

MEITRACK® AI Dashcam



MD101 User Guide

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Document Update Record



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		1.added MD101 third camera related content;		
		2. ADAS camera support 1080P;		
		3. I/O wire color change;		
		4. add RS232 interface;		
		5. Added low voltage shutdown function.		

Precautions for use

Warning

1. The dangerous driving prompts issued by the equipment cannot replace the driver's driving decisions and operations;

2. The dangerous driving prompts issued by the device are developed based on computer vision and deep learning technology, and cannot guarantee 100% recognition accuracy. For example, the accuracy of algorithm recognition varies under different road and weather conditions.

3. The preparation aims to enhance users' understanding of driving conditions under correct usage. If used improperly, users may be distracted, leading to accidents, property damage or personal injury. During driving, do not attempt to view information stored on the device or change device settings. Only operate the device when your vehicle is stationary and parked in a safe place in accordance with local laws. Please always maintain awareness of the surrounding environment and avoid being distracted by the display screen or phone. Focusing on equipment may lead to driving hazards. The risk of using this device will be borne by the user.
4. When installing the device on a vehicle, please do not place it in a place that hinders the driver's ability to see the road or interferes with vehicle operation and control, such as the steering wheel, pedals, or transmission lever. Do not place it loosely on the vehicle dashboard. Do not place the device in front of or on top of any airbags.

5. Drivers are prohibited or restricted from playing videos on their devices in certain regions. Please comply with relevant laws in each region.

Maintenance precautions

1. Please keep the equipment dry. Do not let the equipment and cables stay in a damp environment, and do not operate the equipment with wet hands to avoid faults caused by short circuits, corrosion, or electric shock to personnel.

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2. Equipment should be subjected to strong impacts or vibrations to avoid equipment failure.

3. Place the equipment and power supply at high or low temperatures, otherwise, it may cause equipment malfunction.

4. Please do not hit, throw, or puncture the equipment, and avoid dropping or squeezing the equipment.

5. Please do not use unofficially approved or provided power and data cables.

6. Please do not dismantle the equipment and accessories without authorization, otherwise the equipment and accessories will not be covered by the warranty.

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1 Product Introduction

MD101 is a comprehensive automotive active safety product that integrates functions such as satellite positioning, video surveillance, and active safety. This product meets the needs of fleet monitoring, management, driving safety, and standardized driving behavior. Based on advanced deep learning technology, intelligent algorithms such as Advanced driver-assistance system (ADAS), Driver Monitoring System (DMS), Lane Change Assistance (LCA) and active safety functions can be applied to complex driving scenarios, improve the safety and efficiency of traffic driving, and enhance the overall user experience. The integration of artificial intelligence technology into the driving process of vehicles can further standardize the safe driving behavior of drivers.

2 Product Specifications

Main Device	
CPU	Dual cores, 1.2GHz
RAM	Capacity: 2Gb 16-bit DDR3(L)
System Structure	
System operation	Linux
Built-in AI algorithm	ADAS & DMS algorithms
Audio and Video	
Compression standard	H264
Audio compression	PCM、 WAV
Built-in speaker	Mono support
Built-in MIC	Mono support
ADAS front camera	
Sensor	1/2.9", 2MP CMOS sensor
FOV	D:125° H:105° V:58°
Resolution	720P;
Frame rate	Max support 1080p@15fps
	Connect to three cameras and can only be set to 720p@15fps
DMS Rear Camera	
Sensor	1/3", 2MP CMOS sensor
FOV	D:120°H:100° V:45°
Resolution	1080P
Frame rate	Max support 1080p@15fps
	Connect to three cameras and can only be set to 720p@15fps
Third way camera (optic	onal)
Model	ACA701



Sensor	2MP CMOS sensor
FOV	D:108°H:90° V:48°
Resolution	720P
Frame rate	Max support 720p@15fps
Model	ACA105 waterproof camera
Sensor	1/2.9" GC2053
FOV	D: 170°H: 160° V: 100°
Resolution	720P
Frame rate	Max support 720p@15fps
Frequency band	
	WCDMA: B1/B5/B8
MD101-E	LTE-FDD: B1/B3/B7/B8/B20/B28
	LTE-TDD: B38/B40/B41
MD101-A	WCDMA: B2/B4/B5
	LTE-FDD: B2/B4/B12
	GSM: B2/B3/B5/B8
	WCDMA: B1/B2/B5/B8
MD101-AU	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28
	LTE-TDD: B40
	WCDMA: B1/B6/B8/B19
MD101-J	LTE-FDD: B1/B3/B8/B18/B19/B26
	LTE-TDD: B41
Othora	
Others	0.201/
Power supply	9-36V
Operating power	400~430 mA
Sensors	3-axis acceleration sensor
Storage media	Support Micro SD card only, up to 512GB (It is recommended that you should
	use a Class 10 or above, FA132 format.)
Working temperature	Without battery: -20 C to 70 C
Storage temperature	
Relative numidity	10% to 90%, non-condensing
Atmospheric pressure	860Mbar to 1060Mbar
GPS sensitivity	-163 dB
WiFi	Supports APP connection only (Cannot transfer data)
Weight	198g
dimension	116mmx66mmx38mm

3 Standard and optional accessories

3.1 Standard









2m Power Cord



SIM Card Pin Ejector

G meitrack

Standard	Quantity
MD101 host	1
SOS alarm button	1
GPS antenna	1
2m power cord	1
SIM card pin ejector	1
Total	5

3.2 optional accessories



ACA701 Camera



ACA105 waterproof camera



4 Product Appearance and LED Status

4.1 Appearance







No.	lcon	Name	Description
1	Í	Pocording indicator light	Red, blue, and purple colors
T	ļ	Recording indicator light	indicate the recording status
ſ	1.	Notwork indicator light	The yellow color indicates the
Z	1111	Network indicator light	4G network status
2		CDC indicator light	The green color indicates the
3	۲	GPS mulcator light	GPS positioning status
4	NA	DMS camera	1080P DMS camera
5	NA	Heat sink	Metal heat sinks
6	NA	Tail line outlet	Default 6PIN tail cable
г	NA	Fixed lock for DMC comore	Locking the position of the DMS
/		Fixed lock for DIVIS camera	camera
0	NA	Fixed lock for DMS comore	Locking the position of the
ō			ADAS camera





No.	lcon	Name	Description
1	NA	Heat Sinks	
2	NA	Communication Module	4G Communication Module
3	R	Reset button	Single-click reset by using the probe
4	(((·	WiFi key	Short Trigger: Turn on/off the WiFi function.
			Voice broadcasting: WiFi is ON/OFF.
5	SIM	SIM card slot	Support Nano-SIM card
6	NA	Micro card slot	Support up to 512GB, Class10 and above
7	NA	ADAS camera	720P ADAS camera
8	NA	Labeling	Product model label



No.	lcon	Name	Description
1	0	Microphone(MIC)	Collect sound
2		Speaker(SPK)	Play sound



4.2 Definitions of Ports

No.	Wi	re Color	Definition	Description	Port
1	Rod		DDAT	Power input positive, input voltage: 9~36V;	Paro wiro
1	Reu		BBAI+	Connect to car and battery positive.	Dale wile
2	Black		CND	Ground wire is connected to the negative	Paro wiro
Z	DIdCK		UND	terminal of the vehicle battery;	Dale wile
2	Vallow			It is used to connect the vehicle ACC and check	Paro wiro
3	renow	_	ACC	the vehicle ignition status;	Bare wire
4	White		SOS	SOS Emorronou Alarm Button	SM-A Pair
4	Blue		303	SOS Emergency Alarm Button;	Connector
5	Orange		RIGHT-IN	Connect the right turn signal wire;	Bare Wire
6	Green		LEFT-IN	Connect the left turn signal wire;	Bare Wire
-	Dia ali		CDC	4PIN BMW header harness for docking GPS	4PIN BMW
	васк		Gr5	antenna;	Header
0	Black			ADIN RNW header harness for decking camera:	4PIN BMW
0	DIdCK		ANDI	4PIN DIVIN header harness for docking camera,	Header
0	Brown &		ту		
9	White		IA	N3232 1A	
10	Brown		RX	RS232 RX	4PIN
11	Pink &		F1/		MOLEX
11	Yellow		υC	50	
12	Black	_	GND	GND	
Note	: The 2-way o	amera does not h	ave a BMW port	cable for the third-way camera.	

4.3 Power On and LED Status

The device will automatically turn on when the red wire is connected to the power cord, and the blue/red light is always on.

Meaning	lcon	Color	Status	Description
			Steady on	Power off.
Video Light		Dod/Dluo	Dhua light stoody on	The system is running normally, but not
Video Light	-	кеалыце	Blue light steady on	recording.
			Red light steady on	Recording.
	lh.	Yellow	Steady off	No signal is received.
4G Signal Light			Blink	4G signal available, not yet on the platform
			Steady on	4G signal is available and the platform is online.
			Steady off	No GPS signal is received.
GPS Light	\odot	Green	Blink	GPS signal available, not located
	\checkmark		Steady on	GPS signal available and successfully located



5 First Installation

5.1 SIM Card and Micro SD Card Installation





SIM card installation

5.2 Suggest of Main Device Location Installation

It is recommended to install the MD101 on the upper edge of the windshield directly above the steering wheel, as shown in the figure.

To ensure safe driving and maximize the accuracy of AI algorithms, the choice of device installation location should be based on th e following principles:

- Do not block the driver's view.
- Do not interfere with the driver's driving.
- The device should be kept level and not tilted.
- The driver's face should preferably be displayed in the center of the inward-facing camera's image(see preview in the "Viidure" APP).
- The center of the front camera frame should preferably coincide with the horizon (see preview in the "Viidure" APP).





5.3 DMS and ADAS Camera Adjustment



DMS Camera adjustment



Adjust the camera angle to capture **facial features and the entire upper body** clearly, otherwise there may be more seatbelt false alarms.

Tighten the DMS fixing screws after fixing.



ADAS Camera adjustment

Adjust the angle of the front camera so that the Vanishing point of the road is in the middle of the picture. After confirming the position of the ADAS camera, tighten the screws.



Note: It is recommended that **the angle between the face and the DMS installation should not exceed 20 degrees**. If it exceeds 20 degrees, it will affect the accuracy of distraction alarm and smoking alarm. For example, if the DMS angle deviation is too large, it may detect the collar near the mouth and trigger smoking alarm wrongly. Note: APP can view AI video rendering effect, please see <u>6.3 ADAS/DMS APP video rendering</u>.

Example of DMS camera wrong angle:

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5.4 Host Wiring

Please connect the ACC cable and power cord to the corresponding original vehicle fuse socket



Note: 1. If you do not know whether the fused interface corresponds to ACC or constant current, please use a multimeter or test pen to measure, as follows:

- a. When the vehicle is turned off and powered off, the test pen light illuminates to prove that this port is a constant power interface;
- b. Start the vehicle and use a test pen to measure it. The previously off light is now on, and this port is ACC.

