



AlienRider

M2 User Manual

(Motorcycle riding system)



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ATS ELECTRONICS TECH CO.,LTD

I 、Preface

Dear user:

Thank you for choosing this product. To ensure a superior user experience, we strongly recommend carefully reading this manual.

This product boasts a 6.1-inch high-brightness IPS touch screen and is equipped with a specialized motorcycle UI, providing a simple and fast operation. Offering multiple enhanced functions, it effortlessly delivers intelligent information on a large screen while riding, ensuring a safer and more flexible smart riding experience for users.

II、Product Introduction

I、Product Overview:

The M2 is a smart motorcycle riding system that integrates streaming media, phone connectivity (Apple Carplay, Android Auto, Bluetooth music, WIFI video), Tpms, phone Bluetooth, music play, and video playback functions.

The device is equipped with front and rear high-definition 1080P cameras, one-click capture, ultra-low power standby, and other functions.

II、Packaging includes:

Main Unit



M2 Host



M2 front and rear cameras

Accessory- (mounting bracket)



Round-head mount



A pair of 2mm diameter changing rings



A pair of 4mm diameter changing rings



A pair of 6mm diameter changing rings



A pair of 8mm diameter changing rings

Accessory- (Remote Controller)



Button



U-shaped bracket



L-shaped bracket



Z-shaped bracket

Accessory- (Tpms - optional)



External Tpms



Internal Tpms



Wrench



Anti-theft nut

Accessory- (Others)



Power cable



Screwdriver

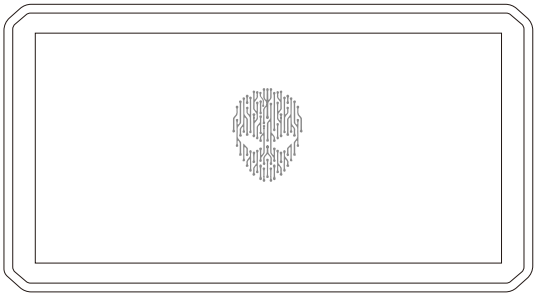


Three hexagon wrench (M4、M6、M8)

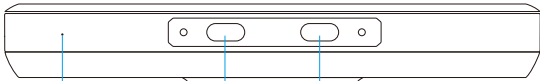
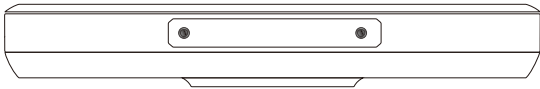


Φ10Wrench

III、Detailed Explanation of Product Components:



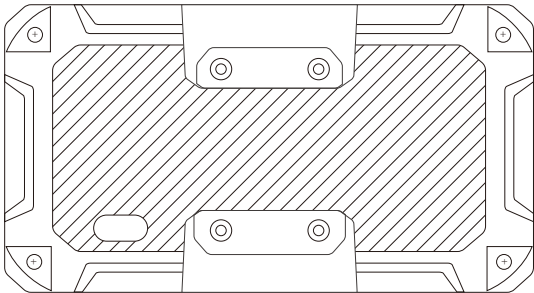
Front View of the Host



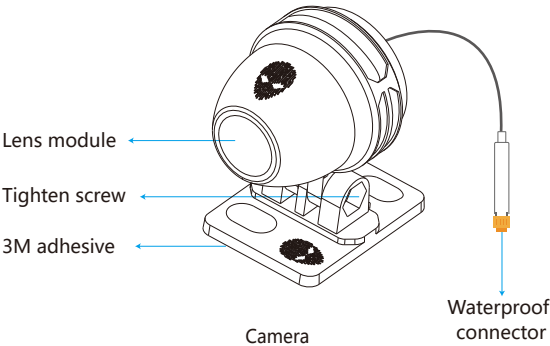
MIC

Micro USB port

TF card slot



Back View of the Host



Lens module

Tighten screw

3M adhesive

Camera

Waterproof connector

III、Product Installation

I、Device Installation:

1.1 This product is designed for fuel-powered motorcycles. If installing it on electric bicycles or motorcycles, an inverter is necessary to reduce the voltage to 12V.

2. Power Supply

2.1. B+ (Main power): Connect the yellow power line to the positive terminal of the battery.

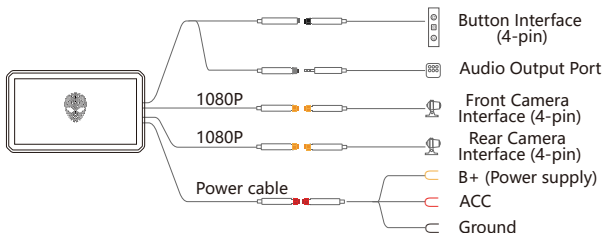
2.2. GND: Connect the black line to the negative terminal of the battery.

2.3. ACC: The red line serves as the ACC power line. Locate the fuse box, switch off the ACC (dashboard is off) to measure 0 voltage. When the ACC is on or the vehicle is started, there should be a 12V fuse or an empty fuse slot available to serve as an ACC power supply.

