



# **BLACKVUE™**

## **DR590X-2CH**

### **Quick Start Guide**



ENGLISH

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

# BLACKVUE

---

DR590X-2CH

For manuals, customer support and FAQs go to [www.blackvue.com](http://www.blackvue.com)

## 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 / -40°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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacture 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-DR590X-2CH**

**IC: 23402-DR590X2CH**

## CAUTION

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

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 [A] digital apparatus complies with Canadian ICES-003.

- 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 licence.

L'exploitation est autorisée aux deux conditions suivantes:

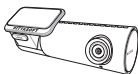
- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'encompromettre le fonctionnement.

The antenna (or antennas) must be installed so as to maintain at all times a distance minimum of at least 20 cm between the radiation source (antenna) and any individual. This device may not be installed or used in conjunction with any other antenna or transmitter.

L'antenne (ou les antennes) doit être installée de façon à maintenir tout instant une distance minimum de au moins 20 cm entre la source de radiation (l'antenne) et toute personne physique.

## In the box

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



Front camera



Rear camera



Cigarette lighter  
power cable



Rear camera  
connection cable



Quick start guide



Cable clips (5 EA)



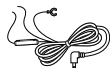
microSD Card



microSD card adapter



Double-sided tape  
for the Mounting  
Brackets



Hardwiring  
power cable  
(Optional)



External GPS - USB  
Type  
(Optional)

### Need help?

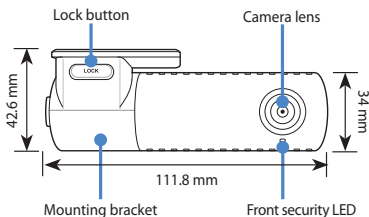
Download the manual (including FAQs) and the latest firmware from [www.blackvue.com](http://www.blackvue.com)

Or contact a Customer Support expert at [cs@pittasoft.com](mailto:cs@pittasoft.com)

## ➤ At a glance

The following diagrams explain each part of the BlackVue dashcam.

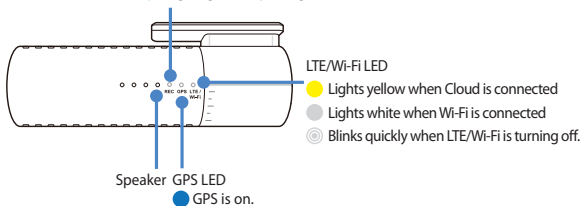
### □ Front camera



- : Lights on during (i) normal mode, (ii) an event is being recorded (impact detected), (iii) manual recording has started, or (iv) motion is detected in parking mode.
- ◻ : Blinks slowly during parking mode motion detection standby.

#### Recording LED

- : Lights orange in normal mode.
- : Lights red when (i) an event is being recorded (impact detected), or (ii) manual recording has started.
- : Lights green in parking mode when motion is detected.

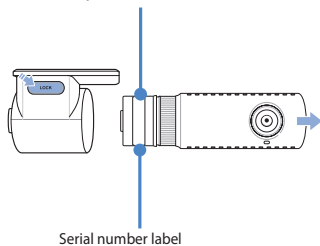


- : Lights yellow when Cloud is connected
- : Lights white when Wi-Fi is connected
- ⊙ : Blinks quickly when LTE/Wi-Fi is turning off.

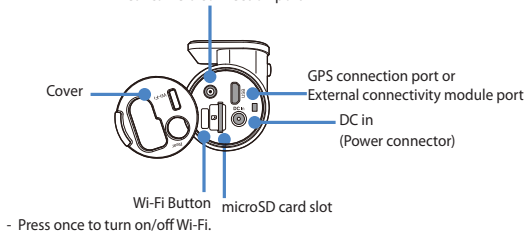


## Connectivity details label:

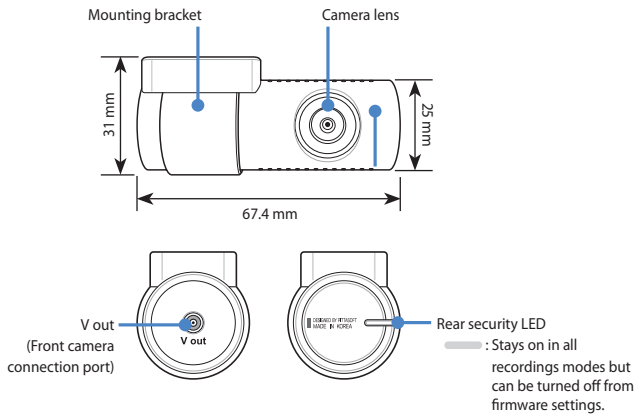
- Default Wi-Fi SSID
- Default Wi-Fi password
- Cloud code
- QR code



