

Fat Shark FSV1131-02

Fat Shark Echo FPV Video Goggles User Manual

Model: FSV1131-02

1. INTRODUCTION

The Fat Shark Echo FPV Video Goggles provide an immersive First-Person View experience for drone piloting. Designed for ease of use, these goggles feature an integrated four-band, 32-channel receiver and onboard DVR functionality. This manual provides essential information for the proper setup, operation, and maintenance of your Fat Shark Echo FPV Video Goggles.

2. PRODUCT OVERVIEW

2.1 Key Features

- Integrated four-band, 32-channel receiver.
- Onboard Digital Video Recorder (DVR) for recording flights (MicroSD card not included).
- Simple USB charging capability.
- Integrated channel scanner for optimal signal detection.
- On-Screen Display (OSD) showing video signal strength, battery life, and channel selection.
- 4.3-inch LCD panel with WQVGA resolution and 55° Field of View (FOV).

2.2 Components

The Fat Shark Echo FPV Video Goggles package includes the following main components:

- Fat Shark Echo Headset
- Linear Antenna
- Headband
- Cleaning Cloth
- Battery (rechargeable)



Figure 1: Overall view of the Fat Shark Echo FPV Video Goggles with the linear antenna installed.



Figure 2: Top view of the goggles, highlighting the SMA antenna connector, display control buttons (up, down, left, right), Band+ and CH+/- buttons, Scan button, and the MENU/REC I/O buttons with the MicroSD card slot.



Figure 3: Front-side view of the goggles, displaying the 'RECON' branding on the front and ventilation grilles on the side.



Figure 4: Interior view of the goggles, showing the eye-piece area with comfortable foam padding and the integrated display.



Figure 5: Side view of the goggles, illustrating the ergonomic design and additional ventilation slots.

3. SETUP

3.1 Unpacking

Carefully remove all components from the packaging. Inspect for any signs of damage. Retain the packaging for future storage or transport.

3.2 Battery Installation and Charging

1. Locate the battery compartment on the goggles.
2. Insert the provided rechargeable battery, ensuring correct polarity.
3. Connect the goggles to a USB power source using a compatible USB cable (not always included) to charge the battery. The charging indicator will show the charging status.
4. Allow the battery to fully charge before first use.

3.3 Antenna Attachment

1. Locate the SMA antenna connector on the top of the goggles (refer to Figure 2).
2. Carefully screw the linear antenna onto the SMA connector until it is finger-tight. Do not overtighten.

3.4 Headband Adjustment

1. Attach the headband to the designated points on the sides of the goggles.
2. Place the goggles on your head and adjust the straps for a comfortable and secure fit. Ensure the display is centered with your eyes and the foam padding sits snugly against your face to block out ambient light.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

- **To Power On:** Press and hold the power button (usually integrated with one of the control buttons) for a few seconds until the display illuminates.
- **To Power Off:** Press and hold the power button again until the display turns off.

4.2 Channel Selection and Scanning

The goggles feature an integrated receiver with 32 channels across four bands. Use the following controls:

- **Band+ Button:** Press to cycle through the available frequency bands.
- **CH+ / CH- Buttons:** Press to manually change the channel within the selected band.
- **Scan Button:** Press to initiate an automatic channel scan. The goggles will search for the strongest available video signal and lock onto it. This is recommended for quick setup.

4.3 Onboard DVR Functionality

The Fat Shark Echo goggles include an onboard DVR for recording your FPV flights. A MicroSD card (not included) is required for this feature.

1. **Insert MicroSD Card:** Carefully insert a formatted MicroSD card into the designated slot (refer to Figure 2). Ensure the card is inserted correctly.
2. **Start Recording:** While viewing live FPV feed, press the REC I/O button (often labeled 'SP' or similar, refer to Figure 2) to start recording. A recording indicator will appear on the OSD.
3. **Stop Recording:** Press the REC I/O button again to stop recording. The video file will be saved to the MicroSD card.
4. **Playback:** Use the MENU button and display controls to navigate to the DVR playback menu to review recorded footage.

4.4 On-Screen Display (OSD)

The OSD provides real-time information overlaid on your video feed, including:

- Video signal strength indicator.
- Current battery life/voltage.
- Selected channel and band.
- Recording status (when DVR is active).

5. MAINTENANCE

5.1 Cleaning

- Use the provided cleaning cloth to gently wipe the display lenses. Avoid abrasive materials that could scratch the surface.
- Wipe the exterior of the goggles with a soft, damp cloth. Do not use harsh chemicals or solvents.
- Ensure no dust or debris enters the ventilation grilles.

5.2 Battery Care

- Always use the recommended charging method (USB).
- Do not overcharge or completely discharge the battery.
- If storing for extended periods, charge the battery to approximately 50% capacity.

5.3 Storage

Store the goggles in a cool, dry place away from direct sunlight and extreme temperatures. It is recommended to use the original packaging or a protective case to prevent damage.

6. TROUBLESHOOTING

If you encounter issues with your Fat Shark Echo FPV Video Goggles, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No video signal or poor reception	Incorrect channel/band, loose antenna, interference, low power on VTX.	Perform a channel scan. Ensure antenna is securely attached. Check VTX power and frequency. Move away from sources of interference.
Goggles do not power on	Battery discharged, battery not properly installed, faulty power button.	Charge the battery. Reinstall the battery correctly. Contact support if power button is unresponsive.
DVR not recording	No MicroSD card, MicroSD card full or corrupted, incorrect file format.	Insert a formatted MicroSD card. Ensure card has sufficient space. Format the card if necessary (FAT32 recommended).
Display is blurry or uncomfortable	Headband not adjusted correctly, lenses dirty.	Adjust the headband for a snug fit. Clean the display lenses with the provided cloth.

7. SPECIFICATIONS

Detailed technical specifications for the Fat Shark Echo FPV Video Goggles:

Feature	Specification
Model Number	FSV1131-02
Dimensions (D x W x H)	3.15" x 5.91" x 4.72" (80mm x 150mm x 120mm)
Weight	1.1 Pounds (approx. 500g)
Display Type	LCD
Resolution	WQVGA
Field of View (FOV)	55°
Connectivity Technology	USB
Wireless Communication Technology	Wi-Fi (for internal receiver communication)
Flash Memory Type	Micro SD (for DVR)
Supported File Format (DVR)	RAW
Battery Cell Type	Lithium Ion
Battery Weight	111 Grams
Enclosure Material	Plastic
Skill Level	Novice
UPC	840630131022

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official Fat Shark website or contact their customer support directly. Keep your proof of purchase for warranty claims.

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

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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