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1 Product overview

This product uses high performance chip, provide high definition video, seamless dynamic picture. Through the European CE, American FCC strict certification, support 4K.2K, 1080P camera. Please read this manual carefully before use and keep it properly. We hope that this product will meet your needs and serve you for a long time

1 Performance parameter



Built-in image sensor	4K(3840x2160), 2K(2560x1440) .1080P(1920x1080)
Rear camera	1080P(1920x1080)
Lens perspective	120 Degrees
Options language	Multinational language
TF memory card slot	Micro TF
Video resolution	4k(3840x2160) 2K(2560x1440), 1080P(1920x1080),
Photo resolution	4M(2560x1440) 2MHD(1920x1080)
Store compression	H.264
Video format	TS
picture format	JPEG
Storage temperature	-30°C~70°C
operative temperature	0°C~50°C
operation humidity	15-65%RH
Storage card capacity	Maximum support is 256GB

2 product mix

Image sensor	4k 2K
Display screen	12, 10 MIPI display screen

Camera lens	All-glass + level high-resolution multi-layer
Video specifications	TS
Image format	JPEG
transmission speed	USB2.0

Power interface	5V/2A
Capacity support	Most 256GB
Built horn	8 Europe 1W
Built-in recording	High fidelity horn
Batteries	Built-in lithium polymer

3 Key function description

3.1 Power button / screen backlight on key

Function 1: switch machine function

Long press: in the shutdown state, long press [power button] to turn on the local power supply, the machine automatically began to work. Press [power button] for 3 seconds to automatically save video files and user Settings and shut them down.

Short press: Short press [power button] to close the screen display, and short press [power button] again to open the screen display.

4 Installation guide

1. Turn off the car engine.

2. Insert the TF card into the recorder card slot.

Please use a high-speed TF card (Class10 and above) with a capacity of no less than 4GB.

3. Fix the recorder to the original rearview mirror of the car.

4. Insert the car charger into the car lighter.

5. Connect the USB interface of the recorder to the car charger using a charging extension cable.

[Note] When wiring, the charging extension cable can be laid along the edge of the car windshield.

6. Install the rear camera at the rear of the vehicle, paying attention to the direction during installation. The wiring can be laid along the roof of the vehicle. After installation, connect the rear plug to the recorder AV-IN.

7. Adjust the lens position to ensure that the lens is level with the ground.

8. Start the engine and check if the machine is installed correctly.

[Note] When the machine is installed correctly, the system operation indicator light will light up; The machine starts and enters the recording state, and the recording indicator light flashes. Please pay attention to checking whether the display screen is normal. If the displayed image is inverted, please contact us promptly.

5 Touch screen function interface introduction

Start the car engine, the recorder will automatically start and turn on the recording function. If it is inserted, it will enter the streaming media interface by default, otherwise enter the main interface.

5.1 Main interface introduction



5.1.1 Interface display introduction

1. Locking (EMR emergency):

In the video, click on the add-lock sign “” Add in the current video, and add 20s to the current video time as the lock file, add the lock icon “”, click “” unlocks the current file.

2. Audio switch:

Click to turn the recording function on or off.(The setting will be automatically saved, and there is no need to reset the function after turning on again.)

3. picture recording:

The default icon in the video state is “”, The default icon in the non-video state is “”, Click to change the video status.

4. During recording:

Click to implement the photo taking function.

5. Playback interface:

Click to enter the playback interface.

6. Setting interface:

Click to enter the settings interface.

7. Recording icon:

Flashing indicates normal recording, and non recording status will be hidden.

8. Recording time:

Under normal recording, the recording time is displayed, with a default of 1 minute. You can choose to cycle recording to change the time in the settings interface. Non recording status will be hidden.

9. Resolution:

Display the current video resolution, which defaults to 2K and can be changed in the settings interface.

10. Time:

Display the current RTC time, which can be set in the settings menu.

11. Brightness adjustment:

By sliding up and down, the brightness can be changed. Swipe to the right to increase the brightness and to the left to decrease it.

Note: The brightness of this operation is turned off and saved.

12. Brightness icon:

Indicates the brightness icon.

13. License plate:

You can set the license plate in the settings interface menu

14. WIFI icon:

Enabling WIFI will display a white WIFI icon, which can be turned on or off in the settings interface. If connected to the mobile app, the WIFI icon will turn green.

15. GPS icon:

When the GPS module is plugged in, a white GPS icon will be displayed. If there is no connection and it is closed, the GPS icon will turn green when the GPS receives the signal.

