Sony ILCE-7M5

Sony Alpha 7 V Full-Frame Mirrorless Camera Instruction Manual

Model: ILCE-7M5

1. INTRODUCTION

Thank you for purchasing the Sony Alpha 7 V Full-Frame Mirrorless Camera. This camera is designed for advanced photographers and videographers, featuring a 33.0 MP partially stacked sensor, blackout-free 30fps continuous shooting, AI-based subject recognition, and intuitive operation. This manual provides essential information for setting up, operating, and maintaining your camera.

2. SAFETY INFORMATION

Please read all safety instructions carefully before using the camera. Keep this manual for future reference.

- **Battery Safety:** Use only genuine Sony NP-FZ100 batteries. Do not open, crush, short-circuit, or incinerate batteries. Keep batteries out of reach of children.
- **Water and Dust:** While the camera features a dust and moisture resistant design, it is not guaranteed to be 100% dust and moisture proof. Avoid direct exposure to water or excessive dust.
- **Heat:** Do not expose the camera to direct sunlight for extended periods or to extreme temperatures.
- **Cleaning:** Use a soft, dry cloth for cleaning. For the sensor, use specialized cleaning kits and follow manufacturer instructions carefully.

3. SETUP

3.1 Unboxing

Upon opening the package, you will find the camera body, a rechargeable battery (NP-FZ100), a shoulder strap, a body cap, and an eyepiece cup. Please ensure all components are present.

Official unboxing video for the Sony Alpha 7 V camera body. This video demonstrates the contents of the camera package and initial handling.

3.2 Battery Installation and Charging

Insert the NP-FZ100 battery into the battery compartment located at the bottom of the camera. Ensure it clicks into place. The battery may not be fully charged upon purchase. Charge the battery using a compatible USB-C cable

connected to the camera or an external charger.

Front view of the Sony Alpha 7 V camera. The battery compartment is located at the bottom of the camera body.

3.3 Memory Card Installation

The Alpha 7 V features dual media slots. Slot 1 supports CFexpress Type A and SDXC/SDHC UHS-II/UHS-I memory cards. Slot 2 only supports SDXC/SDHC UHS-II/UHS-I memory cards. Open the memory card slot cover on the side of the camera and insert the cards with the correct orientation until they click.

The Sony Alpha 7 V features dual media slots for flexible storage options.

3.4 Attaching a Lens

Align the white index mark on the lens with the white index mark on the camera's E-mount. Rotate the lens clockwise until it locks into place. To remove, press the lens release button and rotate counter-clockwise.

The camera features a Sony E-mount for a wide range of compatible lenses.

3.5 Initial Setup

Upon first power-on, the camera will guide you through initial settings such as language, date, and time. Follow the on-screen prompts to complete this process.

