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> [Nagoya UT-72 Super Loading Coil 20-Inch Magnetic Mount VHF/UHF Antenna User Manual](#)

BTECH Nagoya UT-72

Nagoya UT-72 Super Loading Coil Magnetic Mount Antenna User Manual

Model: UT-72 | Brand: BTECH

INTRODUCTION

This manual provides comprehensive instructions for the setup, operation, and maintenance of your Authentic Genuine Nagoya UT-72 Super Loading Coil 20-Inch Magnetic Mount VHF/UHF (144/430Mhz) Antenna. Designed for both handheld and mobile radios, this antenna offers enhanced reception and durability. Please read this manual thoroughly to ensure optimal performance and longevity of your product.

PRODUCT COMPONENTS

The Nagoya UT-72 comes as a complete package, ensuring a quick and hassle-free setup. The kit includes:

- **Nagoya UT-72 Antenna:** The primary antenna element, made from stainless steel for durability.
- **Magnetic Base:** A robust base with a strong rare earth magnet for secure mounting on metal surfaces.
- **Heavy-Duty Coaxial Cable:** Connects the antenna to your radio.
- **SMA Adapter:** An additional adapter for compatibility with BTECH and BaoFeng handheld radios.

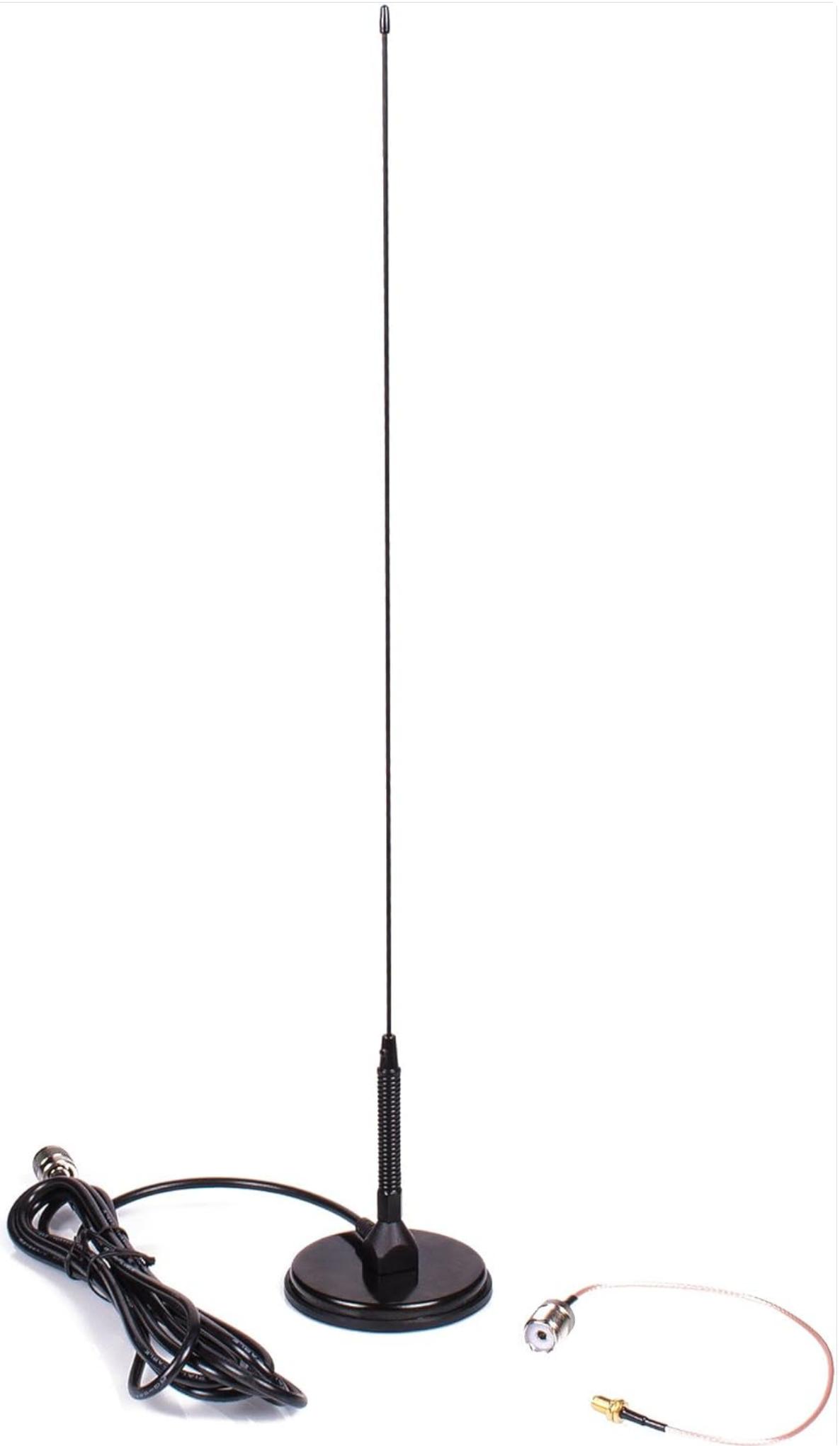


Figure 1: Overview of the Nagoya UT-72 antenna and its included components.



