LAOWA 12mm T2.9

Zero-D Cine

使用手册
Instruction Manual

微信公众账号　FACEBOOK

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LAOWA 老蛙

Preface

Thank you for choosing LAOWA 12mm T2.9 Zero-D Cine Ultra Wide Angle Lens. In order to fully understand the usage and precautions of this product, please read the User's Manual carefully before using this product.

⚠ *In order to ensure the safety of operation, please read the User's Manual and Precautions carefully before using this product, and put the Manual in a place that is easily accessible when needed. If you encounter any problem that cannot be solved, please call after-sales for technical support.*

Main Features

- It adopts one large-diameter aspherical glass and one medium-diameter aspherical glass to completely correct the distortion. To ensure zero distortion performance from infinity to close distance and to solve the problem of excessive distortion caused by the distance change, main focusing group and assist focusing group are adopted to coordinate focusing.
- In order to solve the dispersion problem caused by the super wide-angle large aperture, this lens uses three pieces of ED(Extra-low Dispersion) glass to completely correct the dispersion aberration.
- All-metal construction ensures lens' high assembly precision and long-lasting durability.
- Multi-layer Low Reflective Coatings for every lens element to eliminate ghosting and flare.
- This lens combines high performance and miniaturization because of its large-diameter aspherical glass and multiple ED glass.

Precautions

⚠ Safety Precautions

- Don't look at the sun or intense light source directly through a camera with a lens attached in case it may cause damage to CCD/CMOS of the camera and one's eyesight.
- To prevent damage to CCD/CMOS of the camera and fire danger, please don't leave the lens under the sun without the lens cap attached.
- When the lens is taken from a cold environment into a warm one, condensation may develop on the surface and internal parts of the lens. Please keep it in a dry environment when it is not in use.
- Don't expose the lens to direct sunlight. Long-time sunlight exposure will deform the lens elements or other parts and cause some unexpected breakdowns.

Direction for use

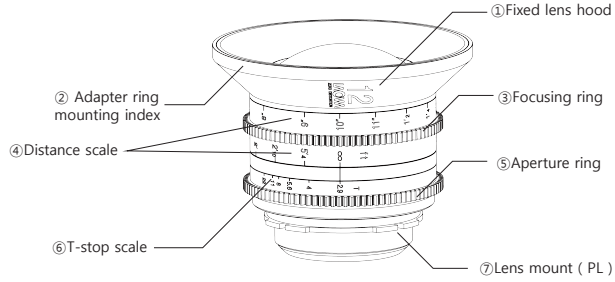
Mounting and detaching the lens

- Please select the corresponding mount for different cameras. For the installation method, please refer to the usage instruction of each camera.

Focus

- This lens is a full manual focus lens. When focusing, slowly rotate the focus ring until it is in focus. To avoid excessive damage to the focus ring, please do not over-boom the focus ring too quickly.

Nomenclature

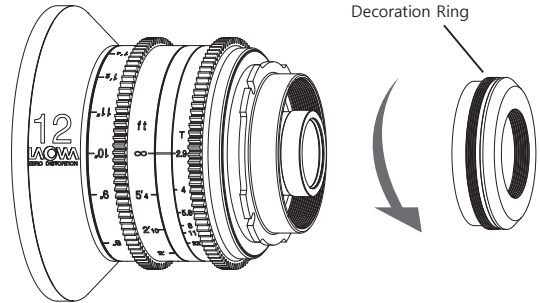


①Fixed lens hood
② Adapter ring mounting index
③Focusing ring
④Distance scale
⑤Aperture ring
⑥T-stop scale
⑦Lens mount (PL)

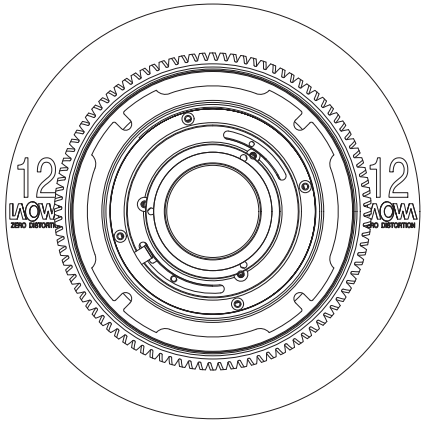
Shims Mounting

- Place the lens on a flat surface with the rear mount facing up and then rotate the black decoration ring anti-clockwise to detach it. Four inner mounting screws will now be seen and use a screwdriver to remove the four screws on the mount. Do not put the lens upside down after detaching the bayonet since the aperture ring and original shims may fall off. After detaching the bayonet mount, add or remove shims according to your own need. When it is completed, put back the bayonet mount and tighten the four mounting screws. Attach and rotate the decoration ring clockwise to complete the adjustment.

