

 **Polaroid**

 **Polaroid**



**FHD 1080p Driving  
Recorder  
DS231GSW  
User Guide**



Questions?  
Need some help?  
This manual will help you  
enjoy your new product.



China toll free No.:  
400-8401030



or visit us at:  
[www.polaroidcarcam.com](http://www.polaroidcarcam.com)  
(For other region,



Questions?  
Need some help?  
This manual will help you  
enjoy your new product



400-8401030  
China toll free No.: (For  
other region, please



or visit us at:  
[www.polaroidcarcam.com](http://www.polaroidcarcam.com)

**Federal Communications Commission (FCC) Statement**

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 made to this device not expressly approved by ZIMING PLASTIC HARDWARE(SHENZHEN)CO.,LTD. may void the FCC authorization to operate this device.

**Note:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

**RF exposure statement:**

The transmitter must not be colocated or operated in conjunction with any other antenna or transmitter. This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

Polaroid, Polaroid Pixel, Polaroid Classic Border Logo, and Polaroid Color Spectrum are trademarks of PLR IP Holdings, LLC, used under license. PLR IP Holdings, LLC does not manufacture this product. Fairyard Enterprises Limited will provide manufacturer warranty and support.

Copyright © 2017, All Rights Reserved.

**Manufactured By:**

Fairyard Enterprises Limited  
RM 7B, 12/F, HOPEFUL FACTORY CENTRE 10-16 WO SHING STREET,  
FO TAN, N.T., Hong Kong

[www.polaroidcarcam.com](http://www.polaroidcarcam.com)

|  |    |
|--|----|
| <b>About this Guide .....</b>                      | 1  |
| <b>Battery Warning .....</b>                       | 1  |
| <b>Notes on Installation .....</b>                 | 1  |
| <b>Caution .....</b>                               | 2  |
| <b>1 Introduction.....</b>                         | 3  |
| 1.1 Features .....                                 | 3  |
| 1.2 Package Contents .....                         | 3  |
| 1.3 Product Overview .....                         | 4  |
| <b>2 Getting Started.....</b>                      | 5  |
| 2.1 Inserting the Memory Card.....                 | 5  |
| 2.2 Installing in Vehicles.....                    | 5  |
| 2.3 Connecting to Power .....                      | 7  |
| 2.4 Powering the Device On / Off .....             | 7  |
| 2.4.1 Auto Power On / Off .....                    | 7  |
| 2.4.2 Manual Power On / Off and Reset .....        | 7  |
| 2.4.2.1 Manual Power On / Off .....                | 8  |
| 2.4.2.2 Reset the Device .....                     | 8  |
| 2.5 Set the Date / Time.....                       | 8  |
| 2.5.1 Auto Update.....                             | 8  |
| 2.5.2 Manual Update.....                           | 8  |
| 2.6 Mode Selection.....                            | 8  |
| <b>3 Using the Driving Recorder.....</b>           | 8  |
| 3.1 Recording Videos .....                         | 8  |
| 3.1.1 The Recording Screen .....                   | 9  |
| 3.1.2 A key Protection .....                       | 9  |
| 3.1.3 Motion Detection .....                       | 9  |
| 3.1.4 G-sensor Collision Recording Protection..... | 10 |
| 3.1.5 Audio On / Off .....                         | 10 |
| 3.1.6 Front and Rear Camera Switch .....           | 10 |
| 3.1.7 Video Menu Operation.....                    | 10 |
| 3.1.8 Movie Mode Menu Options .....                | 10 |
| 3.1.9 General Settings Menu Options .....          | 11 |
| 3.2 Taking Picture .....                           | 13 |
| 3.2.1 Still Capture Screen .....                   | 13 |
| 3.2.2 Zoom in / out .....                          | 14 |
| 3.3 Playback Mode .....                            | 14 |
| 3.3.1 Playing Videos .....                         | 14 |
| 3.3.2 Play Video Screen.....                       | 14 |
| 3.3.3 Videos Switch of Front and Rear.....         | 15 |
| <b>4 GPS Tracking.....</b>                         | 15 |
| 4.1 GVP Player Instruction.....                    | 15 |
| 4.2 GPS Abnormal Warning State.....                | 15 |
| <b>5 Warning Radar Setting.....</b>                | 16 |
| <b>6 WiFi Connection</b>                           | 17 |

#### About this Guide

The content in this document is for information purpose and is subject to change without prior notice. We made every effort to ensure that this User Guide is accurate and complete, however, no liability is assumed for any errors and omissions that may have occurred.

