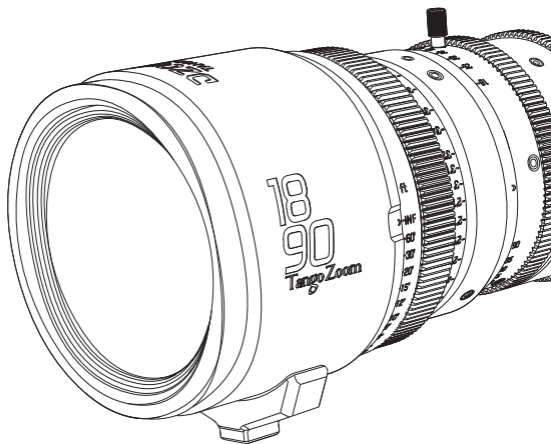


**DZOFILM**  
MAKE YOUR MOVIE

# TANGO ZOOM LENS USER'S MANUAL

行云系列变焦镜头使用说明书



电影镜头

CINE LENS

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

# Contents

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Introduction .....	1
Safety Notes.....	1
Lens Parts .....	2
Lens Control.....	3
Flange Back Adjustment.....	5
1. Method One.....	5
2. Method Two .....	6
PL Mount Assembly Instruction.....	10
EF Mount Assembly Instruction.....	11
Specification.....	12
After-sales Service .....	13
The Name and Content of Hazardous Substances.....	15

## Note

### Click to go

Users can read the table of content(TOC) to have an overview of the Tango Product Manual. Please click on the title or link to jump to the TOC.

### Search keyword

The Search-keyword Function is available in PDF Document. For example, In WPS Office, Windows users can search keywords with the keyboard shortcut <Ctrl+F> and Mac users can execute the same function with shortcut <Command+F>.



## **Introduction**

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Thank you for purchasing this product !

Tango series is a set of high-performance S35 zoom lenses produced by DZOFILM. Good representation of details, vivid colors and smooth transition of image as well as can be characterized in this series of lenses. They are suitable for different kinds of projects, including documentary, competition, TVC, movie, television program etc, (bringing audience with pure and vivid image texture and natural transition of focus shifting.

With 114mm standard front diameter, Tango Zoom can be used with common accessories in film industry to make your production more effortless.

Featured with impressive range of focal lengths and optional servo compatibility, Tango Zoom lenses unlock new possibilities for versatile shooting scenarios.

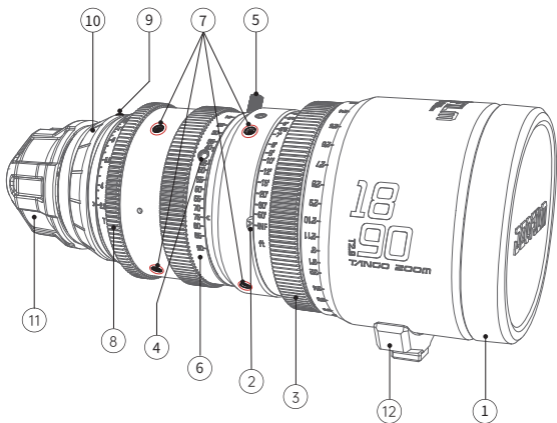
## **Safety Notes**

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- Please do not watch the sun or bright light source through the lens, otherwise it will cause visually disabled;
- Never use organic solvents such as paint thinner or benzene to clean the lens;
- Attach the front and rear caps when the lens is not in use;
- Store the lens and filter in cool, dry locations to prevent mold and rust. Do not store in direct sunlight or with naphtha or camphor moth balls;
- Please keep the lens dry and wipe the water droplets off if there are water droplets on the glass surface;
- Leaving the lens near heater or in other extremely hot locations could cause damage or warping;
- Use a blower to remove dust and lint from the glass surfaces of the lens or filter. To remove smudges and fingerprints, apply a small amount of lens cleaner to a soft, clean cotton cloth or lens-cleaning tissue and clean from the center outwards using a circular motion. Do not leave smears or touch the glass with your finger.

