

YAESU M-100

Yaesu M-100 Dual-Element Microphone Instruction Manual

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1. INTRODUCTION

The Yaesu M-100 is a high-quality dual-element microphone designed for use with Yaesu HF transceivers. It integrates both condenser and dynamic microphone elements to provide versatile audio characteristics. This manual provides essential information for the proper setup, operation, and maintenance of your M-100 microphone.



Figure 1: Yaesu M-100 Dual-Element Microphone. This image shows the Yaesu M-100 Dual-Element Microphone. The microphone features a black body with a mesh grille, mounted on an adjustable stand, which is attached to a black base

unit. The base unit includes several control buttons.

2. SETUP

2.1 Connecting the Microphone

Connect the supplied microphone cable from the M-100 base unit to the microphone input jack on your compatible Yaesu HF transceiver. Ensure the connection is secure.

2.2 Powering the M-100

The M-100 microphone receives power directly from compatible Yaesu HF transceivers via the supplied microphone cable. No separate power adapter is typically required for most compatible models.

Note: Certain transceivers, including the FT-747, FT-840, FT-850, FT-990, and FT-1000, may require an optional "Power Supply Kit" for proper operation. Refer to your transceiver's manual for specific power requirements.

3. OPERATION

3.1 Dual-Element Selection

The M-100 features both a condenser and a dynamic microphone element. Use the one-touch buttons on the microphone base to select between these elements:

- **Condenser Element:** Provides a wider overall frequency response with clear and crisp audio.
- **Dynamic Element:** Delivers enhanced low and mid-range frequency response.
- **Combined Mode:** Both elements can be used simultaneously to achieve a balanced sound quality tailored to individual voice characteristics.

3.2 Audio Frequency Response Controls

The microphone base includes controls to shape the transmitted audio frequency response:

- **Low-Cut Control:** Cuts off frequencies below 340Hz at -6dB/octave. This helps reduce unwanted low-frequency noise.
- **High-Cut Control:** Cuts off frequencies above 2kHz at -6dB/octave. This can be used to reduce high-frequency hiss or tailor the audio for specific operating conditions.

3.3 Treble Boost Cowling (TBC)

The supplied TBC (Treble Boost Cowling) can be attached to the microphone to enhance voice response attributes in the 1,000 – 1,500 Hz range. This feature helps create a more penetrating signal with a distinct texture, useful for cutting through crowded bands.

3.4 PTT Key and ON AIR Indicator

The Push-To-Talk (PTT) key is designed for smooth and comfortable operation, utilizing three Air-Cylinder Tubes to prevent a harsh "click." A magnetic switch ensures long-term reliability. The highly visible ON AIR LED indicator illuminates when the PTT circuit is active, clearly showing when you are transmitting.

4. MAINTENANCE

To ensure the longevity and optimal performance of your Yaesu M-100 microphone, follow these general maintenance guidelines:

- **Cleaning:** Gently wipe the microphone body and base with a soft, dry cloth. Avoid using abrasive cleaners, solvents, or excessive moisture, which can damage the finish or internal components.
- **Storage:** When not in use, store the microphone in a clean, dry environment, away from direct sunlight, extreme temperatures, and high humidity.
- **Cable Care:** Avoid sharply bending or twisting the microphone cable. Always grasp the connector, not the cable, when plugging or unplugging it from your transceiver.
- **Handling:** Handle the microphone with care to prevent drops or impacts, which could affect its delicate internal elements.

5. TROUBLESHOOTING

If you encounter issues with your M-100 microphone, consider the following troubleshooting steps:

- **No Audio Output:**
 - Ensure the microphone cable is securely connected to both the M-100 and the transceiver.
 - Verify that the transceiver's microphone input is enabled and properly configured.
 - Check if the M-100 requires an optional power supply kit for your specific transceiver model (refer to Section 2.2).
 - Test with a different microphone or cable if available to isolate the issue.
- **Poor Audio Quality:**
 - Adjust the Low-Cut and High-Cut controls on the microphone base.
 - Experiment with the Condenser, Dynamic, and Combined element selections to find the optimal setting for your voice and operating conditions.
 - Ensure the TBC is correctly attached if you intend to use it.
 - Check the microphone gain settings on your transceiver.
- **PTT Not Activating:**
 - Ensure the microphone cable is fully inserted and locked into place.
 - Check the ON AIR LED indicator. If it does not illuminate, there might be a connection or power issue.
 - Consult your transceiver's manual for PTT input settings.

If these steps do not resolve the issue, please contact Yaesu customer support or your authorized dealer for further assistance.

6. SPECIFICATIONS

Feature	Description
Brand	YAESU
Model Name	M-100
Microphone Form Factor	Handheld (with desktop stand)
Elements	Dual-Element (Condenser and Dynamic)
Polar Pattern	Unidirectional

Feature	Description
Connectivity Technology	XLR (via supplied cable to transceiver)
Power Source	Corded Electric (from compatible transceiver)
Material	Metal
Item Weight	3.45 Pounds (1.56 kg)
Included Components	Microphone, Treble Boost Cowling (TBC)
Compatible Devices	Yaesu HF Radios (e.g., FT-DX9000, FT-DX5000, FT-DX3000, FT-DX1200, FT-991/A, FT-891, FT-450 Series)

7. WARRANTY & SUPPORT

7.1 Warranty Information

Please note that this item does not come with a separate warranty card. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact your authorized Yaesu dealer.

7.2 Customer Support

For technical assistance, service, or inquiries regarding your Yaesu M-100 microphone, please contact your local Yaesu dealer or visit the official Yaesu website for support resources and contact information.

