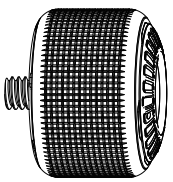
PDMOVIE

# LIVE AIR 4 SMART

(PDL-AFX-RA-SPM、PDL-AFX-SPM、PD-BTMP-SPM)

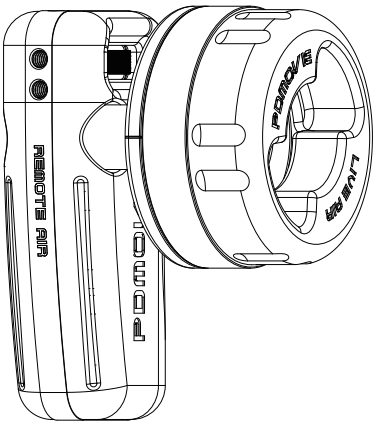
Product User Manual

# Welcome To Use LIVE AIR 4 SMART



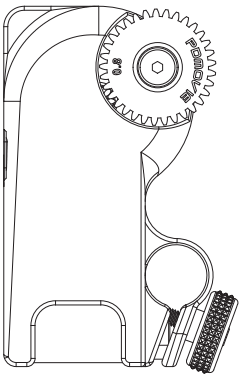
**Bluetooth Wireless Small Controller**

(PDL-TC-AFX)




**Professional Big Handwheel**

(REMOTE AIR RIG)



**Motor Smart**

(PD-BTMP-SPM)

# Important Information

- **Before using the product, please carefully read the manual or watch the tutorial videos to learn proper operation techniques. The company shall not be held liable for any direct or indirect adverse consequences resulting from operational errors.**
- **Do not attempt to repair or modify the internal structure of the product. If any damage or failure occurs due to such actions, our company reserves the right to deny warranty service.**
- **If the product malfunctions during use and needs repair or one-on-one debugging, please contact us through the following methods.**

**E-mail: pd@pdmovie.com**

**Website: www.pdmovie.com**

**Instagram: pdmovie_official**

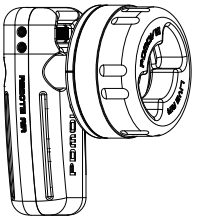
**Facebook: PDmovie**

**Youtube: PDMOVIE**

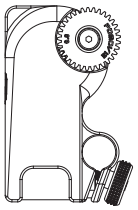
**WhatsApp: +86 135 4210 5054 (same as WeChat number)**

