2K 4G mini Dash Camera

User Manual



Part One

General features:

It is one mini 4g dash cam for the fleet tracking and monitor on cmsv6 or other 3rd tracking platform. Its video quality is 2K+1080P, has the WIFI, GPS, DMS, ADAS function, when trigger the alarm, it will send alarm message to platform as well as capture picture and upload to server.

It can fit max 9-36V power input and have the delay shut down function, you can use the max 512G TF card into it, with the locked SIM card and TF card slot.

[Wire connection]





1	Connect the main dash camera
2	Connect the back cam or inside cam
3	Connect GPS antenna
4	Connect SOS button
5	Black wire: connect to the Ground
6	Red wire: connect to the long power B+ (when ACC OFF, still have power)
7	Yellow wire: connect to ACC +
8	Green wire: I/O alarm (connect to the external sensor or relay for the oil cut remotely)

[Indicator status]

Red led: recording status, it will not be on if not record.
Blue led: it will be solid on when GPS position is successful, if not, it will flosh

Green led: it will be solid on when 4g signal is good and dash cam connect to 4g network, it will flash when 4g network is abnormal.

[Direction for SIM card and TF card]



[Reset Key]

Reset key can help the dash cam recover to the factory default setting. We need to press this RESET key till the indicator led does not flash or on, this mean RESET key works.

The WIFI hot spot from dash cam is with name 101xxxxxxxx and the password is 88888888

this key is near the SIM card slot as below photo



[TF card capacity]

we suggest you to use the 16-512G TF card with class 10 or above, please format the TF card first when we first insert it into

Please format the TF card every some time, so that the system

can run more smooth.

Part Two

DMS and ADAS function

DMS (driver monitor system) can detect the driver action

(smoke, phone use, yawning, eye close, distraction,

block the camera, seatbelt)

ADAS (advanced driver assistance system)

Lane departure warning system (LDWS)

Forward vehicle moving warning (FVWS)

Forward collision warning system (FCWS)
Pedestrian collision warning system (PCWS)

when these DMS, ADAS action last 3-5s, it will detect them and send one alarm to the tracking platform as well as send one capture picture to the platform, and save there.

You can set the trigger speed on the app TViewer with one Android device (phone or tablet)

note: not support the setting parameter on iPhone.

Part Three

[ADAS camera install guide]

The ADAS camera is embedded in the main dashcam body. After fixing the dash cam, simply adjust the angle of the ADAS camera. Turn on the main dashcam and use the APP to view the image ratio. The road surface accounts for 1/2 to 2/3 of the image, and the sky accounts for 1/2 to 1/3 of the entire image. The effect is shown below. After adjusting the angle, use tools to fix the camera.



When using the APP (Tviewer) for ADAS calibration, please drive straight in the middle of the lane, with the vertical line representing the center line of the lane and the horizontal line representing the horizontal line where the road ahead disappears. Place the cross at the intersection and adjust it by moving up/down, left/right. Once calibrated click "Start Collibration".

[DMS camera install guide(optional)]

It can use the front and back cam, or use the front and inside cam (when you use inside cam, can use the DMS function, can check this quide for this camera install)

It is recommended to install the external DMS camera at position ① on the left side of the steering wheel, with the driver's face centered in the image, as shown below. Note: Location ⑤ is the GPS antenna position.



connect the main dash cam to power, use the TViewer APP to view images, and the DSM will automatically calibrate. Click "Start Calibration", please look straight ahead, and the calibration will be successful and prompted by voice after about 3 seconds; Calibration can also be done manually.

Part Four

[App install]

TViewer App is for the android device such as phone or tablet to set the dash cam's parameter, can check the live video, playback the video

file in TF card, can monitor the vehicle

you can download this app from below google drive

https://drive.google.com/drive/folders/Im89ftKcxy89izu_vsKG_i34uSj3X3BUy?usp=drive_link

After download and install it it will be like this



[App connect]

1. on android phone, open the WIFI and find the WIFI hot spot from the dashcam.

The WIFI hot spot name is with 101XXXXXX and password is 88888888

We open the TViewer APP, click the Search icon on the top right corner of android phone

[APP usage]



Usually it will search the device automatically, if not, then we do this manually like below picture.



Then the full main UI as below picture, you will see there is live, playback, setting and calibration.



1	Front cam live video check
2	Switch to the back cam or inside cam live video check
3	Show the live video from two cams at the same time
4	Check live video
5	Playback the video files in TF card
6	Parameter setting
7	ADAS DMS calibration (this need to connect the inside cam first, then can adjust)

In the playback video, we can choose Channel and date for the video file play in the $\ensuremath{\mathsf{TF}}$ card



[Video playback]

Click on the video file below to enter the playback page. After playing the video, the video search page will display the current recording time period in blue font, and the video file will be downloaded by default.



[Video download]

click on the recording time period and long press, click on the drop down on the right side of the black border at the top, and select the download method: download to USB or download to mobile phone.



Parameter setting



When we click setting, it pops up this dialog and we need to input the password 111111 to log in.

After log in, then we can set the dash cam parameter there.

[APP web settings - system information]



Once we set here, and the configuration will sync on the dash cam on cmsv6 tracking platform.

System information: show MCU version, APP version, system voltage, device number, ACC status, lock status, IO status, acceleration value status, GPS positioning status information, license plate number, good sequence, AI recognition



Network information: show current 4g network status and the SIM card information

Disk information: show the disk capacity, blank capacity
Satellite: it show the satellite quantity there and signal status
OR code: scan it to get the IMFI information

[APP web settings - system management]



erminal settings: Configure the license plate number, device number, terminal model, manufacturer ID, provincial ID, city ID, terminal ID, chassis number, engine number, license plate classification, license plate color, GUI transparency, and language on the device end.

