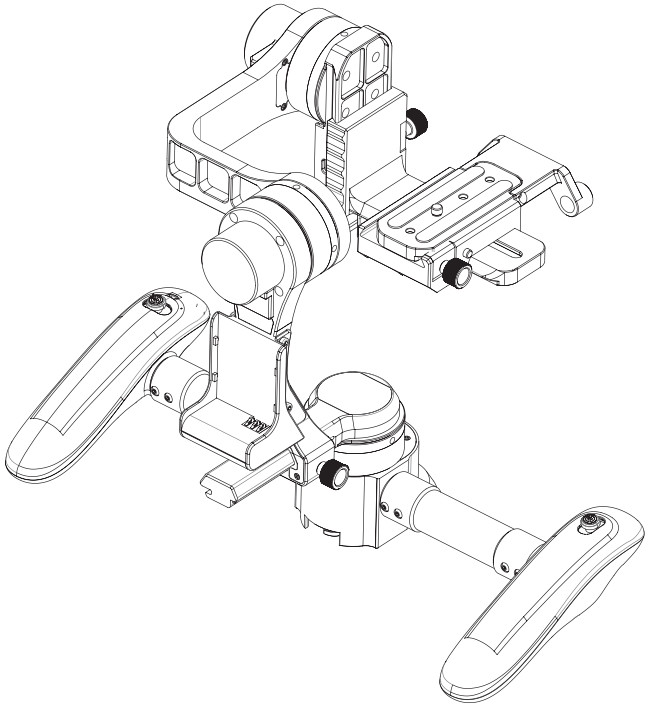
WenPod

BORN A HERO

MD2 User Guide



World First TIME-LAPSE Function Built-in

Neuron technology

Compact in Size

Lightweight

Intelligent

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Notice

All documents, warranty and manuals are subject to change without further notice. For updated information, please visit www.wenpod.com

Disclaimer and Warnings

BATTERIES AND BATTERY CHARGER

WARNING: Please read the safety instructions and warnings carefully. Failure to comply with the safety instructions while using Lithium Polymer (LiPo) battery could result in damaging the battery, electrical issues, excessive heat, fire, or injury and property damage.

- Stop using or charging the battery immediately if the battery becomes or appears damaged, starts to balloon or swell, leaks, becomes deformed or gives out an odor, exceeds a temperature of 71ºC (160ºF), or if anything else abnormal occurs. Disconnect the battery and observe in a safe area outside of any building or vehicle for at least 45 minutes, as a damaged battery can experience a delayed chemical reaction that could possibly result in fire.
- DO NOT disassemble, modify, puncture, shock, drop, crash and/or short circuit the battery. Leakage, smoke emission, ignition, explosion or fire can occur, which may result in personal injury or property damage.
- DO NOT leave the battery and charger unattended during use.
- DO NOT attempt to charge "dead" or damaged batteries.
- DO NOT charge a battery if the cable has been damaged or shortened.
- DO NOT allow children to charge or use battery packs without adult supervision. Never charge near moisture, extreme temperatures, flammable or combustible materials.
- DO NOT drop charger or batteries.
- DO NOT charge or store batteries in extremely hot or cold places (recommended between 10º-26ºC/50º-80ºF)
- DO NOT leave batteries in a hot environment (inside an automobile in hot weather), or leave in direct sunlight.
- DO NOT place or carry batteries in your pockets or clothing.
- Use only WENPOD Smart batteries for MD2.

- Always use the dedicated WENPOD charging adaptor ONLY. Failure to do so may cause a fire, which may result in personal injury and/or property damage.
- Always inspect the battery before charging.
- Always unplug the adaptor after charging, and let the charger cool between charges.
- If a battery will not be used for more than one week, it is recommended that the battery is stored at room temperature in a cool or shaded area (ideally between 10º-26ºC/50º-80ºF).
- Batteries should be stored in a vented, fire-resistant container. No more than two batteries should be placed in a container to avoid chain reactions. Storage temperatures should not fall below 0ºC/32ºF or above 54ºC/130ºF. Damaged batteries are extremely sensitive to temperature fluctuation and care should be taken in their immediate disposal. High temperatures may cause fire, even with undamaged batteries.