## Rear camera connection port



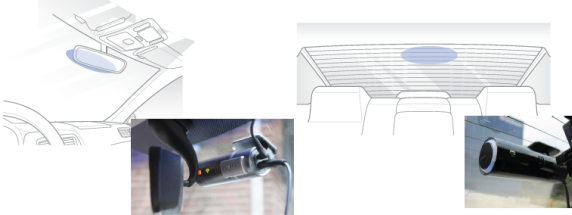
## □ Rear camera



## 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.

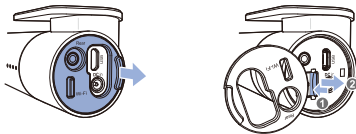
To meet the FCC's MPE regulation regarding '20cm minimum separation distance between transmitter and human body parts'; Please follow the install guide and suggested mounting location below.



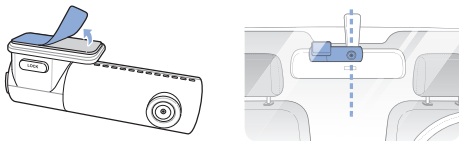
### ⚠ Warning

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

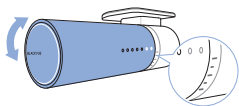
- A** Turn off the engine. Open the cover of the microSD card slot, gently push the card into the slot until it locks into place and close the cover.



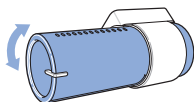
- B** Peel off the protective film from the double-sided tape and attach the front camera to the windshield behind the rear-view mirror.



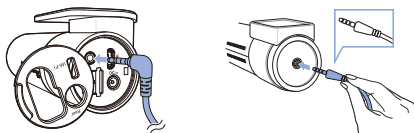
- C** Adjust the angle of the lens by rotating the body of the front camera. We recommend pointing the lens slightly downwards ( $\approx 10^\circ$  below horizontal), so as to record video with a 6:4 road to background ratio.



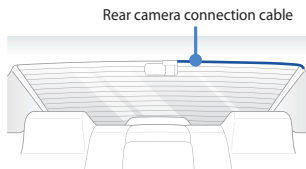
- D** Peel off the protective film from the double-sided tape and attach the rear camera to the rear windshield. Adjust the angle of the lens by rotating the body of the rear camera.



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



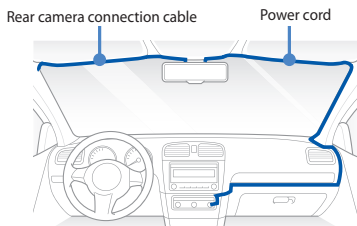
- F** Use the pry tool to lift the edges of the rubber window sealing and molding and tuck in the rear camera connection cable.



- G** GPS receiver or connectivity module (Optional):  
Plug in the GPS receiver or connectivity module and attach it in a corner of the windshield. Use the pry tool to tuck in the cable.



- H** Plug the cigarette lighter power cable into the cigarette lighter socket and the front camera. Skip to **L** for Hardwiring Power Cable setup.
- I** Use the pry tool to lift the edges of the windshield trim/molding and tuck in the power cord.



- J** Turn on the engine. The BlackVue dashcam will power up and start recording. Video files are stored on the microSD card.

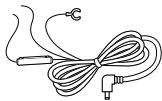
**K** Turn off the engine. The dashcam will automatically stop recording and power down. To record in parking mode while the engine is off please connect the Hardwiring Power Cable (Optional) or install a **Power Magic Battery Pack** (sold separately). A **Hardwiring Power Cable** (Optional) uses the automotive battery to power your dashcam when the engine is off. A low voltage power cut-off function and a parking mode timer to protect the automotive battery from discharge is installed in the device. Settings can be changed in the BlackVue App or Viewer.

**L** Locate the fuse box to connect the hardwiring power cable.

 **Note**

- Location of the fuse box differ by manufacturer or model. For details, refer to the vehicle owner's manual.

