FORWARD & INWARD **DRIVING RECORDER**



Instruction Manual

PRODUCT SPECIFICATION

Image sensor	Dual 2.0MP Sony IMX323 CMOS Sensor				
Lens	6G / 150° / F1.8				
Screen	2.0 inch LCD Screen				
Video Resolution	2K@25fps +1080P@25fps or 1080P@30fps + 1080P@30fps				
Photo Resolution	12M / 10M / 8M / 5M				
File Format	Video: MP4 (H.264) / Photo: JPG				
Set IR Light	Auto / On / Off				
Loop Recording	2min / 3min / 5min				
WDR	On / Off				
G-sensor	Off / Low / Medium / High				
Motion Detection	On / Off				
Audio Record	On / Off				
Date Stamp	On / Off				
Time Lapse Record	Off / 1sec / 5sec / 10sec				
White Balance	Auto / Daylight / Cloudy / Tungsten / Fluoresent				
Exposure	(-3.0EV∼+3.0EV)				
Number Plate	Support				
Screen Save	Off / 10sec / 30sec / 2min				
WIFI	802.11 b/g/n				
АРР	Roadcam (Android / iOS)				
GPS	GPS Coordinate, Speed, Date and Time (not included)				

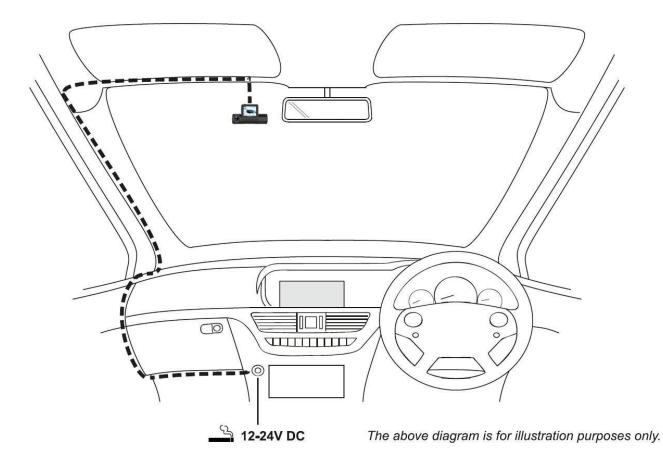
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Language	Multiple languages				
Microphone/Speaker	Built-in				
Storage	MicroSD Cass10, 128GB max (not included)				
Power Supply	Input: 12-24V / Output: 5V 2A				
Super Capacitor	2.7V / 7F				
Storage Temperature	(-25℃~+70℃)				
Operating Temperature	(-20°C∼+60°C)				
Unit Dimension	83 x 79 x 40mm				
Unit Weight	111g				

ACCESSORY

Standard Accessory: Car Charger, Bracket, 3M Sticker, Instruction Manual **Optional Accessory:** GPS module, Memory card

INSTALLATION



- 1. Insert a memory card into the device when it is turned off. Do not remove or insert the memory card when the device is turned on. This may damage the memory card.
- 2. Remove the protective plastic film from the 3M sticker. Select required position for the mount and clean windshield with a dry/clean cloth to achieve good contact between the glass and mount. Then paste the mount to the windshield.
- 3. Connect the car charger to mini USB socket of device and then plug the car charger into the 12-24V dc outlet of your vehicle. The device will automatically power on and start recording once power is available.

NOTE:

- Your camera is shipped with the Screen Saver function set to Default OFF. It can be set to Off/1 min / 3 min/ 5 min, in order to blank the screen completely while driving. This avoids any potential distraction and may be a legal requirement in some countries.
- It is recommended to position your camera on the passenger side of the car, behind

the rear view mirror, as shown above. Do not mount the camera directly in front of the driver and to obstruct your vision of the road ahead.

