



BLACKVUE™

DR900S-2CH
Quick Start Guide



ENGLISH / 日本語

www.blackvue.com

BLACKVUE

DR900S-2CH

For manuals, customer support and FAQs go to www.blackvue.com
取扱説明書、カスタマーサポート、およびFAQ(よくあるご質問)については
BlackVue ウェブサイト (www.blackvue.com) をご覧ください

Important safety information

For user safety and to avoid property damage, read through this manual and follow these safety instructions to use the product correctly.

- Do not disassemble, repair, or modify the product yourself.

Doing so may cause fire, electric shock, or malfunction. For internal inspection and repair, contact the service center.

- Do not adjust the product while driving.

Doing so may cause an accident. Stop or park your car in a safe place before installing and setting up the product.

- Do not operate the product with wet hands.

Doing so may cause electric shock.

- If any foreign matter gets inside the product, detach the power cord immediately.

Contact the service center for repair.

- Do not cover the product with any material.

Doing so may cause external deformation of the product or fire. Use the product and peripherals in a well-ventilated location.

- If the product is used outside the optimal temperature range (-20°C - 70°C / -4°F - 158°F), performance can decline or malfunctions may occur.

- When entering or exiting a tunnel, when directly facing into bright sunlight, or when recording at night without lighting the quality of recorded video may deteriorate.

- If the product is damaged or the power supply is cut due to an accident, video may not be recorded.

- Do not remove the microSD card while the microSD card is saving or reading data. The data can be damaged or malfunctions may occur.

FCC Compliance Information

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 protections 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.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such 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, and
- (2) This device must accept any interference received, including interference that may cause undesired operation of this device.

FCC ID: YCK-DR900S-2CH

CAUTION

Any changed or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

There is a risk of explosion if the battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

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

CE WARNING

- Changes and modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- It is desirable that it be installed and operated with at least 20cm or more between the radiator and a person's body (excluding extremities: hand, wrists, feet, and ankles).

Disposal of your BlackVue dashcam



1. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities. Contact local authorities to learn about disposal and recycling options available in your area.
2. The correct disposal of your BlackVue dashcam will help prevent potential negative consequences for the environment and human health.
3. For more detailed information about disposal of your BlackVue dashcam, please contact your city office, waste disposal service or the shop where you purchased the product.

IC Compliance

This Class [B] digital apparatus complies with Canadian ICES-003.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

- IC Warning

This device complies with Industry Canada licence-exempt RSS standard(s).

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de license.

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.

IC: 23402-DR900S2CH

In the box

Check the box for each of the following items before installing the BlackVue dashcam.



Front camera



Quick start guide



Power cord



Cable clips (8 EA)



Double-sided tape
for the Mounting
Brackets



microSD Card



microSD
card reader



Rear camera



Rear camera
connection cable



Pry tool

Need help?

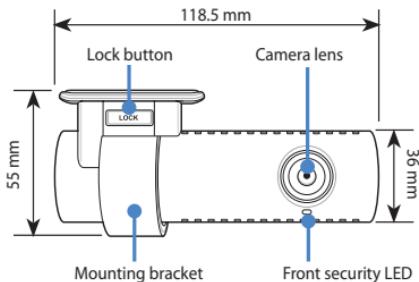
Download the manual and the latest firmware from www.blackvue.com

Or contact a Customer Support expert at cs@pittasoft.com

➤ At a glance

The following diagrams explain each part of the BlackVue dashcam.

□ Front camera

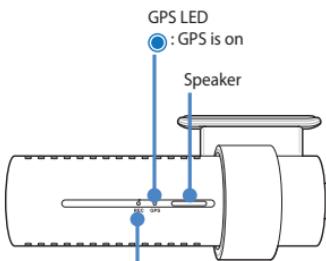


Mounting bracket

Front security LED

□ : Blinks slowly during normal mode and parking mode motion detection standby.

□ : Blinks quickly when (i) an event is being recorded (impact detected), (ii) manual recording has started, or (iii) motion detected in parking mode.



