

# Preface

Dear user

Hello!

First of all, thank you very much for using our company's series of products. It is our greatest honor to serve you, and your recognition and support are the driving force for us to move forward!

Our company's series of products have comprehensive warranty and excellent service quality, thus receiving support and praise from our customers. Since its establishment, the company has always adhered to the business philosophy of "customer first, quality first"; Fulfilling the service tenet of "seizing the opportunity, exploring and innovating, and developing products with strong competitiveness"; The corporate culture of "people-oriented, reputation first" runs through.

Please read this manual carefully before using the dash cam. The manual adopts a combination of illustrations and illustrations to provide a detailed and intuitive explanation of the product's operation. In addition, due to different production dates and batches of products, there may be differences between them and the actual products used. Please refer to the actual product as the standard.

Thank you again for your support and patronage, and we sincerely hope that you can provide us with your valuable feedback during the use process. Your correction and support are the driving force for us to move forward! Going out happily and returning home safely is our greatest wish, and in the end, we sincerely wish you a happy family and everything goes smoothly.

# Product specifications

|                              |                          |   |
|------------------------------|--------------------------|---|
| 关键部件<br>Key<br>Component     | 主控 (Main Chip)           | 瑞芯微 RV1126 4* CA7@1.5GHz RISC-V MCU@200MHz  |
|                              | 显示器 (Display)            | MIPI 11.26 inches Resolution: 440 * 1920  |
|                              | TP                       | Supports 11.26 inches capacitive screen   |
|                              | DDR 存储器 (ROM)            | 32-bit LPDDR3 Max 512MB   |
|                              | Flash 存储器 (Flash Memory) | SPI NOR 32MB  |
|                              | BT                       | BT  |
|                              | super capacitor          | 3.8V 30F  |
|                              | 喇叭 (Loudspeaker)         | Built in (8ohm/1.5W), power amplifier NS4890  |
|                              | 咪头 (Microphone)          | Built in -35db ± 2db  |
| 接口件<br>Port                  | TF 卡槽 (SD socket)        | Expanding memory card: TF card capacity supports up to 128GB  |
|                              | Type-c interface         | Type-c 16pin right bend 90 ° (power supply method: step-down line/vehicle charging DC5V/2.5A)                   |
|                              | GPS 接口 (GPS Jack)        | 1 GPS3.5 headphone interface (optional, software functions to be developed later)                               |
|                              | 耳机接口 (Earphone Jack)     | 1 AHD rear pull camera (2.5MM 4-segment headphone holder) interface, compatible with automatic reverse function |
| 摄像头<br>Camera                | front camera             | GC4653  |
|                              | Rear camera              | AHD HD 1080P N5   |
| 传感器<br>Sensor                | 重力感应 (Gravitysensor)     | Three Axis (DA380)  |
| 物理按键键<br>Physical<br>buttons | On/Off key               | 1 个   |
|                              | reset key                | 1 个   |
|                              | Download key             | 1 (behind 3.5 headphone stand) for easy upgrade of the entire machine   |
| SOFTWARE                     | 系统/OS                    | Linux 4.9   |
|                              | UI                       | 内置 UI   |
|                              | 投屏                       | CarPlay   |
|                              | ADAS                     | /   |
|                              | Language                 | Support languages (Simplified Chinese, Traditional Chinese, English, Japanese, Russian, French, etc.)           |
|                              | 格式/format                | H.265/H264  |
| monitor                      | Parking monitoring       | Vibration wake-up recording for 20s/reduced time recording  |