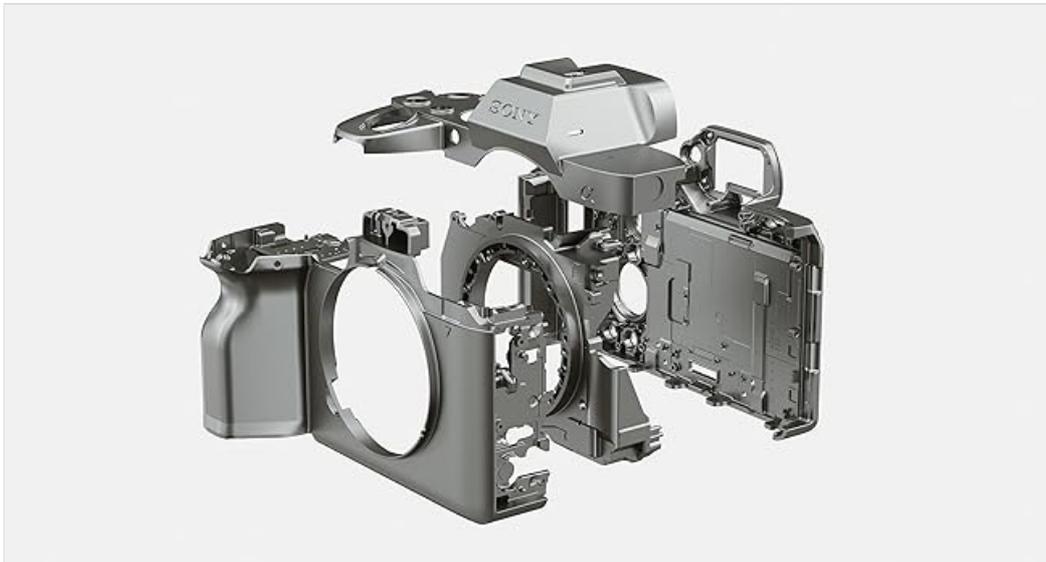## 4. OPERATING THE CAMERA

4.1 Basic Controls

The camera features an intuitive layout with a mode dial, custom buttons (C1, C2, C3, C4), and dedicated controls for AF-ON and AEL. The power switch is located on the top plate.
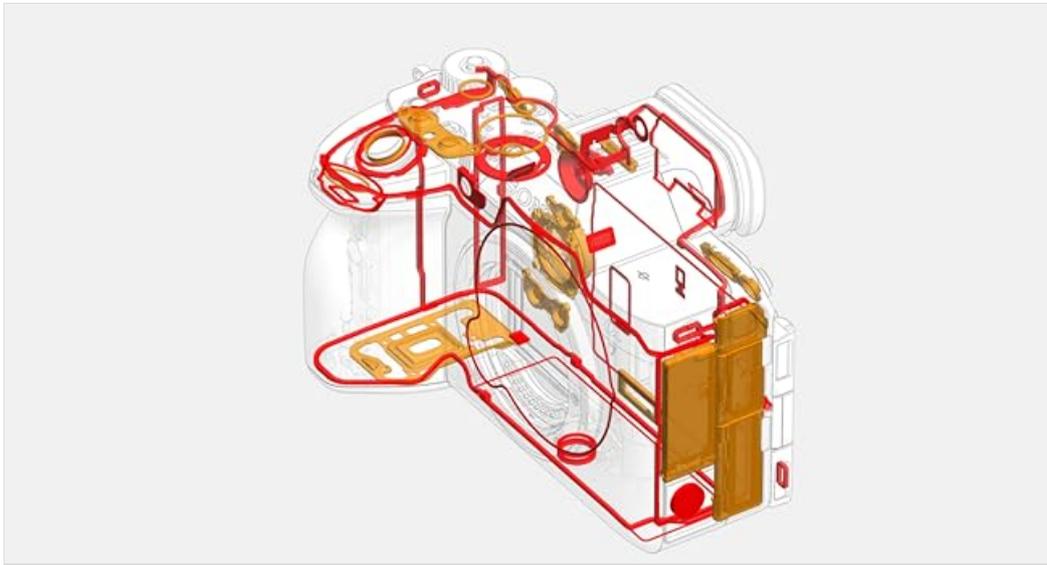
Top view of the camera highlighting the mode dial and power switch.

4.2 Display and Viewfinder

The camera is equipped with a 3.2-inch, 2.1 million-dot multi-angle LCD monitor that can be articulated for various shooting angles, including front-facing for vlogging. It also features a 3.68 million-dot OLED electronic viewfinder for clear and detailed viewing.

The multi-angle LCD monitor offers flexibility for diverse shooting scenarios.

