MEITRACK® AI Dashcam

MD300 User Guide

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Copyright and Disclaimer

Document Update Record

Version	Date	Modification
1.0	2025-03-17	Initial Draft.

Usage Precautions

Installation Environment

1. To ensure stable recording images, please avoid adhering to low-adhesion materials such as velvet as much as possible, and ensure that the device base is securely attached with 3M adhesive during installation;

2. This device should be installed horizontally. When installing the device, please pay attention to waterproofing, moisture-proofing, and lightning protection, while keeping the vehicle stationary to prevent the device from falling and being damaged.

3. To ensure the safe use of the device, the main unit, camera, wiring, and other accessories should be placed in locations that are not easily accessible to passengers and the driver.

Avoid electric shock and fire.

1. This device operates on a DC power supply of 11.4-40V. When wiring, please pay attention to the positive and negative terminals to avoid short circuits.

2. Before installation, please disconnect the power supply of this device. Wrap each unused I/O wire separately with tape to prevent contact with other wires and the output power line, which could lead to damage to the device.

3. When connecting other external devices, please turn off the power of this device;

4. Remember not to touch the power and this device with wet hands;

5. Do not let liquids spill on the device to avoid internal short circuits or fire;

6. Do not place other devices directly on top of this camera;

7. Non-professionals should not open the casing themselves to avoid damage and electric shock;

Transportation and Handling

1. To ensure that the device is not accidentally damaged during transportation, please handle it with care when moving or transporting the device, preferably using the original packaging materials and boxes;

2. It is strictly prohibited to move this device or replace components while powered on, as it may damage the device;

Table of Contents

1 Product Introduction

The MD300 is a second-generation AI Dashcam solution that uses a high-performance AI processing chip; This product is a dual-system (dual communication channel), highly stable HD vehicle recording device, supporting up to 4 channels of H.264/H.265 video compression/decompression, 4G, GPS, WiFi, Bluetooth, wide voltage, high voltage protection, and other technologies, making it a core product of the new generation wireless vehicle video monitoring solution.

Widely used in various mobile video surveillance fields such as buses, long-distance coaches, taxis, logistics vehicles, special vehicles (such as cash transport vehicles), private cars, and forklifts.

Product Features:

Built-in 1080p resolution DMS camera, 2K resolution ADAS camera;

Embedded high-performance AI video processing chip (optional AI video algorithms: ADAS, DMS);

Supports TF card, with a maximum capacity of 2*1TB, equipped with a TF card slot;

Expandable to support 2 channels of 720P cameras;

Uses industrial-grade power chips, supporting 11.4~40V power input, suitable for harsh environments;

Supports dual working modes for local recording and network transmission;

Built-in sensors for detecting driver behavior status;

Utilizes a self-developed data writing mechanism to effectively protect recording data and prevent data loss due to abnormal power outages.

2 Specifications and Parameters

Power Supply	
Rated Voltage	Input voltage 11.4-40V. Rated 12V/2A power supply box is external, with N1 and N2 versions.
Power Consumption	Main unit audio and video on with built-in 2-channel camera approximately 6W; External 2-channel cameras, approximately 12.5W during the day (13W with display connected), approximately 14W at night (14.5W with display connected)
AI	
AI Video (optional)	ADAS、DMS
Storage Medium	
TF Card	2*TF, maximum capacity for a single TF card: 1 TB, Class 10 and above, FAT32 format;
System Structure	
System Operation	Dual system operation, dual communication channel (to prevent data loss)
Audio and Video	
Video Input	Supports up to four channels (built-in 2K ADAS and 1080P DMS + two external 720P cameras); Note: AV3 supports audio input, AV4 does not support audio input;
Video Output	1 channel AHD or CVBS aviation plug output (level: 1.0Vp-p, impedance: 75Ω);
Video Compression	H.264/H.265 configurable; default H.265

Standard	
Screen Display	Supports 4-screen display
Audio Input	Built-in Mic; AV3 camera Mic input, requires the camera to support audio;
Audio output	Built-in speaker (MAX: 8Ω 1.5W); 1 external display screen with built-in speaker output;
Audio compression	G.726/G.711a/AAC
Recording retrieval and playback	Can be retrieved and played back by channel, recording type, stream type, and time
Recording mode	Normal recording and alarm recording, audio and video recorded synchronously

Frequency band	
MD300-EU (EMEA/Southeast Asia)	GSM: 900/1800MHZ; WCDMA: B1/B5/B8; LTE-FDD: B1/B3/B5/B7/B8/B20/B28; LTE-TDD: B38/B40/B41;
MD300-AU (Latin America/Australia/New Zealand)	GSM:850/900/1800/1900MHZ; WCDMA: B1/B2/B4/B5/B8; LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28/B66; LTE TDD:B40;
MD300-A (North America)	LTE FDD: B2/B4/B12; WCDMA: B2/B4/B5;
MD300-J (Japan)	LTE FDD: B1/B3/B8/B18/B19/B26; LTE TDD:B41; WCDMA: B1/B6/B8/B19;
WiFi\Bluetooth\GNSS	
WiFi	IEEE 802.11 b/g/n/ax, frequency 2.4G, supports AP/STA mode;
Bluetooth	Supports Bluetooth 5.1; Supports master-slave dual mode, can read Bluetooth accessories, and can configure parameters through the APP;
Positioning Mode	GPS/GPS_BEIDOU/GPS_GLONASS
Positioning Accuracy	2.5m
Tracking Sensitivity	-162dBm
GNSS Antenna	Single-frequency L1 antenna; supports antenna insertion/removal/short circuit detection

Others	
Operating Temperature	-20~70 degrees
SPI memory	256MB
Sensor	Built-in 3-axis sensor
I/O port	**N1 version:** SOS*1 + ACC*1 + IN/AD/OUT*2 (total of 2 multiplexed) + RS232*1 + CAN*1 + 5VOUT*1 + DCIN*1 + GND*1 **N2 version:** SOS*1 + ACC*1 + IN/AD/OUT*6 (total of 6 multiplexed) + OUT*1 (independent) + RS232*1 + CAN*2 + 5VOUT*1 + DCIN*1 + GND*2 + 12VOUT*1 + RS485*1 + 1-Wire*1
Dimensions	117*70*120mm (including bracket)

Weight	310g (excluding accessories)

Certification
CE certified
Protocol

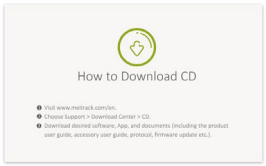
Meitrack Protocol (CCE) + RTMP (Audio and Video Transmission Protocol, also compatible with Meitrack's private audio and video transmission protocol)

3 Optional

3.1 Standard Configuration

MD300 Main Unit

Power Box



CD Download Guide Card

Bracket

Screws and Wrench

GPS Antenna

3.2 Optional

3.2.1 MDVR Camera Optional

Waterproof Standard Camera (Outdoor)	
Side-mounted Waterproof Camera 720p （ACA301）	Waterproof Square Camera 720p （ACA501）
	

Non-waterproof Standard Camera (Indoor)
Metal Small Conch Camera 720p(ACA303)

Camera Extension Cable (Default 3M or 5M)

Note:

1. The standard camera cable length is generally 50cm; please adapt the corresponding camera extension cable.
2. The third and fourth cameras support a maximum resolution of 720P.

3.2.2 Other optional accessories

Bluetooth external accessories optional	
Bluetooth temperature and humidity sensor （AST101）	Bluetooth beacon （AB402）

Other external accessories optional			
A53 fuel sensor (voltage AD)	Relay	Ultrasonic fuel sensor ASUF103 (range 100cm)	Ultrasonic fuel sensor ASUF104 (range 250cm)

7-inch CVBS display	Ultrasonic fuel sensor ASUF105 (range 400cm with AD)	Ultrasonic fuel sensor A76 (range 100cm, without AD)
		
RFID card reader	USB configuration cable	TF Card
		

Only N2 version supports optional accessories	
A52 Digital Temperature Sensor	iButton Card Reader
	

Note: The N1 output line does not have a 1-wire interface; please use the N2 output line for 1-wire devices.

4 LED Indicator Light

Identifier	Indication Meaning	Color	Status	Description
	Power Indicator	Red	Always On	Device Power Indicator
			Always Off	Device Power Cut
	Video Status Indicator	Red	Always On	All channels are not connected to a camera
			Flashing (flashes once every 5 seconds)	There is one channel without a camera connected
			Flashing (flashes twice every 5 seconds)	There are two channels without cameras connected
			Flashing (flashes three times every 5 seconds)	There are three channels without cameras connected
			Always Off	All four channels have cameras connected
	Positioning indication	Blue	Always On	Button triggered
			Fast flashing (flashes once every 0.1 seconds)	GPS initialization

			Flashing (on for 0.1 seconds, off for 2.9 seconds)	Positioning successful
			Slow flashing (on for 1 second every 2 seconds)	Not positioned
	4G network status indication	Green	Fast flashing (flashes once every 0.1 seconds)	Module is initializing
			Blinking (On 0.1s Off 2.9s)	4G network is normal
			Always Off	Not registered on the network
	WIFI indicator light	Green	Fast flashing (flashes once every 0.1 seconds)	Using WIFI network
			Blinking (On 0.1s Off 4.9s)	WIFI module detected, but not using WIFI network
			Always Off	No WiFi module
	Recording status indicator	Green	Flashing (once every 0.1s)	Storage disk detected normally, can record normally
			Blinking (On 0.1s Off 4.9s)	Storage disk detected, but no recording
			Always Off	No storage disk detected

5 I/O wire and interface definition

Serial Number	Wire color		Definition	Description
	Both N1 and N2 support the following I/O			
1	Red		DC+	DC power input positive terminal, with a 5A fuse; connect to the car and battery positive terminal.
2	Black & White		DC-	DC power negative terminal input;
3	White		ACC	ACC input, high-level input, triggers above 4.5V, maximum operating voltage 45VDC; used to connect to the car ACC to check the vehicle ignition status;
4	Gray		SOS/IN1	SOS wire, negative trigger, maximum operating voltage 45VDC;
5	White & Red		IN3/OUT1/AD1	Digital input 3, connects to the left turn signal, default high trigger. Can also be configured as a positive trigger or AD1 (0~30V) analog input or OUTPUT1, maximum operating voltage 45VDC, OUT maximum current 0.3A;
6	White & Orange		IN4/OUT2/AD2	Digital Input 4, connected to the right turn signal, default high trigger. Can also be configured as positive trigger or AD2 (0~30V) analog input or OUTPUT2, maximum operating voltage 45VDC, maximum output current 0.3A.
7	Brown & White		RS232_TX	RS232 input (MCU communication), RS232 output of external device;
8	Brown		RX232_RX	RS232 output (MCU communication), RS232 input of

				external device;
9	Orange		CAN_L1	CAN Bus low input, ISO11898 protocol, maximum 5Mbps;
10	Orange & White		CAN_H1	CAN Bus high input, ISO11898 protocol, maximum 5Mbps;
11	Pink & Red		5V_OUT	5VDC output, maximum 0.5A current output;
12	Black		GND	Ground wire, external accessory ground wire;
	Only N2 supports the following I/O			
13	Yellow		OUT3	Output Control 3 defaults to low-level trigger (0V); when inactive, it is an open-collector output (OC). The voltage that can be tolerated when the output is open-collector (inactive) is: maximum 40 volts, maximum current 400 milliamps. Can connect to an external relay for remote disconnection of the vehicle's fuel line/engine power supply, etc.
14	White & Yellow		IN5/OUT4/AD3	Digital Input 5, defaults to low negative trigger. Can also be configured as a positive trigger or AD3 (0~30V) analog input or OUTPUT4, maximum operating voltage 45VDC, maximum output current 0.3A;
15	White & Green		IN6/OUT5/AD4	Digital Input 6, default high trigger. It can also be configured as a positive trigger or AD4 (0~30V) analog input or OUTPUT5, with a maximum operating voltage of 45VDC and a maximum output current of 0.3A.
16	White & Blue		IN7/OUT6/AD5	Digital Input 7, default high trigger. It can also be configured as a positive trigger or AD5 (0~30V) analog input or OUTPUT6, with a maximum operating voltage of 45VDC and a maximum output current of 0.3A.
17	White & Purple		IN8/OUT7/AD6	Digital Input 8, default high trigger. It can also be configured as a positive trigger or AD6 (0~30V) analog input or OUTPUT7, with a maximum operating voltage of 45VDC and a maximum output current of 0.3A.
18	Green		1-WIRE	Used for connecting temperature sensors, iButton, and other 1-Wire accessories;
19	Purple		RS485_A	RS485-A interface, supports a maximum of 20 Mbps
20	Purple & White		RS485_B	RS485-B interface, supports a maximum of 20 Mbps
21	Orange & Yellow		CAN_H2	CAN Bus high input, ISO11898 protocol, maximum 5 Mbps
22	Orange & Green		CAN_L2	CAN Bus low input, ISO11898 protocol, maximum 5 Mbps
23	Pink & Orange		12V_OUT	12VDC output, maximum 1A current output

