

RONIN-S Focus Motor

User Guide

使用说明

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In the Box

Focus Motor

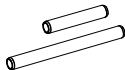
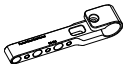
× 1

Rod Mount

× 1

15 mm Rod

× 2



Screw

× 4

Focus Gear Strip

× 2

Power Cable

× 1

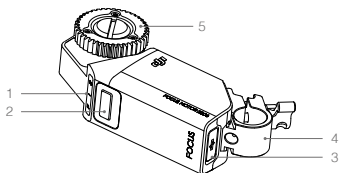


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Introduction

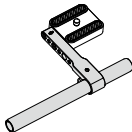
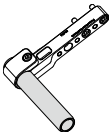
The RONIN™-S Focus Motor is used with the Ronin-S Focus Wheel to control the focus, iris, and zoom.

1. Status Indicator
2. Function Button
3. CAN Bus Port
4. Rod Clamp
5. Gear

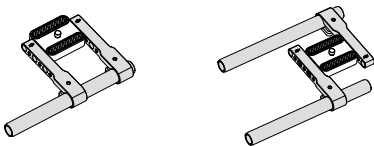


Installation

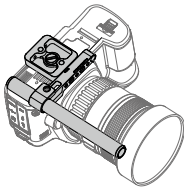
1. Select and attach the 15 mm rod to the rod mount according to the camera lens.
2. Attach the rod mount to the camera riser.



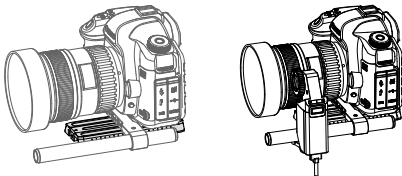
3. To increase stability or to use a Focus Motor on either side of the camera, attach two rod mounts.



4. Attach the camera riser with the rod mount to the bottom of the camera.

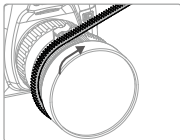


5. After attaching the camera to the mounting plate, attach the Focus Motor to the rod mount.

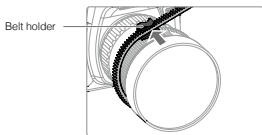


- The Focus Motor gear can be mounted on either side of the motor, and the position of the rod clamp is adjustable.
- Ensure the Focus Motor is mounted firmly.

6. If the camera does not have a lens focus ring with a 0.8 m gear, attach the provided gear strip to the camera lens to use the Focus Motor.
- a. Be sure the teeth of the gear strip are facing outward. Line up the gear strip on the focus ring or the zoom ring on the lens and pull it taut.

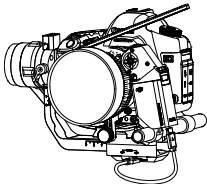


- b. Press the gear strip into the belt holder while holding it tightly. Be sure the gear strip is securely in place in the belt holder.



- To loosen the gear strip, push the gear strip outward while holding the belt holder tightly. **DO NOT** pull out the gear strip forcibly or the gear strip will get damaged.
- Trim the gear strip to the required length, leaving enough for adjustments (if needed).

7. Use the provided power cable to connect the Focus Motor to the Ronin-S 12 V / 2 A accessory power port.



Usage

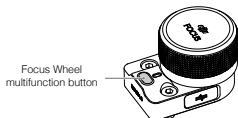
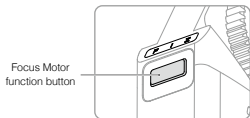
Control the Focus Motor by using the Focus Wheel after powering on the Ronin-S.

Calibration

The Focus Motor can be used before calibration, but the range that the Focus Wheel can rotate the motor will be limited. After calibration, the Focus Wheel will be able to fully rotate the motor.

Calibrate Procedure

- For lenses with a mechanical limit, calibration can be done automatically. Press the Focus Wheel multifunction button or Focus Motor function button twice to calibrate the Focus Motor.



- For lenses without a mechanical limit, calibration must be done manually.
 - Press the Focus Wheel multifunction button or Focus Motor function button to start the calibration. When the motor rotates to the start point, stop the motor manually. The motor will continue to rotate and stop the motor manually again when it reaches the start point.
 - Repeat the step above to confirm the end point.