2. If you are unsure about which fuse interface corresponds to the turn signal, please use a multimeter or a test pen for the following steps:

a. Start the vehicle and turn on/off the left or right turn signal. Use a test pen to detect the fuse interface. If the interface lit up or turned off in sync with the turn signal, then that interface the left/right turn signal switch check port.





b. If you are not connecting the left/right turn signal detection wire, please disable the lane departure warning function. Otherwise, it will trigger the lane departure warning event by default.



6 APP Configuration

6.1 Downloading APP

Search for the "Viidure" app in the mobile Google app market or Appstore, download and install it.





Note:

If Google Market is unable to download or install, please download it through the following link. <u>https://www.meitrack.com/cd-download/Aided_Software/viidure.apk</u>

6.2 APP Connect to MD101

MD101 is connected to an external power source and turned on. Ensure that the recording blue light is always on. Press the WiFi button on the device and you will hear a voice reminder saying "WiFi is on" to turn on the WiFi function.



Please open the app and follow the steps shown below:

Note: The WIFI search name is: MD101_IMEI Default Password: 12345678

The name and password can be modified through the app.



After connecting to the WiFI of MD101, you can connect to the device through the APP and set the parameters of MD101.



4:20 PM 48.5KB/s \Lambda 🗬		3:09 PM 11.8KB/s		4:32 PM 20.4KB/s		an an 🕿 🎟 🕫	4:32 PM 20.4KB/s	s 🔲 👌	3al 3al 📚 🐽 +
← WLA	AN E	My Camera •	+	<	MD101	0	<	MD101	0
-							T/S		
SAVED NETWORKS									P.F
🖘 Meitrack-CP-5	G 50 🗎 🦻				-			4	
Available networks	0			Martine Contraction	-	HI SHARE	2024/23 15 11:10:20 00. 205699E 107.098	605 Akm/h	Su-
	÷ ?			20			10		
ক্ল TS233	A 2	1					N		
🗟 Meitrack-CP	4 (F		″ = 🔽						
ন্ধ wifi-test_5G 📧					11 0				
♥ MD101					O			0	
MD1	01								
12345678	•								
Advanced	options	MD101	Access Camera						
Conne	ect		-			()			\$
		Camera Album	More	Camera File	Cam	era Settings	Camera File		Camera Settings

Note: 1. An MD101 device can only be connected to one phone at a time, otherwise errors may occur.

2. If WIFI cannot be found, please check if the ACC line is active.

6.3 ADAS/DMS APP Video Render

After connecting to MD101, click Recorder Settings - Algorithm Settings (as shown below). Open video rendering for ADAS/DMS.

3:09 PM 11.8KB/s	GED 🛠 hill %.	4:32 PM 20.4KB/s 💭 🖲	+ (000 (P lat) lat)	10:06 1.1K/s 皮 回	5 Sall (\$ CED	10:08 0.6K/s 反 ⑦		■ ::::::: ♥ @D
My Camera •	+	< MD101	0	< Camera Settin	ngs	<	AI Setting	
		ST. MARKEN	C'Y	Video Speaker Volume	Medium	Forward Collision	Warning	Medium #
				Photo Resolution	3M Pixels	Lane Departure V	Warning	Medium 3
		12-13	1/1	Video Resolution	1080P	Stop & Go		Off I
		22		Loop Recording Duration The duration of each recording, if the metric card is full, it will externaticate the everyonth	ory (Minutels))	Virtual Bumper		Medium +
				Advanced		Pedestrian Collisi	ion Warning	Medium
			-	Time Zone	GMT +8 1	ADAS Render		•
	=	<u>.</u>	-	AI Setting	1.1	Fatigue Warning		Medium 1
				Platform Settings		Distraction Warni	ing	Medium
		0		Universal		Smoking Warning	9	Medium +
				WiFi Password	9225048363962	Calling Warning		Medium >
MD101	ccess Camera			Firmware Version		Seatbelt Detection	n	Medium >
				Format SD Card Free 14.4	IGB/Total 14.4GB	Steering Wheel D	Direction	Left /
Carmera Album	More	Camera File	Camera Settings	Reset		DMS Render		•

Note: The video rendering of ADAS/DMS is only displayed in the APP. When customers install it for the first time, they need to check the installation position before enabling the APP video rendering function.

6.4 Setting MD101 and Vehicle Parameters

Filling in the parameters for device location in advanced settings can make the algorithm more accurate (not mandatory). If the test result is accurate using the default parameter values, you do not need to modify.

(1) Car Type

The default car type is "Small". Users can select the corresponding vehicle type "large", "medium" or "small" according to the actual installation situation of the device.

(2) Installation Parameters

The default values of camera height, distance from lens to the front bumper, distance from lens to left wheel, and distance from lens to right wheel are 120cm, 155cm, 85cm, and 85cm respectively.

The parameters of the device installation position may affect lane departure alarms. If tested three sensitivity settings, lane departure still frequently triggers false alarms or not triggered at all, you can adjust the distance from lens to left and right wheels to reduce it by 10-20cm compared to the actual parameters of the device position. This method can reduce some false alarms.

DMC Deader		< Advanced		
Forward Collision Speed	30Km/h >	Car Type	Small >	
Lane Departure Speed	60Km/h >	Camera Height	120CM	
Fatigue Warning Speed	30Km/h >			
Distraction Speed	30Km/h >	Distance from lens to front bu	155CM	
Smoking Warning Speed	30Km/h >	Distance from lens to left whe	eel 85CM	
Calling Warning Speed	30Km/h >			
Seatbelt Detection Speed	30Km/h >	Distance from lens to right wh	neel 85CM	
Advanced	>			
Distance from Dista	nce from	Camera height		

6.5 ADAS & DMS Calibration

1. Select "AI Setting" - "Steering Wheel Direction" to select the direction of the steering wheel, which is left by default.

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Al Setting		< Al Setting
rward Collision Warning	Medium >	Forward Collision Warning
ane Departure Warning	Medium >	Lane Departure Warning
op & Go	Off >	Stop & Go
rtual Bumper	Medium >	Virtual Bumper
edestrian Collision Warning	Medium 2	Pedestrian Collision Warning
DAS Render		ADAS Render
atigue Warning	Medium >	Fatigue Warning
straction Warning	Medium >	Distraction Warning
oking Warning	Medium >	Distraction Warning
Illing Warning	Medium >	Smoking Warning
eatbelt Detection	Medium >	Left
eering Wheel Direction	Left >	Right
MS Render		Cancel

2. MD101 adopts automatic calibration. Before the first calibration, the device does not output any alerts. When the driving speed is detected to be consistently greater than 20 km/h, it will automatically enter the calibration.

Alarm Type		Sensitivity Sett	ing
	High	Medium	Low
Forward Collision	ttc <= 3.5s	ttc <=2.7s	ttc <= 1.8s
Warning			
Lane Departure	Distance from the wheel to	Distance from the wheel	Distance from the wheel to the lane line: <=-
Warning	the lane line: <=0.15m	to the lane line: <=0m	0.15m
	Lane correction cooldown	Lane correction cooldown	Lane correction cooldown time: 1.5s
	time: 0.7s	time: 1s	Pressing the line or slowly approaching and
			then pressing the line will trigger
Front Vehicle Start-up	ttc <= 3.5s	ttc <=2.7s	ttc <= 1.8s
Warning (Stop & Go)			Suppress alarm when the vehicle GPS speed
			decelerates significantly
Virtual Bumper	Distance to the front vehicle:	Distance to front	Distance to front vehicle: <=(1-3)m
(Distance Detection)	<=(3-5)m	vehicle:<=(2-4)m	And the two vehicles are close to each other
	And the two vehicles are	And the two vehicles are	
	close to each other.	close to each other	
Pedestrian Collision	absttc<=1.6 s	absttc <= 1.3 s	absttc <= 1 s
Warning	Warning range, 0.1m	Warning range, 0m	Warning range, 0.1m inside the vehicle
	outside the vehicle	outside the vehicle	
Fatigue Driving Warning	Eyes closed or mouth open	Eyes closed or mouth	yes closed or mouth open time >= 3s
	time >= 1s	open time >= 2s	Lip height-width ratio >= 0.6
	Lip height-width ratio >= 0.4	Lip height-width ratio >=	
		0.5	
Distraction Warning	Face posture above the	Face posture above the	Face posture above the threshold time >= 3s
	threshold time >= 1s	threshold time >= 2s	pitch >= 40 degrees or
	pitch >= 30 degrees or	pitch >= 35 degrees or	yaw >= 40 degrees

3. The AI sensitivity parameters are described as follows:



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	yaw >= 30 degrees	yaw >= 35 degrees	
Smoking Warning	Smoking time >= 1s	Smoking time >= 2s	Smoking time >= 3s
	Cigarette needs to be lit	Cigarette needs to be lit	Cigarette needs to be lit
Calling Warning	Phone call time >= 1s	Phone call time >= 2s	Phone call time >= 3s
		Phone position needs to	Phone position needs to be above the chin;
		be above the chin	Mouth needs to open to speak
Seatbelt Detection	No seatbelt detected >= 5s	No seatbelt detected >=	No seatbelt detected >= 15s
		10s	
Steering Wheel	Defaults to the left rudder ar	nd does not enable this calibra	ation when there is only one face. For multiple
Direction	faces, select the face based or	n the left/right drive calibratic	on. The user can set it to the left or right rudder.

4、 AI alarm settable speed range

Alarm Type	Minimum warn	ing speed value
	Default value	Adjustable range
Forward Collision Speed	>30	30-120
Lane Departure Speed	>60	30-120
Virtual Bumper (Distance	1-30	1-30
Detection)		
Fatigue Warning Speed	>30	0-120
Distraction Warning Speed	>30	0-120
Smoking Warning Speed	>30	0-120
Calling Warning Speed	>30	0-120
Seatbelt Detection Speed	>30	0-120
The follo	wing alarms are not adjustable b	y default
Front Vehicle Start-up	0	Non-adjustable
Pedestrian Collision	10-60	Non-adjustable
Face Pose Angle Calibration	>20	Non-adjustable

Note:

1. The device is calibrated every time it is turned on. After the calibration is completed, the results will be used for the next startup. Recalibration means correcting and confirming the last result. This process does not affect use.

2. During calibration, the speed must be greater than 20km/h, and the calibration time is about 1 minute. Otherwise, the calibration progress (0-100%) will be paused.

3. No distraction warning before calibration (other alarms are not affected). After each power-on, calibration starts when the speed exceeds 20km/h and continues until completion. The distraction warning will be triggered after calibration, and the next power-on will require calibration again, using the previous calibration for the distraction warning until the new calibration is completed.

