VIOFO

A229 Pro
USER MANUAL

Scan to Access User Guide Videos

Scan to Access User Manual

V23.07.24

Table of Contents

Product Overview

Standard Items

| Front Camera +GPS Mount | Type-C Data Cable | Car Charger Adapter |

| Spare Front Mount Sticky Pads | Trim Removal Tool | Windshield Static Stickers x2 |
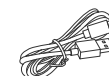
> * **Note:** The USB data cable is only for connecting the camera with computer to transfer video files or upgrade firmware, not for charging the camera.
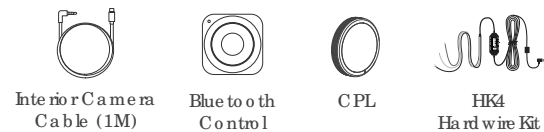
Optional Accessories

| Rear Camera | Interior Camera | Rear Camera Cable (6M) |

Interior Camera
Cable (1M)

Bluetooth
Control

CPL

HK4
Hardwire Kit

Product Diagram

■ **Front Camera (Main Unit)**
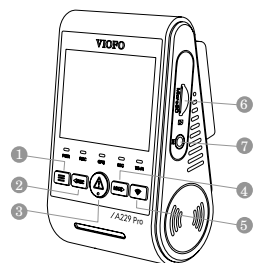
1 - Menu / Power On | Off
2 - Menu Up / Recording Start | Stop
3 - Menu Confirm / Video Protect / Playback
4 - Menu Down / Microphone On | Off
5 - Wi-Fi On | Off
6 - Memory Card Slot
7 - Interior Camera Port
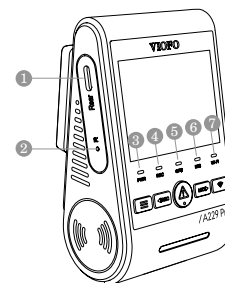
1 - Rear Camera Port / Power In / microSD Card Reader
    Mode (computer)
2 - Reset Button
3 - Power Status Indicator
4 - Recording Status Indicator
5 - GPS Status Indicator
6 - Microphone Status Indicator
7 - Wi-Fi Status Indicator
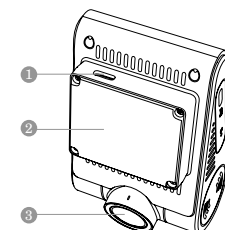
1 - USB Power Port
2 - Mount (GPS Module)
3 - Lens

■ **Rear Camera (Optional)**

1. Bracket
2. Power In
3. Lens

■ **Interior Camera (Optional)**
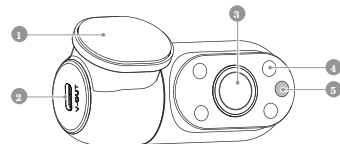
1. Bracket
2. Power In
3. Lens
4. Infrared LED
5. IR Light Sensor

LED Indicators

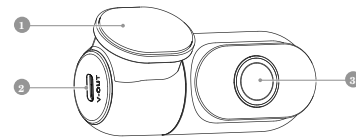| LED	Led Status	Behavior
PWR	Flashing Red	Updating Firmware
	Solid Red	Power On
	Off	Power Off
REC	Solid Red	Recording
	Flashing Red	Not Recording
GPS	Flashing Blue	GPS Signal Receiving
	Solid Blue	GPS Signal Received
	Off	GPS Disabled
MIC	Solid Blue	Audio Recording On
	Off	Audio Recording Off
Wi-Fi	Flashing Blue	Wi-Fi On and Waiting Connecting
	Solid Blue	Wi-Fi Connected
	Off	Wi-Fi Disabled

Buttons and Icons

Mode	Buttons	Behavior
Recording Mode	≡	Long press to power off Click once to take photo
	◀ꞁREC	Click once to stop recording
	⚠	Click once to lock the file being recorded
	MIC ꞁ▶	Click once to enable / disable audio recording Long press to enable / disable parking mode
	📶	Long press to enable / disable Wi-Fi Click once to change live video source

