CHIOPT

EXTREMER

COMPACT ZOOM 28-85MM / T3.2

USER'S MANUAL

EXTREMER

DISCOVER YOUR PASSION

COMPACT ZOOM 28-85MM / T3.2

简介

光和影的表达对政治、经济、文化、科技、教育、军事、艺术发展具有极大的引领与推动作用。优秀的影视作品之所以为人称颂的原因往往是深层次的，优良的设备可以更有助于创作者思想的表达和作品的呈现。

CHIOPT，致力于探索光学科技，服务于人类社会的进步。

感谢您购买本产品。在使用之前，请详细阅读并理解本手册内容，阅读完后，请妥善保管手册，以便随时查阅。

EXTREMER 系列是 CHIOPT 旗下影视类镜头中的全画幅变焦产品，助您释放无限灵感。

您可以关注我司官方网站（www.chioptfilm.com），或通过网站服务界面输入您的邮箱 , 订阅信息 , 随时了解产品及服务动态。您也可以上传并与大众分享您的作品，另外，如果您有任何关于镜头使用心得，以及对我们产品和服务的任何意见和建议，请发送邮件到 service@chiopt.com，您的满意就是我们最大的心愿。

请在使用前仔细阅读手册，确保正确使用镜头，特别是安全注意事项。

产品基础保养

- 洁净的镜片才能保证成像优质，如镜片表面有灰尘，请使用吹气球去除，若要去除污点和指纹，可使用一块滴有少许镜头清洁剂的干净软绵布或镜头清洁纸，以圆周运动方式从里向外进行清洁，注意不要用手指触摸玻璃，更不要用任何尖锐的物品接触镜片；
- 镜身金属件表面的脏污，可用拧干湿抹布擦拭，镜身上的文字和刻度是用油漆填充，切勿使用涂料稀释剂或苯等有机溶剂擦拭；
- 不使用镜头时，请盖上镜头前后盖；
- 为防止发霉，请将镜头存放在阴凉、干燥的地方；
- 将镜头从寒冷的地方拿到温度和湿度较高的地方时，镜头的玻璃镜片上可能会产生雾气，为避免雾气，使用镜头前，请先让镜头适应使用环境。

附带配件

本镜头标配为 PL 卡口版本，此版本镜头包含以下配件

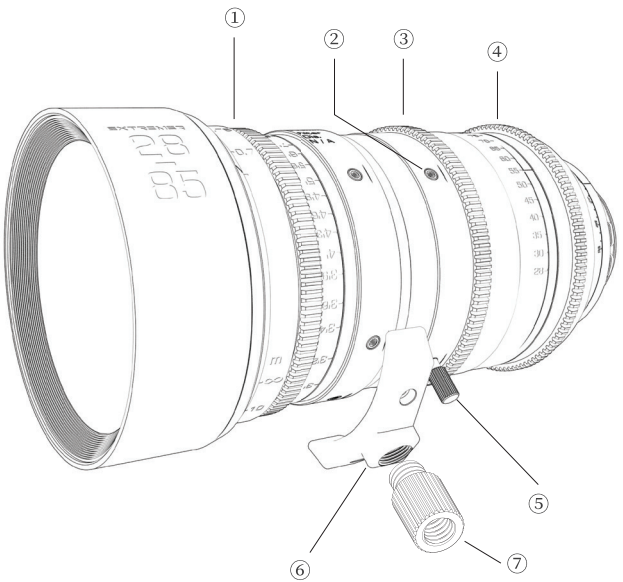
镜头主体 1 个	镜头保护箱 1 个	114 毫米口径镜头前盖 1 个
支撑座 1 个	支撑座固定螺丝 2 颗（M3*10）	桥接杆螺丝 2 颗（3/8 英寸）
垫片盒子 1 个	变焦紧固螺丝 1 个（预装在镜头上）	说明书 1 份

公制 1.5mm 内六角扳手 1 个（配合卡口固定螺丝使用）

后焦调整垫片一套（T0.02*1；T0.03*1；T0.05*1；T0.1*2；T0.2*1；T0.3*1；T0.4*1；T0.5*1）

** 本镜头可另外选购 EF 卡口和 E 卡口，附赠有 DIY 工具，用户可以自行更换，具体更换办法参考 P8-P9 之 EF 和 E 卡口安装说明。*

镜头部件说明



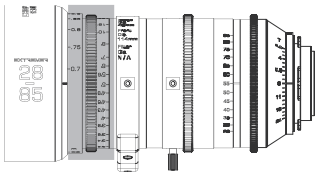
① 对焦环
② 变焦紧固螺丝孔
③ 变焦环
④ 光圈环
⑤ 变焦紧固螺丝
⑥ 支撑座
⑦ 桥接杆螺丝

