

# **CamFi ZF**

## **Remote Zoom & Focus Controller**

### **User Guide**



# Contents

<b>Module Descriptions</b>	1
• Introduction to Indicators and Buttons	2
<b>Installation Instructions</b>	3
• Select the appropriate Carbon Fiber Rail Rods for your lens	3
• Adjust the Base Plate with Rail Rods and the Quick Release Plate according to the camera body size	4
• Installation of Belt Pulleys and Motor Module	5
• Installation of Belt	7
• Installation of the Holder for Lens Mount	8
• Installation of L Bracket	9
• Installation of CamFi and USB Hub	9
• Connect the USB Cable	10
<b>How to Use the App</b>	11
• App Download and Installation	11
• Connect to the Wi-Fi signal of the CamFi.	11
• Launch the CamFi App	12
• Select Lens Configuration	13
• Select a Task	14
<b>Frequently Asked Questions</b>	17
<b>Product Specifications</b>	18

# Module Descriptions

## Module A

### Base Plate and Quick Release Plate - with 150mm carbon fiber rail rods installed

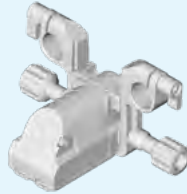
Used to connect the camera and install other modules. 150mm rail rods are installed by the factory. Additional sized rods are available (see Modules I and J below).



## Module B

### Motor Module

Used to adjust the distance between the motor and the lens. Also used to drive the belt which moves the zoom ring and focus ring.



## Module C

### Holder for Lens Mount

Used to adjust and support the lens to enhance overall stability.



## Module D

### Belt Pulley

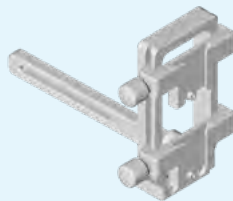
Used to adjust the belt tightness.



## Module E

### L Bracket

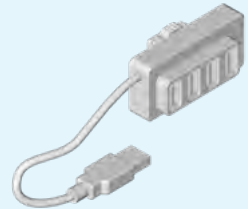
Used to mount the USB Hub and the CamFi Remote Camera Controller (sold separately).



## Module F

### USB Hub

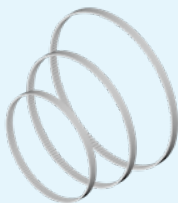
Used to connect the CamFi, the motor module and the camera.



## Module G

### MXL Belts for Focus Ring

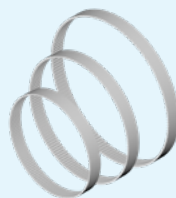
Three sized belts are included to accommodate different lens sizes: B150T\*15 MXL, B160T\*15 MXL, B170T\*15 MXL.



## Module H

### MXL Belts for Zoom Ring

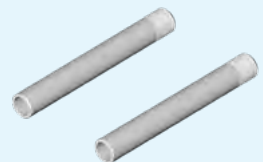
Three sized belts are included to accommodate different lens sizes: B150T\*15 MXL, B160T\*15 MXL, B170T\*15 MXL..



## Module I

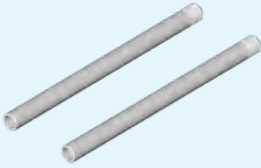
### 110mm carbon fiber rail rods

Use 110mm rods for wide and extra wide-angle lenses with focal lengths of 35mm or less (such as 15mm, 20mm, 24mm, 16-35mm, 17-35mm). Use with Base Plate (Module A).



**Module J****200mm carbon fiber rail rods**

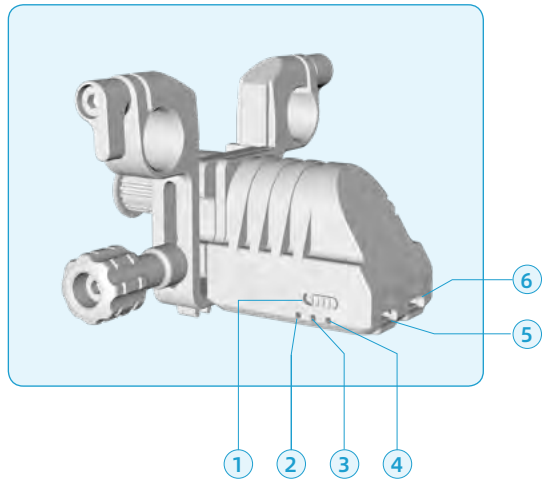
Use 200mm rods for lenses with a focal length of 200-400mm and for zoom lenses (such as 70-200mm, 70-300mm, 100-300mm, 100-400mm). Use with Base Plate (Module A).

**Module K****USB Cable**

Connect motor with USB Hub. Or charge the motor with the USB cable.