Mode	Buttons	Behavior
Playlist Mode	≡	N/A
	◀ꞁREC	Menu up / Change playback speed / Delete the video
	⚠	Select the current video / Play / Pause
	MIC ꞁ▶	Menu down / Change playback speed / Lock current / Unlock current video
	📶	Return to previous menu / Exit playlist

Mode	Buttons	Behavior
Standby Mode (Not Recording)	≡	Click once to enter menu
	◀ꞁREC	Click once to start recording Long press to format the card
	⚠	Long press to enter playlist
	MIC ꞁ▶	Click once to enable / disable audio recording Long press to enable / disable parking mode
	📶	Long press to enable / disable Wi-Fi Click once to change live video source

Mode	Buttons	Behavior
Setting Menu Mode	≡	Exit setting menu / Return to previous menu
	◀ꞁREC	Menu up
	⚠	Enter / Confirm setting options
	MIC ꞁ▶	Menu down
	📶	N / A

Display Overview
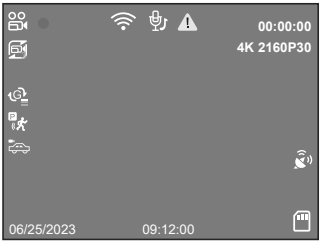
	Recording Mode		Microphone
●	Recording Status	⚠	Emergency Lock
	Loop Recording Status	00:00:00	Recording Time
	G-sensor Status	4K 2160P30	Video Resolution
	Parking Motion Detection		GPS Status
	Parking Mode		SD Card Status
	Wi-Fi Status		

Insert / Remove the Memory Card

■ **Insert the memory card**

Ensure the camera is turned off. Hold the memory card in the orientation shown, slide it into the card slot until you hear a click.
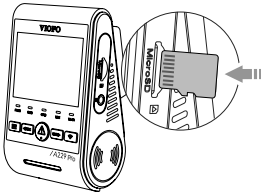
■ **Remove the memory card**

Ensure that the camera is turned off, and then push the edge of the memory card with your fingernail. The card will spring out far enough to be removed.

Note:

- The microSD card is sold separately. The microSD card must have a Class-10 or UHS-I rating and the capacity is up to 512GB.
- We recommend you to buy the VIOFO brand memory cards which are manufactured with top-tier MLC NAND flash, making them durable and reliable.
- Memory card must be formatted before first use. Please format the card on a computer or in the camera to the exFAT or FAT32 file system.
- Please turn off the A229 Pro before inserting or removing the microSD card.
- Inserting or removing the microSD card while recording may destroy the files.

■ Format the memory card

Memory card must be formatted before first use.

Format the memory card in the camera

To format the card in the camera, either use the VIOFO App and the format option in the Settings, or alternatively long press the [◀|REC] button.

Format the memory card using a computer

To format the memory card on your computer, follow your computer's user manual.
For deep formatting of the memory card, you can also download the GUIFormat tool from our official website: https://viofo.com/download/guiformat.exe

Note:

We suggest formatting the card periodically to ensure the best performance of the camera.

Formatting the card will erase all data permanently, please back up important data beforehand.

Install the Front Camera

1. Select a location on the windshield behind the rear-view mirror where the camera will not obstruct the driver's view while driving.

Best mounting location

Connect to car cigarette lighter socket
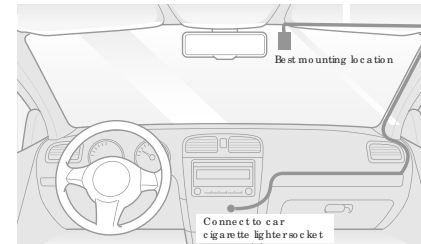
2. Wipe clean the installation surface of the windscreen with a dry cloth, it must be grease free for the sticky pad to stick firmly.
3. Mount the dashcam directly to the windshield with the sticky pad, or attach the static sticker to the selected location before installation (Refer to guide on page 13).
4. Peel the protection film off the sticky pad and camera lens.
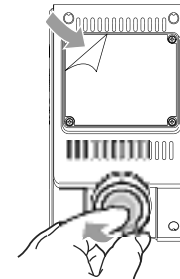
5. Fix the camera on the selected location.