## 一、 Renderings



## 二、 Introduction to the functions of the dash cam

### (一) Key functions

#### (1) On/Off key (power key)

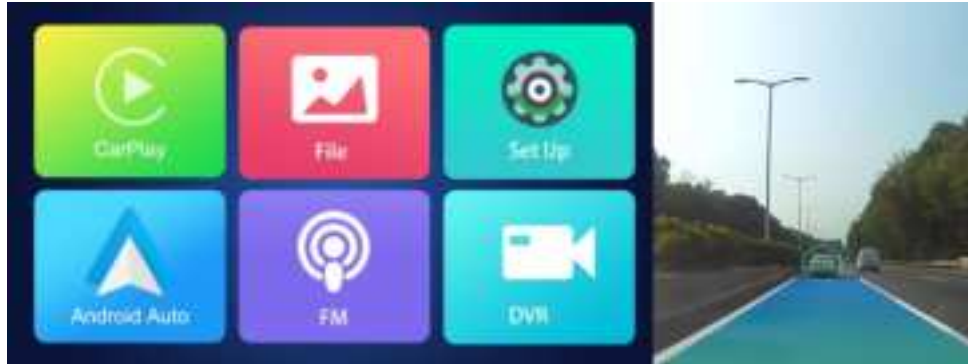
In the shutdown state, short press the power button to turn on the machine; When turning on and on, long press power to turn off, short press to rest the screen (screen sleep, touch the screen or press power again to wake up the screen)

#### (2) Reset key (located on the back of the machine near the power cord interface)

Force the machine to restart. If the recorder experiences downtime or other malfunctions, short pressing the reset button will restart the machine.

## (一) Interface functions

### (1)初始界面 (Start window)












1. When not connected to Carplay/Android Auto, clicking on Carplay/Android Auto will prompt for the connection method (click again to exit). If connected, it will jump to the Carplay/Android Auto interface;
2. Click on the recorder area to jump to the preview interface. The camera button will take photos of the initial program, and the recording button will turn on and off the recording sound;
3. Click on Settings to jump to the settings interface and perform functional settings;
4. Click on the file to quickly enter the playback interface;

### (分屏情况下/In split screen)

1. Slide up and down on the left side of the preview area to adjust the machine volume (if the sound is low, you can quickly operate it)
2. Swipe up and down on the right side of the preview area to adjust the screen backlight.

## (2)Preview interface



1. **Recording:**  Indicates that the recorded file contains sound, and the recording icon has a prohibition sign indicating that the recording is in a silent state
2. **Take a photo:** Click on  the take a photo icon to take a photo
3. **Recording:** Click to  the recording icon,  with a small red dot indicating that the recording has been made, and no small red dot indicating that there is no recording
4. **Settings:** Click to , enter and view the relevant function settings in the machine
5. **Locking:**  Gray indicates that the current video is not locked,  blue indicates that the current video is locked, and the recording icon changes to a yellow icon ; The vibration large video will automatically lock (collision sensitivity is turned on), and locking can only be performed in the recorded state
6. **ADAS switch:**  Driving assistance system switch. When the switch is on, the system will make corresponding warning judgments based on the vehicle ahead, lane line, and vehicle position, and broadcast (lane departure, front vehicle collision, front vehicle start); When the switch is off, the front car start warning broadcast will not be performed.
7. **Preview display:**
  - a) Left area of the screen: Swipe up and down to adjust the lens preview angle
  - b) Right area of the screen: Swipe up and down to adjust the backlight brightness of the screen
  - c) Slide the screen to the right: enter the playback interface
  - d) Swipe screen left: Switch preview mode (front view, rear view, split screen)

### (3)Setting interface

1. **Resolution:** The resolution of the pre recorded video can be changed, with options of 4K and 2K, and the default is 2K;

2.**Recording duration:** Set the length of the recorded video before and after recording, with options of 1 minute, 2 minutes, and 5 minutes. The default is 1 minute. The video files will be overwritten in a loop. Please transfer or store them in a timely manner.

3.**Encoding format:** Switch recording video format, H264 compatibility is the best, H265 video improves compression ratio, and files are smaller

**Note: Options 4, 5, and 6 are only displayed when connected to the step-down line**

4. **Shrink time monitoring:** There are two options: on and off, and the default is off. When the engine is turned off, the machine will shut down if there is no shutdown monitoring when the engine is turned off. If it is on, it will undergo contraction monitoring.

5. **Time reduction monitoring duration:** There are options for 2H, 8H, and 12H, with a default of 2H. When the duration of time reduction monitoring reaches the set duration, it will be turned off, and during this period, it will be recorded with a setting of 1 second per shot. The video file can be found in the emergency video playback or in the event reading in TF (the video file ends in the IMP).