GPS LED

○ : GPS is on

Speaker

Recording LED

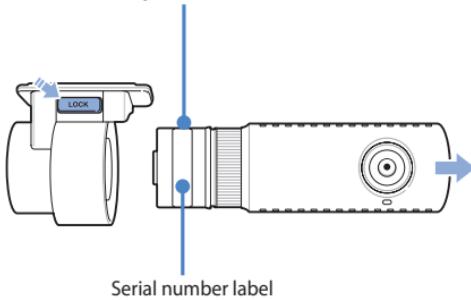
● : Blinks orange in normal mode.

● : Blinks red when (i) an event is being recorded (impact detected), or (ii) manual recording has started.

● : Blinks green in parking mode when motion is detected.

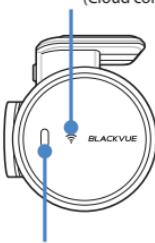
Connectivity details label:

- Default Wi-Fi SSID
- Default Wi-Fi password
- Cloud code
- QR code

**Wi-Fi/Internet LED**

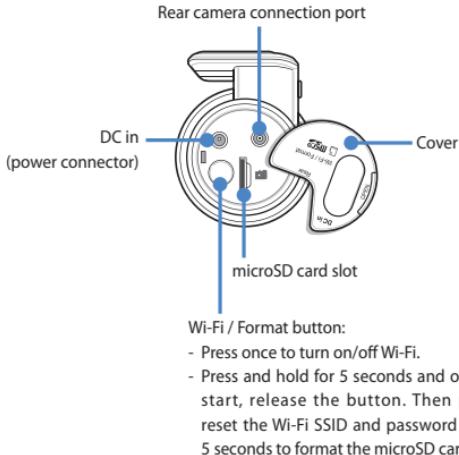
ssid : Direct Wi-Fi is on.

ssid : Blanks when connected to the internet
(Cloud connected).

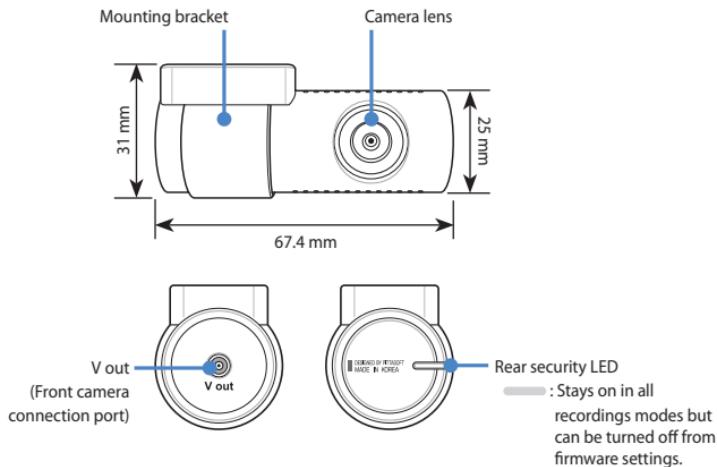
**Proximity Sensor:**

Touch or wave a finger within 20mm of the sensor to turn on/off audio recording.

Alternatively, it can be set as a manual recording trigger in the firmware settings.

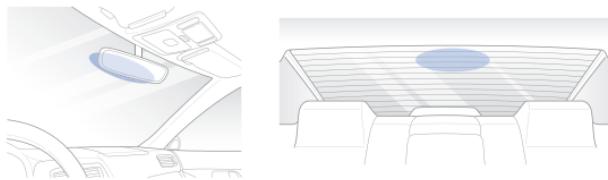


□ Rear camera



STEP 1 ➤ Install and power up

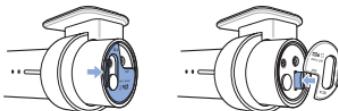
Install the front camera behind the rear view mirror. Install the rear camera at the top of the back windshield. Remove any foreign matter and clean and dry the windshield before installation.



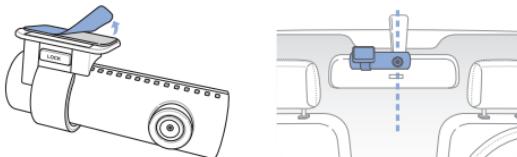
⚠ Warning

- Do not install the product in a location where it can obstruct the driver's field of vision.