#### Battery Warning

- Always charge using the provided system. Improper handling of the battery may result in explosion.
- Never dismantle or pierce the battery or allow the battery to short-circuit.
- Batteries may explode if exposed to naked fire. Never dispose of batteries in a fire.
- Disposed of used batteries observing local regulations.
- Never replace the battery on your own, have the dealer do it for you.

#### Notes on Installation

- This product shall be installed near the rear view-mirror, at the center of windshield, if possible, for optimal viewing.
- Make sure that the lens is within the wiping range of the windscreen wiper to ensure a clear view even when it rains.
- A protective film on the lens will affect the video or photographic effect, remove the protective film before using the device.
- Do not touch the lens with your fingers. Finger grease may be left on the lens and will result in unclear videos or snapshots. Clean the lens on a regular basis.
- Do not install the device on a tinted window. Doing so may damage the tint film.
- Make sure that the installation position is not hindered by the tinted window.
- To use the contained car power adaptor only. In order to avoid equipment burn or cause the battery explosion, please do not use other brand car power adaptor.

**Do not attempt to disassemble or alter any part of the device that is not described in this guide.**

#### Caution

- Due to local laws and vehicles safety considerations, do not operate the device while driving.
- Set up time and date accurately before you use this device.
- This product gets warm when in use, this is normal.
- Do not place the device near a heat source or directly expose it to flame or heat.
- Never place the device in vicinity of equipments generating strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or data corruption and loss.
- The system is used only for non-commercial use, within the maximum limits permitted by applicable law. Our company does not accept any responsibility for any data loss during the operation.
- Improper use or operation of the product may result in damage of the product or its accessories and void the warranty.

**Before you start using the system, it is assumed that you agree to the above statement.**

### 1 Introduction

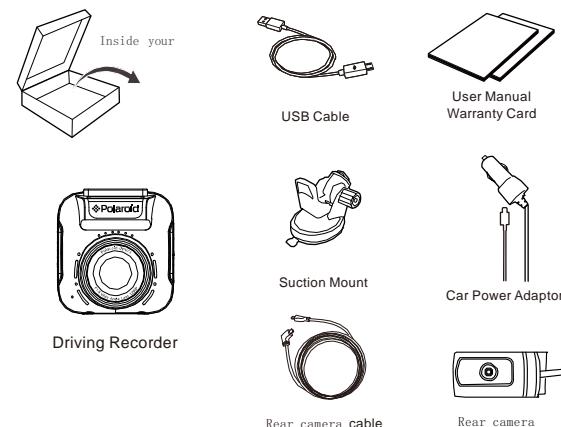
Thank you for purchasing this advanced Driving Recorder. This device is specifically designed for real time video and audio recording.

### 1.1 Features

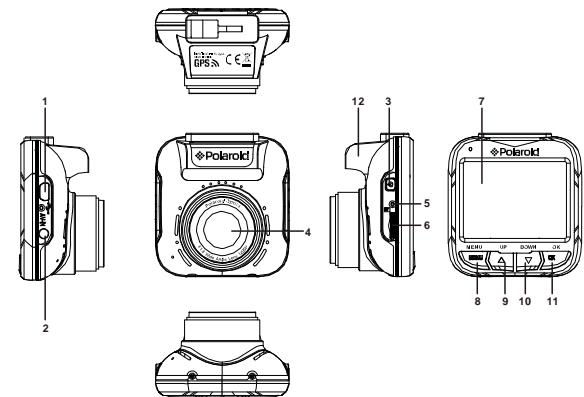
- Full HD 1080p Driving Recorder
- 2.3" TFT Display
- G-sensor Collision Recording Protection
- Seamless Loop Recording
- Support up to 128GB Micro SD Memory Card
- Support GPS Journey Tracking

### 1.2 Package Contents

The package contains the following items. In case there is any missing or damaged item, contact your dealer immediately.



