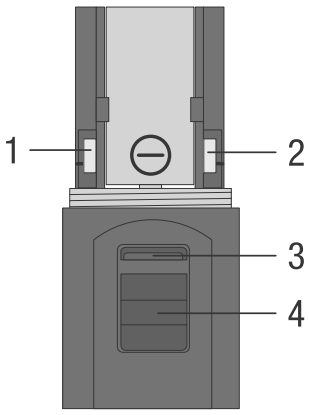


Figure 1: Controls

1) Attenuation selector switch
2) Bass-cut selector switch
3) Status LED
4) On/Off Switch

Attenuation selector switch

Selector switch 1 on the left-hand side of the microphone enables you to increase the mic level by 10 dB to enable distortion-free recording of very loud sound sources and in close proximity to sound sources. This attenuation prevents the microphone output level from exceeding critical control limits, particularly at low frequencies, in miniature transformers that are used in mixing desk inputs, for example.

Bass-cut selector switch

Rumble or wind noises, etc., may cause distortion at the lowest frequencies, but these can be reduced by simply using the switchable bass-cut. The bass-cut also counteracts the proximity effect that can occur when the microphone is only a short distance (less than 15 cm) from the sound source.

Status LED

This LED indicates the current battery status:

- LED flashes momentarily when switching ON and then extinguishes: Battery is OK.
- LED lit constantly: Battery life of about 60 minutes remaining.


NOTE

When you use the microphone with phantom power, the Status LED will not be lit.

On/Off Switch

The microphone provides an on/off switch with no audible click. In the Off position, the batteries are not used.


NOTE

Switch the microphone off when it is not in use, thus prolonging the battery life.

3 Powering

The C1000S is a condenser microphone and therefore needs a power supply. When powered by two AA batteries, the microphone can be used independently of external phantom power without a loss in audio quality. When operating using external phantom power, however, the microphone will automatically switch from battery to phantom power mode.

The microphone provides a balanced output on a 3-pin male XLR connector:

Pin 1: ground
Pin 2: hot
Pin 3: return

You can connect the microphone either to a balanced microphone input with or without phantom power or an unbalanced microphone input.

Battery power

Inserting/replacing and testing the batteries



Figure 2: Insert batteries

1) Unscrew the wire-mesh cap (1).
2) Insert two AA batteries into the battery compartment to conform with the polarity marks (+/-).
   If the batteries are inserted incorrectly, the microphone will not work.
3) Screw the wire-mesh cap back onto the microphone.
4) Slide the on/off switch (3) up to "ON" to switch power to the microphone on.

   - The Status LED (2) will flash momentarily. If the batteries are in good condition, the Status LED will extinguish.
   - If the Status LED fails to flash, the batteries are dead. Insert new batteries.
   - If the Status LED lit constantly, the batteries will be flat within about one hour. Replace with new batteries as soon as possible.

Connecting to a balanced input

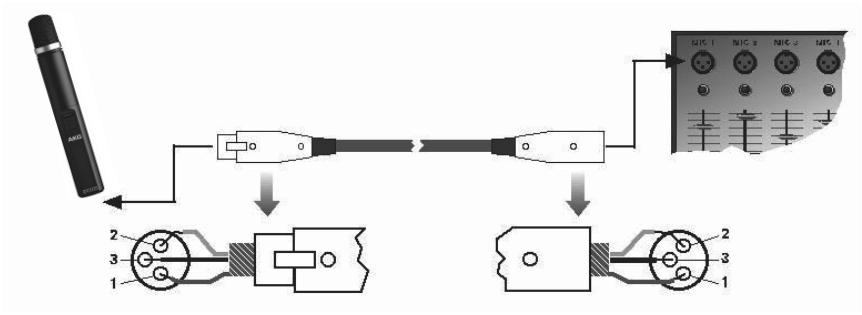


Figure 3: Connecting via a balanced XLR cable

Use a commercial XLR cable.

The length of the cable does not affect signal quality.

Connecting to an unbalanced input

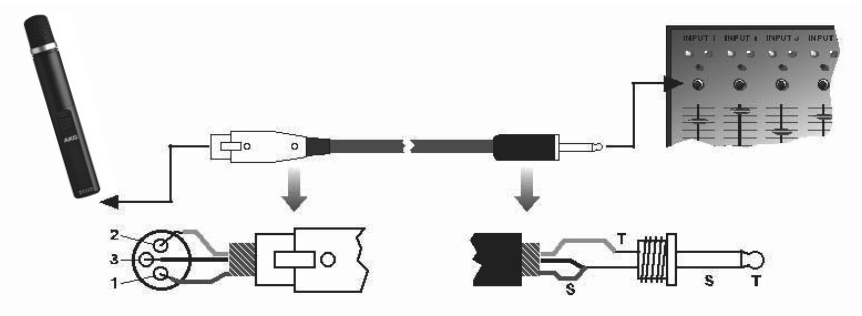


Figure 4: Connecting via an unbalanced cable

To connect the microphone to an unbalanced microphone input (1/4" jack), use a cable with an XLR connector and a 1/4" TS jack plug.

