

BINGFU BFN00270

Bingfu 4G LTE Outdoor Wall Mount Waterproof Antenna User Manual

Model: BFN00270

1. INTRODUCTION

This user manual provides comprehensive instructions for the installation, operation, and maintenance of your Bingfu 4G LTE Outdoor Wall Mount Waterproof Antenna. This antenna is designed to enhance 4G LTE cellular signal reception for various compatible devices, including routers, modems, gateways, and cellular trail cameras. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of the product.

2. PRODUCT OVERVIEW

The Bingfu 4G LTE Outdoor Wall Mount Waterproof Antenna is an omni-directional antenna engineered for robust outdoor performance. It is designed to capture and amplify 4G LTE signals across a wide frequency range, providing improved connectivity in areas with weak cellular coverage. Its durable, waterproof construction allows for reliable operation in diverse environmental conditions.



Figure 2.1: Bingfu 4G LTE Outdoor Wall Mount Waterproof Antenna, showing the antenna unit, attached cable, SMA male connector, RP-SMA adapter, and mounting bracket with screws.

3. FEATURES

- **Wide Compatibility:** Compatible with major carriers including Verizon, AT&T, T-Mobile, and Sprint.
- **Broad Frequency Range:** Supports 698-960 MHz, 1710-2170 MHz, and 2300-2700 MHz.
- **High Gain:** Provides 5dBi gain for enhanced signal reception.
- **Omni-directional:** Captures signals from all directions, simplifying placement.
- **Durable & Waterproof:** Designed with rainproof features and a high-strength internal waterproof rubber ring for outdoor use.
- **Flexible Mounting Options:** Supports fixed wall mount and thru-hole mount installations.
- **Long Cable:** Includes a 3-meter (10 feet) cable for flexible antenna placement.
- **Versatile Connectivity:** Equipped with SMA Male Connector and includes an RP-SMA Male Connector Adapter for broad device compatibility.