6. **Parking monitoring:** There are two options: on and off. When the switch is on, if the vehicle shakes or vibrates, the machine will start up and record. After recording a 20S video, it will automatically shut down (the machine will have a logo prompt during startup, and the screen will be in a black state during recording. After recording, there will be a sound prompt related to the machine) The recording file is:\_ End of URG.

7. **ADAS switch:** Driving assistance system switch. When the switch is on, the system will make corresponding warning judgments based on the vehicle ahead, lane line, and vehicle position, and broadcast (**lane departure, front vehicle collision, front vehicle start**); When the switch is off, the **front car start** warning broadcast will not

be performed.

8. **Collision sensitivity:** The recorder has a built-in sensor, and the sensitivity can be set in three modes: low, medium, high, and so on. If there is vibration during recording, a 20S video will be re recorded and included in the emergency recording. You can search for it by playing back emergency videos or reading events in TF. Excessive files will cause cyclic overwriting. Please transfer or store them in a timely manner (the video file ends with \_VIO).

9. **Light source frequency:** The frequency can be either 50Hz or 60Hz, with a default of 50Hz.

10. **Recording switch:** controls whether sound is recorded during recording, and can be switched on or off by default

11. **Streaming:** Controls whether to display preview memory mode or only post recording when turning on. When the switch is on, the preview interface is displayed as post recording when turning on. When the switch is turned off, the preview interface displays the mode before turning off when starting the computer.

12. **Preview Image:** Change the post record preview image or original image switch.

**Note: Options 12 and 13 will only be displayed when GPS is connected**

13. **Time zone:** Different time zone options can be set

14. **Speed unit:** Switch speed unit display, KM/H and MP/H.

15. **Projection mode:** Carplay/auto projection can be switched to split screen mode and full screen mode. After switching, the machine needs to be restarted.

16. **Volume adjustment:** The system volume can be adjusted. (0-40)

17. **Button sound:** Control whether there is a prompt sound when pressing the button. It can be set to on or off, and the default is on.

18. **Switching on/off sound:** It can control whether there is a sound when the machine is turned on or off. Default to open.

19. **AUX:** Control electronic audio equipment to output audio. When the switch is on, there will be no sound from the machine end. It is necessary to connect the Aux cable and make a sound from the car end.

20. **Screen Sleep:** When the machine is not operating for a long time, the screen will

sleep according to the set duration. 10S, 30S, 60S, and off can be set. The default is off.

21. **Storage status:** Check the memory usage and remaining size of the storage card.

22. **Format:** Initialize the TF card and restore the TF initialization mode. If the TF card cannot be formatted, please replace the TF before attempting again.

23. **Language:** You can freely switch languages from other countries. After switching the language of that country, the entire system will display the corresponding language. The default is Simplified Chinese.

24. **Time setting:** Date and time settings can be set, displayed directly above the preview interface screen, and standby will be displayed on the right side.

25. **Restore factory settings:** Restore the initial settings of the recorder from the factory.

26. **About:** Viewing device software version information.

#### (4) Playback interface

You can click on the file in the initial interface or right-click the screen in the preview interface to enter the playback interface. The playback interface is divided into level 1 (Figure 4-1) and level 2 (Figure 4-2) interfaces. Priority is given to displaying the Level 1 interface first.



Figure 4-1



1. Clicking the corresponding button in the playback level 1 interface will automatically redirect to the corresponding folder



图 4-2

2. In the Level 2 interface, you can directly switch between front and rear ordinary recording, front and rear emergency recording, and front and rear photos. You can view photos, play replays, and delete videos.

(1) The front and back ordinary recording files are saved as circular recording files.

(2) Emergency recording will store parking monitoring videos, emergency locking videos, and time-lapse recording videos, which can be distinguished based on the last three digits of the video name\_ IMP time-lapse recording\_ VIO locking video\_ URG parking monitoring.

#### **(5)FM 无线调频发射/wireless FM transmitter**

The FM modulator modulates a high-frequency constant amplitude oscillation signal through an audio signal, amplifies the modulated high-frequency oscillation signal and sends it to the transmitting antenna, where it is converted into radio waves and radiated.

