ICOM SM-50

ICOM SM-50 DESK MICROPHONE
Instruction Manual

1. Introduction

The ICOM SM-50 is a high-quality dynamic desktop microphone designed to complement Icom transceivers. It is engineered to provide clear and robust audio transmission, making it suitable for various communication applications. Its robust construction and advanced features ensure reliable performance and excellent sound reproduction.

This manual provides essential information for the proper setup, operation, and maintenance of your SM-50 desk microphone.

2. Key Features

- **Unidirectional Polar Pattern:** Designed to pick up sound primarily from a single direction, minimizing background noise.
- **High Signal-to-Noise Ratio:** Achieves a 70 dB signal-to-noise ratio for clear audio with reduced interference.
- **Built-in Amplifier:** Realizes high microphone gain for strong audio output.
- **Flat Frequency Characteristics:** Optimized to utilize the high sound quality capabilities of Icom transceivers.
- **Durable Construction:** Manufactured with robust materials for long-lasting use and reliability.
- **Easy to Use:** Simple setup and intuitive controls for optimal performance.
- **Compatible Devices:** Works effectively with an amplifier for enhanced audio clarity.

3. Package Contents

Please verify that all items listed below are included in your package:

- ICOM SM-50 Desk Microphone Unit
- Integrated Cable with XLR Connector
- Amplifier (integrated or external, as specified by model)

4. Setup

Follow these steps to set up your ICOM SM-50 desk microphone:

1. **Placement:** Position the SM-50 on a stable, flat surface near your Icom transceiver. Ensure it is placed in a location where it will not be easily knocked over and where the microphone element is directed towards the speaker.

2. **Connection:** Locate the XLR connector cable attached to the SM-50. Connect this cable securely to the microphone input port on your compatible Icom transceiver. Ensure the connection is firm to prevent audio interruptions.

3. **Power:** The SM-50 is typically powered directly by the transceiver through the microphone cable. No separate power supply is usually required.

4. **Initial Settings:** Before operation, refer to your transceiver's manual for initial microphone gain settings. It is often recommended to start with a lower gain setting and gradually increase it to avoid overdriving the audio.

Figure 4.1: Front view of the ICOM SM-50 Desk Microphone, showing the microphone element, flexible gooseneck, and base with control buttons.

Figure 4.2: The ICOM SM-50 Desk Microphone positioned next to an Icom IC-7300 transceiver, illustrating a typical setup for amateur radio communication.

5. Operating Instructions

The SM-50 features several controls on its base for convenient operation:

- **PTT (Push-To-Talk) Button:** Press and hold this large button to transmit. Release it to receive.
- **LOCK Button:** Press this button to engage the PTT lock function. This keeps the microphone in transmit mode without needing to hold the PTT button. Press it again to disengage.
- **LOW-CUT Button:** Activates a low-cut filter, which reduces low-frequency audio components. This can be useful for reducing hum or rumble and improving voice clarity, especially in noisy environments.
- **UP/DOWN Buttons:** These buttons are typically used to adjust the frequency of the connected transceiver. Refer to your transceiver's manual for specific functionality and configuration.

Microphone Gain Adjustment: The optimal microphone gain setting is crucial for clear audio. Start with the gain setting on your transceiver at a moderate level (e.g., 50% or as recommended by your transceiver's manual). Speak into the

microphone at your normal speaking volume and monitor the ALC (Automatic Level Control) meter on your transceiver. Adjust the gain until the ALC meter shows appropriate deflection without overdriving, ensuring your audio is strong but not distorted.

6. Maintenance

To ensure the longevity and optimal performance of your SM-50 microphone, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to wipe the exterior of the microphone. For stubborn dirt, a slightly damp cloth with mild soap can be used, followed by a dry cloth. Avoid using abrasive cleaners, solvents, or excessive moisture.
- **Storage:** When not in use for extended periods, store the microphone in a clean, dry environment, away from direct sunlight and extreme temperatures.
- **Cable Care:** Avoid sharp bends or kinks in the microphone cable. Do not pull on the cable to disconnect it; always grasp the connector.
- **Handling:** Handle the microphone with care. Avoid dropping it or subjecting it to strong impacts, as this can damage internal components.