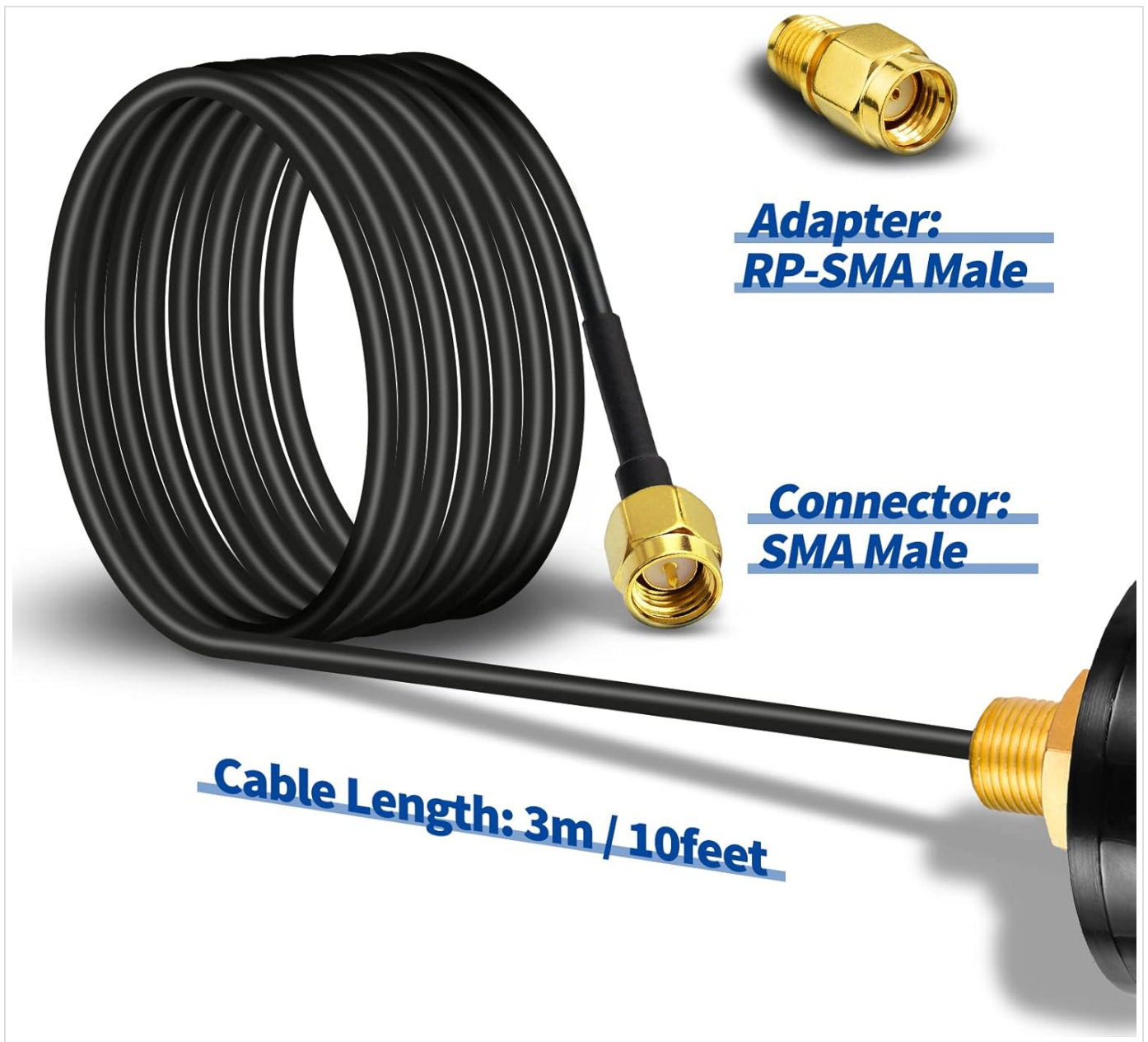
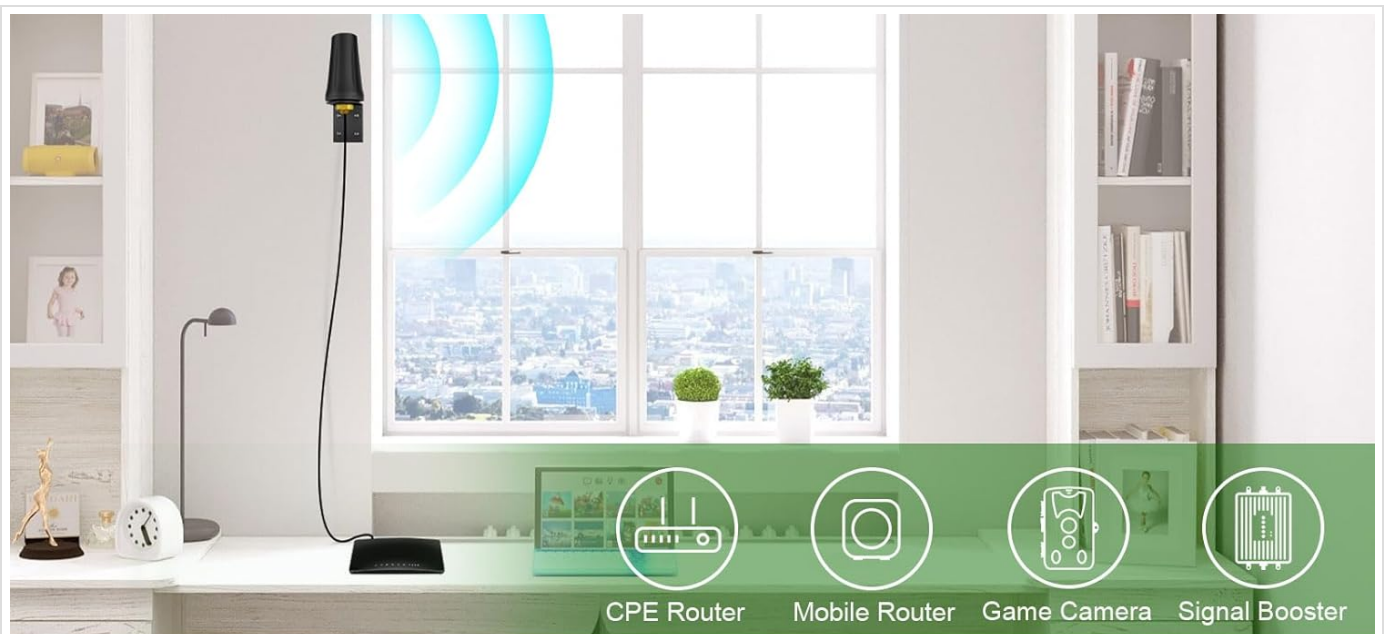


Figure 3.1: Detail of the antenna's rainproof design and high-strength internal waterproof rubber ring, highlighting its suitability for outdoor environments.



Compatible with Most 4G Devices



Figure 3.2: Visual representation of the antenna's broad compatibility with various 4G devices, including CPE routers, mobile routers, game cameras, and signal boosters.

4. PACKAGE CONTENTS

Please verify that all items are present in your package:

- 1 x Bingfu 4G LTE Outdoor Wall Mount Waterproof Antenna
- 1 x RP-SMA Connector Adapter
- 1 x Wall Mount Bracket
- 4 x Self-tapping Screws



Figure 4.1: Contents of the Bingfu 4G LTE Antenna package, including the antenna, mounting hardware, and adapter.