24	Black	[redacted]	GND	Ground wire, external accessory ground wire;

6 Interface Definition

(The illustration is a temporary representation and will be updated later)

Serial Number	Name	Description
1	Type-C Port	Can be connected to a computer using a Type-C data cable
2	SIM Card Slot	Supports Nano SIM*1
3	TF Card Slot-1	Standard TF Card Slot, maximum capacity supports 1T
4	TF Card Slot-2	Standard TF Card Slot, maximum capacity supports 1T
5	WIFI Button	Temporarily turn On/Off the device's WIFI hotspot
6	Interface Cover Plate	Integrated cover plate on the device body, can be secured with screws, providing protection and dust resistance
7	LED Indicator Light	Device Status LED Indicator
8	DMS Camera	1080P DMS Camera Ntsc
9	Audio and Video Interface	Can connect audio and video conversion cables to expand 2 video inputs and 1 video output - AV_IN*2, AV_OUT*1 (the illustration shows the old version structure; the latest version machine interfaces have been changed)
10	Speaker	
11	MIC	

(The illustration is a temporary representation and will be updated later)

Serial Number	Name	Description
1	ADAS Camera	2K Resolution ADAS Camera Pal
2	Main Cable	12PIN Interface, can connect to a converter integrating 12/24PIN I/O harness
3	GPS Antenna Interface	SMA Male Connector, connects to GPS antenna

7 Installation

7.1 SIM Card & TF Card Installation;

Remove the screws from the device cover and open the side interface cover:

1) SIM Installation - Insert the Nano-SIM as shown in the left① of the figure below - with the metal chip facing up and the notch facing the interface direction, insert it into the card slot until it clicks, then release your hand;

2) TF Card Installation - In the right① TF card slot of the figure below, the TF card must be inserted with the gold finger facing down, and the side card slot on the right side; In the image, the TF Card Slot 2 on the right② requires the gold finger of the TF Card to face upwards, with the side card slot on the left; Align the card with the slot and insert it; after hearing a 'click' sound, release the card, and it will not pop out.

After installation, please cover the lid back and secure it with screws. (The image is a temporary illustration and will be replaced

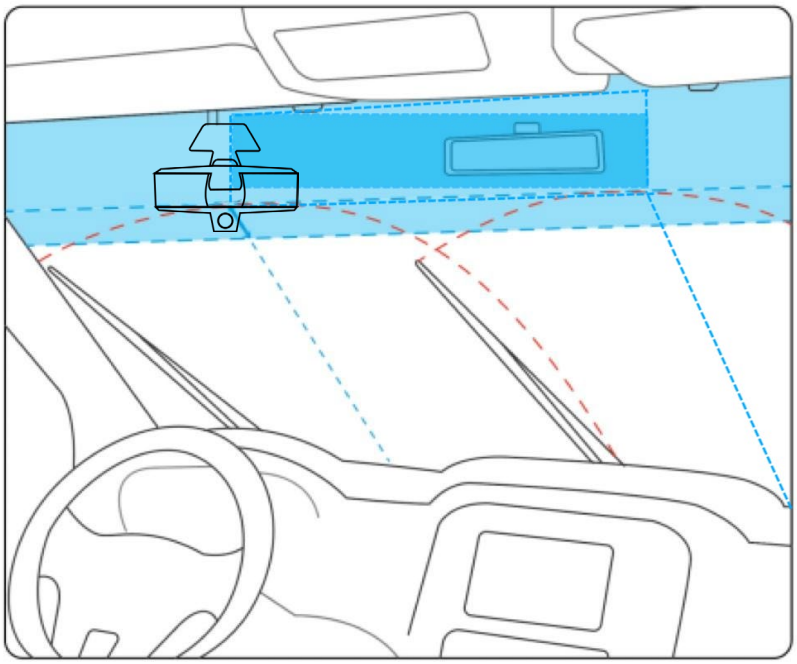
later.)

7.2 Main unit installation;

It is recommended to install the MD300 in the area around the rearview mirror on the upper right side of the steering wheel, as shown in the deep blue area, ensuring that the driver's face is within the 30° angle area on one side of the DMS Camera.

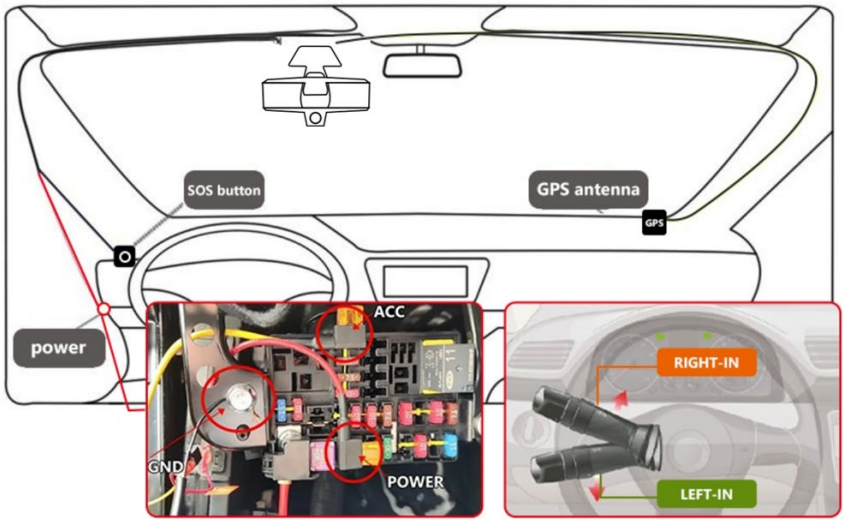
To ensure safe driving and maximize the accuracy of AI algorithms, the selection of the device installation location must be based on the following principles:

- Do not obstruct the driver's line of sight.
- Do not interfere with the driver's driving.
- The device should be kept level and not tilted.
- The driver's face should ideally be centered in the view of the inward-facing camera (preview available in the 'MT Manager+' APP).
- The center point of the front-facing camera's view should align as closely as possible with the horizon (preview available in the 'MT Manager+' APP).
- After installation, please strictly follow the AI calibration operation instructions to calibrate the AI-enabled camera (preview and calibration available in the 'MT Manager+' APP).



7.3 Power and ACC connection;

Please connect the ACC wire and power wire to the corresponding original vehicle fuse socket.

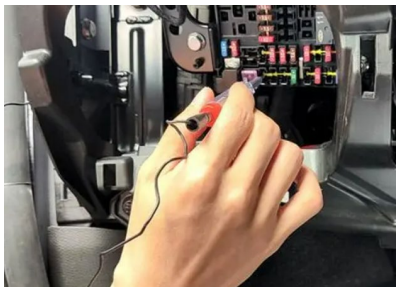


Note:

1. If you do not know which fuse socket corresponds to ACC or constant power, please use a multimeter or test pen to measure, as follows:

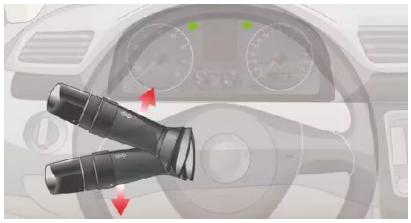
a. With the vehicle turned off and power disconnected, if the test pen light is on, this socket is a constant power socket;

b. Start the vehicle, then use the test pen again; if the previously unlit socket is now lit, this socket is ACC.



2. If you do not know which fuse socket corresponds to the turn signal, please use a multimeter or test pen to measure, as follows:

a. Start the vehicle, turn on/off the left or right turn signal, and use the test pen to check the fuse socket. If the socket you check lights up or goes out in sync with the turn signal being turned on/off, this socket is the left/right turn signal switch check socket.



b. If the left and right turn signal detection wires are not connected, please turn off the left and right road deviation alarm function; otherwise, it will default to triggering the left and right road deviation alarm events.

7.4 Other wiring

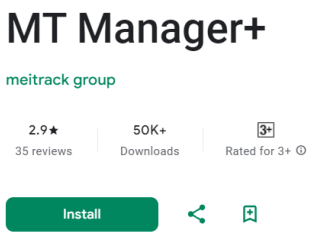
To be supplemented

8 Parameter configuration

8.1 APP parameter configuration

(1) Download the APP

Search for 'MT Manager+' in the Google Play Store or App Store, download and install it.