The high-resolution OLED viewfinder provides a clear and accurate view of your scene.
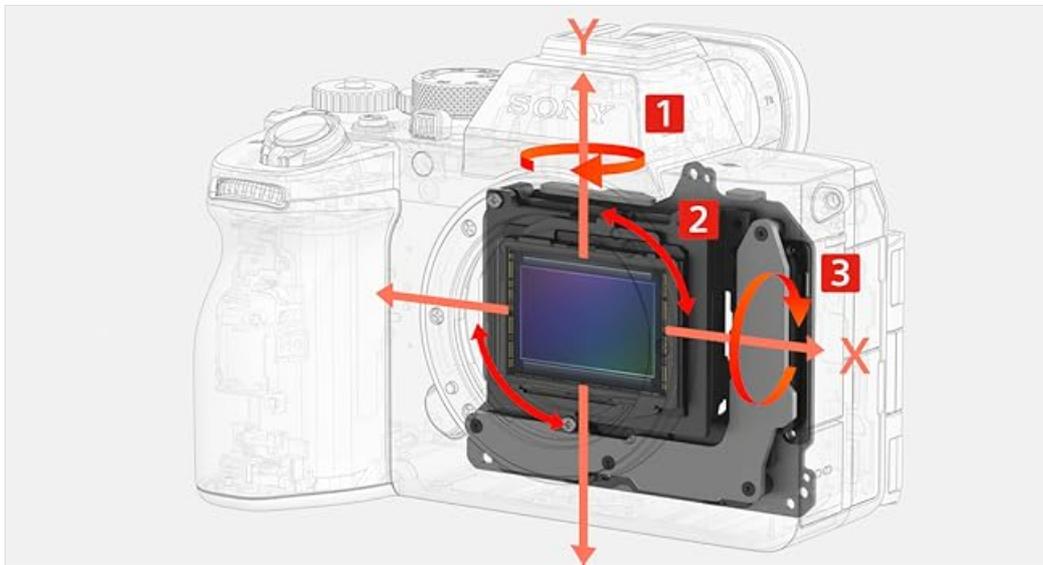
4.3 Autofocus System

The Alpha 7 V features an advanced AI-based autofocus system with Real-time Recognition AF and Real-time Tracking. It utilizes 759-points focal plane phase-detection AF for precise and reliable focusing, even in low-light conditions down to EV-4.0. The system can accurately recognize humans, animals, birds, vehicles, and insects.

AI-based human pose estimation technology ensures accurate subject recognition.

AI-based Real-time Tracking maintains sharp focus on moving subjects.

The camera delivers precise AF performance even in challenging low-light environments.

4.4 Still Photography

Capture stunning images with the 33.0 MP sensor and BIONZ XR2 processing engine. Enjoy blackout-free continuous shooting at up to 30 fps with AF/AE tracking, even with 14-bit full resolution RAW files. The camera offers a wide 16-stop dynamic range and reduced noise at higher ISO sensitivities (ISO 100-51200, expandable to 50-204800).
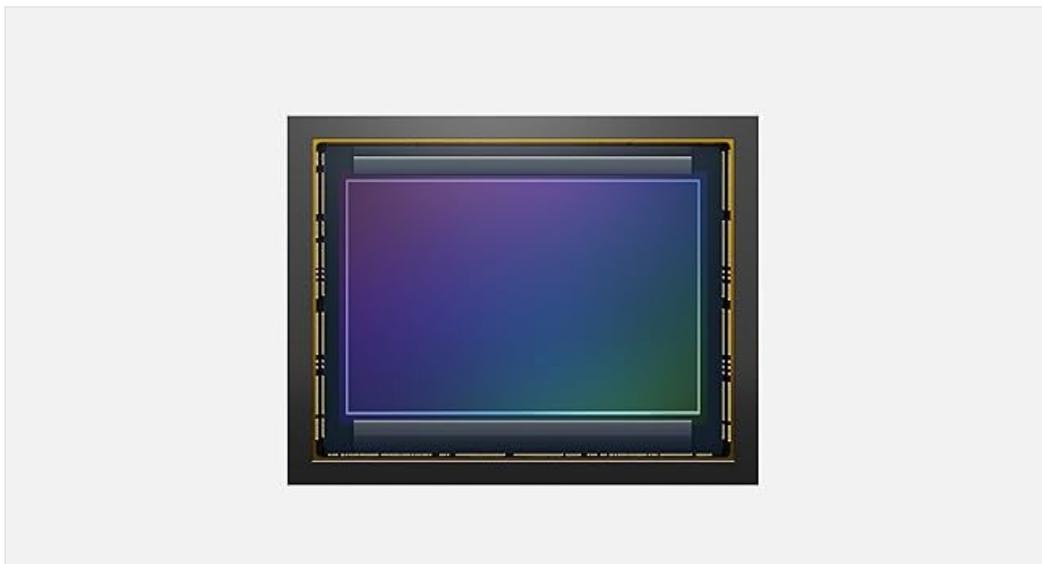