6.6 Modifying Time Zone

(1) The device displays **GMT+8** by default, and the user needs to change it to the local time zone on the "Camera Settings-Time Zone" page of the APP.

Platform Settings

(2) Send the command \$TEXT_OP:TIMEZONE:UTC+8 (customized time zone) on the platform to set it remotely. Please follow the steps ①②③④⑤⑥ below.

Gmeit	rack I	Reports	📑 Managen	nent O Searching	System settings	🖒 Logout		0.5
+ China	Management			Sending command		1.3 1		000
- 70	Use Normal	Hidder	1		0	Search key eg: GPI	RS,fences,A10	
	-	Ö	*** >	Enter tracker name Tracker name	Transmit process	Command:	Send the text (GB)	*
	Account & Tracker	Parameter settings	Sending command	MD101 Total(2)	A	Mode:		-
<u></u>	0	0		MD101-9767	_	Text information:	\$TEXT_OP:TIMEZONE:UTC+8	
	Frequent stop	Bind frequent	LED settings	MD500S Total(2)				
1.	place settings	stop place to device		MD500S-9162				
				MD600-1897				
1 · ·	Driver info	Car info	MDVR FTP Tasks	P88L-1797				
	9		Assignment	 P88L-7226 T399E Total(1) 			6	
	Online upgrade			T399E 3483	_		Send co	ommand
Tracker name MD101-3962				T633L-2674	-			

6.7 Indoor Simulation Test

To enhance product experience, basic functionality tests can be conducted indoors or outdoors in a stationary state. However, it should be noted that indoor testing accuracy may not match that of actual driving tests. The testing steps are as follows:

(1) Insert SIM card and Micro SD card.

(2) Connect the red and yellow wires to the positive power supply and the black wire to the negative power supply.

(3) Press the WIFI button and listen for "WIFI is on", then connect the device in the app.

(4) Configure platform parameters. Fill in the platform's IP, port, and protocol (refer to 7.1).

(5) Click on the firmware version in the app, and upon hearing "Simulated speed is on", you can begin simulated testing with the default speed of 60 km/h.



Camera Settings

Photo Resolution	3M Pixels	>
Video Resolution	1080P	>
Loop Recording Duration The duration of each recording, if the memory card is full, it will automatically be overwritten from the earliest video	1 Minute(s)	>
Advanced		
Time Zone	GMT +8	
AI Setting		>
Platform Settings		>
Universal		
WiFi Name MD101_86922	3048363962	>
WiFi Password You will need to change WiFi password in phone	settings	>
Firmware Version MD101_3.1.14_GJ4Ai6PT1S6W3		>
Format SD Card Free 22.8GB/	Total 58.1GB	>
Reset		>

Note: Indoor testing can assess all DMS functions, but ADAS function testing requires simulated road videos, which can be provided upon request.

7 Platform Configuration

7.1 Platform Parameter Settings

After MD101 is connected, enter the APP setting interface - Platform setting - enter platform parameters (as shown below) - click "OK".

IP : mdvr.trackir	ngmate.com	OR 67.203.13.	<mark>43</mark>	
Port: <mark>8506</mark>				
Server protocol	: <mark>2019</mark>			
Camera Settings		/ 01-14	Cattions	. –
Video		< Plat	orm Settings	
Speaker Volume	Medium >	Device number	869223048363962	
Photo Resolution	3M Pixels >	Terminal ID	0	
Video Resolution	1080P >	Lissnes plats color		
Loop Recording Duration The duration of each recording, if the memory card is full, it will automatically be overwritten from the earliest video	1 Minute(s) >	License plate color	er 0	
Advanced		Primary server addr	ress 672031343	
Time Zone	GMT +8 >			
AI Setting	5	Primary server port	8506	119 1
Platform Settings	>	Primary server prote	ocol 2019	
Universal		Slave server addres	s 0	ī
WiFi Name MD101_86922	3048363962 >	Slave server port	0	IP 2
WiFi Password You will need to change WiFi password in phone	settings >	Slave server port		
Firmware Version		Slave server protoco	ol 2019	_
Format SD Card Free 14,4GB	/Total 14.4GB >		~	
Reset			OK	

Note:

(1) MD101 supports dual IP login, just enter the corresponding IP and port. The agreement always fills in "2019".

(2) The MD101 uses APN automatic recognition. If automatic configuration fails or you need to set a special APN for a special SIM card, please contact us.

7.2 Adding Devices to the Platform

Login Meitrack MDVR platform <u>https://mdvr.trackingmate.com/</u>, according to the following screenshots ①②③④⑤⑥ steps to add equipment.

-				Add new tracker				•
Reports	T N	lanagement	Searching	IMEI: 4	612030710007			
Management	~	rull o	Inter-e	Tracker password:	•••••			
Use Normal	Accourt	t/Tracker Mana	aement	Tracker name:	MD101			
	Fester			SIM number:	00000			
9	Enter	tracker/user nam	Templa	Model: 5	MD101			*
		Users		Expiry date: 6	2024-10-09	\$		
Account & Tracker	P 🗏 🦂	🛃 Add new su	ub account	Tracker icon	¥			
60		Add new tr	acker 🕙	Hackericon	•			
LEDI	+ •	Add existin	g account	A Icon list —				
		add existin	g tracker					
LED settings T	e	📄 Modify acc	ount info					
		Send mess	age					
		🄏 Search sub	user			12-7	Name of Street	
		📷 Search trac	ker			()	4	
		3 Transfer cre	edit					-

Note:

1.Login account \ password please contact us.

2. The IMEI of the device can be viewed through the APP or device label.

7.3 Platform Video Monitor and Video Playback

Right-click the device or click the icon to view the Video Monitor of the device and play back the Video Playback.





7.3.1 Video Monitor

When the device is online, click the icon below to enter the real-time preview of the platform.



7.3.2 Video Playback

In addition to the AI alarm video, the device's general recording video can also be played on the platform. Click the following icon to enter the platform playback preview.



1. Get the playback video (general recording video) from the device's Micro SD card. Please follow the steps below: 12345



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Note:

(1) General recording videos can be viewed in the "Normal" folder of the Micro SD card. They exist though disable FTP function.

(2) The device must be online to play back the video on the platform.

(3) By default, one video is stored 1 minute. You can set the playback time through the APP. The maximum storage time is 5 minutes.



2. Set the video automatic upload FTP server, the 1/3/5mins general recording videos will be automatically uploaded to the FTP server. At this time, the playback videos can be viewed even if the device is offline. You can see the file details and recording duration in the FTP record.



If it is a 10s AI alarm video, the file details recorded in FTP will not record the duration, that is, the start time and end time are the same. However, the 10s video can be played normally. It is just that according to the MD101's protocol, the AI alarm is triggered immediately when the trigger condition is met. There is no need to set the FTP function. All AI alarm videos are automatically uploaded and the upload cannot be turned off. The uploaded video defaults to 10s and cannot be modified, so the file details no longer display the 10s recording duration.



De	evice re	ecord	FTP record		
Ti	me	File			
Nu	imbe	Chann	Time	Alarm	Ту
1	CH2	2024	4-06-27 09:52:25~2024-06-27 09:52:25	Driver Abnormal Alarm	FTF
2	CH2	2024	4-06-27 09:52:35~2024-06-27 09:52:35	Driver Abnormal Alarm	FTF
3	CH2	2024	4-06-27 09:52:46~2024-06-27 09:52:46	Driver Abnormal Alarm	FTP
		_			

Note:

(1) Follow the steps ①②③④⑤ to configure the FTP server. The default FTP address is 67.203.13.43. Default FTP port: 9876. Default FTP path: IMEI of the device. The FTP account and password are the login account and password of the platform.
(2) After the Settings are successful, all videos will be automatically uploaded to FTP. The uploaded video resolution is D1. Please note SIM card data consumption.

🚺 📻 Manage	ment 📕 Report	ts 🔍 Searching 🔅 S	ystem settings 🛛 🕛 Logour	t 🗧 Online upgrade		
penStreet Bing	OneMap Longdr	DVR Params Settings	And December and			= 08
lanagement	•	8 MD101-6949				
Use Normal	Hidden 🛛	Alarm information Communication paramete	Oisable FTP upload	Inable FTP upload		
Account &	Parameter	FTP function 3 DLT	FTP address:	67.203.13.43		
Tracker	settings		FTP port: FTP user name:	9876		
>_ Sending	2 () MDVR Params		FTP password:			
command	Settings		FTP remote path:	865828060066949		
RFID card	Geo-Fence					
Geo-Fence binding	Temperature sensor	,				
2023-12-13 14:39:30	2023-12-13 14:	Read All			Read	5 Write

7.4 Modifying AI Alarm Parameters on the Platform

Modifying ADAS/DMS alarm parameters requires the device to remain online. By default, all alarm functions are turned on (Except the "Stop & Go" alarm is turned off by default). The default AI alarm speed threshold is 50km/h (used to distinguish between alarm level 1 and alarm level 2). The default trigger speed value for Forward Collision Warning, Fatigue Driving Warning, Distraction Warning, Smoking Warning, Calling Warning, and Seatbelt Detection is 30km/h, and the Lane Departure Warning speed is 60km/h. You can turn off any alarm or adjust the speed value as needed via APP or sending the text commands from the platform. Please follow the next steps to set up.