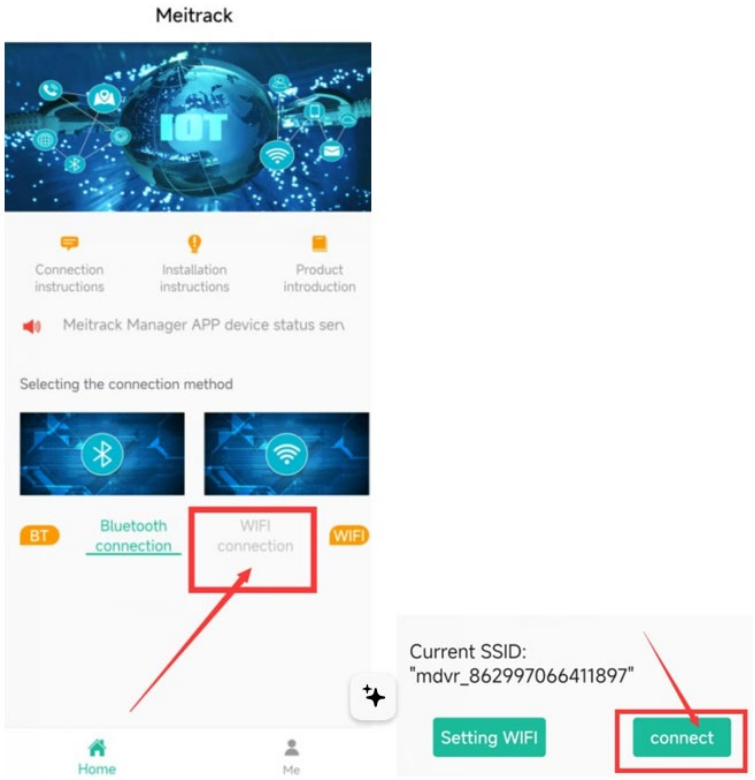


https://apps.apple.com/cn/app/mt-manager/id1640858688

https://play.google.com/store/apps/details?id=com.meitrack.mm.all

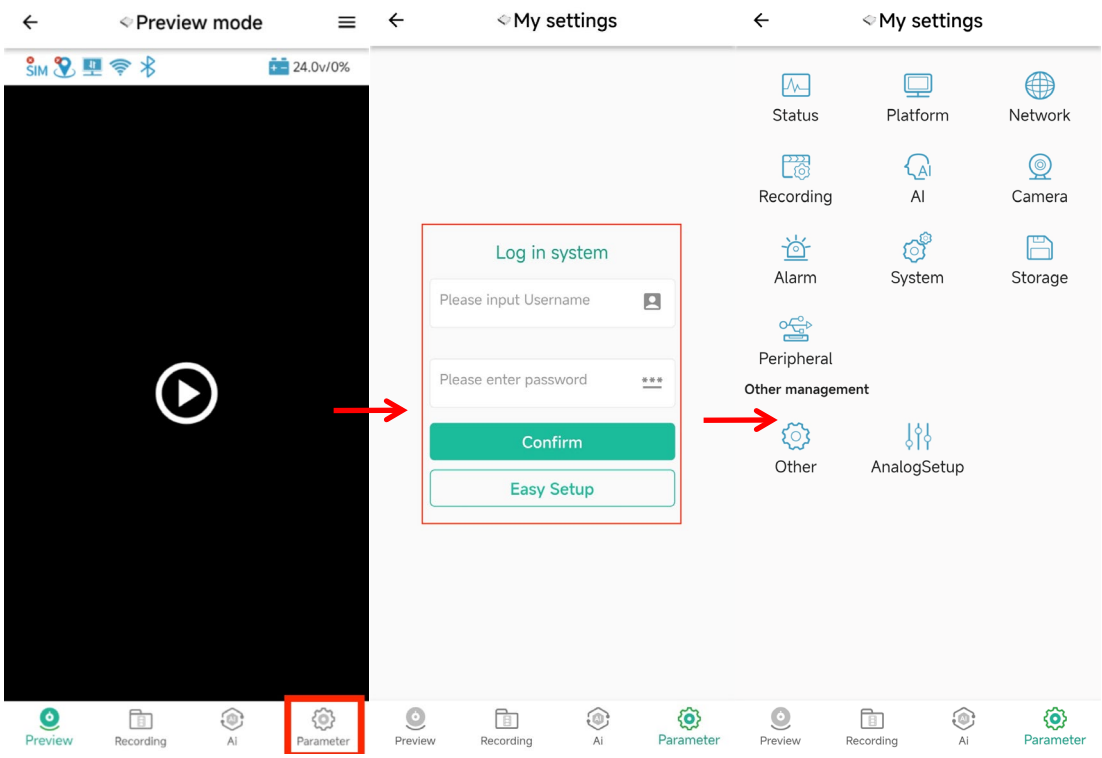
(2) Connect the device

For the first connection to configure the APP, press the button to the right of the LED indicator to turn on the device's WIFI hotspot. After connecting to the device's WIFI, use the APP to connect to the device.



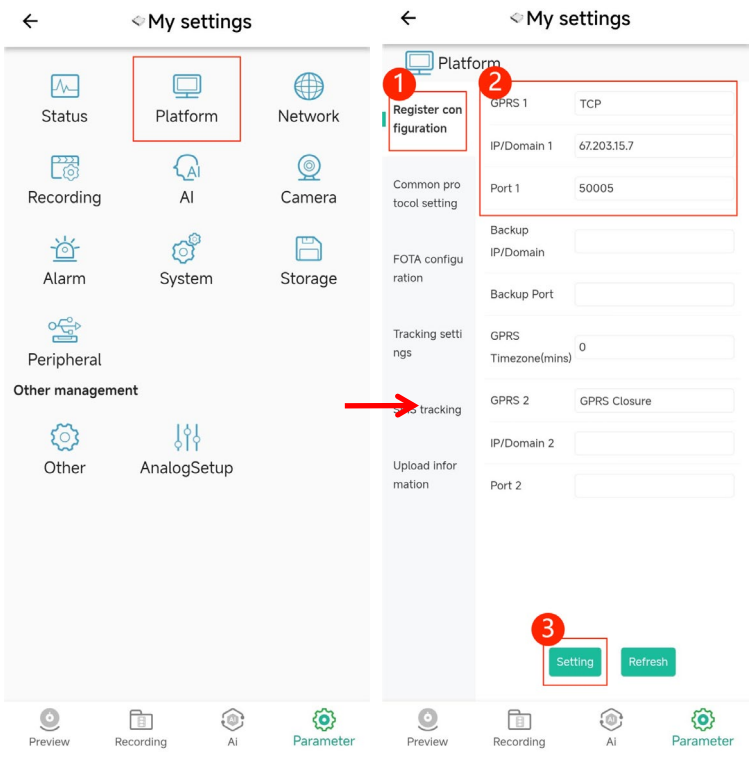
(3) Log in to the management account

Once the APP successfully connects to the device, click on 'Parameter Configuration' in the navigation bar below, and enter the account-password: 'admin', '0000' to access the parameter configuration page.



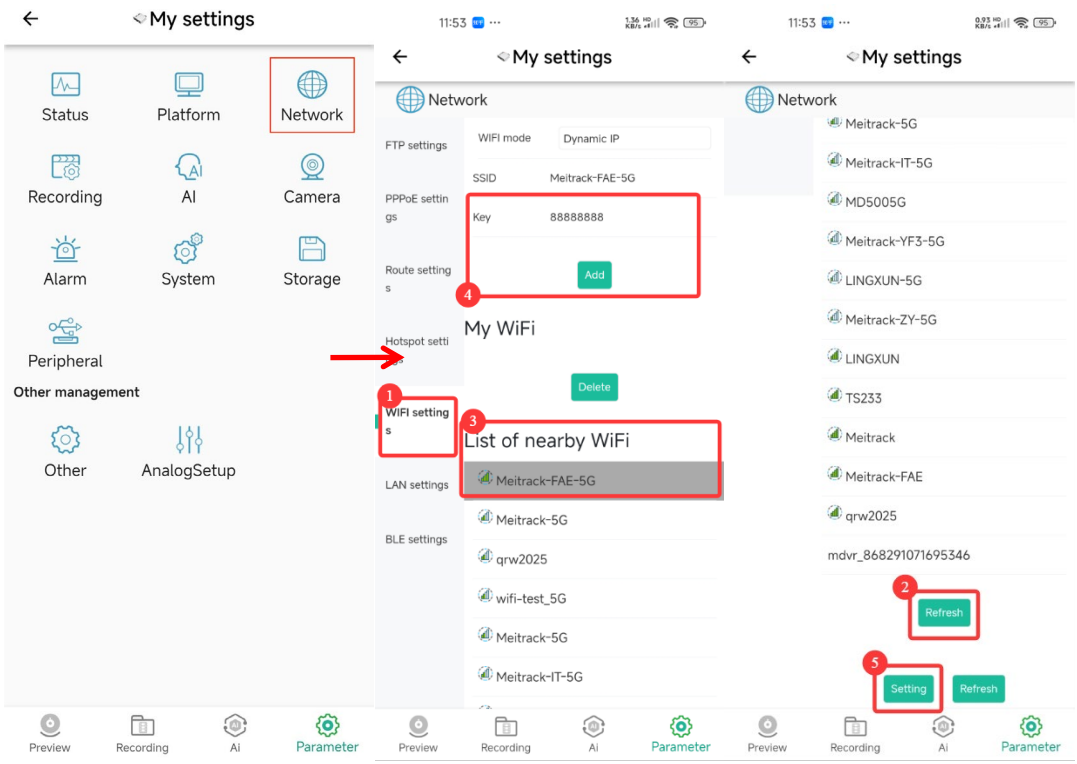
（4）Configure platform parameters

Click in sequence — Register Configuration — Set GPRS1 connection method to TCP — Enter IP/Domain 1: 67.203.15.7, enter Port 1: 50005 — Click 'Settings' at the bottom of the page



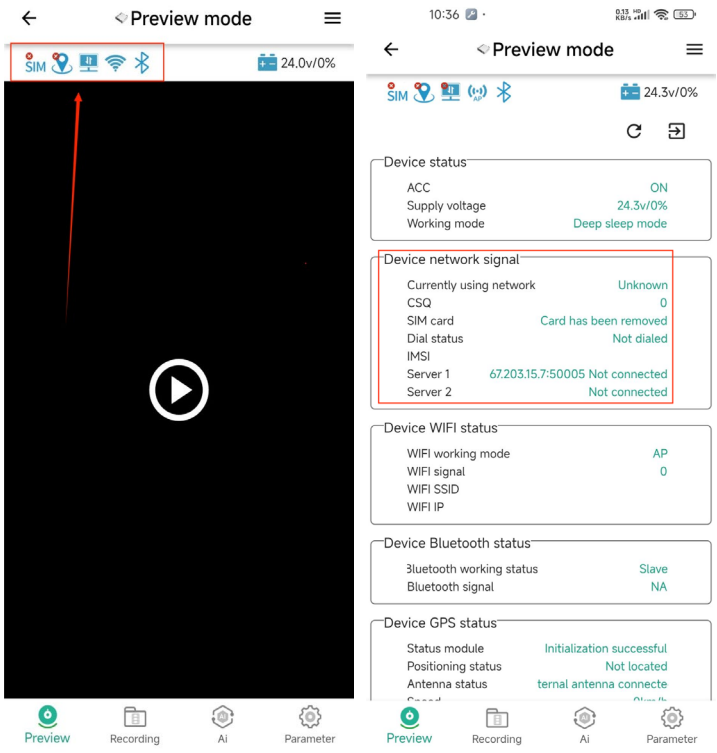
（5）Configure WIFI parameters

Click in sequence — Network Settings — WIFI Settings — Nearby WIFI List — Refresh — Select and click on the WIFI from the list — Enter the WIFI password above 'My WIFI' — Click Add — Click 'Settings' at the bottom of the page



（6）Connection status check

Return to 'Preview', click the status list in the upper left corner to check the device status



8.2 MM parameter configuration

（1）Basic page

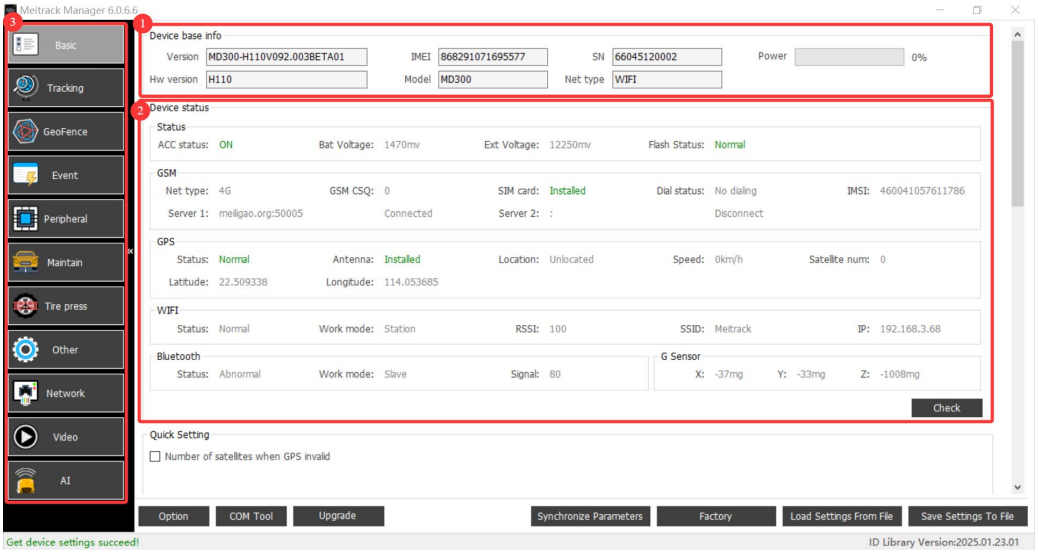
Use a C to A data cable to connect the device to the PC, ensure no other software is occupying the serial port, open Meitrack Manager, and MM will automatically recognize and read the device information, entering the basic settings page.