- Do not operate the unit while driving.
- To reduce the risk of theft, remove the unit from your vehicle, or position out of sight before leaving your vehicle unattended.
- In vehicles where the 12V/24V output remains on when ignition is turned off, please disconnect the device when not in use.
- First time use of the device will require the Time and Date to be set.

CONTROLS



PRODUCT FEATURES

2.0" LCD Screen

Provide instant video playback and makes the device efficient for adjusting video output settings.



2.0MP Sony IMX323 Image Sensor

Record high quality video in Full HD with perfect sharpness and clarity of an image, enabling you to capture every detail of your trip.

Dual-Channel Recording

Capture the road ahead and interior of your vehicle with dual 150 $^\circ\,$ wide-angle lens.

Super Capacitor

Compared to lithium battery, capacitor charge and discharge much more rapidly, more heat resistant, more reliable and longer lifetime.

G-Sensor

In the event of an impact the device will automatically protect the recording stopping the file from being over-written, individual files can also be "protected" when viewed within playback mode.

GPS Logger (Optional)

GPS co-ordinates, date and time are recorded, the journey can then be viewed on map using the supplied PC playback software.

WiFi

Your can easily view real-time recording, manage files, change settings and one-key share the video/photos to social platforms through APP on your smartphone.

Built-in Microphone & Speaker

Record audio to compliment the video recordings.

OPERATE INSTRUCTION

Video Mode

The camera will automatically enter the video mode when connected to cigarette via car charger. At this moment, the red indicator on top of the screen will flash and start video recording automatically. Press OK button to stop recording and the files will be automatically saved in the memory card.

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Photo Mode

Press MODE button for 3sec to switch into Camera mode and press OK button to capture a photo. Press MENU button to enter setting in photo mode, and press MENU button again to exit setting.

Playback Mode

Press MODE button for 3 sec twice to switch into Playback mode. Press UP and DOWN button to select the recorded files and press OK button to playback. Press MENU button to delete, protect, and slide the files.

P2P Switching

While recording, press LENS SWITCH button to switch the front and back lens.

GPS Install

1. Insert the GPS external into the camera, it'll show NO GPS on the Screen in red word of 0km/h, indicating that the GPS has been connected.

2. When the GPS Positions successfully, the words shown on the screen will be turned in Green. The positioning time will generally take 5 minutes, but depend on different environment.

3. Take out the memory card and playback the files by supplied DVR GPS Player. You'll see the driving route, time and speed on map, only available when the video files was recorded when satellite connection was present.

MENU & SETTINGS

Each mode (Video, Photo and Playback) has a menu used to access the various options and settings, press the MENU button on the left side of the device to access the menu, specific to the current mode selected. Use the UP and DOWN buttons to select chosen option and press OK button to confirm.

1. VIDEO MODE

1.1 Resolution



Select recording resolution to increase/decrease the quality of the recorded video. Default Setting: 1080P30 + 1080P30

1.2 Loop Recording

Select duration of recording length for the individual video files, the camera will fill the SD Card and then loop back to the beginning, overwriting the saved files (unless protected)

Default Setting: 3 Minutes

1.3 WDR

Balance the brightness of the recording videos. Default Setting: On

1.4 Exposure

Select exposure, used to adjust exposure level for different light conditions Default Setting : +0.0

1.5 Motion Detection

Turn On/Off the motion detection function, the device will need to remain on and will start a 10 seconds recording when a change to the viewed scene is detected. Default Setting : Off

1.6 Record Audio

Turn On/Off audio recording. Default Setting: On

1.7 Date Stamp

Turn On/Off the date stamp shown on recorded files. Default Setting: On

1.8 G-SENSOR

Turn Off or adjust the sensitivity of the G-Sensor to defect forces which will automatically protect the current recording in event of a collision. Default Setting : Medium

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1.9 GPS

Set the GPS as Off/ KM/H / MPH Default Setting : KM/H

1.10 Rear camera mirroring

Set the rear camera mirroring Default Setting: Off

2. PHOTO MODE

2.1 Capture Mode

Set the capture mode: Single/2S Timer/5S Timer/10S Timer Default Setting: Single

2.2 Resolution

Select image size, this will increase or decrease the size of the recorded image. Default Setting: 12M

2.3 Burst

Select burst as Off/On

Default Setting: Off

2.4 Quality

Select photo quality as Fine/Normal/Economy

Default Setting: Fine

2.5 Sharpness

Adjust the sharpness of the recorded image. Default Setting: Normal

2.6 White Balance

Adjust the white balance for different light conditions.