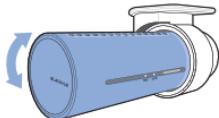
- Ⓐ Turn off the engine. Open the cover of the microSD card slot, gently push the card into the slot until it locks into place and close the cover.



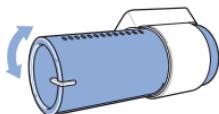
- Ⓑ Peel off the protective film from the double-sided tape and attach the front camera to the windshield behind the rear-view mirror.



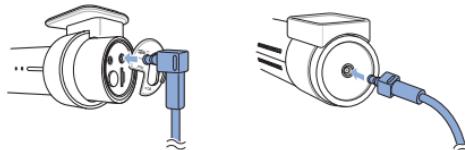
- © Adjust the angle of the lens by rotating the body of the front camera. We recommend pointing the lens slightly downwards ($\approx 10^\circ$ below horizontal), so as to record video with a 6:4 road to background ratio.



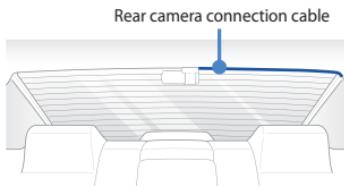
- Ⓓ Peel off the protective film from the double-sided tape and attach the rear camera to the rear windshield. Adjust the angle of the lens by rotating the body of the rear camera.



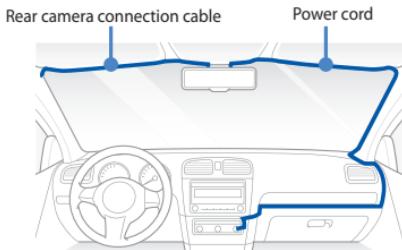
- Ⓔ Connect the front camera ('Rear' port) and the rear camera ('V out') using the rear camera connection cable.



- Ⓕ Use the pry tool to lift the edges of the rubber window sealing and molding and tuck in the rear camera connection cable.



- (G) Plug the power cord into the cigarette lighter socket and the front camera.
- (H) Use the pry tool to lift the edges of the windshield trim/molding and tuck in the power cord.



- (I) Turn on the engine. The BlackVue dashcam will power up and start recording. Video files are stored on the microSD card.
- (J) Turn off the engine. The dashcam will automatically stop recording and power down. To record in parking mode while the engine is off please install a **Power Magic Battery Pack** (sold separately) or a **Power Magic Pro** (sold separately). A **Power Magic Pro** powers your dashcam when the engine is off by hardwiring it to the automotive battery. A low voltage power cut-off function and a parking mode timer protect the automotive battery from discharge.

Note

- When you run the dashcam for the first time the firmware is automatically loaded onto the microSD card. After the firmware has been loaded onto the microSD card you can customize settings using BlackVue Viewer on a computer.

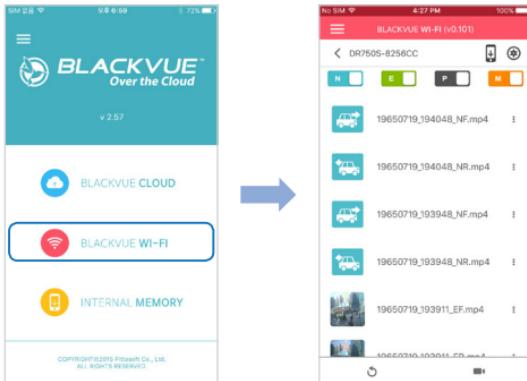
STEP 2 ➔ Playback

☐ Playing video files on your smartphone (Android/iOS)

- (A) Search for the BlackVue app in the Google Play Store or Apple App Store and install it on your smartphone.
- (B) "Pair" your smartphone with the BlackVue dashcam via direct Wi-Fi:
- Unplug the power cable and remove the front dashcam from its mount. With the connectivity details label visible, plug in the power cable and wait for the dashcam to start normal recording. Press the Wi-Fi button once to turn on Wi-Fi.
 - Go to your smartphone's **Settings** then select **Wi-Fi**, and make sure Wi-Fi is turned on.