6. Adjust the Lens Angle
   - Look at the live view on the LCD.
   - Adjust the angle of the lens up / down if necessary.
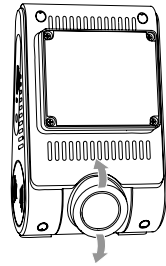
7. Connecting to Power
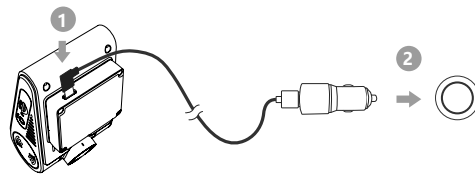
Insert the car charger USB cable's male port into the camera mount's Type-C port. Plug the car charger adapter into your vehicle's 12V / 24V female power socket.

Install the Static Sticker (Optional)

1. Wipe clean the surface of the windscreen before installation.

2. Peel the red sign protective film off the static sticker, then attach the sticker to the windscreen. Press it for a few seconds, making sure no bubbles are left.
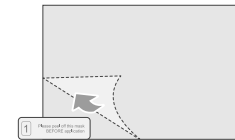
3. Peel the green sign protective film off the static sticker.
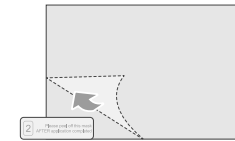
4. Peel the protection film off the sticky pad on the mount, and attach it to the sticker. Press the camera hard for a few seconds, making sure it is attached firmly.
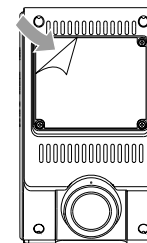
Install the Rear Camera (Optional)

1. Select an installation location on the windscreen, without defrost grid wires, and where the camera can record the entire rear view.

2. Wipe clean the installation surface of the windscreen with a dry cloth.

3. Peel the protection film off the sticky pad and camera lens.
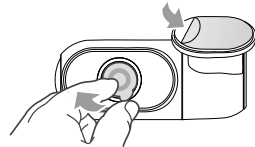
4. Fix the rear camera on the selected location.

5. Connecting with Rear Camera

Power off the product and connect the rear camera cable to the front camera (main unit).

Cable routing should be as shown in the following two diagrams.
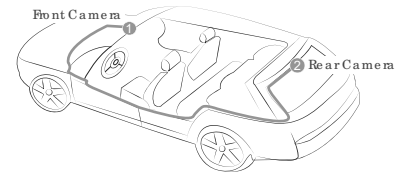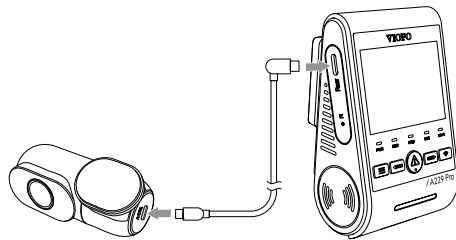
Install the Interior Camera (Optional)

1. Select an installation location.

2. Wipe clean the installation surface of the windscreen with a dry cloth. Select a location on the windscreen, without defrost grid wires, and where the camera can record the entire Interior view.

3. Peel the protection film off the sticky pad and camera lens.
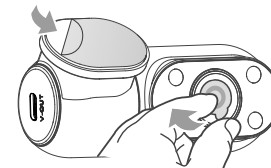
4. Fix the Interior camera on the selected location.

5. Connecting with Interior Camera.

Use the Interior camera cable to connect the two cameras. Power off the product and connect the interior camera cable to the front camera (main unit). Cable routing should be as shown in the following two diagrams. Use the cable clips to help fix the two cables conveniently and safely.

Interior Camera   Front Camera

Remove Cameras

To remove the front camera from its bracket, slide the camera to the right and pull the front camera out of the mounting bracket.
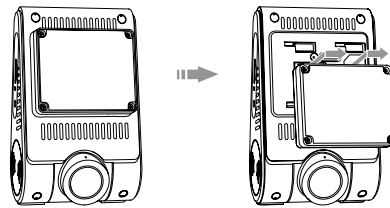
Note:
When you want to plug and unplug the rear or interior camera, please turn off the camera first.