**Introduction to Indicators and Buttons**

- ① Power switch
- ② Power light
- ③ Charging light
  - On: Unit is charging
  - Off: Charging is completed
- ④ Battery light
  - Red: Battery is low
- ⑤ Charging connector
- ⑥ USB data connector



# Installation Instructions

## Select the appropriate Carbon Fiber Rail Rods for your lens

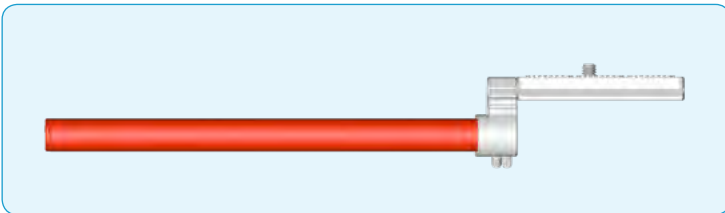
110mm carbon fiber rail rods (Module I) can be used for wide-angle and ultra-wide angle fixed focus and zoom lenses with a focal length of 35mm or less (such as 15mm, 20mm, 24mm, 16-35mm, 17-35mm).



150mm carbon fiber rail rods can be used for standard zoom lenses (such as 24-70mm, 28-70mm, 35-70mm). These rods have been pre-installed onto the base plate by the factory.



200mm carbon fiber rail rods (Module J) can be used for lenses with a focal length of 200-400mm and for zoom lens (such as 70-200mm, 70-300mm, 100-300mm, 100-400mm).

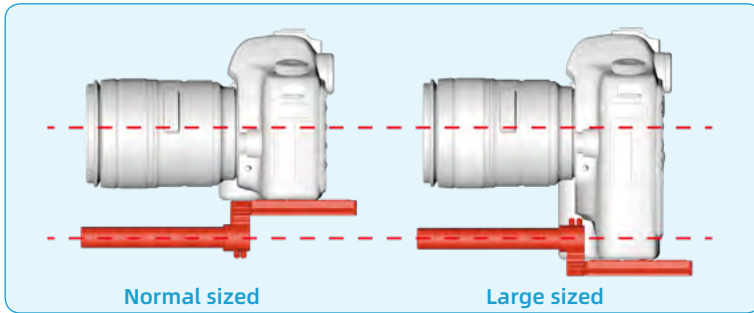


## Adjust the Base Plate with Rail Rods and the Quick Release Plate according to the camera body size

There are two types of camera bodies:

Normal sized cameras (shown in the left image) include the Sony Alpha series, Canon cameras except the 1D series, Nikon cameras except the D4-D6 series.

Large sized cameras (shown in the right image) include the Canon 1D series, Nikon D4-D6 series, Fuji GFX100 and other cameras that are equipped with a camera battery grip.



The default assembly in the package conforms to normal sized cameras. If you use a large sized camera, you need to adjust Module A first. Follow the diagram below:

Steps:

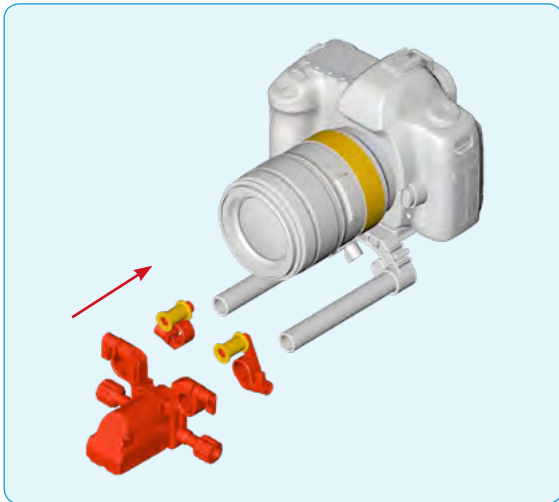
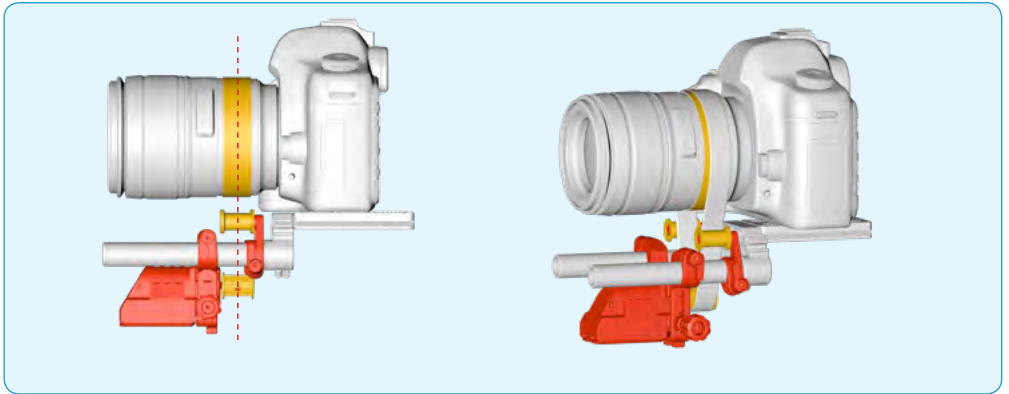
1. Locate the large hex key (aka allen wrench) in the package (lower left image).
2. Remove the screw highlighted in yellow (upper left image) using the hex key.
3. Flip the assembly (upper right image).
4. Use the screws from the quick release plate and align them with the screw holes on the bottom of the camera. Hand tighten the screws. At this time, there is no need to tighten the bottom screws.