# Product List

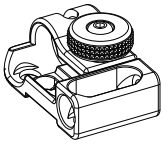
① Wireless Controller



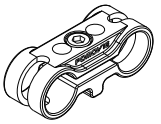
② Professional Big Handwheel



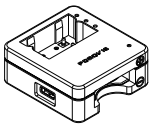
③ Bluetooth Motor



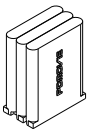
④ Hot Shoe Clamp



⑤ Rod Adapter

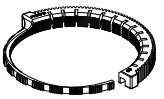


⑥ Hybrid Charger

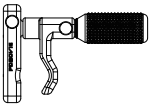


⑦ Li-42Bx3 Battery

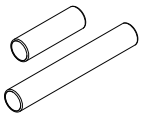
⑧ LIR2477 Battery



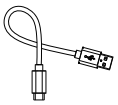
⑨ Focus Ring



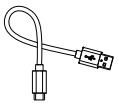
⑩ Multifunctional Clamp



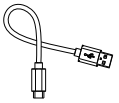
⑪ 5CM&10CM Rod



⑫ USB-C Charging Cable（0.3M）



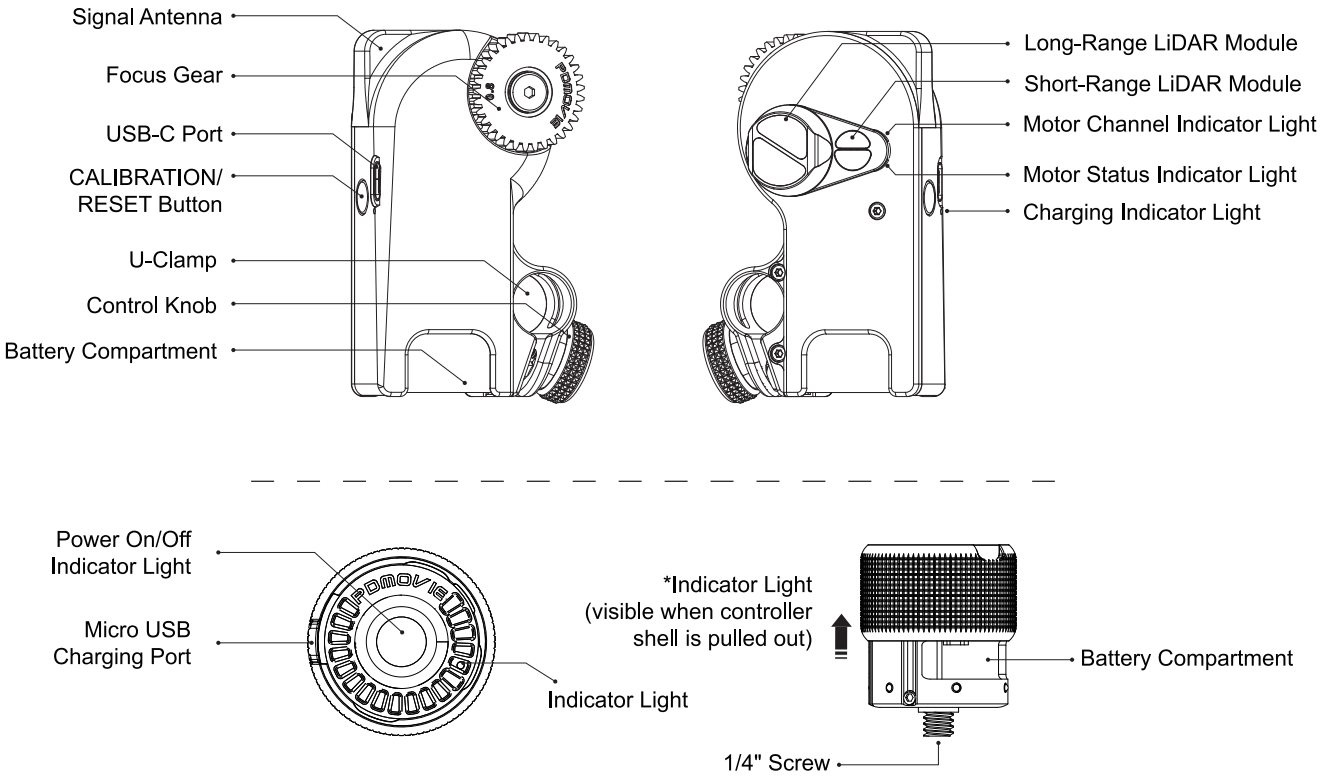
⑬ USB-C Power Cable（0.5M）



⑭ Micro USB Charging Cable（0.3M）

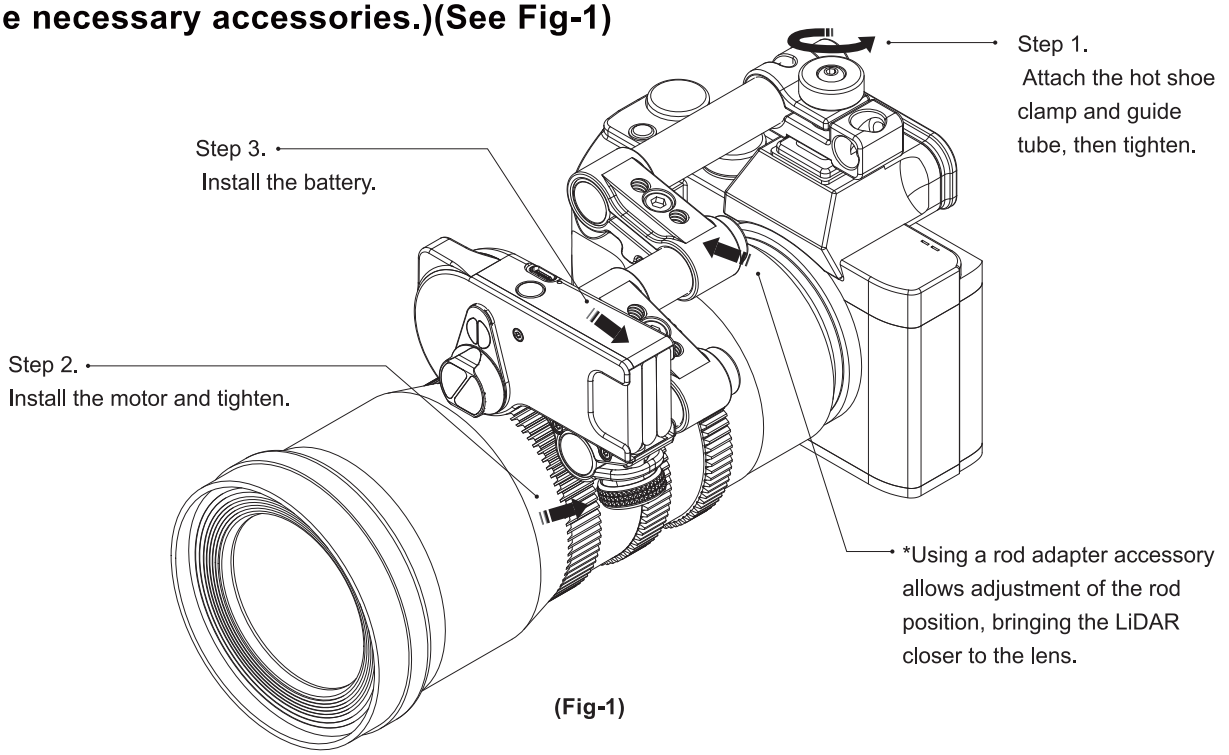
| Number | Name | PDL-AFX-RA-SPM | PDL-AFX-SPM | PD-BTMP-SPM |
|---|---|---|---|---|
| 1 | Wireless Controller（PDL-TC-AFX） | 1 | 1 | - |
| 2 | Professional Big Handwheel（REMOTE AIR RIG） | 1 | - | - |
| 3 | Bluetooth Motor（PD-BTMP-SPM） | 1 | 1 | 1 |
| 4 | Hot Shoe Clamp | 1 | 1 | 1 |
| 5 | Rod Adapter | 1 | 1 | - |
| 6 | Hybrid Charger | 1 | 1 | 1 |
| 7 | Li-42Bx3 Battery | 2 | 2 | 2 |
| 8 | LIR2477 Battery | 2 | 2 | - |
| 9 | Focus Ring | 1 | 1 | - |
| 10 | Multifunctional Clamp | 1 | 1 | - |
| 11 | 5CM&10CM Rod | 1 | 1 | - |
| 12 | USB-C Charging Cable（0.3M） | 1 | 1 | 1 |
| 13 | USB-C Power Cable（0.5M） | 1 | 1 | 1 |
| 14 | Micro USB Charging Cable （0.3M） | 1 | 1 | - |

# User Guide

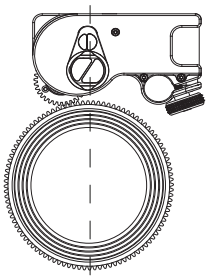



## 1.Installing the Motor

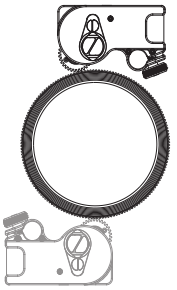
- Mount the motor onto the rod, ensuring the motor gear tightly meshes with the lens gear, then secure the U-clamp. **(For mounting on mirrorless/DSLR cameras, first install the hot shoe clamp or ensure the camera kit includes the necessary accessories.)(See Fig-1)**



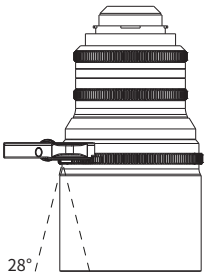

**(Fig-1)**



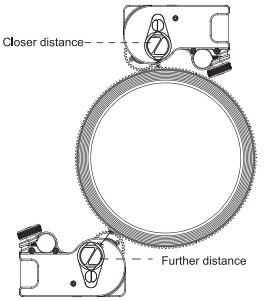
1.During installation, position the LiDAR as close as possible to the lens's central axis for optimal performance.



2.Depending on the usage scenario, mount the LiDAR directly above or below the lens. Side mounting will render the scanning field ineffective.




3.The LiDAR's field of view is 28°+4°/16°. Avoid obstructing it during use.




4.For longer lens front ends, adjust the LiDAR's position to avoid obstruction.

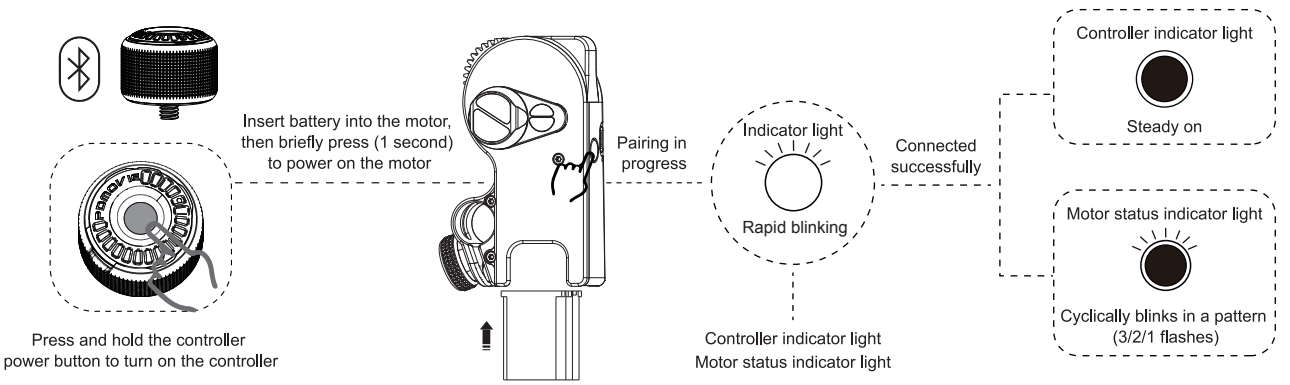
- **The autofocus feature is compatible with most manual lenses with built-in limiters or DSLR electronic lenses with depth-of-field scale markings. Lenses without limiters or scale markings are not supported.**
- **For lenses without 0.8Mod focus gears, an additional follow focus ring must be installed. Ensure the motor gear tightly meshes with the follow focus ring gear for proper operation.**

## 2.Powering On/Off the Controller and Motor

- Press and hold the controller's ON/OFF button for 3 seconds until the indicator lights up, then release.
- Insert the battery into the motor and press the button briefly to power it on. To power off, press and hold the button until the motor's status light turns off.
- (Gear movement during shutdown is normal.)