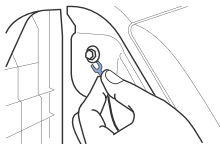
**L-1** After removing fuse panel cover, find a fuse that powers on when engine is turned on(ex.cigarette lighter socket, audio, etc) and another fuse that remains powered on after the engine is turned off (ex.hazard light, interior light). Connect the ACC+ cable to a fuse that powers on after engine start, and BATT+ cable to a fuse that remains powered on after engine is turned off.



 **Note**

- To use battery saver feature, connect the BATT+ cable to the hazard light fuse. Functions of fuse differ by manufacturer or model. For details refer to the vehicle owner's manual.

- L-2** Connect the GND cable to metal ground bolt.



- M** Connect the power cable to the DC in terminal of the front camera. BlackVue will power up and start recording. Video files are stored on the microSD card.

 **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)

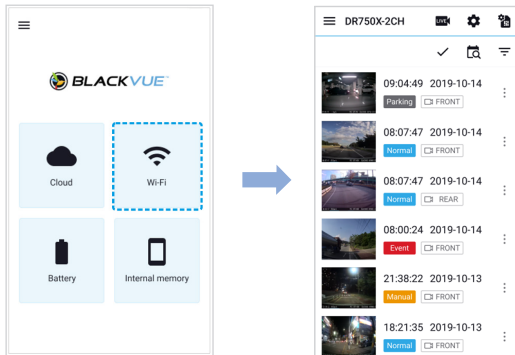
- A Search for the BlackVue app in the Google Play Store or Apple App Store and install it on your smartphone.
- B "Pair" your smartphone with the BlackVue dashcam via direct Wi-Fi:
  - (i) Press the Wi-Fi button once to turn on Wi-Fi.
  - (ii) Go to your smartphone's **Settings** then select **Wi-Fi**, and make sure Wi-Fi is turned on.



- (iii) Choose your BlackVue dashcam from the network list. The dashcam's default SSID begins with its model number (e.g. BlackVue590X-\*\*\*\*\*).
- (iv) Enter the password and tap join.
  - \* To find the default Wi-Fi password, unplug the cables and remove the front camera from its mount. The default Wi-Fi SSID, password and cloud code are printed on the dashcam's connectivity details label.



- (v) Open the BlackVue app and select WI-FI.



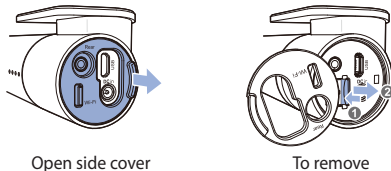
- Ⓒ Select the video file you want to play from the video list.

 **Note**

- Direct Wi-Fi lets you connect your smartphone to your dashcam via Wi-Fi within a range of 10m.
- All image shown are for illustration purposes only. Actual App may differ from images shown.

□ **Playing video files on your computer (Windows/macOS)**

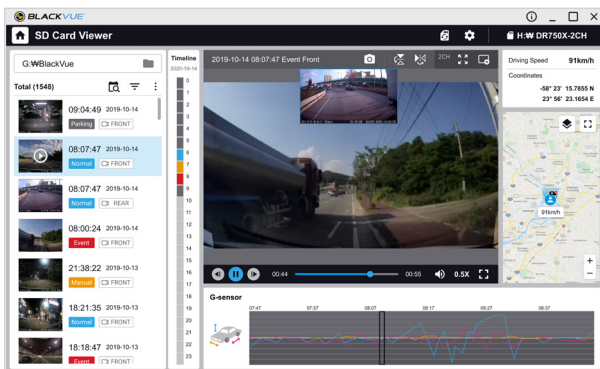
- Ⓐ Remove the microSD card from the dashcam.



- Ⓑ Use the included microSD card adapter to connect the card to a computer.



- Ⓒ Download BlackVue Viewer program from [www.blackvue.com](http://www.blackvue.com) > **Support** > **Downloads** and install it on your computer.
- Ⓓ Run BlackVue Viewer. To play, select a video and click on the play button or double click the selected video.



