



微信公众账号 FACEBOOK

安徽长庚光学科技有限公司

[www.laowalens.com](http://www.laowalens.com)

服务热线:400-066-1316

Email: [sales@laowalens.com](mailto: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

## LAOWA FF 24mm T14 2X **MACRO PERIPROBE**

使用手册  
Instruction Manual

**LAOWA** 老蛙

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*.



## Preface

Thank you for purchasing LAOWA FF 24mm T14 2X MACRO PERIPROBE Lens. This lens is a special macro lens designed for full-frame cameras. Periprobe lens features unusual shape and unique optical design, which offers you extraordinary shooting experiences, enables you to explore new avenues of photography, and captures incredible scenes from a truly unique angle which is inaccessible to common macro lenses.



 *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.*

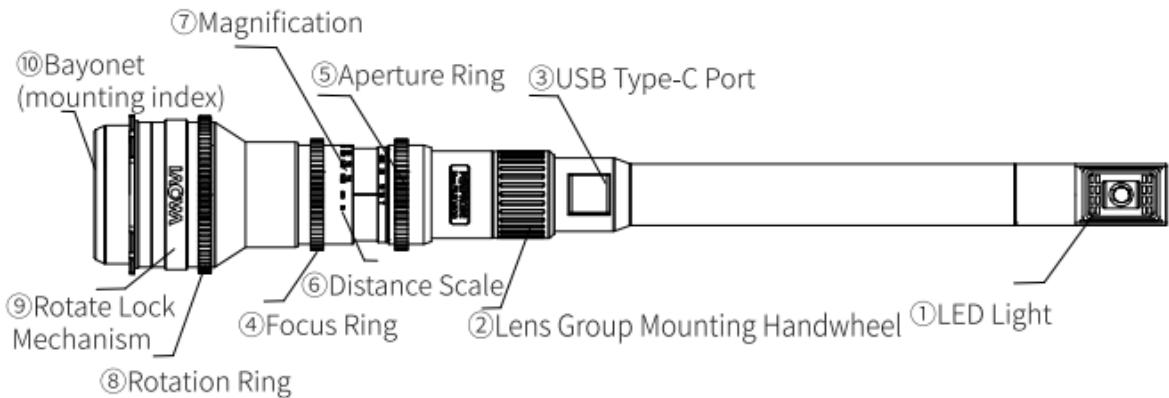
- This long and tubular lens barrel could be inserted into places that are difficult for some conventional macro lenses to shot, such as some animal caves, underwater, narrow crevices, etc.
- This lens has two detachable front lens groups. One for direct vision shooting and another one for 90° right angle shooting. You can assemble it by yourself. The rear part of the lens has a 360° rotation mechanism, with the combination of different shooting angles of the front lens group, you can switch the shooting perspective to meet the needs of the actual shooting environment.
- An LED light (powered via 5V voltage, type-c interface) is embedded in the lens tip to provide additional lighting for focus assistance.
- This lens rear part has a rotation design, in the case of the non-locked rotating state, the lens can be rotated 360°.
- The 21cm front barrel of the lens has a fully waterproof structure. The waterproof design implies that this lens could be used in underwater shooting.

#### ⚠ 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.
- The camera's built-in flash will cause barrel shadow if used with this lens. For best results, please only use an external flash unit.

## 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.
- 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.
- 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.



### ■ To attach the Lens

Remove the rear lens cap. Align the mounting index<sup>⑩</sup> 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.

### ■ Focusing

- This is a fully manual lens. Rotate the focusing ring<sup>④</sup> slowly to get focus.

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

The distance scale<sup>⑥</sup> 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.)

## Focusing Tips

### 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't be recorded.

#### Method 1 Magnification Priority

- ① Set the magnification first, and then turn the focus ring to the desired magnification mark on the lens.
- ② Check the frame by viewfinder or [Live View] on the camera and try to get focus by moving the camera back and forth until obtaining the proper focal length.
- ③ Rotate the focus ring to achieve precise focus.

#### Method 2 Framing Priority

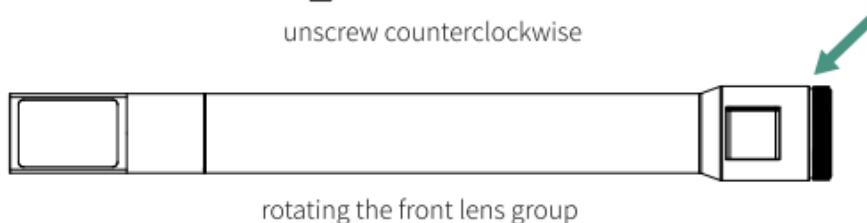
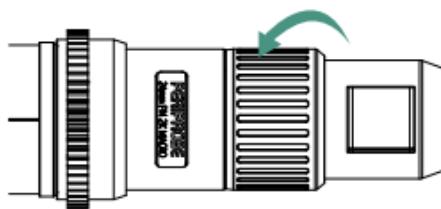
- Set the frame first. Turn the focus ring while you are checking the image through viewfinder or [Live View] on the camera, and then follow steps 2, 3 as the method 1 above.