## 3.Bluetooth Pairing

- The controller and motor are pre-paired. Turn both on simultaneously for automatic pairing (rapid blinking indicates pairing in progress). Successful pairing is indicated by a steady controller light and motor light blinking at the current speed setting. (If pairing with other controllers/motors: The Bluetooth of the controller and motor need to be reset.. See Table 3-④ and Table 2-⑥. Skip this step if not using a controller.)

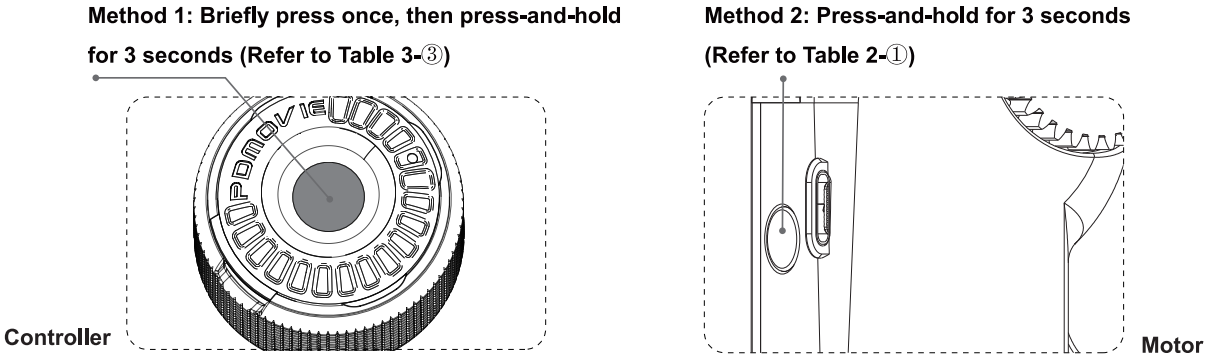


**1.The controller's stable range is approximately 100 meters in line-of-sight, though actual range may vary due to environmental factors.**

**2.In high-interference environments, the motor and controller may disconnect. Reduce the distance and wait for signal recovery; they will reconnect automatically.**

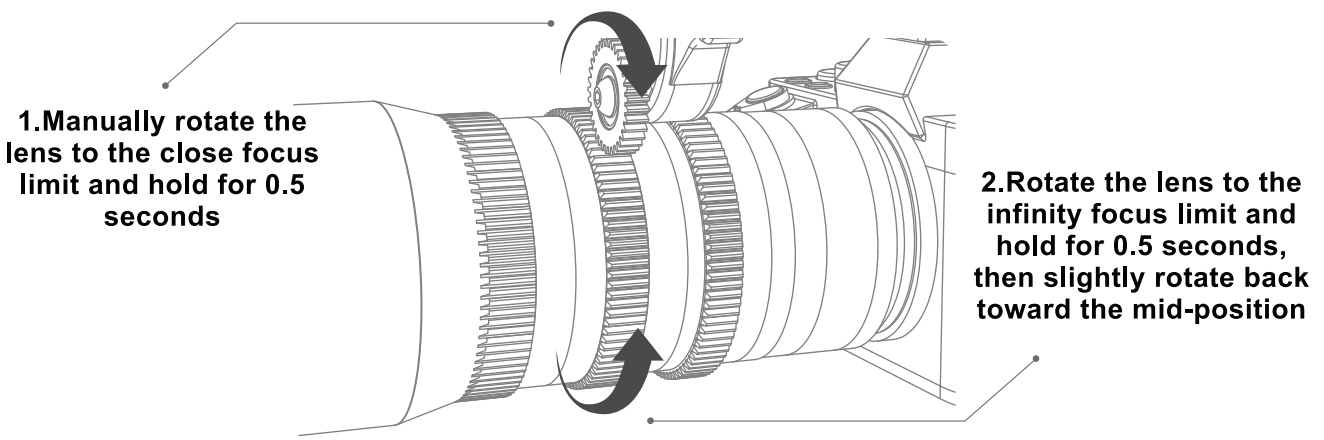
## 4.Calibrating Lens Travel

- Method 1: Briefly press the controller's ON/OFF button, then press and hold for 3 seconds until the motor starts rotating. Release to auto-calibrate lens travel.
- Method 2: Press and hold the motor's CALIBRATION button for 3 seconds until rotation begins. Release to auto-calibrate.




- Method 3: Manual calibration. Ensure the motor gear fully meshes with the lens gear. After powering on the motor, manually rotate the lens to the nearest focus limit, hold for 0.5 seconds, then rotate to the infinity focus limit and hold for 0.5 seconds. Finally, slightly rotate the lens back toward the midpoint. The motor will auto-detect the lens travel. (The motor can rotate to either the near or far limit first without sequence requirement. Just remember the logic: first rotate to Limit A, then to Limit B, and finally make a slight rotation back toward Direction A.)

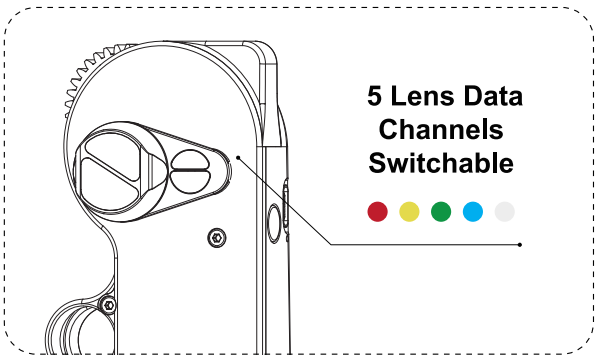
**(Note: Use this method for DSLR lenses without limiters or with high resistance that prevents auto-calibration.)**



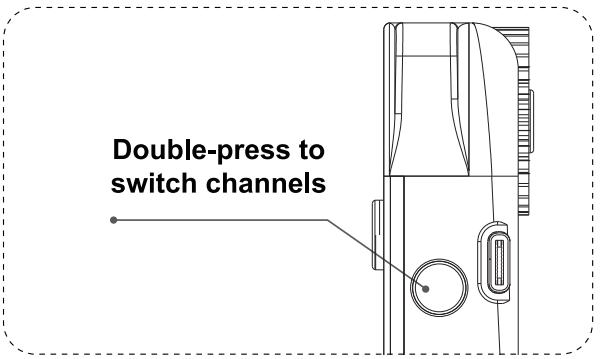

***After completing steps 1-4, the controller can drive the motor. For more commands, see Tables 2 and 3.**

# Auto-Focus Calibration Steps

1.Please use the focus calibration card and stick it on a non-reflective wall. (Printing on standard A3 or A4 paper is also acceptable.)
2.Try to perform auto-focus lens calibration indoors, as changing light conditions outdoors may lead to calibration failure.
3.Install the motor correctly according to the manual. Make sure the controller is turned off and start the motor independently (ensure the motor is not connected via Bluetooth).
4.Choose the channel color to save the lens calibration data. Double-click the motor button to cycle through the five channels (Red, Yellow, Green, Blue, White). You can label each channel with the corresponding lens. (See Fig. 2/ Fig. 3)
5.Try to keep the camera and focus calibration card on the same horizontal level during calibration to avoid excessive tilt.
6.Ensure there are no objects between the motor and the focus calibration card during calibration to avoid scan interference or errors.
7.During calibration, open the lens aperture to its widest setting to achieve the shallowest depth of field for more accurate focus points.