## Installation of Belt Pulleys and Motor Module

Note: Make sure that the Zoom Ring, Focus Ring, Belt Pulley and Motor Module are all in a vertical line when assembling.

### A. Assembly Instructions for zoom and focus rings that are close to the camera body

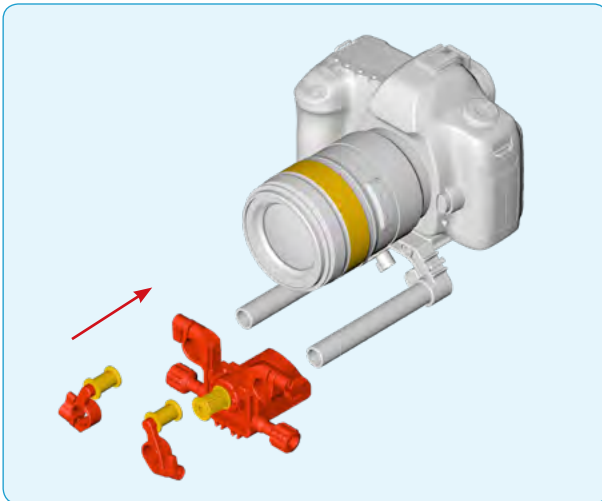
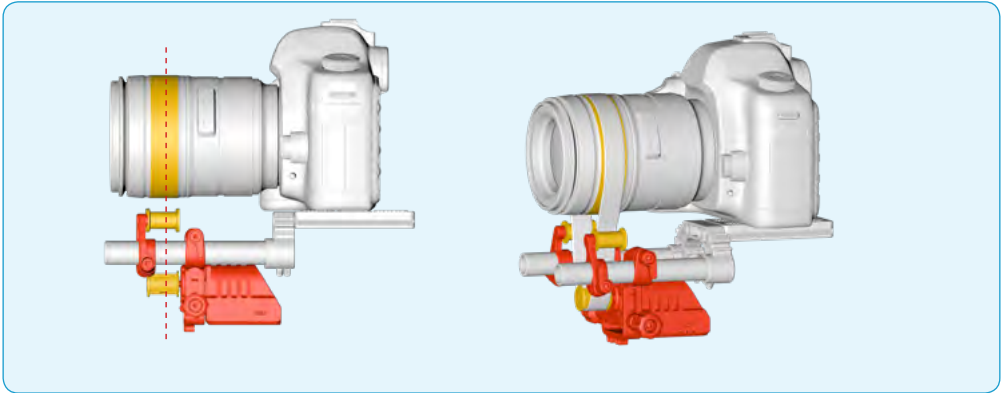


Installation sequence:

1. First, place the Belt Pulley (Module D) on the rail (upper image).
2. Then, place the Motor Module (Module B) on the rail (lower image).