16. Date:

Display the current RTC time, which can be set in the settings menu.

17. GPS speed:

When the GPS receives the signal, the GPS icon will be green and the GPS speed will be displayed. Pay attention to the difference between the units of km/h and mph.

18. Voice: (optional)

Opening the voice function will display this icon, otherwise it will be hidden. After successful activation, the corresponding voice command dialog box will be displayed.

5.1.2 Main interface screen operation

1. Click on the action:

Enter various interfaces or functions as described in 6.11.

2. Slide up and down:

Change the display position of the current camera video screen by dragging up and down

Note: After dragging up and down, the operation will be shut down and saved.

3. Sliding left and right:

By sliding left and right, change the current video display source to the front view camera by default, and change the order to front view - rear view - split screen display (left for front view and right for rear view) - front view - and so on.

If it is the left and right sliding of the brightness part, slide it to the right to increase the brightness, and slide it to the left to decrease the brightness.

Note: The left and right sliding operation will shut down the screen display saved in the current screen.

5.2 Playback interface

5.2.1 File list interface

Click "Playback icon" in the main interface to enter the playback interface, and enter the video file interface under the front camera by default.



1. Video file mode:

Click to view the normal recording file. Note: The recording files of the front and rear cameras are

saved in the "front_norm" folder and "back_norm" folder of the SD card, respectively.

2. Lock file mode:

Click to view the locked video file. Note: The locking files for the front and rear cameras are saved in the "front_emr" folder and "back_emr" folder of the SD card, respectively.

3. Photo file mode:

Click to view and store the photo file. Note: The photo files of the front and rear cameras are saved in the "front_photo" folder and "back_photo" folder of the SD card, respectively.

4. Front and rear camera switching:

Switch between front and rear camera files under the current file.

5. Delete:

After clicking, the upper right corner of the file information in the middle grid pop up "Delete", Select the desired deleted file for the file information in the middle grid to display "Delete", Click the delete icon again, the dialog box will pop up, and delete the corresponding file.

6. Files within the grid:

There are file contents stored in the corresponding file mode. You can swipe up and down to select the file. After selecting the file, you will enter the file playback interface corresponding to the file.

7. Return:

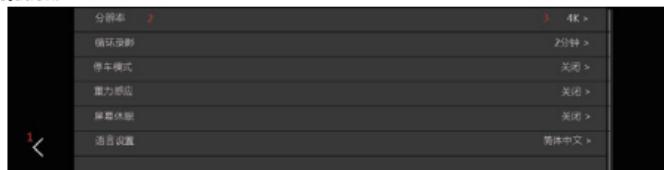
Return to the main interface.

8. Select All:

Select all files.

5.3 Set the interface

Click "Settings" on the main interface to enter the setting interface, and the default selection is the resolution.



1. Return:

Return to the main interface.

2. First level menu:

Display the setting menu function, which can be selected by sliding up and down. After selection, the content and default items of the current corresponding first level menu will be displayed in the second level menu.

For specific functional descriptions, please refer to Content 7: Introduction to Settings Menu Functions.

3. Second level menu:

After selecting the first level menu, it will display and change the corresponding selection content.

For specific functional descriptions, please refer to Content 7: Introduction to Settings Menu

Functions.

Note: Selecting will shut down and save.

6 Description of the setting menu function

Note: Set the menu function will be shut down and saved.

6.1 Resolution ratio

Change the screen display resolution, currently 4K / 2K / 1080P, 3840x2160 2560x1440 1440x1080 resolution respectively, 2K by default.

6.2 Circulating video

It means that the video recording time is, the segmentation time of video files. The recording period can be set to 1,2 and 3 minutes, and the default is 1 minute. Note: When the SD card is full, the recorder will cover the earlier image.

6.3 Short-time recording

Shrink time recording: It is a shooting technique that compresses time by capturing a set of photos or videos, which are later concatenated or captured through video frames. The process of minutes, hours, or even days and years is compressed into a shorter time frame and played as a video. In a delayed photography video, the process of slow changes in objects or scenery is compressed into a relatively short period of time, presenting a strange and exciting scene that cannot be detected by the naked eye.

There are four forms of video recording that can be selected: off, 5 hours, 12 hours, and 24 hours. The default is off. When selecting to turn on video recording, if the car stalls and ACC disconnects, the main interface of the recorder will prompt a "Enter Video Recording" prompt box, and then enter the streaming interface. The recording mode is in video recording mode, and the screen will be turned off after 5 seconds. If a touch operation occurs within 5 seconds or after turning off the screen, the screen will be turned off again after 10 seconds. When the car is restarted and ACC is powered on, it will exit the video recording and a prompt box will pop up saying 'Exit Video Recording'.