(Fig. 2)




(Fig. 3)

1.Different lenses require separate lens channels for autofocus calibration data setup. (Upon completion, the settings are automatically saved to the currently selected color channel.)
2.The lens autofocus data only needs to be configured once. For subsequent use, simply select the corresponding color channel, perform automatic/manual lens travel calibration, and it will be ready for use—no need to repeat the setup.
3.Repeating the autofocus calibration process will automatically overwrite the previous data. The data cannot be individually deleted. (If changing lenses or encountering inaccurate calibration data, simply reconfigure as needed.)
4.If the lens and motor are moved to another camera for autofocus use, factors such as adapters or changes in flange distance may cause autofocus data errors, resulting in focus inaccuracy. In such cases, the autofocus setup must be performed again.

## 1.Start Calibration

- Press and hold the motor button for 3 seconds to auto/manual calibrate the lens range. Ensure full calibration of the lens travel—this step is critical.
- Short press the motor button once, then immediately press and hold for 3 seconds to enter auto-focus calibration mode. (Ensure the commands are performed smoothly. The channel indicator will flash in a circular pattern twice to confirm entry into calibration mode.)

1.Manually rotate the lens to near its minimum focus distance, move the camera forward or backward until the focus calibration card appears sharp and in focus on screen. Then short press the motor button once to mark the first calibration point. At this time, the channel indicator will flash rapidly. Do not move the camera until the rapid flashing stops. When the indicator stops flashing and a beep is heard, it means the first point has been successfully calibrated. At this time, the channel indicator will then flash three times in a circular pattern.(See Fig-4)

2.Move the camera backward approximately 2 meters from the first calibration point. Manually adjust the lens focus ring until the focus calibration card appears sharp and in focus on screen. Then short press the motor button once to mark the second calibration point. At this time, the channel indicator will flash rapidly again. Do not move the camera until the rapid flashing stops. When the indicator stops flashing and a beep is heard, the second point has been successfully calibrated. At this time, the channel indicator will then flash four times in a circular pattern.(See Fig-4)

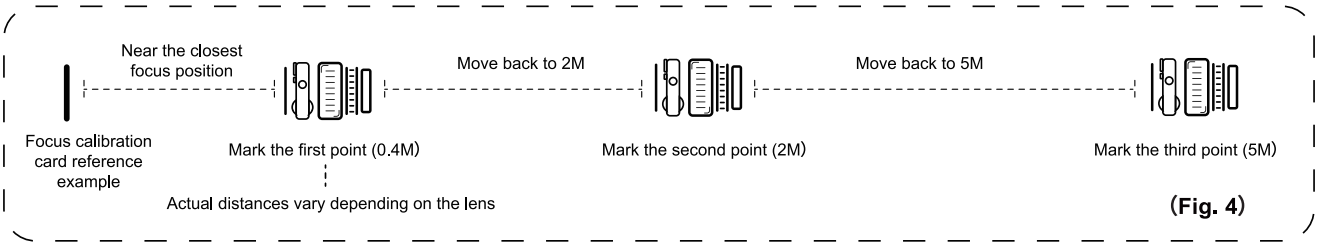
3.Move the camera another 5 meters backward from the second calibration point. Manually adjust the focus ring until the focus calibration card appears sharp and in focus on screen. Then short press the motor button once to mark the third calibration point. When the channel indicator stops flashing and a beep is heard, the third point has been successfully calibrated, and the auto-focus calibration is complete. At this stage, the channel indicator will either stay solid or alternate between the current channel color and purple, indicating that the motor has entered auto-focus mode.(See Fig-4)

## 2.Calibration Distance Reference

1. When testing autofocus, check whether the focus is accurate from 10-20 meters to the closest focusing distance. Adjust the long-distance LiDAR angle to 4° (refer to the “LiDAR Scanning Status and Performance” section in the manual for adjustment instructions). For indoor auto-focus testing, try to use the focus calibration card to check whether the focus is accurate. Considering the limited space indoors, it's sufficient to test based on the farthest available distance in the room. For outdoor tests, use large, flat objects in the same vertical plane as references.

2.If you find that the auto-focus is inaccurate, consider the following factors:
①The aperture was not fully opened during calibration.
②The focus accuracy was not confirmed by using magnification during calibration.
③The lens has incorrect back focus.
④The lens uses a non-standard linear focusing mechanism (please contact customer service for alternative calibration methods).
⑤There were errors in the calibration steps—please review the procedure carefully.

*If focus is accurate at close distances (e.g., 0.5-5 meters) but inaccurate beyond 5 meters (especially when using telephoto lenses over 70mm), try recalibrating using the following adjusted distances:




(Fig. 4)

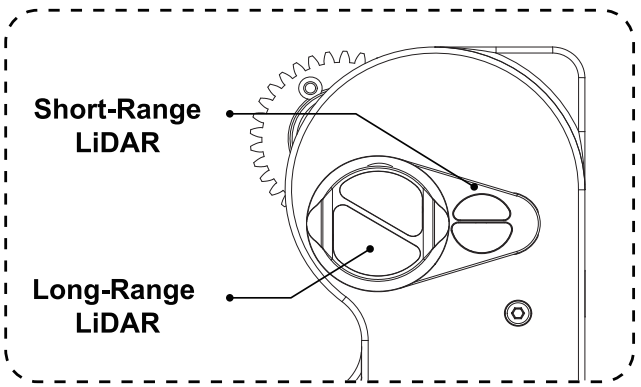
# LiDAR Scanning Modes and Performance

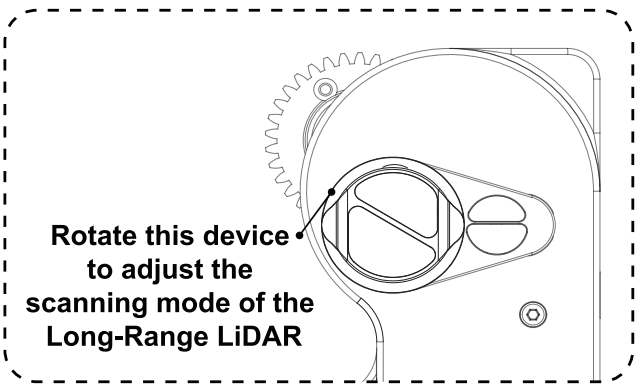
•Close-range LiDAR: Area scanning, effective up to 4m, 28° angle.
(Strong sunlight reduces range.)

•Long-Range LiDAR Module:

Point Scanning Mode:Effective scanning distance: 30 meters | Scanning angle: 4°
（Under strong sunlight, scanning distance may shorten depending on illumination intensity）

Line Scanning Mode:Effective scanning distance: 9 meters | Scanning angle: 16°
(Under strong sunlight, both scanning distance and angle may reduce depending on illumination intensity) The scanning angle can be adjusted by rotating the external mounting mechanism.




**The LiDAR scanning coverage percentages are for reference only, as variations may occur due to different lens focal lengths and motor mounting positions.**

The current LiDAR activation status can be determined by the status indicator light:

- Solid light indicates Single-LiDAR Mode, which only uses the long-range LiDAR for distance measurement and autofocus.
- Alternating between current channel color and purple blinking indicates Dual-LiDAR Mode, which activates both short-range and long-range LiDAR for distance measurement and autofocus.
- No light indicates Manual Control Mode, where focus must be fully manually controlled through the controller.
- Triple-click the motor button to cycle through these three modes.

*When the motor is in autofocus mode, a short press of the motor button will pause autofocus, and another short press will restart autofocus.

