captainrc M5F

M5F FPV Monitor User Manual

Model: M5F | Brand: captainrc

1. Introduction

The captainrc M5F FPV Monitor is a high-performance 5-inch display designed for First Person View (FPV) drone and RC model enthusiasts. It integrates a 5.8G 48-channel receiver with advanced Steadyview Diversity technology, ensuring a stable and clear video feed. With its built-in 60FPS DVR, users can record their flight experiences directly to a microSD card. The monitor offers versatile power options and a compact, lightweight design for portability.

Figure 1: captainrc M5F FPV Monitor Overview

This image shows the M5F FPV Monitor from the front, displaying a scenic view on its 5-inch screen. Two antennas are visible at the top, indicating its reception capabilities. The monitor has a robust, dark grey casing.

Key features include:

- High-quality 5-inch screen for seamless and clear viewing.
- Steadyview Receiver for stable and consistent image quality.
- Ensures real-time video streaming with minimized latency.
- Compact and lightweight design ensures easy portability and comfortable usage.
- Features AV input and DVR playback for recording memorable flight moments.

2. Package Contents

Upon opening the package, verify that all the following items are present:

- 1 x SKYZONE M5F 5-inch FPV Monitor
- 2 x 5.8G Antennas
- 1 x USB Power Cable
- 1 x AV Cable

- 1 x 18650 Battery Holder (Note: 18650 battery not included)

Figure 2: M5F FPV Monitor Package Contents

This image displays the various components included with the M5F FPV Monitor. It shows the monitor itself, two black stick antennas, a battery holder, a USB cable, and an AV cable with yellow and red connectors.

3. Product Layout

Familiarize yourself with the various ports, buttons, and indicators on the M5F FPV Monitor:

Figure 3: M5F FPV Monitor Rear Panel and Controls

This detailed image shows the rear of the M5F FPV Monitor, with clear labels pointing to each component. From top to

bottom, left to right: ANT1 (Antenna 1 connector), ANT2 (Antenna 2 connector), Wheel (scroll wheel for navigation), SD card slot, MENU button, REC (Record) button, power switch, 18650 battery bay, video input, Type-C USB port, and DCIN (DC power input).

- **ANT1** / **ANT2:** SMA connectors for attaching the FPV antennas.
- **Wheel:** Multi-function scroll wheel for menu navigation and channel selection.
- **SD Card Slot:** For inserting a microSD card (not included) for DVR recording.
- **MENU Button:** Accesses the monitor's settings menu.
- **REC Button:** Initiates or stops DVR recording.
- **Power Switch:** Turns the monitor on or off.
- **18650 Battery Bay:** Compartment for a single 18650 Li-ion battery (not included).
- **Video Input:** AV input for external video sources.
- **Type-C USB:** USB-C port for power supply.
- **DCIN:** DC power input (2-6S) for external power sources.

4. Setup

4.1 Powering the Monitor

The M5F monitor supports multiple power input methods:

- **18650 Li-ion Battery:** Insert a fully charged 18650 battery into the battery bay, ensuring correct polarity.
- **DC IN (2-6S):** Connect an external DC power source (e.g., LiPo battery) to the DCIN port.
- **Type-C USB:** Connect a USB-C power adapter or power bank to the Type-C USB port.

Figure 4: Multiple Power Supply Options

This image illustrates the three ways to power the M5F monitor: using a replaceable 18650 Lion battery, connecting a 2-6S Lion input via the DCIN port, and powering via the Type-C USB port.

4.2 Antenna Installation

Screw the provided 5.8G antennas onto the ANT1 and ANT2 SMA connectors. Ensure they are finger-tight to prevent signal loss.

4.3 MicroSD Card Installation (for DVR)

Insert a formatted microSD card (Class 10 or higher recommended) into the SD card slot with the contacts facing down. The monitor supports up to 64GB cards.

5. Operating Instructions

5.1 Power On/Off

To power on the monitor, slide the Power Switch to the "ON" position. To power off, slide it to the "OFF" position.

