

**YAESU MD M1**

# Yaesu MD-M1 Programmable Reference Microphone User Manual

Model: MD M1

## 1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of the Yaesu MD-M1 Programmable Reference Microphone. Designed for discriminating Ham Radio Operators, the MD-M1 offers advanced audio customization and performance.

The MD-M1 integrates both Condenser and Dynamic microphone elements, allowing for versatile audio characteristics. It features a sophisticated Nine (9) Band Graphic Equalizer for precise frequency response adjustments, along with various other functions to optimize your audio transmission.

## 2. PRODUCT OVERVIEW



Figure 1: Yaesu MD-M1 Programmable Reference Microphone

This image displays the Yaesu MD-M1 Programmable Reference Microphone. It features a sleek, black design with a cylindrical microphone head mounted on an adjustable stand. The base of the microphone includes a control panel with an LCD screen and various buttons for programming and operation.

## Key Features:

- **Dual Microphone Elements:** Combines Condenser and Dynamic elements for diverse audio profiles.
- **Nine-Band Graphic Equalizer:** Independent 9-band EQ (63Hz to 16kHz) for each microphone element.
- **Frequency Response Memories:** Two memories and a 'through' mode for each element's EQ settings.
- **Independent Output Levels:** Separate volume controls for Condenser and Dynamic elements.
- **TBC (Treble Boost Cowling):** Enhances voice response in the 1-1.5kHz range.
- **Smooth PTT Key:** Utilizes three Air-Cylinder Tubes and a contactless magnetic switch for comfortable, durable operation.
- **Recording and Playback:** 20-second capability to confirm audio tonality.
- **LCD Display:** Large Graphic Equalizer and Frequency Response Scope LCD with anti-reflective coating.
- **Connectivity:** Cannon-type (XLR) output plug connector.
- **Additional Features:** Headphone jack, Touch PTT keylock, Built-in low-cut filter, Audio output volume control for headphones.

## 3. SETUP

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### 3.1 Unpacking and Inspection

Carefully remove the MD-M1 microphone from its packaging. Inspect all components for any signs of damage. The package should contain the MD-M1 microphone unit.

### 3.2 Connecting the Microphone

1. Ensure your radio or audio interface is powered off.
2. Connect the MD-M1's Cannon-type (XLR) output plug to the corresponding input on your radio or audio equipment.
3. Connect the microphone to a suitable power source. The MD-M1 operates via a corded electric connection.
4. Position the microphone on a stable, flat surface. The microphone is designed as a table array unit.

The MD-M1 is compatible with various radio systems. Refer to your radio's manual for specific microphone input requirements.

## 4. OPERATING INSTRUCTIONS

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### 4.1 Power On/Off

Locate the power switch on the microphone base. Press to turn the unit on or off. The LCD display will illuminate upon power-on.

### 4.2 Microphone Element Selection

The MD-M1 allows selection between the Condenser element, Dynamic element, or a combination of both. Use the dedicated buttons on the microphone base to cycle through these options. The selected element(s) will be indicated on the LCD.

### 4.3 Graphic Equalizer Adjustment

The 9-band graphic equalizer can be adjusted independently for each microphone element. Use the navigation buttons and control knob to select frequency bands (63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz, 16kHz) and adjust their gain levels. The LCD will display the current EQ curve.

### 4.3.1 EQ Memory Functions

Two frequency response memories (Memory 1, Memory 2) and a 'through' mode are available for each element. Use the one-touch buttons to switch between these presets. This allows for quick recall of preferred audio profiles.

## 4.4 Output Level Adjustment

Separate volume controls are provided for the Condenser and Dynamic elements. Adjust these controls to achieve the desired output level for each element, ensuring optimal modulation without overdriving your radio's input.

### 4.5 TBC (Treble Boost Cowling)

The supplied Treble Boost Cowling can be attached to the microphone head. This accessory enhances the voice response around the 1-1.5kHz range, creating a distinct tonal texture. Attach or remove the cowling as desired to suit your audio preference.

### 4.6 PTT (Push-To-Talk) Operation

The PTT key features a smooth action due to its Air-Cylinder Tubes and contactless magnetic switch. Press and hold the PTT key to transmit. Release to receive. The large red TX LED indicator will illuminate during transmission.

#### 4.6.1 PTT Keylock

Engage the Touch PTT keylock to maintain continuous transmission without holding the PTT button. Press the keylock button again to disengage.

### 4.7 Recording and Playback

The MD-M1 includes a 20-second recording and playback function. Use this feature to record a short audio sample and play it back to evaluate your audio tonality and EQ settings. Refer to the specific buttons on the microphone base for record and playback controls.

### 4.8 Low-Cut Filter

A built-in low-cut filter is available to shape the low-frequency response, reducing unwanted bass or rumble. Activate or deactivate this filter via its dedicated control to optimize your audio for different operating conditions.

### 4.9 Headphone Use

Connect headphones to the headphone jack on the microphone base. Adjust the audio output volume control for headphones to monitor your transmitted audio or receive audio from your connected radio, if supported.

## 5. MAINTENANCE

### 5.1 Cleaning

To clean the MD-M1, use a soft, dry cloth. For stubborn dirt, a slightly damp cloth with mild soap can be used, ensuring no moisture enters the microphone grille or control panel. Avoid abrasive cleaners or solvents, as these can damage the metal finish and electronic components.