### 1.3 Product Overview

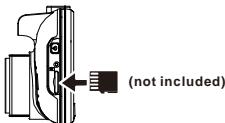


|   |                                 |    |                  |
|---|---------------------------------|----|------------------|
| 1 | USB port                        | 7  | LCD              |
| 2 | 2.5mm headphone Interface Block | 8  | Menu/Mode button |
| 3 | Power button                    | 9  | Up button        |
| 4 | Lens                            | 10 | Down button      |
| 5 | Reset button                    | 11 | REC/OK button    |
| 6 | TF Card slot                    | 12 | GPS              |

## 2 Getting Started

### 2.1 Inserting the Memory Card

Follow the direction indicated by the silk printing on the device to insert the memory card, a click sound is heard indicating the card is in position .

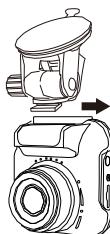


To remove the memory card, push to eject the memory card out of the slot.

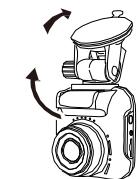
#### Note:

1. Do not remove or insert the memory card when the device is turned on. This may damage the memory card.
2. Please use a Class 6 or higher rating Micro SD card, max. up to 32GB.
3. Please format the micro SD card before the initial use.
4. When removing the memory card, be careful that the card may spring out and get lost. The memory slot has this spring-out feature for easy removal of the card.

### 2.2 Installing in Vehicles



← Push the head of the mount into the device slot, make sure the mount is securely locked in place.



← Loosen the knob to swivel the device vertically. Locking knob, and confirm that the device is securely locked in place.

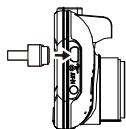


→ Rotating the device to have proper view.

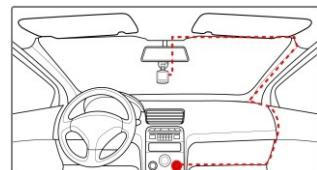
**2.3 Connecting to Power**

Use only the attached car power adaptor for activating the device and charging the built-in battery.

1. Connect one end of power connector to USB port on the device.



2. Plug the other end of the power adapter to the cigarette lighter socket of your vehicle. Once the vehicle engine is started, the device automatically turns on.

**2.4 Powering the Device On / Off****2.4.1 Auto Power On / Off**

Once the vehicle engine is started, the device automatically turns on and recording (must have SD Card). After the car engine stopped, the device will automatically save the last recorded file and shutdown.

**2.4.2 Manual Power On / Off and Reset****2.4.2.1 Manual Power On / off**

Press Power button to turn it on. To power off the device press the Power button with 3 seconds.

**2.4.2.2 Reset the Device**

In case the device fails to function normally due to unknown causes, press the Power button with 10sec to restart the device.

**2.5 Set the Date / Time**

To set the correct date and time, press **Menu button** to enter the menu setting, then press **Menu button** change to General Settings Menu , then press **Up / Down button** to select Clock settings, press **REC button** to enter date / time setting, then press **Up / Down button** to adjust the value, press **REC button** switch to next setting, after finished all the settings, press **REC button** to back General Settings Option, press **Menu button** to exit from menu setting.

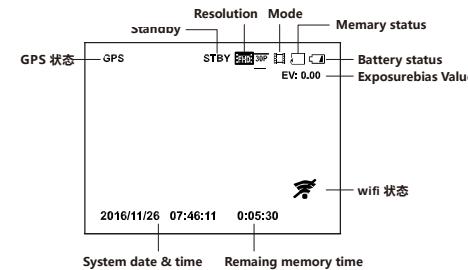
**2.6 Mode Selection**

The default setting is **Video Mode** , Long press **Menu button** can switch to **Still Capture Mode** , **Video Playing Mode** , **Picture viewing Mode** .

**3 Using the Driving Recorder****3.1 Recording Videos**

Before starting recording, please insert a SD card into the TF card slot. Press **REC button** to start recording, the video recording icon flashes on the screen. The recorded files are saved on the TF card. To stop recording, press **REC button** again.

With car power adaptor connected the device will automatically turn on and start recording when the car engine starts. When the engine stops, the device will automatically save the last file and turn off.



### 3.1.2 A Key Protection

During recording, press **Menu button MENU** to protect current video, the lock icon appears on the screen, the current movie clip will be protected and cannot be replaced (the default setting for a movie clip is 3-minute), the next movie clip will unlock automatically and can be replaced if the SD card is full.