## Lens Parts

- ① Front Cap
- ② Lens Mark
- ③ Focusing Ring
- ④ Holes for Zoom  
Lever Socket \*4  
(M3, 4mm deep)
- ⑤ Zoom Lever Socket
- ⑥ Zoom Ring
- ⑦ Holes for Servo module \*4  
(M3, 4mm deep)
- ⑧ Aperture Ring
- ⑨ Flange Back Adjustment Locking  
/Unlocking Screw
- ⑩ Flange Back Adjustment Ring
- ⑪ Rear Cap
- ⑫ Holes for Supporting Base\*1  
(M3/8-16 thread, 9mm deep)  
Mounting holes \*2 (M3,3mm deep)

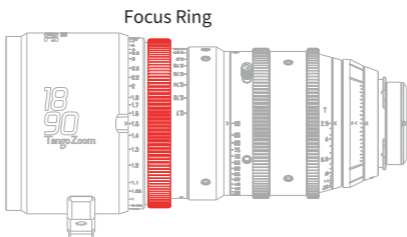


# Lens Control

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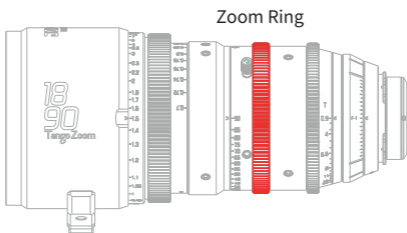
## Focus Control

Rotate the focus ring to increase or decrease the focus distance.



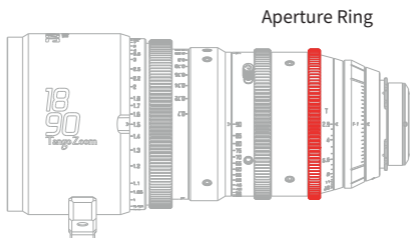
## Zoom Control

Rotate the zoom ring to zoom out, increasing the area visible in the frame or zoom in on the subject so that it fills a larger area in the frame.



## Aperture Control

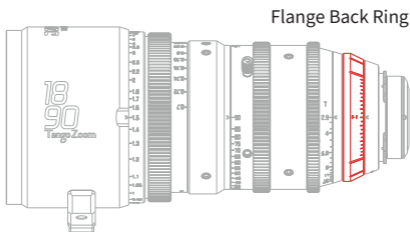
Rotate the aperture ring to enlarge or reduce the diameter of the aperture, adjusting the brightness of the image and the bokeh effect of the subject's background.



## Flange Back Adjustment

Rotate the flange back adjustment ring to adjust the flange back distance to keep the focusing marks accurate.

**Note:** Adjustable flange back range  $\pm 0.2\text{mm}$



# Flange Back Adjustment

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Every Tango lens will process flange back adjustment on standard. But to the tolerance of different cameras, to achieve the best performance of this product and to match the cameras, please adjust flange back of the product.

The following method is applicable to the situation when only one end of the focus scale, the wide-angle end or telephoto end, is not accurate; If both ends of the focus scale are not accurate, please contact the after-sales service for repair.

## 1. Method One

### 1.1 Preparation

**Step One:** Ready your subject. You can use a "Star Chart", or other high-resolution black-and-white objects;

**Note:** You can download and print the chart on "DZOFILM website-Support-Download Center-Tool-Star Chart" For Adjusting Back Flange

[\(Click to jump to the website\)](#)

**Step Two:** Attach the lens to the camera;

**Step Three:** Select the maximum aperture (wide open);

### 1.2 Flange Back Adjustment

**Step One:** Rotate the zoom ring to the longest focal length, and rotate the focus ring until the image to its clearest.

**Step Two:** Rotate the zoom ring to the widest-angle end. Keep the focus ring still, and use a T6 torx screwdriver to loosen the headless screw on the flange back adjusting ring in the counterclockwise direction. Then rotate the back focus adjustment ring until the subject becomes sharpest in the frame.

**Note:** If the focus ring is changed during adjusting, please start from the first step.

**Step Three :** Repeat step One and Two until without moving the focusing ring, the wide-angle end and telephoto end are both in sharp focus and the focusing scales are accurate . This means the lens is parfocal. Then tighten the headless screw on the flange back adjustment ring in the clockwise direction to complete the flange back adjustment.

## 2. Method Two

**Note:** The adjustable flange back range of Method One is  $\pm 0.2\text{mm}$ , if this range is exceeded, use Method Two.

### 2.1 Preparation

**Step One :** Ready your subject. You can use a "Star Chart", or other high-resolution black-and-white objects;

**Note:** You can download and print the chart on "DZOFILM website-Support-Download Center-Tool-Star Chart" For Adjusting Back Flange [\(Click to jump to the website\)](#)

**Step Two :** Attach the lens to the camera;

**Step Three :** Select the maximum aperture (wide open);

**Step Four :** Set the object **1.5m** away from the camera sensor plane, and adjust it to the center of the whole image.

