## LAOWA MFT 6mm F2.0 C&D -Dreamer

使用手册 Instruction Manual





微信公众账号 FACEBOOK

# 安徽长庚光学科技有限公司

www.laowalens.com

服务热线:400-066-1316 Email: sales@laowalens.com 电话Tel:(+86) 551-69107990

地址: 合肥市庐阳区天水路与太和路交口庐阳中科大校友创新园5号楼 Add: Building 5, USTC Alumni Innovation Park, Crossing of Tianshui and Taihe Road, Luyang District, Hefei City, Anhui Province, China

#### M 全 挂

本公司保留更改产品设计与规格的权利,届时恕不另行通知; 本公司保留对此《使用说明》的最终解释权。

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*.

#### 前宣



真诚地感谢您选购LAOWA MFT 6mm F2.0 C&D - Dreamer广角镜头。此镜头是M43画 幅系统超广角镜头,采用迷你化设计, 轻便 小巧, 搭配电子光圈, 通过机身调整光圈参 数更加便捷。



△ 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、镜头采取迷你化设计,大小仅有φ61mm\*53mm,重量180g,搭配在M43画幅机身上使用,体积小巧,轻便携带。
- 2、镜头采用电子光圈设计,可通过机身调节光圈参数并记录拍摄的 光圈值和镜头型号数据信息,搭配大疆X5云台使用,可通过遥控直 接调整光圈数值,提升了使用效率。
- 3、内部有9组13片镜片,包含3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

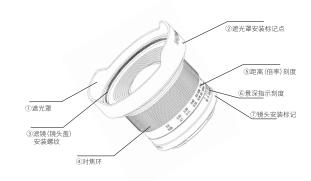
- 切勿自行拆解、修改或改装。当产品由于外力原因破损,切勿触碰外 露部分或破损边缘处。
- 切勿放置于直射阳光下、封闭车辆中或其余高温处,否则过高的温度会使镜片和其他部件产生伸缩变形。
- 不使用镜头时,请将镜头前盖盖上或置于没有阳光照射处。凸透镜反射出的光线可能会聚集在附近物体上,导致发生火灾。
- 在逆光拍摄时,切勿将太阳置于画面中心,应该使太阳充分偏离画角,否则阳光会在相机内部聚集并导致火灾或灼伤眼睛。
- 在使用相机内置闪光灯拍摄时,由于镜头本身会遮挡光线而产生渐晕,因此建议您使用外设闪光灯拍摄。

### 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



### 使用说明

# ■ 镜头安装

取下镜头后盖。將镜头卡口上的安装标记⑦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。

## ■ 遮光罩装卸

将遮光罩上的安装标记②对准镜头上的遮光罩安装点,然后顺时针旋转遮光罩,直至锁紧末端为止。

如要拆卸遮光罩,按相反方向旋出即可。

安装遮光罩可减少强光并保护镣头前部元件。 安装某些滤光镜后, 悠可能无法再使用遮光罩。 若不使用遮光罩时, 可将遮光罩反向安装于镜头上。 利用闪光灯拍摄时, 滤光罩可能遮挡住光线而造成影像上的渐量现象。所以在使

用相机闪光灯或使用高度不够的外置闪光灯时,请拆卸遮光罩后再进行拍摄。

### ■対焦

此款镜头是全手动对焦镜头,合焦时,缓慢旋转对焦环④,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⑤与景深刻度⑥是出于指导目的。实际焦点与最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)。

# ■ 光圏使用

光圈在机身上调节,根据拍摄环境和与所需要的景深,转动机身光圈调节波轮来选择对应的光圈。 由于此镜头有CPU数据,可以记录光圈参数。

### ■ 对焦方法一

放大倍率预先确定后再进行对焦

- ① 预先确定放大倍率,随后转动对焦环至所需的放大倍率刻度。
- ② 通过取景器或开启Live View (实时取景) 功能观察画面, 并前后平移相机进行粗略对焦直至确定合适的焦距。
- ③ 转动对焦环对物体进行精确对焦。

## ■ 对焦方法二

先构定拍摄画面 在通过取景器或开启Live View(实时取景)功能观察 画面的同时,转动对焦环,构定拍摄画面后,进行方法一的②、③步骤。 在进行高放大倍率拍摄时,镜头的工作距离非常短,容易碰到拍摄物 体,请小心拍摄。

