LAOWA MFT 50mm T2.9 Macro 2:1 Cine

使用手册
Instruction Manual

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LAOWA 老蛙

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Preface

Sincerely thank you for purchasing LAOWA MFT 50 mm T2.9 Macro 2: 1 Cine cinema macro lens. This lens is for the MFT frame system. It supports up to 2× magnification under the macro mode. And it has a dispersion control capability that is similar to that of APO. Users are provided with excellent imaging quality is provided from infinity to macro, as well as stable and reliable support. With it, tiny objects can be captured, such as small insects, jewelry, etc.

⚠ *Read this operation manual carefully to familiarize yourself with its contents and ensure that you can operate the product properly. Keep the Instruction Manual in a safe place where it can easily be referenced whenever required. If you are still unable to solve the problem by reading the manual, please contact our after-sales service for further technical support.*

Main features

- 1、LAOWA MFT 50 mm T2.9 Macro 2. 1 Cine is different from traditional macro lenses. Based on the high-performance imaging of the M43 frame system, with this lens, high-resolution images can be taken from infinity to macro, and amazing 2× object magnification is achieved under the macro mode. With the the dispersion control that is similar to that of APO, there is no obvious dispersion even under 2× magnification. Higher magnification provides users with more creative space.

- 2、The lens adopts a miniaturized design: the size is only φ58 mm × 83 mm, and the weight is 289 g. It is used on a matching M43 frame body, and is compact in size and light for carrying.

- 3、The industrial design for cinema lenses is adopted, with the 0.8 mm standard modulus of gear for both the aperture and focusing handwheel, which are compatible with all kinds of cinema equipment gears.

- 4. There are 10 groups and 14 pieces of lens pieces inside, including 3 pieces of anomalous dispersion glass structures, which bring about high-quality images. There is a mechanical structure fully made of metal materials on the outside to ensure the durability of the lens for long-term use.

Matters needing attention

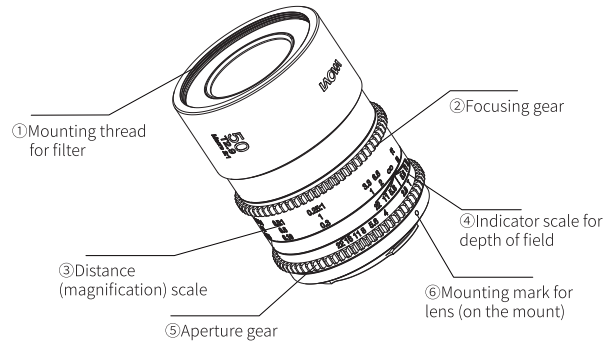
⚠ Safety Precautions

- Do not disassemble, alter or modify the lens by yourself. When the lens is damaged due to external forces, do not touch the exposed part or the edge of the place of damage.
- Do not place the lens under direct sunlight, in a locked vehicle, or at other high-temperature places, or otherwise excessively high temperature will cause the lens and other parts to stretch and deform.
- When not using the lens, put the front lens cover the lens or place the lens at a place where there is no direct sunlight. The light reflected by the convex lens may collect on nearby objects and cause a fire.
- When shooting against the light, do not place the sun at the center of the frame, and sufficiently avoid the avoid from the angle of picture, or otherwise the sunlight will collect inside the camera and cause fire or burns to the eye.
- When shooting with the camera's built-in flash lamp, since the lens itself will block the light and result in vignetting, it is recommended that you use an external flash lamp for shooting.

Precautions for long-term use and maintenance

- Avoid touching the surface of the lens. Use special lens cloth or air blowing to remove dust on the surface of the lens. When the lens is not in use, put the cover it.
- When cleaning the lens with lens paper or lens cloth, wipe the dirt and fingerprints on the lens from the middle to the outside in a spiral manner.
- When the lens is suddenly transferred from a cold environment to a warm environment, water mist will be condensed on external and internal pieces of the lens, so moisture protection measures should be taken when the lens is being transferred.

Nomenclature



Lens installation

Remove the rear lens cap. Align the Mounting Mark ⑥ on the lens mount with the corresponding mark on the seat, then insert the lens into the seat on camera body, and turn the lens in the mounting direction of the purchased mount till the lens is locked with a click. Please do not use excessive force during installation to avoid damage to the mount.