镜头控制

使用镜头控制可进行对焦、变焦、光圈大小控制。

对焦控制

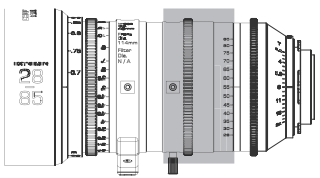
旋转对焦环，可增加或减少对焦距离



对焦环

变焦控制

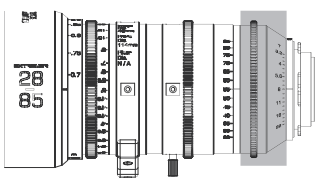
旋转变焦环，可放大或缩小画面的可视区域，可增大或缩小视场角



变焦环

光圈控制

旋转光圈环，可放大或缩小通光孔直径使得镜头到达摄影机的光线增加或减少



光圈环

EXTREMER 系列镜头后焦垫片调整说明

后焦距离精准是变焦镜头确保齐焦功能以及对焦距离准确的关键。

EXTREMER 镜头在出厂之前就已经被严格设定为额定值（52.00mm），每一颗镜头都经历了严格的检验。在设计镜头的时候，我们充分考虑到不同摄像机系统的传感器位置可能会存在一定的差异，因此，可通过减少和增加垫片的方式，实现镜头后法兰距的微调，以确保更完美的适配您的摄像机。

一般而言，在新的摄像机系统上，如果出现变焦过程中焦点移动的现象，大概率是因为后焦不准确造成的，此时，我们就需要通过增减垫片的方式，校准后焦距离。

校准后焦后，镜头才能完美匹配该摄像机，才能确保不丢焦，以及拥有更好的画质。

- 调节过程，请执行以下步骤：

  1、准备好拍摄对象。可使用“星状测试图”或其他黑白相间的、对比度较高的拍摄对象；

  2、将光圈环保持全开状态；

  3、将拍摄对象在距离摄像机成像面约 1.5M 处放置，拍摄对象位于画面中心；

- 调整操作：

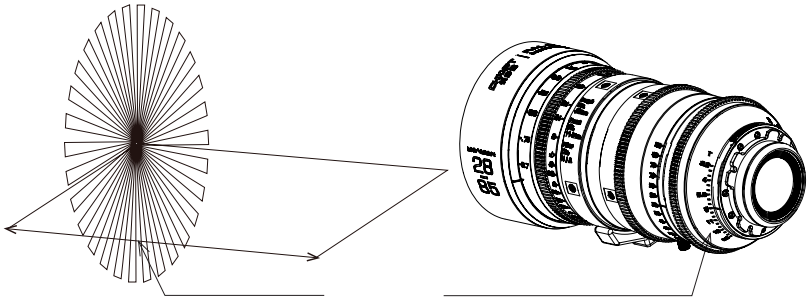
  A: 旋转变焦环至最长焦端，然后旋转对焦环至画面最清晰状态，记下此时的对焦刻度值 D1；

  B: 旋转变焦环至最短焦端，然后旋转对焦环至画面最清晰状态，记下此时的对焦刻度值 D2；

  C: 对比 D2 与 D1 的大小，若 D2 小于 D1，则需要增加后焦垫片；若 D2 大于 D1，则需要减少后焦垫片；（垫片的调整量与 D1D2 的差值对应的对焦环旋转角度有关，旋转角度越大，需要调整的垫片越多，反之亦然）

  D: 重复 A-B 步骤，直到 D2 等于 D1 时，说明镜头已处于 parfocal 状态，调整结束；

  （举例：假设镜头变焦至 85mm 端，对焦至画面最清晰时，对焦刻度值为 1.5m，再将镜头变焦至 28mm 端，重新对焦至画面最清晰时，对焦刻度值为 1.4m，比 1.5m 小，按经验值，将后焦垫片增加 0.1 后，重新确认，85 mm 端到 28mm 端，画面最清晰时对焦刻度值都在 1.5m，说明镜头已处于 parfocal 状态，调整结束；）



