DZOFILM X-Tract 18-28mm T8 2.1x Macro Probe Lens

DZOFILM X-Tract 18-28mm T8 2.1x Macro Probe Lens User Manual

Model: X-Tract 18-28mm T8 2.1x Macro Probe Lens

1. Introduction

This manual provides comprehensive instructions for the proper use, setup, operation, and maintenance of your DZOFILM X-Tract 18-28mm T8 2.1x Macro Probe Lens. Designed for PL mount cameras, this lens offers unique capabilities for macro cinematography, allowing for detailed capture in challenging environments. Please read this manual thoroughly before using the product to ensure optimal performance and longevity.

2. Product Overview and Key Features

The DZOFILM X-Tract 18-28mm T8 2.1x Macro Probe Lens is engineered to explore and capture microscopic details. Its design facilitates access to narrow and concealed spaces, providing a unique perspective in filmmaking.

Key Features:

- **Unique Perspectives:** Features an innovative 0-degree direct view, enabling shots previously difficult to achieve.
- **Detailed Macro Capture:** Offers a 2.1x magnification factor at 28mm, ideal for revealing intricate textures and minute subjects.
- **Superior Optical Quality:** Incorporates 25 elements in 18 groups, including 7 high-refractive-index (HRI) and 6 extra-low-dispersion (ED) lenses, ensuring clarity, sharpness, and minimal distortion.
- **Precise Manual Control:** Equipped with dedicated manual focus (300°), iris (72°), and zoom (100°) controls for accurate and tactile adjustments.
- **Versatile Compatibility:** Designed with a PL mount and a 43.2mm image circle, supporting full-frame cameras and Super 35 sensors.
- **Constant Aperture:** Maintains a consistent T8 aperture across all focal lengths for uniform brightness.

Figure 1: Side view of the DZOFILM X-Tract 18-28mm T8 2.1x Macro Probe Lens.

3. What's in the Box

Upon unpacking your DZOFILM X-Tract lens, please verify that all the following items are included:

- Hard Case with Foam Inlay
- Bolt Driver
- Shim Set
- 3x Support Ring

4. Setup

4.1 Attaching the Lens to a PL Mount Camera

1. Ensure your camera is powered off and the lens mount cap is removed.
2. Align the red dot on the lens mount with the red dot on your camera's PL mount.
3. Insert the lens into the camera mount.
4. Rotate the lens clockwise until it clicks securely into place. Do not force the lens if it does not align easily.
5. For added stability, especially with the probe's length, attach the provided support rings to your camera rig to prevent strain on the lens mount.

Figure 2: The DZOFILM X-Tract lens mounted on a camera rig, ready for operation.

4.2 Adjusting Back Focus (Shimming)

The lens comes with a shim set for precise back focus adjustment. If you experience soft focus at infinity or inconsistent focus across the zoom range, shimming may be required. Refer to your camera's specific instructions for back focus calibration and use the provided shims to achieve optimal optical performance.

5. Operating the Lens

The DZOFILM X-Tract lens features three distinct control rings for manual adjustment: Focus, Iris (Aperture), and Zoom.

Figure 3: Detailed view of the manual control rings for focus, iris, and zoom.

5.1 Focus Control

- The focus ring is located closest to the camera body.
- Rotate the focus ring to adjust the point of sharpest focus. The ring has a 300° rotation for precise adjustments.
- Utilize your camera's focus assist features (e.g., peaking, magnification) for critical focus.

5.2 Iris (Aperture) Control

- The iris ring controls the lens aperture, marked in T-stops (T8 being the widest).
- Rotate the iris ring to adjust the amount of light entering the lens and to control depth of field. The ring has a 72° rotation.
- A wider aperture (smaller T-number) results in more light and shallower depth of field.

5.3 Zoom Control

- The zoom ring allows you to change the focal length between 18mm and 28mm. The ring has a 100° rotation.
- This lens is a zoom macro lens, meaning you can adjust the focal length while maintaining macro capabilities.
- The 2.1x magnification is achieved at the 28mm focal length.

5.4 Utilizing the 0-Degree Direct View

The unique probe design allows for a 0-degree direct view, enabling the lens to be inserted into tight spaces or positioned very close to subjects for extreme macro shots. This feature is particularly useful for creative angles and exploring hidden details.

Figure 4: Demonstrating the macro capabilities of the lens on a floral subject.

6. Maintenance

6.1 Cleaning the Lens

- Always use a clean, soft microfiber cloth specifically designed for optical surfaces.
- For dust, use a blower brush first to remove loose particles. Avoid wiping dry lenses as this can scratch the surface.
- For smudges or fingerprints, apply a small amount of lens cleaning solution to the microfiber cloth (not directly to the lens) and gently wipe in a circular motion from the center outwards.
- Do not use harsh chemicals or abrasive materials.

6.2 Storage

- When not in use, store the lens with both front and rear caps attached in its protective hard case.
- Store in a cool, dry place away from direct sunlight and extreme temperatures.
- Avoid environments with high humidity to prevent mold growth on lens elements.

7. Troubleshooting

Common Issues and Solutions:

- **Issue: Lens not mounting securely.**

Solution: Ensure the red alignment dots on the lens and camera mount are perfectly aligned. Do not force the lens. Check for any obstructions on the mount. If issues persist, consult your camera's manual or a qualified technician.

- **Issue: Soft focus or inconsistent focus.**

  Solution: This may indicate a back focus issue. Refer to Section 4.2 on adjusting back focus using the provided shim set. Ensure you are using your camera's focus assist tools correctly.

- **Issue: Dust or smudges on lens elements.**

  Solution: Follow the cleaning instructions in Section 6.1. Always use appropriate lens cleaning tools to avoid damage.

For issues not covered here, please contact DZOFILM customer support.

8. Specifications

Feature	Specification
Brand	DZOFILM
Model	X-Tract 18-28mm T8 2.1x Macro Probe Lens
Focal Length	18-28mm
Maximum Aperture	T8 (Constant)
Magnification Factor	2.1x (at 28mm)
Lens Type	Macro, Wide-Angle Zoom
Compatible Mountings	PL Mount
Optical Design	25 elements in 18 groups (7 HRI, 6 ED lenses)
Image Circle	43.2mm (Supports Full-Frame)
Focus Rotation	300°
Iris Rotation	72°
Zoom Rotation	100°
Product Dimensions	16.3 x 2 x 2 inches
Item Weight	9.1 pounds

9. Warranty and Support

DZOFILM products are manufactured to high-quality standards. For warranty information, please refer to the warranty card included with your product or visit the official DZOFILM website. For technical support, service, or inquiries, please contact DZOFILM customer service through their official channels.
Keep your purchase receipt and product serial number handy when contacting support.

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