Note:

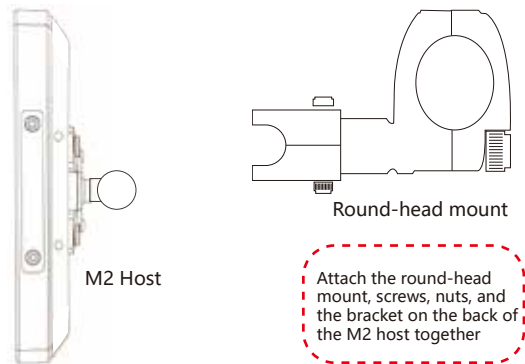
It's crucial to connect all three wires correctly to ensure the device functions properly and to avoid any potential issues!

II、Wiring Diagram of the Product:

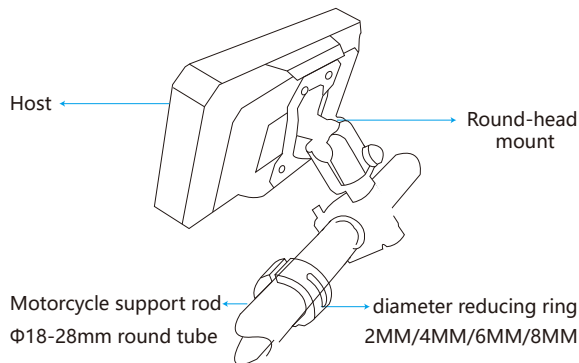


III、Installation instructions:

1、Fixing the M2 Host



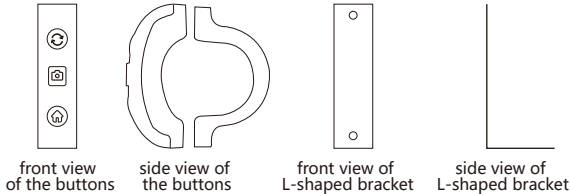
2、Secure the fixed bracket onto the support rod



3、Adjust the position of the lens to ensure the recording frame is centered.



4、Secure the buttons on the rightmost part of the left handlebar for convenient operation with the thumb. There are two installation methods available: handlebar installation and rearview mirror bracket installation (L-bracket).

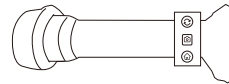


Switch Button: (Switch icon) Short press: Return to rear view/previous interface, answer calls via Apple Carplay/Android Auto (AUX audio channel); Long press for 15 seconds: Manually shut down.

Capture Button: (Capture icon) Short press: Take a photo, end calls during Apple Carplay/Android Auto (AUX audio channel); Long press for 3 seconds: Record a video.

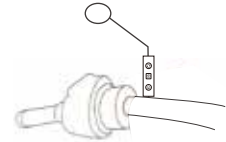
Home Button: (Home icon) Short press: Switch to home page/phone connectivity; Long press for 5 seconds: Toggle touchscreen functionality on/off.

Handlebar installation is as shown in the following figure:



Left handlebar

The rearview mirror bracket installation method is as shown in the following figure:



Left rearview mirror

IV、Overview of Product Installation:



IV、 Method to connect your phone to the device

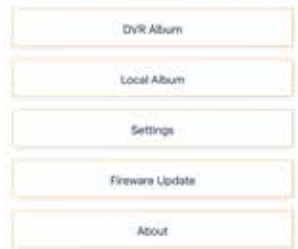
I、 Scan the QR code on your phone to download the 'Moto-DVR' app:



Download for iphone



Download for Android



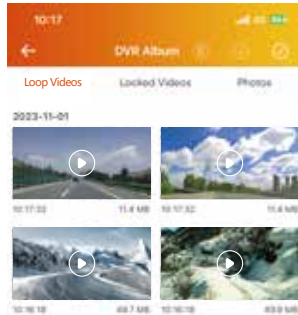
II、 To view the video via a Wi-Fi connection:

Activate the Wi-Fi function on your phone and search for the Wi-Fi network named 'M2-*****'. Enter the password '12345678' to connect. Then, tap the 'Video Playback' button on the homepage to access the live streaming page.



III、Mobile Wi-Fi Preview and Video Download:

Under Wi-Fi connection, live streaming can be continuously accessed but only when the vehicle is ignited and within 10 meters of the vehicle.



Note: If screen mirroring is in progress, please exit the screen mirroring first, and then click on "WIFI Video"



V、Function Introduction

I、Main Interface:



The main functions include: driving recording, phone connectivity, Bluetooth, tire pressure monitoring, video playback, and etc.



The Settings Interface

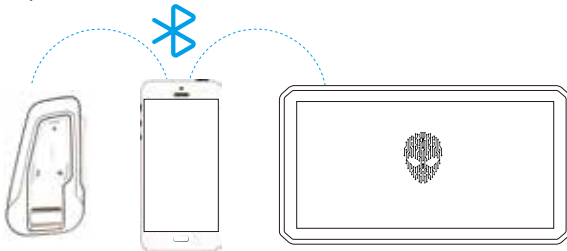
II、Phone Connectivity Interface:

Choose one of the following four methods based on your preferences, then follow the on-screen instructions to connect your phone. Once the phone is initially connected, the device will automatically establish the connection every time it's started, without the need for additional settings.



