FF Sword 60mm T2.9 Macro 2X Cine

使用手册
Instruction Manual

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Preface

Thank you very much for purchasing FF Sword 60mm T2.9 Macro 2X Cine full frame macro cinema lens. This lens can shoot from infinity to 2X magnification. With several ED glasses, it can maximize the elimination of chromatic dispersion. Whether at macro or infinity, excellent image quality can be achieved in the focus range, providing users with stable and reliable support. It can shoot tiny objects, such as small insects, jewelry, etc.

⚠ *For operational safety, please read the manual and precautions carefully before using this product, and keep the manual at a place that is easily accessible when needed. If you encounter a problem that cannot be solved, please ask for technical support through email.*

Features

- 1.FF Sword 60mm T2.9 Macro 2X Cine is different from traditional macro lens.On the basis of full frame system of high-performance imaging, this lens can achieve high resolution image quality from infinity to macro. Besides, under macro mode, it can get amazing 2X magnification of objects. With the help of several ED glasses, this lens has no obvious chromatic dispersion under 2X magnification. The higher magnification gives users more space for creation.
- 2.**It** adopts 13 aperture blades, therefore, the aperture is more round, which makes the point light source presents a nearly circular blur effect and gives a beautiful and soft bokeh.
- 3.This lens is constructed of 14 elements in 11 groups, which can bring high resolution imaging. The all-metal structure ensures durability of the lens for long-term use.

Precautions

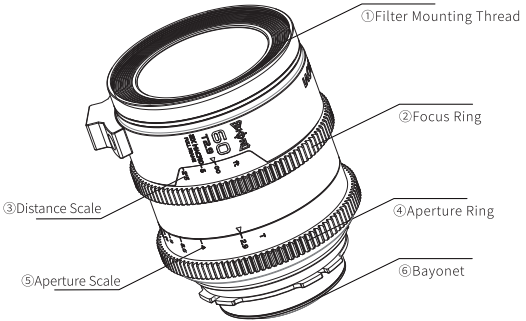
⚠ Safety Precautions

- Do not disassemble, modify the lens by yourself. Do not touch the internal parts that become exposed as the result of external force.
- Do not leave the lens where it will be exposed to high temperatures, such as in direct sunlight and an enclosed vehicle. Excessive heat may deform the glass elements and other parts of the lens.
- Whether it is attached to the camera or not, do not leave the lens under the sun without the lens cap attached. This is to prevent the lens from concentrating the sun' s rays, which could cause a fire.
- Do not place the sun in the frame center when shooting with backlight. Doing so might cause a fire or harm your eyes.

Maintenance Precautions

- Do not touch the surface of the lens directly. Brush off any dust with a blower. Wipe the surface with a cleaning cloth or a lens tissue.
- Try a circular motion from the center outward to remove oil, fingerprints and grime on the lens surface.
- If your lens is brought directly from a cold place to a warm place, condensation may appear on the lens. To avoid this, be sure to take some action to protect the lens.

Name of each part



To attach the Lens

Remove the rear lens cap. Align the mounting index ⑥ on the lens bayonet with the mounting index on the camera. Place the lens on the camera mount and attach the lens according to the proper installation method of the mount type. Do not use excessive force during installation to avoid damage to the bayonet.

To attach the Lens

Turn the camera off. While pressing and holding the lens release button on the camera, rotate the lens in the reverse direction for attaching the lens until it stops, then detach the lens.

After installing the lens, try rotating it to make sure it is fixed to the camera. In order to ensure more stability of the lens, install lens guide rails and Y-shaped brackets as required.

Focusing

This is a fully manual lens. Rotate the focus ring ② slowly to get focus. Turn the focus ring slowly and gently to prevent the focus mechanism from damage.
The distance scale ③ and depth of field scale are for instructional purposes. Actual focus and DOF may slightly differ from those scale indications.
To get precise focus, it is recommended to focus wide open when the camera position is fixed. Get focus first, then set the desired aperture by turning the aperture ring.
For the ease of focusing, turn on the focus peaking on the camera. (Note that the function depends on camera models.)

Setting the Aperture

Aperture is set through the aperture ring on the lens. According to the shooting situation and the desired depth of field, rotate the aperture ring ④ on the lens to the corresponding aperture.
Since the lens has no CPU data, the aperture values can not be recorded.

Focusing Methods

Method 1 Focus after magnification is predetermined
①Determine magnification in advance, then turn the focus ring to the desired magnification scale.
②Check the frame by the viewfinder or [Live View] on the camera and pan the camera back and forth to roughly focus until the right focus length is determined.
③Rotate the focus ring to achieve precise focus.

Method 2
Set the frame first. Turn the focus ring while you are checking the image through the viewfinder or [Live View] on the camera. After setting the composition, perform steps ② and ③ of Method 1.

When shooting at high magnification, the working distance of the lens is very short and it is easy to touch the shot object. Therefore, please be careful when shooting.
Magnification refers to the proportional relation between the size of the image recorded on the sensor or film and the actual size of the shot object.

Method of Shim Installation and Debugging

Since the bayonet flange distances of PL mount camera produced by different manufacturers are different, our lens can compensate the difference of flange distance by adjusting the thickness of bayonet shim. Specific method: install the lens on the camera. Then, choose a shot object that can confirm shooting distance (for example, 5 feet 4 inches) as the goal. After focusing rightly, check the actual scale value on the focus handwheel. If the scale value is greater than 5 feet 4 inches, you should change the original shim and choose a thinner shim for debugging. Otherwise, you need to choose a thicker shim. After debugging, the scale value is accurate and debugging is completed.

Macro Photography Mode

The maximum magnification is 2X and the minimum focusing distance is 21cm.

Specifications

FF Sword 60mm T2.9 Macro 2X Cine	
Format Compatibility	FF
Focal Length	60mm
Aperture Range	T2.9-22
Angle of View	39.7°
Lens Structure	14 elements in 11 groups
Aperture Blades	13
Focus Throw	160°
Aperture Throw	73.1°
Focus Scale	Foot/Meter
Min. Focusing Distance (Object-Image Distance)	21cm
Focus Mode	Manual (MF)
Follow Focus Pitch	0.8m
Filter Thread	ϕ77mm
Dimensions	Ø85.6mm*112.93mm
Weight	About736g (without front lens cap and rear lens cap)
Mounts	PL/EF