## B. Assembly Instructions for zoom and focus rings that are further away from the camera body

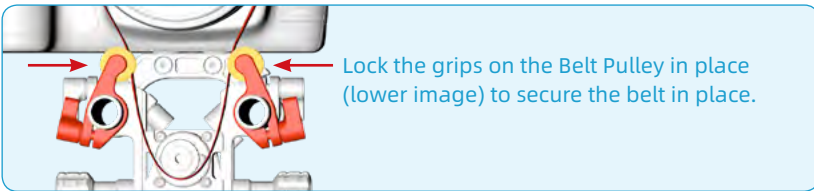
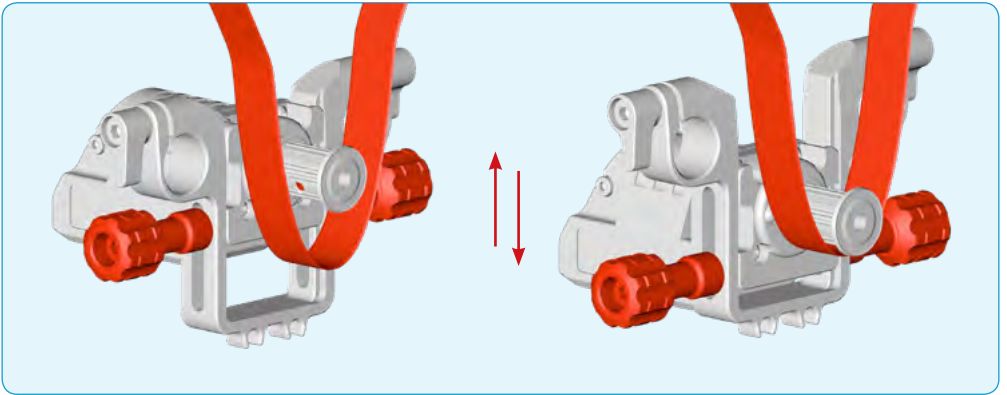
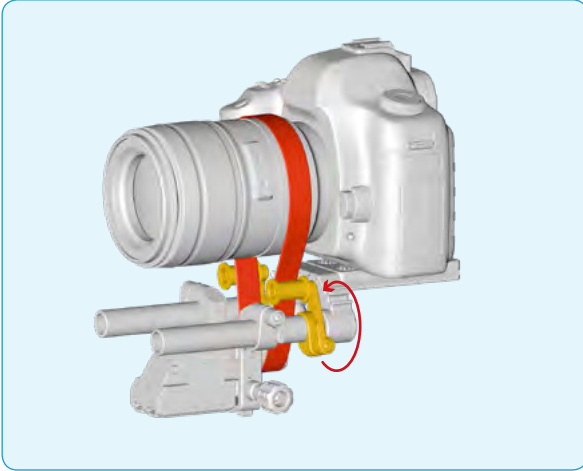


Installation sequence:

1. First, place the Motor Module (Module B) on the rail (upper image).
2. Then place the Belt Pulley (Module D) on the rail (lower image).

## Installation of Belt

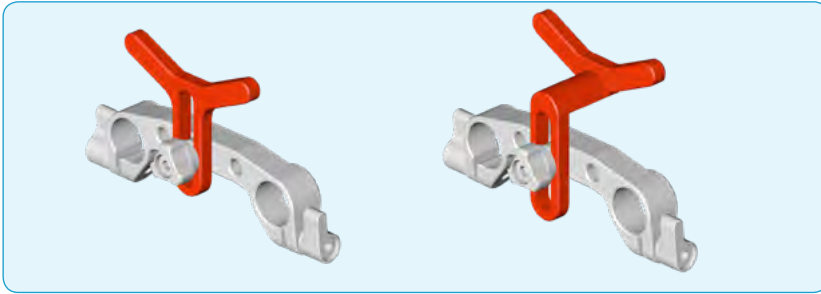
Select a suitably sized belt (Module H) based on your lens size and hold the zoom ring by adjusting the motor height and the Belt Pulley to avoid slippage.



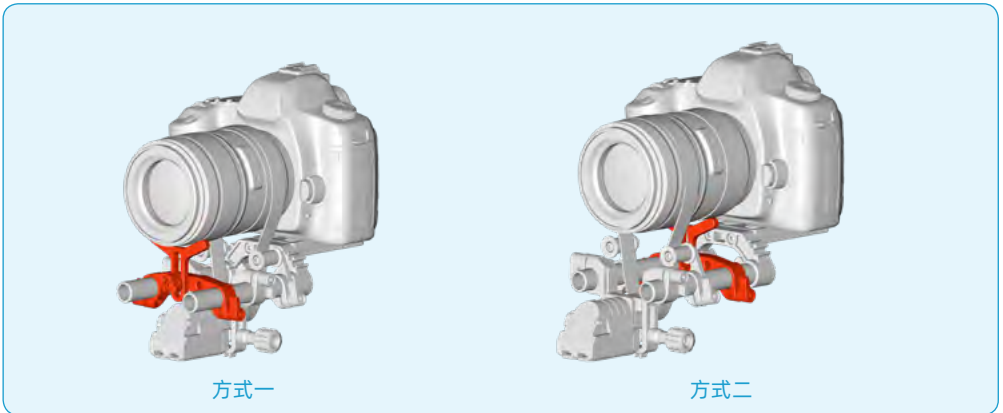
Lock the grips on the Belt Pulley in place (lower image) to secure the belt in place.

## Installation of the Holder for Lens Mount

Adjust the position of the Holder for Lens Mount (Module C) forward, backward, up and down to position the lens axis parallel to the carbon fiber rods.