BATTERY DISPOSAL

NOTICE: LiPo batteries require special handling for safe disposal. The following steps must be taken to avoid damage or injury to yourself, your property or anyone who comes in contact with the battery.

If the battery is undamaged but no longer useful:

1. Discharge the battery to a maximum of 1.0V per cell using a safe discharge method.
2. Leave the battery uncharged and retest the battery after 24 hours. If the battery is over 1.0V per cell, repeat the procedure until the battery is 1.0V per cell or less.
3. Place electrical tape over each wire lead and tape the wire leads to opposite sides of the battery.
4. Place battery in a sealed plastic bag and place plastic bag in a vented, fire-safe container.
5. Use a fire-safe container to deliver battery to a recycling center authorized for LiPo batteries. Please note that not all battery recycling services include LiPo batteries. If no LiPo recycling facility is available in your area, contact your state or local HAZMAT agency for instructions.

If the battery is damaged:

- If the battery or wiring is damaged, please contact your state or local HAZMAT facility for instructions. Batteries must be rendered safe before being transported or recycled.
- DO NOT transport or ship batteries which have more than 1.0V per cell charged OR that show signs of damage without following the instructions given by the HAZMAT agency.

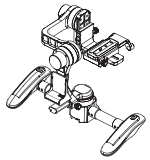
Introduction

Congratulation for purchasing the WENPOD MD2 Studio Class Professional 3-axis Stabilizer. MD2 is a future generation of three-axis stabilization, the world's smallest and lightest DSLR stabilizer. With the highly intelligent, lightweight design concept, MD2 helps videographers to finish steady shots as simple as ABC.

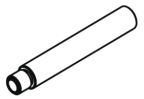
MD2 is pioneered with Artificial Intelligent algorithms + Neuron technology. All axes are equipped with independent sensors and CPU. By coordinating with the central CPU, all axes are seamlessly interacting with each others to perform most stable operations.

MD2 is auto-calibrated with a touch of a button, without using external software. The A.I. auto-calibration automatically adjust the parameters according to the weight of your camera and environmental factors. This will greatly improve your efficiency in video shooting.

What's in the box



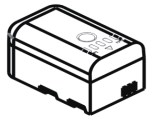
MD2 Stabilizer



Focus-tracking Tube x 2

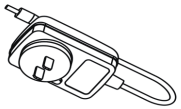
Handle bar

User Guide

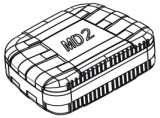


Smart battery

Warranty card



Charging Adapter



Portable Protective Case

Product Specification

Model	MD2
Dimension	L 350mm
	W 245mm
	H 280mm
Weight	1.5kg
Loading weight	3kg
Battery type	LiPo Battery
Battery Spec.	14.8V 2400mAh
Operating time	180-360 min. under normal temperature
Charging time	120 min. under normal temperature
Operating temp.	-10 to 40 Degree Celcius
Operating humidity	<90%
Operating angle	360°in roll / tilt / pan axis

Suport all DSLR / Mirrorless camera / Camcorder less than 1.5kg (including lens and accessories)

Gimbal Description

[1] Roll axis motor
[2] Tilt axis motor
[3] Tilt elevation adjustment
[4] Pan axis motor
[5] Horizontal handle
[6] Left joystick (for pan)
[7] Pan speed wheel
[8] Bottom quick mount handle
[9] Focus tracking tubes
[10] Camera quick mount plate
[11] Tilt balance adjustment (forward / backward)
[12] Roll balance adjustment (left / right)
[13] Smart battery
[14] Pan balance adjustment (forward / backward)
[15] Multifunction mode button
[16] Right Joystick (for tilt)
[17] Power indicator button
[18] Power indicator LED
[19] Adaptor charging port
[20] Power on / off button
[21] Bottom handle screw

GETTING STARTED

Charging the smart battery

1. Install battery to MD2 battery compartment.
2. Connect the charging adapter to an AC power source.
3. Connect the charging adapter to the MD2 Charging port.
4. The light on MD2 battery compartments will stay lit indicating battery is being charged. When the red light indicates that the battery is not full, when the light turn green and the battery get full.
5.The red light and green light flash alternately when the battery is not installed.