Windows/macOS Viewer


**Note**

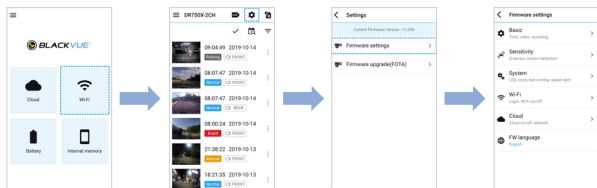
- All images shown are for illustration purpose only. Actual program may differ from images shown.

### 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.

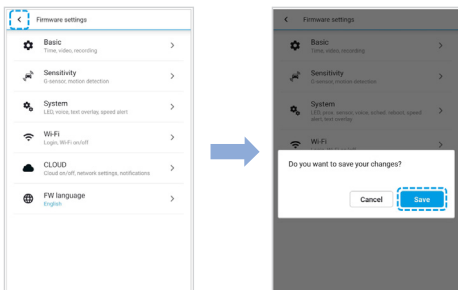
#### □ Using your smartphone (Android/iOS)

- 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 Wi-Fi.
- C Tap the  button to access the Firmware settings menu.



- D (i) Select **Firmware settings > Basic > Time**.
- (ii) If you run the dashcam with the GPS receiver or CM100GLTE-M connected, select your time zone to auto-sync with GPS time. If you do not connect the GPS receiver or CM100GLTE-M you can set the time and date manually after enabling **Manual time setting**.

- E** Go back to the Firmware settings menu and configure other desired settings. Settings that can be changed include Wi-Fi SSID & password, image quality, 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.



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

- Ⓐ Run BlackVue Viewer program after connecting dashcam's microSD card to your computer. Click on the ⚙️ button to open the BlackVue settings panel.



Settings that can be changed include Wi-Fi SSID & password, image quality, 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](http://www.blackvue.com) > **Support** > **Downloads**.

Ⓑ Time zone setting

**If you do not connect the GPS receiver or CM100GLTE-M:**

To manually set the time select Manual time setting and set your date and time.

**If you connect the GPS receiver or CM100GLTE-M:**

If you run the dashcam with the GPS receiver or CM100GLTE-M connected, it is possible to sync with GPS time. To sync with GPS time, select your GMT time zone. The factory setting is GMT -11.

If you are unsure of your GMT offset please look up your city on

<https://greenwichmeantime.com/>

## STEP 4 Connect to BLACKVUE CLOUD (optional)

If you don't have a Blackvue connectivity module or if you don't want to use the BLACKVUE CLOUD Lite Service, you can skip this step.

If you have a BlackVue connectivity module (CM100GLTE-M), you can use the BlackVue app to connect to BLACKVUE CLOUD Lite Service and see in real-time where your car is and the dashcam's live image feed.

For more information about using the BlackVue app, please download the Cloud Lite Manual from [www.blackvue.com](http://www.blackvue.com) > **Support** > **Downloads**.

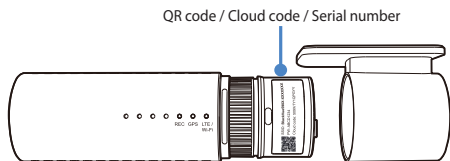
### A Create an account

- (i) Open the BlackVue app.
- (ii) Tap the ☰ button in the top-left corner and select **Create account**.
- (iii) Enter your name, e-mail address and choose a password. Re-enter your password and press **Sign up**.
- (iv) 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 **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

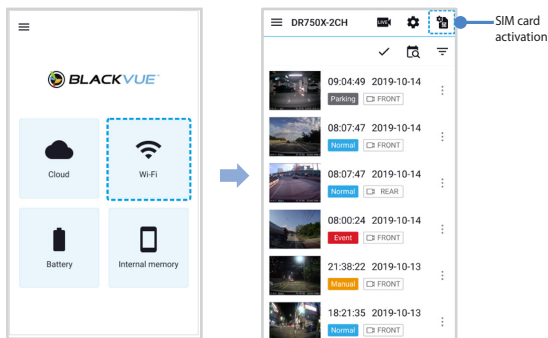
**Manual registration:** Enter your camera's Serial number and Cloud code and press **Register**.

### **Ⓒ Connect your BlackVue dashcam to Cloud connectivity (Using CM100GLTE-M)**

Make sure your BlackVue dashcam and connectivity module is connected. Then, follow the below steps for SIM registration.

