

Tamron A007E

Tamron SP 24-70mm Di VC USD Lens (Model A007E) for Canon Mount

Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the proper use and care of your Tamron SP 24-70mm F/2.8 Di VC USD (Model A007E) lens, designed for Canon EF mount cameras. This high-performance standard zoom lens offers a versatile focal range, a bright constant aperture, and advanced optical technologies to enhance your photographic experience. Please read this manual thoroughly before using the lens to ensure optimal performance and longevity.

2. KEY FEATURES

- **Versatile Focal Length:** Covers a standard zoom range of 24-70mm, suitable for a wide variety of photographic subjects from landscapes to portraits.
- **Constant F/2.8 Aperture:** Provides excellent low-light performance and allows for beautiful background blur (bokeh) across the entire zoom range.
- **Vibration Compensation (VC):** Tamron's proprietary image stabilization system helps reduce camera shake, enabling sharper handheld shots in challenging lighting conditions.
- **Ultrasonic Silent Drive (USD):** Ensures fast, precise, and quiet autofocus operation, ideal for both still photography and video recording.
- **Advanced Optical Design:** Incorporates specialized glass elements, including three Low Dispersion (LD) and two Extra Refractive Index (XR) elements, to minimize chromatic aberrations and deliver high image quality.
- **Moisture-Resistant Construction:** Designed with seals to help protect the lens from moisture, making it suitable for use in various outdoor environments.



Figure 2.1: The Tamron SP 24-70mm Di VC USD (Model A007E) lens with its included lens hood.

3. SETUP

3.1 Attaching the Lens

1. Ensure your camera is turned off.
2. Align the mounting index mark on the lens (usually a red dot or white square) with the corresponding mark on your camera's lens mount.
3. Insert the lens into the camera mount and rotate it clockwise until it clicks into place. Do not force the lens.

3.2 Detaching the Lens

1. Ensure your camera is turned off.
2. While pressing the lens release button on your camera, rotate the lens counter-clockwise until it stops.
3. Carefully remove the lens from the camera body.

3.3 Attaching the Lens Hood

The included flower-shaped lens hood helps to block unwanted stray light and protect the front element of the lens. Align the lens hood with the front of the lens and rotate it until it locks into position. For storage, the hood can be reversed and attached to the lens.

4. OPERATING THE LENS

4.1 Autofocus (AF) / Manual Focus (MF) Switch

Locate the AF/MF switch on the side of the lens barrel. Slide the switch to 'AF' for autofocus operation or 'MF' for manual focus. In AF mode, you can still fine-tune focus manually without switching to MF, thanks to the full-time manual focusing capability.

4.2 Vibration Compensation (VC) Switch

The VC switch is also located on the lens barrel. Set it to 'ON' when shooting handheld to activate image stabilization. Turn it 'OFF' when the camera is mounted on a tripod or when using very fast shutter speeds, as VC can sometimes interfere with stability in these situations.

4.3 Zooming

Rotate the zoom ring to adjust the focal length between 24mm and 70mm. The current focal length is indicated on the lens barrel.

4.4 Manual Focusing

In MF mode, rotate the focus ring to achieve sharp focus. The distance scale on the lens barrel provides an indication of the current focus distance.

5. MAINTENANCE

5.1 Cleaning the Lens

- Use a blower brush to remove dust from the lens surfaces.
- For smudges or fingerprints, use a clean, soft microfiber cloth specifically designed for optics, along with a small amount of lens cleaning fluid. Apply the fluid to the cloth, not directly to the lens.
- Never use abrasive materials or harsh chemicals to clean the lens.

5.2 Storage

- Store the lens with both front and rear caps attached to protect the elements from dust and scratches.
- Keep the lens in a cool, dry place, away from direct sunlight and extreme temperatures or humidity.
- If storing for extended periods, consider using a dehumidifying cabinet to prevent mold growth.

6. TROUBLESHOOTING

6.1 Blurry Images

- Check if the lens is properly focused. Ensure the AF/MF switch is in the desired position.
- If shooting handheld, ensure the VC switch is 'ON'.
- Verify that your camera's shutter speed is appropriate for the lighting conditions and focal length to avoid motion blur.

- Clean the lens elements if smudges or dust are present.

6.2 Autofocus Not Working

- Ensure the AF/MF switch on the lens is set to 'AF'.
- Check your camera's focus mode settings.
- Ensure there is sufficient light and contrast in your subject for the autofocus system to lock on.
- Confirm the lens is securely attached to the camera body.

6.3 Lens Not Attaching/Detaching Smoothly

- Ensure the camera is turned off before attempting to attach or detach the lens.
- Align the mounting marks correctly. Do not force the lens.
- Check for any obstructions or debris on the lens mount or camera mount.

7. SPECIFICATIONS

Feature	Specification
Model Name	A007E
Focal Length	24-70mm
Maximum Aperture	F/2.8
Minimum Aperture	F/22
Lens Construction	17 elements in 12 groups
Minimum Focus Distance	0.38m (15 inches)
Max. Magnification Ratio	1:5 (at f=70mm)
Filter Diameter	82mm
Overall Length	4.3 inches
Maximum Diameter	3.5 inches
Weight	29.1 oz (1.82 pounds)
Diaphragm Blades	9 (rounded diaphragm)
Image Stabilization	VC (Vibration Compensation)
Autofocus Motor	USD (Ultrasonic Silent Drive)
Compatible Mountings	Canon EF

8. WARRANTY AND SUPPORT

Your Tamron SP 24-70mm F/2.8 Di VC USD lens is covered by a manufacturer's warranty. Please refer to the warranty card included with your product for specific terms and conditions, including warranty period and registration details. For technical support, service, or inquiries regarding your lens, please visit the official Tamron website or contact Tamron customer service directly.

For more information, visit: [Tamron USA Official Website](#)

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