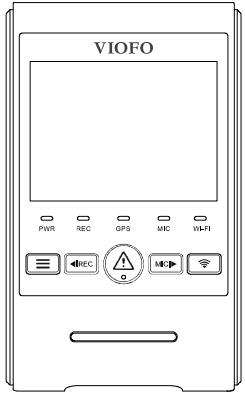
A229 Duo

USER MANUAL

The user manual is available on
https://support.viofo.com



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Rear Camera


Rear Camera Cable (6M)


Type-C Data Cable


Car Charger Adapter


GPS Module


Card Reader Adapter

Trim Removal Tool


3M Sticker for front Camera


3M Sticker for Rear Camera


Static (Windshield) Stickers

*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 Accessory


Bluetooth Control

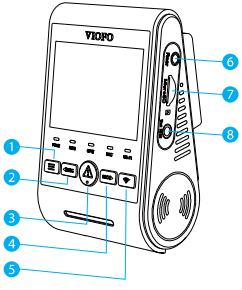

CPL


Hardwire Kit


External Microphone

■ Product Diagram

1) Front Camera



1 - Menu / Power On|Off
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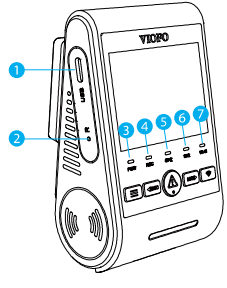

1 - Power In / MicroSD Card Reader Mode
2 - Reset Button
3 - Power Status Indicator
4 - Recording Status Indicator
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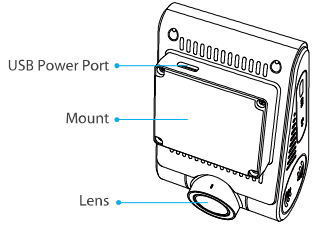
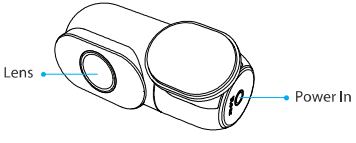


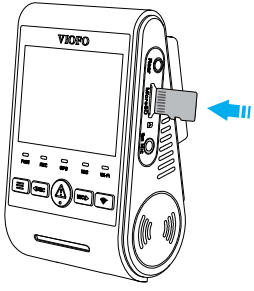
2) Rear Camera



■ Inserting / Removing the memory card

Inserting the memory card

Push the memory card into the card slot until you hear a click, with the card label facing the forward (away from the screen).



Removing the memory card

Ensure that the camera is turned off / not recording, 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 up to 256GB.
64GB,128GB and 256GB microSD cards must be formatted with the FAT32 file system, either on a computer or in the camera.

We recommend you buy the VIOFO brand memory card which are manufactured with top-tier MLC NAND flash, making them durable and reliable.

Formatting the card

Format the card ('Format' option in Dash Camera 'System settings') to prepare for first use in the dash camera.
Formatting will permanently erase any data on the microSD card.
For best performance, format periodically (after backing up any important files).

■ LED Indicators

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

■ Buttons and Icons

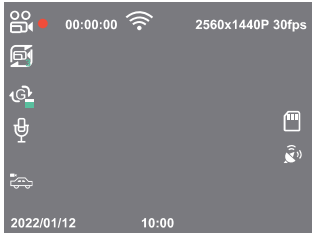
Mode	Buttons	Behavior
Recording Mode	☰	Long press to power off
	◀I REC	Click once to stop recording
	⚠	Click once to lock the file being recorded
	MIC I▶	Click once to enable / disable audio recording
	📶	Long press to enable / disable the Wi-Fi

Mode	Buttons	Behavior
Standby Mode (Not Recording)	☰	Click once to enter menu
	◀I REC	Click once to start recording
	⚠	Long press to enter playlist
	MIC I▶	Click once to enable / disable audio recording
	📶	Long press to enable / disable the Wi-Fi

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

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

■ Display Overview

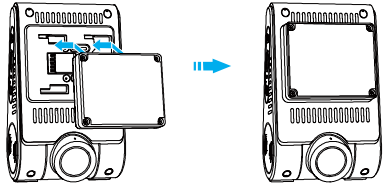


	Recording Mode
	Recording Status
00:00:00	Recording Time
	Wi-Fi Status
2560x1440P 30fps	Video Resolution
	Loop Recording Status
	G-sensor Status
	Microphone
	Parking Mode
	SD Card Status
	GPS Status

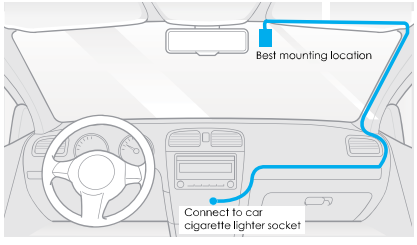
Installation

■ Front camera installation

1) Insert the clips, then slide the mount horizontally into the slot on the back of camera.

