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FF Ranger 75-180mm T2.9

使用手册

Instruction Manual

**LAOWA 老蛙**

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to the final interpretation of the *Instruction Manual*.



## 前言

真诚的感谢您选购FF Ranger 75-180mm T2.9全画幅电影镜头!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仔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、全画幅(覆盖43.2mm像场) T2.9恒定光圈变焦电影镜头, 拥有2.4倍变焦, 变焦范围为75mm至180mm焦距段。
- 2、完美齐焦  
合焦后, 在变焦过程中, 焦点位置会始终不变, 在电影拍摄时, 如需变焦, 跟焦员不需要重新对焦, 提升拍摄效率。
- 3、近似零呼吸效应效果  
区别于普通镜头, 此款镜头在合焦过程中, 不会出现明显的视角变化, 而让画面不稳定, 近似零呼吸效应的效果。
- 4、T2.9恒定大光圈  
T2.9大光圈设计, 较大的光圈设计, 在底照度的环境中, 可以保持画面的纯净度, 提升影像品质。

## 注意事项

### △ 安全注意事项

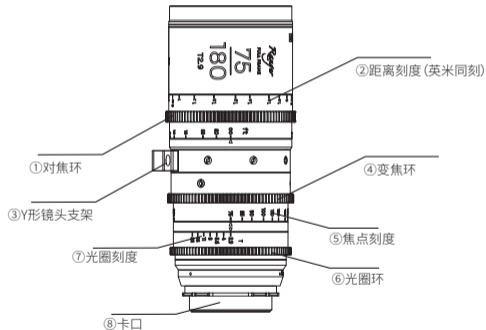
- 切勿自行拆解、修改或改装。当产品由于外力原因破损, 切勿触碰外露部分或破损边缘处。
- 切勿放置于直射阳光下、封闭车辆中或其余高温处, 否则过高的温度会使镜片和其他部件产生伸缩变形。
- 不使用镜头时, 请将镜头前盖盖上或置于没有阳光照射处。凸透镜反射出的光线可能会聚集在附近物体上, 导致发生火灾。
- 在逆光拍摄时, 切勿将太阳置于画面中心, 应该使太阳充分偏离画角, 否则阳光会在相机内部聚集并导致火灾或灼伤眼睛。

## 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



## 使用说明

### 镜头安装

取下镜头后盖。将镜头卡口⑧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。PL卡口需要卡口锁止环进行锁止。

### 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。PL卡口需要释放卡口锁止环，进行镜头拆卸。

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，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。

### 变焦

手动或者搭配跟焦器旋转变焦环，直至完成变焦。  
不要过猛过快地旋转变焦环，避免用力过度损坏变焦环。

### 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。

### 卡口切换方式

- 1、将镜头变焦环转动到180mm端
- 2、逆时针方向旋转卸下后组装饰圈。
- 3、使用附赠十字螺丝刀将卡口处6个螺丝全部卸下。
- 4、装上所需卡口（EF卡口），使用十字螺丝刀将卡口处6个螺丝全部拧紧。
- 5、顺时针方向旋转拧紧后组装饰圈。

## ■ 齐焦 (Parfocal) 调整方式

1. 将镜头焦距调到在180mm端。
2. 将对焦刻度拧到无限远, 对准无限远看是否清楚合焦, 如果清楚合焦, 齐焦无需调整。  
若刻度在无限远位置, 没有清楚对焦, 需要调整齐焦。
3. 手动逆时针方向卸下后组装饰圈。
4. 使用十字螺丝刀将卡口处6个螺丝全部卸下。
5. 焦距调整在180mm端, 加减垫片 (包装内附赠配套垫片), 安装卡口, 上机测试直到无限远 $\infty$ 合焦即可; 对焦手轮不动, 然后变焦至75mm端, 确认是否清晰对焦。若75焦段合焦位置的调焦手轮刻度小于180焦段合焦位置的调焦手轮刻度, 需要增加卡口垫片, 反之减少卡口垫片。当75焦段与180焦段合焦位置的调焦手轮刻度一致时, 齐焦调整完成。

规格表

FF Ranger 75-180mm T2.9	
画幅	全画幅
焦点距离	75-180mm
光圈范围	T2.9 -T22
视场角	32.2° - 13.7°
变焦倍率	2.4X
像场直径	Φ43.2mm
镜头结构	14组17枚
光阑叶片	11片
法兰距	PL=52mm EF=44mm
对焦行程	270°
光圈行程	42°
变焦行程	100°
对焦刻度	英尺同刻
最近对焦距离	0.89M / 2ft11in
最大放大倍率	0.217X
合焦驱动方式	手动 (MF)
跟焦齿距	0.8mm
前置滤镜尺寸	Φ77mm
镜头尺寸	约Φ80mm*189.5mm
重量	约1339 g
卡口	PL/EF/E/R/Z/L



## Preface

Thank you very much for purchasing FF Ranger 75-180mm T2.9 full-frame cinema lens! In order to fully understand the usage and precautions of this product, please read this manual carefully before use.