The following functions can be achieved on the basic settings page:

① View basic device information such as IMEI number, FW version, etc.

② Check the status of various device modules, such as GSM and WIFI signal strength, as well as server connection.

③ Navigate to other functional pages via the navigation bar.



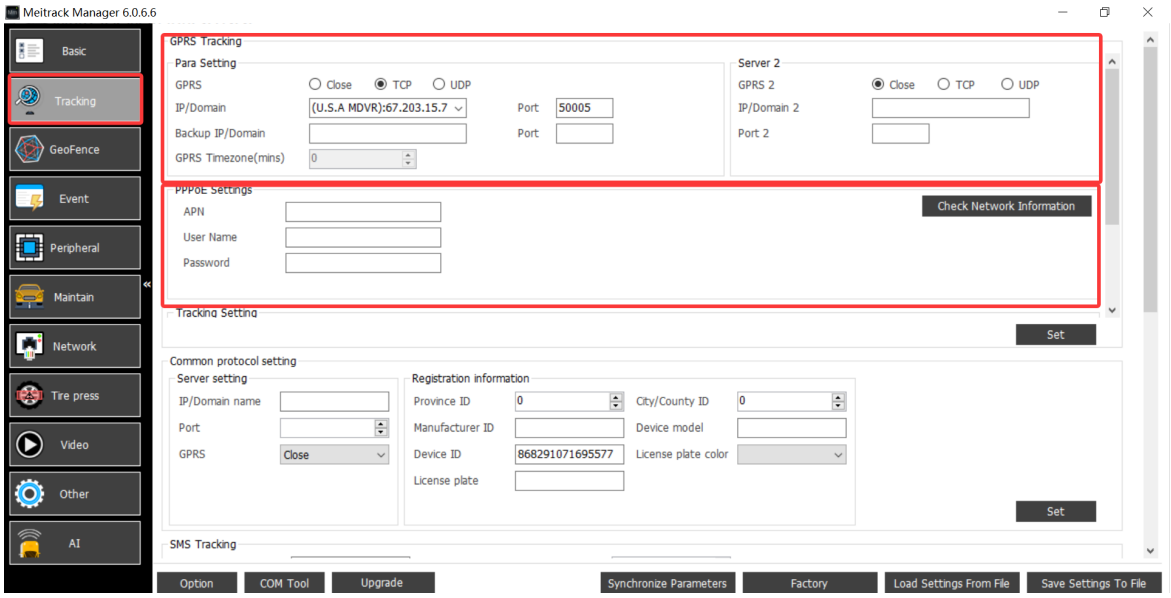
（2）Connection Settings

When using the Meitrack MDVR platform, the GPRS connection mode must be set to TCP mode, and the main server IP should be set to the US MDVR server. The port will be configured automatically at this time, and when setting a custom IP, the GPRS time zone can also be adjusted as needed.

On the right side of the main server, the secondary server can be configured, requiring the user to input the IP and port manually.

Below, you can set the internet dial-up - APN, username, and password.

Finally, do not forget to click 'Set' to save the settings.



（3）Network Settings

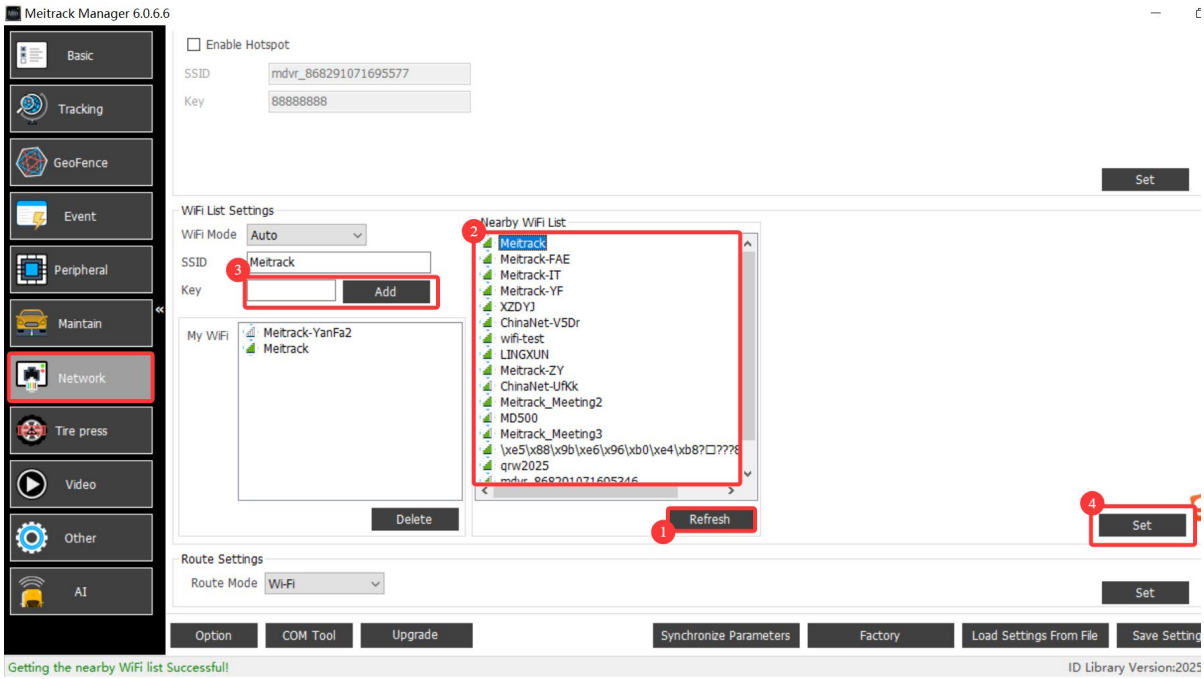
Set up the connection to WIFI on the network settings page.

① Find the WIFI list settings and click refresh to search for nearby WIFI

② Click to select WIFI from the WIFI list

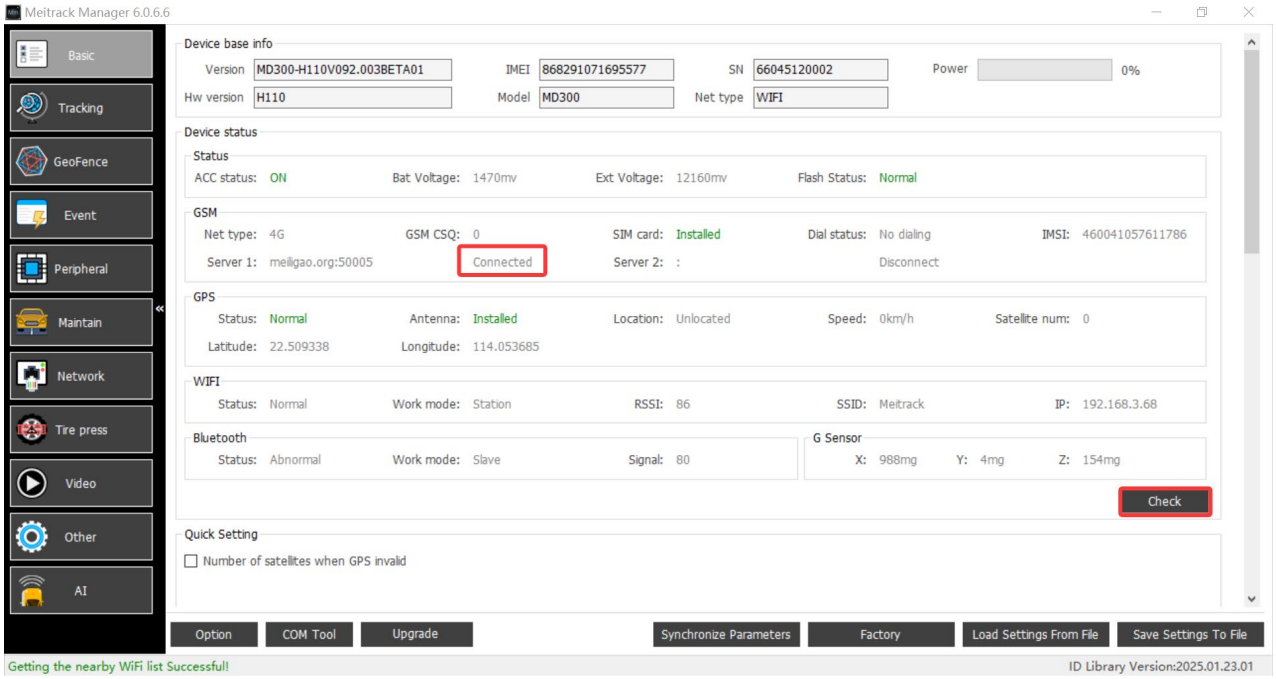
③ Enter the password and click add

④ Finally, click 'Set' to save the settings



(4) Status Check

After completing the above operations, return to the basic settings page and click the 'Check' button to view the status of each module of the current device. If it shows 'Connected', it indicates a successful connection to the platform, and you can proceed to add the device on the platform. For specific steps on adding devices, refer to the platform setup instructions.



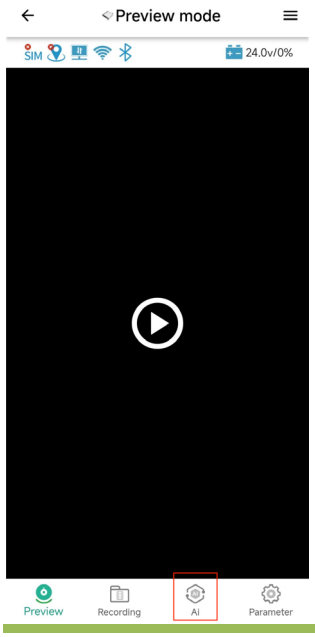
9 AI Calibration

The AI calibration function requires the 'MT Manager +' APP. Please refer to the APP configuration section for installation and connection methods.

