**Saved from manuals.plus.**
**Open the live page for links to other documents and user manuals.**



## ACROTOR Foxeer Lollipop 4 Plus

# ACROTOR Foxeer Lollipop 4 Plus FPV Antenna Instruction Manual (RP-SMA)

Model: Foxeer Lollipop 4 Plus (RP-SMA)

## 1. Introduction

This manual provides essential instructions for the proper installation, operation, and maintenance of your ACROTOR Foxeer Lollipop 4 Plus FPV Antennas. Designed for FPV racing drones, these antennas offer reliable 5.8GHz signal transmission and reception with RHCP polarization and an RP-SMA connector type. Please read this manual thoroughly before use to ensure optimal performance and longevity of your product.

## 2. Product Overview and Specifications

The Foxeer Lollipop 4 Plus is a high-performance FPV antenna engineered for clarity and range in 5.8GHz systems. Its robust design and optimized specifications contribute to a stable video link for FPV applications.

### 2.1 Key Features

- **Optimized Performance:** New version Foxeer Antenna Lollipop 4 Plus 5.8G 2.6dBi RHCP FPV Antenna, designed for enhanced range and signal quality.
- **Durable Construction:** Features an IRoot Reinforcement Design, allowing the antenna to be bent at various angles while maintaining 360° protection and low feeder loss.
- **High-Quality Material:** Constructed from imported PC+ABS material, providing resistance to high-strength impacts and supporting improved range and performance in any orientation.
- **Easy Installation:** Designed for straightforward installation with low feeder loss.

### 2.2 Technical Specifications

| Specification | Value |
|---|---|
| Center Frequency | 5.75GHz |
| Gain | 2.6dBi |
| Axial Ratio | Close to 1 |
| Bandwidth | 5.5G-6G |

| Specification | Value |
| --- | --- |
| Radiation Efficiency | 98% |
| V.SWR | 1.07 in center frequency |
| Connectors | RP-SMA (This model) |
| Weight | 7.8g |
| Dimension | 17mm x 60mm |
| Cable Length | 51mm |
| Polarization | RHCP (Right Hand Circularly Polarized) |
| Shell Material | PC+ABS |
| Cable Type | RG178, SFX086, RG141 |
| Maximum Range | 300 Meters |
| Impedance | 5 Ohms |

## 2.3 Product Visuals

**Figure 1:** Two Foxeer Lollipop 4 Plus FPV antennas, showing the RP-SMA connector and the teal-colored antenna housing. One antenna is upright, the other is lying down.

**Figure 2:** A close-up view of a single Foxeer Lollipop 4 Plus antenna, highlighting the "Lollipop 4+" branding and its 2.6dBi gain specification.