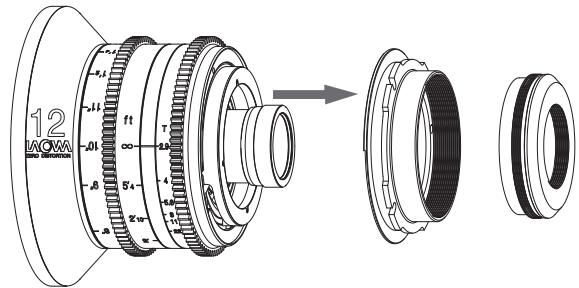
Shims Mounting Method



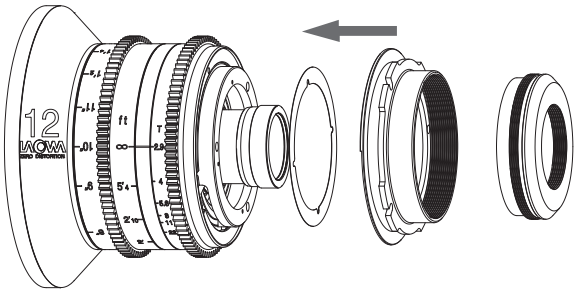
Shims Mounting Method



Shims Mounting Method



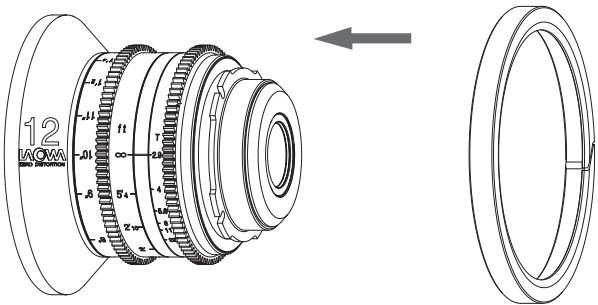
Shims Mounting Method



Adjusting Method

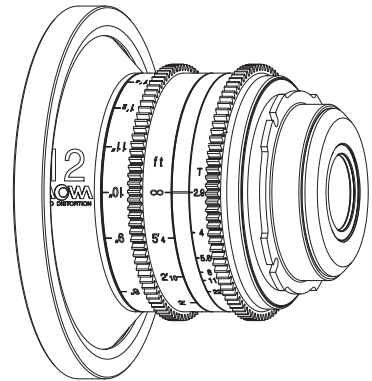
- Due to the difference in the flange distance of the PL mount cameras produced by different manufacturers, the flange focal distance of our lens can be adjusted by removing or adding shims. Please follow below instructions to select the proper shims for your camera. Mount the lens onto the camera. Try to gauge focus at an object placed at a distance away from you (Say 5 feet 4 inches). After focusing, check the focus ring for its actual scale value. (1) if the scale value > 5 feet 4 inches, then replace the original shim with a thinner one and recheck. (2) if the scale value < 5 feet 4 inches, then replace the the original shim with a thicker one and recheck. (3) if the scale value is very close to 5 feet 4 inches, then the adjusting process is completed.

Front Ring Mounting Method



The front ring works with the 114mm matte box on the market.

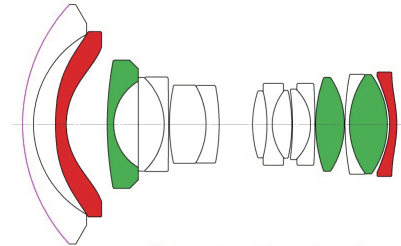
Installation completed



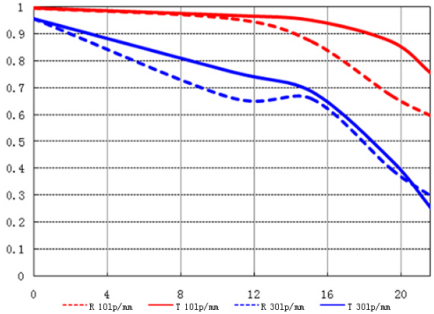
SPECIFICATIONS

LAOWA 12mm T2.9 Zero - D Cine	
Model	LAOWA 12mm T2.9 Zero - D Cine
Format	Full Frame
Focal Length	12mm
T-stop range	2.9-22
Lens Groups	16 elements/10 groups
Aperture Blades	7
Minimum Shooting Distance	18cm
Image Coverage	ø43.3mm
Maximum angle of view	121°
Front Diameter	102mm, works with 114mm adaptor ring and matte box
Filter Size	Fliter Thread No
Maximum Diameter	ø102mm
Length	87mm
Weight	675g
Mounts	PL、EF、E

LENS CONSTRUCTION



MTF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0.3
0.2
0.1
0
0
4
8
12
16
20
R 10lp/mm
T 10lp/mm
R 30lp/mm
T 30lp/mm

L A O W A

New Idea . New Fun .