**Note:** About the shooting distance in Step Four:

- ① Tango Zoom 18-90mm needs setting at 1.5m or 7 ft;
- ② Tango Zoom 65-280mm needs setting at 3.5m or 11 ft.

## 2.2 Flange Back Adjustment

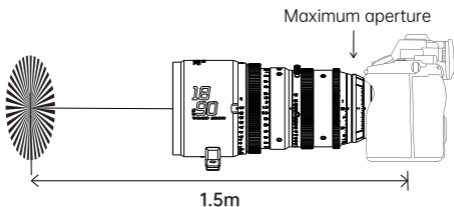
**Step One:** Rotate the zoom ring to the longest focal length, and rotate the focus ring until the image to its clearest, mark down the focusing distance **S1**;

**Step Two :** Rotate the zoom ring to the widest focal length and rotate the focus ring until the image to its clearest, mark down the focusing distance **S2**;

**Step Three:** Compare the difference between **S2** and **S1**. If **S2<S1**, then need to add shims; otherwise decrease the shims,

**Note:** The shim adjustment is evaluated on the angle between **S2** and **S1**. If the angle is bigger, then need to change more shims and vice versa.

**Step Four :** Repeat step1-2 until **S2=S1**. Then it means the lens in under parfocal.



Set the object **1.5m** away from the camera sensor plane, and adjust it to the center of the whole image.

Take **Tango Zoom 18-90mm (Metric)** as an example:

Rotate the focal length to **90mm**, and focus till the image is at its sharpest, the focusing distance mark is **1.5m (S1)**. And then rotate the zoom ring to **18mm**, re-focus to the image at its sharpest, current focusing distance mark is **1.3m (S2)**.  $S2 < S1$ .

According to the sheet below, add **0.13mm** shims on the lens mount and double check. At this time, both **18mm** and **90mm** focus at the closest under **1.5m** focus mark. That means this lens is under parafocal.



<b>18-90mm shim adjustment reference (metric)</b>		
90mm focusing mark S1	18mm focusing mark S2	Shim adjustment (mm)
1.5	0.9	+0.3
	1	+0.26
	1.1	+0.2
	1.3	+0.13
	1.5	0
	1.7	-0.01
	2	-0.02
	2.5	-0.06
	3.5	-0.11

<b>18-90mm shim adjustment reference (imperial)</b>		
90mm focusing mark S1	18mm focusing mark S2	Shim adjustment (mm)
7'	4'	+0.18
	4'6"	+0.13
	5'	+0.07
	6'	+0.03
	7'	0
	8'	-0.03
	9'	-0.07
	10'	-0.08
	12'	-0.10

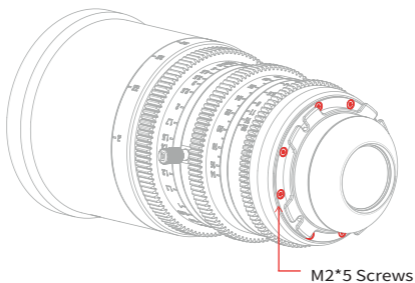
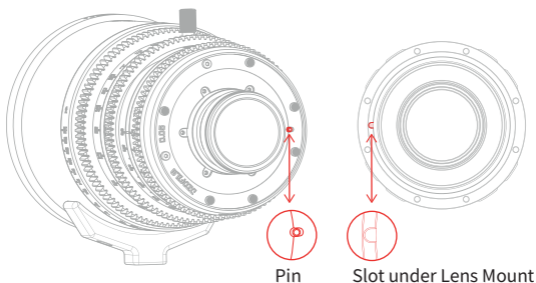
65-280mm shim adjustment reference (metric)		
280mm focusing mark S1	65mm focusing mark S2	Shim adjustment (mm)
3.5	2.5	+0.47
	3	+0.2
	3.5	0
	4	-0.15
	4.5	-0.29
	5	-0.41
	5.5	-0.47

65-280mm shim adjustment reference (imperial)		
280mm focusing mark S1	65mm focusing mark S2	Shim adjustment (mm)
11'	8'	+0.5
	8'6"	+0.42
	9'	+0.3
	10'	+0.14
	11'	0
	12'	-0.1
	14'	-0.29
	16'	-0.42
	18'	-0.52