*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.*

## Features

- 1.This is a full-frame (covering 43.2mm image field) T2.9 constant aperture zoom cinema lens with 2.4X zoom ratio and 75mm to 180mm zoom range.
- 2.Perfect parfocalization  
After the focus, the focus position will always be the same in the zoom process. When shooting movies, the focus puller does not need to refocus if zoom is needed, which can improve shooting efficiency.
- 3.Approximate zero breathing effect  
Different from general lenses, this lens does not change the angle of view significantly in the process of focusing and therefore does not make the picture unstable. It has approximate zero breathing effect.
- 4.T2.9 constant fast aperture  
This lens adopts T2.9 fast aperture design. In the low illumination environment, using a fast aperture can maintain purity of the image and improve image quality.

## Precautions

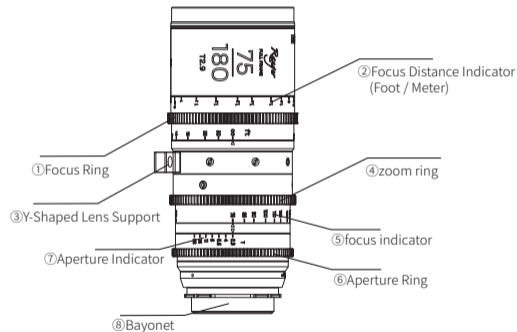
### ■ ⚠ Safety Precautions

- Do not disassemble, modify the lens by yourself. Do not touch the internal parts that become exposed as the result of external force.
- Do not leave the lens where it will be exposed to high temperatures, such as in direct sunlight and an enclosed vehicle. Excessive heat may deform the glass elements and other parts of the lens.
- Whether it is attached to the camera or not, do not leave the lens under the sun without the lens cap attached. This is to prevent the lens from concentrating the sun's rays, which could cause a fire.
- Do not place the sun in the frame center when shooting with backlight. Doing so might cause a fire or harm your eyes.

## ■ 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 ⑧ 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 installation method of the mount type until it is locked with a click. Do not use excessive force during installation to avoid damage to the bayonet. PL bayonet requires the bayonet locking ring for locking.

### ■ 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. PL bayonet requires releasing the bayonet locking ring for detaching.

After installing the lens, try rotating it to make sure it is fixed to the camera.

### ■ Focusing

This is a fully manual lens. Rotate the focus ring slowly to get focus.

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

### ■ Zooming

Rotate the zoom ring manually or with a follow focuser until zooming is completed.

Do not rotate the zoom ring too fast or too hard to avoid excessive damage to the zoom ring.

## ■ Setting the Aperture

Aperture is set through the aperture ring on the lens. According to the shooting situation and desired depth of field, rotate the aperture ring on the lens to the corresponding aperture.

Since the lens has no CPU data, the aperture value can not be recorded.

## ■ Bayonet Switching Method

1. Rotate the lens zoom ring to the 180mm end.
2. Turn counterclockwise to detach the rear decorative ring.
3. Remove all the 6 screws from the bayonet with the Phillips screwdriver included.
4. Attach the required bayonet (EF bayonet) and tighten all six screws at the bayonet with a Phillips screwdriver.
5. Turn clockwise to tighten the rear decorative ring.

## ■ Parfocalization Adjustment Method

1. Adjust the focal length of the lens to the 180mm end.
2. Turn the focus scale to infinity and aim at infinity to see if the lens is focusing clearly. If it is focusing clearly, parfocalization does not need to be adjusted. If the scale is at infinity and the lens is not focusing clearly, parfocalization adjustment is needed.
3. Manually detach the rear decorative ring in counterclockwise direction.
4. Remove all six screws from the bayonet using a Phillips screwdriver.
5. Adjust the focal length at the 180mm end. Then, add or remove the shims (with matching shims included in the package). Attach the bayonet on the camera and test the lens until it can focus at infinity. Keep the focus handwheel still, then zoom to the 75mm end to make sure the focus is clear. If the scale of the focus handwheel at the focus position of the 75 focal length is smaller than that at the focus position of the 180 focal length, bayonet shims need to be added. Otherwise, the bayonet shims should be reduced. Parfocalization adjustment is completed when the scales of the focus handwheel at the focal position of the 75 focal length and the 180 focal length are the same.

## Specifications

FF Ranger 75-180mm T2.9	
Format Compatibility	Full Frame
Focal Length	75-180mm
Aperture Range	T2.9-T22
Angle of View	32.2°- 13.7°
Zoom Ratio	2.4X
Image Circle Diameter	Φ43.2mm
Lens Structure	17 elements in 14 groups
Aperture Blades	11
Flange Distance	PL=52mm EF=44mm
Focus Throw	270°
Aperture Throw	42°
Zoom Throw	100°
Focus Indicator	Foot/Meter
Min. Focusing Distance	0.89M / 2ft11in
Max. Magnification	0.217X
Focus Mode	Manual (MF)
Follow Focus Pitch	0.8mm
Front Filter Thread	Φ77mm
Dimensions	About Φ80mm*189.5mm
Weight	About 1339 g (PL Mount)
Mounts	PL/EF/E/R/Z/L