Set Focus Motor Range

The range of the Focus Motor can be set by confirming Points A and B on the Focus Wheel. Rotate the motor to the desired Point A and press the Focus Wheel multifunction button to confirm. After Point A is confirmed, repeat the step to confirm Point B. Press the Focus Wheel multifunction button again to delete Points A and B.



- The Focus Motor must be calibrated every time it is powered on.
- DO NOT touch the motor's gear when it is rotating.

The status indicator of the Focus Wheel indicates the calibration status.

Blinking Pattern	Descriptions
Solid yellow	Focus Motor is connected, but not calibrated
Blinks yellow slowly	Calibrating
Solid green	Focus Motor is connected and calibrated
Blinks green slowly	Point A is set
Blinks green twice	Points A and B are set

Focus Motor Control

Press the Focus Motor function button to switch the status indicator between Focus (F), Iris (I), and (Z) Zoom. Make sure the status indicator is set to the lens that the Focus Motor is attached to.

Press and hold the Focus Motor function button to turn the status indicator on or off.

Press and hold the Focus Wheel multifunction button to reverse the rotational direction of the Focus Motor.

Focus Motor Status Indicator Descriptions

Blinking Pattern	Descriptions
Blinks red twice	Focus Motor error, update firmware
Blinks red slowly	Focus Motor is disconnected
Blinks red quickly	Focus Motor has stalled
Solid green	Calibration complete
Blinks green slowly	Working normally

Firmware Update

The Focus Motor firmware is part of the Ronin-S firmware. When new firmware is available, connect the Focus Motor to the Ronin-S to update.

Specifications

Focus Motor	
Weight	198 g (power cable included)
Dimensions	110 x 53 x 30 mm
Max. Torque	0.5 Nm
Max. Speed	210 RPM
Operating Current	Free current: 25 mA (12 V); Stall current: 0.5 A (12 V)
Operating Voltage	6-17 V
Noise	25 dB
Rod Clamp Inner Diameter	15 mm
Gear	No. of teeth: 40; Module: 0.8
Operating Temperature	-20 to 55°C
Gear	
No. of Teeth	151
Module	0.8
Diameter	30 to 110 mm
Length	377 mm

This content is subject to change.

Download the latest version from

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物品清单

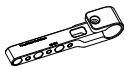
跟焦器电机

× 1



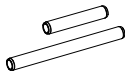
固定组件

× 1



15 mm 导管

× 2



螺丝

× 4



跟焦齿条

× 2



电源线

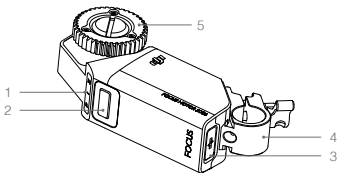
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简介

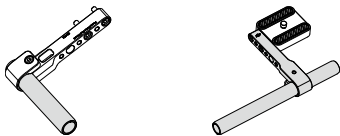
RONIN™-S 跟焦器电机配合 Ronin-S 跟焦轮使用，用于调节镜头对焦、光圈或变焦。

1. 状态指示灯 (F/I/Z)
2. 功能按键
3. 电源通信接口
4. 快拆装置
5. 齿轮

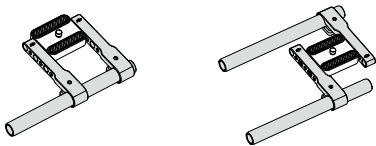


安装

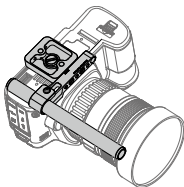
1. 根据相机镜头长短，选择不同长度的导管安装至固定组件。
2. 固定安装组件至垫高模块。



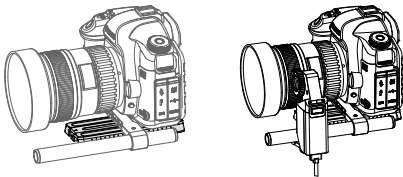
3. 为增强导管的刚度或满足两个跟焦电机的使用要求，可使用两套安装组件。安装示例如下。



4. 安装垫高模块与安装组件至相机底部。



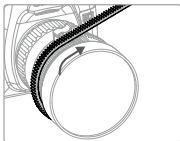
5. 安装相机固定板后，安装跟焦器电机至安装组件。



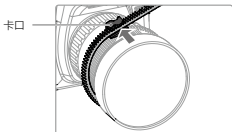
- 跟焦器电机齿轮可安装于电机左、右两侧，电机快拆装置安装方向可调换，请根据实际需求操作。
- 确保跟焦器电机安装稳固。

