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LAOWA CF 10mm F4.0 Cookie

使用手册
Instruction Manual

LAOWA 老蛙

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Please note we reserve the right to change our product's
design and specifications at any time without notice and
to the final interpretation of the *Instruction Manual*.



Preface

Thank you sincerely for purchasing our LAOWA CF 10mm F4.0 Cookie wide-angle lens. It is the APS-C mirrorless ultra-wide-angle lens that has miniaturized design, a light weight and a small volume.



⚠ *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. It is the pancake-style lens, with the dimensions of only $\phi 59.8\text{mm} \times 25\text{mm}$ and the weight of 130g. It can be used in combination with the APS-C camera. It has a small volume, and thus can be carried around easily.
- 2. It provides a 10mm focal length and the angle of view of 109.3°. Thanks to its optical property of “zero” distortion, all the horizontal and vertical lines in the images are in right positions. With the design of 5 diaphragm blades, you can use a small aperture to obtain the pictures with 10-ray starburst effects.
- 3. There are 12 lens elements in 8 groups, including 4 ED glass lenses and 2 aspherical lenses internally, which provides high-quality imaging. The mechanical structures made of full-metal materials are provided externally, guaranteeing the durability for the lens’ long-term use.

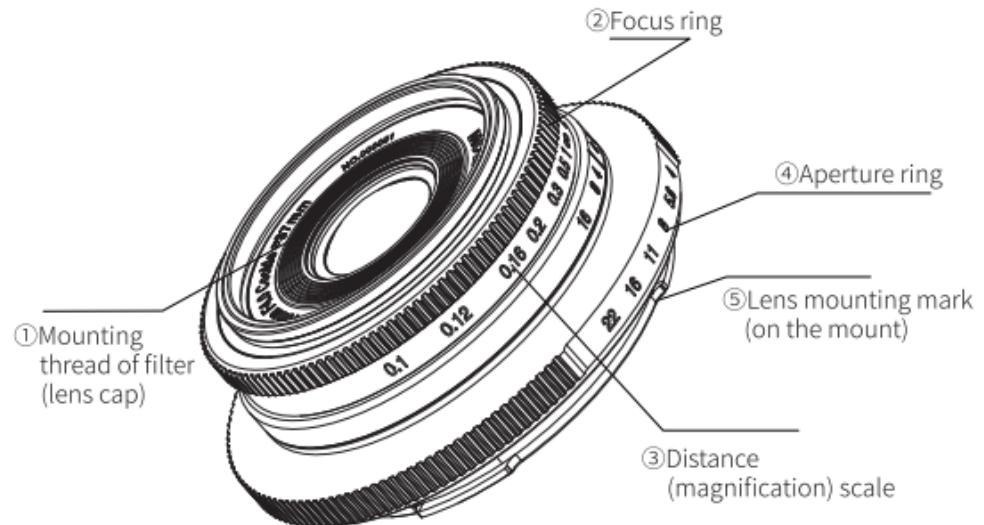
Precautions

■ Safety Precautions

- Do not disassembly, modify or refit the lens by yourself. When the product is damaged due to external causes, any exposed part or broken edge must not be touched.
- Do not place the lens in direct sunlight, in closed cars or at other high-temperature places; otherwise, excessively high temperature will cause the expansion/shrinkage deformation of lens elements and other parts.
- When the lens is not in use, please mount the front lens cap, or place the lens at the place under no sunlight. The light rays reflected by the convex lens may be concentrated on nearby objects, and thus cause a fire.
- For backlight photographing, keep the sun well out of the viewing frame; otherwise, sunlight focused into the camera will cause a fire, or scorch eyes.
- When the built-in flash is used for photographing, the lens itself will keep out light and cause vignetting. Therefore, external flashes are recommended.

■ long-term use and maintenance

- Do not touch the lens surface. Use special lens cloth, or blow air, to remove the dust from the lens surface. When the lens is not in use, mount the lens cap.
- When lens cleaning paper or lens cloth is used for cleaning, the dirt and fingerprints on the lens shall be wiped off in a spiral pattern, starting from the center of the lens and moving to the rim.
- When the lens is transferred suddenly from cold environment to warm environment, water fog will be caused on both the external and internal elements of the lens. For this reason, protective measures against moisture shall be taken during the transferring.



■ Mounting lens

Take off the rear lens cap. Align the mounting mark (⑤) on the lens mount with the corresponding mark on the camera mount ring; then, insert the lens to the mount ring, rotate the lens in the mounting direction of the purchased mount, and stop rotating until a click sound is heard (meaning the lens is locked). Please do not apply excess force for mounting; otherwise, the mount may be damaged.

■ Detaching lens

Power off the camera; then, press and hold the lens release button, rotate the lens in the direction opposition to the mounting direction of the purchased mount, and draw out the lens from the mount ring.

After lens mounting, please try to rotate the lens to ensure it is fixed on the camera.

■ Using aperture

Adjust the aperture on the lens, and rotate the aperture ring to select the aperture corresponding to the photographing environment and the required depth of field.
As no CPU data of this lens are available, its aperture parameters cannot be recorded.

Focusing

It is the manual focus lens. Rotate the focus ring (②) slowly until the image is in focus.

Do not rotate the focus ring with excess force or too quickly; otherwise, excess force may cause damage to the parts of the focus ring.

The distance scale (③) and depth-of-field scale on the lens are provided for instruction. The actual focal point and depth of field may be different from these marked scales.

For greatly accurate focusing, please use the maximum aperture when fix the camera well, and rotate the lens to obtain the required aperture after focusing.

For easier focusing, please enable the function of focus peaking in the camera (depending on the functions of the adopted camera).

Specifications

LAOWA CF 10mm F4.0 Cookie	
Focal length	10mm
Maximum aperture	F4.0
Minimum aperture	F22
Angle of view	109.3°
Lens structure	12 elements in 8 groups (2 high-refraction elements, 4 ED elements and 2 aspherical elements)
Diaphragm blades	5
Maximum magnification	0.15
Shortest shooting distance (object-image distance)	10
In-focus driving mode	Manual (MF)
Diameter of filter	Φ37mm
Lens size	About φ59.8mm*25mm
Weight	About 130g (with no front/rear caps)
Mount	BLACK:E/X/RF/Z/L SILVER:E/X/Z