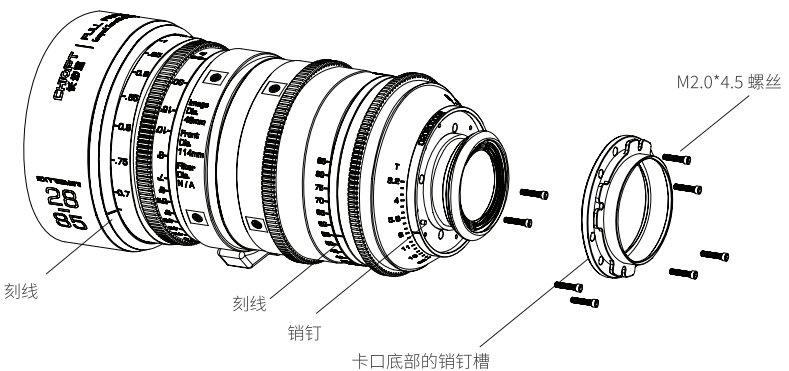
将拍摄对象在距离镜头表面约 1.5 米处放置，拍摄对象位于画面中心。

调整到最大光圈

齐焦垫片调整参考表		
85mm 端对焦清晰刻度值	28mm 端对焦清晰刻度值	后焦垫片调整参考值
1.5m	1	+0.25
	1.1	+0.2
	1.2	+0.15
	1.3	+0.1
	1.35	+0.05
	1.5	0
	1.7	-0.05
	2	-0.1
	2.25	-0.15
	2.5	-0.2
	3	-0.25

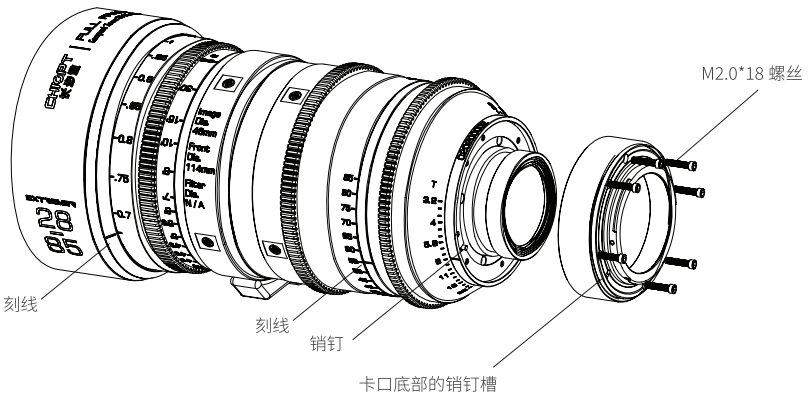
PL 卡口安装说明

在去除镜头原卡口后，将镜头底部向上竖直放在工作台上，将 PL 卡口底部的销钉槽，对准镜头后端的销钉，垂直放在镜头后端，左右轻轻扭动卡口，有感受到停顿感，说明卡口已安装平稳到位。然后依次对称锁入 8 颗 M2*4.5 螺丝。（如 图）



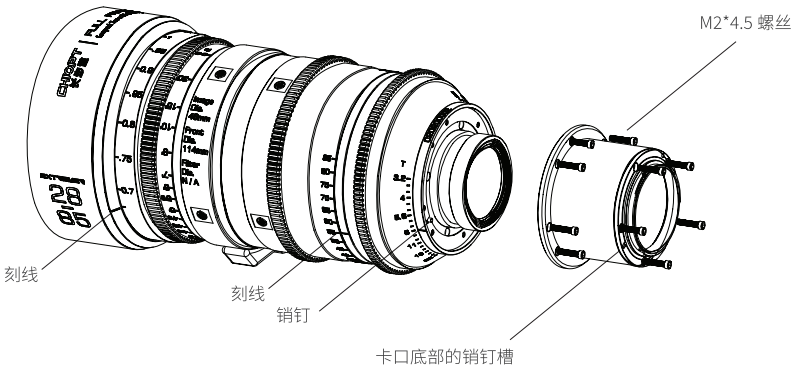
EF 卡口安装说明

在卸下镜头原卡口后，将镜头底部向上竖直放在工作台上，将 EF 卡口底部的销钉槽，对准镜头后端的销钉，垂直放在镜头后端，左右轻轻扭动卡口，有感受到停顿感，说明卡口已安装平稳到位。然后依次对称锁入 8 颗 M2*18 螺丝。（如图）