- ① Turn on the FM switch
- ② After adjusting to the appropriate transmission channel, turn on the receiver and adjust to the same channel as the transmission (the channel can be adjusted by sliding the progress bar left and right or adjusting left and right)



**Note:** When the switch is turned on, the machine system sound does not play out

## (2) Carplay/Android auto

Built in screen projection function, connecting Apple phones and overseas Android devices to achieve screen synchronization mapping, synchronizing functions such as maps, music, phone, information, etc. on the phone to the machine.



### A. Connection method:

- a. After powering on the machine, turn on the Bluetooth on your phone.  
(Settings → Bluetooth)
- b. Click on Carplay/Android auto on the machine side to view the Bluetooth name.
- c. After connecting the corresponding Bluetooth name to the phone, continue the operation according to the prompt box.
  - a) Pop up Bluetooth request pairing, check if it is the Bluetooth name displayed on the machine, and if so, select pairing
  - b) Pop up 'Allow' to synchronize contacts and personal favorites, click

'Allow' to proceed

- c) Pop up with Carplay to use Carplay car, choose to use Carplay car

**Note: If you cannot connect to Carplay**

After ignoring the connected Bluetooth, perform a reconnection operation

Method 1: If unable to connect again, try restarting your phone and machine, wait for 15 seconds before restarting before proceeding

Method 2: If only the "Bluetooth request pairing" and "Allow synchronization of contacts and personal favorites" pop-up boxes appear when connecting, and the "Use carplay car with carplay" pop-up box cannot be talked about, please check the mobile phone - Settings - General - Whether there is a connected carplay in the car. If there is one, please delete it and try connecting again

Method 3: If the above cannot be connected, please consult relevant personnel

**Note: If you cannot connect to Carplay**

After ignoring the connected Bluetooth, perform a reconnection operation

Method 1: If unable to connect again, try restarting your phone and machine, wait for 15 seconds before restarting before proceeding

Method 2: If only the "Bluetooth request pairing" and "Allow synchronization of contacts and personal favorites" pop-up boxes appear when connecting, and the "Use carplay car with carplay" pop-up box cannot be talked about, please check the mobile phone - Settings - General - Whether there is a connected carplay in the car. If there is one, please delete it and try connecting again

Method 3: If the above cannot be connected, please consult relevant personnel

- a) Click on the brightness, to drag the progress bar to adjust the screen backlight
- b) Click the volume button, to drag the progress bar to adjust the size of the machine's sound
- c) Click the homepage button to jump to the initial interface
- d) Click the recording button to jump to the preview interface and perform the

operation on the preview interface

- e) Click the play button to jump to the playback interface for video viewing
- f) Click the setting button to jump to the setting interface and set the switch


### (3)Wired Android auto (rechargeable)

## 三、 Adas Instructions for Use

A. Calibrate the calibration line (requires turning on the Adas function and inserting GPS)

There are two methods for calibrating calibration lines: automatic recognition and manual calibration

- a)**Manual calibration: after installing the machine, adjust the lens to make the lane line on the screen coincide with the lane line on the road. To change the position of the lane**


**line on the screen, long press and hold Adas in the preview interface**  **Press the button for 2 seconds, and a cross shaped line will appear on the screen. Drag the horizontal line to align with the far end of the road, drag the vertical line to align with the current road in the center, align with the cross line, and then press and hold the**

**Adas**  **button again to save the settings.**

- b) **.Automatic calibration: After installing the machine, if the lane line on the screen does not overlap with the lane line on the road surface, making it difficult to recognize, driving on a straight and clearly visible lane line for a period of time will automatically recognize and set the calibration point.**

B. Notes

When the GPS module is inserted and the speed reaches 50KM/h, an early warning broadcast will only occur; When the GPS module is not inserted, the speed will not affect the warning broadcast, and all warnings will be broadcast by default;


If the switch displays ADAS/NotActive [as shown in the figure],  it indicates that ADAS is not activated (non activated devices cannot use ADAS). Please contact the administrator to activate.

