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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*.



前言

真诚地感谢您选购 LAOWA CF 10mm F4.0 Cookie广角镜头。此镜头是无反aps-c画幅系统超广角镜头,采用迷你化设计,轻便小巧。



为了操作上的安全,使用本产品前请务必详细阅读使用手册与注意事项,并将手册放在需要时容易取得的地方。如遇到不能解决的问题请通过售后电话获取技术支持。

主要特色

- 1、镜头采用饼干头风格化设计,大小仅有 $\phi 59.8\text{mm} \times 25\text{mm}$,重量130g,搭配在aps-c画幅机身上使用,体积小巧,轻便携带。
- 2、10mm焦段,视场角 109.3° ,“零”畸变的光学特性,画面中的线条横平竖直。5片光阑叶片设计,可以小光圈情况下轻松拍摄出十针耀眼星芒。
- 3、内部有8组12片镜片,包含4枚异常分散玻璃和2枚非球面镜片的结构带来的高素质成像。外有全金属材料制成的机械结构,保障了镜头长期使用的耐用性。

注意事项

△ 安全注意事项

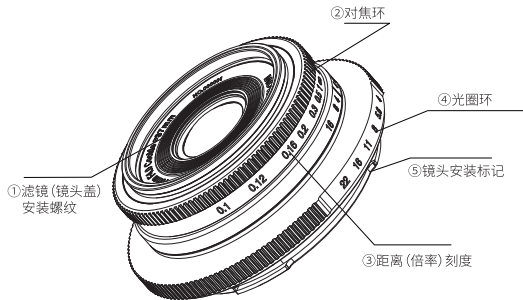
- 切勿自行拆解、修改或改装。当产品由于外力原因破损,切勿触碰外露部分或破损边缘处。
- 切勿放置于直射阳光下、封闭车辆中或其余高温处,否则过高的温度会使镜片和其他部件产生伸缩变形。
- 不使用镜头时,请将镜头前盖盖上或置于没有阳光照射处。凸透镜反射出的光线可能会聚集在附近物体上,导致发生火灾。
- 在逆光拍摄时,切勿将太阳置于画面中心,应该使太阳充分偏离画角,否则阳光会在相机内部聚集并导致火灾或灼伤眼睛。
- 在使用相机内置闪光灯拍摄时,由于镜头本身会遮挡光线而产生渐晕,因此建议您使用外设闪光灯拍摄。

注意事项

长期使用保养注意事项

- 避免触摸镜头表面,应用专用镜头布或气吹去除镜头表面的尘埃,不使用镜头时,应将镜头盖盖上。
- 使用镜头纸或镜头布清洁时,以螺旋的方式从中间向外擦拭镜头上的污垢以及指印。
- 镜头从寒冷的环境突然转移至温暖的环境时,镜头的外部以及内部镜片将会凝结水雾,所以在转移时应采取防潮保护措施。

各部件名称



■ 镜头安装

取下镜头后盖。将镜头卡口上的安装标记⑤对准相机座圈上的对应标记，随后将镜头插入机身座圈，根据所购买卡口的安装方向旋转镜头，直至咔嚓声锁紧镜头。安装时请不要用力过猛，以免导致卡口损伤。

■ 镜头拆卸

关机后按住相机上的镜头释放按钮，依照所购买卡口的安装方向反向旋转镜头，随后将镜头从座圈中拔出。

装上镜头后，请尝试旋转镜头确认是否已将其固定在相机上。

■ 对焦

- 此款镜头是全手动对焦镜头，合焦时，缓慢旋转对焦环②，直至合焦。

不要过猛过快地旋转对焦环，避免用力过度损坏对焦环部件。

镜头上的距离刻度③与景深刻度是出于指导目的。实际焦点与景深可能同刻度标记稍有不同。

如需要非常精确的对焦，请在固定好相机位置的情况下使用最大光圈对焦，对焦完成后再旋至所需要的光圈值。

为了对焦的方便性，请开启相机内的峰值对焦功能(视所使用相机功能而定)

■ 光圈使用

- 光圈在镜身上调节，根据拍摄环境和与所需要的景深，转动光圈环来选择对应的光圈。

由于此镜头无CPU数据，无法记录光圈参数。

规格表

LAOWA CF 10mm F4.0 Cookie	
焦点距离	10mm
最大光圈	F4.0
最小光圈	F22
视场角	109.3°
镜头结构	8组12枚(高折射镜片2枚,异常分散镜片4枚,非球面2枚)
光阑叶片	5片
最近摄影距离(物像距离)	10cm
最大放大倍率	0.15 倍
合焦驱动方式	手动(MF)
滤镜尺寸	Φ37mm
镜头尺寸	约φ59.8mm*25mm
重量	约130g(不含前后盖)
卡口	黑色版本:E口/X口/RF口/Z口/L口 银色版本:E口/X口/Z口





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

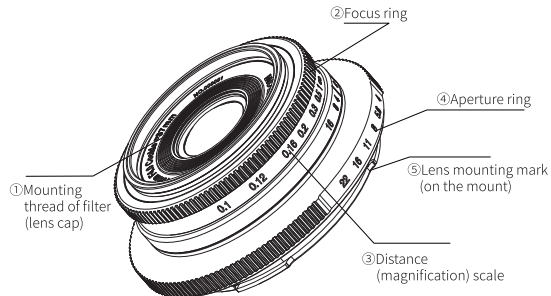
- Do not disassembly, modify or refit the lens by yourself. When the product is damaged due to external causes, any exposed part or broken edge must not be touched.
- Do not place the lens in direct sunlight, in closed cars or at other high-temperature places; otherwise, excessively high temperature 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.

Precautions

■ 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.

Nomenclature



Instructions

■ Mounting lens

Take off the rear lens cap. Align the mounting mark (㊟) 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