*Please make sure that during installation, the power is turn off.

Tips for battery and charger:
• Please fully charge the battery before use.
• Press and hold the button on the smart battery to view the current battery power.
• If not used for a long time, please remove the battery and place it in a dry, cool place.

Mounting the CAMERA

1. According to the weight and size of the camera, use different hole positions on the Camera mounting plate, tighten the screw through the hole onto the camera tripod hole.

* If you need to install with a focusing device or other focusing accessories, please fasten the focus tracking tubes onto the front holes of the camera mounting plate.

2. Install the camera onto MD2 and adjust the tilt balance. Loosen the locking knob on the mounting bracket. Slide in the camera mounting plate onto the mounting bracket. Adjust the camera position forward / backward to obtain a balance position in tilt axis. Tighten the locking knob when it is balanced.

* Before you install the camera and adjust the camera balance, please make sure the lens cover is removed, memory card inserted, camera battery has been installed and other accessories have been installed.

Mounting the CAMERA - cont.

3. Adjust horizontal roll balance. Loosen the horizontal roller adjustment knob, adjust the camera position by sliding left or right in order to achieve the roll axis balance. When camera is balanced, tighted the knob.

Step 1) Unscrew this knob, and lower the frame to the bottom

Step 2) Loosen this screw as in the above photo. Slide the camera to LEFT or RIGHT to obtain horizontal balance.

4. Adjust tilt axis elevation balance. Position the camera with lens facing diredional, as shown in the diagram. Loosen the elevation adjustment knob. (Item [3] in Gimbal description section) Adjust the camera bracket height so that the camera's center of gravity and tilt motor are on the same horizontal line. When the camera remains stationary in this position, the tilt axis elevation is balanced. Tighten the elevation adjustment knob.

5. Adjust Pan axis balance. Turn the handle bar vertically, as shown in the diagram. Loosen the pan balance adjustment knob (item [14] in Gimbal description section). Adjust the pan balance by sliding the connector forward / backward until it is balanced. Tighten the knob when pan axis balance is achieved.

After all 3 axes are balanced, your MD2 is ready to use.

Install Handle

1. Turn over MD2. The screws are located under the pan motor.
2. Loosen the screws, and fasten the handle bar as shown.
3. You may now use the handle bar for your desirable holding position.

Power on MD2

Power on MD2. Position the camera in proper position as shown in the diagram. Press the power button located at the bottom of battery compartment. When the motors start moving, remove the the hand holding the camera. MD2 is now ready to use.

* If MD2 is idle / not being used, you may power off the device to preserve battery. If it is not used for long period of time, it is highly recommended to remove the smart battery.

GIMBAL OPERATION

Joystick operation

The left joystick:
- To control the left and right pan direction.
- By default, MD2 will start in pan locking position. The camera will always stay in one direction.
- By pressing down the left joystick, MD2 will enter the "FOLLOW-ME MODE". In FOLLOW-ME MODE, the camera will follow your movement, while stabilizing all motions.

Wheel in front of left handle:
- To adjust the speed of pan direction.
- Turn the wheel to the left to reduce the speed.
- Turn the wheel to the right to increase the speed.

The right joystick:
- To control the angle of tilt.
- Press and hold the joystick to enter the tilt axis in FOLLOW-ME MODE. Release the joystick to return to default locking mode.

Multi-function mode button (in front of left handle):
- Press once, to enter FOLLOW-ME MODE in pan direction.
- Press once again to exit current mode.
- Press twice swiftly (within 0.5 second), to enter FOLLOW-ME MODE in both pan and tilt direction.
- To enter time-lapse / panoramic mode, press this button, at the same time move the left joystick to either right / left according to your desirable direction.
- Remove both hands when the camera start turning. To adjust the speed, please turn the wheel in front of left handle accordingly.
- To exit time-lapse / panoramic mode, press this button once again.

GIMBAL OPERATION - cont.

Normal Holding Position

Without handle bar

With handle bar

Hold and lift up MD2 with both hands. This is the normal operating position. It is used in motion and panning shots. If handle bar is installed, single handed operation can be perform for low angle position shooting.