Default Setting: Auto

2.7 Color

Adjust the color effect of the recorded image. Default Setting: Normal

2.8 ISO

Adjust the ISO setting, the brighter the conditions the lower the ISO required. Default Setting: Auto

2.9 Exposure

Select exposure, used to adjust exposure level for different light conditions Default Setting : +0.0

2.10 Anti-Shaking

Turn On/Off the anti-shaking feature, may help reduce image being blurred under some circumstances.

Default Setting: Off

2.11 Quick Review

Set quick review as Off/2 seconds/3 seconds

Default Setting: Off



2.12 Date Stamp

Turn On/Off the date stamp shown on recorded files. Default Setting: Date/Time

3. PLAYBACK MODE

The playback menu is the same when viewing either videos or photos.

3.1 Delete

Used to delete the current file, also available is the option of deleting all files.

3.2 Protect

Used to lock or unlock the current file, also available is the option of locking and unlocking all files.

3.3 Slide Show

Used to start a slide show of images stored on the SD card, press the MENU button to exit the slide show.

4. SETUP MENU

There is also s Setup menu for the general settings, press the MENU button twice on the left of the device to access the menu. The options and settings available are described below.

4.1 Wi-Fi

The Wi-Fi function allows you to view videos while recording, adjust the setting, control the basic functions (record,play,pause,etc.) and playback videos directly to your smartphone or tablet.

Default Setting: Off

4.2 Time Zone

Select the time zone of your region. Default Setting: GMT:+8

4.3 Date / Time

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Adjust the date/time as required using the OK button to toggle fields, UP and DOWN to set variables.

4.4 Auto Power Off

Set the Auto Power Off as Off/ 3 Minutes/ 5 Minutes/ 10 Minutes

Default Setting: Off

4.5 Beep Sound

Turn Off / On the beep sound, note if Beep is turned off the audible low-battery warning will also be disabled.

Default Setting: On

4.6 Language

Set the language as required. Default Setting: English

4.7 Frequency

Set the frequency as required. Default Setting: 50Hz

4.8 Screen Save

Turn on the screen saver function, shut down the screen after a period of inactivity, with options of Off/1 Minutes / 3 Minutes / 5 Minutes. Press any button to reactivate the display.

Default Setting: Off

4.9 IR LED

Set the IR LED as Off/On

Default Setting: Off

4.10 License No Set

Enter the registration number for your vehicle, this will be shown on the video file. Default Setting: ******

4.11 Format

Format the inserted memory card, this will delete all content.

4.12 Default Setting

Reset the device to the default settings.

4.13 Version

Display the version number of the device's software.

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GPS PLAYER

The GPS Player is designed to reviewing of recorded files as well as checking journey route / GPS data (location and speed) and G-Sensor information. The key below explains the various information displayed within the GPS Player.



- 1. Playback window of selected video file
- 2. View current video, to make full screen double-click on the white bar at the top of the window.Volume

Adjust playback volume.

3. G-Sensor data

Displays data recorded by the G-Sensor across the three axis. X = left/right, Y = up/down, Z = acceleration/deceleration.

4. Add files

Select and add the videos from files stored on your computer to the GPS player.

5. Delete files

Delete the videos from file list on the GPS player.

6. Map

Displays route travelled on map. Only available when the video files was recorded when satellite connection was present.

