Z CAM E2-M4

Z CAM E2-M4 4K Cinema Camera MFT User Manual

Model: E2-M4

INTRODUCTION

This manual provides comprehensive instructions for the operation, setup, and maintenance of your Z CAM E2-M4 4K Cinema Camera MFT. The E2-M4 is designed for professional filmmakers and videographers, offering advanced features in a compact form factor. It features a 4/3" sensor for exceptional image quality and enhanced low-light performance, supporting 10/12-bit color and a wide dynamic range.

Key features of the Z CAM E2-M4 include:

- 4K @160fps, 10-bit color recording capability.
- 4/3" WDR CMOS sensor for superior image capture.
- 13 - 15 stops dynamic range, expandable to 16 stops with WDR enabled.
- ZRAW (partial debayer) support for flexible post-production.
- Gigabit Ethernet for data transfer, camera control, and live streaming.

WHAT'S IN THE BOX

Upon unboxing your Z CAM E2-M4, please verify that all the following components are present:

- Z CAM E2-M4 4K Cinema Camera MFT Body
- LEMO Power Cable
- Lens Mount Cap

Note: Lenses, batteries, and storage media are sold separately.

PRODUCT OVERVIEW

Familiarize yourself with the various components and interfaces of the Z CAM E2-M4 camera.

Figure 1.1: Front-right view of the Z CAM E2-M4 camera, showcasing the Micro Four Thirds (MFT) lens mount, function buttons (F1-F4), power button, and CFast card slot.

Figure 1.2: Rear-left view of the Z CAM E2-M4 camera, highlighting the various mounting points and the robust, cube-like design.

Figure 1.3: Front-left view of the Z CAM E2-M4 camera, showing the lens mount and additional mounting points on the side.

Figure 1.4: Direct front view of the Z CAM E2-M4 camera, emphasizing the MFT lens mount and the sensor behind it.

Figure 1.5: Top view of the Z CAM E2-M4 camera, displaying the integrated screen with status information (e.g., resolution, frame rate, ISO, shutter speed, aperture), record button, and navigation controls.

SETUP GUIDE

1. Attaching a Lens

1. Remove the lens mount cap from the camera body by twisting it counter-clockwise.
2. Align the red dot on your MFT lens with the red dot on the camera's lens mount.
3. Gently insert the lens into the mount and twist clockwise until it clicks into place.

2. Powering the Camera

The Z CAM E2-M4 can be powered via a LEMO power cable or compatible NP-F series batteries (not included). For continuous operation, external power is recommended.

- **Using LEMO Power Cable:** Connect the provided LEMO power cable to the camera's power input port and to a suitable power source.
- **Using NP-F Battery:** Attach a charged NP-F battery to the battery plate on the rear of the camera. Ensure it is securely latched.

3. Inserting Storage Media (CFast 2.0)

1. Locate the CFast 2.0 card slot on the side of the camera.
2. Open the CFast card slot door.
3. Insert a compatible CFast 2.0 card with the label facing the correct direction (refer to the diagram near the slot). Push until it clicks into place.
4. Close the card slot door securely.
5. *Note: It is recommended to format the CFast card in-camera before first use.*

OPERATING INSTRUCTIONS

1. Powering On/Off

- To power on, press and hold the power button (red circle icon) on the side of the camera until the display illuminates.

- To power off, press and hold the power button again until the display shuts down.

2. Basic Controls and Menu Navigation

The camera features a top-mounted display and control buttons for quick access to settings.

- **MENU Button:** Access the main menu system.
- **FN Button:** Access customizable function shortcuts.
- **Arrow Buttons (Up/Down):** Navigate through menu options or adjust values.
- **OK Button:** Confirm selections or enter sub-menus.
- **Record Button (Red Circle):** Start and stop video recording.

3. Recording Video

1. Ensure a formatted CFast 2.0 card is inserted and a lens is attached.
2. Power on the camera.
3. Adjust exposure settings (ISO, Shutter Speed, Aperture) using the menu or assigned function buttons.
4. Set desired resolution and frame rate (e.g., 4K @ 160fps) in the menu.
5. Press the red record button on the top of the camera to begin recording. The display will indicate recording status.
6. Press the red record button again to stop recording.

4. Connecting to External Monitor

The E2-M4 supports external monitoring via HDMI. Connect an HDMI cable from the camera's HDMI output port to your monitor's HDMI input. Ensure the monitor is powered on and set to the correct input.

MAINTENANCE

- **Cleaning the Camera Body:** Use a soft, dry, lint-free cloth to wipe the camera body. For stubborn dirt, slightly dampen the cloth with water. Avoid using solvents or abrasive cleaners.
- **Cleaning the Lens and Sensor:** For lens elements, use a lens cleaning solution and a microfiber cloth. For sensor cleaning, it is highly recommended to use a professional sensor cleaning kit or seek professional service to avoid damage.
- **Storage:** When not in use for extended periods, store the camera in a cool, dry place, away from direct sunlight and extreme temperatures. Remove batteries if storing for more than a few weeks.
- **Firmware Updates:** Periodically check the Z CAM official website for firmware updates. Keeping your camera's firmware up-to-date ensures optimal performance and access to new features.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Camera does not power on.	Battery depleted or not inserted correctly; power cable loose.	Ensure battery is charged and properly seated. Check power cable connection.
Cannot record video.	No CFast card; card full; card not formatted; incorrect recording settings.	Insert a CFast card. Delete unnecessary files or use a new card. Format the card in-camera. Verify resolution/frame rate settings.
No image on external monitor.	HDMI cable faulty; monitor input incorrect; monitor not powered.	Check HDMI cable. Ensure monitor is on and set to the correct HDMI input.

Problem	Possible Cause	Solution
Poor image quality.	Lens dirty; sensor dirty; incorrect exposure settings; low light conditions.	Clean lens. Consider professional sensor cleaning. Adjust ISO, aperture, shutter speed. Use adequate lighting.

SPECIFICATIONS

Feature	Detail
Brand	Z CAM
Model Number	E2-M4
Sensor Type	4/3" WDR CMOS
Video Capture Resolution	Up to 4K (DCI/UHD) @ 160fps, HD @ 240fps
Color Depth	10-bit, 12-bit
Dynamic Range	13 - 15 stops (16 stops with WDR enabled)
Lens Mount	Micro Four Thirds (MFT)
Storage Media	CFast 2.0
Connectivity	Gigabit Ethernet, HDMI, USB-C, 3.5mm Mic Input, Genlockable Time Code I/O
Dimensions (Product)	10.25 x 8.5 x 5 inches
Item Weight	4.05 pounds

WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official Z CAM website. Z CAM provides technical support and resources to assist with any questions or issues you may encounter.

Online Resources: For the latest firmware, FAQs, and additional support documentation, please visit the official Z CAM support page.

Contact Support: If you require further assistance, please contact Z CAM customer service through their official channels.