- Choose your BlackVue dashcam from the network list. The dashcam's default SSID begins with its model number (e.g. BlackVue900S-*****).
- Enter the password and tap join.
 - The default Wi-Fi SSID, password and cloud code are printed on the dashcam's connectivity details label.
- Open the BlackVue app and select BLACKVUE WI-FI.



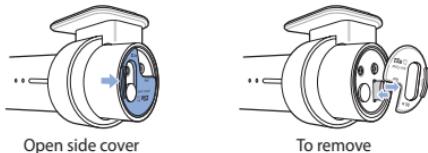
© Select the video file you want to play from the video list.

Note

- The playback of 4K UHD resolution, 'Highest' image quality and/or H.265 coded videos depends on your device's hardware and software. Older devices may not support 4K UHD, 'Highest' image quality or H.265 video playback. If you encounter issues please check your device's video playback capabilities.
- All images shown are for illustration purposes only. Actual app may differ from images shown.

Playing video files on your **computer** (Windows/Mac)

- (A) Remove the microSD card from the dashcam.

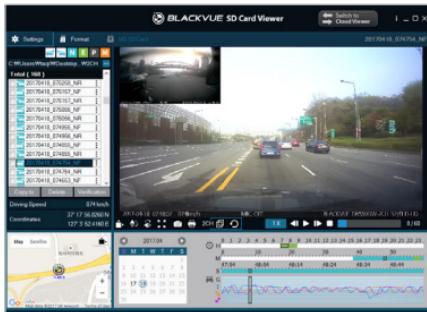


- (B) Insert the card into the microSD card reader and connect it to a computer.



- (C) Download BlackVue Viewer program from www.blackvue.com > **Support** > **Downloads** and install it on your computer.

- D Run BlackVue Viewer. To play, select a video and click on the play button or double click the selected video.



Windows Viewer



Mac Viewer

Note

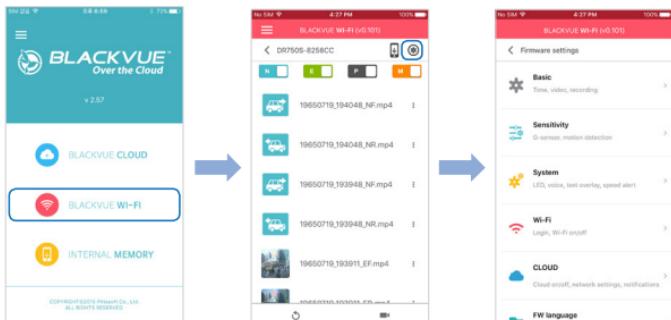
- The playback of 4K UHD resolution and/or H.265 coded videos depends on your computer's hardware and software. Older computers may not support 4K UHD or H.265 video playback. If you encounter issues please check your computer's video playback capabilities.
- All images shown are for illustration purposes only. Actual program may differ from images shown.

STEP 3 ➔ Changing dashcam's time zone, Wi-Fi password and other settings.

The dashcam's time zone is initially set to (GMT-11). To display the correct time please select your time zone.

Using your smartphone (Android/iOS)

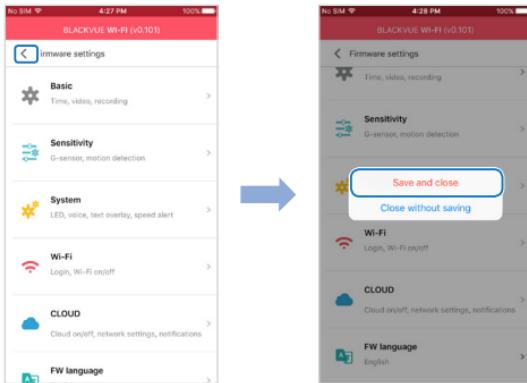
- A "Pair" your smartphone with the BlackVue dashcam via direct Wi-Fi (for details see STEP 2 'Playing video files on your smartphone')
- B Open the BlackVue app and select BLACKVUE WI-FI.
- C Tap the  button to access the Firmware settings menu.