Account management: set the WIFI name and password System clock: Set date format, date, time, time selection (OFF, GPS, NTP), timeout exit, time zone, NTP settings, and daylight saving time settings; After modifying the date and time settings, if the device recognition does not match the current time, it will restart. After restarting, the configuration will synchronize with the device.

Power management: Set to ignition mode, automatic maintenance can be enabled, maintenance time can be set, and when the set time is reached, the device will automatically restart Set to timed mode: automatic maintenance, maintenance time not displayed; Timed on/off limit on equipment: The time interval between on/off must be greater than I minute

Low voltage shutdown: Set the power supply to shut down between 9.0-11.5V for low voltage 12V vehicles and 17.5-23.5V for 24V vehicles, Delayed shutdown: Set the delayed shutdown time between 1 to 14400 minutes:

Power Management - Hibernation Wake up: Enable Hibernation Wake up, the wake-up setting button is only displayed below, not displayed if not enabled

Power Management - Sleep Wake: Click on the wake-up settings to enter the conditional wake-up page, and set the wake-up type (conditional wake-up, manual wake-up, scheduled wake-up)

Power Management - Restart System: Click Restart, the device will restart, and the app needs to be reconnected

Upgrade: you can find the file from the local PC or phone to upgrade the dash cam remotely

Parameter setting: Click on restore or import, and the device will restart

- ①Parameter import: Import configuration information from the current storage to the current device. Import the already set system configuration parameters and restore the factory settings to the factory state.
- $\ensuremath{ \mbox{$\mathbb{Z}$} }$ Parameter export: Export all configuration information of the current device to storage.
- ③ Factory settings: Restore all device settings to the factory default state. This operation will clear all device settings.
- Restore user settings: Users can restore their settings. Note: When installing a large number of devices and each device has the same settings, please use import export configuration. That is, after setting up a device, export the configuration file of that device, and then import it to other devices to achieve the same configuration for each device.

Disk management: When entering this page, a list of hard drives will be displayed. Select the target disk and enter the sub menu to display information such as the capacity, standard partition, and blank size of the target disk.

When the device is inserted into a USB drive and the disk usage is

When the device is inserted into a USB drive and the disk usage is set as primary recording, the disk management is displayed as SD3. Disk Management - Disk Format: Click SD1/SD2 to enter the disk format page. The new TF card needs to be formatted to record properly.

The disk information is consistent with the device side, and the standard partition can be modified to select a block size before formatting. The "standard partition" and "block size" of the disk can be set, and the partition cannot be set too small to prevent the loss of video files.

After formatting the TF card with the device, it will automatically partition into two zones, one for recording device logs and other information, and the other for storing recordings.

[APP web set: recording set]



General: Set the selection of recording format, recording mode, input type, display resolution, camera type, audio input, preview mode, and preview channel (0 options cannot be selected)

Main stream: Display the number of channels and select the encoding type. You can click on the channel to enter the channel settings page (currently, the encoding type H265 cannot be previewed in the APP) Click on the channel to enter the main stream settings page: set the main stream enable switch, resolution, frame rate, image quality, audio and video (recording), and image

Sub stream: Display the number of channels and select the encoding type. You can click on the channel to enter the channel settings page (currently, the encoding type H265 cannot be previewed in the APP)

Timed record: Select the recording mode as timed mode for basic settings, click on the date to enter the timed recording setting, and set the recording time period (each day's level is greater than a single day) The start and end times, time period 1 and time period 2, and data from the next day can all be set to overlap and save. **Storage settings:** Set alarm preview, alarm delay

(alarm recording=pre recording+delay), alarm file upload method, alarm file protection days, alarm threshold, disk usage, modify any one of them, the device will restart.

Information overlay: Information overlay can be displayed in app preview, playback, and device playback. OSD transparency:

Overlay information background transparency.

Timed snap: Select the interval time (seconds) for capturing and the storage time (days); The specified number of capture channels; Number of channels enabled for uploading.

[APP web- network setting]



Center Server there are 4 centers to choose from, with FTP settings options;

Central server settings page: You can select protocol type (optional protocol and device consistency), GPS interval time, IPC address, port, etc. Fill in the platform's existing device number on the terminal device, and check if it is connected on the system information page.

3G/4G: in this part you can set the APN for your SIM card WiFi: check the WIFI auto mode, set the WIFI name and password

[APP web settings - alarms setting]



IO alarm: click on the corresponding IN channel to enter the IO alarm settings page.

IO Alarm Settings Page: Set the alarm linkage settings for emergency alarm (SOS) recording, level, capture, preview, etc. The emergency alarm (SOS) defaults to a low-level triggered alarm, which can be triggered as long as the device IO IN is grounded.

Alarm linkage (common to all alarms): Set recording switch, buzzer switch, preview mode, recording lock, recording report, linkage output, capture upload, preview channel

Speed alarm: set the alarm for low speed or over speed and speed pulse and the OSD speed unit

G-sensor: set the details and alarm for the sharp turn, brake, and sharp crash...

Voltage: from this you can set the lower power protection

Al set:



- -Channel setting: for the DMS, ADAS channel set
- -Alarm setting:set for the DMS and ADAS alarm Mode settina:

Driver information: set the driver details or import the driver file AI custom ID: set the road details and sharp turn or other alarm term

File upload: mean upload the video file to which server (there are 4 server for choice) $\,$