Lens removal

After turning off the camera, press and hold the lens release button on the camera, turn the lens in the direction opposite to the mounting direction of the purchased mount, and then pull the lens out of the seat.
After mounting the lens, try turning the lens to confirm whether it has been fixed on the camera.

Focusing

This lens is a fully-manual-focus lens. When focus is achieved, slowly turn the Focusing Gear ② till focus is achieved.
Do not turn the focusing gear too fast or too hard to avoid damaging the focusing ring component with excessive force.
The Distance Scale ③ and Scale for Depth of Field ④ on the lens are for guidance purposes. The actual focus and the depth of field may be slightly different from the scale marking.
If very precise focus is needed, please achieve focus using the maximum aperture with the camera position fixed, and then turn to the required aperture value after the focus is achieved.
For the convenience of focusing, please turn on the peaking focus function in the camera (depending on the camera function used).

How to use the aperture

The Aperture Gear ⑤ is adjusted on the lens. Turn the aperture ring to select the corresponding aperture according to the shooting environment and the required depth of field.

As this lens is with no CPU data, it is temporarily impossible for the lens to record aperture parameters.

Macrophotography mode

The maximum magnification is 2:1 times. The minimum focusing distance is 13.5 cm. And the minimum distance from the object shot to the first glass piece of the lens is about 8 cm.

Focusing method I

Focusing after the magnification is determined in advance.

① Determine the magnification in advance, then turn the focusing ring to the desired magnification scale mark.

② Observe through the viewfinder or by turning on the Live View function, and pan the camera back and forth to roughly focus till a suitable focal length is determined.

③ Turn the focus ringing to accurately focus on the object.

Focusing method II

Frame the scene to be shot first; while observing through the viewfinder or by turning on the Live View function, turn the focusing ring; after the scene to be shot is framed, proceed to Steps ② and ③ of Method I.

When shooting with high magnification, the working distance from the lens is very short and it is easy for the lens to touch the object. Please be careful when shooting.

Magnification refers to the ratio between the size of the image recorded on the sensor or film and the actual size of the object shot.

Table of depth of field (missing)

	infinity		0.25		0.5	
FNo.	back	front	back	front	back	front
2.8	INF	54888.6	292.1	290.13	191.1	190.51
4	INF	39824.86	292.21	290.03	191.19	190.42
5.6	INF	28193.04	292.66	289.59	191.35	190.26
8	INF	19968.1	293.31	288.96	191.58	190.04
11	INF	14152.19	294.24	288.09	191.91	189.73
16	INF	10039.72	295.57	286.86	192.37	189.3

	0.75		1		1.25	
FNo.	back	front	back	front	back	front
2.8	159.9	159.6	146.12	145.92	139.27	139.13
4	159.92	159.58	146.15	145.88	139.29	139.11
5.6	159.99	159.51	146.21	145.83	139.32	139.08
8	160.09	159.41	146.29	145.75	139.38	139.03
11	160.24	159.27	146.41	145.64	139.45	138.96
16	160.44	159.08	146.57	145.48	139.55	138.86

	1.5		1.75		2	
FNo.	back	front	back	front	back	front
2.8	135.89	135.79	134.49	134.4	134.27	134.2
4	135.9	135.78	134.49	134.4	134.28	134.18
5.6	135.93	135.75	134.51	134.38	134.31	134.16
8	135.96	135.72	134.53	134.36	134.34	134.13
11	136.01	135.67	134.57	134.32	134.38	134.09
16	136.08	135.6	134.63	134.27	134.53	133.95

Specifications

LAOWA MFT 50 mm T2.9 Macro 2. 1 Cine	
Format	M4/3
Focal distance	50mm
Aperture range	2.9-22
Angle of field of view	24°
Lens structure	10 groups and 14 pieces (3 ED lens pieces)
Aperture Blades	7 pieces
Min. Shooting Distance	13.5cm
Max. Magnification	2 times
Focusing	Manual (MF)
Filter Thread	Φ49mm
Dimensions	About ϕ58 mm × 83 mm
Weight	About 289 g (including front and rear covers)
Mounts	M4/3