# Table 1: Motor Autofocus Commands

| Button Press Sequence | Function |
|---|---|
| ① ▬ Press and hold for three seconds | CALIBRATION<br>Enter this command while powered on, and the motor will automatically calibrate the lens travel.<br>Note: Release the button once the motor starts rotating to prevent prolonged press from causing motor shutdown. If the motor is in LiDAR pause mode, this command input will be invalid. |
| ② ●▬ Press briefly once, then press and hold for 3 seconds | START TO MARK<br>Enters autofocus calibration state<br>Note: Before entering this command, ensure the correct color channel is selected and whether lens travel has been automatically/manually calibrated. If this command is entered incorrectly and the motor enters autofocus calibration state, simply remove the battery to restart the motor. |
| ③ ● First brief press: Marks first point<br>● Second brief press: Marks second point<br>● Third brief press: Marks third point | ● --------- FIRST POINT<br>● --------- SECOND POINT<br>● --------- THIRD POINT<br>In calibration state, before marking each point with a brief press, ensure the focus reference object is properly focused as required. |
| ④ ● Press briefly once | PAUSE/START<br>When the autofocus is active, entering this command will pause autofocus (during which the lens can be manually rotated without being locked).<br>When autofocus is paused, entering this command will resume autofocus. |
| ⑤ ●● Press briefly twice | RED-YELLOW-GREEN-BLUE-WHITE<br>This command switches the color channel for saving autofocus lens data. Each command entry switches to the next color channel. There are five color channels total: red, yellow, green, blue, and white. Note: This command is invalid when the motor is in pure manual control mode. |
| ⑥ ●●● Press briefly three times | ENERGY MODE/HYBRID MODE/OFF<br>The motor has three control modes:<br>1.Single-LIDAR autofocus mode (channel indicator shows solid light)<br>2.Dual-LIDAR autofocus mode (channel indicator alternates between current channel color and purple blinking)<br>3.Pure manual wireless focus mode (channel indicator off)<br>Each entry of this command cycles through these three modes. |

③ After completing the three calibration point steps, if the focus matches at both the closest focus point and 10-20 meters distance, the motor calibration is successful and enters autofocus mode. Otherwise, repeat the above steps to recalibrate.

④ This command procedure applies when the motor is not connected to a controller. After pausing, the lens can be manually adjusted.

⑥ This command is for users requiring pure manual wireless lens control, completely isolating autofocus data interference. After entering this mode, the motor channel indicator light will turn off.

# Table 2: Motor Button Commands

| Button Press Sequence | Function |
|---|---|
| ① Press and hold for 3 seconds | CALIBRATION<br>Enter this command while powered on, and the motor will automatically calibrate lens travel.<br>Note: Release the button once the motor starts rotating to prevent prolonged press from causing motor shutdown.<br>If the motor is in LiDAR pause mode, this command input will be invalid |
| ② Press briefly once | STOP CALIBRATION<br>If gear slippage occurs during the motor's automatic calibration process, entering this command will immediately terminate the automatic calibration. |
| ③ Press briefly 4 times | RESET/RECOVERY CALIBRATION (POWER OUTAGE)<br>When the motor has completed automatic/manual calibration of lens travel and has existing travel data, entering this command will clear the learned lens travel. If errors occur during manual lens travel calibration steps resulting in incorrect learned travel data, this command can be used to clear the travel.<br>Note: Clearing lens travel does not clear autofocus data. When the motor has insufficient power during use, after replacing batteries and starting the motor, entering this command can restore the lens travel learned before power loss and restart. |
| ④ Press briefly 5 times | SPEED (FAST · MEDIUM · SLOW) - SWITCH MOTOR SPEED (FAST/MEDIUM/SLOW)<br>PULSE FREQUENCY (3/2/1 TIMES) - BLINK FREQUENCY (3/2/1 FLASHES)<br>The motor has three speed settings (Fast/Medium/Slow) for switching.<br>Each input of this command cycles through these three speeds.<br>When motor is in Fast speed = Motor status indicator blinks rapidly 3 times<br>When motor is in Medium speed = Motor status indicator blinks rapidly 2 times<br>When motor is in Slow speed = Motor status indicator blinks rapidly 1 time<br>Note: The speed level indicators only display when motor is Bluetooth connected.<br>Though not displayed, the speed will still switch when command is entered. |
| ⑤ Press briefly 7 times | MOTOR DIRECTION<br>This command switches the motor's rotation direction, typically used to adjust the lens rotation direction according to different focus pullers' controller operating. |
| ⑥ Press briefly 3 times, then long press for 3 seconds | BLUETOOTH PAIRING<br>This command re-pairs Bluetooth controllers.<br>Note: If your Bluetooth controller was successfully pre-paired at factory, no re-pairing is required. |
| ⑦ Press briefly 7 times, then long press for 3 seconds | MASTER - SLAVE MODE SWITCH<br>Entering this command switches the motor to master-slave mode, converting it into a dedicated LiDAR ranging controller. In this mode, it will wirelessly transmit ranging data to another Bluetooth-enabled motor to drive its autofocus function. |

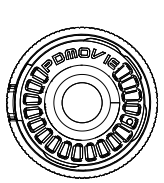
③ To clear calibrated travel: No need to restart the motor, simply press the button 4 times to delete the travel; Power outage recovery: After motor restart, press the button 4 times to restore previously calibrated travel.

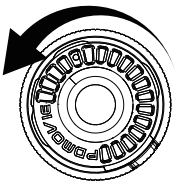
④When switching motor speeds, the motor indicator will display corresponding blink frequencies: Fast = 3 blinks; Medium = 2 blinks; Slow = 1 blink.

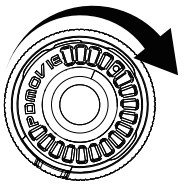
# Mode Switching

## 1.Control Mode Switching

- With the controller and motor connected:Rotate the controller to the close focus limit (i.e., the hard stop), hold for 3 seconds, and the motor will enter autofocus tracking mode.
- When the controller moves away from the close focus limit:After 1 second, it reverts to manual focus control mode. (Refer to Fig. 5)







(Fig. 5)

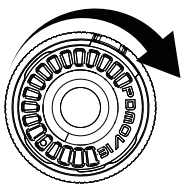
1.Connected state:Rotate the controller to the close focus limit, hold for 3 seconds, and the motor enters autofocus tracking mode.

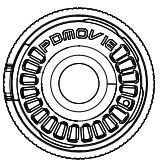
2.Controller moves away from the close focus limit:After 1 second, it returns to manual focus control mode.

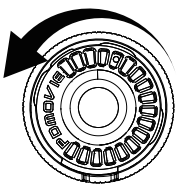
**For pure manual control: Refer to the Motor Command Instructions—press the motor button three times to set the motor to pure manual wireless control mode.**

## 2.Front Focus/Back Focus Lock Switching

- When the controller and motor are connected, rotate the controller to the close focus limit, wait for 3 seconds, and the LiDAR will automatically lock front focus;
- Switch the motor speed to medium/slow, rotate the controller to the far focus limit, wait for 3 seconds, and the LiDAR will automatically lock back focus. (See Fig-6)







1.In connected state, rotate the controller to the close focus limit, hold for 3 seconds, and the LiDAR will automatically lock front focus.