- D (i) Select **Basic settings > Time**.
(ii) Select your time zone to auto-sync with GPS time or you can set the time and date manually after enabling **Manual time setting**.
- E Go back to the Firmware settings menu and select Wi-Fi > Login credentials, enter desired Wi-Fi SSID and password and press OK.

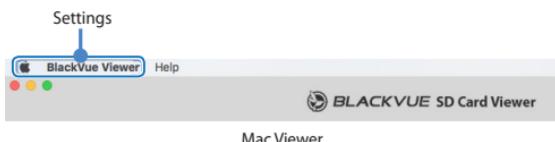
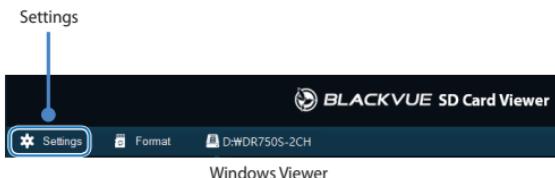
- F Go back to the Firmware settings menu and configure other desired settings. Settings that can be changed include video resolution, image quality, video segment length, sensitivity settings, voice recording on/off, speed unit (km/h, MPH, off), LEDs on/off, voice guidance volume, Cloud settings etc.

Once settings are configured, tap < and tap Save and close.



Changing the dashcam's time zone and other firmware settings on your computer (Windows/Mac)

Run BlackVue Viewer program after connecting dashcam's microSD card to your computer. Click on the  **Settings** button (Windows) or the  **BlackVue Viewer** menu (mac OS) to open the BlackVue settings panel.



Settings that can be changed include Wi-Fi password, video resolution, image quality, video segment length, sensitivity settings, voice recording on/off, speed unit (km/h, MPH, off), LEDs on/off, voice guidance volume, Cloud settings etc.

For more information about changing the settings in BlackVue Viewer, please download the manual from www.blackvue.com > Support > Downloads.

STEP 4 ➔ Connect to BLACKVUE CLOUD (optional)

If you don't have a mobile Wi-Fi hotspot, or if you don't want to use the BLACKVUE CLOUD service, you can skip this step.

If you have a mobile Wi-Fi hotspot (also known as a portable Wi-Fi router), a car-embedded wireless internet network or a Wi-Fi network near your car, you can use the BlackVue app to connect to BLACKVUE CLOUD and see in real-time where your car is and the dashcam's live video feed.

For more information about using the BlackVue app, please download the Cloud Manual from www.blackvue.com > Support > Downloads.

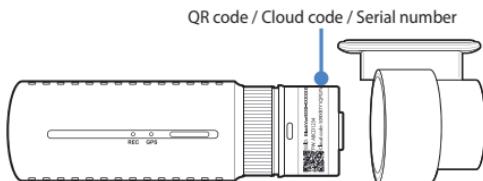
A Create an account

- (i) Open the BlackVue app.
- (ii) Tap the  button in the top-left corner and select **Create account**.
- (iii) Enter your email address and choose a password. Re-enter your password and press **Next**.
- (iv) After reading the Terms & Policies, check the boxes and press the **Create account** button to continue.
- (v) You will receive an e-mail. Click the link in the email to finish creating your account.

B Register your dashcam with your account

- (i) In the BlackVue app select **BLACKVUE CLOUD** and login to your account.
- (ii) Tap **Yes** to enable push notifications (this setting can be adjusted at any time later).
- (iii) Select **Register new camera**.
- (iv) Register your camera using one of the following methods:

QR Code: Press **Scan QR Code** and line up the QR Code on your smartphone's screen.