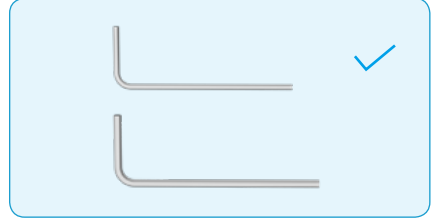
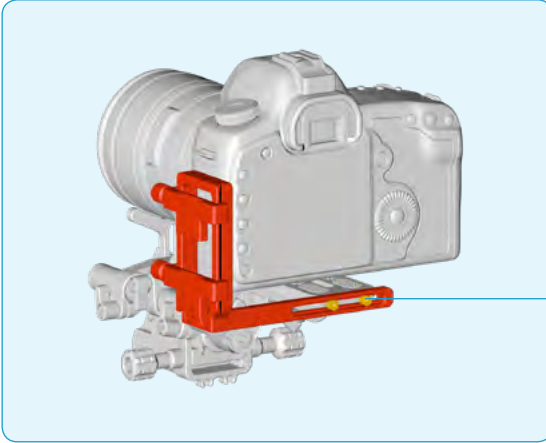
Note: The Long Holder for Lens Mount (right image) may be used in special cases.



Note: Do not touch the Holder for Lens Mount (indicated in red below) with the moving parts of the lens.

## Installation of L Bracket

Install the L Bracket (Module E) as shown below and adjust the position of the L bracket to the width of the camera.



Note: The small hex key (upper right image) is required to remove the screws on the L Bracket.

## Installation of CamFi and USB Hub

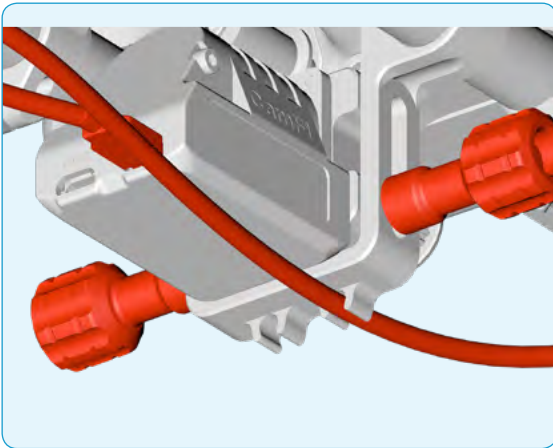
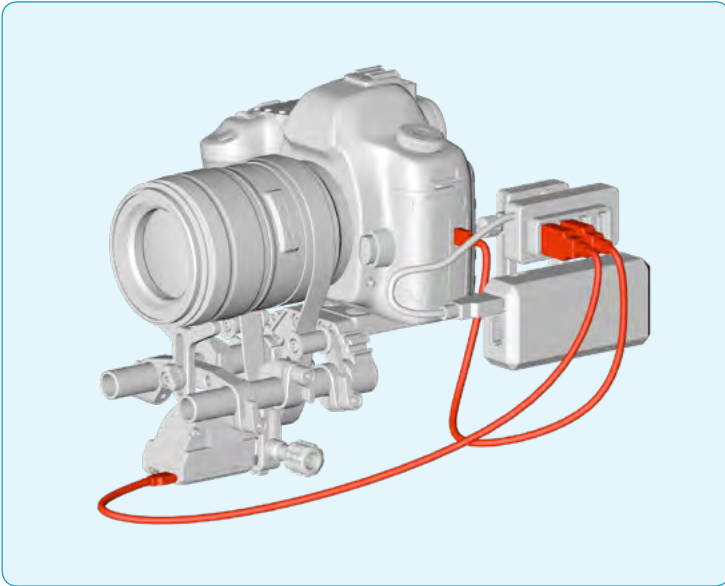
Install the CamFi Remote Camera Controller and the USB Hub (Module F) into the shoe mount on the side of the L Bracket.

Then connect the cable from the USB Hub to the CamFi Remote Camera Controller.



## Connect the USB Cable

Connect the Motor Module and the camera to the USB HUB with the cables (upper image).



The cables can be attached to the cable clips (lower image).

# How to Use the App

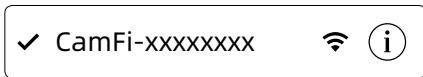
## App Download and Installation

Download the CamFi App from the “Download” page on CamFi’s official website <https://www.cam-fi.com/en/download.html> or by scanning the QR code below:



## Connect to the Wi-Fi signal of the CamFi.

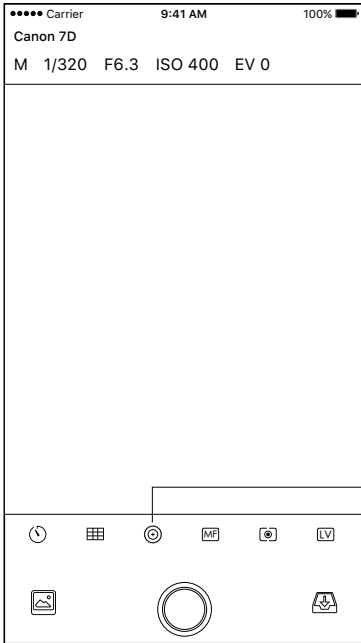
After the software download is completed, use your phone to connect the Wi-Fi signal of the CamFi Remote Camera Controller (sold separately, see notes below).