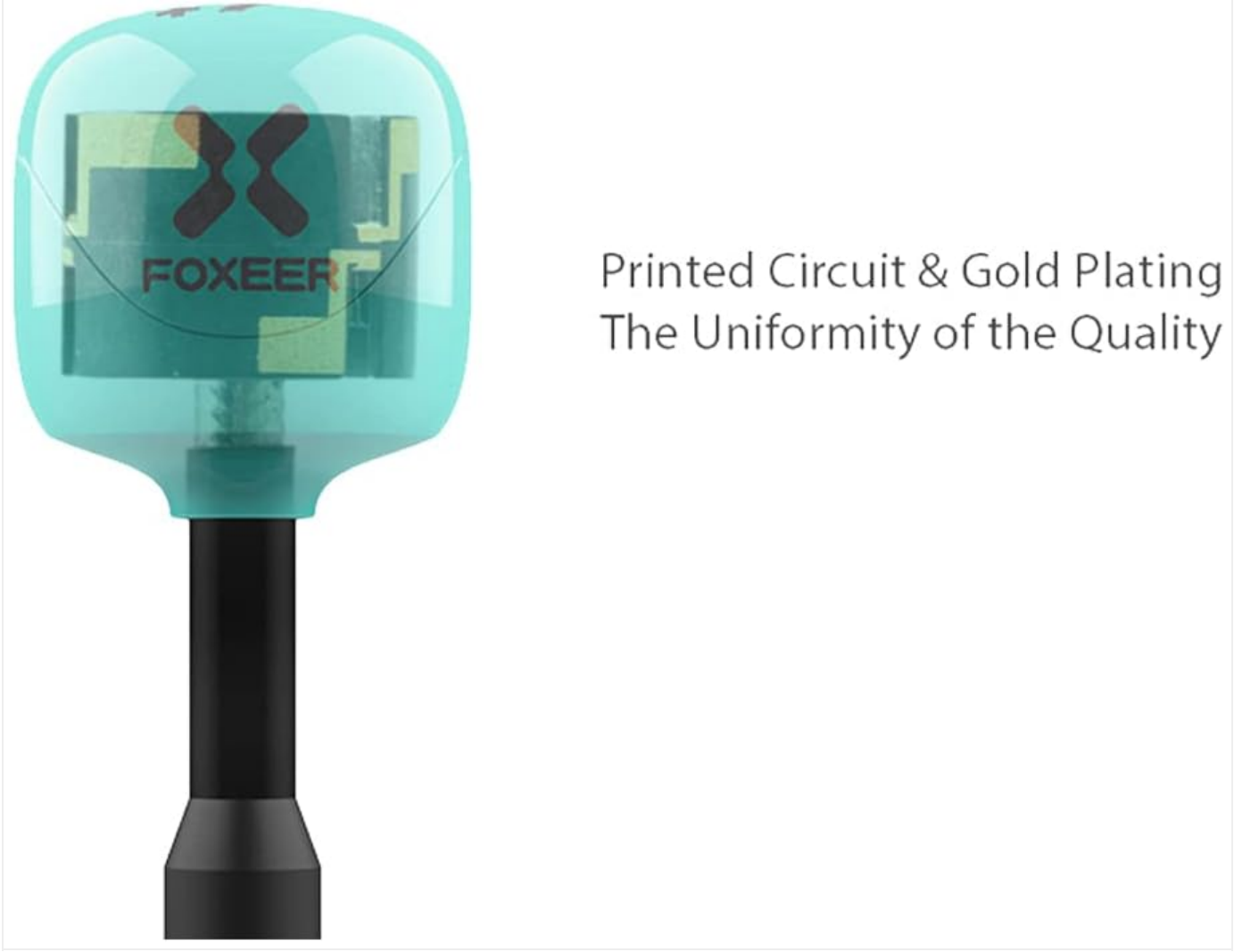


**Figure 3:** An internal view of the Foxeer Lollipop 4 Plus antenna, revealing the printed circuit board and gold plating, indicating quality construction.

**Figure 4:** Two Foxeer Lollipop 4 Plus antennas demonstrating the flexible IRoot Reinforcement Design, with one antenna cable bent to illustrate its durability and adaptability.

**Figure 5:** A Foxeer Lollipop 4 Plus antenna placed on a digital scale, displaying its lightweight design at 7.8 grams.