The main functions include: Apple Carplay, Android Auto, Bluetooth music, and Wi-Fi video.

1、After phone mirroring, the phone's Bluetooth will be immediately released. The phone can still connect to Bluetooth headphones and other Bluetooth devices.



Bluetooth headset connection

Once the phone is connected to the M2 main unit, the system can perform functions like answering and making calls.

III、Tire Pressure Monitoring Interface:



1、Tire Pressure Operation Steps: Select vehicle type > Select the tire pressure monitoring number > Choose the wheel linked to the tire pressure sensor. Adjust the pressure by inflating or deflating this wheel. If pressure changes, the sensor will automatically sync with the M2 main unit, displaying tire temperature and pressure readings.

2、Tire pressure sensors come pre-configured from the factory and can be easily installed upon receipt. 'A' designates the front wheel, while 'B' denotes the rear wheel. For tricycles or quadricycles, additional purchase of tire pressure sensors is necessary for installation.

VI、 Product Configuration Parameters

Display Screen	6.1 inches with an 18:9 aspect ratio, high brightness at 1000 nits, 1440*720
CPU	AMD-R5
DDR3 (RAM)	2Gb
System	Linux
Operating method	touchscreen
Software update	Supports TF card upgrade and remote OTA (Over-The-Air) upgrade via the app
Phone connectivity	Apple Carplay/Android Auto/bluetooth music/WIFI video
WiFi	2.4G:WIFI 802.11b/g/n 2.4G;HT20 5G: W52/53/56/58/DFS
View and download video recordings	Supports viewing recorded video files on the TF card and downloading video files to the phone
Bluetooth	Bluetooth4.0
USB	Micro USB
Collision Lock	3-axis G-sensor, supports loop recording
Camera	Front/Rear Sony IMX307, LQR, 1080p
Video parameters	Front/Rear1920*1080, 30fps
Lens angle	120 degree wide-angle
Video compression standard	H.264 encoding
Video format	TS format
Storage	Get genuine U3 TF cards designed for dashcams from official retailers like SanDisk or Kingston. These cards support up to 256GB capacity and ensure optimal performance for your dashcam

Microphone	One built-in waterproof microphone with two independent ADC channels, offering echo and noise cancellation at -40db±2db
Physical buttons	Switch/Capture/Home
External AUX interface	3.5mm AUX jack outputs left and right channels
G_sensor	gravity sensor, three-axis
Power supply	supports a wide voltage range of 9 to 16 volts
ACC power on/off	Supports ACC detection, activating with 'ACC_ON' and entering standby mode when 'ACC_OFF'.
Working current	12V, 550mA
Standby current	After turning off ACC, enters standby sleep mode with consumption less than 0.25mA
working environment	Relative humidity: 5% to 95% (non-condensing)
Storage temperature	-30°C~+80°C

VII、Common Troubleshooting

Num	Problem Description	Solution
1	Unable to power on	1. Ensure the power interface screw cap is properly tightened. 2. Inspect the three wires (B+, ACC, GND) for any breaks or poor connections.
2	Touchscreen unresponsive	1. If the touch screen isn't responsive during startup, wait for a complete boot-up before using the screen. 2. Inspect the touch screen for any damage. Avoid using sharp objects on the screen to prevent potential damage.
3	No image from the camera	1、Check if the yellow interface of the camera is tightened. 2、Ensure the correct usage of the camera.
4	Machine overheating leading to slow performance and lagging	Avoid prolonged exposure to direct sunlight. If the temperature rises too high, the device will automatically protect itself by pausing operation until the recorder's temperature returns to normal before resuming work.
5	Unable to connect Carplay	1. Initial connection may take longer than usual. 2. Apple Carplay is only supported on iPhones. 3. Ensure both the phone's Wi-Fi and Bluetooth switches are turned on. 4. Disconnect from any Wi-Fi networks that don't provide internet access, like 'carlink...' 5. Navigate to phone settings - General - Carplay, delete all records, and reconnect. 6. Restart the iPhone and reconnect.
6	Unable to connect Android Auto	1. Disable and re-enable the phone's Bluetooth, then reconnect to the smart screen's Bluetooth. 2. Clear the cache and data of the phone's Google Play services, restart the phone, and reconnect Bluetooth (Clearance steps: Settings-Apps-Google Play services-Storage & cache- Clear cache, Manage space-CLEAR ALL DATA) .

Ⅷ、 After-sales warranty terms

1. Within one year from the purchase date, manufacturing or component malfunctions under normal usage conditions are covered by the warranty, excluding consumable parts.
2. During the warranty period, repair fees may apply under the following conditions at the company's discretion:
 - (1) Improper use, operational negligence, or faults due to not following installation guidelines.
 - (2) Repairs, adjustments, or modifications by unauthorized repair centers or personnel.
 - (3) Malfunctions from using non-company-provided equipment or accessories.
 - (4) Damages from natural disasters or during transportation.
 - (5) Products or accessories not sold by the company are not covered.
3. Any damages caused by the owner, including physical damage, are not covered under warranty.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate the equipment.

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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance 20cm the radiator your body: Use only the supplied antenna.