**Note:** Shim adjustment: "+" means adding shims, and "-" decreasing shims.

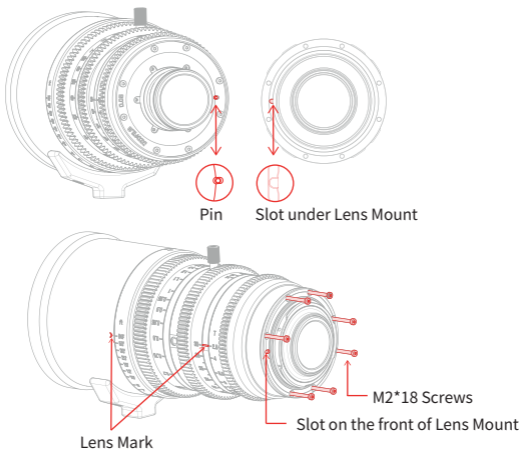
## PL Mount Assembly Instruction

Align the slot on PL mount to the pin on the rear of lens. Then lay the PL mount flat on the lens rear and slightly rotate the mount. If the mount cannot move, that means the mount sits in right place. Tighten the 8pcs of M2\*5 screws symmetrically on by one to keep the balance of lens mount.



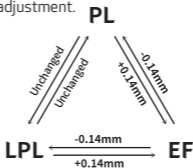
## EF Mount Assembly Instruction

Align the slot on EF mount to the pin on the rear of lens. Then lay the PL mount flat on the lens rear and slightly rotate the mount. If the mount cannot move, that means the mount sits in right place. Tighten the 7pcs of M2\*18 screws symmetrically on by one to keep the balance of lens mount.



**Notice:** After changing to EF mount, the rear element will extrude from the lens. Please do not place the lens on the desk with rear part upside down, in case of causing damage to lens surface.

After changing mounts, adjusting shim thickness is needed to ensure the accuracy of focusing. Please refer to following chart about shim adjustment. Focusing marks can be correct again after shim adjustment.



## Specification

Name	Tango	
Colour	Black	
Focal Length	18-90mm	65-280mm
Mount	PL/EF	
Aperture	T2.9-T22	T2.9/4-T22 65-219mm-T2.9 220mm-T3.; 240mm-T3.5 260mm-T3.8; 280mm-T4
Image Circle	∅ 31.5mm (S35)	
Construction of Optics	24 Elements in 17 Groups	21 Elements in 17 Groups
Flange Distance	52mm (PL) /44mm (EF)	
Close Focus (from sensor plane)	0.7m/2ft3in	1.1m/3ft7in
Zoom Ratio	5X	4.31X
Iris Control	Manual(74.1°)	Manual(73.6°)
Focus Control	Manual(270°)	
Zoom Control	Manual(100°)	
Front Dia.	∅ 114mm/4.48in	
Length (from lens front to flange plane)	249.1mm/9.8" (PL) 256.4mm/10.1" (EF)	267.1mm/10.5" (PL) 274.4mm/10.8" (EF)
Iris Blade	16	
Filter Size	M105	
Gear Pitch	0.8 Mod	
Material	Aluminium alloy	
Weight(Product)	≈3539g	≈3962g

## After-sales Service

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### How to Obtain After-Sales Service

If a product does not function as warranted during the warranty period, you may obtain after-sales service by contacting DZOFILM support team or DZOFILM's authorized dealers. Charges may apply for services not covered by this After-Sales Policy.

The After-Sales Policy varies with the country or region of purchase. Please contact DZOFILM for information specific to your location.

### Warranty Service

DZOFILM grants a minimum warranty period of one year from the date of purchase for lenses purchased through DZOFILM's official dealers. DZOFILM warrants that each DZOFILM product that you purchase will be free from material and workmanship defects under normal use in accordance with DZOFILM's user manual and accompanying documentation during the warranty period. You may claim warranty service by returning it to the point of purchase. The owner is responsible for all shipping costs. The warranty period varies with the country or region of purchase. Stored proof of purchase in a safe place, as you will need to provide a valid proof-of-purchase for the warranty service. Parts replaced during the warranty service become DZOFILM's property.

### Service Outside the Warranty Period

Request for after-sales service will normally be accepted within a period of roughly 5 years following the end of production, during which time spares will be kept on hand, although owners may be offered an equivalent product during this period in the event that spares are not available. The specific cost standard is subject to DZOFILM's quotation. Compatibility with consumables and accessories for the original product is not guaranteed. To prevent waste, DZOFILM may collect returned parts or products.

