# **Useful Functions**

# Microphone Angle adjustment M-1/M-100

The Microphone may be set to the desired operating position with the angle adjustment knobs.



### M-1 Control Panel



### RX ATT switch M-1 only

If the transceiver audio output level is too high, the audio signal input to the rear panel RX AUDIO IN terminal may be attenuated by 20dB.

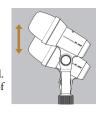
### **Specifications**

	M-1	M-100
Microphone elements	Dynamic and condenser microphones	Dynamic and condenser microphones
Supply Voltage	DC 5 V ±5 %	DC 5 V ±10 %
Frequency Response	30 - 17000 Hz	30 - 17000 Hz
Sensitivity	-60 dB (1kHz 0 dB = 1V/1Pa)	-60 dB (1kHz 0 dB = 1V/1Pa)
Mic Impedance	600 Ohms	600 Ohms
Headphone Output Impedance	16 Ohms(TYP)	_
Headphone Output Level	15 mW(TYP)	_
RX AUDIO IN (Input Level)	100 mVrms(TYP)	_
Dimensions (WxHxD)	5.5" x 11.0" x 6.0" (140 x 280 x 152 mm) *	5.0" x 11.0" x 5.4" (126x 280 x 137 mm) *
Weight (approx)	2.11 lbs (960g) w/o Cable	2.00 lbs (910g) w/o Cable

<sup>\*</sup> Dimensions (H): Maximum with microphone horizontal

# Microphone Height adjustment M-1/M-100

The height of the microphone can be precisely adjusted. The microphone stand can be extended a maximum of 2.36" (60 mm)



# 1 MIC GAIN adjustment knobs M-1 only

The output gain of the condenser microphone and the dynamic microphone may be adjusted individually by turning the MIC GAIN control knobs using the included adjustment tools.

# 2 SCOPE key M-1 only

The screen may be switched between the real-time audio scope display, and the equalizer settings display.

# 3 Recording/Playback key M-1 only

Up to 20 seconds of audio can be recorded. The recorded content can be replayed through headphones connected to the PHONES jack on the rear panel. Use the built-in record and playback feature to listen to your own voice and adjust as necessary.

## 4 MONITOR Volume knob M-1 only

The Monitor Volume Knob adjusts the level of the audio in the headphones connected to the PHONES terminal on the rear panel.

### **Applicable Models**

As of April 2017

M-1 and M-100		
FTDX5000 Series	FTDX3000D	
FT-891	FT-450/D	
FT-857/D	FT-817/ND	
FT-950	FT-897/D	
FT-900	FT-847	
FT-1000MP-MKV	FT-1000 *1	
FT-980 *1	FT-850 *1	
FT-767 *1	FT-757 *1	
FT-736 *1		
	FTDX5000 Series FT-891 FT-857/D FT-950 FT-900 FT-1000MP-MKV FT-980 *1 FT-767 *1	

<sup>\*1</sup> Requires Optional "Power Supply Kit for M-100" when connecting with the M-100

About this brochure: We have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Precise frequency range may be different in some countries. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized Yaesu Dealer for complete details.



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# Find New Pleasure in Creating Your Own Unique Vocal sound



# Engineered for the Most Discriminating Ham Radio Operators



Ultimate Reference Microphone



- Dual microphone configuration (Dynamic and Condenser Microphones)
- TBC (Treble Boost Cowling) produces a unique tonal texture
- Long stroke, Smooth Operating PTT key
- High visibility ON AIR LED
- One-touch PTT keylock

### M-1 Exclusive Features

- Nine-band graphic equalizer
- Built-in one-click Low-Cut filter
- Solid aluminum die cast microphone stand
- Large display (featuring anti-reflective AR coating)
- Built-in record and playback feature
- Headphone output for real-time monitoring
- Cannon-type (XLR) Output

# Nine-band graphic equalizer

The nine-band graphic equalizer is applied to each microphone element independently, giving total flexibility to accentuate and enhance the frequency characteristics of both output signals. The outputs of the dynamic and condenser microphones may be characterized and combined for a distinctive sound. The nine frequency bands of each graphic equalizer can be adjusted individually with rotary encoders located on the base control panel below the display (a dedicated alignment tool is provided). The built-in memories can store two different groups of settings for each microphone. Stored settings (Memory 1 and 2) can be accessed instantly. A through (flat) option is also provided. By blending the two microphone outputs together, you can create your own unique tonal quality. The M-1 adds a new level to the audio creative process.





