FF S 20mm F4.0 C-Dreamer

使用手册
Instruction Manual

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LAOWA 老蛙

LAOWA 老蛙

前言

真诚的感谢您选购FF S 20mm F4.0 C-Dreamer 镜头!为了让您充分理解本产品的使用方法和注意事项，请您在使用前仔细阅读本说明书。

⚠ *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、该镜头是针对全画幅单反相机设计的超广角移轴镜头，非移轴情况下，最大视场角94.4°，在移轴情况下最大视场角可以达到117°，可覆盖φ65mm像场直径。镜头采用特殊光学设计，保证光学素质的同时，镜头畸变控制接近“零”，是目前市场上难得的全画幅20mm焦段移轴镜头，更大的拓展了使用场景，增加了摄影师对于商业建筑摄影，镜头方面的选择。
- 2、移动量±11mm
  在拍摄建筑的过程中，很多时候由于环境的限制，拍摄机位离建筑较近，若使用其他镜头甚至不能拍摄建筑全貌。此时，20mm的视角更能轻松的在有效空间内完成拍摄任务。借助±11mm的镜头偏移，让建筑物不会因为拍摄距离近、俯仰角度大或镜头焦距广而产生的近大远小的透视变化，让拍摄变得更为严谨。
- 3、镜头结构
  此镜头的机械机构全部采用金属部件，确保了镜头的组装精度和耐用性，镜头具备±11mm移轴机构，同时具有360°旋转机构，方便摄影师在不同场景下拍摄。
  镜头光学结构11组16片，采用了2片非球面镜片和3片ED镜片，保证镜头锐度，又最大限度的降低了色散和畸变，同事提高了边缘画质。
- 4、遮光罩为特殊设计，专为20mm移轴镜头使用，按照遮光罩安装点正确安装遮光罩后，将锁止螺母拧紧，固定好遮光罩，莲花遮光罩可进行360°旋转，在极限移轴的时候可以改变遮光罩方向，避免像场遮挡，同时，在面对逆光或者点状光源时，通过改变莲花罩的角度遮挡光源，避免鬼影和眩光的产生。

注意事项

⚠ 安全注意事项

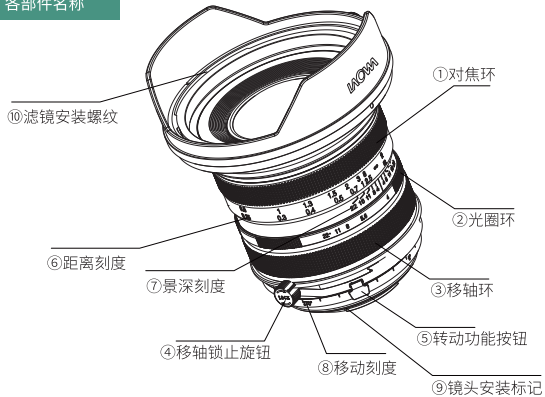
- 切勿自行拆解、修改或改装。当产品由于外力原因破损，切勿触碰外露部分或破损边缘处。
- 切勿放置于直射阳光下、封闭车辆中或其余高温处，否则过高的温度会使镜片和其他部件产生伸缩变形。
- 不使用镜头时，请将镜头前盖盖上或置于没有阳光照射处。凸透镜反射出的光线可能会聚集在附近物体上，导致发生火灾。
- 在逆光拍摄时，切勿将太阳置于画面中心，应该使太阳充分偏离画角，否则阳光会在相机内部聚集并导致火灾或灼伤眼睛。

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⑨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。

遮光罩使用方法

遮光罩为特殊设计，专为20mm移轴镜头使用，按照遮光罩安装点正确安装遮光罩后，将锁止螺母拧紧，固定好遮光罩，莲花遮光罩可进行360°旋转。

对焦

- 此款镜头是全手动对焦镜头，合焦时，缓慢旋转对焦环①，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⑥与景深刻度⑦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。

移动功能

- 移动功能的使用使得镜头的光轴平行得从影像平面的中心移开。
如果您用常规的镜头拍摄比如建筑，建筑物会因为透视逐渐变小。但是如果您使相机与建筑物平行并移动镜头，您可以纠正这个透视关系。

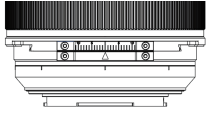
当您拍摄一个反光的景物时，您可以移动相机使它不在镜头内，然后用移动功能拍摄拍照，这使得您不改变拍摄构图就可以使相机不在反光面出现。

使用移动功能

1，拧松④移动锁止机构
2，转动③移轴环来调整移动量
3，在达到移轴需求量时，拧紧锁止机构

转动功能

转动功能使您能通过转动移动装置来改变移动的方向。当镜头装在相机上时，按住⑤转动锁定释放按钮，然后转动。
转动装置可以转动±180°。镜头在每15°位置设置限位，可锁止。