（1）AI Calibration Page and Functions

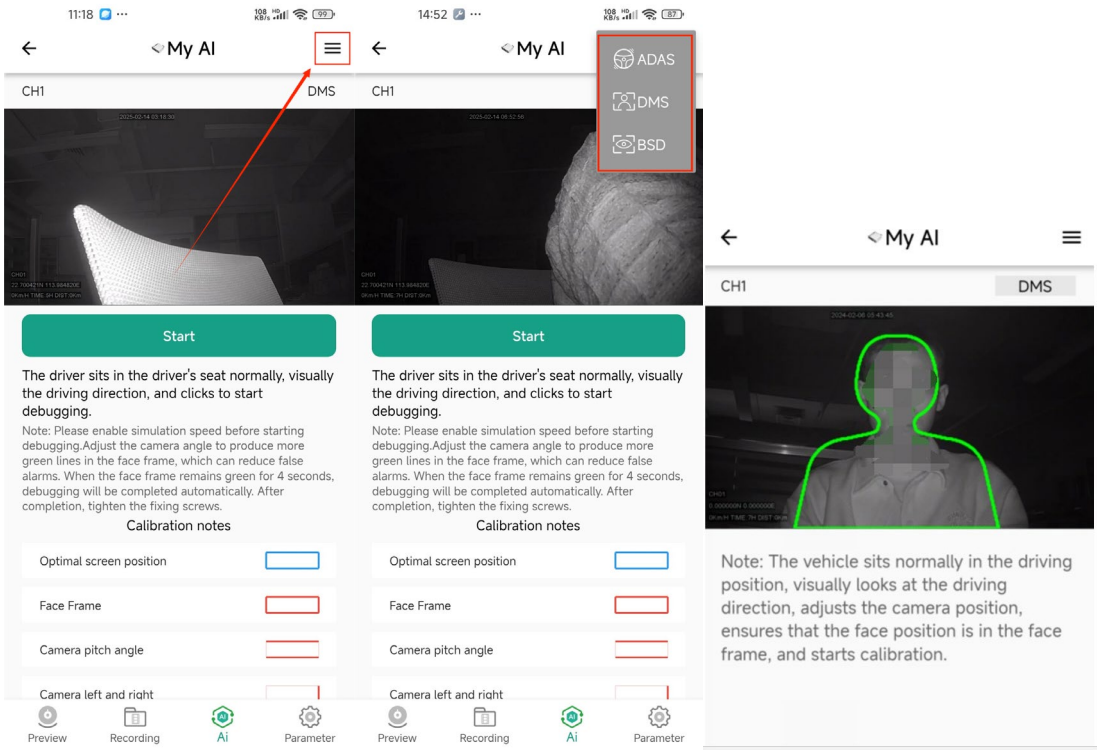
After successfully connecting the device, enter the main page - click 'AI' in the navigation bar below to access the AI calibration settings interface.

- The multifunction button in the upper right corner can navigate to different AI recognition calibration function pages.
- The upper left corner displays the video stream currently being played.
- The name of the current AI function is displayed below the function key in the upper right corner.
- Below the video stream is the AI calibration function settings section.



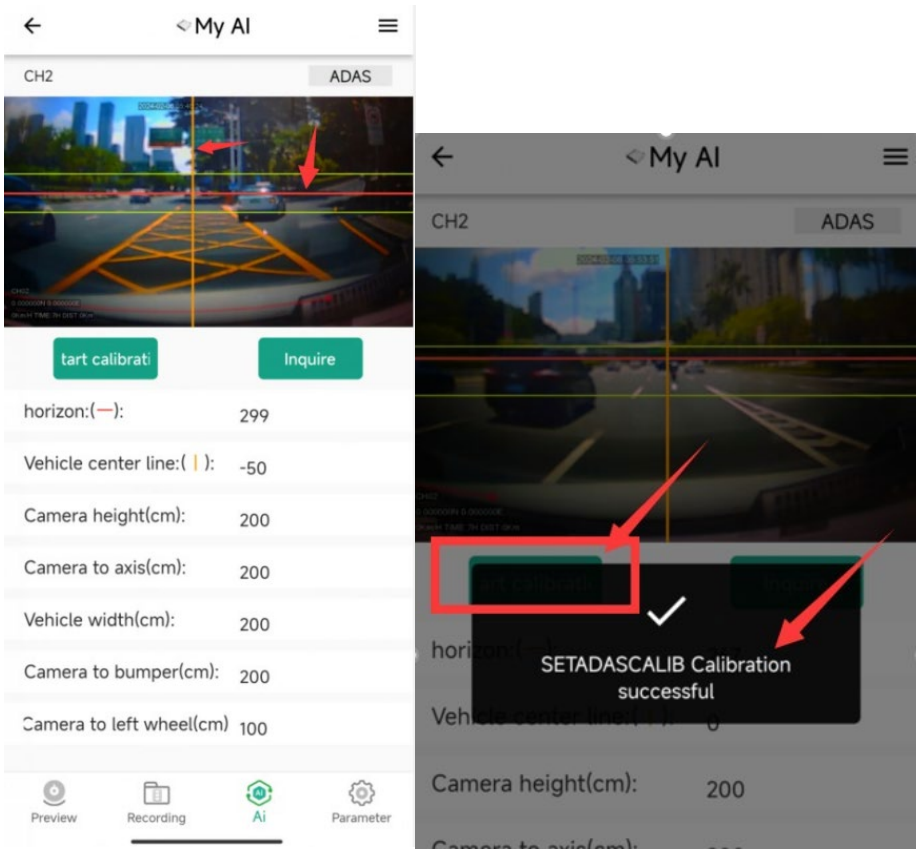
（2）DMS Calibration

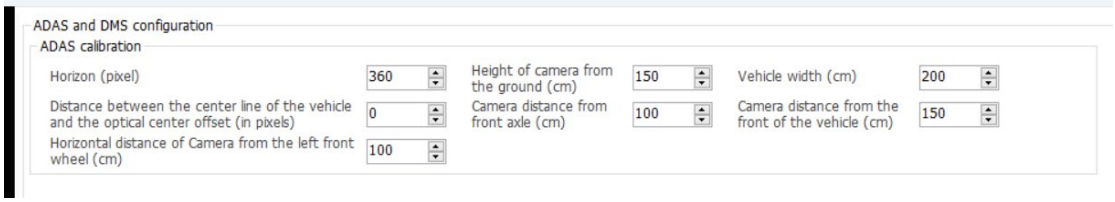
In the AI function page, click the multifunction button in the upper right corner—select DMS—adjust the camera to center the driver in the frame as much as possible, and ensure the driver is looking in the driving direction—click 'Start'—calibration is automatically completed when the portrait frame remains green for 4 seconds—after completion, please secure the DMS camera to prevent angle displacement.



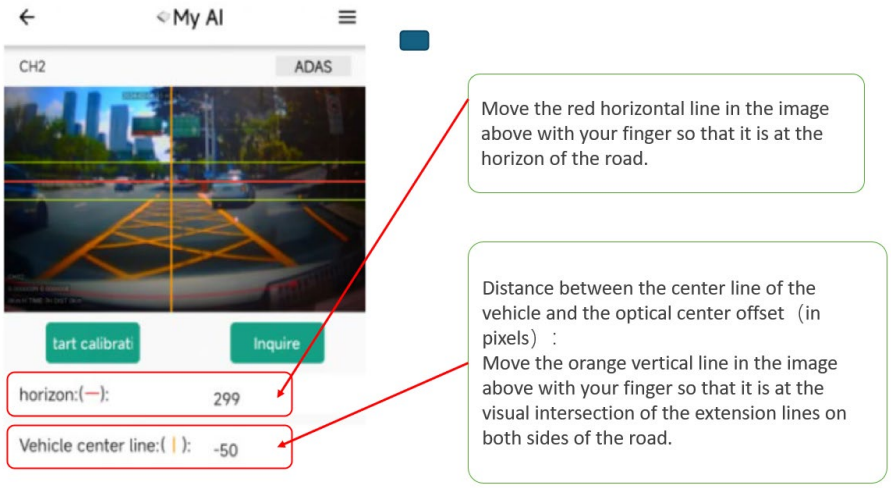
（3）ADAS Calibration

In the AI function page, click the function key in the upper right corner—select ADA—manually adjust the positions of the yellow and red lines in the image, placing the red line at the road's horizontal position and the vertical orange line at the end of the road—click the calibration button—start the vehicle and drive for 2-3 minutes, the device will automatically complete the calibration, and then you can attempt to trigger DMS/ADAS events.





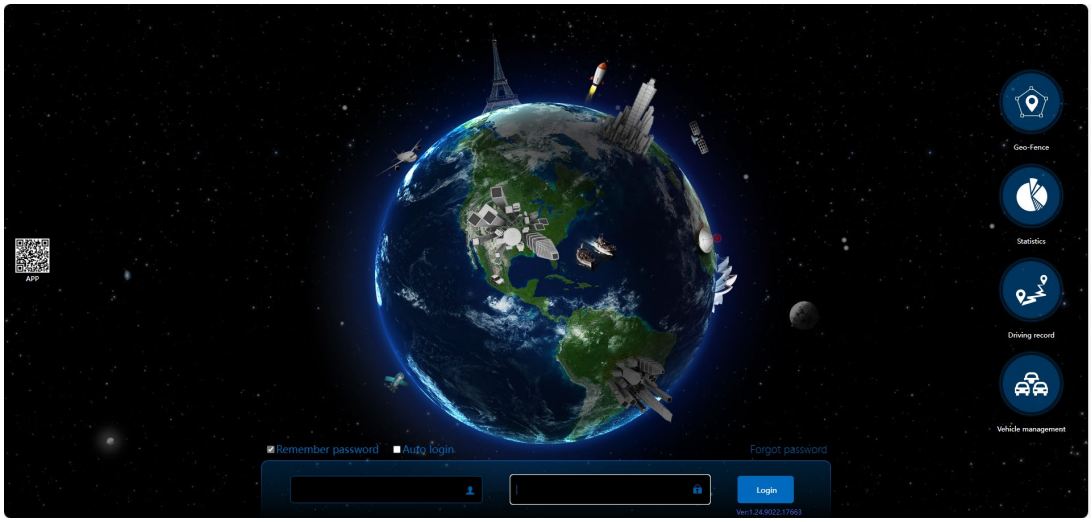
Refer to the image below to configure the vehicle dimensions:



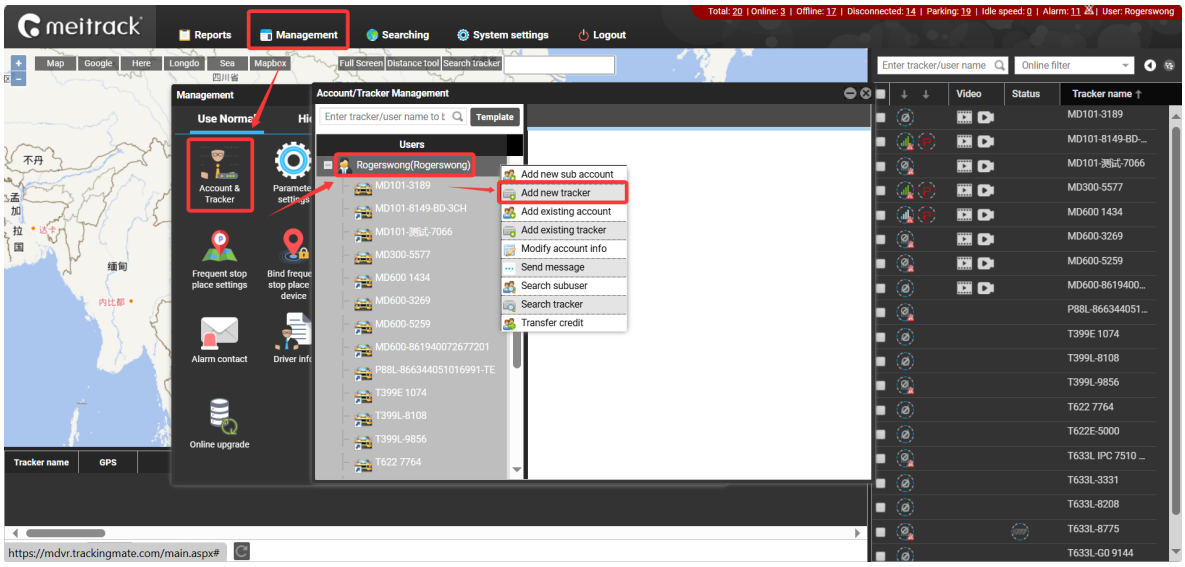
10 Platform Settings

10.1 Add Device to Platform

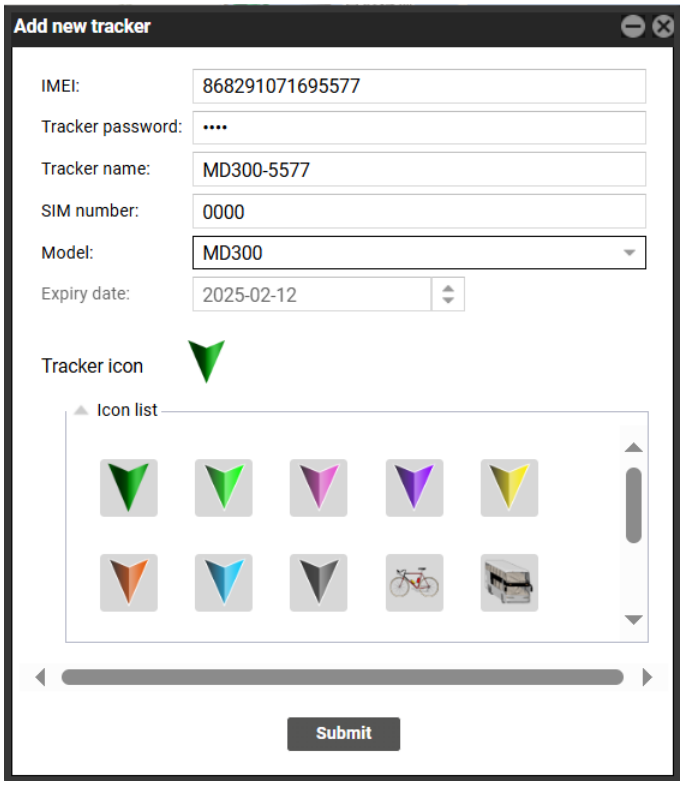
(1) Enter your username and password to log in to the platform. If you are using it for the first time, please consult relevant personnel in the company to obtain an account - (mdvr.trackingmate.com)



(2) After entering the main page, click in sequence - Management Center - Device Management - Username (right-click) - Add New Device



(3) In the device addition window, enter the device IMEI - device password - device name - SIM card number in sequence, select the device model, set the device expiration date, and finally click submit to complete the device addition.



Settings Content:

Device IMEI: one-to-one, usually written on a label on the device body, can also be obtained by connecting to MM

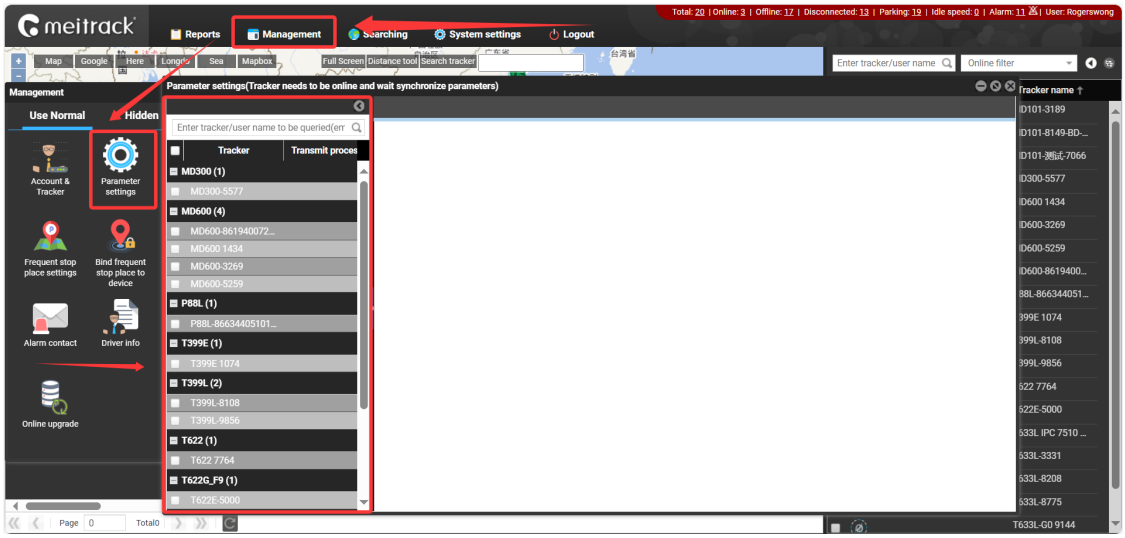
Device password, device name, and SIM card number: user custom

Device Model: Usually written on the body label; if the label is damaged, it can also be obtained by connecting to MM.

Expiration Date: The usage period of the device on the platform. Note that this setting will consume the account's annual quota, so please set it according to actual usage needs.

10.2 Platform Parameter Settings

(1) On the main page, click Management Center - Comprehensive Parameter Settings - Check the target device on the left side of the parameter settings window.

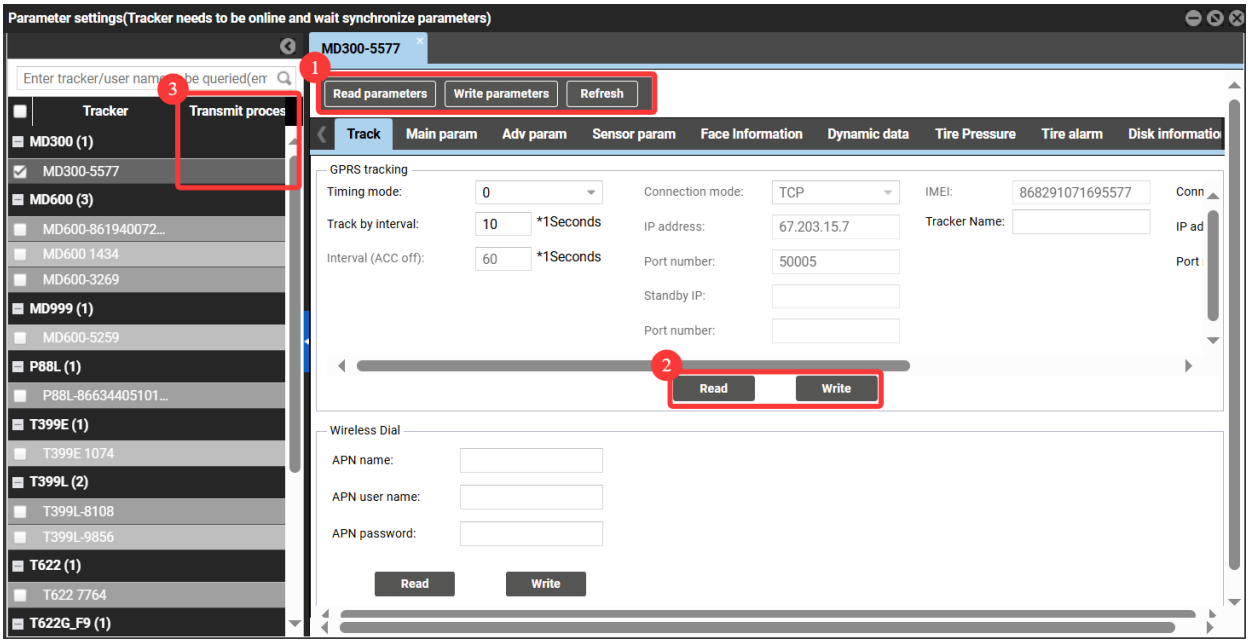


(2) In the device parameter settings interface, you can read, view, and configure the settings parameters.

Reading and Viewing Parameters: When viewed for the first time, the settings parameters will be blank. Clicking the 'Read' button located below section ② of the corresponding settings can read the parameters of that specific setting individually. You can also click the 'Read Parameters from Terminal' button located above section ① on the settings page to obtain all the settings parameters.

Configuration settings parameters: After modifying the settings parameters for certain functions, click the 'Write' button at the bottom of the function page (②) to complete the configuration of this part of the settings parameters. If you have modified a large number of settings parameters, you can also click 'Write parameters to terminal' (①) to configure all parameters to the device at once.

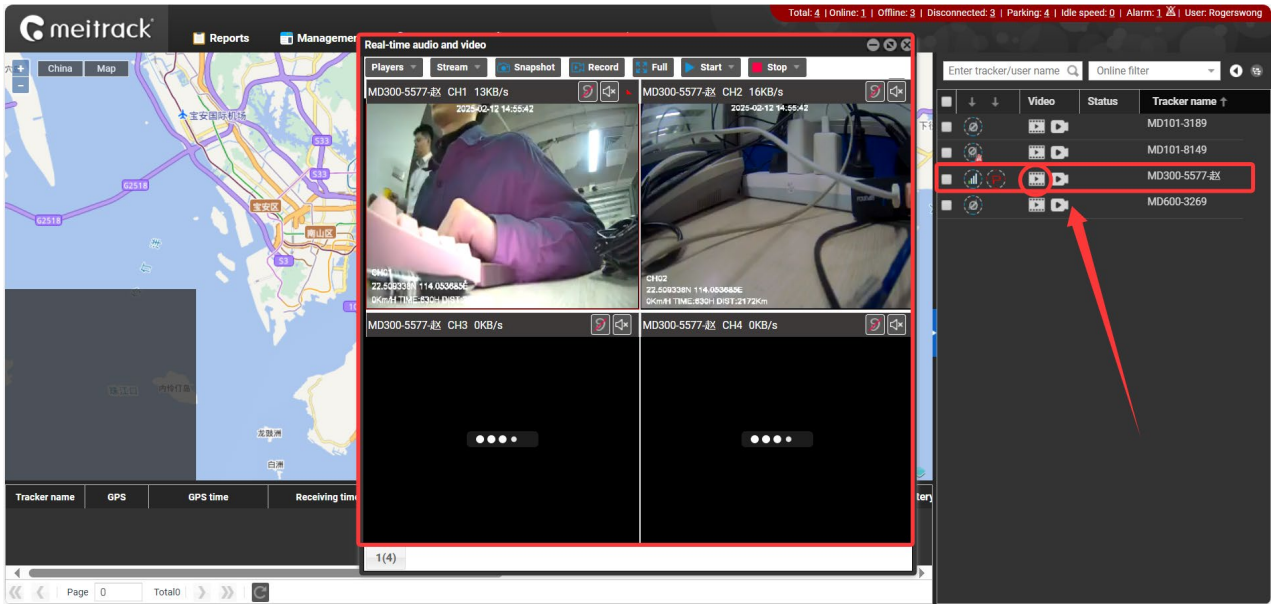
In addition, check the process status at (③), such as whether reading was successful, whether writing was successful, etc. After initially reading and checking the settings, if you want to check again after a long interval, you can click 'Refresh' or 'Read parameters from terminal' (①) to obtain the latest settings parameters.