5. SPECIFICATIONS

Parameter	Value
Brand	BINGFU
Model Number	BFN00270
Frequency Range	698-960 MHz, 1710-2170 MHz, 2300-2700 MHz
Gain	5dBi
Direction	Omni-directional
Impedance	50 Ohm

Waterproof Rating	Rainproof
Mounting Feature	Fixed Wall Mount; Thru Hole Mount
Antenna Mounting Screws Diameter	M12 (11.76mm-11.95mm)
Cable Length	3 meters (10 feet)
Connector Type	SMA Male Connector (with RP-SMA Male Connector Adapter)
Product Dimensions (L x W x H)	2.76 x 1.57 x 4.72 inches
Item Weight	5.9 ounces
Maximum Range	3000 Feet (approx.)
UPC	790404676511



Figure 5.1: Detailed dimensions of the antenna and its supported frequency ranges.

6. SETUP AND INSTALLATION

Proper installation is crucial for optimal signal improvement. The antenna can be mounted using the included wall mount bracket or via a thru-hole mount.

6.1 Choosing an Installation Location

Select a location that offers the best possible line of sight to the nearest cellular tower. Higher elevations and clear paths away from obstructions (buildings, dense foliage) are ideal. The antenna is designed for outdoor use and is rainproof.



Figure 6.1: Example of the antenna mounted on a tree, demonstrating its use with a cellular trail camera to boost 4G signal.

6.2 Mounting the Antenna

1. Wall Mount:

- Position the wall mount bracket at your desired location.
- Mark the four screw holes.
- Drill pilot holes if necessary.
- Secure the bracket using the provided self-tapping screws.
- Attach the antenna to the bracket by screwing its base onto the threaded post of the bracket. Ensure the connection is firm.

2. Thru-Hole Mount:

- Drill a hole with a diameter of approximately 12mm (M12) at the chosen mounting surface.
- Insert the antenna's threaded base through the hole.
- Secure the antenna with the included nut and washer from the other side of the mounting surface.