光圈使用

- 光圈在镜头上调节，根据拍摄环境和与所需要的景深，转动光圈环②　来选择对应的光圈。
  由于此镜头无CPU数据，所以暂时无法记录光圈参数。
  由于光圈为手动调节，无法较好的使用快门优先模式，但可以使用光圈优先模式(测光准确度视相机型号而定)。

注意：此款镜头在佳能单反机器上，开启曝光模拟模式，在非移轴和移轴情况下会出现测光不准的问题，在使用的过程中请关闭曝光模拟选项，使用A档或通过测光表来进行精准测光。

规格表

LAOWA FF S 20mm F4.0 C-Dreamer	
焦点距离	20mm
最大光圈	F4.0
覆盖像场	Φ65mm
视场角	94.4°（极限移轴117°）
镜头结构	11组16枚（2枚非球面3枚ED镜片）
滤镜尺寸	82mm
光阑叶片	14片（圆形）
最小光圈	F22
最大放大倍率	0.17
最近摄影距离（物像距离）	25cm
合焦驱动方式	手动（MF）
镜头尺寸	约φ95mm*91mm
重量	约747g
卡口	佳能EF RF、尼康F Z、索尼E、L 宾得PK

Preface

Thank you for choosing our FF S 20mm F4.0 C-Dreamer lenses! Please read this Instruction Manual carefully before using the lens to fully understand its application methods and precautions.

⚠ *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 an ultra-wide-angle shift lens designed for full-frame digital single-lens reflex (full-frame DSLR) cameras. Its maximum angle of view is 94.4° in non-shift condition, and up to 117° in shift condition, covering an image circle diameter of 65mm. Special optical design is adopted for the lens to guarantee its optical quality and control its distortion to be "close-to-zero". It is a full-frame shift lens with a 20mm focal length, which is rare in the market. Its usage scenario is expanded larger, with the addition of lens options in commercial architectural photography for photographers
- 2、Shift amount of ±11mm
  For architectural photography, cameras have to be placed near the buildings most of the time due to environmental restrictions, and the lenses other than our products cannot even capture the full view of the buildings. In such case, photography tasks can be fulfilled more easily within effective space with the angle of view of a 20mm lens. By means of the lens shift of ±11mm, the perspective phenomenon of buildings, which makes nearby objects look bigger and faraway objects look smaller, will not be caused by short shooting distances, large pitch angles or wide focal lengths, and thus photography will be more rigorous.
- 3、Lens structure
  The entire mechanical mechanism of the lens is made of metal components, which ensures the assembling accuracy and durability of the lens. The ±11mm shift mechanism and 360° rotation mechanism of the lens enable photographers to fulfill their shooting in different scenes.
  The lens has a structure of 16 elements in 11 groups. The 2 aspherical and 3 ED lens elements that are adopted can ensure lens sharpness, minimize dispersion and distortion, and enhance the quality of picture edges.
- 4、The hood is specially designed for the 20mm shift lens. After the hood is attached correctly at the hood mounting position, the lock nut shall be tightened to fix the hood. The lotus-shape hood can be rotated by 360°. During the shooting with the maximum shift, the hood direction can be changed to avoid the shading of the image circle. Moreover, for the photography under the condition of backlight or light spots, the angle of the lotus-shape hood can be changed to keep out light, avoiding ghosting and flare.

Precautions

⚠ Safety Precautions

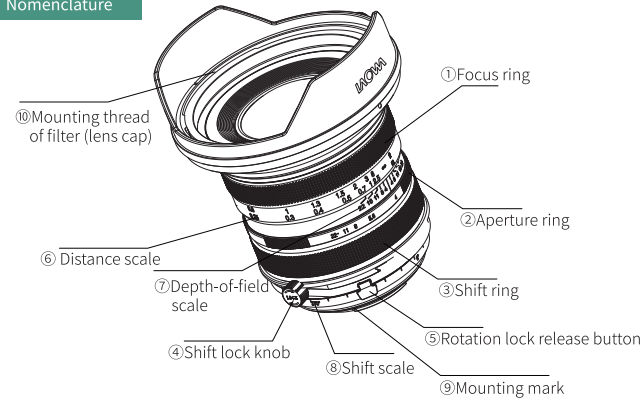
- Do not disassembly, modify or refit the lens by yourself. When the product is damaged due to external causes, any exposed part or broken edge must not be touched.
- Do not place the lens in direct sunlight, in closed cars or at other high-temperature places; otherwise, excessively high temperature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

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



Mounting lens

Take off the rear lens cap. Align the mounting mark (⑨) 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 a direction opposite 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.

