tuner to "BYPASS". Touch for more than 1 second to start tuning and set the tuner to "ONLINE".

- ☆ When the tuner is tuning, in addition to the "ONLINE/TUNING" indicator lights up in red, the red text "TUNE" will flash on the transmitter screen
- ☆ After the tuner completes the tuning cycle, when it is online, the white text "TUNE" will always be lit on the transmitter screen, except for the "ONLINE/TUNING" indicator on the front panel that lights up green.

## Start tuning cycle method B:

- ☆ When PTT is pressed for the first time on a new frequency, the tuner will automatically start a new tuning cycle.
- ☆ The "PTT TUNE" function of the IC-705 transmitter is turned on by default. If you turn off this function, you will not be able to drive the tuning cycle by this method.

## **Specifications**

Frequency Range:  $1.8 \sim 54$  MHz Impedance Range:  $5 \sim 1500 \Omega$  Tune Time: 5 seconds or less Memories: 16000 channels

Charging Voltage: 4.5-5.5V, TYPE-C USB Charging Current: 500mA, Max 700mA Operating Temperature: -10°C ~ +50°C Case Size(WHD): 67 x 29 x 151 mm Net Weight: 237g, Gross weight: 330g

## **Supplied Accessories**

Control Cable 1pc
TYPE-C USB charging cable 1pc

• Tip: mAT-705 has two built-in lithium batteries, which may be restricted during transportation. Please comply with relevant laws and requirements.

## MAT-TUNER®

# **mAT-705**

Automatic Antenna Tuner For the ICOM IC-705 transceiver

#### HENGSHUI MAT-TUNER LLC

www.mat-tuner.com No.28 Ronghuabei ST, Hengshui, Hebei, CHINA HENGSHUI MAT-TUNER LLC http://www.mat-tuner.com

http://www.mat-tuner.cn

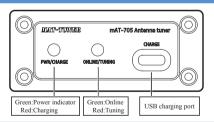
## Automatic Antenna Tuner mAT-705Plus User Instructions

Thank you for your purchase of the model mAT-705 Automatic Antenna Tuner, designed specifically for the ICOM IC-705 HF/VHF/UHF Transceiver. The mAT-705 tuner is powered by two built-in lithium batteries, can be charged by a USB power adapter. Magnetic latching relays are used inside the tuner to save energy.

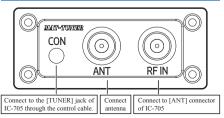
The mAT-705 Automatic Antenna Tuner responds to control commands from the IC-705 Transceiver. providing microprocessor-based impedance matching on the 160 through 6 meter Amateur bands. On the HF and 50 MHz bands the impedance matching range is from  $5\Omega$  to  $1500\Omega$ .

The tuner comes with control cable. Both ends of the control cable are standard 3.5mm plugs. One side is connected to the TUNER socket of the transmitter. and the other plug is connected to the CON socket of the tuner. The transceiver controls the tuner through this cable for automatic tuning. An RF cable mAT-RC1 that connects the IC-705 and the tuner is sold as an accessory item, mAT-RC1 is a common coaxial cable with male BNC plugs at both ends.

#### Front Panel Information



#### **Back Panel Information**



### **Charging instructions**

- 1. Two built-in 10440 lithium batteries, 3.7V. 1000mAh
- 2.TYPE-C USB charger.
- 3. Charging current is 500mA, complete charging in about 1 hour
- 4. Highest charging voltage is 5.5V.



☆ The "PWR/CHARGE" green indicator flashes when the tuner starts means the tuner needs to be charged.

☆ The "PWR / CHARGE" red indicator light is on while charging. The red indicator light will go out after the battery is fully charged.

## **Operating**

- ☆ The mAT-705 tuner has no mechanical power switch. Its startup and shutdown are controlled by the IC-705 transmitter, which turns on and off along with the transmitter.
- ☆ Before use, make sure that the control cable and RF cable are properly connected. Pay attention to whether the control cable has been inserted in enough places.
- ☆ When the transmitter is operating in the 144 or 430MHz band, it is recommended that you remove the tuner. Otherwise the tuner may affect the impedance of your antenna system.



 Turn on the power of the IC-705 transmitter, the "PWR/CHARGE"

tuner will automatically light up in green. If this indicator flashes, it means the tuner needs to be charged.

## Start tuning cycle method A:

1.Enter the function menu of the transmitter, as



shown in the figure, the [TUNER] option turns white to indicate that it is available.

2.Quickly touch [TUNER] to switch the