放大倍率是指记录在传感器或胶片上的图像尺寸大小与拍摄物体的实际尺寸大小之间的比例关系。

### 规格表

LAOWA MFT 6mm F2.0 C&D -Dreamer	
画幅	M43
焦点距离	6.0mm
光圈范围	F2.0-16
视场角	121.9°
镜头结构	9组13枚(2枚非球面镜片)
光阑叶片	5片(自动光圈)
最近摄影距离(物像距离)	9cm
最大放大倍率	0.18倍
合焦驱动方式	手动(MF)
滤镜尺寸	Ф58mm
镜头尺寸	约φ61mm*53mm
重量	约180g (不含遮光罩、前后盖)
卡口	M43

#### Preface



Thank you very much for purchasing LAOWA MFT 6mm F2.0 C&D -Dreamer wide angle lens. This is an ultra wide Angle lens for M43 frame system. It is light and compact adopting mini design. With electronic aperture, it is more convenient to adjust aperture values through the camera body.



Δ

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.

 $\Pi$ 

## Features

- 1.This lens adopts mini design with the size of φ61mm\*53mm and the weight of 180g. It is compact and portable, which can be used on M43 frame camera body.
- 2.The lens adopts the electronic aperture design, which can adjust the
  aperture values through the camera body and record the aperture value
  and lens model data information. When used with DJI X5 head holder, the
  aperture value can be directly adjusted by remote control, which improves
  the use efficiency.
- 3.There are 13 elements in 9 groups inside, including 3 extra-low dispersion elements and 2 aspherical elements, which bring high quality imaging. The mechanical structure made of all metal materials ensures the durability of the lens for long-term use.

### Precautions

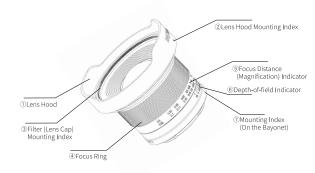
# ■ △ Safety Precautions

- Do not disassemble, modify, or modify the product by yourself. When the
  product is damaged due to external force, do not touch the exposed part or
  the edge along the damaged part.
- Do not place the product in direct sunlight, in a closed vehicle, or other places with high temperature, or otherwise deformation in the form of expansion or contraction of the lens and other parts will occur under an excessive temperature.
- When the lens is not in use, please cover it with the front lens cap or place it at a place out of direct sunlight. Light reflected from a convex lens can collect on nearby objects, and cause a fire.
- When shooting in backlighting, do not place the sun in the center of the frame, and the sun shall be well off the angle of picture, or otherwise the sunlight will gather inside the camera and cause a fire or burn your eyes.
- When shooting is done with the built-in flash, vignetting will occur since the lens itself blocks the light, so shooting with an external flash is recommended.

## 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



#### Instructions

### To attach the Lens

Remove the rear lens cap. Align the mounting index ① on the lens bayonet with the mounting index on the camera, and place the lens on the camera mount, then rotate the lens according to the proper direction of the mount type until it locks. Do not use excessive force during installation to avoid damage to the bayonet.

After attaching the lens, please try to rotate the lens to make sure it mounted onto the camera properly.

### To remove 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.

#### Instructions

# Attaching/detaching lens hood

Align the mounting index on the lens hood  $\ @$  and the lens. Turn the hood clockwise until it locks.

For detaching lens hood, rotate it counterclockwise.

It is recommended that you use a lens hood to reduce strong light and protect the front element.  $% \label{eq:control}$ 

Lens hood may be unavailable when using certain filters.

When storing, turn over the lens hood and place it onto the lens hackward

When shooting with a flash, the lens hood may block light and cause vignetting. So when shooting with the camera's built-in flash or with the external flash unit that is not high enough, please remove the hood before shooting.

## Focusing

This is a fully manual lens. Rotate the focusing ring  ${\bf @}$  slowly to get focus.

Turn the focus ring slowly and gently to prevent the focus mechanism from damage.

The distance scale ⑤ and depth of field scale ⑥ 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.

Turn on the focus peaking on the camera to help focusing. (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 environment and the required depth of field, turn the aperture adjustment wave wheel on the camera body to select the corresponding aperture. Since this lens has CPU data, the aperture values can 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.

3 Rotate 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.

### Specifications

LAOWA MFT 6mm F2.0 C&D -Dreamer	
Format	M43
Focal Distance	6.0mm
Aperture Range	F2.0-16
Angle of View	121.9°
Lens Structure	13 elements/9 groups (Aspherical Lens*2)
Aperture Blades	5 (automatic aperture)
Min. Shooting Distance (Object Image Distance)	9cm
Max. Magnification	0.18X
Focusing	MF
Filter Thread	Ф58mm
Dimensions	About Φ61mm*53mm
Weight	About 180g (without lens hood and both front cap and rear cap)
Mounts	M43