ROADCAM (Wi-Fi) APP FOR IOS

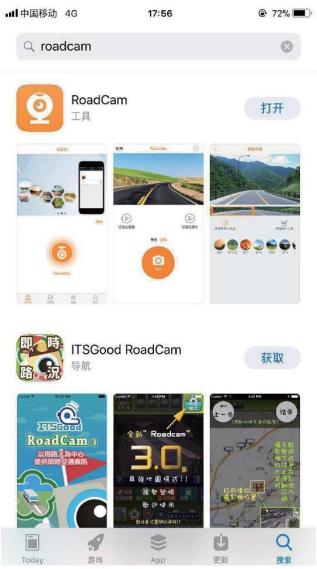
The Wi-Fi function allows you to use your smartphone to view videos during recording, adjust the device settings, control the basic functions (record, play, pause, etc.) and playback videos directly to your smartphone.

The RoadCamAPP is available for free download from App Store of Apple smartphones.

Installing the App on an iOS smartphone:

Open the App Store on your iOS smartphone and search for the "RoadCam" App, tap on "Get" to install.





Once installed, the "RoadCam" App will be available on the home screen of your phone.



ROADCAM (Wi-Fi) APP FOR ANDROID

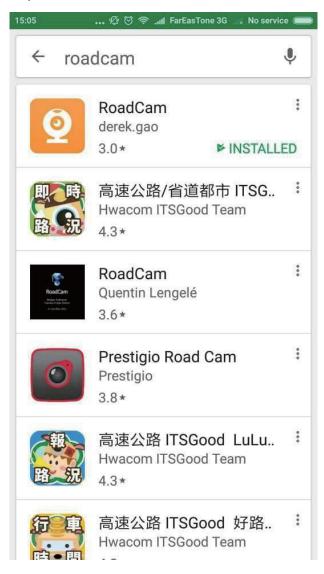
The Wi-Fi function allows you to use your smartphone to view videos during recording, adjust the device settings, control the basic functions (record,play,pause,etc.) and playback videos directly to your smartphone.

The RoadCam APP is available for free download from Google Play of Android smartphones.



Installing the App on an Android smartphone: (Android system must be 6.0 above)

Open Google Play on your Android smartphone and search for the "RoadCam" App, tap on "Install" and then "Accept".



Once installed, the RoadCamApp will be available on the home screen of your phone.





ROADCAM (Wi-Fi) APP FOR IOS & ANDROID (OPERATION)

Turn on the Wi-Fi

To turn on the Wi-Fi function on the camera, go to the General Settings menu, select "Wi-Fi" and press OK. The "On" option will be highlighted, press OK button to confirm.

The menu window will close and the "AP Mode" (Access Point Mode) window will open, as shown below.



Connect your phone to the camera

To connect your phone to the camera open the Wi-Fi connections menu on your phone, the camera will be shown in Wi-Fi network list as "J02**********.

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Tap on the "J02_*********** and when prompted enter the password "12345678". Once successfully connected the "WiFi Connected" window will appear on the camera screen.

Using the RoadCam App

Open the App by tapping on the RoadCam button on your phone, the first time the App is opened the "Please click + to add camera" screen will appear, see image below.



Edit



Tap on the + button, select "J02********* from the available networks, enter the password "12345678" and tap "Add", the live video screen will appear. Press back on your smartphone to go to the RoadCam home screen, as shown below.

The key below describes the various information, functions and features available within the RoadCam home screen.



- 1. Camera name
- 2. Moments

Tap here to enjoy the recommended and latest moments published by other users.



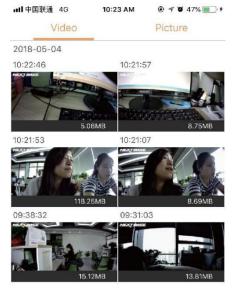


3. Album

Tap here to see your own videos and photos

Press each video or photo for some seconds to download or delete them.

Please note: To playback a recording on your phone, you will need to download the videos or photos from the camera, the download will be saved in the Albums.



