

## BINGFU BFN00250

# Bingfu Vehicle Mobile Ham Radio Antenna

MODEL: BFN00250

Instruction Manual

## INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Bingfu Vehicle Mobile Ham Radio Antenna. Designed for optimal performance in VHF (136-174MHz) and UHF (400-470MHz) bands, this antenna kit includes a lip mount fixed bracket and a 5m (16.5 feet) RG58 cable with a PL259 male connector. Please read this manual thoroughly before use to ensure proper setup and safe operation.

## SAFETY INFORMATION

- Ensure the antenna is securely mounted to prevent detachment during vehicle movement.
- Avoid installing the antenna near power lines or other electrical hazards.
- Do not operate the radio or antenna in adverse weather conditions, such as lightning storms.
- Verify all connections are tight and properly insulated to prevent signal loss or short circuits.
- Keep the antenna away from children and pets.

## PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- 1 x Dual Band Mobile Ham Radio Antenna (VHF 136-174MHz, UHF 400-470MHz)
- 1 x Lip Mount Fixed Bracket
- 1 x 5m (16.5 feet) RG58 Coaxial Cable with PL259 Male Connector
- 2 x Hexagon Wrenches (for installation)

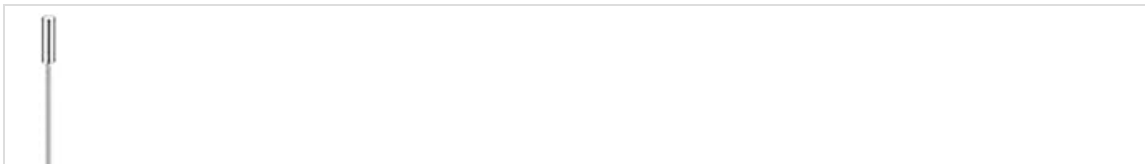






Image: Complete Bingfu Vehicle Mobile Ham Radio Antenna kit, including the antenna, lip mount bracket, coaxial cable, and hexagon wrenches.

## SETUP

### 1. Antenna Assembly and Mounting

The antenna and lip mount bracket are designed for easy installation on various vehicle surfaces such as trunk lids, hood edges, or hatchback doors. The kit includes two hexagon wrenches for tightening the components.

## Mounting Instruction



Image: Step-by-step visual guide for assembling the lip mount bracket and attaching the antenna base. The image shows the bracket components, the SO239 female connector, and the final assembled mount.



Image: Close-up view of the two hexagon wrenches provided, illustrating their use for tightening the antenna and bracket components.

## 2. Protecting Vehicle Surface

The lip mount bracket includes protective gaskets to prevent damage to your vehicle's paint and surface. Ensure these are properly positioned during installation.

# Effectively Protect Your Vehicle Surface



**Silicon Rubber Gasket**



**Aluminium Gasket**

Image: Diagram showing the silicon rubber gasket and aluminum gasket integrated into the lip mount to protect the vehicle's surface from scratches and damage during installation.

### 3. Cable Connection

Connect the PL259 male connector of the RG58 coaxial cable to the SO239 female connector on the antenna mount. Then, connect the other end of the PL259 male connector to your amateur mobile radio or ham radio equipment.





**Extended Line Connector**



**Equipment Interface**



**Tips: Device is not included.**

Image: Illustration detailing the connection points: the PL259 male connector from the cable connecting to the antenna mount, and the equipment interface (radio) where the cable connects. Note: Radio device is not included.

#### 4. Antenna Placement Examples

The lip mount allows for flexible placement on various vehicle types. Ensure the antenna is positioned vertically and clear of obstructions for optimal performance.

## Installation Position of Antenna



**TIPS: Please tighten the bracket and antenna.**

Image: Various examples of the antenna mounted on different vehicles, including a Jeep's spare tire carrier, a motorcycle's rear rack, and a car's trunk lid, demonstrating versatile installation options.

## OPERATING

This antenna is designed for dual-band operation, covering VHF 136-174MHz and UHF 400-470MHz frequencies. It is compatible with a wide range of amateur mobile radios, ham radios, FRS, and GMRS two-way radios from brands such as BTECH, ICOM, Midland, Yaesu, TYT, AnyTone, Radioddity, Cobra, Uniden, President, Galaxy Audio, Pro Trucker, and Stryker.

# Extended Reception Range



Image: A vehicle driving on a road, illustrating the extended reception range provided by the antenna, with icons indicating resistance to rain, snow, CO<sub>2</sub>, and UV exposure.

## Signal Optimization

- For best performance, ensure the antenna is mounted as high as possible and has a clear line of sight.
- Regularly check the SWR (Standing Wave Ratio) of your antenna system to ensure efficient power transfer and prevent damage to your radio. An SWR meter is recommended for this purpose.
- The antenna's design, including its stainless steel construction and low-loss RG58 cable, contributes to reliable signal transmission and reception.

## MAINTENANCE

### Cleaning

Periodically clean the antenna and mount with a soft, damp cloth to remove dirt, dust, and road grime. Avoid using abrasive cleaners or solvents that could damage the finish or materials.



Inspection

Regularly inspect the antenna, cable, and mount for any signs of wear, corrosion, or damage. Pay close attention to the cable's integrity and the tightness of all connections.