Dash Cam Recording Operation

Power On / Off

1. When you start the engine, the camera will turn on and begin recording automatically.

2. When you turn off the engine or unplug the charging cable from the power adapter, the camera will stop recording and turn off.

3. Short press [≡] button to power on the camera. Long press [≡] button to power off the camera.

Loop Recording

1. Insert a microSD card into the camera's card slot and automatic loop recording will begin once the camera detects power.

2. Time frame for each video file is 1 / 2 / 3 / 5 / 10 minutes.

3. When there is insufficient space on the microSD car, loop recording will automatically overwrite the oldest files (one by one).

4. Loop recording files are saved to SD card: \DCIM\Movie.

Emergency Recording

1. Automatic emergency recording

   When the G-sensor is activated by a collision, the current footage will be locked automatically to avoid being overwritten by loop recording.

2. Manual emergency recording

   Pressing the [⚠] button during a recording will lock the current file being recorded. Once locked, the file will not be overwritten by the loop recording feature.

Note:

Collision detection sensitivity can be adjusted in settings under the "G-sensor" option. Locked files are saved to SD card: DCIM \ Movie \ RO

Disable / Enable Audio Recording

Pressing the [MIC▶] button once to turn off / on audio recording, [MIC] LED light will be off / solid Blue.

Parking Mode

There are three options for parking mode.

1. Auto Event Detection
The camera will automatically record a video sequence while a moving object is being detected during parking mode. It will stop recording when no new movement is detected.

2. Time Lapse Recording
Time lapse record a video at low frames at 1 / 2 / 3 / 5 / 10 fps, it keeps recording continuously without audio recorded.

> **Note:** Audio cannot be recorded in time-lapse mode.

3. Low Bitrate Recording
This mode uses low bitrate to record video and audio, and uses small file sizes for continuous recording.

> **Note:** Parking mode provides surveillance of your parked vehicle only when the engine is off and the USB Type-C Hardwire Kit is used to provide continuous power. The Hardwire Kit also protects your car battery from being drained. We recommend buying the VIOFO HK4 ACC hardwire kit cable for parking mode recording.

Playback and Manage Videos

Playback Video on Dashcam

1. Under standby mode (not recording), click once [☰] button to enter the playlist.

2. Use the arrow buttons [◀REC MIC▶] to select the desired video and press the button [⚠] to play.

3. Press the [☰] button to exit.

Playback Video on VIOFO APP

Long press the Wi-Fi button to enable Wi-Fi. Connect Wi-Fi on your phone first. Open VIOFO app and choose "Connect your camera" to use your phone to control the dashcam. You can play and manage files through the APP. You can check the app introduction refer to [**Review and Control on Smartphone**].

Playback Video on PC

1. Remove memory card from dashcam.
   Before removing the memory card, make sure you have switched off the Dashcam.

2. Insert the memory card into a SD card adapter or card reader connected to your PC.

3. Open the DCIM folder, using VLC or another video player to playback the video.

> **Note:** For your PC with a microSD slot, you can directly insert the memory card into it.

Video File Storage Location

Recording Mode	Behavior
Loop Recording (Including Motion Detection)	DCIM \ Movie
Emergency Recording (Locked Video)	DCIM \ Movie \ RO
Parking recording (Auto Event Detection / Time-lapse Recording / Low Bitrate Recording)	DCIM \ Movie \ Parking
Snapshot	DCIM \ Photo

File Format Definition

Files recorded by front camera, interior and rear camera are saved separately.

2023_0615_180010_062PF.MP4
2023_0615_180010_063PI.MP4
2023_0615_180010_064PR.MP4

Year   Date   Time   Sequence Number

F for the front camera
I for the interior camera
R for the rear camera

P for the video recorded
in the parking mode.