### 5.2 Storage

When not in use for extended periods, store the microphone in a cool, dry place, away from direct sunlight and extreme

temperatures. Protect it from dust and physical impact.

## 6. TROUBLESHOOTING

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This section addresses common issues you might encounter with your MD-M1 microphone. If you experience problems not covered here, please contact Yaesu customer support.

- **No Audio Output:**

- Ensure the microphone is powered on.
- Verify all cables, especially the XLR connector, are securely attached.
- Check the output level controls for both microphone elements.
- Confirm the correct microphone element (Condenser, Dynamic, or combined) is selected.
- Ensure your radio or audio interface input is correctly configured and enabled.

- **Distorted Audio:**

- Adjust the output level controls to prevent overdriving the radio's input.
- Review the Graphic Equalizer settings; extreme boosts can cause distortion.
- Check for any physical obstructions or damage to the microphone grille.

- **LCD Display Not Working:**

- Ensure the microphone is powered on.
- If the issue persists, contact customer support.

- **PTT Key Not Responding:**

- Check if the PTT keylock is engaged. Disengage it if necessary.
- Ensure the microphone is properly connected and powered.

## 7. SPECIFICATIONS

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Feature	Specification
Brand	YAESU
Model Name	M-1 (MD M1)
Microphone Form Factor	Table Array
Power Source	Corded Electric
Material	Metal
Hardware Platform	PC (Compatible with Radio)
Number of Channels	1
Frequency Response	3E+1 KHz (General range, specific EQ bands 63Hz-16kHz)
UPC	788026158164
Item Weight	4.25 - 4.3 Pounds

Feature	Specification
Recommended Uses	Video Conference, Voice Recording (and Ham Radio Communication)
Connectivity Technology	XLR
Connector Type	XLR
Special Feature	Programmable
Compatible Devices	Radio
Included Components	Microphone
Polar Pattern	Unidirectional
First Available Date	February 17, 2017

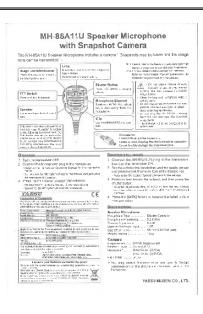
## 8. WARRANTY AND SUPPORT

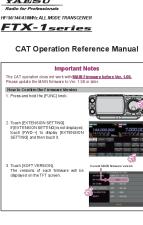
For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official Yaesu website. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.

When contacting support, please have your product model (MD M1) and serial number ready. For service or repair, it is recommended to contact an authorized Yaesu service center.

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### Related Documents - MD M1

 <p><b>FT-50R</b> Dual-Band Amateur Hand-Held Transceiver with Digital Voice Recorder Option <small>Downloaded from Yaesu.com/FT-50R</small></p>	<p><a href="#">Yaesu FT-50R Dual-Band Amateur Hand-Held Transceiver User Manual</a> Comprehensive user manual for the Yaesu FT-50R Dual-Band Amateur Hand-Held Transceiver. Learn about its features, operation, accessories, and specifications.</p>
 <p><b>MH-85A11U Speaker Microphone with Snapshot Camera</b> <small>Downloaded from Yaesu.com/MH-85A11U</small></p>	<p><a href="#">YAESU MH-85A11U Speaker Microphone with Snapshot Camera User Manual</a> Detailed information on the YAESU MH-85A11U Speaker Microphone with integrated snapshot camera, including operation, specifications, and usage instructions.</p>

 <b>FTDX10</b> CAT Operation Reference Manual  <small>YAESU MUREN CO., LTD.</small>	<p><a href="#"><b>Yaesu FTDX10 CAT Operation Reference Manual: PC Control Guide</b></a></p> <p>This reference manual provides detailed instructions and command lists for operating the Yaesu FTDX10 transceiver's Computer Aided Transceiver (CAT) system via PC connection (USB/RS-232C).</p>
 <b>HRI-200</b> Reference Manual for DR-2XXE  <small>YAESU MUREN CO., LTD.</small>	<p><a href="#"><b>YAESU HRI-200 Reference Manual for DR-2X/XE</b></a></p> <p>This reference manual provides detailed instructions for operating the YAESU HRI-200 controller with the DR-2X/XE repeater, covering activation, connection, configuration, and WIRES-X operation.</p>
 <b>FTDX3000 Series</b> CAT OPERATION REFERENCE BOOK  <small>YAESU MUREN CO., LTD.</small>	<p><a href="#"><b>Yaesu FTDX3000 CAT Operation Reference Book</b></a></p> <p>A comprehensive guide to the Computer Aided Transceiver (CAT) system for the Yaesu FTDX3000 radio. This reference book details connection methods (RS-232C and USB), the structure of control commands, and provides an extensive list of programmable commands and their parameters for remote operation.</p>
 <b>FTX-1 Series</b> CAT Operation Reference Manual  <small>YAESU MUREN CO., LTD.</small>	<p><a href="#"><b>YAESU FTX-1 Series CAT Operation Reference Manual</b></a></p> <p>Comprehensive guide to the Computer Aided Transceiver (CAT) system for the YAESU FTX-1 series HF/50/144/430MHz All Mode Transceiver, detailing connection, commands, and operation. Includes information on firmware versions and communication parameters.</p>