Figure 2: The antenna, magnetic base with cable, and SMA adapter laid out.

SETUP AND INSTALLATION

The UT-72 is designed for user-friendly installation, primarily for vehicle use due to its magnetic mount and requirement for a metal ground plane.

- 1. Choose a Mounting Location:** Select a flat, metallic surface on your vehicle, such as the roof or trunk lid. Ensure the surface is clean and free of debris to maximize magnetic adhesion and provide an effective ground plane. The antenna requires a metal ground plane for optimal performance.
- 2. Secure the Magnetic Base:** Place the magnetic base firmly onto the chosen metal surface. The strong rare earth magnet will provide a secure attachment.
- 3. Route the Coaxial Cable:** Carefully route the heavy-duty coaxial cable from the antenna base into your vehicle to your radio. Avoid pinching the cable in doors or windows, which can damage the cable and affect performance.
- 4. Connect to Radio:**
 - For radios with a PL-259 connector, directly attach the coaxial cable's PL-259 end to your radio's antenna port.
 - For handheld radios (e.g., BTECH and BaoFeng) requiring an SMA connection, use the included SMA adapter. Connect the PL-259 end of the coaxial cable to the adapter, then connect the SMA end of the adapter to your handheld radio.



Figure 3: Antenna connected to a handheld radio using the SMA adapter.



Figure 4: Example of the antenna mounted on a vehicle.

OPERATING INSTRUCTIONS

The Nagoya UT-72 is an omni-directional antenna designed for VHF/UHF (144/430MHz) frequencies. Its super loading coil design significantly enhances UHF reception and extends range.

- **Frequency Range:** Operates effectively on 144MHz (VHF) and 430MHz (UHF) bands.
- **Omni-Directional:** Receives and transmits signals equally well from all directions, eliminating the need for precise aiming.
- **Optimal Performance:** For best results, ensure the antenna is mounted on a large, flat metal surface that acts as a ground plane. This is crucial for efficient signal radiation and reception.
- **SWR Check:** It is recommended to check the Standing Wave Ratio (SWR) after installation to ensure optimal tuning and prevent damage to your radio. An SWR of 1.5 or less is generally

desirable.

MAINTENANCE

To ensure the longevity and continued performance of your Nagoya UT-72 antenna, follow these maintenance guidelines:

- **Regular Cleaning:** Periodically clean the antenna and its magnetic base with a soft, damp cloth. Ensure no dirt or debris accumulates between the magnet and the mounting surface, as this can affect adhesion and signal quality.
- **Inspect Cable and Connectors:** Regularly check the coaxial cable for any signs of wear, kinks, or damage. Ensure all connectors (PL-259, SMA adapter) are securely fastened and free from corrosion.
- **Weather Protection:** The UT-72 is weatherproof, but extreme conditions (e.g., severe storms, heavy ice) may warrant temporary removal or additional protection if possible, especially if the vehicle is parked for extended periods.
- **Storage:** If storing the antenna for an extended period, detach it from the vehicle, coil the cable neatly, and store it in a dry, cool place away from direct sunlight.

TROUBLESHOOTING

If you experience issues with your Nagoya UT-72 antenna, consider the following common troubleshooting steps:

Problem	Possible Cause	Solution
Poor Signal Reception/Transmission	No proper metal ground plane. Loose or corroded connections. Damaged coaxial cable. High SWR.	Ensure antenna is mounted on a large, flat metal surface. Check all connections (PL-259, SMA adapter) for tightness and cleanliness. Inspect cable for damage; replace if necessary. Perform an SWR check and adjust antenna if possible (though this model is generally fixed).
Antenna Falls Off Mount	Mounting surface is not clean. Insufficient magnetic contact.	Clean the mounting surface thoroughly. Ensure the entire magnetic base is in full contact with the metal surface.
Adapter Issues (e.g., SMA adapter)	Incorrect adapter usage. Damaged adapter.	Verify the correct adapter is used for your radio's port. Inspect the adapter for physical damage; replace if broken.

SPECIFICATIONS

Feature	Detail
Model Number	Nagoya UT-72
Frequency Range	VHF/UHF (144/430Mhz)
Antenna Type	Super Loading Coil, Omni-directional
Mount Type	Magnetic Mount (Heavy Duty)
Connector Type	PL-259, includes SMA Adaptor
Antenna Material	Stainless Steel
Product Dimensions	3.5"L x 3.5"W x 20"H (Antenna height approx. 20 inches)
Item Weight	14 ounces
Impedance	50 Ohm
Country of Origin	Taiwan
UPC	685256254904

WARRANTY AND SUPPORT

BTECH is committed to providing high-quality radio products and accessories. As a USA-based brand, BTECH offers dedicated local support for any issues that may arise with your Nagoya UT-72 antenna.

- **Warranty:** This product comes with a real USA warranty. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact BTECH customer support.
- **Customer Support:** For technical assistance, troubleshooting, or warranty claims, please contact BTECH customer support. Contact information can typically be found on the product packaging or the official BTECH website.



Figure 5: BTECH, a USA-based brand, provides local support and warranty.