5.2 Channel and Frequency Selection

The M5F monitor features a 48-channel 5.8G receiver with auto-search functionality.

- **Auto Search:** Press the Wheel button briefly to initiate an automatic frequency scan. The monitor will search for active 5.8G signals and lock onto the strongest one.
- **Manual Selection:** Rotate the Wheel to manually cycle through available channels and bands. Press the Wheel to confirm your selection.

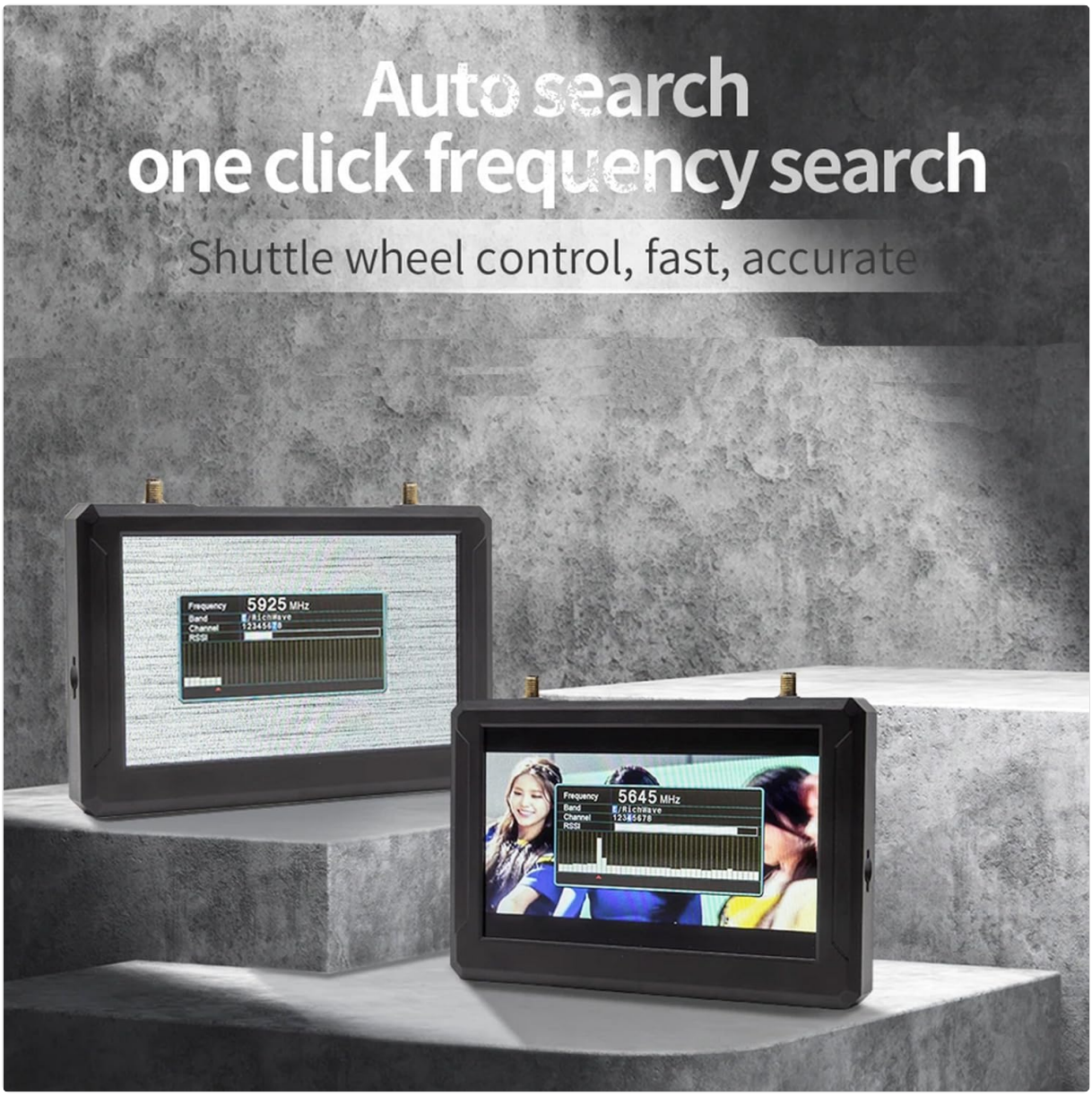

Figure 5: Auto Search Functionality

This image shows two M5F monitors side-by-side, demonstrating the auto-search feature. Each screen displays frequency information, signal strength, and channel details, indicating the monitor's ability to quickly find and lock onto FPV signals.