E 卡口安装说明

在卸下镜头原卡口后，将镜头底部向上竖直放在工作台上，将 E 卡口底部的销钉槽，对准镜头后端的销钉，垂直放在镜头后端，左右轻轻扭动卡口，有感受到停顿感，说明卡口已安装平稳到位。然后依次对称锁入 8 颗 M2*4.5 螺丝。（如图）

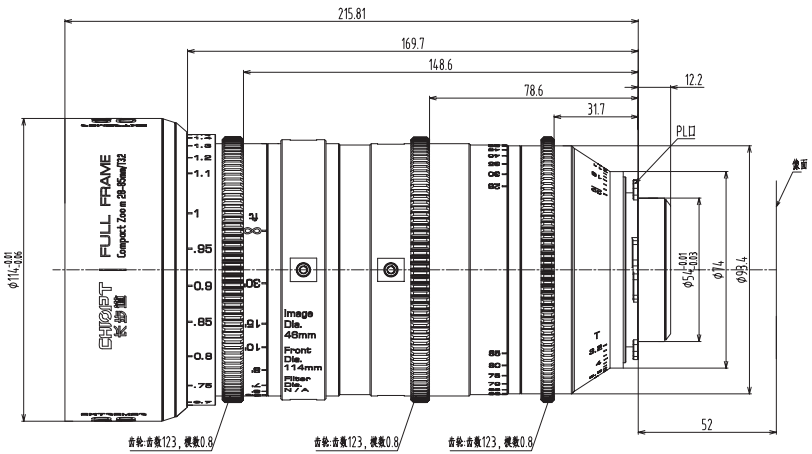


技术规格

型号	COMPACT ZOOM 28-85mm/T3.2
镜头卡口	PL/EF/E
焦距	28-85mm
变焦倍率	3 倍
最小 T 值	T3.2(F2.8)
光圈范围	T3.2-T22
像场直径	¢ 46mm
法兰距（空气中）	52mm(PL)/44mm(EF)/18mm(E)
最近对焦距离（距离镜头前端）	0.4m
最近对焦距离（距离焦平面）	0.7m
最近对焦位置放大率	0.05X
在最近对焦距离下的拍摄区域	28mm: (510*340mm)　85mm: (123*82mm)
水平视场角	65~17.5°
竖直视场角	46~11.5°
对角线视场角	75~21°
光圈叶片数	11 片
光圈环旋转角度	84°
变焦环旋转角度	96°
对焦环旋转角度	288°
最大直径 VS 长度	¢ 114*228（PL）*229(EF)*254.5(E)
重量	2.7（PL）/2.75（EF）/2.8KG（E）
镜头前部外径	¢ 114mm
滤镜接口	无
齿轮模数	0.8M

**为改进产品，我们有可能更改其部分规格和外观，恕不另行通知；*

外观视图



售后服务

1. 长步道为本产品提供两年的免费送修服务，保修期内的产品质量问题，长步道承诺提供免费维修服务；
2. 保修期内，以下售后处理也将视情况收费；
   2.1 未出示有效序列码的情况；
   2.2 未按产品使用说明的要求使用、维护、保管而造成损坏的；
   2.3 购买后发生的因人为操作、保管不当，导致摔落、进水、发霉、镜片破裂、划痕、沙埋、火烧等，或者其他不可抗拒因素等造成损坏的；
   2.4 在非长步道总部进行修理、改造、分解、内部清洁而造成损坏的。
3. 保修期后，我司将视情况为本产品提供有偿的维修、维护服务。
4. 长步道可提供有偿的镜头保养与清洁服务（客服邮箱：SERVICE@CHIOPT.COM）

说明：

送修产品时，请务必包装良好，确保序列码清晰，务必用文字描述产品问题，如有必要请附上照片、视频等，方便我司技术人员分析问题（可添加附件，邮件发送到 SERVICE@CHIOPT.COM，邮件标题为：服务 + 序列码）。

如果镜头出现使用故障，建议按照以下流程处理：

1、自行依照说明书进行简单排查（不可拆卸）；
2、咨询当地经销商寻求技术指导；
3、邮件咨询客户服务 - 寻求帮助；
4、按照售后部门指导，寄修问题产品。

隐私：

本公司遵循所有关于处理用户所提供姓名、地址、电话号码以及其他个人信息的现行法律和法规。

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INTRODUCTION

The expression of light and shadow has a great leading and driving effect on political, economic, cultural, technological, educational, military and artistic development. The reasons why excellent film and cinema works are celebrated are frequently deep-rooted, and excellent equipment can be more conducive to the expression of the creator's ideas and the presentation of his works.