Review and Control on Smartphone

Connect to Smartphone

The VIOFO app allows you to control your camera remotely by using a smartphone. Features include full camera control, live preview, playback and video recording.

■ **Android Device**

Android users can download the app from Google Play, or download the APK directly from our official website: https://viofo.com/en/content/13-app/

■ **IOS Device**

IOS users can download the app from the App store.

Download on the
App Store

GETITON
Google Play

■ **Connect VIOFO APP**

Turn on the Wi-Fi in the menu or long press the [📶] button. When the Wi-Fi is on, a Wi-Fi status icon, Wi-Fi name (SSID) and the password appear on the camera LCD screen.

00:00:00
4K 2160P30

SSID: VIOFO_A229 Pro_*****
WPA2: 12345678
06/25/2023   09:12:00
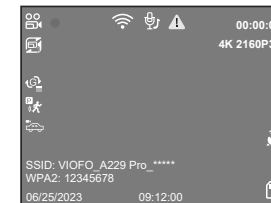
• **Step 1:** Use the phone to connect A229 Pro Wi-Fi. When the phone is connected with the dashcam, the LED light on the camera shows solid blue.
• **Step 2:** Open VIOFO app and choose "Connect your camera" to use your phone to control the dashcam.
• **Step 3:** Now you can see the live view of both cameras. You can change the settings and check the files on the app.

APP Layout Overview

Choosing "Connect your camera" to use your phone to control the dashcam.

1 - Menu   4 - Official Support
2 - Downloaded Video   5 - Firmware Update
3 - VIOFO Official Facebook Page

Preview Video

1 - Rear Camera Live Video   8 - Go to Video File lists
2 - Interior Camera Live Video   9 - Start / Stop Recording
3 - Front Camera Live Video   10 - Go to System Settings
4 - Audio Recording Status   11 - Video File Lists
5 - Motion Detection Status   12 - Download Video Files
6 - Switch Camera Video Source   13 - Delete Video Files
7 - Take a Video Snapshot

Install Optional Accessories

Install CPL

The CPL(Circular Polarizing Lens) can be used to reduce reflections and glare from the window glass and road surfaces that can otherwise damage image quality, this works in the same way as polarized sunglasses, getting more saturated and beautiful video.
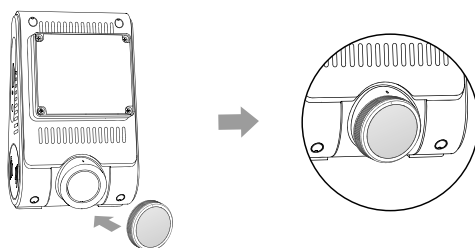
When installing the CPL, you need to align the white mark on the CPL with the corresponding mark on the camera.

Install Bluetooth Remote Control

With the Bluetooth remote control (optional) mounted in a convenient location on your dashboard, you can safely protect important videos from being overwritten, without needing to take your eyes off the road. When you press the bluetooth remote, the camera will lock the current video file and take a video snapshot.

Pairing with dash camera

- Power on the camera.
- Press and hold the video lock button on remote control for 3 seconds to pair with camera.
- If get paired successfully, the LED indicator of the remote turns blue.
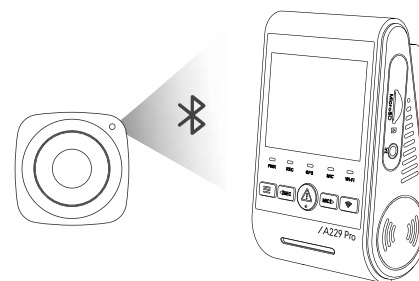
You can set the product features according to your needs and preferences using the camera button or the VIOFO APP. To enter the menu settings, please stop recording first.

• **Resolution:**

1. Front Camera:
   3840x2160P 30fps
   2560x1440P 30fps
   1920x1080P 30fps
2. Front Camera + Rear Camera:
   2160P30+1440P30
   1440P30+1440P30
   1080P30+1080P30
3. Front Camera + Interior Camera:
   2160P30+1080P30
   1440P30+1080P30
   1080P30+1080P30
4. Front Camera + Rear Camera + Interior Camera:
   2160P30+1440P30+1080P30
   1440P30+1440P30+1080P30
   1080P30+1080P30+1080P30

• **Loop Recording:** Off / 1 / 2 / 3 / 5 / 10 minutes.