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C	mei <mark>trac</mark> k	
---	-------------------------	--

		Sending command					906
< AI Se	etting			0	Search kow og : CBI	PS forecos A10	1
Smoking Warning	Medium >	Enter tracker name	Q,	droup	Command:	Soud the text (CP)	-
Calling Warning	Medium >	Tracker name	Transmit p	rocess	oonnana.	Send the text (OD)	
Seatbelt Detection	Medium >	MD101 Total(8)		4	Mode:	Al Gorithm Alarm Speed	—i
		MD101-1340				, a contain nam opeca	
Steering Wheel Direction	n Left >	MD101-2281			Туре:	ADAS-Forward Collision Warning	
DMS Render		MD101-3486			Speed threshold:	30	
ar le riender	-	MD101-4907 (ISUZ			Text information:	\$TEXT_OP:SET_ALARM_SPEED:FCW,	30
Forward Collision Spee	d 30Km/h >	MD101-6949					
Lane Departure Speed	60Km/h 3	MD101-8066			 Contract (1) 		
cane bepartare opeca		MD101-8267	03,E9,83,0	00,00	4		
Fatigue Warning Speed	30Km/h >	QISG_MD101					
Distraction Speed	30Km/h >	MD500S Total(2)					
		MD500S					
Smoking Warning Spee	ed 30Km/h⇒	MD500S-9162					
Calling Warning Speed	30Km/h o	MD600 Total(2)					-
Seatbelt Detection Spe	ed 30Km/h >	MD600 6232				Send con	nmand
Sector 2 Steellon ope		MD600-1897					
Advanced	3-	P88L Total(2)		-			

7.5 Platform Reports

All alarm events can be viewed on the platform. Please follow the following 123456 steps to set up.

orts 🛡 🕸	Event report		<u></u>		5	
Use Normal 🛛 🗐	Event: Select events T	ast 7 Days 🔻 From:	2024-03-13 🗰 00:00 💌 To: 2024-03-1	9 🗰 23:59 👻 🔤 Addr	ress 🔍 🚺 📙 🤅	2
	Enter tracker/user name to be que	Tracker name	Alarm type	GPS time	Receiving time	GPS valid
	Users	QIID_MD101	Phone Call Alarm(Level:01)	uble ²⁰² fick ¹⁸ 11:14:43		
ivent report ADAS/DMS	🔲 🗏 🚑 Quantum2023	QIID_MD101	Forward Collision Alarm(Level:01)			
Керон	🔲 😑 🚑 YTL01	QIID_MD101	Fatigue Driving Alarm(Level:01)	2024-03-18 11:15:20	2024-03-18 12:15:21	Valid
A -	🗹 3 🛛 🚗 QIID_MD101	QIID_MD101	Lane Departure Alarm(Level:01)			
Tinh 🔜	QIMY_MD101_YTL	QIID_MD101	Fatigue Driving Alarm(Level:01)			
ent statistics Historical data	QIMY MD101 TEST	QIID_MD101	Smoking Alarm(Level:01)			
	- OIMY MD101 YTL	QIID_MD101	Lane Departure Alarm(Level:01)	2024-03-18 11:16:40	2024-03-18 12:16:41	Valid
		QIID_MD101	Lane Departure Alarm(Level:01)			
	disc MD101	QIID_MD101	Not wearing a seat belt(Level:01)		2024-03-18 12:17:27	
peed curve Speed pie		QIID_MD101	Distracted Driving Alarm(Level:01)			
		QIID_MD101	Lane Departure Alarm(Level:01)	2024-03-18 11:18:02	2024-03-18 12:18:04	Valid
		QIID_MD101	Lane Departure Alarm(Level:01)			
Р 🕺		QIID_MD101	Distracted Driving Alarm(Level:01)			
arking report Trip report		QIID_MD101	Fatigue Driving Alarm(Level:01)			





Note:

(1) Al alarm videos and images display specific dates, times, longitudes, latitudes, and driving speeds when the alarm is triggered.(2) Placing the mouse over Al alarm images enables viewing the full image. Right-clicking allows downloading the image.

(3) Clicking on the video icon permits downloading AI alarm videos one by one, but batch downloading is not supported. For quick downloading of multiple videos, they can be downloaded from the "Event" folder on the Micro SD card.

7.6 Platform Tracker Talk Settings

Select the device, right-click and select the "Tracker Talk" function (Note: if this function is not displayed, it can be called up in "Customize Menus").





$\leftarrow \ \ \rightarrow \ \ G$	<u>۵</u>	https://mdvr.tracking	gmate.com/main.aspx									\$ *	ඩ 🛛 🗳) :
C mei	track	Reports	💼 Management	Q Searc	ching	🔅 System se	ttings (Total: <u>13</u> Online: <u>1</u> O	ffline: <u>12</u> Dis	connected: <u>10</u> P	'arking: <u>12</u> 1	dle speed: <u>0</u>	Alarm: <u>7</u> Ϫ User:	Teresa
+ China -		1.	Full	Screen Distanc	ce tool Search	h tracker			X	Enter tracker,	′user nam∈(Q Online	filter 👻	0 9
12				- <u>*</u>	r.F				1	■ + +	Video	Status	Tracker name †	
51			2	Tracker Talk				117洲	00				MD101-3962	
		北美洲	100	MD101_396	52					• 🧐			MD101-9767	
		1000		WB101-350	JL					• (@)			MD5005	
~			大四洋							■ <u>@</u>			MD5003-9102	
			and a second							- 3			P881-1797	
												Ø	P881-7226	
()			南美洲					Ŷ	a).				T399E 3483	
										- 🍊			T633L-2674	
>								Start Talk		- (@)			T633L-8770	
			13						12				T711L-0222	
			1 · ·										TA255L-6391	
			2.1										TC86L	
			F		_				۲					
Tracker name	GPS	GPS time	Receiving time	Direction	Speed	Total travel	Run time	Position	Track					
MD101-3962	Invalid	2024-03-20 10:19:20	2024-03-20 10:19:21	North	0.0 km/h	0.00km	0Day00:00	0,0						
X A Page	1	Total1	1						+					
						10					^) c		●英册 10:19	₽



Note:

(1) The URL must contain https, otherwise the platform tracker talk function may not work.

(2) The microphone of the computer browser must be turned on, otherwise the sound will not be received. You will see this icon if you open the microphone.



7.7 Platform Modification of AI Alarm Language

The new version of MD101 currently supports the modification of voice alarms for some countries. The alarm voice can only be set by send the text commands from the platform: **\$TEXT_OP:SET_LANGUAGE:0** Chinese 0, English 1, Thai 3, French 4, Portuguese 5, Japanese 6, Indonesian 7, Arabic 8

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Sending command			000
Enter tracker name	O Group	Search key eg: GPF	RS,fences,A10
		Command:	Send the text (GB)
Iracker name	Iransmit process		
MD101 Total(8)		Mode:	Language settings
MD101-2281		Language settings:	English
D101-3486		Lunguage settingsi	
		Text information:	\$TEXT_OP:SET_LANGUAGE:1
MD101-6340			
MD101-8066		•	
MD101-8267			
QISG_MD101			
MD500S Total(2)			
MD500S			
MD500S-9162			
MD511H Total(2)		1	
MD511H-G0-7769		1	Send command
TEST8515			
MD600 Total(2)	-		

8 Introduction to General Alarm

8.1 General Alarm Functions

The MD101 supports the following general alarm events. All general alarm events only upload event reports to the platform, and do not support voice, video, SMS, phone reminders, etc.

General Alarm Event	Remark
Overspeed Warning	Pre-warning for speeding.
Overspeed Alarm	Used for GPS speed detection to determine if the driver is speeding.
Fatigue Driving Warning	Warning for detecting continuous driving in ACC ON state. It will be triggered if continuous driving time exceeds the specified time
Fatigue Driving Alarm	Triggers an alarm generated by excessive continuous driving time.
Exceeding Daily Driving Time	ACC ON time exceeds the preset time on the same day.
Overtime Parking	ACC ON status is detected, but the vehicle has not been driven for a long time.
SOS	Long press the emergency button for 2 seconds to report alarm information to the platform.
GPS Antenna cut	GPS antenna not detected.
Micro SD card Exception	Micro SD card not detected.
Enter Geo-Fence	Set the entry fence range, alarms will be triggered when entering the fence.
Exit Geo-Fence	Set the exit fence range, alarms will be triggered when exiting the fence.
Sharp acceleration and sharp	Detect sharp acceleration and sharp deceleration to determine
deceleration alarm	whether the driver's driving behavior is standardized.
Idle overtime/idle recovery	"idle overtime" means keeping the engine running but not moving the vehicle; "idle recovery" means cutting off the engine



	or restarting the vehicle.
Parking monitor	Ensure the safety and management efficiency of vehicle parking
Ignition on/off	Detect ACC ON/OFF status and upload the event to the platform

8.2 General Alarm Parameter Settings

(1) General alarm events can be enabled/disabled in "Alarm Event" settings. By default, they are enabled. To block a specific alarm, manually uncheck it and then click "Write".



(2) The default general alarm parameters are as shown in the picture below. Parameters can be modified according to your own needs.

MDVR Params Settings					000
0	MD101-3962				
Enter tracker/user name to be queried 🔍	Tracking setting				
Tracker Transmit process	Alarm event ADAS	Turning Angle Setting (degrees):	10	*	
MD101 (2)	DMS	Maximum Speed(km/h):	0	*	
MD101-9767 MD101-3962	FTP function	Overspeeding Duration(s):	0	\$	
	DLT	Fatigue Driving Duration(s):	14400	*	
		Daily Driving Period(s):	0	\$	
		Minimum Rest Time(s):	1200	÷	
		Parking Duration(s):	0	\$	
		Overspeed difference value warning(km/h):	0	*	
		Fatigue driving difference value	0	* *	
	1	warning.			
	Read All			Read	Write
	4				

Note:

① "Turning Angle Setting (degree)" refers to GPS location setting. The default value is 10. Typically, the device uploads its position every 30 seconds. For instance, if this value is set to 0, during normal straight-line driving, at 11:00, 11:30, 12:00, and 12:30, GPS will upload position points P1, P2, P3, P4. However, if the value is set to 10, when turning at an angle of 10° or greater, GPS will upload position P3'.





② "Overspeed difference value warning (km/h)" is a warning value related to "Maximum Speed" above. For example: if "Maximum Speed" is set to 50 and "Overspeed difference value warning (km/h)" is set to 10, when the speed reaches 40, it triggers an Overspeed pre-warning.

③ "Fatigue driving difference value warning" operates on the same principle as "Overspeed difference value warning (km/h)".

④ Pre-warnings are primarily for facilitating analysis of driver behavior from reports and promoting safe driving practices.

8.3 Overspeed Alarm Event Settings

In the general alarm parameter settings, you can set the overspeed alarm conditions. The default values of the maximum speed, overspeeding duration, and overspeed difference value warning difference are 0. When the overspeed alarm is triggered, there will be a voice prompt "Please don't over speed", and the event will be uploaded to the platform.

MD101-8267			
Device information	Alarm event parameter settings		4
Tracking setting Alarm event Alarm event parameter se	Turning Angle Setting (degrees): 10	0	
FTP function	Maximum Speed(km/h): 0	*	
DLT	Overspeeding Duration(s): 0	÷	
	Fatigue Driving Duration(s):	4400 🌲	
	Daily Driving Period(s): 0	A V	
	Minimum Rest Time(s): 12	200 🌲	
	Parking Duration(s): 0	A V	
	Overspeed difference value 0 warning(km/h):	\$	
	Fatigue driving difference value warning: 0	\$	
Read All			Read Write

8.4 Fatigue Driving Alarm Event Settings

Detecting the ACC ON state, if the continuous driving time exceeds the specified time, the fatigue driving alarm will be triggered. The default maximum driving time is 14400s (4 hours). After triggering, the event will be uploaded to the platform continuously, and the driver needs to stop the vehicle and turn off the engine to rest before the alarm stops. The fatigue driving alarm function is turned on by default. If you don't need this function, can turn off.