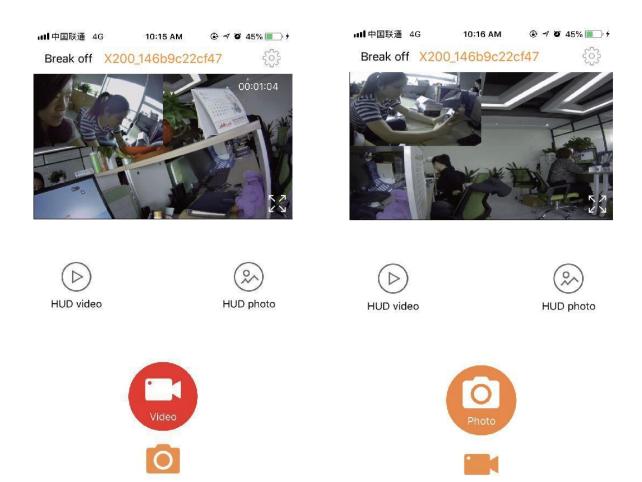


4. Account Setting

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ecording instrument	Moments	Album	Mir	ne

5. Recordings

Tap to recording the videos and photos, video and photo mode Arbitrary switching.



6. Remove the camera

Tap here to remove the camera from the RoadCam App.

7. RoadCam settings

Wi-Fi connection password Change the password from the default setting of 12345678 and press the save icon.

Sound recording The sound can be switched on or off

Camera watermark time Can be turned on or off

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Cycle record time Cycle record time can be chosen Off/1 min/3 min/5 min

G-sensor sensitivity G-sensor sensitivity can be chosen Off/Low/Med/High

FAQ

In normal operation, if product has problems, please refer to the following methods.

1. Please insert TF card

1) As the DVR is with smart card speed identification system, users will need to format the memory card before using. If the screen appears Need Class6 or Higher SD Card, it indicates that the Card speed is not up to standard and needs to be replaced with a high-speed Card.

2) Depending on the USB modules used by each brand, some will have a delay in reading the card reader. Or change another card reader to improve.

2. How to choose a memory card

Please carry the DVR to card supplier, directly record for 2 minutes or longer to test, if video is not stuck, you can be assured to buy, because there are a lot of fake SD and TF card on the market, will affect the quality of the video, the most common situation is playing TAB. We recommend using 8GB high speed TF card or larger capacity.

3. The machine does not work (crash)

1) Using a sharp object (such as a stylus, pin, etc.) to align the RESET hole to allow the DVR to be reset.

2) Most of this happens when the machine over-current protection, so please Avoid the long hours of the DVR in the car parked in the sun.

3) Use the format menu to format the memory card to solve the problem.

4. Screen will flash against the indoor fluorescent light

The fluorescent lamp is not like the natural light, you can set the frequency to 50Hz or 60Hz to solve the blinking problem effectively.



5. Video Blurred

1) Use a cleaning dry cloth to wipe the lens to be clean and avoid touching the lens with your hands to keep the glass clean.

2) Please confirm the lens protection film has been removed from the DVR.

6. Pictures Blurred

Please attach the DVR to the sucker holder for the best photographing effect, because the DVR itself is not a professional digital camera.

7. Too bright in the daytime

When the camera is in front of the sun, it will be in a bright spot. If there is a special demand, it will be able to "lower" the EV value in the function menu. The EV defaults to 0, which can be adjusted between -2 and + 2, + for lighten, or dimming.

8. Too dark in the evening

If you feel dark at night, you will be able to "higher" the EV value in the functional menu, but the morning video may be too bright. The EV defaults to 0, which can be adjusted between -2 and + 2, + for lighten, or dimming.

9. Memory card is full or non-video automatic shutdown, video stuck

Please refer to the instruction manual to use the "format" function of the DVR.

PS. The actual operation and the manual describe will update and improve BUG through software. If there is a discrepancy between the operation and the manual, please ask the seller for it.

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