Recording will begin automatically after powering on with a microSD card in the device. Each recorded file is up to three minutes long, with old footage being replaced when microSD card storage is full.

• **Video Bitrate:** Low/Normal/High/Maximum.

You can set the bitrate for video. High bitrate may improve the quality and smoothness of the video, especially when recording fast motion or high contrast scenes. Using high bitrate mode may decrease the amount of recording time available on your memory card. Using low bitrate will save space and record for longer time.

• **HDR (High Dynamic Range):**

Off/On. The default setting is Off. The multi-exposure HDR technique helps automatically balance the lighting in over bright and over dark areas to avoid over exposure issues.

• **Exposure Value (Front/Interior/Rear)**

Adjusting the value of the EV (Exposure Value) properly can create better footage under different light sources. It ranges from -2.0 to +2.0. You can adjust the EV for the front, interior and rear cameras separately. The default is set at 0.0.

• **Record Audio:**

Turn on and off the microphone. This can also be changed during recording by pressing the microphone button [MIC ▶].

• **G-Sensor:**

The G-sensor measures shock forces and locks the video recorded at the time. The settings from "low to high" determine the amount of force needed to lock the file from being overwritten. We recommend that you set it at low.

• **Wi-Fi:**

Set it On / Off. Press the [🛜] button for 3 or 5 seconds to enable Wi-Fi quickly. We recommend to choose 5GHz Wi-Fi mode.

• **Parking Recording:** There are 3 options under parking mode:

① Auto Event Detection
he camera will automatically record for 45 seconds while a moving object is detected while car is parked.
② Time Lapse Recording
Time lapse record a video at low frames at 1 / 2 / 3 / 5 / 10 fps, it keeps recording continuously without audio recorded.

③ Low Bitrate Recording
This mode records video in low bitrate for both front and rear. It keeps recording continuously in mini file size with audio recorded.

- **Parking Motion Detection:**

  Adjusts the sensitivity of the motion detection so minor motion caused by wind or rain doesn't trigger a recording.

- **Parking G-sensor:**

  The G-sensor detects significant or sudden movement (such as an impact or collision), it will trigger an event recording. We suggest setting it to High sensitivity in parking mode recording.

- **Enter Parking Mode Timer:**

  Set the timer for entering parking mode. (Only for the camera hardwired with the VIOFO HK4, if you use external battery, this function won't work.)
  "Off" means the camera will enter parking mode right away when the engine is off.
  "90 Seconds" means the camera will enter parking mode 90 seconds after the engine is off.

- **Parking Recording Timer:**

  "Off" means the camera will keep recording until the hardwire kits cut the power supply.
  "1 Hour" means the camera will shut down after it gets into parking mode for 1 hour.

- **Time-lapse Recording:**

  Record video from frames captured at specific time intervals to conserve memory and reduce the time it takes to review video. The default is off.

- **Live Video Source:**

  Front Camera / Interior Camera / Rear camera / Front Overlaid / Rear Overlaid / All Camera.

- **Interior Image Rotate:**

  Turn on / off the Interior camera image rotate.

- **Interior Image Mirror:**

  Turn on / off the Interior camera image mirror.

- **Rear Image Rotate:**

  Turn on / off the rear camera image rotate.

- **Rear Image Mirror:**

  Turn on / off the Interior camera image mirror.

- **GPS:**

  Turn on / off GPS logger. A GPS module is used to include the location data in the recorded videos. If disabled, your camera will no longer measure your speed and position; nor synchronize the time / date. (Only available when connecting with GPS signal) Please use "Dashcam Viewer" to playback videos and to visualize your position and speed on your computer.

- **Speed Units:**

  Kilometer per hour (KMH) and miles per hour (MPH) are available for speed units.

- **GPS Stamp:**

  Imprint the GPS information on the recorded video.