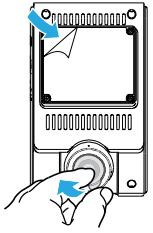


2) Select a location on the windshield rear of the rear-view mirror.

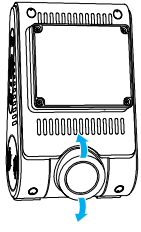


3) Wipe clean the installation surface of the windscreen with a dry cloth, it must be grease free for the sticky pad to stick firmly.

4) Peel the protection film off the sticky pad and camera lens.



5) Fix the front 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.

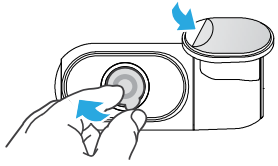


■ Rear camera installation

1) Select an installation location

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

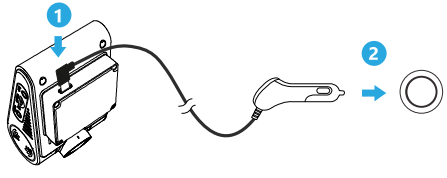
2) Wipe clean the installation surface of the windscreen with a dry cloth.



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

■ Cable Connection

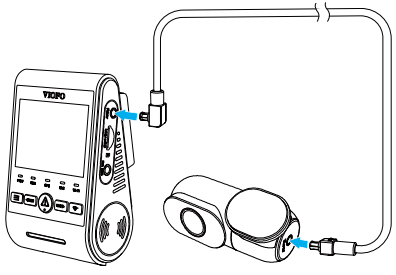
1) Connecting to Power

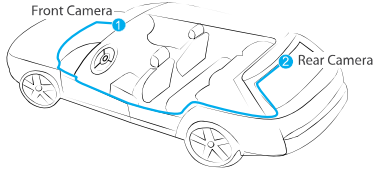


Plug the USB power adapter into your vehicle's 12V / 24V female power socket. Insert the 4M USB cable's male port into the camera's mount USB port.

2) 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.





Tips

1. Do not install / mount the camera in a location that interferes with the driver's visibility and safety.

2. Install / mount the camera close to the rearview mirror so that both sides of the scene being recorded are equally covered by the camera's FOV (field of view).

3. To ensure a clear view on rainy days, the lens should be positioned within the windshield wiper's sweeping range.

4. Do not install / mount the camera on or near airbag panels.

5. Installation / mounting location should not be affected by sun control film (window tint). There should not be any other electronic equipment close to the camera for optimal performance.

Note:
Do not install / mount the camera or cables near an airbag panel or within the airbag's working range. The manufacturer is not liable for any injury or death caused by deployment of the airbag.

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. Long press [☰] button to power on or 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 card, loop recording will automatically overwrite the oldest files (one by one).
4. Loop recording files are saved to SD card: \ DCIM \ MOVIE folder.

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

■ Playback Videos

1. Under standby mode (not recording), long press [⚠] 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.

Note:

1. Separate files are created for the recordings of front and rear camera.
2. The file name of front camera is Year_Date_Time_***F**, and Year_Date_Time_***R** for rear camera.
3. The default video resolution of front and rear camera are 2560 x 1440P 30fps.

PC Mode

1. Connect the camera to a computer by using the included short USB cable.
2. The camera will automatically turn on and "microSD Card Reader Mode" will be displayed on its LCD screen .
3. The computer will detect “removable disk” .
4. There will be two folders under DCIM folder:
   - Movie (loop recording video files)
     Contains subfolder: Parking (Parking mode video files)
     RO (Protected / Locked video files)
   - Photo (Video snapshot files)
5. Copy the files needed to your computer drive.

PIP Mode

There are four modes for live preview on the A229 LCD screen while the rear camera is attached.

Note:

Picture in picture (PIP) mode is available only while the rear camera is attached.

Mode	Description
Front + Rear (Rear overlaid)	Show preview video for front and rear camera on the LCD screen, the rear camera preview is on the top left side.
Rear+ Front (Front overlaid)	Show preview video for front and rear camera on the LCD screen, the front camera preview is on the top left side.
Front Only	Show preview video for front camera only on the LCD screen.
Rear Only	Show preview video for rear camera only on the LCD screen.