Note:

1. The CamFi ZF Remote Zoom & Focus Controller must be used in conjunction with the CamFi Remote Camera Controllers (CamFi CF101, CamFi CF102, CamFi Pro, CamFi Plus) (sold separately). Please visit the official website <https://www.cam-fi.com/en/support.html>.
2. Please refer to the CamFi Remote Camera Controller manual for the operation of the CamFi controller.
3. For detailed instructions on how to use the CamFi ZF Remote Zoom & Focus Controller, please visit <https://www.cam-fi.com/en/support/camfizf.html>.





## Launch the CamFi App

Once the phone is successfully connected to the CamFi Wi-Fi, open the CamFi app.

Make sure that the cable is connected to the camera, and that the camera and the **CamFi ZF Remote Zoom & Focus Controller** are powered on.

Click the "Zoom" icon  on the toolbar at the bottom of the CamFi app to launch the zoom controller view.

Zoom

Note that if the icon is not displayed, slide the toolbar

## Select Lens Configuration

### Select the Lens configuration:

Tap "Select Lens" and select the model that matches your current lens. If there are no lenses of this model in the list, please tap "Add Lens" to create a new lens configuration.

### Create a New Lens Configuration

1. Tap "Add Lens" to create a new lens configuration.
2. Select whether the lens configuration is to be used for zooming or focusing.
3. To set the button for the rotation direction of the motor: tap the button. Make sure the highlighted button will keep the focal length or the focal distance from moving too far. Tap the "Next" button.
4. To locate the initial position of the lens: Tap the arrow button. Adjust the focal length/focal distance of the lens to the shortest setting. Click "Set the current focal length/focal distance to the shortest".

Tip: You can speed this step by setting the step size.

5. Locate the farthest focal length/focal distance of the lens: After adjusting the focal length/focal distance of the lens to the longest (farthest), tap "Next".
6. Save lens settings: name the currently configured lens so that it can be used again.

### Calibrate the Lens

1. Click "Select Lens" to select the model from the list that corresponds to the current lens. Select the lens and tap "Next".
2. To set the button for the rotation direction of the motor: tap the button. Make sure the highlighted button will keep the focal length or the focal distance moving too far. Tap the "Next" button.
3. To locate the initial position of the lens. Tap the arrow button, adjust the focal length/focal distance of the lens to the shortest. Click "Set the current focal length/focal distance to the shortest".

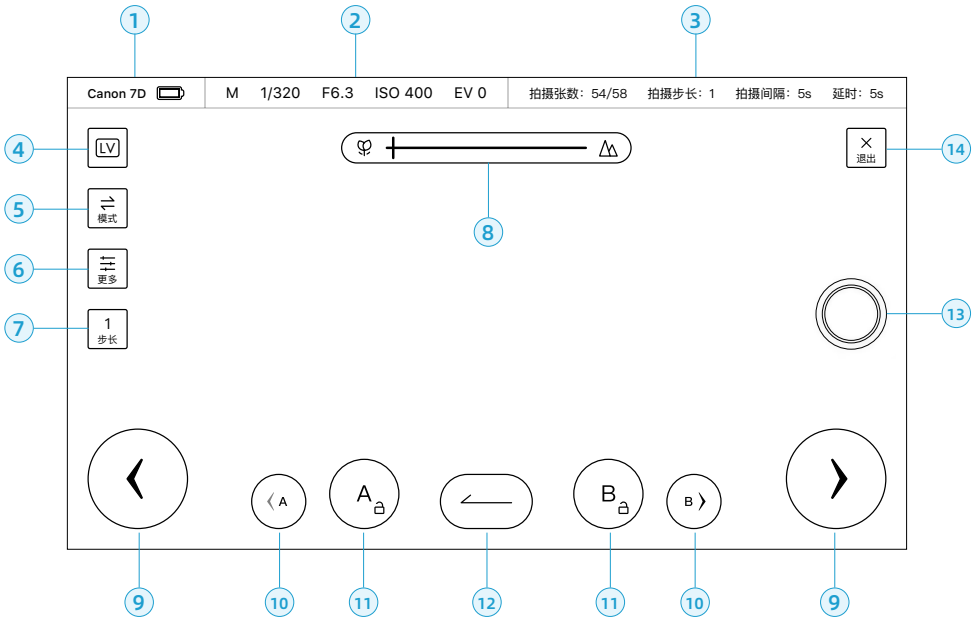
Tip: Change the range of the lens rotation each time you trigger the zoom by modifying the step. When the lens is almost at the end of the rotation, it is recommended to adjust the step size to 1.