### Service Turn Around Time

After we receive the product, the after-sales service will generally be completed within two weeks. This turn around time does not include the time of return shipping. If there are special circumstances, we will notify you in advance.

## **What This After-Sales Policy Does NOT Cover**

This after-sales policy does not cover the following and charges may apply:

- × No valid proof-of-purchase of the product;
- × Damage caused by unauthorized modification, disassembly, or repair not in accordance with official instructions or manuals.
- × Damage caused by improper installation and operation not in accordance with official instructions or manuals.
- × Damage caused by the storage environment not in accordance with official instructions or manuals.
- × Damage caused by operation in bad weather or environment (i.e. rain, sand/dust storms, humid environment, etc.).
- × Damage caused by, any third party products, including those that DZOFILM may provide or integrate into the DZOFILM product at your request.
- × Damage caused by any third-party product.
- × Damage caused by force majeure;
- × Consumable accessories and optional parts that come with this product.

## **Privacy**

DZOFILM obeys all applicable laws and regulations concerning the handling of names, addresses, phone numbers, and other personal information provided by users.

## The Name and Content of Hazardous Substances

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Part Name	Hazardous Substances					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Lens Shell	○	○	○	○	○	○
Inner Mechanics	×	○	○	○	○	○
Optics	○	○	○	○	○	○
Other Parts	○	○	○	○	○	○

This table is formulated in accordance of SJ/T11364.

○: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the GB/T26572 standard.

×: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts may be above the relevant threshold of the GB/T26572 standard.

The "×" in the above table indicates that there are one or more exemptions are applied in the parts stated in RoHS (2011/65/EU).



# 目录

简介 .....	1
安全注意事项 .....	1
镜头部件 .....	2
镜头控制 .....	3
后焦调节 .....	5
1.方法一 .....	5
2.方法二 .....	6
PL卡口安装说明 .....	10
EF卡口安装说明 .....	11
技术规格 .....	12
售后服务 .....	13
产品中有害物质的名称及含量 .....	14

## 阅读小贴士

### 点击跳转

用户可以通过目录了解说明书整体结构，点击标题或链接即可跳转到相应页面。

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PDF电子文档可以使用查找功能快速搜索关键词。例如在WPS PDF文档中，Windows用户使用快捷键Ctrl+F，Mac用户使用Command+F即可快速搜索关键词。

## 简介

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感谢您购买本系列产品！

行云（Tango）系列是DZOFILM旗下的S35高性能变焦镜头，可以让您在视频创作时还原拍摄细节，色彩通透、过渡均匀自然。适合在纪录片、赛事、TVC、电影、电视节目等场景使用，带来纯净而生动的电影质感，较小的呼吸效应使画面焦点转换更自然。

镜头114mm的前端口径作为影视工业的标准尺寸，和拍摄配件如遮光斗等兼容性良好，使拍摄更轻松自如。

较大的变焦倍率，可满足不同景别的拍摄需求。并且搭配了可拆卸的伺服模块，携带Tango系列即可走天下。

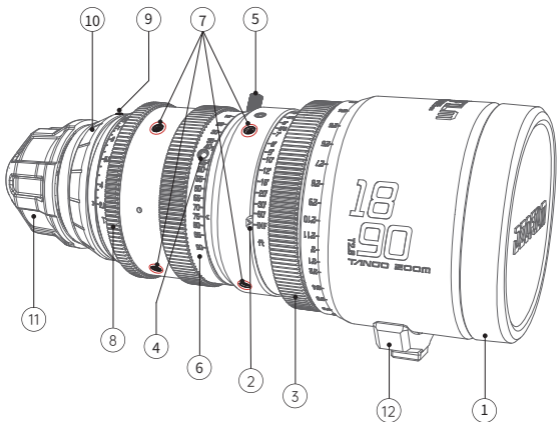
## 安全注意事项

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- 请勿透过镜头或摄影机观看太阳或明亮的光源，否则会使视力受损；
- 切勿使用涂料稀释剂或苯等有机溶剂清洁镜头；
- 不使用镜头时，请盖上镜头前后盖；
- 为防止发霉，请将镜头和滤镜存放在阴凉、干燥的地方，切不可存放在直射阳光下，也不要与石脑油或樟脑丸放在一起；
- 请保持镜头干燥，如受潮或有水滴请擦拭干净后存放；
- 勿将镜头放置在加热器旁或其他极其炎热的地方，可能导致损坏或变形；
- 请使用吹气球去除镜头或滤镜玻璃表面的灰尘，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，注意不要留下污渍，也不要用手指触摸玻璃。