Low Angle Position

In normal holding position, tilt the handles forward to achieve the following mode of application:

- from high angle shot to low angle shot.
- downward panning motion.
- low angle shots.

GIMBAL OPERATION - cont.

Inverted Position

In normal position, turn the handles to left or right 180 degree (MAKE SURE THE CAMERA IS FACING FOWARD), the camera will change its position from sitting on top to hanging at the bottom. In inverted mode, MD2 will go into FOLLOW-ME MODE. This will faciliate motion shot in low angle position.

Single-handed Side Position

In inverted position, let go one hand while holding the handle with the other hand. This is the short cut to take a low angle shot without installing the handle bar. In addition, MD2 will automatically enter the FOLLOW-ME MODE to facilitate low angle motion follow shot.

GIMBAL OPERATION - cont.

Mount on Tripod - TIME-LAPSE function of MD2

Mount MD2 onto the tripod using the screw hole under MD2. In this mode, you may activate the TIME-LAPSE function of MD2.

How to activate the Time-Lapse function:

1. Move the joystick on the left handle toward right or left (depend on which direction the time-lapse you desired), at the same time press the front button on the right handle.
2. The pan axis motor will turn automatically.
3. You may adjust the time-lapse speed using the wheel on the left handle.
4. To exit time-lapse mode, press the front button on the left handle again.

GIMBAL OPERATION - cont.

Mount on Steadicam Harness

MD2 can be mounted on Steadicam Harness over the univseral 1/4 or 3/8 inch screw hole under the bottom pan axis motor.

GIMBAL OPERATION - cont.

Initialization / Automatic Calibration

When the following conditions applied, you may need to go through the Initialization / Automatic Calibration process.

1. There is a change in camera weight.
2. There is an extreme change in environmental temperature.
3. There is instability occur in the device, after completed the pre-balance process.

How to initialize / auto calibrate MD2:

1. Follow the steps on the basic pre-balance section for all 3 axes.
2. Press the front button on the right handle, at the same time, press the power button located under the battery compartment.
3. The Auto Calibration process will begin, now the indicator on left holder is flashing slowly.
4. After the Auto Calibration process completed, now the indicator on left holder is on.MD2 will stop moving, and you may press the power button again to turn it off.
5. Press on the power button again to power on the device as usual.

1) After the pre-balance is completed, while pressing the MODE button on the right handle, press the POWER BUTTON under the battery compartment to initiate the auto calibration process.

2) After the main calibration is completed, while pressing the JOYSTICK on the LEFT handle (Release after 2 seconds after the power has been turn on), press the POWER BUTTON under the battery compartment to initiate the gyroscopic calibration process.

GIMBAL ATTENTIONS

Please do not store / operate MD2 close to the magnetic field, water or under high temperature and high humidity and corrosive environment, in order to avoid damages to the device.

MD2 is automatically calibrated and controlled by the chipset installed. Please do NOT interact with its movement by any external forces. If you find the device instable. Please go through the Initialization / Auto Calibration process.

For best results, alway use the device gently.

AFTER SALES SERVICE

Please contact your local dealer for after sales service.

LEGAL STATEMENT

TRADEMARK STATEMENT

LIMITATION OF LIABILITY

In no event will the company be liable to you for any lost profits, lost savings or incidental, indirect, special or consequential damages, arising out of your use or inability to use the product, even if advised of the possibility of such damages. Some countries do not allow the limitation or exclusion of liability for incidental or consequential damages so the above limitation or exclusion may not apply to you.

FREQUENTLY ASKED QUESTIONS

PROBLEM	WHAT TO DO
When power on, the device is not stable	Please follow the pre-balance section, and go through the pre-balance process.
The pan speed is very slow	Please adjust the wheel in the front of the left handle.
After a while of normal operation, the device is not leveling.	Please go to the Initialization / Auto Calibration section, and go through the automatic calibration process.

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MD2用户手册

Federal Communications Commission (FCC) Statement

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.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

●Reorient or relocate the receiving antenna.
●Increase the separation between the equipment and receiver.
●Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
●Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this device not expressly approved by Guangzhou Hi-Tron AI Techonolgy Co.,Ltd. may void the FCC authorization to operate this device.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.