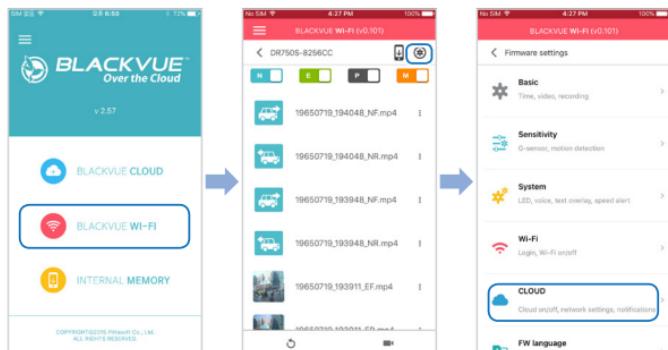


or

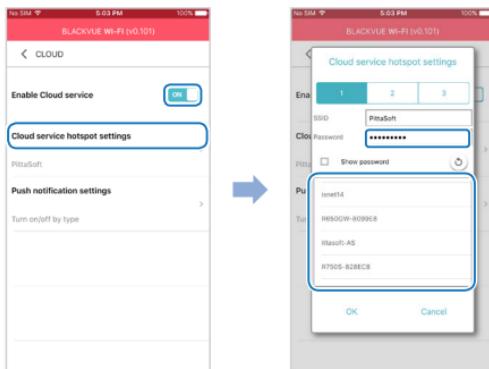
Manual registration: Enter your camera's Serial number and Cloud code and press **Register**.

(C) Connect your BlackVue dashcam to a Wi-Fi hotspot for Cloud connectivity

- Make sure your BlackVue dashcam and mobile Wi-Fi hotspot are on.
- "Pair" your smartphone with the BlackVue dashcam via direct Wi-Fi (for details see STEP 2 'Playing video files on your smartphone')
- Open the BlackVue app. Select BLACKVUE WI-FI > **CLOUD**.



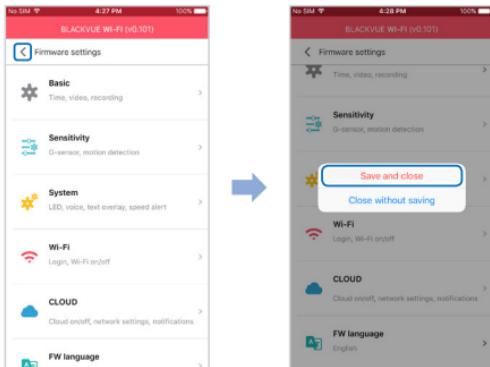
- (iv) Ensure **Enable Cloud service** is on. Select **Cloud service hotspot settings**.
- (v) Choose your Wi-Fi hotspot from the list. Enter the password and tap **OK**.



Note

- Up to 3 Wi-Fi hotspot SSIDs can be saved (e.g. home, portable hotspot and work).

(vi) Go back to the Firmware settings menu, tap  and tap **Save and close**.



After rebooting, your dashcam will automatically connect to the Wi-Fi hotspot.

Select BLACKVUE CLOUD from the main screen to access all of the Cloud features.

➤ Tips for optimal performance

- Ⓐ For stable operation of the dashcam, it is recommended to format the microSD card once a month.

On-device microSD card format:

Press and hold the Wi-Fi/Format button for 5 seconds and once voice instructions start, release the button. Then, press and hold again for 5 seconds to format the microSD card.

Format using BlackVue Viewer (Windows):

Download **BlackVue Windows Viewer** from www.blackvue.com > **Support > Downloads** and install it on your computer. Insert the microSD card into the microSD card reader and connect the reader to your computer. Launch the copy of BlackVue Viewer that is installed on your computer. Click the Format  button, select the card drive and click OK.

Format using BlackVue Viewer (Mac):

Download **BlackVue Mac Viewer** from www.blackvue.com > **Support > Downloads** and install it on your computer. Insert the microSD card into the microSD card reader and connect the reader to your computer. Launch the copy of BlackVue Viewer that is installed on your computer. Click the Format  button and select the microSD card from the list of drives in the left frame. After selecting your microSD card select the Erase tab in the main window. Select "MS-DOS (FAT)" from the Volume Format drop-down menu and click Erase.

- Ⓑ Only use official BlackVue microSD cards. Other cards may have compatibility issues.
- Ⓒ Regularly upgrade the firmware for performance improvements and updated features. Firmware updates will be made available for download at www.blackvue.com > **Support > Downloads**.