MD101-4907 (ISUZU) **Device information** Alarm event Tracking setting Alarm event Alarm event: SOS,Overspeed Alarm,GPS antenna cut-off,Overspeed Warning,Fatigue D Alarm event parameter 🗹 sos **FTP function** Overspeed Alarm DLT 🗹 Fatigue Driving GPS antenna cut-off Overspeed Warning Fatigue Driving Warning Exceeding Daily Driving Time Overtime Parking Entry/Exit Area OK Pond Road All Mait MD101-4907 (ISUZU) **Device information** Alarm event parameter settings **Tracking setting** Alarm event ÷ Turning Angle Setting (degrees): 10 Alarm event parameter **FTP function** \$ Maximum Speed(km/h): 0 DLT \$ Overspeeding Duration(s): 0 Fatigue Driving Duration(s): 14400 \$ ¢ 0 Daily Driving Period(s): Minimum Rest Time(s): 1200 \$ \$ Parking Duration(s): 0 Overspeed difference value 0 \$ warning(km/h): Fatigue driving difference value 0 \$ warning: Bood All Pond Meit

8.5 SOS Alarm Event Settings

After the SOS alarm is triggered, you will receive an alarm message reminder. and the platform will display the current unconfirmed alarms. Move the mouse to the device information bar to see the specific alarm event. In addition, the SOS event will be uploaded to the event report, but there will be no alarm video/photo.

	Total: <u>23</u> Online: <u>4</u>	Offline: <u>19</u>	Disconnected: 19	Parking: 22	Idle speed:	0 Alarm: 9 🖄 User: Teres
ttings 🖒 Logout						
	-		Enter tracker/u	ser name (Online	îlter 🔹 🕢 🤅
			• + +	Video	Status	Tracker name 🕇
			. (%)			MD101-1340
1			• @@			MD101-2281
	太平洋		. (2)			MD101-3486
17:03:25			• @@			MD101-4907 (IS
FA			. 0			MD101-6949
马尼拉			• 🏟			MD101-8066
Tracker name	· MD101-8267		= 🔐 (P)			MD101-8267
Driver name	节:		. 🛞			MD500S
Car license plate		Mar. off	• @@		((())	MD500S-9162
Last upload	: 2024-06-27 17:03:34		 (a) 			MD600-1897
Alarm	: SOS		- 0			Markus test unit
Extend signal	: 00000000					
Position	: 0,	and the	• (Ø)		G	P88L-1797
	巴布亚	新几内亚				P88L-7226

Note:

(1) The default event name displayed on the platform report for SOS alarm is "Input 1 Active/SOS", as shown in the picture:

Event r	eport							-00
Event:	Input 1 Active/SO:	▼ Last 7 D	ays 💌 From: 2024-07	7-16 🗰 00:00 💌 To: 2024-0	07-22 📰 23:59 💌 🗆 Add	Iress 🔍 🗐 🕌	٢	
Enter t	Input 1 Active/SO	ried(Q	Tracker name	Alarm type	GPS time	Receiving time	GPS valid	
	Low External Batte	Contract of	MD101-2281	Input 1 Active/SOS	2024-07-18 09:52:54	2024-07-18 10:52:55	Invalid	-
	ry		MD101-2281	Input 1 Active/SOS				
	Speeding		MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 10:55:31	Invalid	
	Enter Geo-Fence	evr.	MD101-2281	Input 1 Active/SOS				
1.1	Exit Geo-Fence	IND .	MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 10:55:41	Invalid	
\checkmark	External Battery C		MD101-2281	Input 1 Active/SOS		2024-07-18 10:57:54		
	ut		MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 10:58:16	Invalid	
	GPS Antenna Cut	(U)	MD101-2281	Input 1 Active/SOS				
			MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 11:00:49	Invalid	
-	□ Park Overtime		MD101-2281	Input 1 Active/SOS				
	Tpms Alarm	*	MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 11:01:01	Invalid	
	🚗 MD101-8066		MD101-2281	Input 1 Active/SOS				
	MD101-8267		MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 11:04:48	Invalid	
			MD101-2281	Input 1 Active/SOS				
	mD5005		MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 11:05:34	Invalid	
	MD500S-9162		MD101-2281	Input 1 Active/SOS	2024-07-18 09:53:41	2024-07-18 11:07:24	Invalid	
-	MD511H-G0-77	769	Page 1	Total23	Display1 - 30Total673		Show driver	and license-plate

(2) After the SOS alarm is triggered, you need to manually confirm the alarm message on the platform, otherwise, the SOS alarm



Or manually confirm by sending the command on the platform.

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Sending command		000
0	Search key eq : GPRS	Stences Δ10
Enter tracker name 🔍 🗹 Group	Commond	Manual and forestion along
Tracker name Transmit process	Command.	Manual confirmation alarm
■ MD101 Total(8)		
- MD101-1340	Alarm message serial number:	1
MD101-2281	Manual confirmation	Confirmation emergency alarm
— ■ MD101-3486	alarm type:	commuter energency dam
MD101-4907 (ISUZ		
MD101-6949		
MD101-8066	•	
✓ MD101-8267		
QISG_MD101		
MD500S Total(2)		
MD500S		
MD500S-9162		
MD600 Total(2)		
MD600 6232		Send command
MD600-1897		
P88L Total(2)		

8.6 Geo-fence Settings

MD101 supports the geo-fence function, which needs to be set in "Sending command", not "Geo-Fence" in "Management" page (this module is the setting entrance of other product series). Please follow the steps ①②③④⑤ below to set up.

Memuck	Reports	T Managem	ent 🔍	Searching 😳 System settings 🕛	Logout	and the West
+ China Management	Management Use Normal	Hidden	to me	Sending command	3	Enter tracker/user nan
} ★₩#	Account & Tracker	Parameter settings	Sending command	Enter tracker name Q Grou Tracker name Transmit process MD101 Total(2) MD101-3962 MD101-9767	Search key eg: GPRS,fences,A10 Command: Set a Geo-Fer Fence type: Set properties: Area ID:	ce (GB)
-TOTOM	Frequent stop place settings	Bind frequent Li stop place to device	ED settings	MD5005 Total(2) MD5005 MD5005-9162 MD600 Total(1)	Area properties: Draw a fence	3
GPS tim	Driver info	Car info M	MDVR FTP Tasks Assignment	MD600-1897 P88L Total(2) P88L-1797 P88L-7226 T3005 T-tal(2)		
racker name GPS	Online upgrade			T399E 10tal(1) T399E 3483 T633L Total(2) T633L-2674	Ļ	6 Send command

Note: Click "Draw a fence" in step (5) to jump to the map page. Just click on the map and start to draw the geo-fence, then click "Drawing finish" to jump back to the setting page automatically. At this time, the latitude and longitude of the geo-fence has been automatically generated in the setup page.





8.7 Sharp Acceleration and Deceleration Settings

When GPS is valid, if detected the driver brakes or stops suddenly, the sharp acceleration and deceleration alarm will be triggered, and upload the event. If GPS is invalid, this alarm will not be triggered. The parameter configuration of sharp acceleration and deceleration can be modified through text commands. Default value: **\$TEXT_OP:SET_INTEN:1,0,1,10,1,30,1,10**

Sei	nding command					$- \circ \circ$
			Ø	Command:	Send the text (GB)	× •
E	inter tracker name	Q,	Group			
	Tracker name	Transmit p	rocess	Mode:	Set Acceleration&Deceleration	-
	 MD101 Total(8)	•	<u>^</u>	Acceleration:	Enable	-
	MD101-2281	_		Acceleration initial speed(Km/h):	0	\$
	MD101-3486			Acceleration time(s):	1	\$
	MD101-4907 (IS MD101-6340			Acceleration speed threshold(Km/h):	10	\$
	MD101-6949			Deceleration:	Enable	-
	MD101-8066 MD101-8267			Deceleration initial speed(Km/h):	30	\$
	QISG_MD101			Deceleration time(s):	1	\$
	MD500S Total(2) MD500S	_		Deceleration speed threshold(Km/h):	10	\$
	MD500S-9162			Text information:	\$TFXT OPISET INTENII 0 1 10 1	30 1 10 💌
=	MD511H Total(2)					
	MD511H-G0-7769				Send c	ommand
	TEST8515					
	MD600 Total(1)		-			

Note:

The parameter configuration format is "acceleration switch, sharp acceleration initial speed, acceleration time, acceleration speed threshold, deceleration switch, deceleration initial speed, deceleration time, deceleration speed threshold" The detailed description of the default values is as follows:

1-acceleration is on

0-acceleration initial speed is 0

1- acceleration judgment time is 1 second

10-acceleration judgment speed threshold is 10km/h

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1- deceleration is on

30- deceleration initial speed is 30, that is, the speed is greater than 30 to judge sharp deceleration

1-deceleration judgment time is 1 second

10-deceleration judgment speed threshold is 10km/h

The report is displayed as follows:

Event report	Svent report								
Event: Select events Today	- From: 2024-0	13-25 III 00:00 - To: 2024-03-25 II	1 23:59 - Address	् 💵 片 🥯					
Enter tracker/user name to be queried(em, Q	Tracker name	Alarm type	GPS time	Receiving time	GPS valid Positi	Speed ↓			
Users	MD101-6949	Sharp deceleration(Time:1)	2024-03-25 16:54:54	2024-03-25 16:54:55	Valid	30.00			
						295.30			
	MD101-6949	Sharp deceleration(Time:1)	2024-03-25 16:47:23	2024-03-25 16:47:24	Valid	290.30			
MD101-3962	MD101-6949	Sharp acceleration(Time:1)	2024-03-25 16:53:44	2024-03-25 16:53:45	Valid	288.30			
MD101-6949	MD101-6949	Sharp acceleration(Time:1)	2024-03-25 16:40:54	2024-03-25 16:40:55	Valid	270.20			

8.8 Idle Overtime/Idle Recovery Settings

In the platform "MDVR Parameter Setting-DLT", you can set the idle overtime/idle recovery. Default value: parking without stalling speed: 5km/h, duration of parking without stalling speed: 180s.

For general MD101 devices, you only need to set the first parameter (speed) and the second parameter (duration). If the speed does not exceed 5 and the duration exceeds 180s, will trigger idle overtime alarm. Idle recovery does not require additional settings.



Note:

(1) The third parameter (duration of parking without stalling speed) is for the Thailand DTL version connected to the magnetic card reader alarm. That is, after the idle overtime event occurs, the magnetic card reader will sound. The MD101 general version does not support this function.

(2) "idle overtime" and "idle recovery" are just general event alarm states, which do not affect the device's working status and will not cause any drop offline or shut down.

8.9 Parking Monitor Settings

If the parking monitoring function is not turned on, the device will shut down directly when ACC OFF.

If the parking monitoring function is turned on in advance, the device can also record parking video without ACC wire, or ACC OFF. At this time, the device indicator light status is the same as the normal working status. When the monitoring time is over, the recording light turns blue first, then all the indicator lights go out, and then the device will automatically shut down. However, the power wire must be connected so this function is valid. No matter how long the recording time is set, ADAS and DMS will only generate one video each during the parking recording, and the video will be compressed into a multi-speed video. You can check the parking monitor video in the playback.