## 四、 Playback trajectory

**Note: When checking the trajectory, the specified GPS module is required and the equipment needs to be positioned before viewing**

一、 After GPS positioning, trajectory data will be generated and stored in the video. View trajectories with GXPlayer player

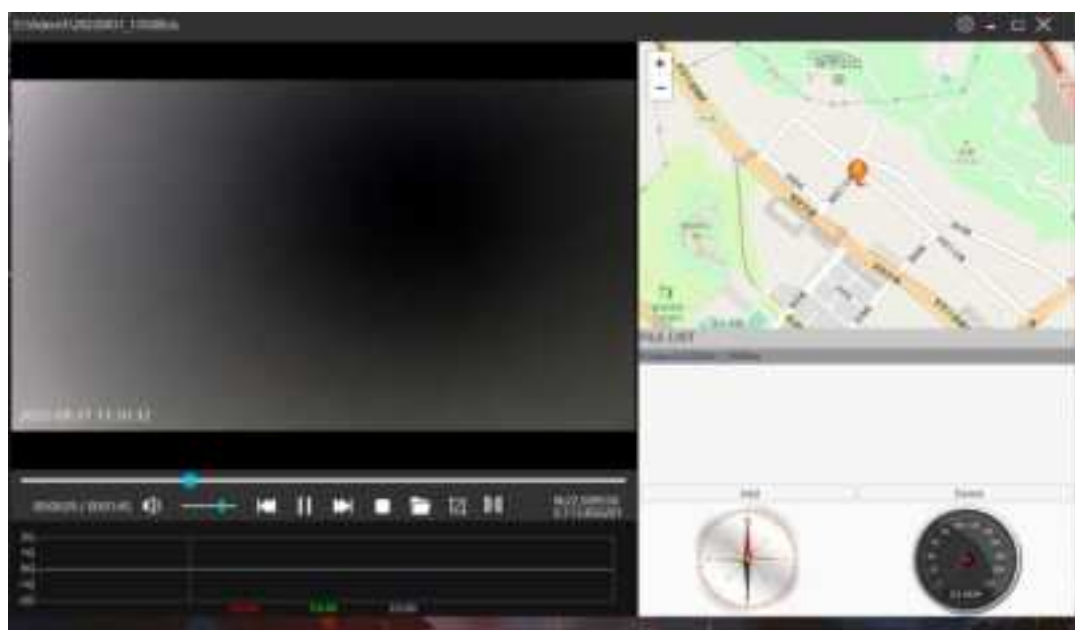
(一) **Steps for installing GXPlayer player**

1. Required items: one card reader, one memory card, and one GPS module
2. Insert the memory card into the machine. If the machine fails to recognize the card, please format it or unplug and insert it again
3. Insert the GPS module into the machine and the positioning icon will appear on the preview interface, as shown in the figure: 
4. Place the memory card in the card reader and search for the gxplayer.exe file in the memory card on the computer, as shown in the following figure



5. Click to install. After installation, use the player to play the video and view the location data stored in the video

(二) View trajectory: Use the player and play it



二、 **View using the Roadcom App**

1. For the installation method of the app, please refer to the instructions for direct connection

2. After opening roadcam and connecting,clickto interface



enter the APP

3. The specific operations are as follows: (The following are operations for Apple phones, similar to Android phones)



## 五、 installation guide

Turn off the car engine

2. Insert the SD card into the recorder card slot

[Note] Please use a high-speed SD card (u3 class10)

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 rear camera interface of the recorder

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.

## 六、 note

1. Please use at natural temperatures and do not work at temperatures that the human body cannot adapt to
2. Please use the product in a humidity environment suitable for human living. Do not place the product in a damp working environment. The product does not have waterproof function, and please avoid exposing it to water or rainwater
3. Do not attempt to open the casing or repair it yourself. If there is a malfunction with this product or any of its accessories, please go to a professional repair point for repair.
4. Do not use irritating chemicals, cleaning solvents, or cleaning agents to clean this product. Please wipe this product with a slightly damp soft cloth.
5. Do not use in environments with high dust density to avoid dust contamination of the lens and other components, which may affect the shooting effect
6. Please pay attention to environmental protection and do not dispose of this product at will. It is prohibited to throw this product into fire to avoid explosion.
7. If there is an abnormality in the dash cam, short press the reset button. At the back of the body, the dash cam will be powered off and restarted
8. Do not plug or unplug the rear camera during use

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

#### Radiation Exposure Statement

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.