## 镜头部件

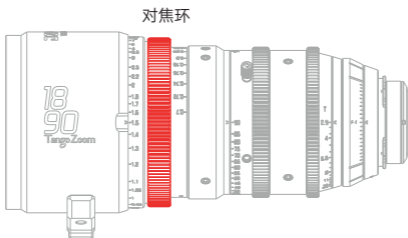
- ① 镜头前盖
- ② 镜头标记
- ③ 对焦环
- ④ 变焦拨杆插孔\*3  
(M3,深4mm)
- ⑤ 变焦拨杆
- ⑥ 变焦环
- ⑦ 伺服模块安装孔位\*4  
(M3,深4mm)
- ⑧ 光阑环
- ⑨ 后焦调节锁定/解锁螺丝
- ⑩ 后焦调节环
- ⑪ 卡口后盖
- ⑫ 支撑底座孔\*1  
(M3/8-16英制牙, 深9mm)  
安装孔\*2 (M3, 深3mm)



## 镜头控制

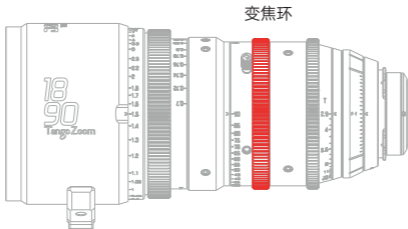
### 对焦控制

旋转对焦环，可增加或减少对焦距离，从而调整画面中的焦点位置。



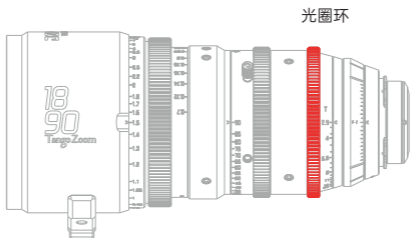
### 变焦控制

旋转变焦环，可放大或缩小画面中的可视区域以及被摄主体的大小。



## 光圈控制

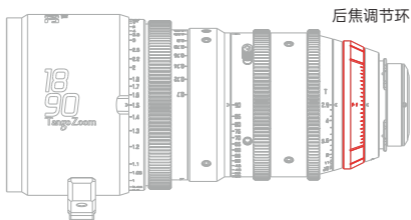
旋转光圈环，可放大或缩小光孔直径，调整画面明暗度以及被摄主体的背景虚化效果。



## 后焦调节

旋转后焦调节环，可增加或减少后焦距离，从而调整恢复对焦刻度的准确性。

注：可调节的后焦范围为 $\pm 0.2\text{mm}$



## 后焦调节

行云(Tango)系列镜头在出厂前会按照标准调整后焦，但不同摄影机的法兰距在出厂时可能会有一点不同，为了方便与不同的相机匹配，达到最佳成像效果，需要进行后焦调节操作。

