

mAT-Y200 Operating Manual

Thank you for purchasing a MAT-TUNER product. Please read this manual carefully and understand it completely before using this product.

Compatibility Notes

Please read the following notes carefully before purchasing this product. By purchasing this product, you acknowledge that you have read and accepted the statements below.

■ **Compatibility with Transceiver Models:** The mAT-Y200 is designed for use with the YAESU transceiver models currently supported by MAT-TUNER. We continuously optimize and improve the product software and firmware to support a broader range of YAESU transceivers. However, we cannot guarantee compatibility with YAESU transceiver models that may be released in the future.

■ **Compatibility with Transceiver Firmware:** Compatibility is guaranteed only with the firmware versions of supported YAESU transceivers that have been tested by MAT-TUNER. If a supported transceiver receives a firmware update in the future, we cannot guarantee that the mAT-Y200 will remain fully compatible with the updated firmware.

Description

The mAT-Y200 uses a control interface compatible with YAESU external antenna tuners such as the FC-40 and FC-50. It can be operated directly from the compatible YAESU transceiver.

It can tune a wide variety of antenna systems, including dipole, vertical, V-type, Yagi, and other coax-fed antennas. With a wide

matching range of 5–1500 Ω , the mAT-Y200 can accommodate a wide variety of antenna systems.

The mAT-Y200 has a maximum RF input power of 200 W PEP (SSB) and is suitable for many YAESU transceivers. It is compatible with the FT-891, FT-991A, FTDX10, FTDX101D, FTDX101MP, FT-710, and other compatible YAESU transceivers.

Unsupported Models:

FT-80C, FT-747, FT-757, FTDX5000, FT-2000: These transceivers do not have the standard YAESU 8-pin tuner interface and are not compatible with the mAT-Y200.

FT-817/FT-818: This tuner cannot be used with these radios; please use the mAT-10 tuner, which is designed specifically for the FT-817/FT-818.

FTX-1 Field: Use the mAT-1F tuner, which is specifically designed for the FTX-1 Field.

Power Notes:

When an external antenna tuner is connected to the FTDX101MP, the transceiver automatically limits the RF output power to 100 W.

The maximum RF input power in DATA modes (such as FT8 and RTTY) is 60 W.

Front Panel



ONLINE: Indicates the tuner status. **ON:** Online; **OFF:** Bypass.
POWER: Power indicator.

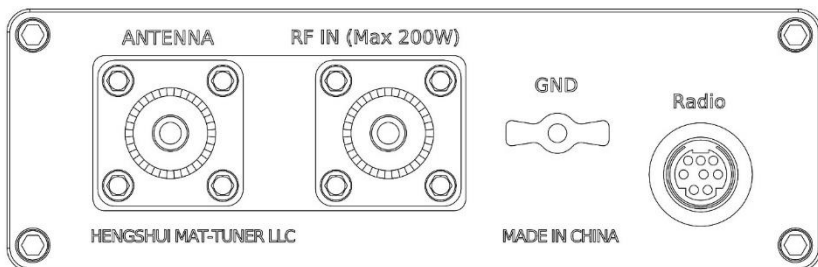
Rear Panel

ANTENNA: SO-239 female connector for connection to the antenna system using a 50 Ω coaxial feedline.

RF IN (Max. 200 W): SO-239 female connector; connects to the transceiver antenna jack with a coaxial cable.

Radio: Connects to the transceiver's external tuner jack using the supplied mAT-CY control cable.

GND: Ground terminal.



Installation

⚠ Be sure to turn off the transceiver before making any connections.

1. Connect the transceiver ANT jack to the tuner "RF IN" jack using a 50 Ω coaxial cable.
2. Connect one end of the mAT-CY control cable to the "Radio" jack on the tuner.
3. Connect the other end of the control cable to the **TUNER** jack on the transceiver. On some models, this jack is labeled **CAT/LINEAR** or **TUN/LIN**.
4. Connect the antenna feedline to the "**ANTENNA**" jack on the tuner.
5. Connect the "**GND**" terminal to a suitable station ground or antenna system ground.

Radio Setup

The external tuner settings vary among YAESU transceiver models. Refer to the transceiver's operating manual for the appropriate settings. The interface and control method of the mAT-Y200 are compatible with YAESU external tuners such as the FC-30, FC-40, and FC-50.

FT-710 Setup Procedure:

To use the mAT-Y200 with the FT-710, configure the transceiver as follows:

1. Make sure the transceiver is turned off. Connect the RF cable and the mAT-CY control cable between the transceiver and the tuner.
2. Turn on the FT-710.
3. Press the **[FUNC]** knob to display the Function screen.
4. Select **[OPERATION SETTING]** → **[GENERAL]** → **[TUNER TYPE SELECT]**.
5. Rotate the **[FUNC]** knob, or touch “<” or “>” on either side of the value to select “**EXT**” .
6. Press the **[FUNC]** knob, or wait for about 3 seconds to save the setting.
7. Press **[BACK]** to exit the setting screen.

The FT-710 is now configured to operate an external antenna tuner through the **TUNER/LINEAR** terminal. For details about FT-710 menu operation, refer to the FT-710 Operation Manual.

For other YAESU models, the menu items and operating procedures may differ. Refer to the transceiver's operating manual for the appropriate settings.

Operation

The method of operating an external tuner varies among YAESU transceivers. Some models use the **[TUNE]** key to control the

tuner, while others may require operation through function menus or knobs. Refer to the operating manual for your transceiver.

Using models that support the [TUNE] key as an example:

1. Press the [TUNE] key to switch the external tuner between **ONLINE** and **BYPASS** modes.
2. Press and hold the [TUNE] key to start automatic tuning.

Supplied Accessories

1. mAT-CY control cable
2. mAT-Y200 manual

Specifications

Frequency Range: 1.8–54 MHz

Maximum RF Input Power: 200 W PEP (SSB); 60 W (DATA)

Impedance Matching Range: 5–1500 Ω

Tuning Time: ≤ 5 s

Memory: 16,000 frequency memories

Compatible Antennas: Dipole, vertical, V-type, Yagi, wire, and other coax-fed antennas

Operating Temperature: -10°C to $+60^{\circ}\text{C}$ (14°F to 140°F)

Power Supply: Supplied by the transceiver through the mAT-CY control cable; no external power supply required

Dimensions: $180 \times 142 \times 51$ mm

Weight: Approx. 0.8 kg

Technical Support

For more information, product specifications, manuals, and support, please visit www.mat-tuner.com.

We recommend purchasing MAT-TUNER products through authorized dealers to ensure reliable after-sales service.

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