AKG CGN99H/S

AKG CGN99H/S Hypercardioid Condenser Gooseneck Microphone User Manual

Model: CGN99H/S

Introduction

The AKG CGN99H/S is a professional hypercardioid condenser gooseneck microphone designed for various sound reinforcement applications. As part of the DAC Series, this microphone is engineered to capture clear audio while effectively rejecting unwanted noise from the sides, making it ideal for situations where speakers are at greater distances from the microphone. Its robust gooseneck design ensures stable positioning, and the integrated XLR phantom power adapter simplifies connectivity to standard mixer inputs.



Figure 1: The AKG CGN99H/S Hypercardioid Condenser Gooseneck Microphone. This image displays the full length of the microphone, highlighting its slender black design and flexible gooseneck section.

Setup and Installation

Proper setup is crucial for optimal performance of your AKG CGN99H/S microphone. Follow these steps for installation:

1. **Unpacking:** Carefully remove the microphone and any included accessories (such as the windscreen) from its packaging.
2. **Mounting:** The CGN99H/S is designed for fixed or mobile installations. Secure the base of the microphone to a compatible microphone stand or surface mount using its integrated XLR connector. Ensure the mounting point is stable and free from vibrations.
3. **Connecting to a Mixer:** Connect the XLR output of the microphone to an available XLR input on your audio mixer or interface.

The microphone requires 9V to 52V phantom power, which is typically supplied by professional mixers. Ensure phantom power is enabled on the corresponding input channel of your mixer.

4. **Positioning:** Adjust the flexible gooseneck to position the microphone capsule optimally relative to the sound source. For speech applications, aim the microphone directly at the speaker's mouth, typically within 12-24 inches (30-60 cm) for best results.
5. **Windscreen Installation:** If included, gently place the foam windscreen over the microphone capsule. This helps reduce plosive sounds and breath noise.

Operating Instructions

Once installed, operating the CGN99H/S is straightforward. Consider the following for effective use:

- **Phantom Power:** Confirm that phantom power is active on the mixer channel connected to the microphone. The microphone will not operate without it.
- **Gain Staging:** Adjust the input gain (trim) on your mixer to achieve a strong signal level without clipping. Monitor the input meters on your mixer to prevent distortion.
- **Hypercardioid Polar Pattern:** The CGN99H/S features a hypercardioid polar pattern, which is highly directional. This pattern is effective at picking up sound directly in front of the microphone while significantly reducing sound from the sides and rear. This characteristic is particularly beneficial in environments with ambient noise or when multiple microphones are in use.
- **Bass Rolloff:** The integrated XLR phantom power adapter includes a 250Hz bass rolloff switch. Engaging this switch (if available and accessible) can help reduce low-frequency rumble, proximity effect (an increase in bass response when a sound source is very close to the microphone), and other unwanted low-end noise. This is often useful for speech applications.
- **Monitoring:** Always monitor the microphone's output through headphones or speakers to ensure clear audio capture and to identify any potential issues.

Maintenance and Care

To ensure the longevity and optimal performance of your AKG CGN99H/S microphone, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to wipe down the microphone body. Avoid using liquid cleaners, solvents, or abrasive materials, as these can damage the finish or internal components.
- **Windscreen Care:** If the foam windscreen becomes dirty, it can usually be gently hand-washed with mild soap and water, then allowed to air dry completely before reattaching.
- **Storage:** When not in use, store the microphone in a clean, dry environment, preferably in its original packaging or a protective case, to prevent dust accumulation and physical damage.
- **Handling:** Avoid dropping the microphone or subjecting it to strong impacts, as this can damage the sensitive internal capsule or the gooseneck mechanism.
- **Environmental Conditions:** Protect the microphone from extreme temperatures, high humidity, and direct exposure to moisture.

Troubleshooting

If you encounter issues with your AKG CGN99H/S microphone, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
No sound output	• No phantom power • Incorrect cable connection • Mixer channel muted or gain too low • Faulty cable or mixer input	• Ensure 9V-52V phantom power is enabled on the mixer channel. • Check that the XLR cable is securely connected at both the microphone and mixer ends. • Verify the mixer channel is not muted and the gain knob is turned up. • Try a different XLR cable or mixer input to isolate the issue.
Low or weak sound	• Insufficient gain setting • Microphone too far from sound source • Phantom power issue	• Increase the input gain (trim) on your mixer. • Position the microphone closer to the sound source. • Confirm phantom power is stable and within the specified voltage range.
Distorted sound	• Input gain too high (clipping) • Microphone overloaded	• Reduce the input gain (trim) on your mixer until distortion disappears. • Ensure the sound source is not excessively loud for the microphone's maximum SPL.
Excessive bass or muddiness	• Proximity effect • No bass rolloff engaged	• Increase distance from sound source. • Engage the 250Hz bass rolloff switch on the microphone's adapter if applicable.

Specifications

Key technical specifications for the AKG CGN99H/S microphone:

Model Name	CGN99 H/S
Polar Pattern	Hypercardioid
Microphone Form Factor	Gooseneck
Connectivity Technology	XLR
Power Source	Corded Electric (Phantom Power 9V-52V)
Impedance	600 Ohm
Signal-to-Noise Ratio	78 dB
Audio Sensitivity	125 dB
Item Weight	10.5 ounces
Included Components	CGN99H/S Microphone, Windscreen
Country of Origin	India

Warranty and Support

For detailed warranty information regarding your AKG CGN99H/S microphone, please refer to the warranty card included with your product or visit the official AKG Pro Audio website. Warranty terms and conditions may vary by region and retailer.
For technical support, service, or additional product information, please visit the official AKG Pro Audio support page or contact

their customer service department. Contact details and support resources are typically available on the manufacturer's website: www.akg.com/pro

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