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› Tamron SP AF17-50mm F/2.8 Di II LD Aspherical (IF) Lens Instruction Manual

Tamron AF016N-700

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Model: AF016N-700

1. INTRODUCTION

The Tamron SP AF17-50mm F/2.8 Di II LD Aspherical (IF) lens is a lightweight, compact, and fast standard zoom lens designed exclusively for digital SLR cameras. It expands upon the popular SP AF28-75mm F/2.8 zoom lens concept, offering enhanced photographic pleasure through its fast F/2.8 aperture, which provides beautiful natural out-of-focus effects for portrait shots and allows for faster shutter speeds. This lens delivers excellent close-up shooting performance across its entire zoom range, ensuring stress-free photography at all focal lengths and distances.



Image: The Tamron SP AF17-50mm F/2.8 Di II LD Aspherical (IF) Lens, showcasing its compact design and control rings.

2. KEY FEATURES

- **Di II Technology:** Lenses designed for exclusive use on digital cameras with smaller-size imagers. They inherit all benefits of Di products and are not designed for conventional cameras or digital cameras with image sensors larger than 24mm x 16mm.
- **Extra Refractive Index Glass (XR):** XR glass bends light rays at steeper angles, reducing the physical length of the lens while enhancing imaging performance by minimizing optical aberrations. This allows for shorter, smaller-diameter, lighter lenses without sacrificing speed or image quality.
- **Low Dispersion (LD) Glass:** LD glass elements reduce chromatic aberration, which is the tendency of different colors of light to focus at different points. This improves image sharpness, especially at long and short focal lengths.
- **Super Performance (SP) Series:** A line of ultra-high-performance lenses designed for professionals and those requiring the highest possible image quality, prioritizing superior performance parameters.
- **Zoom Lock (ZL):** A mechanical engineering concept that prevents undesired extension of the lens barrel when carrying the camera/lens unit on a neck strap.
- Nikon-compatible lens designed specifically for digital SLRs.
- 17-50mm focal range equivalent to 26-78mm in 35mm format.
- Maximum aperture of f/2.8.
- Filter diameter of 67mm.
- Minimum focus distance of 0.27 meters over entire zoom range.

3. SETUP

To attach the Tamron SP AF17-50mm F/2.8 Di II LD Aspherical (IF) lens to your Nikon-D DSLR camera, align the mounting index on the lens barrel with the corresponding index on your camera body. Rotate the lens clockwise until it clicks securely into place. Ensure the lens is firmly attached before use. To detach, press the lens release button on the camera body and rotate the lens counter-clockwise.

For optimal performance, ensure the lens is clean and free of dust before mounting. Always use the provided lens hood to minimize flare and protect the front element.

4. OPERATION

4.1. Auto Focus and Manual Focus

Your digital SLR camera and this lens support autofocus. The lens will automatically focus when you press the shutter release button halfway. While the camera attempts to focus as you see, this is not always the case. The camera offers different focusing modes, allowing you to choose how it focuses.

When looking through your camera's viewfinder, you will see various focusing points. You can select which of these points your camera uses for focus. By default, the camera automatically decides, but it's often beneficial to manually select the focus point for precise results. You can also change the focusing mode in your camera's menu.

Common autofocus modes include "Single Shot" and "Continuous" (or "Servo"). Single Shot mode locks focus on a specific point, allowing you to take the picture once focus is achieved. Continuous mode is ideal for tracking moving subjects, as it constantly re-focuses to keep the object sharp.

Remember, there is a small switch on your lens to toggle between autofocus (AF) and manual focus (MF). Switching to manual focus only affects the focusing mechanism, not other camera functions.

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Video: Understanding Auto Focus. This video explains how autofocus works, different focusing modes, and how to select focus points on your camera.

4.2. Focal Length Selection (Wide Angle vs. Telephoto)

Choosing the right focal length is crucial for improving your images. Wide-angle lenses (17mm-35mm on this lens) are traditionally used for landscapes, capturing a broad field of view. They can also be effectively used in small spaces to make them appear larger, creating dynamic images by emphasizing leading lines or spirals.

Telephoto lenses (35mm-50mm on this lens) bring distant subjects closer by magnifying them within your camera. A secondary effect of telephoto lenses is "compression," which makes the image appear flatter, effectively isolating the subject in your scene. This is useful when you cannot physically get closer to your subject or need to minimize distracting backgrounds.

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Video: Wide Angle vs. Telephoto Lenses. This video demonstrates the effects of different focal lengths, showing how wide-angle lenses capture broad scenes and telephoto lenses bring subjects closer with compression.

4.3. White Balance

Different light sources have varying color temperatures. For instance, sunlight differs from incandescent bulbs or light on a cloudy day. To compensate for these differences and ensure accurate colors, your camera features white balance settings. The default "Auto" white balance analyzes the scene to make whites appear as neutral as possible.