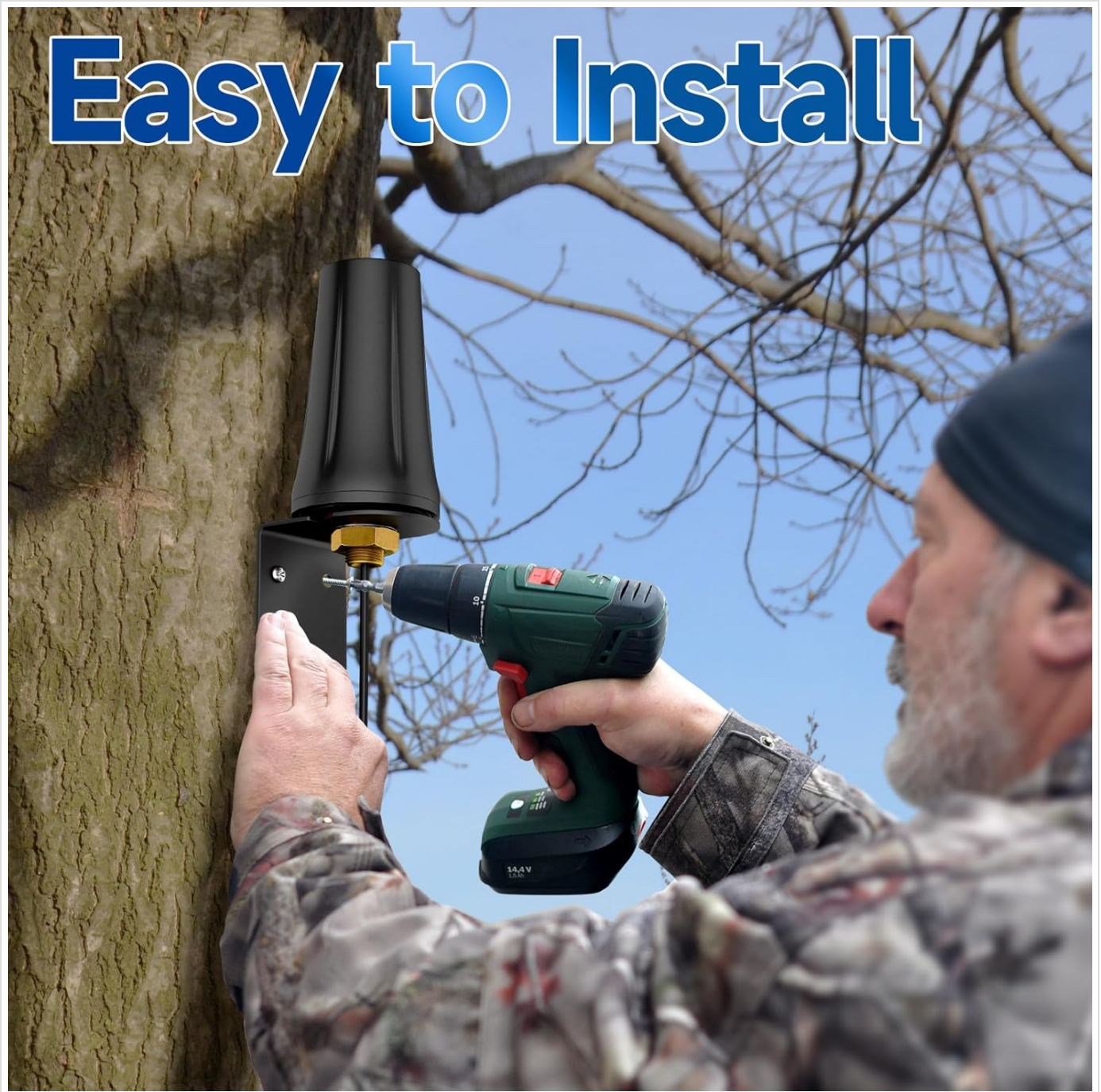


Figure 6.2: An individual demonstrating the installation process of the antenna on a tree using a drill to secure the mounting bracket.

6.3 Connecting the Antenna

The antenna comes with an integrated 3-meter (10 feet) cable terminated with an SMA Male connector. An RP-SMA Male Connector Adapter is included for devices requiring this specific connection type.

1. Identify the antenna port on your 4G LTE router, modem, gateway, or cellular trail camera.
2. If your device has an SMA Female port, directly connect the antenna's SMA Male connector.
3. If your device has an RP-SMA Female port, first attach the RP-SMA Male Connector Adapter to the antenna's SMA Male connector, then connect the adapter to your device.
4. Ensure all connections are hand-tightened to prevent signal loss.



Figure 6.3: Illustration of the SMA Male connector on the antenna cable and the included RP-SMA Male adapter, detailing the connection options.



Figure 6.4: Visual guide to connecting the antenna, showing the SMA Male connector and how the RP-SMA Male to SMA Female adapter is used for different device ports.

7. OPERATING INSTRUCTIONS

Once installed and connected, the Bingfu 4G LTE antenna operates passively to enhance the cellular signal received by your connected device. There are no active controls or power requirements for the antenna itself.

- Ensure your 4G LTE device (router, modem, camera) is powered on and configured correctly for cellular network access.
- The antenna will automatically begin to capture and transmit stronger signals to your device.
- Monitor your device's signal strength indicator to observe improvements. Note that some devices may not immediately reflect a higher "bar" count, but actual data transmission speed and reliability should improve.

8. MAINTENANCE

The Bingfu 4G LTE antenna is designed for minimal maintenance due to its durable and waterproof construction.

- **Cleaning:** Periodically wipe the antenna housing with a damp cloth to remove dirt, dust, or debris that may accumulate, especially in outdoor environments. Avoid using harsh chemicals or abrasive cleaners.
- **Connection Check:** Occasionally inspect the cable connections at both the antenna and your device to ensure they remain secure and free from corrosion.
- **Physical Inspection:** Check the antenna and mounting bracket for any signs of physical damage, such as cracks or loose components, especially after severe weather conditions.

9. TROUBLESHOOTING

If you experience issues with signal improvement, consider the following troubleshooting steps:

Problem	Possible Cause / Solution
No significant signal improvement	<ul style="list-style-type: none">◦ Antenna Placement: The antenna may not be in the optimal location. Try repositioning it higher or in a different direction to find a stronger signal. Experiment with different orientations.◦ Obstructions: Check for physical obstructions (trees, buildings, hills) between the antenna and the cellular tower.◦ Cable Connection: Ensure all cable connections are secure and correctly attached (SMA or RP-SMA adapter used as needed).◦ Device Compatibility: Verify that your device is fully compatible with external antennas and the frequency bands supported by this antenna.◦ Signal Meter Discrepancy: Some devices' internal signal meters may not accurately reflect the improved signal quality from an external antenna. Focus on actual performance (data speed, connection stability) rather than just "bars."
Loose connection / Cable damage	<ul style="list-style-type: none">◦ Inspect Cable: Check the entire length of the cable for kinks, cuts, or severe bends.◦ Re-tighten Connectors: Ensure both ends of the cable are securely hand-tightened to their respective ports.
Antenna not mounting securely	<ul style="list-style-type: none">◦ Correct Screws: Ensure you are using the appropriate screws for the mounting surface.◦ Pilot Holes: For wood or dense materials, pre-drilling pilot holes can aid in secure mounting.

10. WARRANTY AND SUPPORT

For warranty information, technical support, or further assistance, please contact Bingfu customer service directly through their official website or the platform where the product was purchased. Please have your model number (BFN00270) and purchase details ready when contacting support.