The parking monitoring function can only be set through text commands:

Set parking monitor switch: **\$TEXT_OP:PAKING_MON:1** (Description: Set parking monitoring: 1 is on, 0 is off)

Set parking monitor time: **\$TEXT_OP:PAKING_TIME:60** (This command is only valid when PAKING_MON is 1)

(Description: This example set the parking monitoring time to 60 minutes. If it is set to 0 or not set, it will monitor all the time. You can set the monitoring time according to your needs)

Sending command			000	Sending command				-0
G			000		9	Search key eg: GPRS	S,fences,A10	
Enter tracker name 🔍 🗹 Group	Search key eg: GPR	RS,fences,A10		Enter tracker name	🔍 🗹 Group	Command:	Send the text (GB)	Ŧ
Tracker name Transmit process	Command:	Send the text (GB)	Ŧ	Tracker name	Transmit process			
■ MD101 Total(8)				MD101 Total(8)	<u>^</u>	Mode	Paking Monitor Time	-
	Mode:	Set Paking Monitor 😕	*	MD101-1340		mode.		
MD101-1340	Mode:	Parking monitoring	Ŧ	MD101-2281		Monitoring time(min):	10	\$
MD101-3486	Text information:	\$TEXT_OP:PAKING_MON:1		MD101-3486		Text information:	\$TEXT_OP:PAKING_TIME:10	
MD101-4907 (ISUZ				MD101-4907 (ISUZ				
MD101-6949				MD101-6949				
MD101-8066				MD101-8066				
MD101-8267				MD101-8267				
QISG_MD101				QISG_MD101				
MD500S Total(2)				MD500S Total(2)				
MD500S				MD500S				
MD500S-9162				MD500S-9162				
MD600 Total(1)		4		MD600 Total(1)				4
MD600-1897		Send cor	mmand	MD600-1897			Send	command
P88L Total(2)				P88L Total(2)				
■ D091 1707				D 001 1707				

Query of parking monitor video:

(1) View the playback on the platform. If the FTP function is disabled, you only can view in "Device record"; if enable FTP function, you can view in FTP record as well.

Example: Set the parking monitor time to 10 minutes, and the parking monitor video is compressed into a 19s multi-speed video. Find the following records in the corresponding time period of the playback:

Device record		FTP record		Device	record	FTP record			
Time	File			Time	File				
Numbe	Chann	Time	Time period Alarm	Numbe	Channe	Time	Time period Alarm		
261	CH1	24-06-26 17:11:03-17:12:03	00:01:00	527	CH2	24-06-26 17:11:03-17:12:03	00:01:00	4	
262	CH1	24-06-26 17:12:03-17:12:11	00:00:08	528	CH2	24-06-26 17:12:03-17:12:11	00:00:08		
263	CH1	24-06-26 17:12:11-17:12:30	00:00:19	529	CH2	24-06-26 17:12:11-17:12:30	00:00:19		

(2) View the playback on the APP "Loop" page. Note that it is not currently supported to view the video on the "Parking" page.

<	Came	ra File	Select	<	Came	ra File	
Loop	Snapshot	Locked	Parking	Loop	Snapshot	Locked	Parking
The doug	loaded files will	be move to	ocal Album	The down	nloaded files will	be move to L	oca Abum
Today	· ·	_					/
G			R				/
			=			/	
inis 16146122	2 SMS 16146-22	25M8 16145-22	WHS 18145-22				
			R				
=	=	=	=				
2548 16144121	1446 15164121	25MB 16143121	14HB 16143121		·		
		_ 0	R		X	1	
=	=	=	=				
2948 1842:21	1 1448 16:43:21	2548 18:41:21	1448 18441121				
	R	_ 6	R		NO Parkir	ig videos	
=	=	=	=				
26%6 18/46/21	1 1446 18/40/21	25H8 16:59:21	VANIS 15:59:21				
F	R	E	R				
=	=	=	=				
2006 1478872	UNK 14-28-21	NAL 14/32/21	See 53721				
		E	R				
E	=	E	E				
	~~ 00.00121		10-33-22				

8.10 Configuring the External Low-voltage Shutdown Function

When the device turns on the parking monitoring function, in order to avoid depleting the car battery power, you can turn on the low power shutdown function by the following function, which is to protect the battery power consumption.

Please follow the steps 12345 in the following figure; The minimum voltage is recommended at 11.4V. When the device detects a voltage lower than 11.4V, it will automatically shut down, and when it detects a voltage greater than 11.4V, it will automatically start working.

> at			I WO		MD101-7504
海南省	12		a (1)(53)		MD101-7587
MD101-7827		000	(19)		MD101-7702
Search key eg: GP	RS,fences,A10		• @ @		MD101-7827
Command:	Send the text (GB) *	2	 (4) 	Real-time tracking	MD101-7843 (HINO700)
			(28)	Video Monitor	▶ D101-7868
Mode:	Set Low Voltage 👻	3	• @@	🌵 Tracker Talk	D101-7900
Minimum voltage:	11.4 \$	4		过 Historical data	D101-8064
Text information:	\$TEXT_OP:LOW_VOLTAGE:11.4		- (D)(P)	Video playback	D101-8221
				Parking report	D101-8601
				Sending command	0101-8940
				 Parameter settings 	D101-9187
				Parking report	D101-9229
				Sending command	0101 0245
				📋 Event report	0101-9243
		r		O Customize	D101-9328
	Send command	C I		.≡. Customize Menus	D101-9520
	Send Command	•	• @0		MD101-9682

9 Introduction to AI Functions

The device uses machine vision technology based on video analytics to automatically identify road risks and unsafe driving behaviors of drivers. Any detected event will trigger an audible alarm to alert the driver in real time, and these events are also synchronized to the platform. The same type of alarm is triggered only once within 10 seconds.

Note: Al functions must be calibrated and configured according to the instructions. Otherwise, the accuracy of Al functions may be affected. The driver can adjust the Al alarm sensitivity to "High", "Medium", "Low" or "OFF" according to actual usage. For specific algorithm logic, please refer to <u>6.5 ADAS & DMS Calibration "Al Sensitivity Parameter Description"</u>.

9.1 ADAS Functions

9.1.1 Forward Collision Warning (FCW)



FCW is mainly used for emergency situations where the distance between the front and rear vehicles is close and there is a large speed difference, such as the front vehicle braking suddenly, which belongs to the "dangerous and urgent" function. Real-time recognition of the relative speeds between your vehicle and the front vehicle while driving, reminding the driver in case of potential collisions to ensure sufficient emergency braking time.

FCW Time to Collision (TTC) = distance between the two vehicles/relative speed of the two vehicles

For example, if the current distance between the two vehicles is 20M, the speed of the front vehicle is 60Km/h, and the speed of the rear vehicle is 80Km/h, then FCW (TTC)=20/1000/(80-60)*3600=3.6s.

Note: FCW defaults to "Medium" sensitivity. When the vehicle's speed is>=30km/h, can meet the trigger condition. At this time, if TTC \leq 2.7s, trigger; if TTC >2.7s, not trigger.



9.1.2 Pedestrian Collision Warning (PCW)



During driving, it recognizes pedestrians, bicycles, and motorcycles in front of the vehicle, and alerts the driver if there is potential collision danger, ensuring sufficient emergency braking time.

Advantages:

(1) Can detect the human when they are walking, with umbrella, wearing Raincoat

- (2) No false alarm when detect the Garbage can, street lamp
- (3) Can detect tricycles, motorcycles and other non-motor vehicles



Voice: Watch out for the pedestrian

9.1.3 Lane Departure Warning (LDW)



Identify lane departure behavior in real time during driving and alert the driver if there is unconscious lane departure behavior to ensure driving safety.

Note: The vehicle should be connected to the left-in and right-in wires, and the signal lights should be turned on before making a turn, otherwise the turn will trigger a lane departure false alarm.

Voice: Lane departure

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The following are some possible reasons that may cause LDW false alarms:

(1) Unclear or missing road markings: If the road markings are worn or unclear, or there are no markings on certain sections of the road, the LDW may be falsely alarmed.

(2) Arrows appearing in the middle of the road or bus parking boxes may cause false alarms.

(3) Wind or weather effects: Strong winds, rain, snow or other severe weather conditions may cause LDW false alarms.

9.1.4 Virtual Bumper/Distance Detection (HMW)



HMW mainly alarms when the vehicles' distance is close, which can help drivers develop a standard driving habit of keeping a safe distance. It is defined as a "dangerous but not urgent" function. During driving, it identifies that the distance is too close, will alert the driver to maintain a safe distance when there is a potential collision hazard. Because HMW is generally converted into time for display, it is easy to be confused with FCW. HMW defaults to "Medium" sensitivity. When the vehicle's speed is >=30km/h, can meet the trigger condition. At this time, if the distance to the front vehicle is $\leq 2^{4}$ meters, the alarm is triggered.

HMW distance detection time = distance between two vehicles/your vehicle speed

For example, the current distance between the two vehicles is 20M, the speed of the front vehicle is 60Km/h, and the speed of the rear vehicle is 80Km/h, then the HMW distance detection time is 20/1000/80*3600=0.9s

Voice: Please keep distance

Note: When the front and rear vehicles are in moving, FCW(TTC) is generally longer than HMW distance detection time.

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9.2 DMS Functions

9.2.1 Fatigue Driving Warning (DFW)



The AI algorithm identifies identify the driver's fatigue state (closed eyes, yawning) by identifying the driver's eye closing or mouth opening time, or the lip height-width ratio, and issue a warning to ensure driving safety.

Note: False alarms may occur when the driver wears glasses/ AI fail to detect the driver's eyes clearly/ driver speaks frequently or opens his mouth wide.

Voice: Please take a break

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9.2.2 Distraction Warning (FSW)



Default is "Medium" sensitivity. Recognize the driver's behavior of not looking at the road ahead during driving (the head turn left / right/ up / down above 35 degree), and the duration exceeds the set threshold of 2s, will alert the driver to ensure driving safety.

(1) The DMS installation position should be as close to the driver as possible, and the maximum angle between the device and the driver should not exceed 20 degrees, otherwise it is easy to cause false alarms.

(2) After connecting the left/right turn signal, the left/right distraction alarm will no longer be triggered.

Voice: Please keep attention

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9.2.3 Smoking Warning (SMK)



Recognize the driver's smoking behavior during driving and issue warnings to ensure driving safety. It supports detecting big size/ small size cigarette/ cigarette pinching with two fingers / cigarette pinching with five fingers / cigarette in mouth. Can detect when cigarette is lit.

Note: This AI function is easy to trigger false. It may occur when detect the driver is doing some smoking-like behaviors, such as holding a pen/clamping a pen; resting the chin with the hand, eating or drinking may cause false alarms. You can adjust the sensitivity to "LOW". So the alarm only trigger when the smoking time is detected to be >= 3s and the cigarette needs to be lit.