CHIOPT, dedicated to the exploration of optical technology, serves the progress of mankind society.

Thank you for purchasing this product. Please read and understand the contents of this manual before using it and keep it in a safe place for easy reference afterwards.

The EXTREMER series is the full-frame zoom range of CHIOPT cinema lens that will help you unleash your inspiration.

You can keep up to date our products and services by following our official website (www.chioptfilm.com) or by entering your email address on our service interface. You can also upload and share your work with the public. Additionally, if you have any comments and suggestions about the use of the lens, as well as about our products and services, please drop an email to: service@chiopt.com, your satisfaction is our greatest wish.

Please read the manual carefully before using to ensure the correct use of the lens, especially the safety precautions.

PRODUCT BASIC MAINTENANCE

- Clean lens is the only way to ensure good quality imaging. If there is dust on the surface of the lens, use a blow-up balloon to remove it. To remove stains and fingerprints, use clean soft cloth with a few drops of lens cleaner or lens cleaning paper and clean from the inside out in a circular motion, taking care not to touch the glass with your fingers, and not to touch the lens with any sharp objects.
- Dirt on the surface of the metal parts of the lens body can be wiped with a wrung out damp rag. The text and scales on the lens body is filled with paint, do not use paint thinner or organic solvents such as benzene to wipe them.
- Cover the front and rear lens caps when the lens is not in use.
- To prevent mould, store the lens in a cool, dry place.
- When taking the lens from a cold place to a place with high temperature and humidity, fog may form on the glass lens.
- To avoid fog, please allow the lens to adapt to the environment before using it .

ACCESSORIES

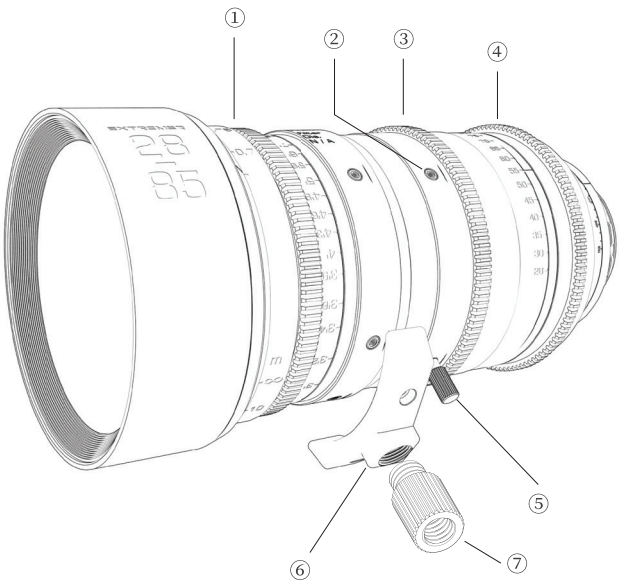
This lens comes standard with the PL mount version, this version of the lens includes the following accessories

Lens*1	Protective case *1	114mm lens front cap *1
Supporting base *1	Supporting base fixing screws *2 (M3*10)	Supporting rod screw *2 (3/8")
Gasket box *1	Zoom fastening screw *1 (pre-install-ed on the lens)	
Manual *1	Metric 1.5mm hexagonal spanner (used with the mount fixing screw) *1	

1 set of back focus adjustment shims (T0.02*1; T0.03*1; T0.05*1; T0.1*2; T0.2*1; T0.3*1; T0.4*1; T0.5*1)

*This lens can be purchased separately for EF mount and E mount, with DIY tools included, users can replace them by themselves, refer to PXX - EF and E mount installation instructions for details.

PARTS OF LENS



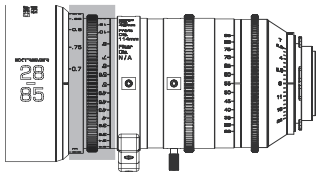
① Focus Ring
② Zoom Fastening Screw Hole
③ Zoom Ring
④ Aperture Ring
⑤ Zoom Fastening Screw
⑥ Supporting Base
⑦ Supporting Rod Screw

LENS CONTROLS

Focus, zoom and aperture can be controlled by adjusting rings.

