

## VILTROX AF 50/1.4 Pro FE

# VILTROX AF 50mm f/1.4 Pro FE Lens Instruction Manual

## 1. INTRODUCTION

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Thank you for choosing the VILTROX AF 50mm f/1.4 Pro FE Lens. This high-performance prime lens is designed for Sony E-mount mirrorless cameras, offering exceptional optical quality and advanced features for both photography and videography. Its bright f/1.4 aperture excels in low-light conditions and provides beautiful background blur, while the precise autofocus system ensures sharp and reliable performance.

## 2. PRODUCT OVERVIEW

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The VILTROX AF 50mm f/1.4 Pro FE lens features a robust magnesium-aluminum alloy construction, ensuring durability and reliability. Key components include:

- **Focus Ring:** For manual focus adjustments.
- **Aperture Ring:** For controlling the lens aperture.
- **AF/MF Switch:** To toggle between autofocus and manual focus modes.
- **Click ON/OFF Switch:** To enable or disable click stops on the aperture ring.
- **USB-C Port:** For firmware updates.



Figure 2.1: Front view of the VILTROX AF 50mm f/1.4 Pro FE lens.



Figure 2.2: Rear view of the lens, highlighting the Sony E-mount.



Figure 2.3: Detail of the AF/MF and Click ON/OFF switches for precise control.



Figure 2.4: The integrated USB-C port for convenient firmware updates.



Figure 2.5: Included accessories: lens, lens cap, lens hood, and lens pouch.

## Optical Design

The lens incorporates an advanced 11-group, 15-element optical structure, including 3 ED (Extra-low Dispersion), 1 ASPH (Aspherical), and 8 HR (High Refractive index) elements. This design minimizes aberrations, distortion, and color fringing, ensuring high sharpness and clarity across the frame. The Nano Crystal Coating further reduces flare and ghosting.



Figure 2.6: Optical diagram illustrating the lens element arrangement.

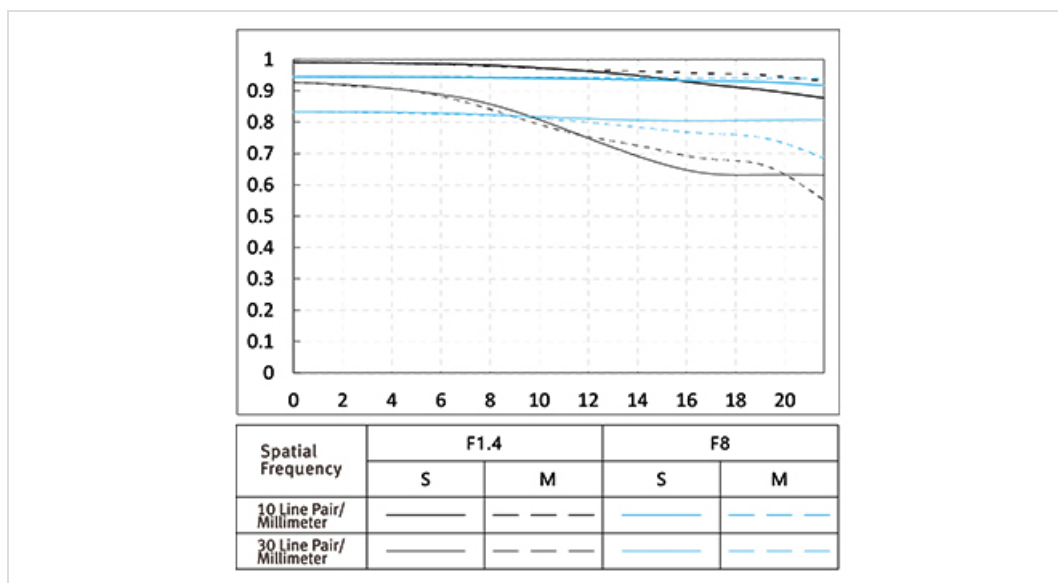


Figure 2.7: MTF (Modulation Transfer Function) chart demonstrating lens performance.

### 3. SETUP

#### Mounting the Lens

1. Ensure your camera is powered off.
2. Align the white dot on the lens barrel with the white dot on your Sony E-mount camera body.
3. Gently insert the lens into the camera mount and rotate it clockwise until it clicks into place.
4. Attach the lens hood by aligning the dot on the hood with the dot on the lens, then twist until it locks.