10.3 Real-time playback and playback

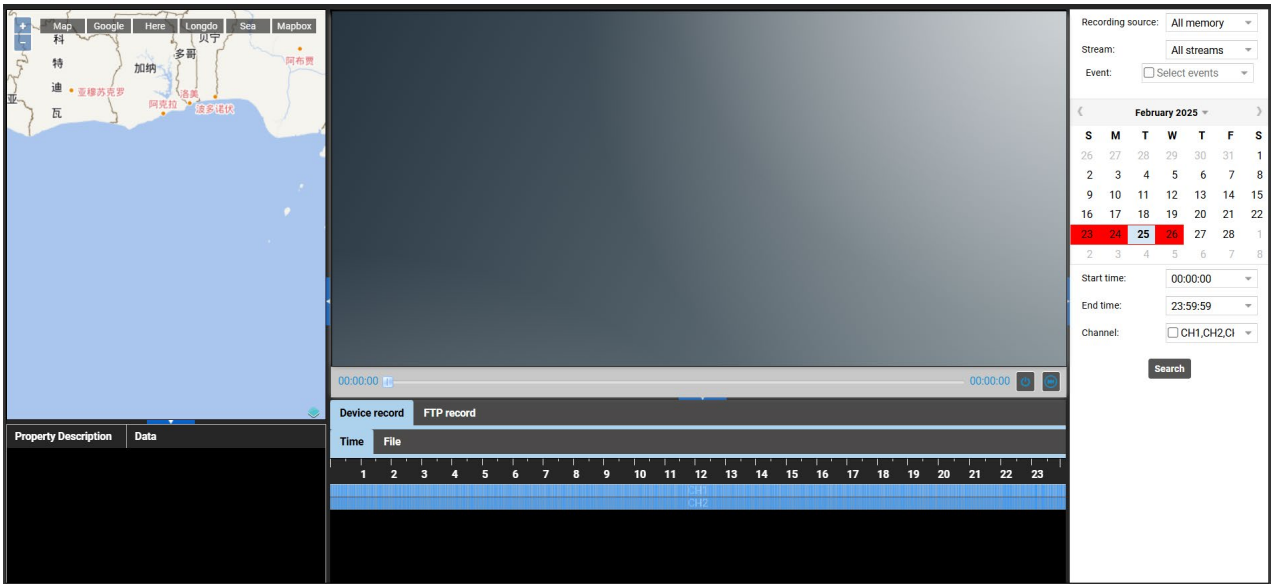
10.4 Real-time playback

Click the real-time video view button in the device list on the right side of the platform page to open the video monitoring window.

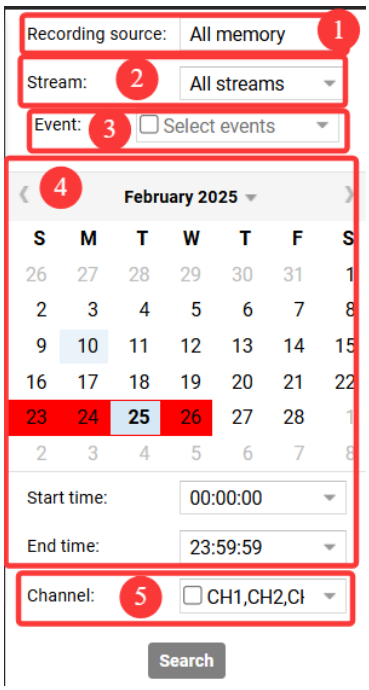


10.5 Video playback

1) In the device list on the right side, click the video playback button of the device to enter the video playback interface.

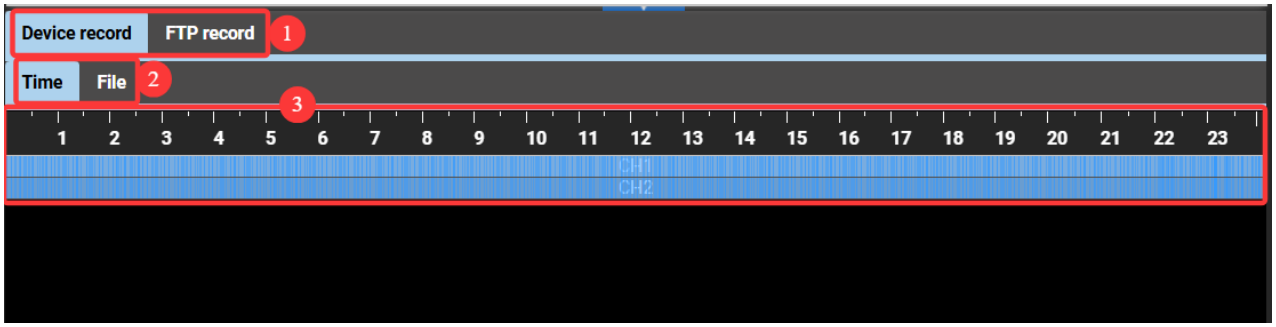


2) On the right side is the video file retrieval navigation, where you can search and filter video files. The filter conditions that can be added include: ① video file storage location, ② bitrate, ③ related alarm events, ④ date and time, and ⑤ video channel.

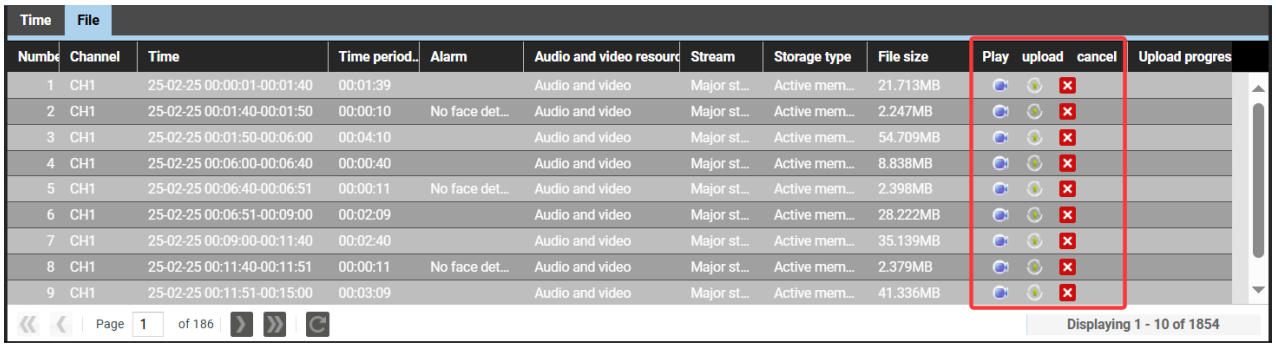


3) In the video playback window, the lower part features the video playback progress bar. To the left of the progress bar is the time of the currently playing video frame, and to the right is the total duration of the video. Additionally, there are ① a video pause function key and ② a fast forward function key.

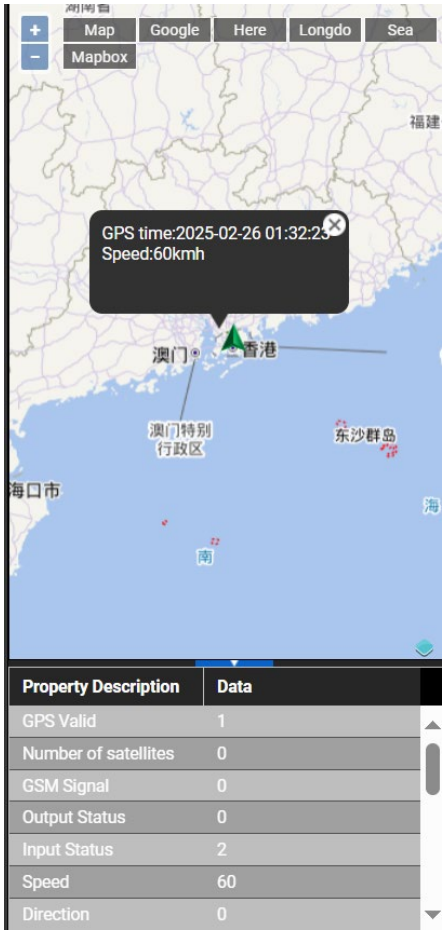
4) In the quick retrieval bar for video files, you can ① select to view files stored on the device or FTP storage, and in ② choose to display video files in timeline or file format. By clicking on the blue video channel below the timeline, you can directly play the video frame from that time.



5) The file display page allows for video file playback, uploading files to the FTP server, and deleting files.



6) The left window displays the location information of the recorded video, while the bottom records some status parameters of the device during video recording.



10.6 Trigger AI alarm information

10.7 Introduction to AI alarm function

This device uses video analysis-based machine vision technology to automatically identify road risks and unsafe driving behaviors of the driver. Any detected event will trigger a sound alarm to alert the driver in real-time, and these events will also be synchronized to the platform.

Note: The AI function must be calibrated and configured according to the installation operation instructions; otherwise, the accuracy of the AI function may be affected.

10.8 AI Alarm and Trigger Conditions

AI Type	Alarm Type	English Prompt Sound
ADAS	Left Lane Departure Warning	Watch out lane departure
	Right Lane Departure Warning	Watch out lane departure
	Front Collision Warning	Watch out for the front vehicle
	Pedestrian Collision Warning	Watch out for pedesitrians
	Too Close Distance Warning	Keep a safe distance
DMS	Smoking	No smoking
	Calling	No phone call
	Distraction Warning	Please face forward
	Fatigue	Attention, drowsiness detected
	Yawning	Please stay awake
	Driver Out of Position	Please return to the seat
	Seat Belt Not Fastened	Please fasten your seat belt
	Infrared Blocked Lens	Do not block the DMS IR
	DMS Camera Covered	Do not block the DMS lens

Trigger Conditions and Sensitivity

Alarm Type	Trigger Speed (Default)	Sensitivity		
		High	Medium	Low
Left lane departure	＞50	Sensitivity: 0.3	Sensitivity: -0.3	Sensitivity: -0.7
Right lane departure	＞50	Sensitivity: 0.3	Sensitivity: -0.3	Sensitivity: -0.7
Forward Collision Warning	＞30	TTC = 4.6s	TTC = 3.6s	TTC = 2.7s
Pedestrian Collision Warning	＞30	TTD = 3.0s	TTD = 2.5s	TTD = 2.0s
Distance Detection	＞30	TTD = 2.0s	TTD = 1.6s	TTD = 1.2s
Smoking	＞10	Alarm Duration: 2s	Alarm Duration: 3s	Alarm Duration: 4s
Calling	＞10	Alarm Duration: 2s	Alarm Duration: 3s	Alarm Duration: 4s
Distraction Warning	＞10	Alarm Duration: 2s	Alarm Duration: 3s	Alarm Duration: 4s
Drowsiness	＞10	Alarm Duration: 2s	Alarm Duration: 3s	Alarm Duration: 4s
Yawning	＞10	Alarm trigger duration:	Alarm Duration: 2s	Alarm Duration: 3s

		1.5s		
Driver Absence Detected	＞10	Alarm Duration: 2s	Alarm trigger duration: 5s	Alarm trigger duration: 8s
Seat Belt Not Fastened	＞10	Alarm Duration: 2s	Alarm trigger duration: 5s	Alarm trigger duration: 8s
IR block	＞10	Alarm Duration: 2s	Alarm Duration: 4s	Alarm trigger duration: 6s
DMS Camera Covered	＞10	Alarm trigger duration: 5s	Alarm trigger duration: 10s	Alarm trigger duration: 15s

10.9 ADAS Function

10.9.1 Left Lane Departure Alarm

Real-time identification of lane departure behavior during driving. If there is unintentional lane departure behavior, the driver will be reminded to ensure driving safety.

Note: The left and right turn signal wires must be connected in the vehicle, and the turn signal must be activated before turning; otherwise, turning may trigger a false lane departure alarm.

10.9.2 Lane Departure Warning

Real-time identification of lane departure behavior during driving. If there is unintentional lane departure behavior, the driver will be reminded to ensure driving safety.