Blackout-free 30fps continuous shooting allows capturing fast-moving subjects with precision.

The Pre-Capture function allows you to record moments before the shutter is fully pressed, with adjustable times from 0.03 to 1 second. This ensures you never miss a critical moment.

4.5 Video Recording

Record high-quality video with 7K oversampled 4K 60p recording with full pixel readout and no pixel binning.

Achieve high frame rate 4K recording at up to 120p. The camera features 5-axis in-body image stabilization, offering up to 7.5-step central and 6.5-step peripheral stabilization, enhanced by Active Mode and Dynamic Active Mode for smooth handheld footage.

7K oversampling delivers highly detailed 4K 60p video.

The 5-axis in-body stabilization system minimizes camera shake for sharp images and smooth video.
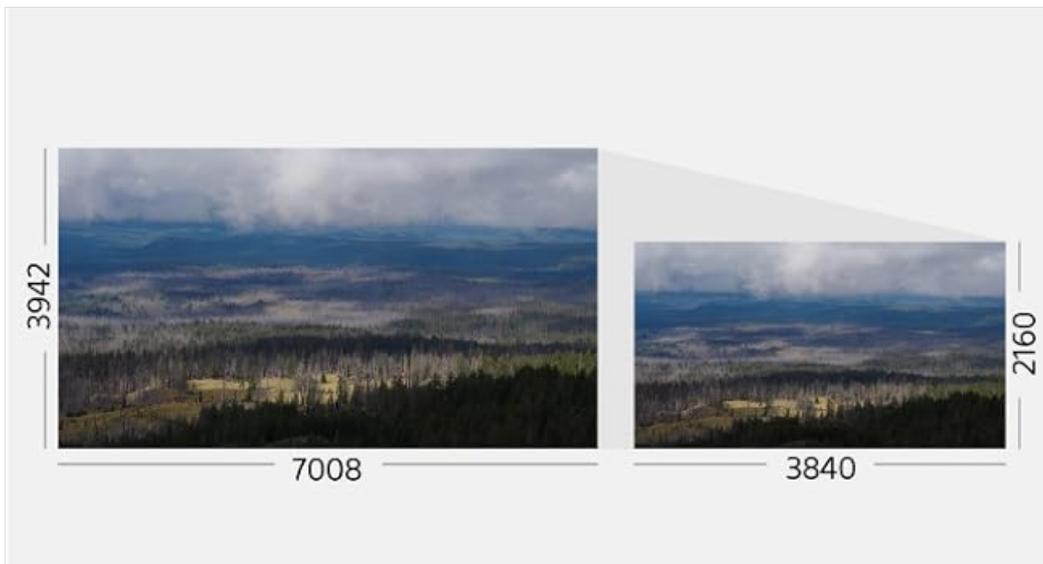
Benefit from in-camera audio noise reduction and Auto Framing, which automatically adjusts composition during video recording. S-Log3 gamma curve provides powerful post-production possibilities, and you can import up to 16 user LUTs for monitoring preview. Shot Marks facilitate still image extraction from video footage.

Official product feature video showcasing the capabilities of the Sony Alpha 7 V, including its advanced video features.

