

radtel RTA-27B

Radtel RTA-27B Telescopic CB Antenna Instruction Manual

Model: RTA-27B

1. INTRODUCTION

Thank you for choosing the Radtel RTA-27B Telescopic 27MHz CB Antenna. This antenna is designed to enhance the signal reception and transmission capabilities of compatible handheld radios, providing clear and stable communication. Its telescopic design allows for compact storage and extended reach, making it ideal for various applications.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Powerful Signal with Extended Reach:** This telescopic antenna extends from a compact 9.2 inches (23.4 cm) to a full 51.5 inches (130.8 cm), significantly boosting signal reception and transmission range for clearer, more stable communication.
- **SMA-Female Connector:** Equipped with a standard SMA-Female Connector, this antenna is compatible with a wide range of popular handheld radios. Direct plug-and-go functionality is provided, though some radio models may require an adapter (not included).
- **High-Performance Specifications:** Operates at 27MHz with a Voltage Standing Wave Ratio (VSWR) under 1.5 and a gain over 1.8dBi. Supports up to 20W power for reliable, long-distance performance.
- **Lightweight & Durable Build:** Weighing only 0.08kg (1.76 ounces), this antenna is easy to carry. Constructed with durable metal for repeated outdoor use.

2.2 Compatibility

The Radtel RTA-27B antenna is compatible with various handheld transceivers, including but not limited to:

- Radtel RT-860, RT-880, RT-880G, UV-98 Plus, RT-920, RT-950, RT-950 PRO, BJ-7800, BJ-8300
- HH50WXST, HH50, MRHH350FLT, C75WXST, HH38WXST, 75-822, 75-785, MHS75, BC75XLT, PRO401HH, BC125AT
- iRadio UV-88, iRadio UV-98 plus

Ensure your radio has an SMA-Male connector or acquire a suitable adapter if necessary.



Figure 2.2.1: The Radtel RTA-27B telescopic antenna in its compact form.

radtel

RTA-27F SMA-Female

Extend and retract freely,
with unimpeded signal
transmission.

27MHz

Telescopic Antenna



Figure 2.2.2: Illustration of the antenna's extendable and retractable design, highlighting its SMA-Female connector.

Radtel Telescopic Antenna

BNC/SMA-Female/SMA-Male Connectors, Suitable for a variety of models can be used in a variety of occasions