5.3 Steadyview Diversity Receiver

The M5F monitor utilizes a Steadyview Diversity Receiver, which combines signals from both antennas to provide a more stable and clear image, especially in challenging signal environments. This technology minimizes image tearing and rolling often seen with standard diversity receivers.

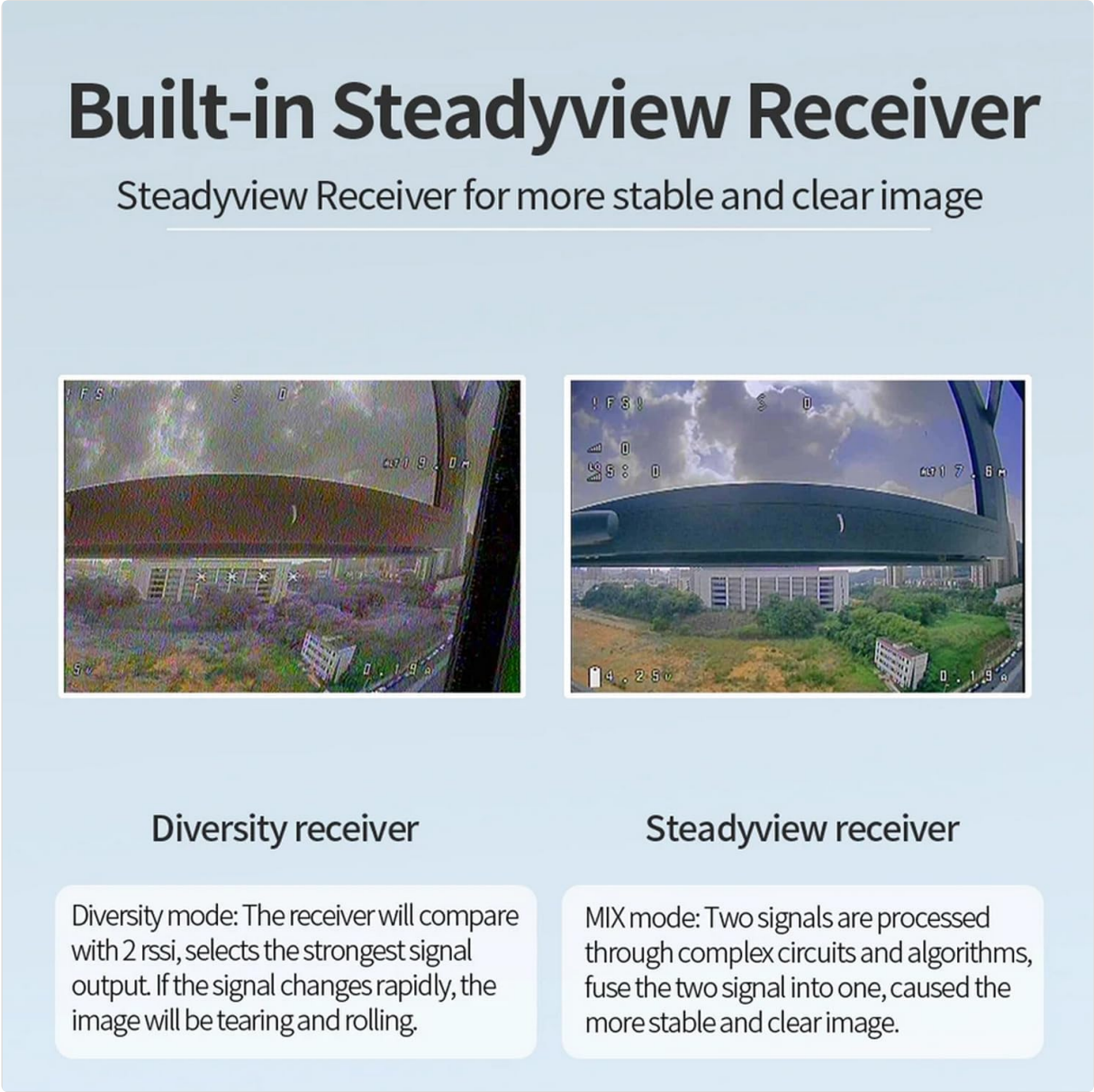

Figure 6: Steadyview Receiver Advantage

This image visually compares the output of a standard diversity receiver (left, showing tearing and rolling) with the Steadyview receiver (right, showing a stable and clear image). Text descriptions explain that diversity mode selects the strongest signal, while MIX mode (Steadyview) processes and fuses two signals for a more stable image.

5.4 DVR Recording and Playback

The built-in DVR allows you to record your FPV flights at 60FPS (MJPEG format).

- **Recording:** With a microSD card inserted, press the REC button to start recording. Press it again to stop recording. A recording indicator will typically appear on the screen.
- **Playback:** Access the DVR menu via the MENU button. Navigate to the playback section to view recorded files.

Figure 7: AV Input and DVR Playback

This image highlights the AV input and the microSD card slot for DVR functionality. It shows a microSD card being inserted into the monitor, emphasizing the ability to record flight moments.

5.5 Menu Navigation

Press the MENU button to enter the main settings menu. Use the Wheel to navigate through options and adjust settings such as brightness, contrast, DVR settings, and system information. Press the MENU button again to exit the menu.

6. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the monitor screen and casing. Avoid abrasive cleaners or solvents.
- **Storage:** When not in use for extended periods, store the monitor in a cool, dry place. Remove the 18650 battery if using it as the primary power source.
- **Battery Care:** If using 18650 batteries, ensure they are charged and stored according to their specifications. Do not overcharge or over-discharge.