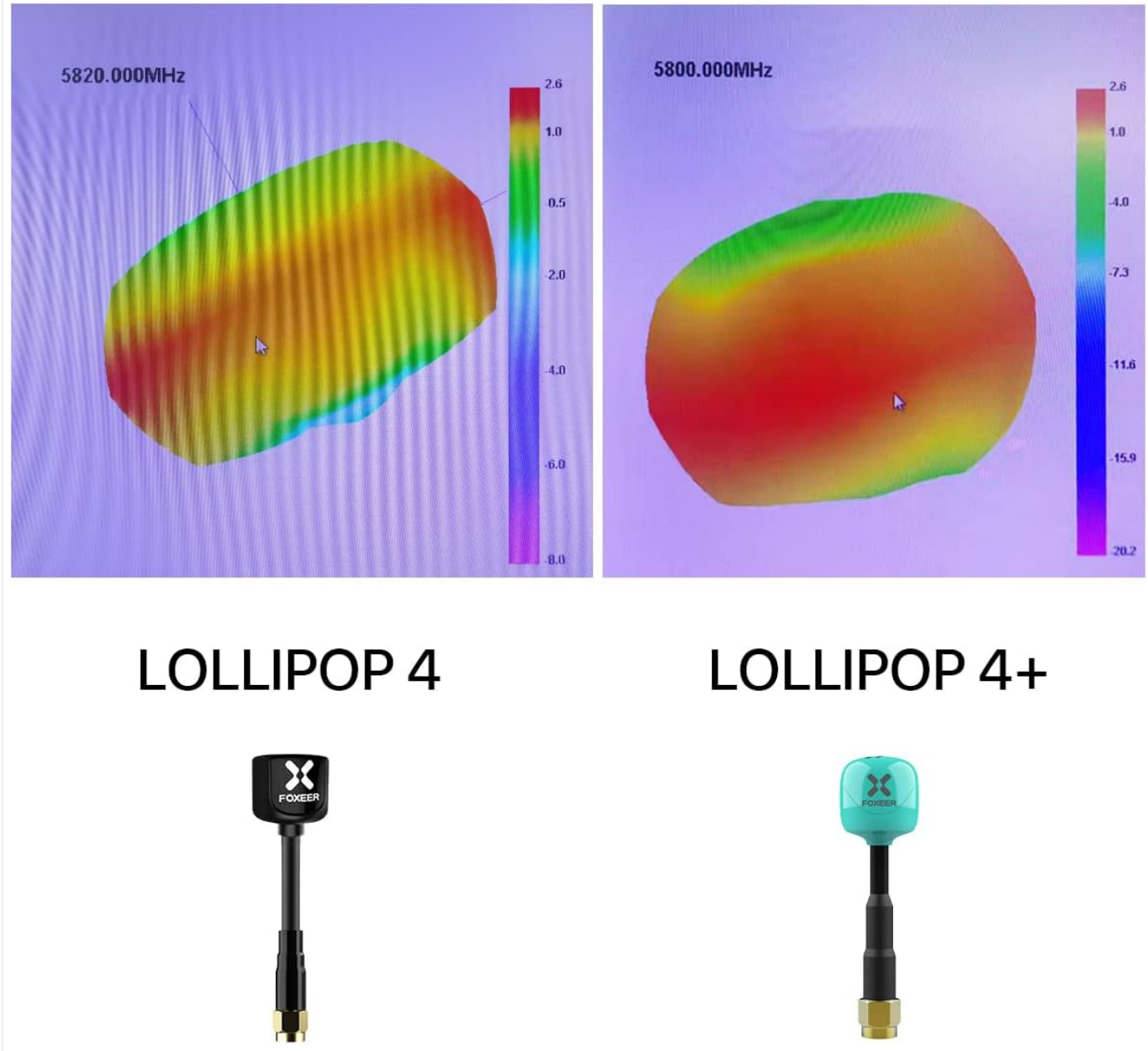


**Figure 6:** Several Foxeer Lollipop 4 Plus antennas shown alongside their retail packaging, indicating a multi-pack offering.