Focus Control

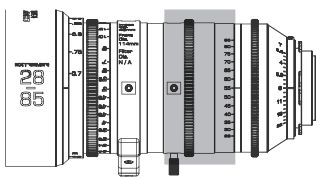
Rotate the focus ring will increase or decrease the focusing distance



Focus Ring

Zoom Control

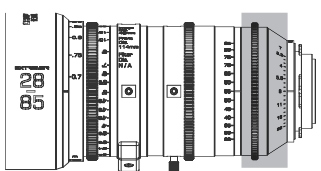
Rotate the zoom ring will increase or decrease the advisable area, and also can increase or decrease the FOV



Zoom Ring

Aperture Control

Rotate the aperture ring will increase of decrease the aperture diameter to increase or decrease the light from lens to camera



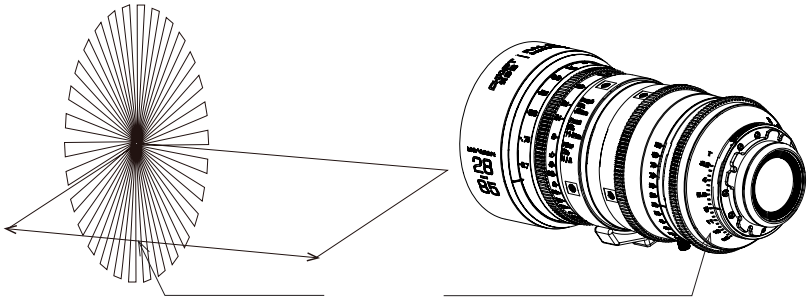
Aperture Ring

EXTREMER SERIES LENS REAR FLANGE ADJUSTMENT INSTRUCTIONS

Accurate back focus distance is the key to the zoom lens to ensure par-focus function and accurate focusing distance.
The EXTREMER lens has been strictly set to the rated value (52.00mm) before leaving the factory, and each lens has undergone strict inspections. When designing the lens, we fully considered that the sensor positions of different camera systems may have certain differences. Therefore, the rear flange distance of the lens can be fine-tuned by reducing and adding spacers to ensure a more perfect fit. With your camera.
Generally speaking, on a new camera system, if the focus moves during the zooming process, it is likely to be caused by inaccurate back focus. At this time, we need to calibrate the back focus distance by increasing or decreasing the spacer. .
After the focus is calibrated, the lens can perfectly match the camera to ensure that it does not lose focus and has a better picture quality.

- For the adjustment process, please perform the following steps:
  1. Prepare the subject. Can use "star test chart" or other black and white, high-contrast subjects;
  2. Keep the aperture ring fully open;
  3. Place the subject at a distance of about 1.5M from the imaging surface of the camera, with the subject at the center of the screen;
- Adjustment operation:
  A: Rotate the zoom ring to the longest focal point, then rotate the focus ring to the clearest state of the picture, and write down the focus scale value D1 at this time;
  B: Rotate the zoom ring to the shortest focal point, then rotate the focus ring to the clearest state of the picture, and write down the focus scale value D2 at this time;
  C: Compare the size of D2 and D1. If D2 is smaller than D1, you need to increase the back focus spacer; if D2 is greater than D1, you need to reduce the back focus spacer; (the adjustment of the spacer and the difference between D1 and D2 correspond to the focus ring The rotation angle is related, the larger the rotation angle, the more shims that need to be adjusted, and vice versa)
  D: Repeat steps A-B until D2 is equal to D1, indicating that the lens is already in par focal state, and the adjustment is over;

(Example: Suppose the lens is zoomed to the 85mm end, and the focus scale is 1.5m when the image is the clearest, then the lens is zoomed to the 28mm end, and the focus scale is 1.4m when the image is the clearest, which is more than 1.5m. Small, according to the experience value, after increasing the back focus spacer by 0.1, reconfirm end to 28 mm end, and the focus scale value is 1.5m when the picture is clearest, indicating that the lens is in par focal state, adjustment completed;)



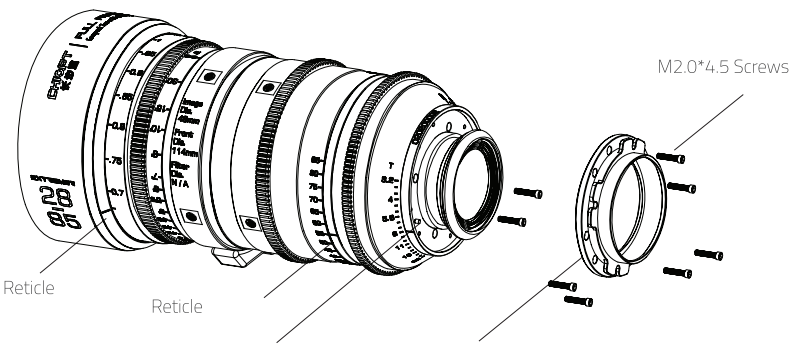
Position your subject about 1.5m distance, and the subject is in the center of the frame

Adjusted to the maximum aperture.