Figure 3.1: The VILTROX 50mm f/1.4 Pro FE lens securely mounted on a Sony E-mount camera.

## Initial Camera Settings

After mounting the lens, power on your camera. Ensure your camera's firmware is up to date for optimal compatibility and performance with the VILTROX lens. Refer to your camera's manual for specific settings related to third-party lenses.

Video 3.1: This video demonstrates the VILTROX AF 50mm f/1.4 Pro FE lens being mounted onto a camera and its general use as a standard prime lens.

## 4. OPERATING INSTRUCTIONS

## Autofocus (AF) and Manual Focus (MF)

The lens features a HyperVCM autofocus motor, providing quiet and fast focusing, ideal for tracking moving subjects in both photography and video. Use the AF/MF switch on the lens barrel to select your desired focus mode.

- **AF (Autofocus):** The camera will automatically focus on your subject.
- **MF (Manual Focus):** Rotate the focus ring to adjust focus manually.

## Aperture Control

The f/1.4 large aperture allows for excellent performance in low-light conditions and creates a shallow depth of field with creamy bokeh. You can control the aperture via the lens's aperture ring or through your camera settings. The Click ON/OFF switch allows you to enable or disable the click stops on the aperture ring, which is particularly useful for smooth aperture transitions during video recording.

## Minimum Focusing Distance

With a minimum focusing distance of 0.45 meters (45cm), the lens allows for detailed close-up shots, adding versatility to your shooting scenarios.

Video 4.1: This video showcases the VILTROX AF 50mm f/1.4 Pro FE lens's performance across various shooting scenes, demonstrating its versatility.

Video 4.2: This video highlights the lens's capability in capturing beautiful starry sky scenes, demonstrating its low-light performance.

## 5. MAINTENANCE

### Cleaning the Lens

To maintain optimal image quality, keep your lens clean. Use a soft, lint-free cloth and a specialized lens cleaning solution to gently wipe the front and rear elements. Avoid touching the glass surfaces with your fingers. Use a blower brush to remove dust particles before wiping.

### Firmware Updates

The VILTROX AF 50mm f/1.4 Pro FE lens features a USB-C port for firmware updates. Regularly check the [VILTROX Official Store](#) for the latest firmware versions and instructions to ensure your lens performs at its best with new camera models and features.

### Dust and Splash Protection

The lens is designed with advanced dust and splash protection, offering reliable performance in various environments. However, it is not fully waterproof. Avoid prolonged exposure to heavy rain or submersion in water.



Figure 5.1: Illustration of the high-grade sealing rings for enhanced dust and splash protection.

## 6. TROUBLESHOOTING

- **Lens not recognized by camera:** Ensure the lens is securely mounted and the camera's firmware is up to date. Clean the electrical contacts on both the lens and camera body.
- **Autofocus issues:** Check if the lens is set to AF mode. Ensure there is sufficient light and contrast for the autofocus system to work effectively. Update lens firmware if available.
- **Image quality concerns:** Ensure lens elements are clean. Check camera settings (ISO, shutter speed, aperture). Verify that the lens is compatible with your camera model.

## 7. SPECIFICATIONS

Feature	Specification
Brand	VILTROX
Model Name	AF 50/1.4 Pro FE
Focal Length	50 Millimeters (Fixed)
Lens Type	Standard Prime
Compatible Mountings	Sony FE
Maximum Aperture	f/1.4
Minimum Aperture	f/16
Number of Diaphragm Blades	11
Focus Type	Auto/Manual
Minimum Focusing Distance	0.45 meters (45cm)
Filter Size	77 Millimeters
Lens Coating Description	Nano Crystal Coating
Image Stabilization	No image stabilization
Real Angle Of View	46.6 Degrees
Water Resistance Level	Water Resistant
Color	Black
Built-In Media	Lens, Lens Cap, Lens Hood, Lens Pouch

## 8. WARRANTY AND SUPPORT

This VILTROX lens comes with a **3-Year Manufacturer Warranty**. For detailed warranty information, product support, or to contact customer service, please visit the [VILTROX Official Store](#).