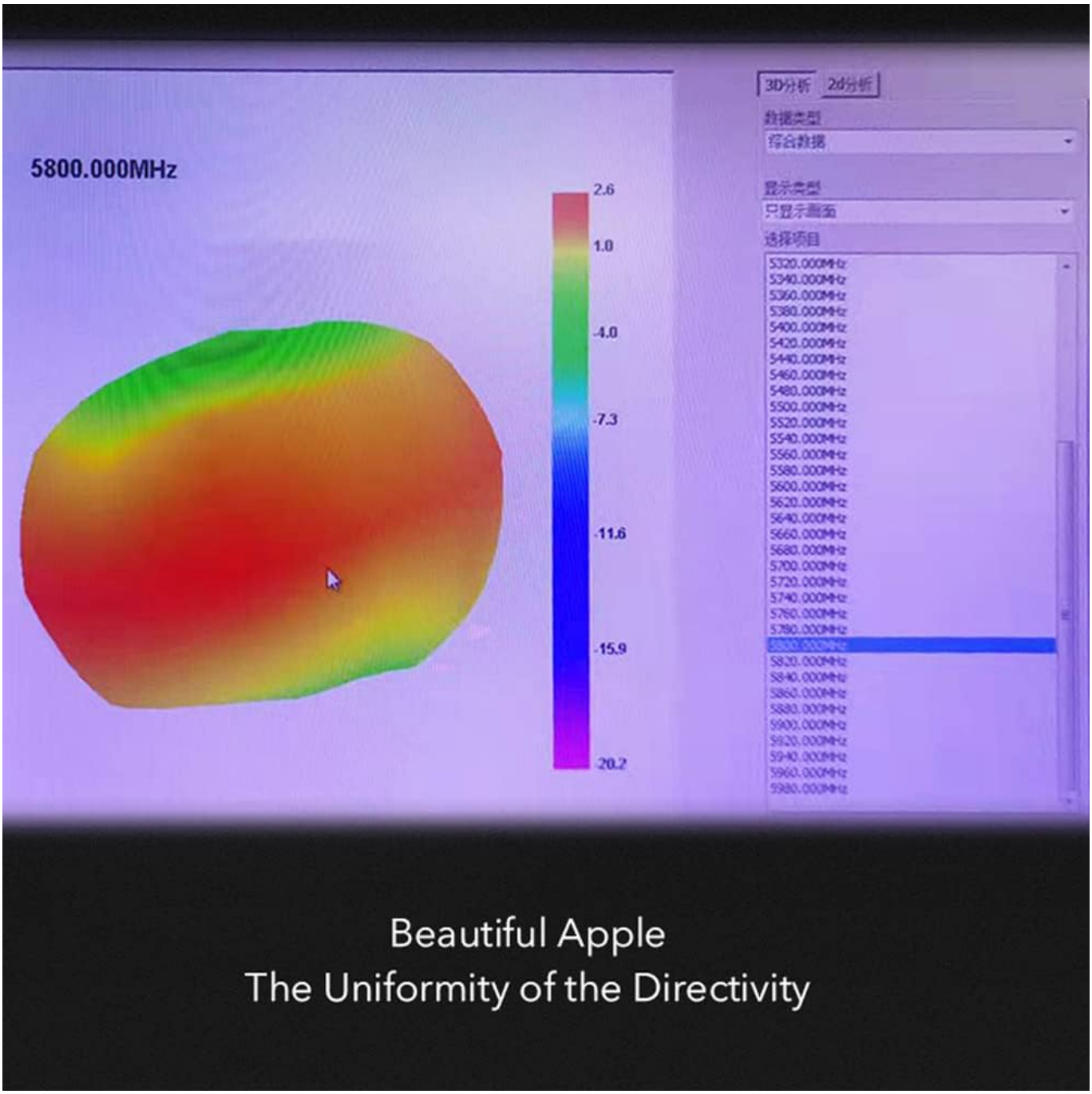


**Figure 7:** A visual comparison of the radiation patterns for the Lollipop 4 and Lollipop 4 Plus antennas, illustrating potential improvements in signal distribution with the newer model.

# FOXEER LOLLIPOP 4 PLUS

| | |
|---|---|
| Center Frequency | 5.75GHz |
| Gain | 2.6dBi |
| Axial ratio | Close to 1 |
| Bandwidth | 5.5G-6G |
| Radiation Efficiency | 98% |
| V.SWR | 1.07 in center frequency |
| Connectors | SMA/ RP-SMA/ Angle-SMA/ AngleMMCX/ StraightMMCX/ UFL |
| Weight | SMA&RP-SMA 7.8g / AngleMMCX 4.7g / StraightMMCX 4.4g / MMCX Tube 4.8g / UFL 2.8g / UFL Tube 2.9g / SMA-10CM 9.7g / Angle SMA 15CM 13.9g / UFL Tube Long 3.8g / MMCX Tube Long 6.8g |
| Dimension | Φ17mm SMA/ RP-SMA/ AngleMMCX/ StraightMMCX: 60mm UFL: 85mm UFL Tube/ MMCX Tube: 95mm SMA-10CM: 100mm SMA-15CM-Angle: 150mm UFL Tube Long/ MMCX Tube Long: 165mm |
| Cable Length | SMA/ RP-SMA/ AngleMMCX/ StraightMMCX:51mm UFL: 76mm UFL Tube/ MMCX Tube: 86mm SMA-10CM: 91mm SMA-15CM-Angle: 141mm UFL Tube Long/ MMCX Tube Long: 156mm |
| Polarization | RHCP/LHCP |
| Shell Material | PC+ABS |
| Cable | RG178, SFX086, RG141 |
| Package Includes | 2pcs/pack |

**Figure 8:** A detailed visualization of the Foxeer Lollipop 4 Plus antenna's radiation pattern at 5800MHz, demonstrating the uniformity of its directivity.

**Figure 9:** A comprehensive table outlining the detailed specifications of the Foxeer Lollipop 4 Plus antenna, including various connector types, weights, dimensions, and cable lengths.