Voice: No smoking

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9.2.4 Calling Warning (CALL)



Recognize the driver's behavior of making phone calls while driving and issue warnings to ensure driving safety. It supports detecting making phone call near ear or voice chat near mouth, and also support detecting the opposite hand call.

Note: There may be false alarms if you grab your ears with hands/ there are objects near your ears/ there is a strong contrast between light and dark near your ears and your face.

Voice: No cellphone using



9.2.5 Seatbelt Detection (SEATBELT)



The device recognizes seatbelt status and warns the driver when driving without a seatbelt to ensure safe driving.

Note: The DMS camera angle must fully capture the driver's head and entire upper body.

Voice: Please fasten your seatbelt



Note:

(1) Actual seat belt detection may take 3-4 seconds longer than described in the sensitivity parameter table, and ongoing optimization efforts are in progress.

(2) Adjusting the DMS angle requires capturing the driver's head and upper body to effectively avoid many false alarms.

(3) Avoid wearing clothes that closely match the color of the seat belt, as this similarity may lead to easily triggered false alarms.

(4) False alarms may occur in dimly lit environments such as driving at night, or when lights are not turned on in the vehicle.

9.2.6 Camera Blocking (HID)



The DMS will send a voice alert when it detects occlusion.

Voice: Lens occlusion

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Location info					000
Map Satellite Traffic Mangrove Bay 中信红	OpenStreet Bing THC 器 Baishi Av 韓語 Saishi 3rd Aly	OneMap Longdo e 2nd wwanner Ruihe Y Rd Baishi 3rd Aly I	MapBox Full Screen <i>Ra</i> ena 印石路 Baishi 3rd Aly	Distance tool Search 北市山 Happy Ma Baishi Rd	tracker 自石路 Baish 心 自石路 Baish 西港大3 Unive
Cand River Golf Club 沙河高尔夫球会 Shenzhen-Bay Park North Bay Harbor	Tracker name:MD1 Alarm time:2023-12 Alarm:Camera Bloc Bai Shi Si Dao, Nan	01-6949 2-07 11:43:18 king Shan Qu, Shen Zhen Shi Binhai Bly	, Guang Dong Sheng, Ch Shenzhen Bay	ina, 518058 中心 Binhaishenwan Jct	Shenzhen Park Bike L 深圳湾公园自行:
/2017年4月1日4日 /注意道(乐北门)	Shenzh	enwan	Haryun Park 深圳湾海的公 2023-12-0 22 122	11:43:09 0:0217 0:10 1 59kn/20	
Event report					000
Event: Camera Blocking - Last	7 Days - From: 2024-03-20	00:00 - To: 2024-03-2	6 🔢 23:59 👻 Address		
Enter tracker/user name to be queried(em)	MD101_LTTR 572	Alarm type Camera Blocking(Level:01)	2024-03-21 10:30:32	Receiving time GPS valid 2024-03-21 18:06:14 Valid	

9.2.7 Driver Absence Detected (YCW)



The AI algorithm determines whether the driver has left by recognizing the driver's face. When fail to recognize the driver's complete face, the driver abnormal alarm will be triggered. For example, the driver bends down to pick up something/ holds his forehead/ supports his hands/ touches his face/ the face is blocked by objects/ the light is too dim to recognize the face. Recognize the driver's above behavior while driving and issue warnings to ensure driving safety.

Voice: Driver abnormally

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9.2.8 Infrared Blocking Warning (SUNGLASS)

The AI recognizes that the driver is wearing sunglasses and cannot detect driver's eyes through the sunglasses, so it will trigger an alarm.

Event re	ent report O S							
Event:	Infrared Blocking	 Last 7 Days From: 2024-06-21 	00:00 - To:	2024-06-27 🔟 23:59 🔻	Address	् 💵 💄 📚		
0	Tracker name	Alarm type	GPS time	Receiving time	GPS valid		Position	
Ple	MD101-4907 (IS	Infrared Blocking(Level:01)	2024-06-22 16:55:0	01 2024-06-22 16:55:09	Valid			-
ise s		Infrared Blocking(Level:01)						

10 FAQ

10.1 Simple Troubleshooting

problem	answer
Invalid recording	Please use a FAT32 memory card with a read and write speed of >= C10 level.
Invalid loop recording	Please check if the storage card has enough space for recording. If there is not enough space, please format the storage card.
The video is blurry	Please remove the protective film from the camera lens and clean the lens and windshield.
There is no audio in the recording	Please confirm that you have opened recording in the app.

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	The AI function of the device requires a lot of computation during
Equipment temperature too high	operation, so it is normal to cause the body to heat up, especially in the
	area of the heat sink. Please do not touch the heat sink to avoid burns.
The files on the storage card connet he	Please switch to a different video player to play. If it still doesn't work, the
displayed on the computer	storage card may be damaged. Please try formatting or replacing it with a
displayed on the computer	new one.
Other	If the above fault cannot be resolved, please restore all settings to the
	factory settings or contact local technical support for further assistance.

10.2 Simple FAQ

Q1: Are there any requirements for the format and capacity of the Micro SD card?

A1: The Micro SD card must be Class 10 or higher and formatted in FAT32. The capacity theoretically has no requirements, with a maximum supported capacity of 512G. It is recommended to use a capacity of no less than 16G, depending on the user's needs. When the storage is full, new videos will automatically overwrite old ones (starting with the oldest videos based on date). Note: Micro SD cards used for forced firmware updates must be smaller than or equal to 32G. 16 or 32G is recommended.

Q2: What should I do if the device fails to connect to the platform successfully?

A2: (1) Check the wiring and ensure that WIFI is enabled.

(2) Check the status of the GSM indicator light.

Blinking: Signal is available, check the APP configuration;

Constantly off: There may be an issue with the SIM card. Try replacing the card or retrying with another device. It could also be that the APN configuration did not succeed automatically (though this possibility is minimal). Inserting the SIM card into the device will automatically configure the APN, with a maximum configuration time of 2-3 minutes. If abnormal, record a video and capture logs for further troubleshooting. If the configuration is unsuccessful, we will assist in manual configuration.

(3) Check if the platform parameters in the APP are correctly configured (IP, port, protocol).

(4) Check the firmware version and whether an upgrade is required. If the issue persists after following the above steps, logs need to be captured for analysis by technical personnel.

Q3: Does MD101 support dual IPs, such as logging into both MS03 and CMSV6 platforms simultaneously?

A3: Yes, it does. In the APP, set the IP and port for both platforms, then log in and add the MD101 device.

Protocols supported by MD101: Standard Active Safety (Su Biao) protocol. Audio encoding format: G711A-EX.

Taking CMSV6 as an example, if a user wants to use MD101 with CMSV6, their account must support this protocol, and the CMSV6 backend must not restrict the account in order to use it normally and play videos. If there are any abnormalities with the account, contact technicians from TongTianxing to obtain authorization for this protocol or update the server to use MD101 normally.

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10:02 2.4K/s		a 👬 🕸 💷
< Platf	orm Settings	
Device number	865828060066	949
Terminal ID	0	
License plate color	0	
License plate numb	er O	
Primary server addr	ess 67.203.13.43	i.
Primary server port	8506	IP 1
Primary server proto	ocol 2019	
Slave server addres	s	
Slave server port	100	IP 2
Slave server protoco	ol 2019	
	OK	
	ОК	

Note: (1) If you fill in the two IP, but want to delete one IP later, you need to manually fill in 0 for IP2 and port, otherwise the settings will be invalid.

(2) In the new version, if you use the BIN file to upgrade, only the MS03 platform parameters will be retained after the upgrade, and other configurations will be cleared. Default IP: mdvr.trackingmate.com Port: 8506.

C Platform Settings

Device number	866989056768267
Terminal ID	0
License plate color	0
License plate numb	er O
Primary server addr	ess mdvr.trackingmate.com
Primary server port	8506
Primary server prot	ocol 2019
Slave server addres	s <u>0</u>
C1	0
Slave server port	0

Q4: During calibration, if there are many occupants in the vehicle, will it affect the calibration results? After calibration, if there are numerous passengers in the footage, will it affect the driver's DMS calibration?

A4: The application allows setting the driver's seat, so calibration is based on capturing the driver's facial features. Passengers occupying the front passenger seat and rear seats do not affect DMS calibration.

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< AI	Setting
Forward Collision Wa	ming Medium >
Lane Departure Warr	ning Medium >
Stop & Go	Off >
Virtual Bumper	Medium >
Pedestrian Collision V	Warning Medium >
ADAS Render	•
Fatigue Warning	Medium >
Distraction Warning	Medium >
Smoking Warning	Medium >
Calling Warning	Medium >
Seatbelt Detection	Medium >
Steering Wheel Direc	tion Left >
DMS Render	•

Q5: Can general video recordings be uploaded to the FTP server?

A5: Yes, but the FTP upload function must be enabled (only available when the device is online). Videos recorded under FTP can be viewed at any time, whereas videos recorded under Device can only be viewed when the device is online.

MDVR Params Settings				• • •
9	QISG_MD101			
Enter tracker/user name to be queried(err Q	Tracking setting			
Tracker Transmit process	Alarm event	Disable FTP upload	Enable FTP upload	
■ MD101 (4)	DMS	FTP address:	67.203.13.43	
QIMY_MD101_TEST	Alarm event parameter se	ETD port	0076	
TL_VLL2538	DLT	FTP port.	9870	
		FTP user name:		
		FTP password:		
		FTP remote path:	862551061610126	
		Use default FTP address	and	
				×
	Read All			Read Write
				,

Device	record	FTP record		
Time	File			
Numbe	Chann	Time	Alarm	Ту
182	CH1	2024-03-27 11:27:32~2024-03-27 11:		F
183	CH2	2024-03-27 03:29:19~2024-03-27 03:	Distracted Driving Al	F
184	CH2	2024-03-27 11:27:32~2024-03-27 11:		F
4				

Q6: What to do if FTP records cannot be found?

A6: (1) Network issues: Videos uploaded to FTP use SIM card data, so delays may occur due to SIM card network conditions, with 4G being superior to 3G and 2G.

(2) Server issues: Heavy user activity during the same time frame may cause delays in FTP uploads. Trying at a different time may resolve this.

Q7: Can the resolution of ADAS and DMS be adjusted?

A7: By default, the device comes with ADAS (720P) and DMS (1080P) resolutions. The application allows simultaneous adjustment of both cameras to resolutions of 1080P/720P/480P. It's recommended to use 1080P if there is sufficient memory in the Micro SD card (as 1080P provides clearer video playback).