Firmware Upgrade

Follow the instructions on this website to upgrade the firmware:
https://support.viofo.com/support/solutions/folders/19000140970

Note:

- Before using a microSD card to upgrade the firmware, formatting the card in 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.

System Settings

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:** Setting video resolution of footage recorded.
Front Camera Only: 2560 x 1440P 30fps, 1920 x 1080P 30fps
Front + Rear Camera: 1440P 30fps + 1440P 30fps, 1080P 30fps + 1080P 30fps
• **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:** 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.
• **WDR (Wide Dynamic Range):** Dynamic range is the ratio of the brightest portion of the image to the darkest portion of the image. WDR enables the camera to deliver video with near perfect exposure in varying lighting situations.
• **Exposure Value (Front & 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 front and rear camera separately. 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 Off
The camera won't enter parking mode after the ignition is off.
② Auto Event Detection
The camera will automatically record for 45 seconds while a moving object is detected while car is parked. It saves 15 seconds video before the event and 30 seconds after the event and will stop recording if no new movement.
③ Time Lapse Recording
Time lapse record a video at low frames at 1 / 2 / 3 / 5 / 10 / 15 fps, It keeps recording continuously without audio recorded.
④ Low Bitrate Recording
This mode record video in low bitrate for both front and rear. It keeps recording continuously in mini file size with audio recorded.
Note: We recommend to buy VIOFO HK4 ACC hardwire kit cable for parking mode recording.
• **Parking Motion Detection:** Adjusts the sensitivity of the motion detection so minor motion caused by wind or rain doesn't trigger a recording.

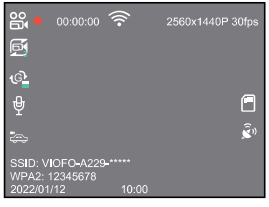
• **Parking G-sensor:** The G-sensor detects significant or sudden movement (such as an impact or collision), it will trigger an event recording. We suggest setting it to High sensitivity in parking mode recording.

• **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.
"90s" means the camera will enter parking mode 90 seconds after engine is off.
• **Parking Recording Duration:**
"Off" means the camera won't record during parking mode.
"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 / Rear camera / Rear Overlaid / Front Overlaid.
• **Rear Image Rotate:** Turn on / off the rear camera image rotate.
• **Rear Image Mirror:** Turn on /off the rear 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 later when powered on. The settings are Off / 5s / 10s.
• **Language:** 简体中文 / 繁體中文 / English / Français / Español / Português / Deutsch / Italiano / Русский / 日本語 / Türkiye / Română / Polski / Česky / Slovensky
• **Voice Notification:** Turn on / off the voice notification.
• **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.
• **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.
• **Format Reminder:** Set the number of days between format warnings.
• **Default Setting:** Restore device to factory settings.
• **Version:** Check the current firmware version of the camera.

Review and Control on 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. While the Wi-Fi enabled, the camera can be only controlled by 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 and the password appear on the camera LCD screen.



Connecting the camera to a smartphone

• Search "VIOFO" on Google play store on an Android device or Apple app store on an iOS device, or scan below code to download the APP.

Download on the App Store

GET IT ON Google Play

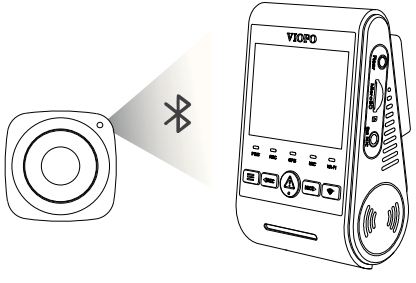
• Download and install VIOFO APP.
• Run VIOFO APP.
• Turn on the Wi-Fi in the menu or long press the [ ] button.
• On VIOFO app, follow app instruction to connect with camera.

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.



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 manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) this device must accept any interference received, including interference that may cause undesired operation.

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.

Your Opinion Matters

If you have any thoughts on how we can do even better, connect with us today at **sales@viofo.com**.

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 **marketing@viofo.com**.

How to Contact Us ?

- Submit a ticket at support.viofo.com
- Live chat box at www.viofo.com
- support@viofo.com
- www.facebook.com/viofo.world
- +86 755 8526 8909 (CN)
- Mon-Fri 9am-6pm

FCC Caution：

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

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.

IC Caution:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

To maintain compliance with RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux apparei ls radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pour maintenir la conformité aux directives d'exposition aux radiofréquences, cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.