6. 如所使用镜头对焦环不自带 0.8 m 卡齿，可将标配跟焦齿条安装至镜头相应位置以配合跟焦器电机使用。

- 安装时请正对相机镜头。然后将跟焦齿条绕住镜头对焦环或调焦环位置，调整跟焦齿条长短，确保跟焦齿条已将镜头牢牢围住。

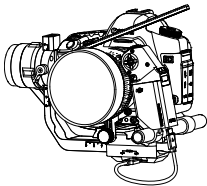


b. 固定跟焦齿条卡口位置的同时，将齿条按进卡口。



-
- ⚠
- 如需解开跟焦齿条，请固定卡口位置同时，将跟焦齿条向外推出。切勿强力将齿条从锁紧位置扯出，以免损坏齿条。
 - 安装好跟焦齿条后，预留合适的调整长度后可根据需求裁剪齿条多余部分。
-

7. 使用电源线连接跟焦器电机底部的电源通信接口与 Ronin-S 12V/2A 电源 / 配件输出接口，实现供电与通信。



使用

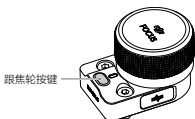
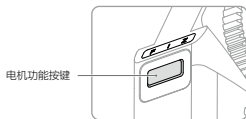
开启 Ronin-S 电源，当跟焦器电机与跟焦轮连接并通信正常，即可通过跟焦轮控制跟焦器电机。

校准行程

电机未校准行程之前，跟焦轮可控制电机齿轮转动部分行程。校准行程后的电机可以控制镜头的全部行程或用户选定的行程。

校准步骤

1. 对于有机械限位的镜头，电机将自动完成校准。双击跟焦轮按键或电机功能按键启动校准电机行程。校准过程中再次双击可以取消校准。



2. 对于没有机械限位的镜头，需要通过手动堵转电机完成校准，具体操作如下：
 - a. 双击跟焦轮按键或电机功能按键启动校准电机行程，当电机转动到限位起点（用户选定）时，手动堵转电机后松手；待电机再次转动到起点时堵转电机，此时限位起点位置确定。
 - b. 当电机继续转动到限位终点时，手动堵转电机后松手；待电机再次转动到终点时堵转电机，此时限位结束点位置确定。

设定行程

校准行程后，跟焦轮可控制镜头的全部行程。若用户需选定特定范围内行程，首先确定电机位置 A 点，单击跟焦轮按键记录；然后使电机在位置 B 点，再单击跟焦轮按键，则跟焦轮只控制镜头在 A-B 点范围内转动。再次单击按键可取消 A-B 点行程。



- 关机后，跟焦器电机不会记录上一次校准后的行程。如有需要，请在每次开机时重新校准。
- 跟焦器电机齿轮转动过程中请勿触碰。

跟焦轮状态指示灯显示校准状态。

闪灯方式	描述
黄灯常亮	监测到电机但未校准行程
黄灯慢闪	正在校准电机行程
绿灯常亮	连接至电机并完成校准行程
绿灯慢闪	跟焦器电机 A 点设定完成
绿灯双闪	跟焦器电机 A 和 B 点设定完成

电机控制

单击跟焦器电机按键切换对焦 (F)、光圈 (I)、变焦 (Z) 指示灯显示。电机当前控制的功能 (F/I/Z) 相应指示灯为绿灯常亮。

长按跟焦器电机按键开启或关闭电机状态指示灯。

长按跟焦轮按键可更改电机转动方向相反。

跟焦器电机状态指示灯指示电机状态，F、I、Z 分别代表 Focus 对焦、Iris 光圈、Zoom 变焦。

闪灯方式	描述
红灯双闪	电机故障，需要升级
红灯慢闪	电机未连接
红灯快闪	电机堵转
绿灯常亮	跟焦电机完成校准行程
绿灯慢闪	正常工作

固件升级

跟焦器电机固件包含在 Ronin-S 固件里，当跟焦器电机固件有更新时，请将跟焦器电机安装在 Ronin-S 上进行升级。升级方法同 Ronin-S 升级方法一致。