以下方法适用于广角端或长焦端仅有一端对焦刻度不准的情况；当两端的对焦刻度均不准时，请联系售后进行维修。

### 1.方法一

#### 1.1 准备工作

**步骤一：**准备好拍摄对象，可使用“星状测试图”，或使用其他黑白相间的、对比度较高的拍摄对象。

**提 示：**可前往“DZOFILM官网-服务与支持-下载中心-工具-后焦调整镜头-后焦调整星图”处下载 [\(点击此处跳转\)](#)

**步骤二：**镜头安装到相机或摄影机上。

**步骤三：**镜头调整为最大光圈。

#### 1.2 调节后焦

**步骤一：**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。

**步骤二：**旋转变焦环至最广角端，此时务必保持对焦环不动的状态，并使用梅花T6螺丝刀，将后焦调节环上的无头螺丝逆时针拧松。然后仅通过旋转后焦调节环，使得拍摄对象在画面中处于最清晰状态。

**提 示：**如果对焦环发生变动，请重新从第一步开始。

**步骤三：**重复步骤一、步骤二直至广角端和长焦端在对焦环不动的情况下，对焦画面均清晰，对焦刻度准确。说明镜头已处于齐焦状态，此时顺时针拧紧后焦调节环上的无头螺丝，完成后焦调节。

## 2.方法二

**注：**方法一可调节的后焦范围为 $\pm 0.2\text{mm}$ ，若超出该范围，请使用方法二。

### 2.1 准备工作

**步骤一：**准备好拍摄对象。可使用“星状测试图”，或使用其他黑白相间的、对比度较高的拍摄对象；

**提示：**可前往“DZOFILM官网-下载中心-工具-后焦调整星图”处下载  
[\(点击此处跳转\)](#)

**步骤二：**镜头安装到相机或摄影机上；

**步骤三：**镜头调整为最大光圈；

**步骤四：**将拍摄对象放置在距离相机成像面约1.5米处，并调整其位置在画面中心。

**提示：**步骤四中的拍摄距离设置如下：

① Tango 18-90（公制）为1.5米，英制为7'；

② Tango 65-280（公制）为3.5米，英制为11'。

### 2.2 调节后焦

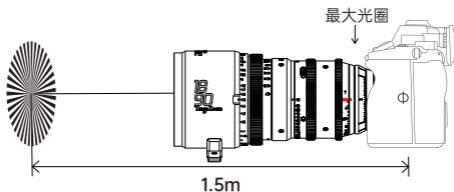
**步骤一：**旋转变焦环至最长焦端，然后旋转对焦环至画面最清晰状态，记下此时的对焦刻度值S1；

**步骤二：**旋转变焦环至最广角端，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S2；

**步骤三：**对比S2与S1的大小，若S2小于S1，则需要增加后焦垫片；若S2大于S1，则需要减少后焦垫片；

**提示：**垫片的调整量与S1，S2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；

**步骤四：**重复 1-2 步骤，直到S2等于S1时，说明镜头已处于齐焦状态，完成后焦调节。



将拍摄对象在距离相机成像画面“Φ”标记处约1.5m放置，  
将拍摄对象位于画面中心。

**例：**以Tango Zoom 18-90mm 公制版为例，假设镜头变焦至90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18端，重新对焦至画面最清晰时，对焦刻度值为1.3m，比1.5m小，参考下方“后焦垫片调整参考表”，将后焦垫片增加0.13mm后，重新确认，90端和18端，画面最清晰时对焦刻度值都在1.5m，说明镜头已处于齐焦状态，后焦调整完成。



18-90mm 后焦垫片调整参考表 (公制)

90 端对焦刻度值S1	18 端对焦刻度值S2	后焦垫片调整参考值(mm)
1.5	0.9	+0.3
	1	+0.26
	1.1	+0.2
	1.3	+0.13
	1.5	0
	1.7	-0.01
	2	-0.02
	2.5	-0.06
	3.5	-0.11

18-90mm 后焦垫片调整参考表 (英制)

90 端对焦刻度值S1	18 端对焦刻度值S2	后焦垫片调整参考值(mm)
7'	4'	+0.18
	4'6"	+0.13
	5'	+0.07
	6'	+0.03
	7'	0
	8'	-0.03
	9'	-0.07
	10'	-0.08
	12'	-0.10

65-280mm后焦垫片调整参考表 (公制)

280 端对焦刻度值S1	65 端对焦刻度值S2	后焦垫片调整参考值(mm)
3.5	2.5	+0.47
	3	+0.2
	3.5	0
	4	-0.15
	4.5	-0.29
	5	-0.41
	5.5	-0.47

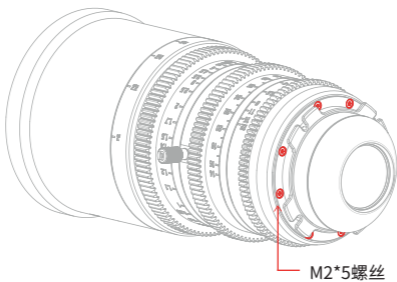
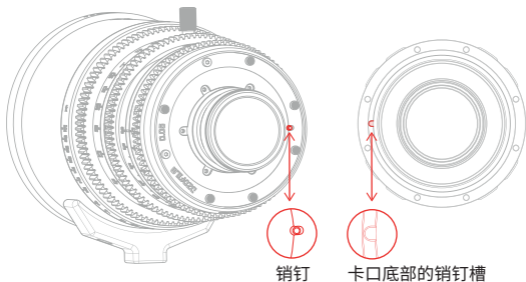
65-280mm后焦垫片调整参考表 (英制)

280 端对焦刻度值S1	65 端对焦刻度值S2	后焦垫片调整参考值(mm)
11'	8'	+0.5
	8'6"	+0.42
	9'	+0.3
	10'	+0.14
	11'	0
	12'	-0.1
	14'	-0.29
	16'	-0.42
	18'	-0.52