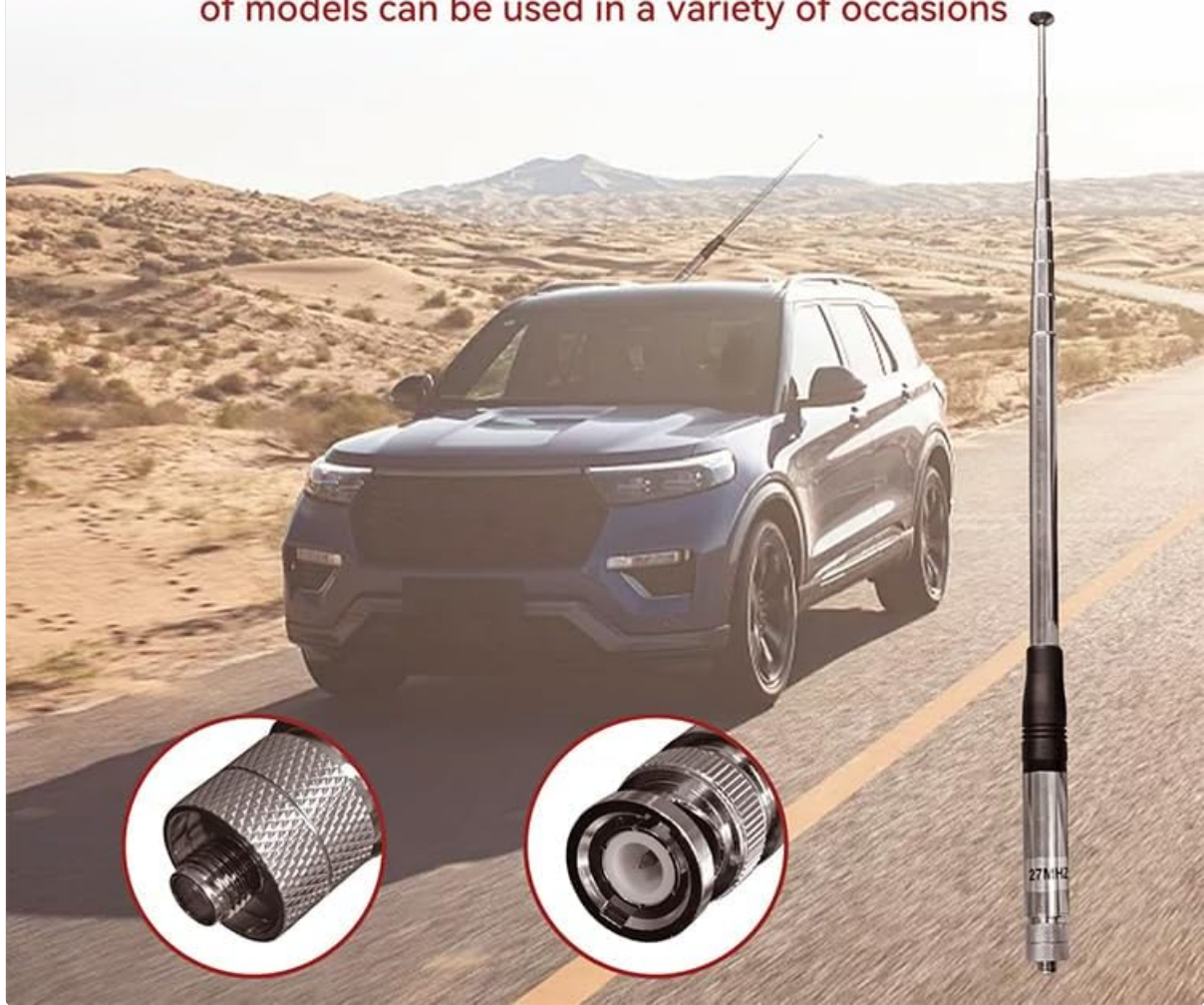


Figure 2.2.3: The antenna shown in an outdoor setting, demonstrating its use with a handheld radio, and highlighting various connector types for broad compatibility.

3. SETUP

1. **Identify Connector Type:** Verify the antenna connector type (SMA-Female) and your radio's antenna port type (typically SMA-Male).
2. **Attach Antenna:** Carefully screw the SMA-Female connector of the RTA-27B antenna onto the SMA-Male antenna port of your handheld radio. Ensure it is finger-tight to establish a secure connection. Do not overtighten.
3. **Adapter Use (If Necessary):** If your radio has a different connector type (e.g., BNC), you will need a suitable adapter (not included) to connect the RTA-27B antenna. Attach the adapter to your radio first, then screw the RTA-27B antenna onto the adapter.

A proper connection is crucial for optimal performance and to prevent damage to both the antenna and the radio.

4. OPERATING THE ANTENNA

1. **Extension:** For maximum signal range and performance, gently pull each segment of the telescopic antenna upwards until it is fully extended. Ensure all segments are straight and locked into place.
2. **Retraction:** To store or transport the antenna, gently push each segment downwards, starting from the top, until the

antenna is fully retracted into its compact form.

3. **Optimal Use:** For 27MHz CB operation, it is recommended to fully extend the antenna. Partial extension may affect performance.
4. **Positioning:** For best results, operate the radio with the antenna positioned vertically and clear of obstructions.



Figure 4.1: The antenna in an operational environment, demonstrating its extended state for improved signal transmission distance.

5. MAINTENANCE

- **Cleaning:** Wipe the antenna with a soft, dry cloth to remove dust and dirt. Do not use abrasive cleaners or solvents.
- **Storage:** When not in use, retract the antenna fully and store it in a clean, dry place away from extreme temperatures and direct sunlight.
- **Inspection:** Periodically inspect the antenna for any signs of damage, such as bent segments, loose connections, or corrosion.
- **Handling:** Avoid bending or forcing the telescopic segments, as this can cause permanent damage.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Poor signal reception/transmission	Antenna not fully extended; Loose connection; Incorrect frequency setting on radio; Environmental obstructions.	Fully extend the antenna; Ensure antenna is securely attached; Verify radio frequency; Move to an area with fewer obstructions.
Antenna segments difficult to extend/retract	Dirt or debris in segments; Minor bending.	Clean the antenna gently; Do not force segments; If severely bent, replacement may be necessary.
Antenna does not fit radio	Incorrect connector type.	Ensure your radio has an SMA-Male connector. If not, acquire a suitable adapter (e.g., SMA-Female to BNC-Male adapter).

7. SPECIFICATIONS

- **Model:** RTA-27B
- **Frequency:** 27MHz
- **Connector Type:** SMA-Female
- **VSWR:** < 1.5
- **Gain:** > 1.8dBi
- **Max Power:** 20W
- **Minimum Length:** 23.4 cm (9.2 inches)
- **Maximum Length:** 130.8 cm (51.5 inches)
- **Impedance:** 50 Ohm
- **Item Weight:** 0.08 kg (1.76 ounces)
- **Manufacturer:** Xiamen Radtel Electronics Co.,Ltd



Figure 7.1: Dimensions of the antenna in both retracted (9.2 inches) and fully extended (51.5 inches) states.

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question