

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [ABBREE](#) /

› [ABBREE HF-3 Multi-Band HF VHF \(80m-6m\) 3.5-50MHz Wideband Ham Amateur Mobile Radio Telescopic Antenna User Manual](#)

ABBREE HF-3

ABBREE HF-3 Multi-Band Antenna User Manual

Model: HF-3

1. INTRODUCTION

Thank you for choosing the ABBREE HF-3 Multi-Band HF VHF Telescopic Antenna. This antenna is designed for amateur mobile radio use, offering wideband frequency coverage from 3.5 MHz to 50 MHz. This manual provides essential information for the proper setup, operation, and maintenance of your antenna to ensure optimal performance.

2. PRODUCT OVERVIEW

The ABBREE HF-3 is a high-performance, portable mobile antenna featuring a telescopic whip and a base coil with multiple sockets for frequency band selection. Its design allows for quick adjustments across various HF and VHF bands.

HF-3

Enhance Signal Concentration

Frequency Range:3.5-50MHz

MAX Power:200Watts S.S.B



Image 2.1: Overview of the ABBREE HF-3 Multi-Band Antenna, highlighting its frequency range of 3.5-50MHz and maximum power capacity of 200 Watts S.S.B.

Telescopic Antenna



Image 2.2: The telescopic antenna fully extended, ready for operation.

Key Features:

- Wideband Frequency Coverage: 3.5-50 MHz (80M / 40M / 30M / 20M / 17M / 15M / 12M / 10M / 6M)
- Connector Type: UHF Male (PL-259)
- Maximum Power Capacity: 200 Watts
- Impedance: 50 OHM
- Overall Length: 180 cm (70.87 inches)
- Detachable Interface for easy installation



Image 2.3: Detailed view of the wire connector and the PL259 connector for antenna attachment.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x ABBREE HF-3 Multi-Band Antenna Main Body

- 1 x Telescopic Whip
- 1 x Wire Lead for frequency adjustment
- 1 x Hex Key (for securing connections, if applicable)
- 1 x Instruction Sheet (for quick reference)



Image 3.1: All components of the ABBREE HF-3 antenna as received in the package.

4. SETUP

The ABBREE HF-3 antenna features a detachable interface designed for easy assembly without the need for specialized tools. Follow these steps to set up your antenna:

1. **Attach the Telescopic Whip:** Carefully screw the telescopic whip onto the top of the main antenna body. Ensure it is finger-tight to prevent loosening during use.
2. **Connect to Radio:** Connect the UHF Male (PL-259) connector at the base of the antenna to your mobile radio or antenna mount.
3. **Prepare for Frequency Adjustment:** The wire lead will be used to select the desired frequency band by inserting it into the appropriate socket on the base coil.

PRODUCT DETAIL

Detachable Interface, No tool needed, it only takes a few minutes to install your new CB radio antenna



Image 4.1: Illustration of the detachable interface, emphasizing tool-free installation.

5. OPERATING INSTRUCTIONS

Operating the ABBREE HF-3 antenna involves selecting the correct frequency band and fine-tuning the telescopic whip for optimal performance.

5.1 Frequency Band Selection

The antenna's base coil features multiple sockets. To change the operating frequency band, insert the provided wire lead into the socket corresponding to your desired band. Refer to the table below for guidance.



Image 5.1: The base coil showing the sockets for inserting the wire lead to select different frequency bands.

5.2 Telescopic Whip Adjustment

After selecting the frequency band with the wire lead, fine-tune the antenna by adjusting the length of the telescopic whip. Extend or retract the whip until the lowest Standing Wave Ratio (SWR) is achieved for your specific operating frequency within the chosen band. The following table provides approximate starting lengths for the telescopic whip for various frequency bands. These measurements are approximate and may vary based on installation environment and vehicle.