提示：后焦垫片调整值，“+”代表要增加垫片厚度，“-”代表减少垫片

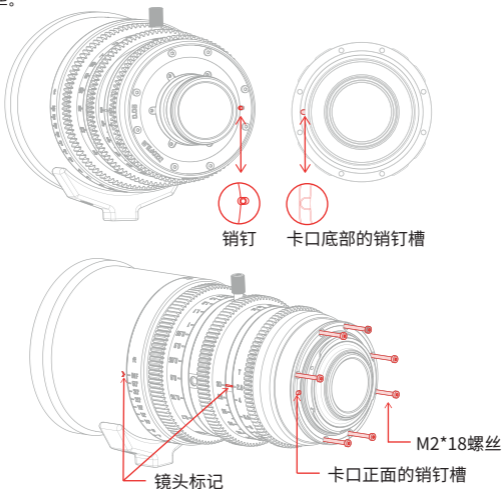
## PL卡口安装说明

先根据镜头将PL卡口底部的销钉槽，对准镜头后端的销钉，平放在镜头后端，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\*5螺丝。



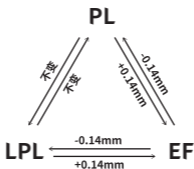
## EF卡口安装说明

将EF卡口底部的销钉槽，对准镜头后端的销钉，平放在镜头后端，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7颗M2\*18螺丝。



**提示：**更换 EF 卡口之后，镜头最后一枚镜片是凸出镜头的，此时不可将镜头小头朝下放置，以免镜片损伤。

若不调整垫片数量，更换卡口后可能会导致对焦失准。可参考下方的图，在安装上卡口前，根据更换的卡口，通过调整垫片的厚度，使得对焦刻度恢复准确。



## 技术规格

名称	行云	
颜色	黑色	
焦距	18-90mm	65-280mm
卡口	PL/EF	
光圈	T2.9-T22	T2.9/4-T22 65-219mm-T2.9; 220mm-T3.2 240mm-T3.5; 260mm-T3.8; 280mm-T4
最大像面	∅ 31.5mm (S35)	
镜片组	24片17组	21片17组
法兰距	52mm (PL) /44mm (EF)	
最近对焦距离 (从传感器平面)	0.7m/2ft3in	1.1m/3ft7in
变焦倍率	5X	4.31X
光圈控制	手动(74.1°)	手动(73.6°)
对焦控制	手动(旋转最多270°)	
变焦控制	手动(旋转最多100°)	
前端直径	∅ 114mm/4.48in	
长度 (从镜头前端面至法兰面)	249.1mm/9.8" (PL) 256.4mm/10.1" (EF)	267.1mm/10.5" (PL) 274.4mm/10.8" (EF)
叶片数量	16	
滤镜尺寸	M105	
齿轮齿距	模数 0.8	
材质	铝合金	
重量	约3539g	约3962g

## 售后服务

**如何获得售后服务：**在保修期间，若产品不能实现所保证的功能，请联系DZOFILM 以获取相应的售后服务。保修以外的服务可能会收取费用。售后服务政策的内容可能因地而异，如欲了解本地信息，请联系DZOFILM。

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**售后服务周期：**我们收到产品后，一般情况下会在两周内完成售后服务，这不包括来回运输的时间。如有特殊情况，我们会提前通知您。

**非售后政策保障范围：**本政策不涵盖以下情况，但可实行收费维修：

- × 无购买凭证；
- × 发生非官方说明书指导的私自改装、拆解，以及自行维修等行为而造成的损坏；
- × 未按说明书指导的不正确安装和操作所造成的损坏；
- × 未按说明书指导的存放环境导致的产品损坏；
- × 在恶劣的环境下使用导致的损坏，如雨天、沙尘、潮湿环境等；
- × 与非DZOFILM认证的第三方部件同时使用时发生可靠性及兼容性问题导致的损坏；
- × 任何第三方产品所导致的故障或损坏；
- × 因不可抗力发生的损坏；
- × 随本产品之附件消耗品及选购件等。

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## 产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
镜头外壳部件	○	○	○	○	○	○
机械部件	×	○	○	○	○	○
光学部件	○	○	○	○	○	○
其它部件	○	○	○	○	○	○

本表格依据SJ/T11364的规定编制。

○:表示该有害物质在该部件所有均质材料中的含量均在GB/T26572规定的限量要求以下。

×:表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T26572规定的限量要求。

对于表示"×"的情况,属于欧盟RoHS指令(2011/65/EU)的豁免项目。

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