- **Date Stamp:**

  Imprint the time and date on the recorded video.

- **Brand Model Stamp:**

  Imprint the camera model on the recorded video.

- **License Plate Number:**

  Imprint the car number on the recorded video.

- **Custom Text Stamp:**

  Imprint the customize text on the recorded video.

- **Beep Sound:**

  Off / Only Keytone / Only Boot Sound / All.
  You can enable/disable the button and startup sounds.

- **Boot delay:**

  The camera will boot seconds delay when powered on. The settings are Off / 5s / 10s.

- **Language:**

  Display language setting (English, Traditional Chinese, French, etc).

- **Voice Notification:**

  Turn on / off the voice notification.

- **Voice Notification Volume:** Low/Medium/High.

  Adjust the volume of the voice notification.

- **Voice Control:** Turn off / on the voice control.

  When Voice Control is turned on, you can control the camera with spoken commands, using your voice to take photos, turn on/off Wi-Fi, start recording, and more.

  Note: Voice command language should be consistent with dashcam system language in following six options: English, Chinese, Russian, Japanese, Vietnamese, and Thai. For all other dashcam language systems, English is the only language to trigger voice control function.

- **Voice Command:** Voice recognition commands. You can issue different voice commands to remote control the camera, like:

- Take Photo	- Turn On Screen
- Video Start	- Turn Off Screen
- Video Stop	- Lock the Video
- Turn On Audio	- Turn On Wi-Fi
- Turn Off Audio	- Turn Off Wi-Fi

- **Date / Time:**
  Set system date / time.

- **Time Zone:**
  Set the current time zone for GPS time and date calibration.
  Note: the time zone must be manually adjusted for daylight savings.

- **Frequency:**
  Set it to minimize flickering and banding in the recorded video.

- **Screen Saver:**
  The screen goes black by default after 1minute while recording. You can set it by adjusting different time intervals on menu.

- **LED:**
  All Off/All On/Power LED Only.
  You can enable/disable the LED lights.

- **Format:**
  The operation will delete all data on the microSD card.
  Note: Once you format the card, all information will be deleted and unrecoverable. Make sure to back up all files that you needed before formatting.

- **Default Setting:**
  Restore device to factory settings.

- **Version:**
  Check the current firmware version of the camera.

Firmware Upgrade

Follow the instructions on this website to upgrade the firmware:
(https://viofo.com/content/42-help-and-support/)

Note:
• Before using a microSD card to upgrade the firmware, formatting the card in the camera is necessary to ensure stable read and write operation.
• Do not unplug or power off the camera during a firmware upgrade, it may cause the camera to subsequently fail to boot.

Notice

FCC Statement
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 the manufacturer could void your authority to operate this equipment.
This device complies with part 15 of the FCC Rules. Operation subjects to the following two conditions:
(1) This device may not cause harmful interference.
(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 & your body.

Shenzhen VIOFO Technology Co., Ltd, declares that this Radio Frequency peripheral is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Customer Service

Thanks for choosing VIOFO!
From the date of purchase on, all products are warranted for 12 months and all accessories are warranted for 3 months. VIOFO offers lifetime technical support for all our users. We are committed to making sure that you are 100% satisfied with our products and services.

☁ Product Registration Program

VIOFO also have Product Registration Program to help customers extend warranty by 6 months.
Visit www.viofo.com and register your new product to extend the warranty from 12 months to **18** months.
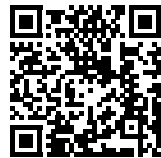
Scan the QR code to activate
6-month extended warranty now

◁ Video Sharing

Share videos caught on VIOFO camera with us. Let's enjoy your new found together! Gain a chance to get a mysterious gift at **share@viofo.com**.

How to Contact Us ?

💬 Submit a ticket at support.viofo.com

🎧 Live chat box at www.viofo.com

✉ support@viofo.com

f www.facebook.com/viofo.world

📞 +86 755 8526 8909 (CN)

🕐 Mon-Fri 9am-6pm

Scan the QR code to submit a ticket