The contraction interval (contraction frame rate) of the contraction recording can be selected within the contraction interval in the menu.

Requirements for voltage reduction board: equipped with surge protection, low power cut off power supply, with a minimum voltage of 4.8V and a maximum voltage of 5.5V under load, a maximum voltage of 5.5V under no-load, and a ripple requirement of within 100MV;

Note: This function requires the ACC function to be turned on, otherwise it will not appear

Attach: MINI USB 5PIN Foot definition:

1. VCC 5V 3A
2. NC
3. NC
4. ACC 5V
5. GND

Note: The pressure reduction box is special, which can not match the pressure reduction line of other cases, please know

6.4 Length time interval

The time reduction interval can be selected as 0.5 seconds, 1 second, or 5 seconds, representing 0.5 frames per second, 1 frame per second, or 5 frames per second, respectively. The default selection is 0.5 seconds.

0.5 frames per second: one minute can record 60 minutes of video;

1 frame per second: one minute can record 30 minutes of video;

5 frames per second: one minute can record 6 minutes of video;

Note: This function requires the ACC function to be turned on, otherwise it will not appear.

6.5 Parking mode

Parking monitoring is divided into four modes: off, low, medium, and high. The default is off, with low, medium, and high indicating the sensitivity of vibration monitoring. Opening the parking monitoring function will prompt a dialog box saying 'Entering parking monitoring mode' when shutting down. In the shutdown state, if there is slight vibration in the car, the recorder will automatically start recording and lock the touch. This video is locked and will not be overwritten. The machine will automatically shut down after 24 seconds of recording. If a power on operation occurs during the recording process, the system will not shut down after locking the recording and switch back to normal recording mode.

Note: Parking monitoring supports sensitivity adjustment: high/medium/low, and can be changed according to actual needs in the parking monitoring settings.

6.6 Gravity induction

This machine has a built-in collision sensor (G-sensor), and gravity sensing is divided into four modes: off, low, medium, and high. The default is off, and low, medium, and high indicate the sensitivity of vibration monitoring. Turn on the gravity sensing function, and if the machine experiences vibrations (such as collisions) during the recording process, it can automatically lock the current video.

Note: The G-sensor supports sensitivity adjustment: high/medium/low, and can be changed according to actual needs in the gravity sensing settings.

6.7 Screen dormancy

The screensaver is divided into off, 10 seconds, 30 seconds, and 3 minutes. It is off by default. After the screensaver is turned on, if there is no touch during use, the screen will be turned off by pressing the key. After turning off the screen, you can open the screen by briefly pressing the power button.

Note: Recording continues even after turning off the screen.

6.8 Time zone selection

You can set up the local time zone.

6.9 The posterior mirror image

Streaming media mirror is divided into open and off two kinds, the default is off. Open the streaming mirror, and the mirror head is displayed.

6.10 Time setting

A time setting dialog box pops up, where you can set the recording time and date. The default is the factory time, and this setting will be updated to the display time and OSD time watermarks on the interface.

Note: In order to effectively record the date and time of obtaining evidence for driving safety accidents, please set the correct time before using this machine

6.11 License Plate Setting

The license plate setting dialog box pops up, allowing you to set the license plate. The default setting is Guangdong B 88888 with five digits, and the green license plate can be set to six digits. This setting will be updated to display the license plate and OSD license plate watermark on the interface.

Note: In order to effectively record and obtain evidence of driving safety accidents, please set the correct license plate before using this machine.

6.12 Recording switch

Switch for recording the sound.

6.13 Language

Languages are divided into Chinese and traditional Chinese languages. In English and, by default, in Chinese. Selection changes the display language.

6.14 Format

Format dialog box pop up, you can choose whether to quickly format, default to fast format, you can choose whether to confirm the formatting.

6.15 Factory data reset

The dialog box of restoring factory Settings will pop up, and you can choose whether to confirm the recovery of factory Settings, confirm that all function setting information will be restored, screen setting lens display and display screen position, playback interface display screen position and display mode.

6.16 WIFI Switch (optional)

You can choose to open and close.

6.17 Speech recognition (optional)

You can choose to open and close.

6.18 GPS(apolegamy)

If GPS is connected, this function menu will be displayed, otherwise this function is not displayed.

After clicking, you can select the time zone calibration, speed calibration and GPS information.

6.19 WIFI two-dimension code.



6 Frame exploration



Road Cam

FCC Warning:

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

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.