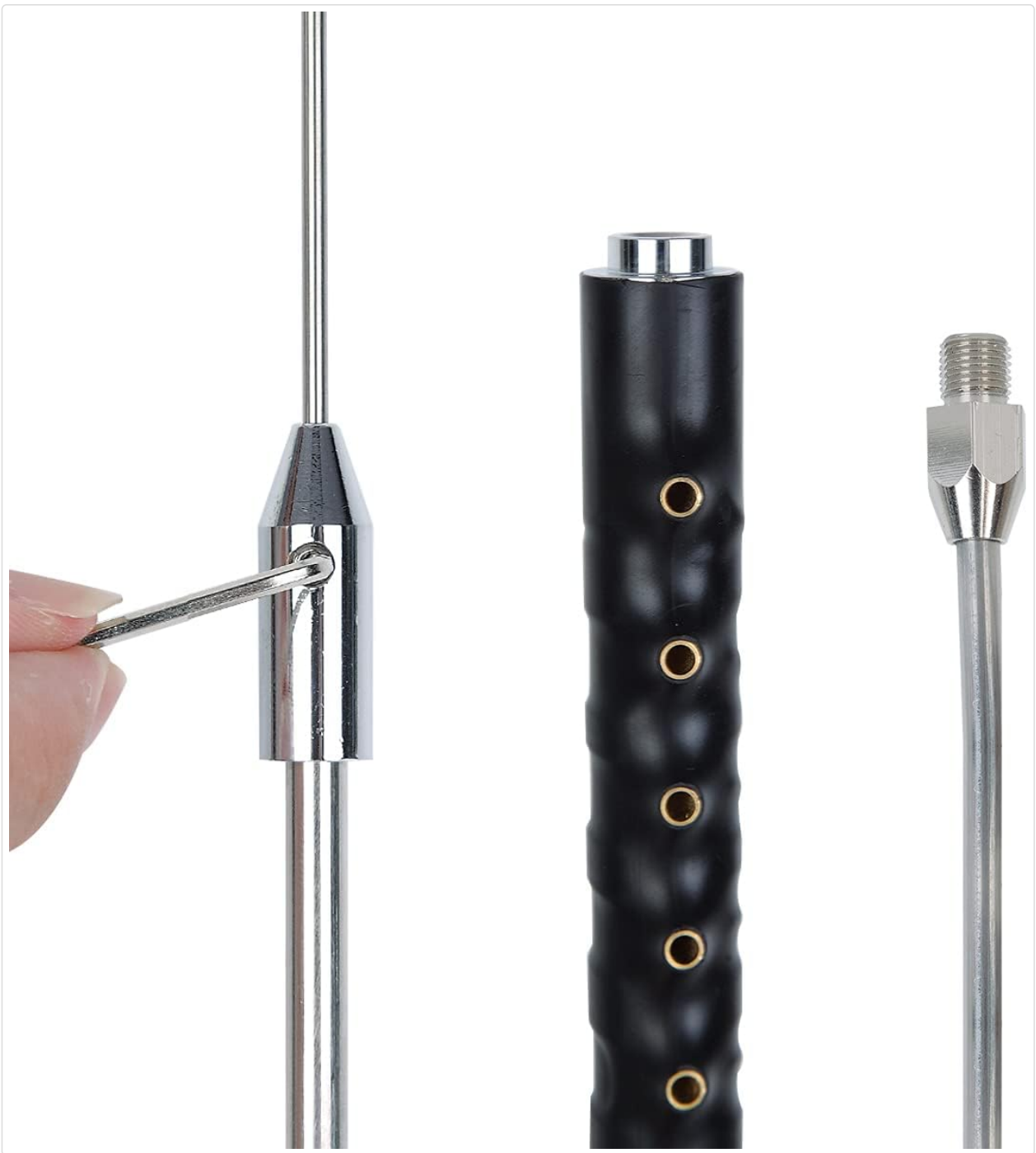


Image 5.2: A hand demonstrating the adjustment of the telescopic whip for fine-tuning.

Frequency Adjustment Table (Approximate)

Frequency (MHz)	Wire Lead Connection	Length of Telescopic Whip (Approx.)	Socket No.
3.5	No shorting wire connected	700mm	No.9
7.00	Wire from No.1 to No.2	700mm	No.8
10.10	Wire from No.1 to No.3	710mm	No.7
14.00	Wire from No.1 to No.4	865mm	No.6
18.00	Wire from No.1 to No.5	925mm	No.5
21.00	Wire from No.1 to No.6	925mm	No.4
24.90	Wire from No.1 to No.7	825mm	No.3

Frequency (MHz)	Wire Lead Connection	Length of Telescopic Whip (Approx.)	Socket No.
28.00	Wire from No.1 to No.8	700mm	No.2
50.00	Wire from No.1 to No.9	700mm	No.1

Note: These measurements are approximate starting points. Fine adjustment with an SWR meter is recommended for optimal performance.

6. MAINTENANCE

Proper maintenance ensures the longevity and reliable performance of your antenna.

- **Regular Cleaning:** Periodically clean the antenna elements and connectors with a soft, dry cloth to remove dirt, dust, and moisture. Avoid abrasive cleaners.
- **Inspect Connections:** Regularly check all connections, especially the telescopic whip and the PL-259 connector, to ensure they are secure and free from corrosion.
- **Storage:** When not in use, store the antenna in a dry, protected environment. Retract the telescopic whip fully to prevent accidental damage.
- **Avoid Over-tightening:** Do not overtighten the telescopic whip or other threaded connections, as this can cause damage.

7. TROUBLESHOOTING

If you encounter issues with your ABBREE HF-3 antenna, consider the following troubleshooting steps:

- **High SWR:**
 - Ensure the wire lead is correctly inserted into the appropriate socket for your desired frequency band.
 - Adjust the length of the telescopic whip incrementally while monitoring SWR with an SWR meter.
 - Check all cable connections for tightness and proper seating.
 - Verify that your antenna mount and grounding are adequate for mobile operation.
- **Poor Signal Reception/Transmission:**
 - Confirm the antenna is tuned to the correct frequency band.
 - Ensure the antenna is mounted in a clear location, away from obstructions that could block the signal.
 - Inspect the coaxial cable for damage or kinks.
- **Physical Damage:**
 - If any part of the antenna appears damaged, discontinue use and contact support for assistance.

8. SPECIFICATIONS

Specification	Value
Frequency Range	3.5-50 MHz (80M / 40M / 30M / 20M / 17M / 15M / 12M / 10M / 6M)

Specification	Value
Connector Type	UHF Male (PL-259)
Max Power Capacity	200 Watts
Impedance	50 OHM
Overall Length	180 cm (70.87 inches)
Weight	0.87 KG
Number of Channels	9 (referring to adjustment points)

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided at the time of purchase or contact your retailer. For technical support or inquiries, please visit the official ABBREE website or contact their customer service department.