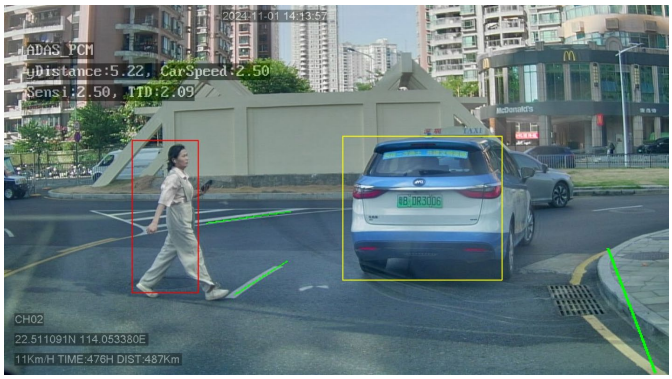
Note: The left and right turn signal wires must be connected in the vehicle, and the turn signal must be activated before turning; otherwise, turning may trigger a false lane departure alarm.

10.9.3 Front Collision Warning

Real-time identification of the relative speed between this vehicle and the vehicle in front during driving, alerting the driver when a collision is likely to occur, ensuring sufficient emergency braking time.

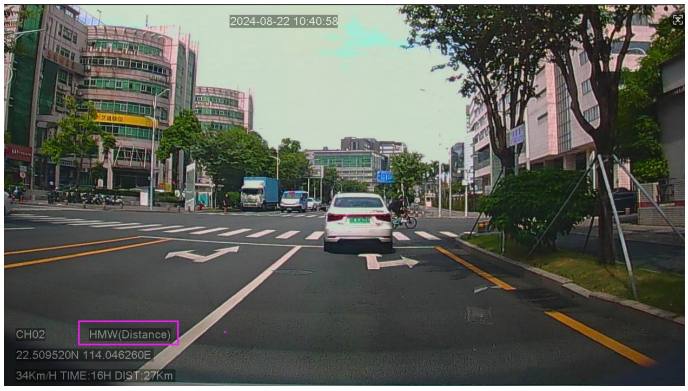
10.9.4 Pedestrian Collision Warning

During driving, real-time identification of pedestrians, bicycles, and motorcycles in front of the vehicle, alerting the driver if there is a potential collision risk, ensuring sufficient emergency braking time.



10.9.5 Distance Detection

When the vehicle is moving at low speed, identifying the relative speed between this vehicle and the vehicle in front. When there is a potential collision risk, alerting the driver to maintain a safe distance.



10.10 DMS Function

10.10.1 Smoking

Identifies the driver's smoking behavior during driving and issues a warning to ensure driving safety.

Note: Smoking alarms may frequently result in false positives. When the driver makes movements similar to smoking, such as resting their chin on their hand or eating and drinking, false alarms may occur. You can collect false alarm videos and provide them to us to optimize the AI algorithm.

10.10.2 Calling

Identifies the driver's mobile phone call behavior while driving and issues a warning to ensure driving safety.

10.10.3 Distraction Warning

Identifies the driver's behavior of not looking at the road ahead while driving (such as looking around or bending down to find something) and issues an alarm to ensure driving safety.

10.10.4 Fatigue Driving Alarm (Close Eyes)

Identifies the driver's fatigue status (close eyes) and issues a warning to ensure driving safety.

10.10.5 Yawning

Identifies the driver's fatigue status (yawning) and issues a warning to ensure driving safety.

10.10.6 Driver Absence Detected

Detects that the driver may be leaving and issues a voice reminder.

10.10.7 Seat Belt Detection

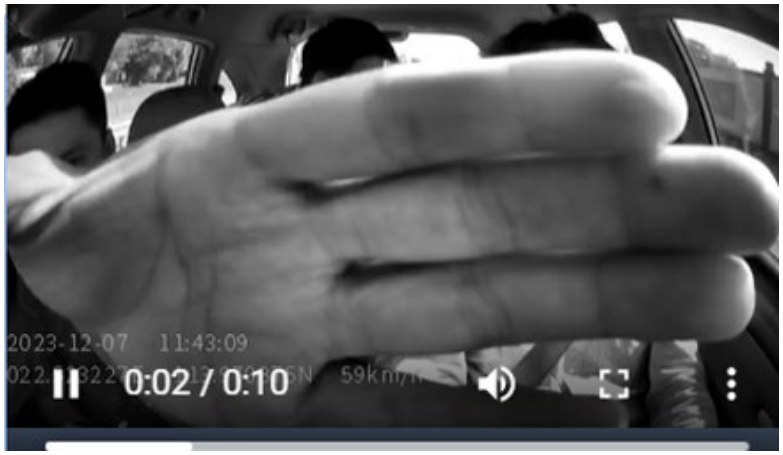
The device identifies the seat belt status and issues a warning to the driver when driving without wearing a seat belt to ensure driving safety.

10.10.8 IR block

The device detects that the driver is wearing sunglasses, which prevents the detection of the driver's closed eyes.

10.10.9 Covered

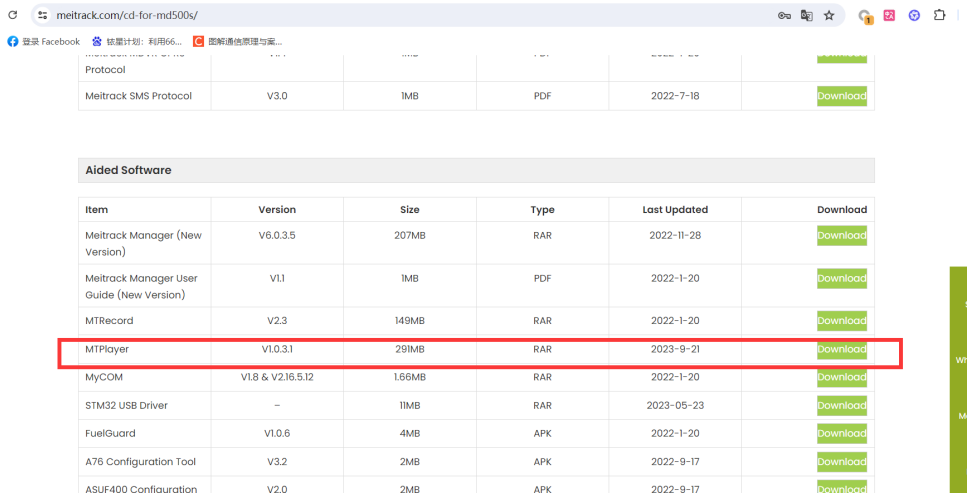
The device has detected that the DMS camera is covered and will issue a voice warning to the driver.



11 MTplayer

11.1 MTplayer Installation

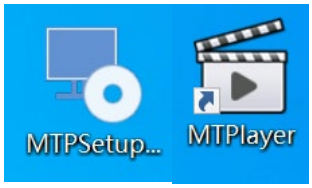
Go to https://www.meitrack.com/cd-for-md500s/, download MTplayer setup.exe, and the installation password is meitrack.iot. After successful installation, a shortcut for MTplayer will be generated on the desktop.



Item	Version	Size	Type	Last Updated	Download
Meitrack SMS Protocol	V3.0	1MB	PDF	2022-7-18	Download

Aided Software

Item	Version	Size	Type	Last Updated	Download
Meitrack Manager (New Version)	V6.0.3.5	207MB	RAR	2022-11-28	Download
Meitrack Manager User Guide (New Version)	V1.1	1MB	PDF	2022-1-20	Download
MTRecord	V2.3	149MB	RAR	2022-1-20	Download
MTPlayer	V1.0.3.1	291MB	RAR	2023-9-21	Download
MyCOM	V1.8 & V2.16.5.12	1.66MB	RAR	2022-1-20	Download
STM32 USB Driver	-	11MB	RAR	2023-05-23	Download
FuelGuard	V1.0.6	4MB	APK	2022-1-20	Download
A76 Configuration Tool	V3.2	2MB	APK	2022-9-17	Download
ASUF400 Configuration	V2.0	2MB	APK	2022-9-17	Download

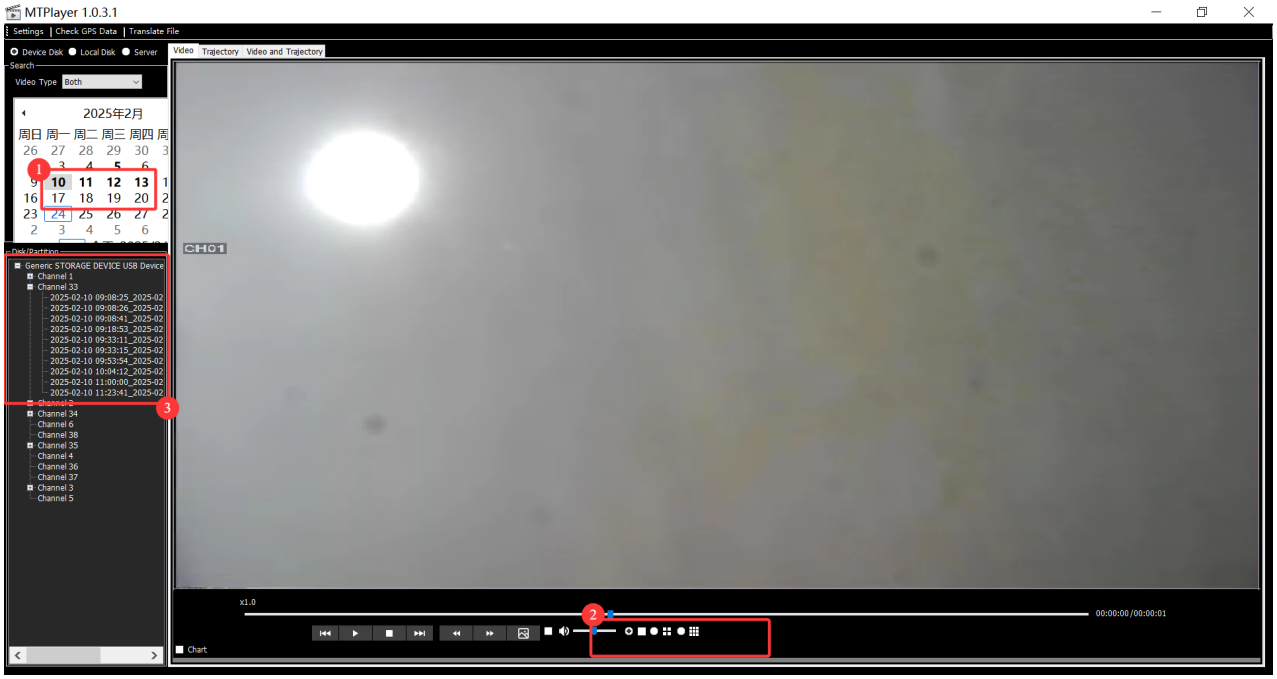


11.2 Storage Card Connection to PC - MTplayer

1) Open the side interface cover of the MD300, gently press the end of the TF card to remove it, insert the TF card into the card reader, and then connect the card reader to the USB port.

2) Open MTplayer, select Local disk, click 'Search', and once the search progress is complete, it will indicate that the search is finished.

11.3 MTplayer Page User Guide



1）The main part is the video playback window, above which displays the current video's time and date, while the lower left corner shows detailed information such as the video's latitude and longitude, speed, etc.

2）Below is the video playback control panel, which not only allows basic video operations such as play, pause, and fast forward, but also allows you to select multiple windows to play videos simultaneously in section ②.

3）On the left side is the video file retrieval navigation, which can be used to search and select videos from a specific date; In the date window, the dates marked in dark color in section ① indicate that there are video files stored for that day, while light-colored dates indicate that there are no video files stored; You can double-click on the date in section ① to enter the secondary page for date video retrieval in section ③. Click the plus sign on the left side of section ③ to expand the video files for different video channels. A plus sign on the left indicates that there are video files under that channel. Click the plus sign to expand the file directory for that channel, and double-click the file named with the date to play the corresponding video on the right side.

12 FAQ

To be determined