(Fig. 6)

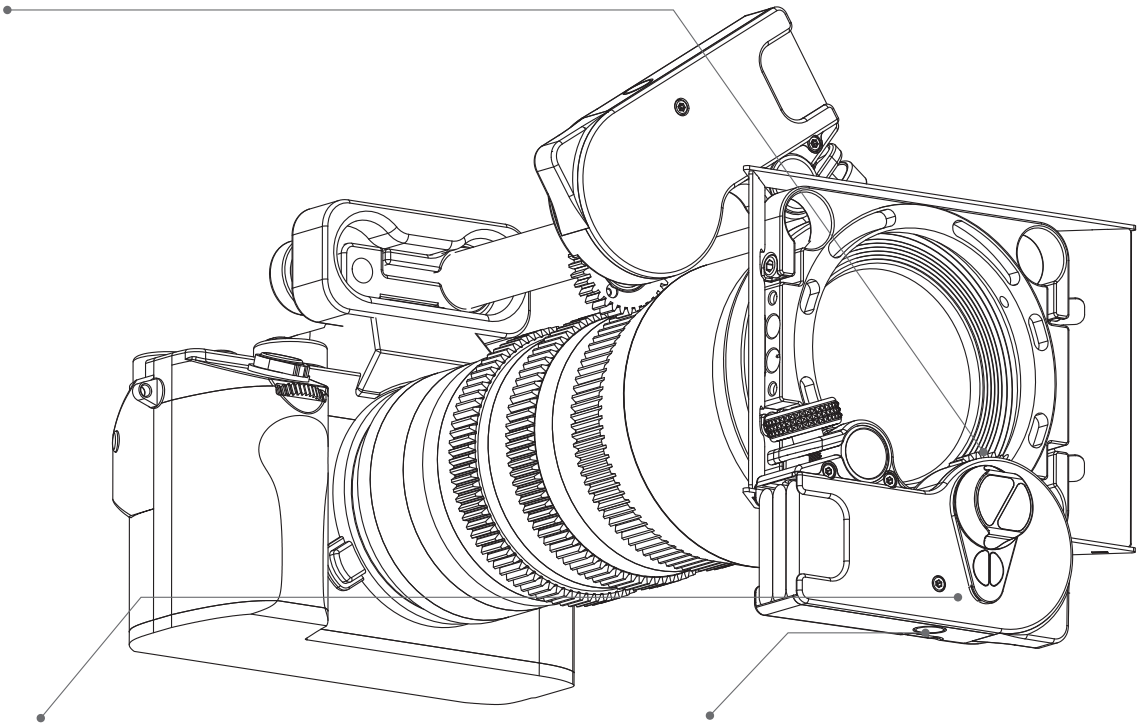
2.In connected state with motor at medium/slow speed, rotate the controller to the far focus limit, hold for 3 seconds, and the LiDAR will automatically lock back focus.

**Back focus lock only works with short-range LiDAR. In single-LiDAR mode or when shooting beyond 4 meters, the setting will be invalid.**

# Master Control Mode

3.By manually turning the motor gear, control another motor to rotate the lens focus ring for 3-point calibration. Once calibrated, it is ready for use.

(Fig. 7)



2.In Master Control Mode, the motor power indicator alternates between power level and blue light blinking.

1.Press the button 7 times briefly, then press and hold for 3 seconds to activate Master Control Mode.

**As shown in Fig-7, in Master-Slave Mode, the LiDAR motor can function solely as a LiDAR ranging controller, wirelessly transmitting ranging signals to another Bluetooth motor to drive its autofocus function.**

**(When the LiDAR operates in 16° plus 28° hybrid mode, the motor should preferably be installed at the bottom position, with the top position as the secondary option. In 4° plus 28° hybrid mode, the motor can be mounted in any position -top, bottom, left, or right without restrictions.)**

## 1.Switching Master Control Mode

- Press the LiDAR motor button and enter the command: press briefly 7 times, then press and hold for 3 seconds (see Table 2-7).
- After activating Master Control Mode, the motor power indicator alternates between power level and blue light blinking.
- Press the motor button again and enter the command: press briefly once, then press and hold for 3 seconds to enter Calibration Mode (see Table 1-2). Then manually turn the LiDAR motor gear to control another Bluetooth motor for rotating the lens focus ring, completing the 3-point calibration process. Once done, it is ready for use.
- To deactivate Master Control Mode, enter the command again: press briefly 7 times, then press and hold for 3 seconds.

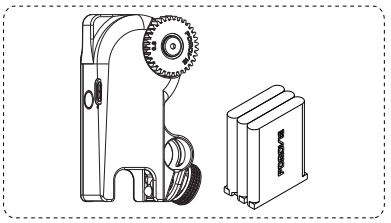
# Table 3 Controller Button Commands

| Button Press Sequence | Function |
|---|---|
| ①  Press and hold for 3 seconds | ON/OFF - Power On/Of |
| ②  Short press once | First press sets Point A, second press sets Point B, third press starts AB auto-run, fourth press cancels auto-run and AB points. (Auto-run speed increases/decreases linearly with knob rotation angle, adjustable only in Focus mode) |
| ③  Short press once, then long press for 3 seconds | CALIBRATION Enter this command when powered on to auto-calibrate lens travel. Note: Release button once motor starts rotating to avoid shutdown from prolonged press. Command is invalid if motor is in LiDAR pause mode. |
| ④  Short press 3 times, then long press for 3 seconds | BLUETOOTH PAIRING Re-pairs other Bluetooth motors. Note: Ensure motor is unpaired and controller's previous auto-pairing target is disconnected first. |
| ⑤  Short press 7 times | MOTOR DIRECTION Reverses motor rotation direction, typically used to adjust lens rotation per focus puller's preference. |
| ⑥  Short press 4 times, then long press for 3 seconds | FOCUS/ZOOM Switches controller from default focus mode to zoom mode (not recommended). See Page 17, Note 5 for zoom mode guidelines. |
| ⑤ | First press sets Point A, second press sets Point B, third press starts AB auto-run, fourth press cancels auto-run and AB points. (Auto-run speed increases/decreases linearly with knob rotation angle, adjustable only in Focus mode) |

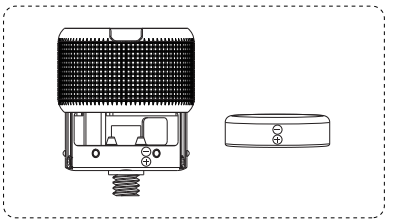
# Battery Instructions

## 1.Battery Packs

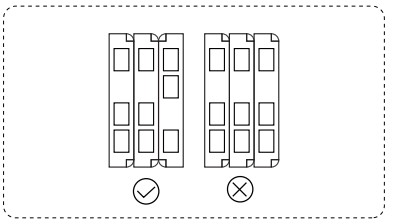
- The motor battery pack consists of three LI42B batteries, while the controller uses one LIR2477 coin cell. As batteries are consumables, promptly replace them if experiencing significant performance degradation, swelling, or severe external damage (excluding surface sticker damage).
- Users may purchase LI42B batteries to assemble LI42Bx3 packs, ensuring correct polarity alignment during assembly



MOTOR SMART and LI42Bx3 Battery Pack



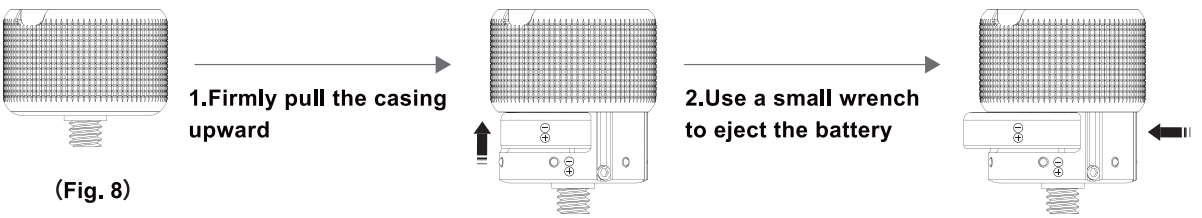
Controller and LIR2477 Coin Cell



LI42Bx3 Battery Contact Diagram

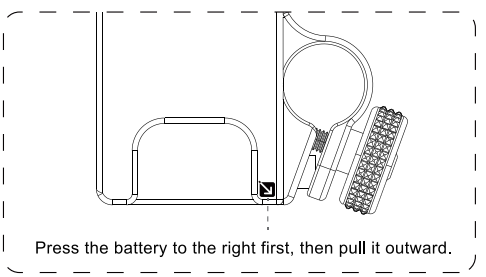
## 2.Battery Replacement

- To replace controller battery: First secure the controller on a 1/4" screw mount accessory for grip, firmly pull the casing upward until fully detached, then use a small wrench to eject the battery. (See Fig-8)
- Avoid frequent controller battery replacement unless necessary due to damage or significant capacity loss. Always verify correct battery polarity during installation.