Use method of hood

The hood is specially designed for the 20mm shift lens. After the hood is attached correctly at the hood mounting position, the lock nut shall be tightened to fix the hood. The lotus-shape hood can be rotated for 360°.

Focusing

It is the manual focus lens. Rotate the focus ring (①) 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 (⑥) and depth-of-field scale (⑦) on the lens are provided for instruction. The actual focal point and depth of field may be different from these marked scales.

Shift function

The implementation of the shift function can move the optical axis of the lens in parallel off the center of the imaging plane.
If you photograph a building or any other subject with a normal lens, the building or the subject will taper from the near to the distant due to perspective effects. However, you can correct such perspective relation by placing the camera parallel to the building and shifting the lens.

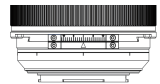
When you photograph a reflective subject, you can move the camera to a position where the camera does not appear in the viewing frame, and then utilize the shift function for shooting. In this way, you can keep the camera away from the shot without changing the shot composition.

Utilizing shift function

1. Loosen the shift lock mechanism (④).
2. Rotate the shift ring (③) to adjust the shift amount.
3. When the required shift amount is obtained, tighten the lock mechanism (see figures).

Rotation function

The rotation function enables you to change the shift direction by rotating the shift mechanism. With the lens mounted on the camera, press and hold the rotation lock release button (⑤), and then rotate the mechanism.
The rotation mechanism can be rotated by ±180°. A limiting position is provided at every 15° of the lens, where the lens can be locked.



Using aperture

Adjust the aperture on the lens, and rotate the aperture ring (②) to select the aperture corresponding to the photographing environment and the required depth of field.

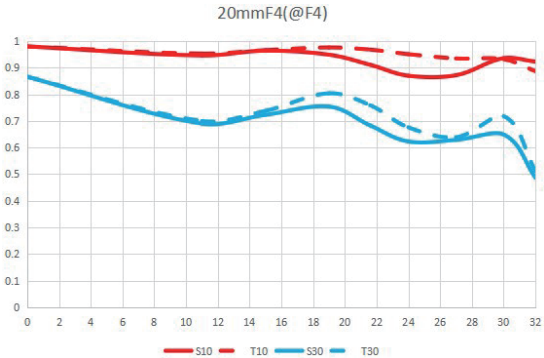
As no CPU data of this lens are available, its aperture parameters cannot be recorded temporarily.

Though the shutter-priority mode cannot be used smoothly due to manual aperture adjustment, the aperture-priority mode can be used (the metering accuracy depends on camera models).

Note: when the lens is used on a Canon DSLR camera, if the exposure simulation mode is enabled, metering will be possibly inaccurate under both non-shift and shift conditions; please cancel the option of exposure simulation during use, and conduct precise metering by selecting Mode A or using a light meter.

Specifications

LAOWA FF S 20mm F4.0 C-Dreamer	
Focal length	20mm
Maximum aperture	F4.0
Coverage of image circle	Φ65mm
Angle of view	94.4° (Maximum shift: 117°)
Lens structure	16 elements in 11 groups (2 aspherical elements and 3 ED elements)
Filter size	82mm
Diaphragm blades	14 (round)
Minimum aperture	F22
Maximum magnification	0.17
Shortest shooting distance (object-image distance)	25cm
In-focus driving mode	Manual (MF)
Lens size	About ϕ95mm * 91mm
Weight	About 747g
Mount	Canon EF and RF, Nikon F and Z, Sony E and L, Pentax PK


20mmF4(@F4)
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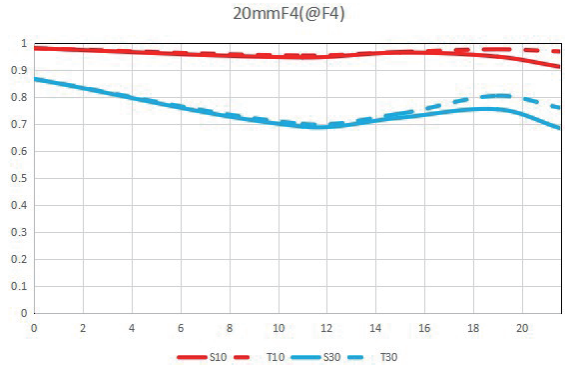
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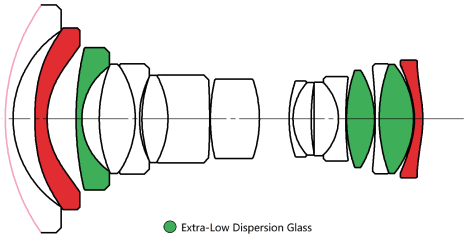
Extra-Low Dispersion Glass
Glass Aspherical
Frog Eye Coating(FEC)