Reference for Par Focal Gasket Adjustment		
Focus Scale Value 85mm	Focus Scale Value 28mm	Rear Focus Gasket Adjusting Reference Value
1.5m	1	+0.25
	1.1	+0.2
	1.2	+0.15
	1.3	+0.1
	1.35	+0.05
	1.5	0
	1.7	-0.05
	2	-0.1
	2.25	-0.15
	2.5	-0.2
	3	-0.25

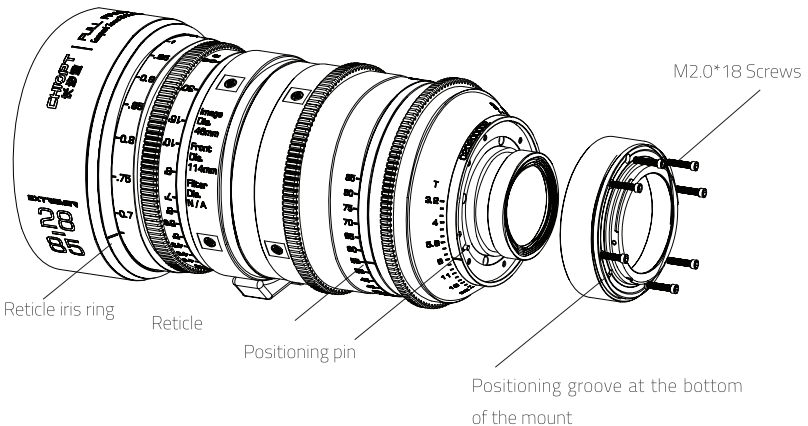
PL MOUNT INSTALLATION INSTRUCTIONS

After removing the original lens mount, put the bottom of the lens upright on the workbench, align the pin groove at the bottom of the PL mount with the pin at the rear of the lens, and place it vertically on the rear of the lens, align slightly left and right , there is a feeling of pause, indicating that the bayonet has been installed smoothly in place. Then symmetrically lock in 8 PCs M2*4.5 screws in sequence. (As the picture shows)



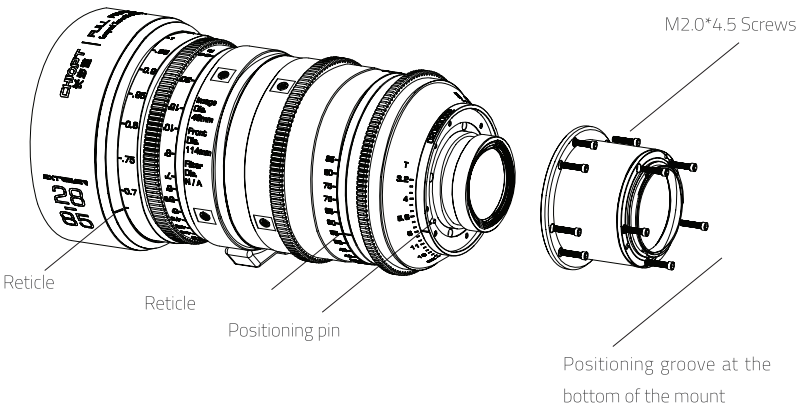
EF MOUNT INSTALLATION INSTRUCTIONS

After removing the original lens mount, place the bottom of the lens upright on the workbench, align the pin groove at the bottom of the EF mount with the pin at the rear of the lens, and place it vertically on the rear of the lens, twist the card left and right slightly If there is a feeling of pause, it means that the bayonet has been installed smoothly. Then symmetrically lock in 8 PCs M2*18 screws in sequence. (As the picture shows)



E MOUNT INSTALLATION INSTRUCTIONS

After removing the original lens mount, place the bottom of the lens upright on the workbench, align the pin groove at the bottom of the E mount with the pin at the rear of the lens, and place it vertically on the rear of the lens, twist the card left and right slightly If there is a feeling of pause, it means that the bayonet has been installed smoothly. Then symmetrically lock in 8 PCs M2*4.5 screws in sequence. (As the picture shows)