7. Troubleshooting

If you encounter issues with your ICOM SM-50, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No audio output from microphone.	- Microphone cable not properly connected. - Transceiver microphone gain set too low. - Faulty cable or microphone.	- Ensure the XLR connector is fully seated in the transceiver's microphone jack. - Increase the microphone gain setting on your transceiver. - Test with another known good microphone or cable if available.
Distorted or unclear audio.	- Microphone gain set too high (overdriving). - Microphone too close to mouth or speaking too loudly. - Low-cut filter engaged unnecessarily.	- Reduce the microphone gain setting on your transceiver. - Maintain a consistent distance from the microphone (e.g., 6-12 inches). - Disengage the LOW-CUT filter if not needed.
PTT LOCK not working.	- Button malfunction. - Not pressing the button firmly enough.	- Ensure a firm press. - If the issue persists, contact Icom support.

8. Specifications

Attribute	Value
Brand	ICOM

| Attribute	Value
Model Name	SM-50
Microphone Form Factor	Table Array
Polar Pattern	Unidirectional
Connectivity Technology	XLR
Connector Type	XLR
Signal-to-Noise Ratio	70 dB
Audio Sensitivity	30 dB
Item Weight	2.2 pounds
Product Dimensions (L x W x H)	3.54 x 5.39 x 10.71 inches
Power Source	Corded Electric (via transceiver)
Color	Black
Compatible Devices	Amplifier (and Icom Transceivers)

9. Warranty and Support
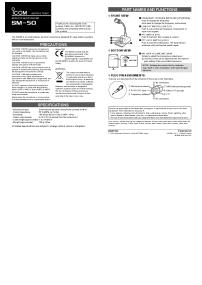
The ICOM SM-50 Desk Microphone is manufactured by ICOM. For specific warranty information, including coverage period and terms, please refer to the warranty card included with your product or visit the official ICOM website. Keep your purchase receipt as proof of purchase.
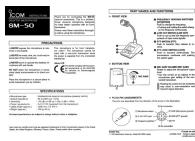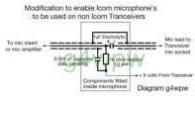
For technical support, service, or inquiries regarding your SM-50 microphone, please contact ICOM customer service directly. Contact information can typically be found on the ICOM website or in the product packaging.
Manufacturer: ICOM

Related Documents - SM-50

[Icom SM-50 Desktop Microphone: User Manual and Specifications](#)
Comprehensive user manual and specifications for the Icom SM-50 desktop dynamic microphone. Learn about its features, functions, precautions, and setup for Icom transceivers.

	[Icom SM-50 Desktop Microphone User Manual](#) User manual for the Icom SM-50 desktop microphone, a unidirectional dynamic microphone designed for base station operation with Icom transceivers. Includes precautions, specifications, and part names and functions.
	[Icom SM-30 Desktop Microphone Instructions](#) User manual and specifications for the Icom SM-30 unidirectional electret condenser desktop microphone, designed for base station operation with Icom transceivers. Includes precautions, specifications, part names, functions, and plug pin assignments.
	[Icom HM-169, HM-184, HM-170GP, HM-171GP Series: Waterproof Speaker Microphone User Guide](#) Explore the features, specifications, and operating instructions for Icom's HM-169, HM-184, HM-170GP, and HM-171GP series waterproof and GPS speaker microphones. Learn about their robust design, audio quality, and GPS capabilities for reliable communication.
	[ICOM SM-10 Desktop Microphone User Manual](#) Instructions and specifications for the ICOM SM-10 desktop microphone, featuring a compressor amplifier and graphic equalizer for enhanced transmitted audio.
	[Icom IC-SM5 Desk Microphone: Modification Guide and Technical Specifications](#) Learn how to adapt Icom microphones for use with non-Icom transceivers and explore the detailed specifications and internal circuitry of the Icom IC-SM5 desk microphone.