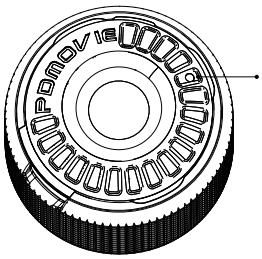

(Fig. 8)

- For motor battery replacement: Press the battery rightward, then pull outward. (Refer to laser guide markers on motor's lower-right). Use grip tape if slippery surfaces hinder removal.



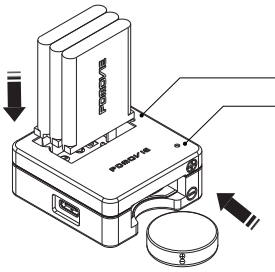

## 3.Charging Instructions

- Connect Micro USB cable to controller's charging port with 5V USB charger. (See Fig-9)
- Insert motor/controller batteries into charger with 5V USB power. Verify LIR2477 battery polarity before charging. (See Fig-10)



Charging Indicator:
Purple when charging, white when fully charged

(Fig. 9)

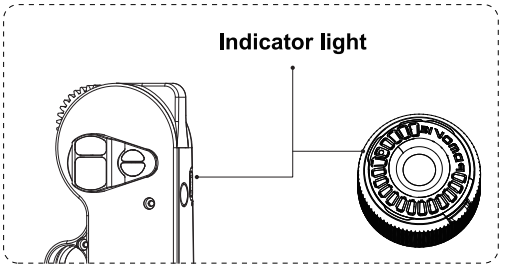


Charging Indicator - LI42Bx3 Battery

Charging Indicator - LIR2477 Battery

Solid red when charging, solid green when fully charged

(Fig. 10)




| The color of the indicator light | Residual electricity |
|---|---|
| PURPLE | Double Power Mode |
| WHITE | 100% - 75% |
| GREEN | 75% - 50% |
| YELLOW | 50% - 25% |
| RED | 25% - 0% |

- **Storage Warning: Never store bare batteries in direct contact with each other when not in use, as this may damage the batteries.**
- **Charge Maintenance: Remove fully charged batteries if unused for extended periods to prevent power drain.**

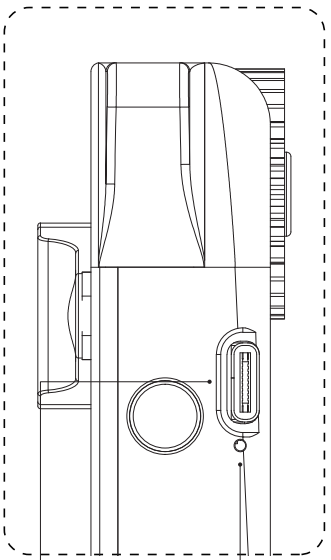
# Type-C Port

## Type-C Charging

- The motor supports fast charging via Type-C port (80% in 15 mins, 100% in 25 mins).

## Double Power Mode

- When the motor is in high-speed state with 100% battery level, it will automatically enter Double Power mode. In this mode:The motor's output power doubles, High-speed  torque reaches 1.5Nm , LiDAR scanning rate increases to 960Hz , The battery indicator light turns purple
- The motor exits Double Power mode when battery drops below 95%. It can maintain Double Power mode by using Type-C external power charging.
- (Recommended to use external power supply with at least 5V3A output. For motor communication protocol matters, please contact customer service.)



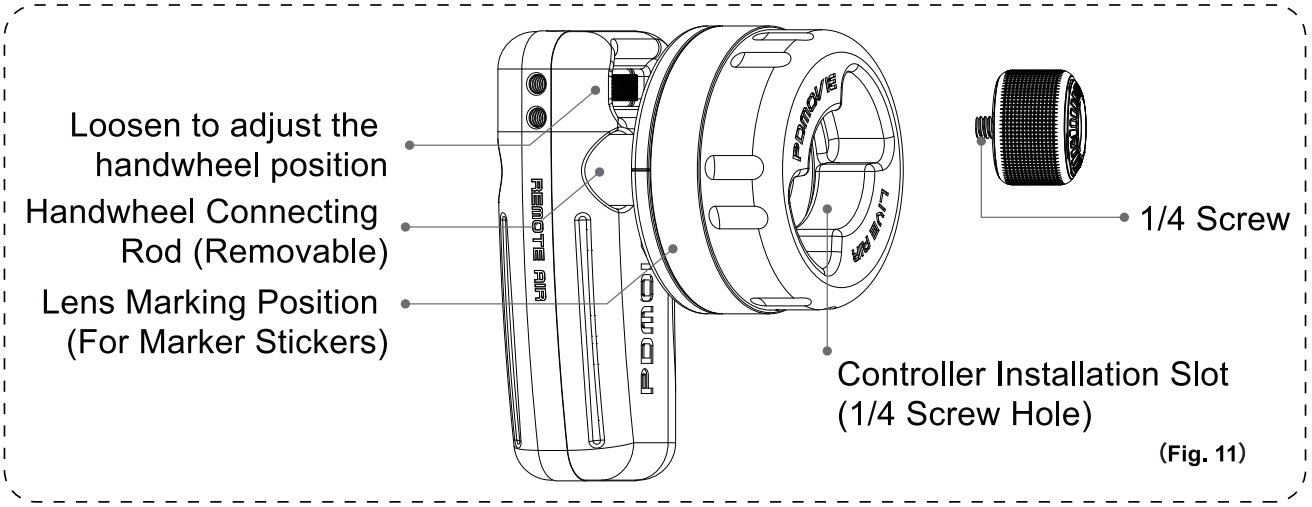
# REMOTE AIR RIG Installation Instructions

## 1.Installation

- First install the Bluetooth thumb wireless controller into the slot of the REMOTE AIR RIG large handwheel extension (must be fully inserted). Press the controller firmly, then rotate clockwise twice to ensure the controller's 1/4 screw is engaged with the large handwheel slot. Continue rotating the handwheel until the controller can no longer turn, indicating installation is complete. (See Fig-11)

## 2.Removal

- First rotate the large handwheel counterclockwise to the controller's limit, then apply slight force to continue rotating counterclockwise until the controller's 1/4 screw completely disengages from the handwheel slot. A "click" sound will indicate the controller can be pulled out.




