

## **Enter Advanced Function**

First turn off it, then turn on and when the LOGO interface is displayed, press and hold [TUNE] for 2 seconds, buzzer is "di-di-di-".

	Function	Menu	Range	Suggest	Introduce
1	Buzzer	★BEEP ON	NO/YES	YES	Push button or VSWR alarm
2	Tuning Parameters	<b>★</b> TUNE AUTO	NO/YES	YES	Automatically tunes when the VSWR is too high
3		<b>★</b> TUNE COUNT	1-20	8	Number of tuned results automatically stored
4		<b>★</b> TUNE AUTOSWR	1.00-2.50	1.80-2.0	The standing VSWR auto-tunes beyond this value
5		TUNE DELAY	10-80	32-40	Wait for operating time of the relay(ms)
6		<b>★</b> TUNE SETP	1-8	2-4	Tuning step depth, swr will be lowe
7		★TUNE MIN PWR	0.1W/1W/2 W/5W	2W	Start tuning power,QRP radion suggest set ">2W",others ">5W"
8	Calibration	FIX RADIO	100W/10W	100W	Set max power of your radio,QRP need attention
9		FIX PWR	60%-150%	100%	Calibration power
10		FIX SWR	60%-150%	100%	Calibration swr
11		<b>★</b> FIX AVG	1-10	3-6	Average value times of power and swr
12	Test	TEST RELAY	ENTER		Test relay failure
13		TEST ADC	ENTER		Test radio signal power
14	Reset	RESET	ENTER		Reset System all value

<sup>★</sup>You'll be tweaking these parameters often and are very useful for tuning.

http://antuner.com/en.html or Youtube@antuner

<sup>★[</sup>TUNE MIN PWR] This parameter is to set the minimum startup tuning RF power. It is recommended that you set a reasonable value. QRP recommends setting it to 2W. For other radios greater than 10W, it is recommended to set 5W, and use 5W power for transmit signal tuning during tuning.

<sup>★</sup>For the complete video tutorial, please visit the official website

# **ANTUNER**Quick Start Manual

### **Properties**

Model Name : AT-100M Support Radio : Any Radio Support Antenna : Any Antenna

Frequency: 1.8-30Mhz/50-54Mhz

Power Range: ★1.8-30Mhz/SSB/CW 0.1-100W, Peak <150W

★1.8-30Mhz/FM/AM 0.1-100W, Suggestion <50W

**★**1.8-30Mhz/FT8 <50W **★**50-54Mhz/FM <50W

Note: The maximum power will be higher or lower than standard, it

depending on different antennas, frequencies, and modulation modes.

Physical Size: 139mm x 74mm x 29mm

Weight: 370g

Charging: Type-C USB 5v/1A(Support overcharge and

overdischarge protection)

Battery : 3300mAh Shutdown Current : About 15µA

Stand-by Current: About 13mA, about stand-by 150-200 hours (no tuning

status)

Tuning Standby: Start 1-3 relays need current 130-330mA, about stand-by

10-25 hours.

Charging Time: Fully charge about 4 hours. The LED light is red when

charging, green fully charged.

#### **Notice**

- 1. Antenna feeder system: A good antenna feeder system can improve the tuning success rate and avoid abnormalities during normal power transmission after tuning;
- 2. Power supply instructions: Ensure that the device has sufficient power. It is recommended that the battery voltage is not lower than 3.6V. If the voltage is too low, the device will restart or shut down;
- 3. Radio type: The factory default radio type is 100W, in order to bring you good power accuracy and functional experience, please adjust according to the maximum output power of your radio [FIX RADIO];
- 4. Equipment calibration: The power and standing wave value algorithm of the tuner has been calibrated when the tuner leaves the factory. But in order to ensure the accuracy, please recalibrate the [FIX PWR] and [FIX SWR] parameters after changing the use environment, antenna feeder, and radio. Please refer to the station.
- 5. Start tuning: Please fully confirm the transmission power, frequency, and mode of your radio before starting to tune, so as not to damage the equipment.
- 6. Communication operation: During the normal communication process, please always pay attention to the standing wave and power of your radio station. If there is any abnormality, please stop transmitting in time and check before operating.

#### Tune

- 1. First, please connect the radio and antenna respectively.
- 2.The radio station is set to the <u>frequency range</u> supported by the device, the <u>minimum</u> <u>output power</u>, and the <u>working mode is FM</u>,.
- 3. Auto tune mode: When the swr exceeds the set value when operating the radio, automatic tuning will also be triggered.

Manual tune mode:press the button and buzzer "di-di-" to achieve tuning.

Screen "PSE TX", Waiting for you to operate the radio to transmission status

Screen "TUNE" ,Detected signal from radio station, tuning in progress. Continue to maintain

Screen "FAIL", The SWR value after tuning exceeds your set value. (default 1.80)

4.Operate the radio station to keep transmitting, at this time, the device will automatically tune to the lowest standing wave and then stop automatically.

5. When the screen shows [SWR] value is 1.0-2.0, the tuning is successful.

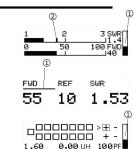
6.Set the radio power to the normal transmission power, frequency, and mode supported by the device to make a call.

#### Interface

- ①Battery: Current remaining battery percentage
- ②Auto tuning threshold: If this value is exceeded, Auto-Tune mode will be entered.

#### Press Button:

- ① 0.5s ,Buzzer "di-" , switch interface/change value
- ② 1s,Buzzer "di-di-" ,start tuning/abandon tuning/enter menu/switch + or when manually trimming the relay
- 3 2s,Buzzer "di-di-di" ,enter advanced menu/exit menu



## Troubleshooting tuning failure

- 1. Whether the hardware and antenna connections are normal;
- 2. Whether the radio mode is FM and whether the radio power is 5W;
- 3. Whether to keep the radio station in the transmitting state until tuning is completed;
- 4. Enter advanced mode to adjust relevant parameters;
- 5. The antenna feed system has significant issues and cannot be tuned.

## Technical support

★Video Tutorial: http://antuner.com/en.html or Youtube@antuner BI3QWQ@gmail.com (Response time about 48h) www.antuner.com