For high magnification close-ups, because of the extremely short working distance, please be careful not to touch the subject.

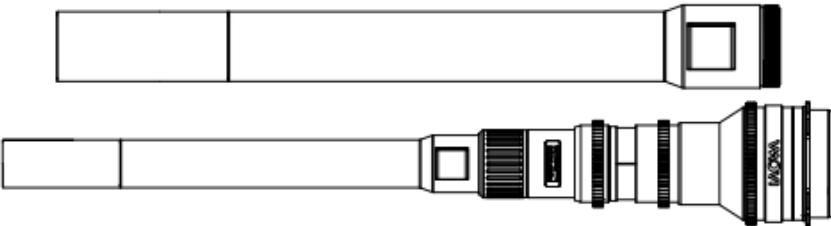
Magnification is the ratio between the size on the camera sensor of an object and its true size.

## ■ Detach the Front Lens Group

- ①Rotate the handwheel of the waterproof cylinder, loosen and remove the front lens group (front lens group and waterproof cylinder are integrated structure)



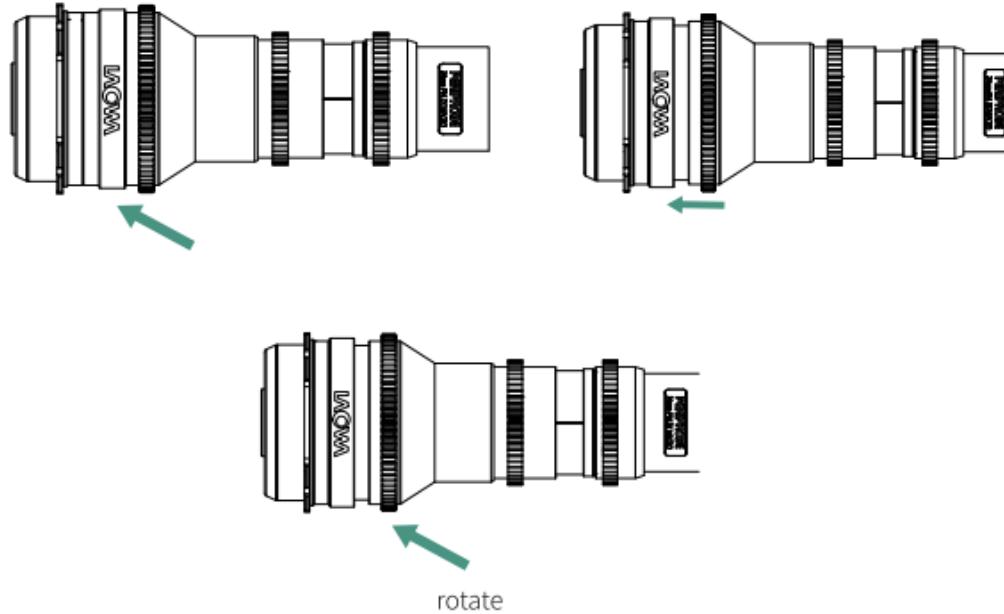
- ②Remove and replace the front lens group, screw in the mounting threads, and lock the waterproof barrel handwheel.



## ■ Rotate the Lens

- ①Push the lens Rotate Mechanism backward (as shown in the figure), then the lens can rotate, according to the shooting needs of the rotation of the shooting angle, and then push forward the locking mechanism, the rotation is complete.  
②If you need to shoot 360° perspective, you can push the rotating mechanism backward and keep it non-locked, and by rotating the handwheel, you can shoot stepless rotation.

## Specifications



FF 24mm T14 2X MACRO PERIPROBE	
Format Compatibility	Full Frame
Focal Length	24mm
Aperture Range	T14-T40
Angle of View	85°
Lens Structure	28 elements in 19 groups (HR*1, ED*2, Prism*1)
Aperture Blades	7
Min. Focusing Distance	2cm
Max. Magnification	2X
Focusing	MF
Dimensions	About $\phi 27\text{mm} \times 408\text{mm}$
Weight	About 770g
Replaceable straight perspective set	About 248g
Mounts	PL, EF, R, F, Z, E, L

NEW IDEA . NEW FUN.