(Fig. 11)

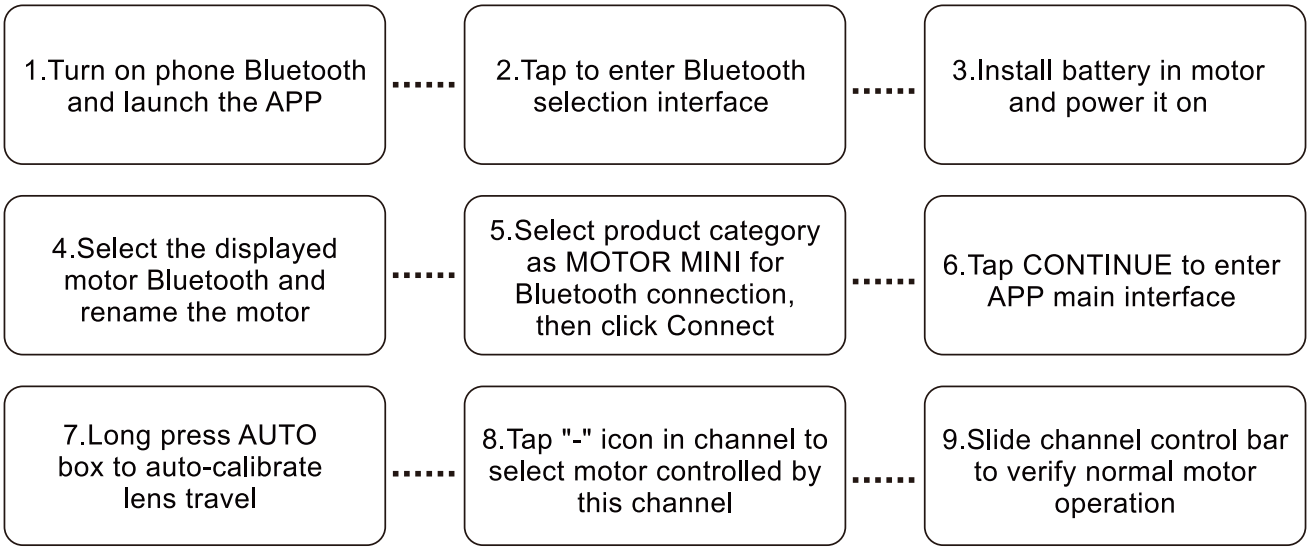
# REMOTE AIR APP Instructions for Use

## 1.APP Download

- The APP only supports manual control functions and does not support autofocus data interaction. Please note.
- The APP can connect and control up to 6 Bluetooth motors.
- 1.Search for PDMOVIE or REMOTE AIR in the Apple APP Store to download.
- 2. Visit the official website http://www.pdmovie.com.cn on your phone, navigate to the "More" section and download the APP from the download page. (The APP currently only supports iOS systems)

## 2.Connection

- Before connecting the APP to the motor, ensure Bluetooth is enabled on your phone, the controller is turned off, and the APP is not running in the background. The specific connection steps are as follows:




- To connect multiple Bluetooth motors, repeat steps 3-5. Step 7's auto lens travel calibration can be replaced with manual calibration or by pressing and holding the motor button for 3 seconds to calibrate.
- For more APP functions, go to the HELP section in the APP SET interface for detailed illustrated tutorials. You can also download the APP user manual from the official website.

## Precautions

1.When installing motor batteries, avoid slapping the batteries to prevent forceful impact on the internal contacts in the battery compartment. The correct installation method is to gently push the battery into the compartment.

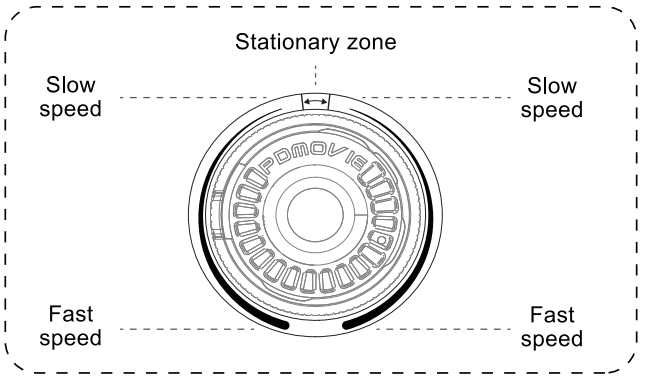
2. Take time to learn the autofocus calibration steps and complete the autofocus setup. Saving autofocus data for all lenses you plan to use will significantly improve your future workflow efficiency.

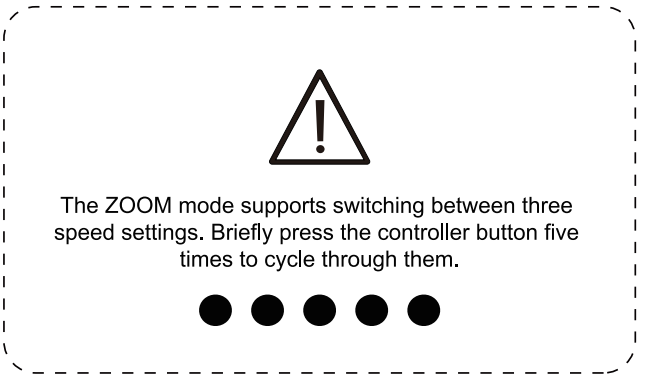
3.When encountering more complex scenes where focus control requires greater precision and higher demands, if the LiDAR-assisted autofocus function cannot meet your usage needs, immediately switch to manual control mode. If you have a controller, you can control the focus through the controller. Without a controller, briefly press the motor button to pause the LiDAR function and manually control the lens directly.

4.For all button commands like "press briefly once, then press and hold for 3 seconds," remember to perform the presses continuously without brief pauses, as this may cause incorrect command input.

5.The controller defaults to FOCUS mode. When switched to ZOOM mode, it divides the knob's 300 degree rotation equally, with a 10 degree neutral zone in the middle. Turning left moves forward, and turning right moves backward. The movement speed is linearly adjusted based on the rotation angle.

6.When the motor's movement range doesn't match the calibrated range, check if the Bluetooth controller's indicator alternates between blue and current battery color. If so, it means the controller has set A-B point limit stops. First briefly press the controller button once to activate A-B point auto-run, then press again to cancel auto-run and A-B point limit stops. (*A-B point command logic: 1st click=set point A; 2nd click=set point B; 3rd click=start A-B point cycle auto-run; 4th click=stop auto-run and cancel A-B point limits.)
7.The PD-BTMP-SPM Bluetooth motor supports three response speed settings. Press the motor button 5 times briefly to cycle through slow, medium and fast speeds. When Bluetooth is connected, the motor indicator will display corresponding blink frequencies after speed switching (no display when disconnected). (Fast=3 blinks; Medium=2 blinks; Slow=1 blink)
8.There's a difference between entering pure manual wireless control mode by pressing the motor button 3 times briefly and entering manual wireless control mode by rotating the controller past limit stops. Pure manual mode won't be affected by controller limit stops. Choose this mode when you don't need autofocus at all.
9.Battery maintenance: When not using the product for extended periods, check batteries monthly to ensure sufficient charge. Prolonged low/no charge will reduce battery capacity or cause damage. If batteries swell, stop using them immediately to prevent getting stuck in the battery compartment.



# LIVE AIR 4 SMART

(PDL-AFX-RA-SPM、PDL-AFX-SPM、PD-BTMP-SPM)

**PDMOVIE Technology Co., Ltd.**

Web: www.pdmovie.com

E-mail: pd@pdmovie.com

Instagram: pdmovie_official

Youtube: PDMOVIE

Facebook: PDmovie