### 3.1.3 Motion Detection

- 3.1.3.1 enter to General Settings to activate Motion Detection function (the default setting is Off, choose Low / Middle / High to activate the function);
- 3.1.3.2 Set motion detection recording time in recording menu to select 5mins/10mins/30mins.
- 3.1.3.3 Long press Up button to enter motion detection mode on movie mode, the motion detection icon appears on the right side of the screen and start count backwards 10 seconds, then standby for detection, it will recording automatically once the device detected any motion in front of lens within 2.5m. The recording time depends on the motion event REC time and the default setting is 5 second. The device will start next 5 second recording if any motion detected, press any button can stop the recording.

Motion event REC time and the default setting is 5 second. The device will start next 5 second recording if any motion detected, press any button can stop the recording.

### 3.1.4 G-sensor Collision Recording Protection

When a collision is detected while recording, the default setting is the lock icon will appear on the right corner of the screen, then the current movie clip will be protected automatically and cannot be replaced.

### 3.1.5 Audio On / Off

During recording, press **Up button**  can turn Off / On the audio.

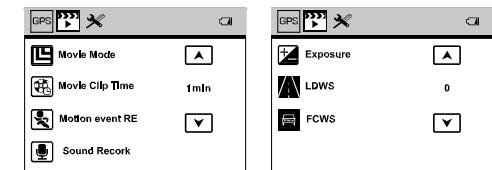
### 3.1.6 Front and Rear Camera Switch

Recording mode, press **down button**  can be switched front and rear camera.

### 3.1.7 Video Menu Operation

Press **Menu button MENU** to enter menu setting, press **Up / Down button**  to select sub menu, then press **REC button OK** to enter the setting, press **Up / Down button**  to select the option, and then press **REC button OK** to confirm. After finished the setting, press **Menu button MENU** third to exit menu setting.

### 3.1.8 Movie Mode Menu Options



| Main Menu  | Function List   | Description  | Available Option  |
|------------|-----------------|--|---|
| Movie Mode | Movie Mode      | Setting for video resolution.  | 1920*1080 30fps<br>1280*720 30fps                                     |
|            | Movie Clip Time | Setting for enabling automatic loop record and the movie clip time.<br><b>Off</b> - The recording will stop when the SD card is full.<br><b>1 Minute/2 Minutes/3 Minutes</b> - Select to limit recording time per file.<br>3 Minutes, for example, the recording time for a file is 3 minutes, if 21 minutes of video is recorded, then 7 files of 3 minutes in length is created. | Off/1min/3min/<br>5min/10min  |
|            | Motion event RE | Setting the recording time for detected motion in front while standby.   | 5sec/10sec/30sec  |
|            | Sound Record    | Setting for the indication of date and logo when the video recorded.<br><b>ON</b> - Date and logo is displayed on the video.<br><b>OFF</b> - No date or logo is displayed on the video.  | On/Off  |
|            | Exposure        | Manual compensation for low or bright light levels. The more negative value in scale, the darker the recorded video appears. The more positive value, the brighter the recorded video. 0 is the neutral setting for this option and is the default value.  | +2.0/-1.7/-1.3/-1/<br>-0.7/-0.3/0/+0.3/<br>+0.7/+1/+1.3/<br>+1.7/+2.0 |
|            | LDWS            | Lane Departure Warning Systems<br><b>Off</b> - No warning tone when lane departure.<br><b>On</b> - When the GPS is positioned, driving speed of 60km / h or more, there will be warning when the deviation from the lane.  | On/Off  |
|            | FCWS            | Forward Collision Warning Systems<br><b>Off</b> - No warning tone when collision occur.<br><b>On</b> - When the GPS is positioned, driving speed of 60km / h or more, there will be warning when the distance less than 20 meters from front vehicle.  | On/Off  |

### 3.1.9 General Settings Menu Options

| GPS | Beep           | On      |
|-----|----------------|---------|
| GPS | Language       | English |
| GPS | Flicker        | Русский |
| GPS | LCD Power Save | 简体中文    |
| GPS | Protect Level  | 繁体中文    |

| GPS | FW Version | Version |
|-----|------------|---------|
| GPS | FW Version | Version |