Beyond "Auto," your camera offers various white balance presets (e.g., Cloudy, Shady, Tungsten, Daylight, Fluorescent, Custom). Selecting the appropriate preset helps achieve accurate color rendition under different lighting conditions. Correct white balance is especially important for JPEG shooters, as there are fewer options for post-processing color corrections compared to shooting in RAW format.

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Video: Understanding White Balance. This video explains how different light sources affect color temperature and how to use your

4.4. Night Photography

Night photography requires patience and the right equipment. Essential tools include your camera, a good wide-angle lens, a sturdy tripod, and a cable release. A tripod is crucial to prevent blurry images due to camera shake during long exposures. A cable release serves the same purpose, minimizing any movement when pressing the shutter button, especially for exposures lasting 15-20 seconds or more.

For night photography, it is recommended to use manual focus. Autofocus systems may struggle in low light conditions to pinpoint a subject. To manually focus in the dark, you can estimate the distance to your subject using the focusing ring on your lens, or use a flashlight to briefly illuminate the subject, allowing you to see and adjust focus through the viewfinder.

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Video: Night Photography Tips. This video provides essential tips for capturing stunning images in low-light conditions, including equipment recommendations and focusing techniques.

4.5. Di II Lens Technology

The digital SLR market features two main sensor types: full-frame and APS-C (or crop-frame). This Tamron lens is a Di II lens, specifically designed for digital cameras with smaller-sized imagers (APS-C sensors). While Tamron also produces Di lenses for full-frame cameras, which can also work on smaller chips, Di II lenses are optimized for the performance of smaller chip cameras.

The reason for different lens types is the sensor size. A smaller sensor requires a wider-angle lens to achieve the same field of view as a full-frame sensor. For example, a 28mm lens on a full-frame camera will have a different field of view than the same lens on a smaller chip camera. Di II lenses are designed to provide true wide-angle and amazing telephoto performance when used with their intended smaller sensors.

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Video: Understanding Di II Lens Technology. This video explains the differences between full-frame and APS-C sensors and how Di II lenses are optimized for smaller sensor cameras.

5. MAINTENANCE

To ensure the longevity and optimal performance of your Tamron lens, regular maintenance is recommended:

- **Cleaning the Lens:** Use a soft, lint-free cloth or a specialized lens cleaning solution and cloth to gently wipe the lens surfaces. Avoid using abrasive materials or harsh chemicals.
- **Dust Removal:** Use a blower brush to remove dust particles from the lens surface before wiping.
- **Storage:** Store the lens in a cool, dry place away from direct sunlight and extreme temperatures. Use the lens caps when not in use to protect the front and rear elements.
- **Avoid Impact:** Protect the lens from drops and impacts, which can damage internal components.

6. TROUBLESHOOTING

If you encounter issues with your Tamron SP AF17-50mm F/2.8 Di II LD Aspherical (IF) lens, consider the following common troubleshooting steps:

- **Focus Issues:**
 - Ensure the AF/MF switch on the lens is set correctly (AF for autofocus, MF for manual focus).
 - Check your camera's focus mode settings (e.g., Single Shot, Continuous) to ensure they match your shooting scenario.

- Verify that the lens is securely mounted to the camera body.
- **Image Quality Issues (Blurry, Soft):**
 - Check for smudges or dust on the lens elements and clean them carefully.
 - Ensure you are using an appropriate shutter speed for the lighting conditions to prevent motion blur.
 - If shooting in low light, consider using a tripod to eliminate camera shake.
- **Zoom Lock (ZL) Engagement:**
 - If the lens barrel is not extending or retracting smoothly, check if the Zoom Lock (ZL) switch is engaged. Disengage it for normal operation.
- **Lens Not Communicating with Camera:**
 - Remove the lens and reattach it, ensuring a firm connection.
 - Clean the electrical contacts on both the lens and camera body with a clean, dry cloth.
 - Ensure your camera's firmware is up to date.

If problems persist after attempting these steps, please contact Tamron customer support for further assistance.

7. SPECIFICATIONS

Product Dimensions	5.3 x 4.1 x 4.1 inches
Item Weight	1.25 pounds
ASIN	B000EXV0QQ
Item Model Number	AF016N-700
Brand	Tamron
Focal Length Description	17-50 millimeters
Lens Type	Standard
Compatible Mountings	Nikon F
Manufacturer	Tamron
Date First Available	May 4, 2006

8. WARRANTY AND SUPPORT

Tamron products are backed by a manufacturer's warranty. For detailed information regarding your lens's warranty period, coverage, and terms, please refer to the warranty card included with your product or visit the official Tamron website. Keep your proof of purchase for warranty claims.

For technical support, service, or any inquiries not covered in this manual, please contact Tamron customer service. Contact information can typically be found on the Tamron website or on your product packaging.