- **Antennas:** Handle antennas carefully. Bending or damaging them can affect signal reception.

7. Troubleshooting

Problem	Possible Cause	Solution
No image on screen	Monitor not powered on; Low battery; Incorrect channel/frequency; Antennas not connected or damaged; Video transmitter off or out of range.	Ensure power switch is ON; Charge/replace battery; Perform auto-search or manually select correct channel; Check antenna connections; Verify video transmitter is on and within range.
Poor image quality (static, tearing)	Weak signal; Interference; Incorrect antenna type; Distance too far.	Ensure antennas are properly connected; Try different channels; Reduce distance to video transmitter; Check for local interference sources.
DVR not recording	No microSD card; Card full; Card not formatted; Card speed too slow; Card error.	Insert microSD card; Delete old files or use a new card; Format card in monitor or on PC; Use Class 10 or higher card; Try a different card.
Monitor freezes or becomes unresponsive	Software glitch; Low battery.	Power off and then on again; Ensure battery is adequately charged.

8. Specifications

Feature	Detail
Model Name	M5F
Screen Size	5 Inch
Resolution	800*480
Latency	≤20ms
Receiver	5.8G 48CH Built-in Steadyview Diversity Receiver
DVR	60FPS MJPEG
Power Supply	2-6S DC IN, 18650 Lion Battery, Type-C USB
Battery Endurance	Approx. 1.5h with 3000mah 18650 battery
Antenna Type	LHCP (recommended)
Dimensions	135mm x 88mm x 16mm (5.31"L x 3.46"W x 0.63"H)
Weight	165±2g (Approx. 0.36 lbs)
Material	Plastic
Connectivity Technology	HDMI (for AV input, not main display)
Batteries Included	No

9. Warranty and Support

Specific warranty information and detailed support contacts are not provided within this manual. For warranty claims, technical support, or service inquiries, please refer to the product's original packaging, the seller's website, or contact captainrc customer service directly through their official channels.
You may also visit the captainrc Store on Amazon for more information.