## 3. Setup

Proper installation of your FPV antenna is crucial for optimal performance. Follow these steps to set up your Foxeer Lollipop 4 Plus antennas:

1. **Identify Connector Type:** Ensure your video transmitter (VTX) or FPV receiver (VRX/Goggles) has an RP-SMA connector. The Foxeer Lollipop 4 Plus antennas provided are RP-SMA.
2. **Secure Connection:** Carefully screw the antenna onto the corresponding connector on your VTX or VRX. Hand-tighten only; over-tightening can damage the connector. Ensure the connection is firm to prevent signal loss during flight.
3. **Antenna Placement:** Position the antenna away from carbon fiber frames or other conductive materials that can block or interfere with the signal. For best results, ensure the antenna has a clear line of sight in all directions.
4. **Polarization Matching:** For optimal signal quality, ensure that both your transmitting antenna (on the drone) and

receiving antenna (on your goggles/ground station) have matching polarization (both RHCP in this case).

*Note:* If your VTX/VRX uses an SMA connector, you will need an appropriate adapter (not included) to use these RP-SMA antennas. Using mismatched connectors or adapters can degrade performance.

## 4. Operating Instructions

Once the antennas are correctly installed, follow these general guidelines for operation:

- **Pre-Flight Check:** Before each flight, visually inspect the antennas for any damage, loose connections, or bends that might affect performance.
- **Power On Sequence:** Always power on your FPV goggles/receiver first, then your drone's video transmitter. This ensures the receiver is ready to capture the signal.
- **Maintain Line of Sight:** While circular polarization helps mitigate multipath interference, maintaining a clear line of sight between your drone and receiver will always yield the best video signal.
- **Avoid Obstructions:** Flying behind dense objects like trees, buildings, or hills can significantly degrade signal quality and range.
- **Monitor Signal Quality:** Pay attention to your video feed for signs of degradation (static, breakup). This indicates you may be approaching the limits of your signal range or encountering interference.

## 5. Maintenance

To ensure the longevity and consistent performance of your Foxeer Lollipop 4 Plus antennas, consider the following maintenance tips:

- **Regular Inspection:** Periodically check the antenna for any physical damage, such as cracks in the housing, frayed cables, or bent connectors.
- **Cleaning:** If the antenna becomes dirty, gently wipe it with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials that could damage the shell.
- **Connector Care:** Keep the RP-SMA connector clean and free of debris. If necessary, use a small brush or compressed air to clean the threads and center pin.
- **Storage:** Store antennas in a protective case or bag when not in use to prevent damage from impacts or crushing.
- **Avoid Excessive Bending:** While the IRoot Reinforcement Design allows for flexibility, repeated or extreme bending at the same point can eventually lead to cable fatigue.

## 6. Troubleshooting

If you experience issues with your FPV video link, consider the following troubleshooting steps:

| Problem | Possible Cause | Solution |
| --- | --- | --- |

| Problem | Possible Cause | Solution |
|---|---|---|
| Poor video signal / Excessive static | ◦ Loose antenna connection<br>◦ Mismatched polarization (RHCP vs. LHCP)<br>◦ Antenna damage<br>◦ Interference from other electronics<br>◦ Obstructions between drone and receiver<br>◦ Incorrect VTX channel/frequency | ◦ Ensure antennas are securely tightened.<br>◦ Verify both TX and RX antennas are RHCP.<br>◦ Inspect antennas for physical damage; replace if necessary.<br>◦ Relocate antenna or separate from other electronics.<br>◦ Fly in an open area with clear line of sight.<br>◦ Confirm VTX and VRX are on the same frequency. |
| Short range | ◦ Antenna placement issues<br>◦ Low VTX power output<br>◦ Damaged antenna | ◦ Ensure antenna is clear of obstructions and carbon fiber.<br>◦ Check VTX settings for power output.<br>◦ Inspect and replace damaged antennas. |
| Antenna feels loose after impact | ◦ Connector thread damage<br>◦ Internal cable damage | ◦ Carefully inspect the connector on both the antenna and the device.<br>◦ If damage is visible or performance is affected, replace the antenna. |

## 7. Warranty and Support

ACROTOR products are manufactured to high standards. For any warranty claims, technical support, or inquiries regarding your Foxeer Lollipop 4 Plus FPV Antennas, please contact the manufacturer or your point of purchase. Please retain your proof of purchase for warranty purposes.
Manufacturer: Thriverline

© 2023 ACROTOR. All rights reserved. Information in this manual is subject to change without notice.


### Ask a question about this manual

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**

---

**Open the live page**

**https://manuals.plus/asin/B0BG2CBQKQ**

More documents and user manuals: **https://manuals.plus/**