

Yarzkrq 500429089

Yarzkrq ATU-100 Pro+ Automatic Antenna Tuner Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the proper setup, operation, and maintenance of the Yarzkrq ATU-100 Pro+ Automatic Antenna Tuner. Please read this manual thoroughly before using the device to ensure optimal performance and prevent damage.

2. PRODUCT FEATURES

- Built-in 3.6V 1350mA Lithium Battery.
- USB Charging Current: 1A.
- Working Frequency Range: 1.8-55 MHz.
- Display: 0.96-inch screen.
- Maximum Current: 300mA.
- Maximum Power: 120W.
- Maximum Measurable Power: 150W.
- Minimum Power for Tuning: 1W.
- Minimum Possible Measured Power: 0.1W.
- Power Measurement Steps (below 10W): 0.1W.
- Power Measurement Steps (above 10W): 1W.
- Power Measurement Accuracy: 10%.
- Specified Maximum Inductance: 8.4 μ H.
- Minimum Inductor Installation Step Size: 0.05 μ H.
- Maximum Installed Capacity: 1870 pF.
- Minimum Capacitor Installation Steps: 10 pF.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x ATU-100 Pro+ Automatic Antenna Tuner
- 1 x USB Data Cable (color may vary)
- 1 x User Manual (English and Chinese)

Data Cable is Random Color



Figure 3.1: Package contents including the ATU-100 Pro+ tuner, a USB data cable, and the user manual.

4. SETUP INSTRUCTIONS

4.1 Charging the Device

The ATU-100 Pro+ has a built-in rechargeable lithium battery. Connect the provided USB data cable to the micro-USB port on the front panel of the tuner and to a standard USB power source (e.g., computer USB port, USB wall adapter). The charging current is 1A. A red 'charge' indicator light will illuminate during charging.

4.2 Connecting Antennas and Transceiver

The tuner features two coaxial connectors on the rear panel: 'ANT' and 'RFIN'.

- Connect your antenna to the port labeled **ANT**.
- Connect your transceiver (radio) to the port labeled **RFIN**.



Figure 4.1: Rear panel of the ATU-100 Pro+ showing the ANT (Antenna) and RFIN (Radio Frequency Input) connectors.

Important Safety Note: Professional installation or careful adherence to connection guidelines is required to avoid product damage and ensure safe operation.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

Locate the 'POWER' switch on the front panel. Toggle the switch to the 'ON' position to power on the device. Toggle to 'OFF' to power off.



Figure 5.1: Front panel controls and display of the ATU-100 Pro+.

5.2 Automatic Tuning

Once powered on and connected, the ATU-100 Pro+ will display relevant information on its 0.96-inch screen. To initiate an automatic tune cycle, press the large green 'TUNE' button. The device will automatically adjust its inductance and capacitance to achieve the lowest possible Standing Wave Ratio (SWR) for the connected antenna and operating frequency.

5.3 Configuration Interface

The ATU-100 Pro+ features a new configuration interface with firmware version 3.1, eliminating the need for repeated flashing or external burners.

To Enter Settings: Long press the 'TUNE' button while simultaneously turning on the 'POWER' switch. After the interface displays a specific indicator (e.g., "SET"), release the 'TUNE' button to enter the setting interface.

To Navigate and Modify Settings:

- **Short Press 'TUNE':** Modifies the current selected value.
- **Long Press 'TUNE':** Switches between different setting items.

5.4 Power Measurement

The device provides accurate power measurement capabilities:

- The minimum measurable power is 0.1W.
- For power measurements below 10W, the step resolution is 0.1W.
- For power measurements above 10W, the step resolution is 1W.
- The power measurement accuracy is approximately 10%.

The power measurement calibration algorithm has been optimized for improved accuracy.

6. MAINTENANCE

To ensure the longevity and proper functioning of your ATU-100 Pro+:

- Keep the device clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Avoid exposing the tuner to extreme temperatures, humidity, or direct sunlight.
- Do not attempt to open the casing or perform unauthorized repairs, as this may void the warranty and cause damage.
- Ensure all connections are secure before operation.

7. TROUBLESHOOTING

If you encounter issues with your ATU-100 Pro+, consider the following:

- **Device not powering on:** Check if the battery is charged. Connect the USB cable to a power source and allow it to charge for some time. Ensure the power switch is in the 'ON' position.
- **Tuning unsuccessful or high SWR:** Verify that your antenna and transceiver are correctly connected to the 'ANT' and 'RFIN' ports, respectively. Ensure the antenna is suitable for the operating frequency.
- **Display issues:** If the display is blank or shows incorrect information, try restarting the device. If the problem persists, contact customer support.

For persistent issues, refer to the manufacturer's support resources or contact your seller.

8. SPECIFICATIONS

Specification	Value
Product Dimensions	4.72 x 1.97 x 0.79 inches
Item Weight	1.15 pounds
Manufacturer	Yarzkrq
Item Model Number	500429089
Antenna Type	Radio
Color	Black
Number of Channels	1
Built-in Battery	3.6V 1350mA Lithium
USB Charging Current	1A
Working Frequency	1.8-55 MHz
Display	0.96-inch
Maximum Current	300mA
Maximum Power	120W
Maximum Measurable Power	150W
Minimum Power for Tuning	1W
Minimum Possible Measured Power	0.1W
Power Measurement Accuracy	10%
Maximum Inductance	8.4 μ H
Minimum Inductor Step Size	0.05 μ H
Maximum Capacity	1870 pF
Minimum Capacitor Step Size	10 pF

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact the seller directly. Keep your proof of purchase for warranty claims.