- (i) Locate the SIM card slot. Unscrew the bolt from SIM slot cover. Then, unmount the SIM slot by using a SIM eject tool. Insert SIM in the SIM slot. Mount the SIM slot back in the connectivity module, then, screw the bolt to hold SIM slot cover.
- (ii) "Pair" your smartphone with the BlackVue dashcam via direct Wi-Fi.
- (iii) Open the BlackVue app and select WI-FI > .





- (iv) Configure the APN settings to activate the SIM card. For detailed information, please check "SIM activation guide" in the packaging box or visit BlackVue Help Center: [www.helpcenter.blackvue.com](http://www.helpcenter.blackvue.com) -> **LTE connectivity guide**.
- (v) Once your dashcam is connected to the internet, you can go to the CLOUD menu to use BlackVue Cloud Lite Service features.


### Note

- For full details, refer to the "SIM activation guide" that is included in the CM100GLTE-M package.
- To use the BlackVue Cloud Lite Service, SIM card must be properly activated for Internet access via LTE-M network.
- When the dashcam is connected to internet, you can use BlackVue Cloud Lite Service features such as Real-time location, push notification on BlackVue app and PC Viewer.
- Some Cloud features may not work when surrounding temperature is high or/and LTE-M (Cat.M1) speed is slow.
- At the end of your free trial period, you must subscribe to a payment plan.
- For more information about using the BlackVue app, please download the Cloud Manual from [www.blackvue.com](http://www.blackvue.com) > **Support** > **Downloads**.


## ➤ Tips for optimal performance

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

### Format using BlackVue Viewer (Windows):

Download **BlackVue Windows Viewer** from [www.blackvue.com](http://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 (macOS):

Download **BlackVue Mac Viewer** from [www.blackvue.com](http://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](http://www.blackvue.com) > **Support** > **Downloads**.

### Customer Support

For customer support, manuals and firmware updates please visit [www.blackvue.com](http://www.blackvue.com)  
You can also email a Customer Support expert at [cs@pittasoft.com](mailto:cs@pittasoft.com)

## Product specifications:

<b>Model Name</b>	DR590X-2CH
<b>Color/Size/Weight</b>	Front: Black / Width 111.8 mm x Height 34 mm / 105 g Rear: Black / Width 67.4 mm x Height 25 mm / 21 g
<b>Memory</b>	microSD Card (32 GB / 64 GB / 128 GB / 256 GB)
<b>Recording Modes</b>	Normal recording, Event recording (when impact is detected in normal and parking mode), Manual recording and Parking recording (when motion is detected) * When using Hardwiring Power Cable, ACC+ will trigger parking mode. When using other methods, G-sensor will trigger parking mode.
<b>Camera</b>	Front: STARVIS™ CMOS Sensor (Approx. 2.1 M Pixel) Rear: CMOS Sensor (Approx. 2M Pixel)
<b>Viewing Angle</b>	Front: Diagonal 139°, Horizontal 116°, Vertical 61° Rear: Diagonal 140, Horizontal 115, Vertical 60
<b>Resolution/ Frame Rate</b>	<Front - Rear> Full HD @30fps - Full HD @30fps * Frame rate may vary during Wi-Fi streaming.
<b>Image Quality</b>	Highest, High, Normal
<b>Video Compression Mode</b>	MP4
<b>Wi-Fi</b>	Built-in (802.11 b,g,n)
<b>GPS</b>	External (Optional - Dual Band : GPS, GLONASS)
<b>LTE</b>	External (Optional - Cat.M1)
<b>Microphone</b>	Built-in

<b>Speaker (Voice Guidance)</b>	Built-in
<b>LED Indicators</b>	Front: Recording LED, GPS LED, LTE/Wi-Fi LED, Front Security LED, Rear: Rear Security LED
<b>Button</b>	Wi-Fi button: * Press once to turn on/off Wi-Fi.
<b>Sensor</b>	3-Axis Acceleration Sensor
<b>Backup Battery</b>	Built-in super capacitor
<b>Input Power</b>	DC 12V-24V (DC Plug (Ø3.5 x Ø1.1)) to Wires (Black: GND / Yellow: B+ / Red: ACC)
<b>Power Consumption</b>	Normal Mode (WiFi On / GPS On / 2CH) : 370mA / hour Normal Mode (WiFi Off / GPS On / 2CH) : 330mA / hour Parking Mode (WiFi On / GPS Off / 2CH) : 340mA / hour Parking Mode (WiFi Off / GPS Off / 2CH) : 300mA / hour  When connected to CM100GLTE-M (Optional) Normal Mode (WiFi On / GPS On / 2CH) : 430mA / hour Normal Mode (WiFi Off / GPS On / 2CH) : 400mA / hour Parking Mode (WiFi On / GPS Off / 2CH) : 400mA / hour Parking Mode (WiFi Off / GPS Off / 2CH) : 370mA / hour * Actual power consumption may vary depending on use conditions and environment.
<b>Operation Temperature</b>	-20 °C – 70 °C (-4 °F – 158 °F)
<b>Storage Temperature</b>	-20 °C – 80 °C (-4 °F – 176 °F)
<b>High Temperature Cut-Off</b>	Approx. 80 °C (176 °F)