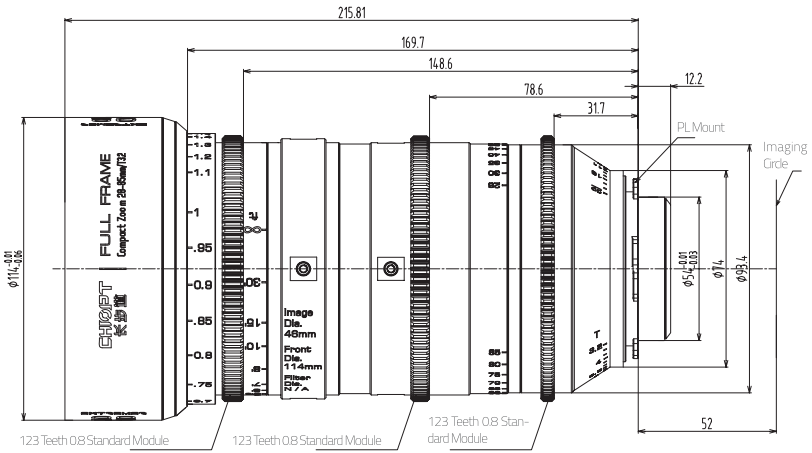
TECHNICAL SPECIFICATIONS

Model Number	COMPACT ZOOM 28-85mm/T3.2
Lens Mount	PL/EF/E
Focal Length	28-85mm
Zoom Ratio	3x
Minimum T Stop	T3.2(F2.8)
Aperture Range	T3.2-T22
Imaging Circle（Image Diameter）	¢ 46mm
Flange Distance	52mm(PL)/44mm(EF)/18mm(E)
MOD From Lens Front	0.4m
MOD From Sensor Plane (minimum marked distance)	0.7m
MOD Magnification	0.05X
Shooting Area for MOD	28mm:（510*340mm） 85mm(123*82mm)
Horizontal FOV (Field Of View)	65~17.5°
Vertical FOV (Field Of View)	46~11.5°
Diagonal FOV (Field Of View)	75~21°
Quantity of Aperture Blades	11 PCs
Angle of Aperture Ring Rotation	84°
Angle of Zoom Rotation	96°
Angle of Focusing Ring Rotation	288°
Maximum Diameter VS Length	¢ 114*228（PL）*229(EF)*255(E)
Weight	2.7（PL）/2.75（EF）/2.8KG（E）
Front Diameter	¢ 114mm
Filter	N/A
Gear Pitch	0.8mm

**In order to improve the product, we may change some specifications and appearance without notice;*

Due to the lens constructed method, in some cases, the distance indicated by the camera's focusing distance indicator (distance indicator) may be different from the actual focusing distance. Please adopt the "distance indicator" for reference only.

Figure



After-sales Service

1. CHIOPT Provide two years of free repair service for this product, product quality problems within the warranty period, CHIOPT commitment to provide free maintenance services.
2. The following after-sales treatment during the warranty period will also be charged as appropriate.
   2.1 Failure to present a valid serial code.
   2.2 Damage caused by failure to use, maintain or store the product in accordance with the requirements of the instructions for use.
   2.3 Damage caused by human handling or improper storage occurring after purchase, resulting in dropping, water ingress, mould, lens breakage, scratches, sand burial, fire, etc., or other irresistible factors.
   2.4 Damage caused by repair, transformation, decomposition, internal cleaning at non-Long Walk headquarters.
3. After the warranty period, our company will provide paid repair and maintenance services for this product as appropriate.
4. CHIOPT can provide paid lens maintenance and cleaning services (customer service email: SERVICE@CHIOPT.COM)

Instructions:

When sending the product for repair, please make sure that it is well packaged, ensure that the serial code is clear, make sure to describe the product the productivity problem in, if necessary please attach photos, videos, etc., to facilitate our technical staff to analyze the problem (you can add attachments, please drop us an email to SERVICE@CHIOPT.COM, with the email title: service + serial code).

If the lens is faulty in use, it is recommended that the following process be followed.

1. carry out simple trouble shooting on your own in accordance with the manual (not detachable).
2. Consult your local dealer for technical guidance.
3.Email customer service - for help.
4. Follow the instructions of the after-sales department and send the product in question for repair.

Privacy:

The company complies with all existing laws and regulations regarding the personal information of: name, addresses, telephone numbers and other personal information provided by users.

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