NOTE	Unbalanced cables may pick up interference from stray magnetic fields (nearpower or lighting cables, electric motors, etc.) like an antenna. This may cause hum or a similar noise if you use a cable that is longer than 5 m (16 feet).

Phantom power

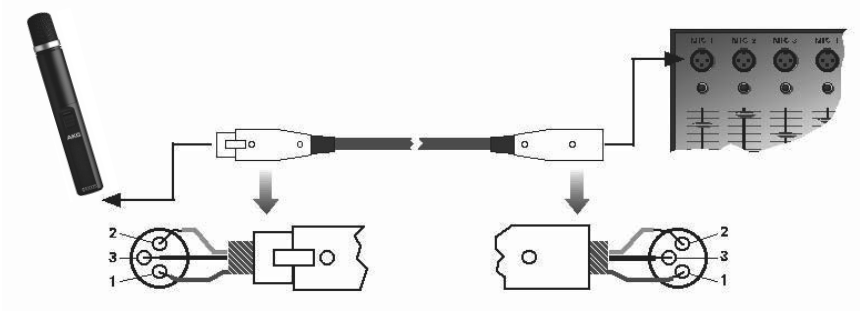


Figure 5: Connecting via a balanced XLR cable

1) Use an XLR cable to connect the microphone to a balanced XLR input with phantom power.
2) Switch on the phantom power. (Refer to the instruction manual of the unit to which you connected your device).

NOTE	The microphone will automatically switch from battery mode to phantom power mode and deactivate the Status LED. Therefore, you do not need to remove the batteries from the microphone. The Status LED will remain off.

4 Application

Installing the PPC1000 or PB1000

1) Unscrew the wire-mesh cap.



Figure 6: Installing the PPC1000 or PB1000

ATTENTION

Risk of damage

When installing or removing the PPC1000 or PB1000, make sure to grip the microphone capsule (2) and rubber shock mount (3) firmly to prevent the capsule from being accidentally detached from its position.

2) Slip the PPC1000 or PB1000 (1) onto the microphone capsule to the stop, slightly turning it as you push it into position.

5 Cleaning

Microphone

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

Internal Windscreen

1) Unscrew the front grill from the microphone CCW.
2) Remove the windscreen from the front grill and wash the windscreen in soap suds.
3) Allow the windscreen to dry overnight.
4) Replace the windscreen in the front grill and screw the front grill on the microphone CW.

6 Troubleshooting

Problem	Possible cause	Remedy
No sound	Power to mixer and/or amplifier is off.	Switch power to mixer and/or amplifier on
	Channel or master fader on mixer, or volume control on amplifier is at zero.	Set channel or master fader on mixer or volume control on amplifier to desired level.
	Microphone is not connected to mixer or amplifier.	Connect microphone to mixer or amplifier.
	Cable connectors are seated loosely.	Check cable connectors for secure seating.
	Cable is defective.	Check cable and replace if damaged.
	No supply voltage.	Switch phantom power on. Check cable and replace if damaged.
	Batteries dead/no batteries inserted.	Check/insert batteries.
Distortion	Gain control on mixer set too high.	Turn gain control down.
	Mixer input sensitivity too high.	Connect a 10-dB attenuation pad between microphone cable and input.
Microphone sound becomes increasingly dull.	Internal or external windscreen attenuates high frequencies when soiled.	Clean internal or external windscreen.

7 Specifications

Working principle:	Pre-polarised condenser microphone
Polar pattern:	Cardioid, hypercardioid (with PPC1000 mounted)
Frequency range:	50 to 20,000 Hz
Sensitivity:	6 mV/Pa (-44 dBV)
Max. SPL for 1% THD:	137 dB
Equivalent noise level (CCIR 468-3):	32 dB
Equivalent noise level:	21 dB-A
Signal/noise ratio (A-weighted):	73 dB
Electrical impedance:	200 ohms
Recommended load impedance:	≥ 2000 ohms
Bass cut filter slope:	Switchable to linear, 80 Hz
Attenuation:	Switchable to -10 dB
Powering:	9 to 52 V phantom power to IEC 61938 or two AA alkaline or rechargeable batteries
Current consumption:	approx. 3 mA
Connector:	3-pin XLR
Finish:	matte grayish blue
Dimensions:	ø 33.5 x 229 mm / ø 1.32 x 9.01 in.
Net weight:	320 g
Shipping weight:	510 g

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