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FF Ranger 28-75mm T2.9

使用手册

Instruction Manual

**LAOWA 老蛙**

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design and specifications at any time without notice and  
to the final interpretation of the *Instruction Manual*.



## Preface

Thank you very much for purchasing FF Ranger 28-75mm 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 2.7X zoom ratio and 28mm to 75mm 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

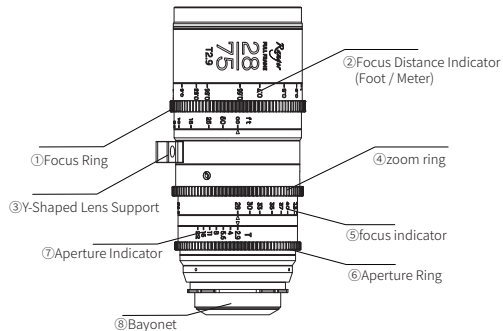
### ■ ⚠ Safety Precautions

- 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 index⑧ 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 75mm 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 75mm 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 75mm 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 28mm end to make sure the focus is clear. If the scale of the focus handwheel at the focus position of the 28 focal length is smaller than that at the focus position of the 75 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 28 focal length and the 75 focal length are the same.

## Specifications

FF Ranger 28-75mm T2.9	
Format Compatibility	Full Frame
Focal Length	28-75mm
Aperture Range	T2.9-T22
Angle of View	75.4°-32.2°
Zoom Ratio	2.7X
Image Circle Diameter	Φ43.2mm
Lens Structure	22 elements in 18 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	0.49M / 1ft7in
Max. Magnification	0.23X
Focus Mode	Manual (MF)
Follow Focus Pitch	0.8mm
Front Filter Thread	Φ77mm
Dimensions	About Φ80mm*179.3mm
Weight	About 1400 g (PL Mount)
Mounts	PL/EF/E/R/Z/L