< Car	nera Settings		
Video			
Speaker Volume		Medium	
Photo Resolution		3M Pixels	
Video Resolution		1080P	5
Loop Recording D The duration of each record card is full, it will automation from the earliest video	uration ding, if the memory cally be overwritten	1 Minute(s)	5
Advanced			
Time Zone		GMT +8	
AI Setting			
Platform Settings			
Universal			
WiFi Name	MD101_86922	3048363962	
WiFi Password You will need to change W	IFi password in phone	settings	
Firmware Version	5W3		
Format SD Card	Free 52.4GB/	Total 58.1GB	
Reset			

Q8: How many electronic fences can MD101 support?

A8: 64.

Q9: How to save data usage?

A9: (1) Reduce FTP video uploads. No uploads mean no data consumption. (2) Limit the time spent watching real-time videos on the platform. (3) Turn off AI alerts.

Q10: Can MD101's WIFI be used for video uploads, or is a SIM card necessary?

A10: No, the device's WIFI is only for connecting the device and the application, without data transmission capability. Video uploads to the platform can only be done using SIM card data. Sufficient SIM card data is required for video uploads.

Q11: How much data is consumed for each video uploaded to FTP? Does platform playback consume data?

A11: (1) The data consumption per video varies depending on changes in the video frames. Higher frame variations result in more data consumption.

(2) It's difficult to determine the exact data consumption due to AI alerts triggered by the driver. It can be estimated based on the amount of memory occupied by the video on the Micro SD card, or the file size displayed in the "Device record" of the video played back by the platform.

(3) Different recording durations (1/3/5 minutes) result in varying data consumption. Also, data is only consumed for the initial FTP upload; platform playback uses computer networks and doesn't consume SIM card data.

Below are the estimated memory and FTP data consumption for a 1-minute regular video recording. For estimating data consumption for 3 minutes, 5 minutes, and 1 hour, you can refer to the following values.

① Device record:

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Time File				
Audio and video resourc	Stream	Storage type	File size	Play uploa
Audio and video	Major st	Standby me	20.407MB	۰ ک
			20.723MB	۵ ک
Audio and video	Major st	Standby me	20.110MB	۰ 🔹
Page 6	of 16	»C	Displaying	51 - 60 of 152

	1min 1080P	1min 720P	1min 480P
CH1	26.5M	20M	7.5M
CH2 14.5M		7.5M	4~7M

2 FTP record:

	1min 1080P	1min 720P	1min 480P
CH1		7 5 4	
CH2		1.50	

(3) The 10s AI alarm small video consumes about 1.3M data.

Q12: Is the data consumption the same for live streaming and playback videos?

A12: No, it's not the same. The Micro SD card displays the memory size occupied by recorded videos, which doesn't consume data during playback. We can categorize them into mainstream (CH1) and sub-stream (CH2). The mainstream defaults to ADAS (720P) and DMS (1080P), which solely exist within the Micro SD card, occupying its memory. Approximately, 1080P 1-minute CH1 (ADAS, color) occupies around 26.5 MB, and CH2 (DMS, black and white) occupies about 14.5 MB. However, for videos uploaded to the platform, such as alarm clips (10s) and regular recordings (1/3/5 mins), they utilize the sub-stream with a resolution of D1. Uploading D1 consumes considerably less data compared to 360P, albeit slightly more than 360P.

Q13: What's the difference between regular video recordings and AI alarm videos?

A13: Regular video recordings need FTP functionality enabled for uploading to the platform, utilizing D1 resolution (unchangeable), and consuming SIM card data during the process. Additionally, regular video recordings are stored in the Micro SD card's "Normal" folder, occupying only memory without data consumption during playback. Hence, it's recommended for customers to choose higher resolutions (e.g., 1080P). Al alarm videos, on the other hand, automatically upload to the platform without requiring FTP functionality. They use D1 resolution for uploading to the FTP server (unchangeable) and are stored in the Micro SD card's "Event" folder.

Q14: If the car engine is turned off but the device needs to remain online, what should be done?

A14: Connecting the ACC line to the car's power supply will continuously power the device, keeping it online.

Q15: Will there be any alerts when the Micro SD card is completely non-functional, or if it's temporarily not working (for 10 minutes)?

A15: Regular alerts will be triggered, and the device indicator lights will function normally. However, without a Micro SD card, there won't be any AI alarm types.

Q16: Can MD101 be used for large trucks?

A16: Yes, it can. In the app's advanced settings, switch the vehicle type to "large" and adjust the device installation parameters accordingly. Although the device can trigger an alarm, there is no video or photo upload. Even if you insert a Micro SD card later, the data will not be re-uploaded.

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< AI Setting				
Smoking Warning	Medium 9	<	Advanced	
Calling Warning	Medium >			
Seatbelt Detection	Medium 2	Car Type		Middle >
Steering Wheel Direction	Left >	Camera He	ight	120CM
DMS Render	•			
Forward Collision Speed	30Km/h >	Distance fro	om lens to front humper	155CM
Lane Departure Speed	60Km/h >	Distance in		
Fatigue Warning Speed	30Km/h >			
Distraction Speed	30Km/h >	Distance fro	om lens to left wheel	85CM
Smoking Warning Speed	30Km/h >			
Calling Warning Speed	30Km/h >	Distance fro	om lens to right wheel	85CM
Seatbelt Detection Speed	30Km/h ≥			
Advanced				

Q17: Can MD101 successfully calibrate and function properly on roads without lane markings?

A17: Currently, MD101 performs automatic calibration and cannot be manually adjusted. Drivers need to complete calibration on roads with lane markings first. While the DMS function can function normally on roads without lane markings, the ADAS function may be affected (e.g., lane departure alerts).

Q18: There are many fatigue driving alarms in the report, which are uploaded every 30 seconds.	How can I turn off?

Tracker name	Alarm type	GPS time	Receiving time	GPS valid
MD101-1688	Fatigue Driving Alarm(Level:01)	2024-06-02 22:42:18	2024-06-02 22:42:18	Valid
MD101-1688	Fatigue Driving Alarm(Level:02)	2024-06-03 08:51:51	2024-06-03 08:51:51	Valid AI alarm
MD101-1688	Fatigue Driving Alarm(Level:01)	2024-06-03 22:05:47	2024-06-03 22:05:47	
MD101-1688	Fatigue Driving Alarm(Level:02)	2024-06-03 22:08:45	2024-06-03 22:08:45	Valid
MD101-1688	Fatigue Driving	2024-06-05 04:13:47	2024-06-05 04:13:47	Invalid
MD101-1688	Fatigue Driving	2024-06-05 04:15:05	2024-06-05 04:15:05	Invalid
	Fatigue Driving			
MD101-1688	Fatigue Driving	2024-06-05 04:17:05	2024-06-05 04:17:05	Invalid
MD101-1688	Fatigue Driving	2024-06-05 04:18:05	2024-06-05 04:18:05	Invalid General alarm
MD101-1688	Fatigue Driving	2024-06-05 04:19:05	2024-06-05 04:19:05	Invalid
MD101-1688	Fatigue Driving	2024-06-05 04:21:05	2024-06-05 04:21:05	Invalid
MD101-1688	Fatigue Driving	2024-06-05 04:22:05	2024-06-05 04:22:05	Invalid

A18: MD101 has two types of fatigue driving alarms: AI alarm fatigue driving alarm and general alarm fatigue driving. The alarm with alarm video/photo is Al alarm, which is triggered when the driver is fatigued, such as yawning. The alarm without alarm video/photo is general alarm, which is triggered when the driver's continuous driving time exceeds a set time (the device defaults to 14400 seconds). After general alarm fatigue driving being triggered, it can be stopped in the following two ways:

- (1) Park and turn off the engine to rest, otherwise it will continue to alarm.
- (2) Turn off this function in "Alarm Event-Fatigue driving".



MD101-4907 (ISUZU)



Q19: Why is GPS data uploaded with delay and the date and time are incorrect?

A19: (1) The SIM card network is poor, which will cause the device to be unable to upload GPS information to the server in real time.

(2) The local time zone may not be set, affecting the accuracy and timeliness of GPS data upload.

Q20: Can I turn off the AI alarm to upload videos/photos and only keep the alarm voice?

A20: No, all AI alarm videos/photos will be automatically uploaded to the platform and cannot be turned off. Each video consumes about 1.3M data. If you want to save traffic, you can turn off all unnecessary AI alarms, but you cannot turn off only some functions of a certain alarm.

Q21: Are the 10s AI alarm short videos and 1/3/5min general video uploaded to the same FTP server?

A21: Al alarm videos are uploaded to the server via TCP, without a switch, and all are automatically uploaded; general videos are uploaded via FTP, and the FTP function can be turned on or off on the platform. The default is off and needs to be turned on manually.

Q22: Can the device be upgraded remotely without a Micro SD card?

A22: A Micro SD card must be inserted. Because the upgrade file needs to be transferred from the server to the Micro SD card for upgrade, the upgrade file cannot be sent to the device without a Micro SD card. The entire upgrade process takes 3 to 4 minutes, and any operation on the device is prohibited.

GPS valid	Receiving time	GPS time	Alarm type	Tracker name
Valid	2024-06-11 18:01:40	2024-06-11 18:01:35	Lane Departure Alarm (Level:01)	MD101-4907
Valid			Lane Departure Alarm (Level:01)	
Valid	2024-06-11 18:10:25	2024-06-11 18:10:20	Lane Departure Alarm (Level:01)	MD101-4907
Valid		2024-06-11 18:14:12	Lane Departure Alarm (Level:01)	
Valid	2024-06-11 18:14:30	2024-06-11 18:14:25	Lane Departure Alarm (Level:01)	MD101-4907
Valid	2024-06-11 18:15:18	2024-06-11 18:15:13	Lane Departure Alarm (Level:01)	MD101-4907
Valid	2024-06-11 18:15:59	2024-06-11 18:15:54	Lane Departure Alarm (Level:01)	MD101-4907
Valid			Lane Departure Alarm (Level:01)	
Valid	2024-06-11 19:12:08	2024-06-11 19:12:03	Lane Departure Alarn (Level:01)	MD101-4907
Valid	2024-06-11 19:12:47	2024-06-11 19:12:42	Lane Departure Alarm (Level:01)	MD101-4907
Valid	2024-06-11 19:20:25	2024-06-11 19:20:20	Lane Departure Alarm (Level:02)	MD101-4907
			Lane Departure Alarm (Level:02)	MD101-4907
Valid	2024-06-11 19:21:20	2024-06-11 19:21:15	Lane Departure Alarm (Level:02)	MD101-4907
Valid	2024-06-11 19:22:25		Lane Departure Alarm (Level:02)	MD101-4907

Q23: What is the difference between AI alarm level 1 and level 2?

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A23: Level 1 and Level 2 are distinguished by speed thresholds, and the default speed value is 50km/h. The default speed is less than 50 for Level 1, and more than 50 for Level 2. The MD101 protocol is for driver safety considerations, so assort the level to remind the driver and facilitate analysis of driving behavior.

If you have any other questions, please send an email to our email address info@meitrack.com We will wholeheartedly serve you.