ADK Microphones A51

ADK A-51 (Mk 5.1) Class A FET Studio Condenser Microphone User Manual

Model: A51

Introduction

The ADK A-51 (Mk 5.1) is a Class A Pressure Gradient FET Condenser Microphone designed for studio and live sound applications. It features a fixed cardioid polar pattern and is known for its versatility across various instruments and vocals.

This manual provides essential information for the proper setup, operation, maintenance, and troubleshooting of your ADK A-51 microphone. Please read it thoroughly before use to ensure optimal performance and longevity of the product.

Figure 1: Front view of the ADK A-51 (Mk 5.1) Class A FET Studio Condenser Microphone. The microphone features a black body with a gold ADK Microphones logo and "A-51" model designation. The top portion is a mesh grille covering the condenser capsule.

Safety Information

- Always connect the microphone to equipment that provides 48V phantom power. Incorrect power supply can damage the microphone.
- Avoid exposing the microphone to extreme temperatures, humidity, or direct sunlight.
- Do not attempt to disassemble the microphone. Refer servicing to qualified personnel.
- Handle the microphone with care to prevent physical damage to the capsule or body.

Setup

Unpacking

Carefully remove the microphone and any included accessories from its packaging. Inspect for any signs of damage during transit. The package should contain the microphone unit.

Connecting the Microphone

1. Ensure your audio interface, mixer, or preamplifier is turned off and its phantom power is disengaged.
2. Connect a standard 3-pin XLR cable to the microphone's XLR output connector.
3. Connect the other end of the XLR cable to an available XLR input on your audio interface, mixer, or preamplifier.
4. Once the microphone is securely connected, activate the 48V phantom power on your audio device.
5. Wait a few seconds for the microphone to stabilize before beginning recording or sound checks.

Mounting

The ADK A-51 is typically mounted using a standard microphone stand and a compatible shock mount or clip (sold separately). Ensure the microphone is securely fastened to prevent accidental falls.

Operating Instructions

Microphone Placement

The optimal placement of the ADK A-51 depends on the sound source and desired sonic characteristics. As a cardioid microphone, it is most sensitive to sounds directly in front of it and rejects sounds from the rear. Experiment with distance and angle to achieve the best results for vocals, acoustic instruments, or amplifier cabinets.

Gain Staging

Adjust the input gain on your audio interface or mixer to achieve a healthy signal level without clipping. The A-51 has a high maximum SPL, but proper gain staging is crucial for clean recordings.

Internal Switches (S-51 Model Reference)

While the A-51 model features a fixed cardioid pattern and no external switches, the related S-51 model incorporates a -10 dB pad switch and a 100 Hz roll-off (high-pass filter) switch on its body. These features are designed to handle high sound pressure levels and reduce low-frequency rumble, respectively. Consult the specific manual for the S-51 if you are using that model.

Maintenance

- **Cleaning:** Use a soft, dry cloth to wipe the microphone body. Do not use liquid cleaners or solvents, as they may damage the finish or internal components.
- **Storage:** When not in use, store the microphone in its protective case or a dry, dust-free environment. Avoid storing it in areas with high humidity or extreme temperature fluctuations.
- **Handling:** Always handle the microphone by its body, not by the grille or cable.

Troubleshooting

Problem	Possible Cause	Solution
No Sound Output	No phantom power Faulty XLR cable Incorrect input selection on audio device Microphone not connected	Ensure 48V phantom power is enabled. Test with a known good XLR cable. Verify the correct input channel is selected. Ensure the XLR cable is fully seated in both the microphone and audio device.
Low Output Level	Insufficient gain on audio device Microphone too far from source	Increase the input gain on your audio interface/mixer. Move the microphone closer to the sound source.
Distorted Sound	Input gain too high (clipping) Microphone too close to a loud source	Reduce the input gain on your audio interface/mixer. Increase the distance between the microphone and the sound source.

Specifications

Feature	Detail

Feature	Detail
Type	Class A Pressure Gradient FET Condenser Microphone
Polar Pattern	Fixed Cardioid (Unidirectional)
Sensitivity	15mv/Pa
Impedance	200 Ohms
Signal-to-Noise Ratio (S/N)	77dB (Ref: 1 Pa / A-Weighted)
Equivalent Self-Noise	17dB (A-Weighted / IEC 268-4)
Max SPL @ 0.5% THD	130dB
Total Dynamic Range	113 dB
Low-Cut Filter (HPF)	Flat / 100Hz (internal switch - *Note: This feature is present internally on the A-51, and externally on the S-51 model.*)
Power Requirement	Phantom Power 48V ± 4V
Body Color	Black
Connectivity Technology	XLR
Included Components	Microphone
Item Weight	1 Pounds (0.45 kg)
Product Dimensions (L x W x H)	8.25 x 2 x 2 inches (20.96 x 5.08 x 5.08 cm)
First Available Date	April 3, 2009

Note: Specifications are subject to change without notice.

Warranty and Support

For information regarding warranty coverage and technical support for your ADK A-51 microphone, please refer to the official ADK Microphones website or contact their customer service directly. Warranty terms may vary by region and purchase date.

ADK Microphones Official Website: www.adkmic.com

For service or repair, contact an authorized ADK Microphones service center.