## Select a Task

Select the task mode or click the "Task" button on the left side of the screen to show the task list. **Please note that for focus-related tasks, turn off the camera's autofocus function first, otherwise the lens may be damaged.**

## UI Description



1. Camera model and battery indicator
2. Camera parameter display
3. Recording status display
4. Turn Live View on/off
5. Switch the shooting mode
6. Set more parameters for shooting
7. Set the motor rotation step
8. Focal position
9. Rotating motors
10. Moving to markers
11. Recording of markers
12. Lens movement direction, A to B or B to A
13. Start shooting
14. Exit

## Remote Zoom (Focus) Photography

Choose the mode "Remote Focus". Open Live View by clicking the "LV" button on the left side of the interface.

**Focus adjustment:** Tap the left and right arrows at the bottom of the screen to adjust the focus. If you need to continue to adjust the focus, long press the focus arrow.

**Step Size:** Tap the "Step Size" button on the left side of the interface to adjust the step size of each zoom.

**Focus/focal length position:** The yellow bar at the top of the interface indicates the current focus/focal length position.

**Shooting:** Click the circular icon on the right side of the interface to take a picture.

## Remote Zoom (Focus) Recording

Choose the mode "Remote Focus Recording". This mode can achieve AB focus/focal length conversion during video shooting.

1. Tap the arrow button to move the focus, click the A icon to set the focus point A.
2. Do the same to set the focus point B.
3. Tap the A/arrow icon and the focus will go to point A. Tap the B/arrow icon and the focus will go to point B.
4. Tap the red icon on the right side of the screen to start video recording.

## Focus Stacking

Choose the mode "Focus stacking".

**Note: Please turn off the camera's autofocus.**

1. Tap the arrow button to set the focus on the closest area of the object, and then tap button A.
2. Tap the arrow button again to set the focus on the furthest area of the object, tap button B.
3. Tap the "More" button on the left to set the number of shots and the interval.
4. Tap the "Capture" button to start shooting.

After the shooting is completed, you can use third-party products like Adobe Photoshop or Affinity Photo for post-processing the series of photos.

## Hyperlapse

**Note: Please make sure the belt is fixed on the zoom ring. Turn on the camera's auto focus of the camera and focus to a fixed point.**

1. Tap the arrow button to set the focus on the closest area of the object, and then tap button A.
2. Tap the arrow button again to set the focus on the furthest area of the object, tap button B.
3. Tap the "More" button on the left to set the number of shots and the interval.
4. Tap the "Capture" button to start shooting.

After the shooting is completed, you can use a third-party product like Adobe After Effects to build the Hyperlapse video with the photos.

## Frequently Asked Questions

Q: Can this CamFi ZF Remote Zoom & Focus Controller be used in cameras that do not support auto focus, such as Sony a7r, a7r ii?

A: Yes, the CamFi ZF Controller can be used with these cameras. Remote focusing has been combined with depth of field shooting.

Q: Can this CamFi ZF Controller be used with follow focus?

A: No. CamFi ZF Controller is mainly designed for photo shooting. It is not suitable for follow focus shooting.

Q: Can this CamFi ZF Controller be used without the CamFi Remote Camera Controller?

A: No. The CamFi Zoom & Focus Controller must be used in conjunction with the CamFi Remote Camera Controller. It supports the following models of CamFi Remote Camera Controllers: CamFi CF101, CF102, CamFi Pro, CamFi Pro Plus.

## Product Specifications

Motor	Charging Voltage	DC 12V
	Step angle	0.144°
Battery	Charging Voltage	DC 3.7V
	Battery Capacity	500 mAH
	Operating Temperature	-10° C ~ 55° C (14° F ~ 131° F)
	Battery Runtime	25H
Wi-Fi	Wi-Fi Distance	≈ 60m
Standard	Size (mm)	Maximum: 200*166.5*140 Minimum : 210*152*140
	Product Net Weight(g)	≈ 520

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operations.

### Disclaimer and Warnings

Thank you for purchasing the CamFi ZF Remote Zoom & Focus Controller. The information contained herein affects your safety and your legal rights and responsibilities. Read this entire document carefully to ensure proper configuration before use. Failure to read and follow the instructions and warnings herein may result in serious injury to you or bystanders, or cause damage to your device or property.