| Main Menu             | Function List  | Description   | Available Option                         |
|-----------------------|----------------|---|--|
| General Settings Menu | Beep           | Setting for enable / disable the beep.<br><b>On</b> - Select this to enable audible beeps when setting the menu options. The default setting for this option.<br><b>Off</b> - Disables the audible system beeps.  | On/Off                                   |
|                       | Clock Settings | Set the system date & time.   |  |
|                       | Date Format    | Set the format of the date or no stamp to show on the file.   | YYYY MM DD/<br>MM DD YYYY/<br>DD MM YYYY |
|                       | Stamp          | Setting for the indication of date and logo stamp on the video recorded.<br><b>Off</b> - No date or logo is displayed on the video.<br><b>Logo</b> - Only logo is displayed on the video.<br><b>Date+Logo</b> - Only date is displayed on the video.  | Off / Date / Logo /<br>Date+Logo         |
|                       | Language       | Select the desired OSD language.  | English / 繁体中文 /<br>简体中文 /Russian        |
|                       | Flicker        | Set the suitable frequency.   | 50HZ/60HZ                                |
|                       | LCD Power Save | Manage the backlighting and presentation of the LCD. It is advisable to enable this feature to preserve battery power.<br><b>Off</b> - Select to disable power saving for the LCD. This is the default setting for this option.<br><b>1min/3min</b> - The driving recorder will automatically shut down the LCD after | Off / 1min / 3min                        |
|                       | Protect Level  | Setting for the sensitivity of G-sensor to detect collision to protect the recording video.<br><b>Off</b> - Disable the G-sensor function.<br><b>Low/Medium/High</b> - The higher sensitivity the collision will be detected easier.  | Off/High/Middle/Low                      |

Polaroid · D

Polaroid · D

|   |  |                     |
|---|--|---------------------|
|  Motion Detector | Setting for activating the motion detection and the sensitivity.<br><b>Off</b> - Disable the motion detection.<br><b>Low/Middle/High</b> - Select to enable the motion detection and the sensitivity.  | Off/High/Middle/Low |
|  Reset Setup     | This option sets the driving recorder to the original factory default settings.  | Yes/No              |
|  Wi-Fi CARCAM    | Turn On/Off Wi-Fi hotspot.   | On/Off              |
|  Format SD-Card  | Formats the inserted micro SD card.<br><b>YES</b> - Selecting this option completes the format process.<br><b>NO</b> - Select this to abort the format and return to the previous menu.<br><b>Warning:</b> All Video and photo files are be permanently deleted and CANNOT be recovered. | Yes/No              |
|  FW Version      | This option displays the current firmware number of the driving recorder.<br>This information may be important for service and support.  |                     |

### 3.2 Taking Picture

To take a picture make sure the Still Capture Mode  is selected. Press the REC button  to take a photo. Taken photos are saved on TF Card.

#### 3.2.1 Still Capture Screen

|  |  |  |  |   |                     |                                 |
|--|--|--|--|---|---------------------|---------------------------------|
|  Still Capture Mode |  Resolution |  SD card status |  Battery Status |  Zoom in/out | 2016/11/26 07:46:11 | 11911                           |
|  |  |  |  |   | Date/Time           | Remaining numbers to take photo |

EN-13

EN-14

### 3.2.2 Zoom in / out

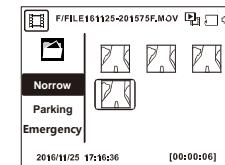
On the still capture mode, press Up/Down button   to zoom in / out.

### 3.3 Playback Mode

#### 3.3.1 Playing Videos

Long Press Mode button MENU switch to videos view mode, press Up / Down button   to select the video to play, press REC button  to playing mode, then press REC button  again to start playing video. Press REC button  can pause the playing, press Mode button MENU to back videos view mode, then press Mode button MENU again to back video recording mode.

#### 3.3.2 Play Video Screen



|  Video Icon |  Narrow |  Parking |  Emergency | F/FILE161125-201575.MOV | 2016/11/25 17:16:36 | [00:00:06]  |
|--|--|--|---|-------------------------|---------------------|-------------|
|  | Video Folder   | Normal   | Save the normal traffic recording video, can be recycled, can be deleted.                       |                         |                     |             |
|  |  | Parking  | Save the motion detection video, can be recycled, can be deleted.                               |                         |                     |             |
|  |  | Emergency  | Save manual protected video and G-sensor protected video, cannot auto recycled and deleted.     |                         |                     |             |
|  |  |  |   | File name               | Date/Time           | Record Time |

### 3.3.3 Video Switch between the Front and Rear

Long press the Menu key **MENU** can switch between the front and rear camera for watching.