5. CONNECTIVITY

The Alpha 7 V offers versatile connectivity options:

- **Two USB Type-C® Ports:** For power delivery, high-speed data transfer (SuperSpeed USB 10 Gbps), and USB communication.
- **Full-size HDMI Port:** For external monitor connection or video output.
- **Microphone and Headphone Jacks:** For external audio input and monitoring.
- **Advanced Wi-Fi:** Supports 802.11ax 2x2 MIMO and 2.4 GHz/5 GHz/6 GHz bands for wireless transfers and remote tethering.
- **Bluetooth:** For wireless remote control and smartphone connectivity.

The camera features multiple ports for extensive connectivity and expansion.

6. MAINTENANCE

Proper maintenance ensures the longevity and performance of your camera.

- **Cleaning:** Regularly clean the camera body with a soft, lint-free cloth. For the lens and sensor, use appropriate cleaning tools and solutions.
- **Storage:** Store the camera in a dry, cool place away from direct sunlight and extreme temperatures. Use desiccant packs if storing in humid environments.
- **Dust and Moisture Resistance:** The camera features a durable magnesium alloy chassis and a dust and moisture resistant design with sealing around buttons and covers. However, it is not waterproof. Avoid exposing it to heavy rain or submersion.

The durable magnesium alloy chassis provides robust protection for the camera's internal components.

Weather sealing helps protect the camera from dust and moisture.

6.1 Heat Dissipation

The Alpha 7 V incorporates effective heat dissipation mechanisms, allowing for extended recording times of up to 90 minutes for 4K 60p 4:2:0 8bit video at 25°C ambient temperature with the monitor panel open and a full battery.

7. TROUBLESHOOTING

If you encounter issues with your camera, refer to the following common solutions:

- **Camera Not Powering On:** Ensure the battery is fully charged and correctly inserted. Try using a different charged battery.
- **Memory Card Error:** Reformat the memory card (this will erase all data). Try a different, compatible memory card.
- **Autofocus Issues:** Ensure the lens is clean and properly mounted. Check AF mode settings and ensure sufficient light for focusing.
- **Image Quality Issues:** Check ISO, aperture, and shutter speed settings. Ensure the lens is clean and free from smudges.

For more complex issues, consult the comprehensive online help guide or contact Sony customer support.

8. SPECIFICATIONS

Model Name	Alpha 7 V (ILCE-7M5)
Sensor Type	Full-Frame Stacked RS CMOS
Photo Sensor Resolution	33 MP
Image Stabilization	5-Axis In-Body (Digital, Sensor-shift)
Continuous Shooting	30 FPS (Blackout-Free)
Video Resolution	4K (QFHD: 3840 x 2160) up to 120p
Autofocus Points	759

Display Type	3.2-inch Articulating LCD (2.1 Million Dots)
Viewfinder	Electronic OLED (3.68 Million Dots)
Connectivity	Bluetooth, HDMI, USB-C (x2), Wi-Fi (802.11ax)
Memory Slots	2 (Slot 1: CFexpress Type A / SD; Slot 2: SD)
Weight	1.35 Pounds (Body only)

9. WARRANTY AND SUPPORT

The Sony Alpha 7 V comes with a 1-year manufacturer's warranty. For support, please visit the official Sony website or contact customer service.

9.1 Software and Apps

Enhance your workflow with Sony's dedicated applications:

- **Creators' App:** A smartphone application for file transfer, remote shooting, and cloud storage management.
- **Imaging Edge Desktop:** For remote (tether) shooting, RAW development, and composite RAW/Extended RAW support.
- **Monitor & Control App:** Provides high-precision wired and wireless video monitoring, remote control on a larger screen, and multi-camera monitoring.

The camera also supports the Camera Authenticity Solution (paid service, availability varies by region) for verifying image authenticity.

10. ENVIRONMENTAL RESPONSIBILITY

Sony is committed to environmental sustainability. More than 20% of the Alpha 7 V is made from recyclable plastic. The packaging materials are also recyclable and non-plastic, contributing to reduced environmental impact.