- **Stainless Steel Construction:** The antenna features stainless steel components for enhanced durability and resistance to rust and water, making it suitable for various weather conditions.
- **RG58 Coaxial Cable:** The included RG58 cable is designed for low loss, ensuring efficient signal transmission between the antenna and your radio.



Image: Close-up view of the antenna's stainless steel elements, highlighting its waterproof and rust-proof properties, with water droplets visible on the surface.

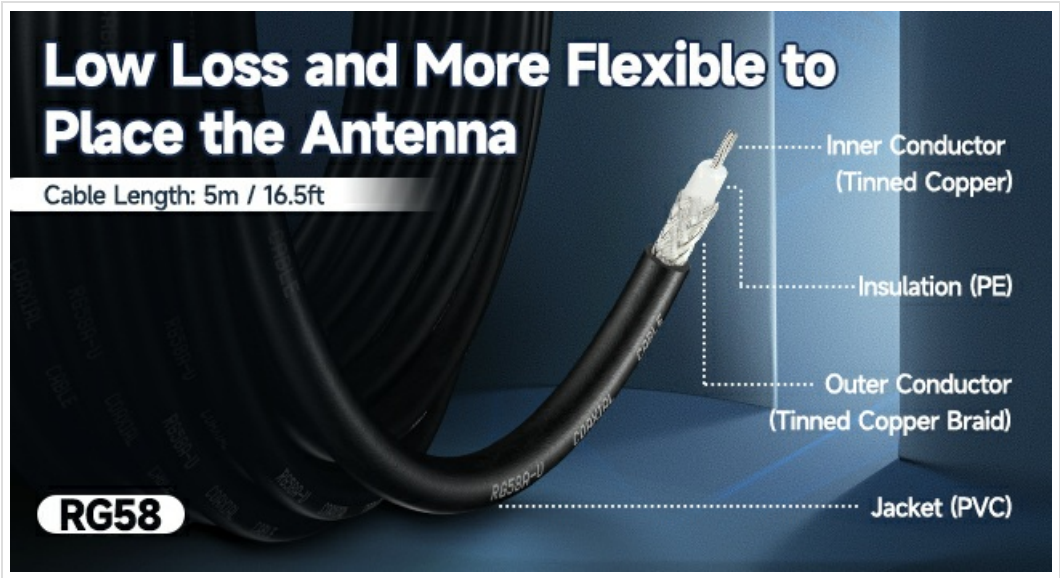


Image: Cross-section diagram of the RG58 coaxial cable, showing its internal conductor (tinned copper), insulation (PE), outer conductor (tinned copper braid), and jacket (PVC), illustrating its low-loss design.

TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Poor Signal Reception / Transmission	Loose connections; Incorrect antenna placement; High SWR; Damaged cable or antenna element.	Check all cable connections (PL259, SO239) for tightness. Ensure antenna is mounted vertically and clear of obstructions. Check SWR with a meter and adjust if necessary. Inspect cable for kinks or cuts; inspect antenna for physical damage.
Antenna Sections Come Apart	Set screws not tightened sufficiently; Vibration during vehicle movement.	Ensure all set screws on the antenna elements are securely tightened using the provided hexagon wrenches. Periodically re-check tightness, especially after driving on rough terrain.
Mount Scratches Vehicle Surface	Protective gaskets not properly installed or missing.	Verify that the silicon rubber and aluminum gaskets are correctly positioned between the mount and the vehicle surface during installation.
Antenna Rusts	Exposure to harsh weather conditions; Material degradation.	While the antenna is designed with stainless steel for rust resistance, prolonged exposure to extreme conditions may cause minor surface oxidation. Regular cleaning and inspection can help mitigate this.





## SPECIFICATIONS

Feature	Detail
Frequency Range	VHF 136-174MHz, UHF 400-470MHz
Antenna Type	Mobile Radio Antenna
Mounting Type	Lip Mount Fix Bracket
Antenna Interface Connector	UHF PL259 Male 50 Ohm Connector
Antenna Mounting Connector	UHF SO239 Female Right Angle Bulkhead Mount 50 Ohm Connector
Cable Type	RG58 50 Ohm Coaxial Cable
Cable Length	5m / 16.5 Feet
Impedance	50 Ohm
Product Dimensions	17.32 x 3.15 x 1.97 inches (Antenna Kit)
Item Weight	1.26 pounds
Model Number	BFN00250
UPC	790404676313

## WARRANTY AND SUPPORT

For warranty information or technical support regarding your Bingfu Vehicle Mobile Ham Radio Antenna, please contact the manufacturer directly. You can find more information and contact details by visiting the official Bingfu store:

Related Documents - BFN00250

<div><div>RF Connector Usage Guidelines</div><div></div><div><div><div><div>FC</div><div>CE</div><div>UK</div><div>CA</div><div>RoHS</div><div>REACH</div></div><div>Made in China</div></div></div></div>	<div><div><a href="#">Bingfu RF Connector Usage Guidelines</a></div><div>Concise guidelines for the proper installation and use of Bingfu RF connectors to ensure optimal performance and longevity.</div></div>
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