Customer Support

For customer support, manuals and firmware updates please visit www.blackvue.com

You can also email a Customer Support expert at cs@pittasoft.com

▶ Product specifications:

Model Name	DR900S-2CH
Color/Size/Weight	Front: Black / Width 118.5 mm x Height 36 mm / 91 g Rear: Black / Width 67.4 mm x Height 25 mm / 25 g
Memory	microSD Card (16 GB / 32 GB / 64 GB / 128 GB)
Recording Modes	Normal recording, Event recording (when impact is detected in normal and parking mode), Manual recording and Parking recording (when motion is detected) * For Parking mode recording, a Parking Mode Battery Pack (Power Magic Battery Pack) or a Parking Mode Hardwiring Kit (Power Magic Pro) is required.
Camera	Front: 8-Megapixel CMOS Sensor Rear: Sony STARVIS™ CMOS Sensor (Approx. 2.1 megapixels)
Viewing Angle	Front: Diagonal 162°, Horizontal 136°, Vertical 77° Rear: Diagonal 139°, Horizontal 116°, Vertical 61°
Resolution/ Frame Rate	<Front — Rear> 4K UHD (3840x2160) @30fps (Extreme) — Full HD (1920x1080) @30fps 4K UHD (3840x2160) @30fps — Full HD (1920x1080) @30fps Full HD (1920x1080) @60fps — Full HD (1920x1080) @30fps Full HD (1920x1080) @30fps — Full HD (1920x1080) @30fps * Frame rate may vary during Wi-Fi streaming.
Video Codec	H.265 (HEVC), H.264 (AVC)
Image Quality	Highest, High, Normal
Video Compression Mode	MP4
Wi-Fi	Built-in (802.11n 2.4GHz / 802.11ac 5GHz Dual band)
GPS	Built-in

* STARVIS is a trademark of Sony Corporation.

Microphone	Built-in
Speaker (Voice Guidance)	Built-in
LED Indicators	Front: Recording LED, GPS LED, Wi-Fi LED, Front Security LED Rear: Rear Security LED
Button	<p>Wi-Fi / Format button: * Press once to turn on/off Wi-Fi. * Press and hold for 5 seconds and once voice commands start, release the button. Then press once again to reset the Wi-Fi SSID and password or press and hold for 5 seconds to format the microSD card.</p> <p>Proximity sensor: Touching the proximity sensor turns on/off audio recording or triggers manual recording depending on the firmware settings.</p>
Sensor	3-Axis Acceleration Sensor
Backup Battery	Built-in super capacitor
Input Power	DC 12 V - 24 V (DC Plug:  (Ø3.5 x Ø1.35), MAX 1 A/12 V)
Power Consumption	<p>Avg. 380 mA (4.56 W at 12 V, when GPS is On and Wi-Fi is Off) Avg. 360 mA (4.32 W at 12 V, when GPS and Wi-Fi are Off)</p> <p>* Actual power consumption may vary depending on use conditions and environment.</p>
Operation Temperature	-20 °C – 70 °C (-4 °F – 158 °F)
Storage Temperature	-20 °C – 70 °C (-4 °F – 158 °F)
High Temperature Cut-Off	Approx. 75 °C (167 °F)
Certifications	Front: FCC, CE, RoHS, Telec, WEEE, IC Rear: FCC, CE, RoHS, WEEE

Software	BlackVue Viewer * Windows XP or higher and Mac Yosemite OS X (10.10) or higher
Application	BlackVue Application (Android 4.4.2 or higher, iOS 9.0 or higher)
Other Features	Adaptive Format Free File Management System

Notes



FCC ID : YCK-DR900S-2CH / HVIN : DR900S-2CH / IC : 23402-DR900S2CH

Product | Car Dashcam

Model Name | DR900S-2CH

Manufacturer | Pittasoft Co., Ltd. / South Korea

Address | 7F, BYC HIGHCITY Building A 131, Gasan Digital 1-ro, Geumcheon-gu,
Seoul, Republic of Korea, 08506

Customer Support | cs@pittasoft.com

Product Warranty | One-Year Limited Warranty

facebook.com/BlackVueOfficial

www.blackvue.com

Made in Korea