<b>Certifications</b>	Front: FCC, CE, RoHS, Teleg, WEEE, IC Rear: FCC, CE, RoHS, WEEE
<b>Software</b>	BlackVue Viewer * Windows 7 or higher and Mac Yosemite OS X (10.10) or higher
<b>Application</b>	BlackVue Application (Android 5.0 or higher, iOS 9.0 or higher)
<b>Others</b>	Adaptive Format Free File Management System

\* STARVIS is a trademark of Sony Corporation.

# Product Warranty

- The term of this product warranty is 1 year from the purchase date. (Accessories such as an External Battery/ microSD Card: 6 Months)
- We, PittoSoft Co., Ltd., provide the product warranty according to the Consumer Dispute Settlement Regulations (drawn up by the Fair Trade Commission). PittoSoft or designated partners will provide the warranty service upon request.

Circumstances		Warranty		
		Within the Term	Outside of the Term	
For performance/ functional problems under normal use conditions	For serious repair required within 10 days of purchase	Exchange/ Refund	N/A	
	For serious repair required within 1 month of purchase	Exchange		
	For serious repair required within 1 month of exchange	Exchange/ Refund		
	When not exchangeable	Refund		
	Repair (If Available)	For Defect	Free Repair	Paid Repair/ Paid Product Exchange
		Repeated problem with the same defect (up to 3 times)	Exchange/ Refund	
		Repeated trouble with different parts (up to 5 times)		
	Repair (If Unavailable)	For the loss of a product while being serviced/repaired	Exchange/ Refund	Refund after depreciation plus an additional 10% (Maximum: purchase price)
		When repair is unavailable due to lack of spare parts within the component holding period		Exchange/ Refund after depreciation
		When repair is unavailable even when spare parts are available		
1) Malfunction due to customer fault <ul style="list-style-type: none"> <li>Malfunction &amp; damage caused by user negligence (fall, shock, damage, unreasonable operation, etc.) or careless use</li> <li>Malfunction &amp; damage after being serviced/repaired by an unauthorized third party, and not through PittoSoft's Authorized Service Center.</li> <li>Malfunction &amp; damage due to the use of unauthorized components, consumables, or separately sold parts</li> </ul>		Paid Repair	Paid Repair	
2) Other Cases <ul style="list-style-type: none"> <li>Malfunction due to natural disasters (fire, flood, earthquake, etc.)</li> <li>Expired life span of a consumable part</li> <li>Malfunction due to external reasons</li> </ul>				

- This warranty is only valid in the country where you purchased the product.

## Notes

## Notes



## Notes

## Notes

## Notes



**FCC ID: YCK-DR590X-2CH / HVIN : DR590X-2CH**

**IC: 23402-DR590X2CH / HVIN : DR590X-2CH**

<b>Product</b>	Car Dashcam
<b>Model Name</b>	DR590X-2CH
<b>Manufacturer</b>	Pittasoft Co., Ltd. / South Korea
<b>Headquarter</b>	Pittasoft 4F, 331, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea, 13488
<b>Service Center</b>	7F, BYC HIGHCITY Building A 131, Gasan Digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea, 08506
<b>Customer Support</b>	cs@pittasoft.com
<b>Product Warranty</b>	One-Year Limited Warranty

 [facebook.com/BlackVueOfficial](https://facebook.com/BlackVueOfficial)

 [instagram.com/BlackVueofficial](https://instagram.com/BlackVueofficial)

[www.blackvue.com](https://www.blackvue.com)

Made in Korea