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> [UAYESOK](#) /

> [UAYESOK TC-8900R Quad Band Mobile Radio Antenna Instruction Manual](#)

UAYESOK TC-8900R

UAYESOK TC-8900R Quad Band Mobile Radio Antenna Instruction Manual

MODEL: TC-8900R

Brand: UAYESOK

[Overview](#)

[Package Contents](#)

[Setup & Installation](#)

[Operating Instructions](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

1. OVERVIEW

The UAYESOK TC-8900R Quad Band Mobile Radio Antenna is designed for enhanced communication across multiple amateur radio bands. This antenna supports frequencies including 29MHz (10m), 50MHz (6m), 144MHz (2m), and 430MHz (70cm), along with 118-124MHz. Its robust construction and detachable stainless steel whip ensure durability and ease of use for mobile radio enthusiasts.

Key features include:

- **Quad Band Operation:** Covers 29MHz, 50MHz, 144MHz, and 430MHz.
- **Wide Frequency Range:** Also includes 118-124MHz.
- **High Gain:** 3.0dBi/5.5dBi (144/435MHz) for improved talk distance.
- **Durable Construction:** Detachable stainless steel antenna whip.
- **Flexible Design:** Bendable base allows for antenna adjustment in height-restricted areas.
- **Standard Connector:** PL259 connector for broad compatibility.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- UAYESOK TC-8900R Quad Band Mobile Radio Antenna (main whip and base)
- Allen wrench (for adjustment, if applicable)
- (Note: Mounting base and coaxial cable are typically sold separately unless specified.)



Image: Various components of the UAYESOK Quad Band Mobile Radio Antenna, including the whip, base, and connector types.

3. SETUP & INSTALLATION

Proper installation is crucial for optimal antenna performance and safety. This antenna is designed for mobile use, typically mounted on a vehicle.

3.1 Antenna Assembly

1. **Attach the Whip:** Carefully screw the detachable stainless steel antenna whip into the antenna base. Ensure it is securely fastened but do not overtighten.
2. **Adjusting the Whip (if applicable):** Some models may require minor adjustments to the whip length for fine-tuning. Use the provided Allen wrench if set screws are present.



Image: A hand using an Allen wrench to adjust a set screw on the antenna whip, demonstrating a common adjustment point.

3.2 Mounting on Vehicle

The antenna typically uses a PL259 connector and requires a compatible mobile mount (e.g., magnetic mount, trunk lip mount, fender mount) and coaxial cable (RG58 recommended) to connect to your radio.

- **Magnetic Mount:** If using a magnetic mount, ensure the vehicle surface is clean and flat for maximum adhesion. Place the magnetic base on a metal surface, such as the vehicle roof or trunk lid.
- **Coaxial Cable Connection:** Connect the PL259 connector from the antenna's cable to the antenna input on your mobile radio.
- **Ground Plane:** For optimal performance, especially with magnetic mounts, ensure a good ground plane is available (e.g., the metal roof of your vehicle).

Your browser does not support the video tag.

Video: An overview of the UAYESOK Quad Band Mobile Radio Antenna, demonstrating its features and potential mounting options.

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Video: Demonstrates the installation of a magnetic mount antenna on a vehicle, highlighting the strong magnetic base and silicone rubber gasket for surface protection.

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Video: Shows the assembly and connection of a dual-band VHF/UHF antenna with a magnetic base to a mobile radio, including SWR testing.

4. OPERATING INSTRUCTIONS

Once installed, the UAYESOK TC-8900R antenna is ready for use with your compatible mobile radio. Ensure your radio is set to the correct frequency band for the best performance.

- **Frequency Selection:** Select the desired operating frequency on your mobile radio within the antenna's supported bands (29MHz, 50MHz, 144MHz, 430MHz, 118-124MHz).
- **SWR Check:** Always perform a Standing Wave Ratio (SWR) check after installation and before transmitting on a new frequency to prevent damage to your radio. An SWR of less than 1.5 is recommended.
- **Power Output:** The antenna is rated for a maximum power of 100W. Do not exceed this limit.
- **Antenna Orientation:** For mobile use, the antenna is designed to be vertical. Ensure it is not obstructed by vehicle parts or cargo.

5. MAINTENANCE

Regular maintenance ensures the longevity and performance of your antenna.

- **Regular Cleaning:** Keep the antenna whip and base clean from dirt, dust, and debris. Use a soft cloth and mild soap if necessary.
- **Connection Check:** Periodically inspect all connections (whip to base, connector to radio) for tightness and corrosion.
- **Magnetic Base Care:** If using a magnetic mount, regularly clean the underside of the magnet and the vehicle surface to prevent scratches and maintain strong adhesion.
- **Driving Safety:** When driving, especially at high speeds or in areas with low clearance (e.g., garages, car washes), consider rotating the bendable part of the antenna 90 degrees to prevent it from folding backward due to wind force. For added security, heat shrink tape or PVC sections can be used to secure the collapsible part.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
High SWR (Standing Wave Ratio)	Poor ground plane, loose connections, incorrect antenna length, damaged cable.	Ensure good metal-to-metal contact for the mount. Check all connections. Verify antenna whip length if adjustable. Inspect coaxial cable for damage.
Poor Reception/Transmission	Antenna obstruction, incorrect frequency, low power, SWR issues.	Ensure clear line of sight for the antenna. Confirm radio is on the correct frequency. Check SWR. Increase radio power within antenna limits.
Antenna folds back during driving	Wind force, insufficient securing of bendable joint.	Rotate the collapsible part of the antenna 90 degrees. Secure the joint with heat shrink tape or a PVC section.

7. SPECIFICATIONS

Feature	Detail
Frequency Range	29MHz / 50MHz / 144MHz / 430MHz / 118-124MHz
Connector Type	PL259
Antenna Length	Approximately 1.3 meters (53 inches)
Weight	510g (1.12 lbs)
Gain	3.0dBi (144MHz) / 5.5dBi (435MHz)
VSWR	Less than 1.5
Max Power	100W
Impedance	50 Ohm
Material	Stainless steel whip
Compatible Radios	YAESU FT-7800R, FT-8800R, FT-8900R; TYT TH-9800, TH-9800 Plus, TH-9800D, TH-9800D Plus; QYT KT-980 Plus, KT-8900, KT-7900D; WOUXUN KG-UV980P, etc.

8. WARRANTY & SUPPORT

Specific warranty information for the UAYESOK TC-8900R Quad Band Mobile Radio Antenna is not provided in the product details. Please refer to the retailer's return policy or contact UAYESOK customer support directly for warranty details and technical assistance.

For further support, please visit the [UAYESOK Store on Amazon](#).