- ①Headphone Jack: Connect headphones to the M-1 to hear the Microphone sound in real time, listen to test recordings or monitor the transceiver signal (via 3.5 mm mono jack cable between the M-1 and the Transceiver Audio Out).
- 2 RX Audio IN Jack: The audio from a transceiver can be monitored with the headphones by connecting the transceiver audio output to this input jack.
- 3 Cannon-type (XLR) Output: Outputs include a balanced XLR jack to be used with professional sound equipment. It reduces the influence of external electrical noise, and maintains high quality audio signals.
- 4 Power Switch: Setting for the desired M-1 power switch operation. AUTO: The M-1 power turns ON/OFF together with the power of the radio. ON: The M-1 power is always ON
- 5DC IN 5 V Jack: Connect to the supplied AC adapter
- (6) Microphone Jack, Modular Terminal: Use the supplied microphone cable to connect the microphone to a transceiver that has an "8-pin terminal".
- "Microphone Jack, 8-pin Terminal: Use the supplied microphone cable to connect the microphone to a



**Dual-Element Microphone** 



- Dual microphone configuration (Dynamic and Condenser Microphones)
- TBC (Treble Boost Cowling) produces a unique tonal texture
- Long stroke, Smooth Operating PTT key
- High visibility ON AIR LED
- One-touch PTT keylock

### M-100 Exclusive Features

• Built-in one-click Low-Cut and High-Cut filters

### Microphone select keys

Microphone select keys on the control panel switch between the condenser microphone and the dynamic microphone. Designate the outputs of the dynamic and condenser microphones for a distinguishing sound.



C key (Condenser Microphone Element key)

D key (Dynamic Microphone Element key)

When both [C] and [D] keys are pressed, the audio output signals of the condenser and dynamic microphone elements are



# Built-in one-click Low-Cut and High-Cut filters

One-click Low-Cut and High-Cut filters are built-in on the control panel. They provide easy control of the frequency characteristics of the output signal.



LC (Low-Cut) key

A low-cut filter (cut-off frequency 340Hz, -6dB/octave) is activated.



HC (High-Cut) key

A high-cut filter (cut-off frequency 2kHz, -6dB/octave) is activated. When the [LC] and [HC] keys are pressed, both filters are activated simultaneously.



- ①Microphone Jack, 8-pin Terminal: Use the supplied microphone cable to connect the microphone to a transceiver that has a "modular terminal"
- 2 Microphone Jack, Modular Terminal: Use the supplied microphone cable to connect the microphone to a transceiver that has an "8-pin terminal".

# **Common Features**

# Dual microphone configuration (Dynamic and Condenser Microphone)

The M-1/M-100 features two built-in microphone elements, one dynamic and one condenser. The unique output signals may be individually crafted and then blended to produce a single rich voice signal. The condenser microphone responds to a broad frequency range including the distinctive crisp highs, while the dynamic microphone adds depth and warmth; desirable qualities for a congenial conversation. The M-1/M-100 lets you fine-tune and balance the two microphone sources to create a sound that is just right for your voice.



# TBC (Treble Boost Cowling) produces a unique tonal texture

The clever clip-on cowling enhances the high-frequency response. The cowling serves to concentrate voice input with a peak at around 1-1.5kHz, producing a unique tonal texture.



# Long stroke, Smooth Operating PTT key

The PTT key has been designed with optimal balance between key weight and stroke to provide the perfect level of responsiveness. The Air-Cylinder construction delivers smooth fingertip-sensitive operation over an extended stroke distance. Meanwhile, the contactless magnetic switch provides years of fault-free operation with minimal mechanical



# High visibility ON AIR LED



### **One-touch PTT keylock**

Use the one-touch PTT keylock features to reduce fatigue during extended sessions.