### 4 GPS Function

This product built-in GPS module, power on and waiting for 1 minute in outdoor, when GPS word on preview screen turned green, it means that the signal has been received, the recorded video can be tracked at this time.

#### 4.1 GVP Player Operating Instructions:

Users can install the player directly on the computer with the accessory disc. When GPS is properly positioned, the information such as longitude and latitude provided by GPS will be recorded in the video of the product. When using GVP player, the player will play the video and also the latitude and longitude information link Google map / Baidu map shows the corresponding map location.

#### 4.2 GPS Abnormal Warning Condition

##### 4.1.2 GPS Abnormal prompts caused may by:

1. Adjacent lane spacing less than 50 meters.
2. Fixed camera removed but still prompted (notify seller or online feedback).
3. When the front corners have a fixed camera.
4. Continuous speed point spacing is less than 100 meters.
5. There is a fixed camera at the exit of the tunnel.
6. Multi- viaduct overlap.

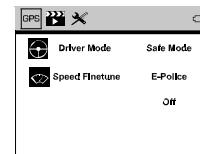
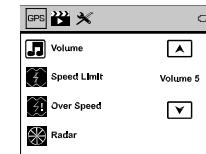
Above six cases the system may be false positives, please pay attention to identification.

##### 4.2.2 Impact of satellite signal reception are:

- (1) Basement or tunnel (2) Under the viaduct
- (3) Around High-rises (4) In the jungle or valley

Above four cases the product may not receive satellite signals or weak signal, please pay attention to driving according to regulations, in order to avoid security accidents or be photographed.

### 5 Warning Radar Setting



| Main Menu | Function List   | Description  | Available Option            |
|-----------|-----------------|--|-----------------------------|
| GPS       | Volume          | Set the beep volume.   | Off/Volume1-8               |
|           | Speed Limit     | Set speed limited prompt.<br>Off - No warning tone during over speed 20km/h - 100km/h - When the speed exceeds 20km/h - 100km/h there will be a warning tone.  | Off/20km/h—100km/h          |
|           | Over Speed      | Set the speed at which the over speed warning tone.  | Off/40km/h-160km/h          |
|           | Radar           | Set the radar detection sensitivity  | High/ Super High/ Auto/ Off |
|           | Driver Mode     | Set a fixed point broadcast mode.<br><b>Normal</b> - Broadcast fixed point and radar.<br><b>Electronic eyes</b> - Only broadcast speed test type and radar at fixed point, do not broadcast security type fixed point. | Safe Mode/ E-Police/Off     |
|           | Speed Fine tune | Adjust the error data between the GPS positioning shows the current speed and each brand car dashboard display speed.  | -6---6                      |

**6 Connecting WIFI**

The camera's built-in Wi-Fi allows you to connect to the smart phone/tablet via the App. the specific steps are as follows:

1. Install App on your phone or tablet computer.  
1.1 Android system can search keywords "wifi camera app" to download and install on Google Play, 360 mobile guards and other security market.  
1.2 IOS system can search keyword "wifi camera a" to download and install on APP Store.
2. Turn on the recorder and then turn on the Wi-Fi, use mobile phones or flat-panel search for this Wi-Fi hotspot to connect;  
Hot Name: SD\_CarDV\_WiFi  
Hotkey Password: 1234567890
3. After the connection and then open the APP, you can use the app to remote control and set the function.

**7 Technical Specifications**

|                       |  |
|-----------------------|--|
| LCD display           | 2.3" color TFT screen  |
| Image sensor          | 4.0MP, 1/2.7" CMOS sensor  |
| View angle            | 130°   |
| Video resolution      | 1920*1080 30fps<br>1280*720 30fps  |
| Photo resolution      | 5M   |
| Video format          | MOV  |
| Photo format          | JPG  |
| Memory                | Support Class 6 or higher rating Micro SD card, maximum up to 128GB  |
| Microphone            | Built-in   |
| Speaker               | Built-in   |
| G-sensor              | Yes  |
| Power source          | Built-in battery, car power adaptor  |
| GPS                   | Positioning accuracy ≤ 10;<br>Receiving sensitivity -159dB;<br>Positioning time average cold start 42S/warm start 28S/ hot start 1S;<br>Receive frequency 1.57542GHz |
| Interface             | Micro USB port, TF card slot   |
| Operating temperature | 0°~ 45° C  |
| Dimensions            |  |
| Weight                |  |