规格参数

电机特性	
重量	198 g (含电源线)
尺寸	110x53x30 mm
最大扭矩	0.5 Nm
最大运行速度	210 RPM
工作电流	静态电流 25 mA (12 V); 堵转电流 0.5 A (12 V)
工作电压	6-17 V
噪音	25 dB
安装孔尺寸	15 mm
齿轮	齿数 40; 模数 0.8
工作温度	-20-55 °C
跟焦齿条	
齿数	151
模数	0.8
适配镜头口径范围	30-110 mm
总长度	377 mm

内容如有更新，恕不另行通知。

您可以在 DJI 官方网站查询最新版本

<http://www.dji.com/ronin-s>

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Compliance Information

FCC Compliance

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 operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

Environmentally friendly disposal



Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.

Umweltfreundliche Entsorgung



Elektro-Altgeräte dürfen nicht mit gewöhnlichem Abfall entsorgt werden und müssen separat entsorgt werden. Die Entsorgung an kommunalen Sammelstellen ist für Privatpersonen kostenlos. Die Eigentümer der Altgeräte sind für den Transport zu den Sammelstellen verantwortlich. Durch diesen geringen Aufwand können Sie zur Wiederverwertung von wertvollen Rohmaterialien beitragen und dafür sorgen, dass umweltschädliche und giftige Substanzen ordnungsgemäß unschädlich gemacht werden.

Tratamiento de residuos responsable con el medio ambiente



Los aparatos eléctricos viejos no pueden desecharse junto con los residuos orgánicos, sino que deben ser desechados por separado. Existen puntos limpios donde los ciudadanos pueden dejar estos aparatos gratis. El propietario de los aparatos viejos es responsable de llevarlos a estos puntos limpios o similares puntos de recogida. Con este pequeño esfuerzo estás contribuyendo a reciclar valiosas materias primas y al tratamiento de residuos tóxicos.

Mise au rebut écologique



Les appareils électriques usagés ne doivent pas être éliminés avec les déchets résiduels. Ils doivent être éliminés séparément. La mise au rebut au point de collecte municipal par l'intermédiaire de particuliers est gratuite. Il incombe au propriétaire des appareils usagés de les apporter à ces points de collecte ou à des points de collecte similaires. Avec ce petit effort personnel, vous contribuez au recyclage de matières premières précieuses et au traitement des substances toxiques.

Smaltimento ecologico



I vecchi dispositivi elettrici non devono essere smaltiti insieme ai rifiuti residui, ma devono essere smaltiti separatamente. Lo smaltimento da parte di soggetti privati presso i punti di raccolta pubblici è gratis. È responsabilità del proprietario dei vecchi dispositivi portarli presso tali punti di raccolta o punti di raccolta analoghi. Grazie a questo piccolo impegno personale contribuirete al riciclo di materie prime preziose e al corretto trattamento di sostanze tossiche.

Milieuvriendelijk afvoeren



Oude elektrische apparaten mogen niet worden weggegooid samen met het restafval, maar moeten afzonderlijk worden afgevoerd. Afvoeren via het gemeentelijke inzamelpunt is gratis voor particulieren. De eigenaar van oude toestellen is verantwoordelijk voor het inleveren van de apparaten op deze of vergelijkbare inzamelpunten. Met deze kleine persoonlijke inspanning lever je een bijdrage aan de recycling van waardevolle grondstoffen en de verwerking van giftige stoffen.

Eliminação ecológica



Os aparelhos elétricos antigos não podem ser eliminados juntamente com os materiais residuais. Têm de ser eliminados separadamente. A eliminação no ponto de recolha público através de entidades particulares é gratuita. É da responsabilidade do proprietário de aparelhos antigos levá-los a estes pontos de recolha ou a pontos de recolha semelhantes. Com este pequeno esforço pessoal, contribui para a reciclagem de matérias-primas úteis e para o tratamento de substâncias tóxicas.

IC Compliance

This device complies with ICES-003 standard. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr ⁶⁺)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
线路板	×	○	○	○	○	○
外壳	×	○	○	○	○	○
金属部件 (铜合金)	×	○	○	○	○	○
内部线材	×	○	○	○	○	○
其他配件	×	○	○	○	○	○

本表格依据 SJ/T 11364 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/T 26572 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/T 26572 规定的限量要求。
(产品符合欧盟 ROHS 指令环保要求)

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