CamFi Limited reserves the right of final interpretation of this document and all relevant documents relating to CamFi RF Remote Zoom & Focus Controller, and the right to make changes at any time without notice.

Please visit [http://www.cam-fi.com/en/product/camfi\\_zf.html](http://www.cam-fi.com/en/product/camfi_zf.html) for updated information.

By using this product, you hereby signify that you have read this document carefully and that you understand and agree to abide by the terms and conditions herein. You agree that you are solely responsible for your own conduct while using this product, and for any consequences thereof. You agree to use this product only for purposes that are proper and in accordance with all terms, precautions, practices, policies and guidelines that CamFi has made and may make available.

CamFi Limited accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of this product. Users shall observe safe and lawful practices including, but not limited to, those set forth herein.

### WARNING

Read the ENTIRE User Guide to become familiar with the features of this product before operating this product. Failure to operate the product correctly can result in damage to the product or personal property and cause serious injury. This is a sophisticated product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. DO NOT use with incompatible components or in any way otherwise as mentioned or instructed in the product documents provided by CamFi. The safety guidelines herein contain instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the User Guide, prior to assembly, setup and use, in order to operate the product correctly and avoid damage or serious injury.

### Safe Operation Guidelines

Caution:

1. The CamFi ZF Zoom & Focus Controller is a high-precision control device. Dropping it or receiving an impact from an external force may damage the CamFi ZF Zoom & Focus Controller resulting in abnormal operation.
2. The CamFi ZF Zoom & Focus Controller is not waterproof. Do not allow the CamFi ZF Zoom & Focus Controller to come into contact with any liquids or liquids with any cleaning products. It is recommended that you use a soft, dry cloth to clean it.
3. Please pay attention to sand, dust and water resistance when using the CamFi ZF Zoom & Focus

Controller.

Warning:

To avoid fire, loss of power, and personal injury, always follow the following safety guidelines when using the battery, charging, and storing.

USE:

Make sure the battery is fully charged before each use.

Battery Charging:

The battery will stop charging automatically when it is full. Disconnect the batteries from the charger when fully charged.

Battery Storage:

1. Discharge the battery to 40%-65% if it will NOT be used for more than 10 days. This can greatly extend the battery life.
2. The battery enters hibernation mode when voltage gets too low. Charge the battery to bring it out of hibernation.

Battery Maintenance.

1. Do not overcharge or over-discharge the battery, as this will damage the battery cell.
2. If left unused for a long time, it will affect the battery performance.
3. Never use the battery when the temperature is too high or too low. The ideal operating temperature is 10° C - 55° C (50° F - 131° F). Do not store the battery in any environment with a temperature of over 60° C (or 140° F).
4. Recharge and discharge the battery about every 3 months to maintain the battery life.

Disposal

1. Do not dispose of the battery in regular trash. Strictly follow your local regulations regarding the proper disposal and recycling of batteries. Only dispose of the battery after a complete discharge.
2. If the battery cannot be fully discharged, contact a professional battery disposal/recycling agent for further assistance.

## Product Warranty

Warranty Period

1. Customers are entitled to replacement or free repair service in case of quality defect(s) found in the product within 15 days upon receipt of the product.
2. Customers are entitled to free repair service from CamFi Limited for any product that is proven defective in material or workmanship that results in product failure during normal consumer usage and conditions within the valid warranty period. The warranty period is 12 months from the date of delivery.

This warranty does not apply to the following:

1. Products subjected to unauthorized maintenance, misuse, collision, neglect, mishandling, soaking, accidents, and unauthorized alterations.

2. Products subjected to improper use or whose labels or security tags have been torn off or altered.
3. Products whose warranty has expired.
4. Products damaged due to acts of nature, such as fire, flood, lightning, etc.

#### Warranty Claim Procedure

1. If failure or any problem occurs to your product after purchase, please contact CamFi's customer service through email at [contact@cam-fi.com](mailto:contact@cam-fi.com) or via our website at <http://www.cam-fi.com/en/>.
2. CamFi's customer service will guide you through the service procedure regarding any product issue or problem you have encountered.
3. CamFi reserves the right to evaluate damaged or returned products.

#### Contact Information

##### Contact Us

Tel: +86-0756-3618386

Email: [support@cam-fi.com](mailto:support@cam-fi.com)

Website: [www.cam-fi.com](http://www.cam-fi.com)

Address: A1002, Tsinghua Science and Technology Park, University Road, Xiangzhou District, Zhuhai, Guangdong, China.

#### Warranty Card

Customer Name:

Mailing Address:

Phone Number:

Date of Sale:

Dealer Name:

Dealer Phone Number:

Product Serial Number:

Cause of Failure: