



ENGLISH

www.blackvue.com

BLACKVUE

DR900X-2CH

For manuals, customer support and FAQs go to 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 / $-4^{\circ}F$ 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.

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-DR900X-2CH

IC: 23402-DR900X2CH

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



- 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.
- The correct disposal of your BlackVue dashcam will help prevent potential negative consequences for the environment and human health.
- 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

his 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 appreils radio exempts de license.

L'exploitation est autoriséee 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, méme 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 tre install e de fa on 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	\Box	Quick start guide
	Cigarette lighter power cable		Hardwiring power cable
	Double-sided tape for the Mounting Brackets	DDDD DDDDD	Cable clips (8 EA)
- 220	microSD Card	10 NO	microSD card reader
	Rear camera		Rear camera connection cable
	Pry tool		

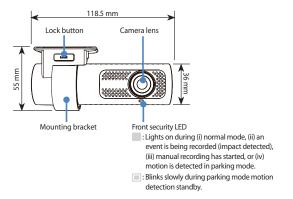
Need help?

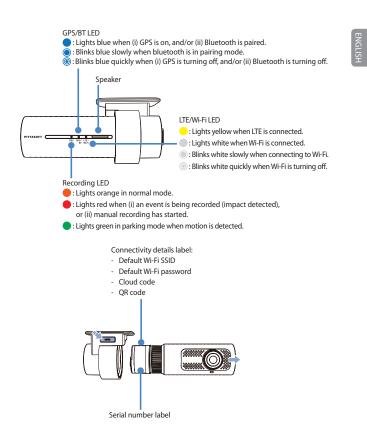
Download the manual (including FAQs) and the latest firmware from <u>www.blackvue.com</u> Or contact a Customer Support expert at <u>cs@pittasoft.com</u> NGLISH

At a glance

The following diagrams explain each part of the BlackVue dashcam.

Front camera





DR900X-2CH 8

Proximity Sensor LED

Lights when proximity sensor is triggered.

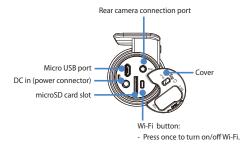


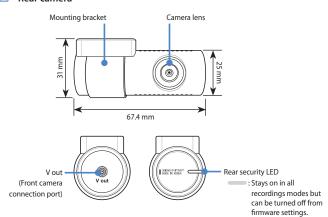
Proximity Sensor:

Touch or wave a finger within 20mm of the sensor to trigger a customizable function.

Available options:

- Turn on/off audio recording (default)
- Manual recording trigger
- Off





Rear camera

ENGLISH

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 seperation 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.

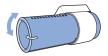


C Adjust the angle of the lens by rotating the body of the front camera. We recommend pointing the lens slightly downwards (≈10° below horizontal), so as to record video with a 6:4 road to background ratio.

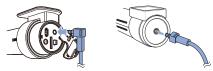




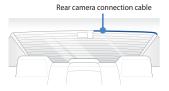
Peel off the protective film from the double-sided tape and attach the rear camera to the rear windshield. Adjust the angle of the lens by rotating the body of the rear camera.



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

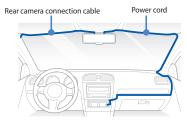


Use the pry tool to lift the edges of the rubber window sealing and molding and tuck in the rear camera connection cable.



DR900X-2CH 12

- G Connectivity Module (Optional): Connect the connectivity module to the front camera and attach it to the edge of the window. Use the pry tool to tuck in the cable.
- \bigcirc Plug the cigarette lighter power cable into the cigarette lighter socket and the front camera. Skip to \bigcirc for Hardwiring Power Cable setup.
- 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.
- 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 (included in the box) or install a Power Magic Battery Pack (sold separately). A Hardwiring Power Cable 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.
 -) 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.

 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.







- 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.
- .)-② Connect the GND cable to metal ground bolt.



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.



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)
- 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:
 - Go to your smartphone's Settings then select Wi-Fi, and make sure Wi-Fi is turned on.

∞ SKT ♥	10104	9256	••••• SKT LTE 21:38 Settings	♥ 29% ■
	23 🏀 🛍		Settings	
	Calendar Photos Can		Airplane Mode	
		>>		$\overline{\mathcal{Q}}$
	Clock Maps Vid		🛜 Wi-Fi	Off >
ſ		\$	Bluetooth	Off >
1	Notes		Cellular	
		a	Personal Hotspot	Off >
		2	Carrier	SKTelecom >
	Aco Store		_	
	Contraction		Notifications	
			Control Center	
			C Do Not Disturb	
ł	0. • •		-	
			General	
	Saferi Mei Mu	als	🔼 Display & Brightness	

- (ii) Choose your BlackVue dashcam from the network list. The dashcam's default SSID begins with its model number (e.g. BlackVue900X-******).
- (iii) 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.

INGLISH

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



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

📝 Note

(C)

- 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.
- Direct Wi-Fi lets you connect your smartphone to your dashcam via Wi-Fi within a range of 10m.
- For quick playback and download of the recordings, you can select the "Quick play file" option from App settings.
- All image shown are for illustration purposes only. Actual App may differ from images shown.

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

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 <u>www.blackvue.com</u> > Support > Downloads and install it on your computer.

INGLISH

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



Windows/macOS 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 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.



- (i) Select Firmware settings > Basic > Time.
- Select your time zone to auto-sync with GPS time or you can set the time and date manually after enabling Manual time setting.

ENGLISH

(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 \checkmark 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 <u>www.blackvue.com</u> > **Support** > **Downloads**.

ENGLISH

STEP 4 Connect to BLACKVUE CLOUD (optional)

If you don't have a mobile Wi-Fi hotspot, Blackvue connectivity module 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), BlackVue connectivity module (CM100LTE), 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 <u>www.blackvue.com</u> > **Support** > **Downloads**.

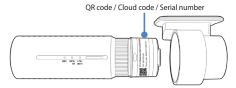
Create an account

- (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.

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

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

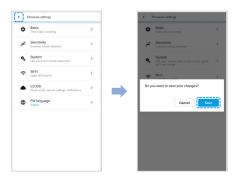


- (iv) Ensure Enable Cloud service is on. Select Cloud service hotspot settings.
- (v) Choose your Wi-Fi hotspot from the list. Enter the password and tap OK.

Enable Cloud service			ervice hotspot s	
Cloud service hotspot settings SSID/Password setting		1 SSID	2	3
Park and facilities and inge have could argue	-	Wifi list iptime Androi iptime	w password	С

V 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**.



After rebooting, your dashcam will automatically establish internet connection. If internet connection was not established, please ensure Wi-Fi information was inserted correctly.

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

🗐 Note

 If LTE and Wi-Fi hotspot is available for internet connection, Wi-Fi hotspot will be in priority. If LTE connection is preferred at all times, please remove Wi-Fi hotspot information.

D Connect your BlackVue dashcam to Cloud connectivity (Using CM100LTE)

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: <u>www.helpcenter.blackvue.com</u> -> LTE connectivity guide.
- (v) Once your dashcam is connected to the internet, you can go to the CLOUD menu to use BlackVue Cloud features.

🖌 Note

- For full details, refer to the "SIM activation guide" that is included in the CM100LTE package.
- To use the BlackVue Cloud Service, SIM card must be properly activated for Internet access via LTE network.
- When the dashcam is connected to internet, you can use BlackVue Cloud features such as remote Live View and Video playback, Real-time location, push notification, Auto-upload, remote Firmware update etc. on BlackVue app and PC Viewer.
- Some Cloud features may not work when surrounding temperature is high or/ and LTE speed is slow.
- For more information about using the BlackVue app, please download the Cloud Manual from <u>www.blackvue.com</u> > **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 <u>www.blackvue.com</u> > **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 <u>www.blackvue.com</u> > **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 <u>www.blackvue.com</u> > Support > Downloads.

Customer Support

For customer support, manuals and firmware updates please visit <u>www.blackvue.com</u> You can also email a Customer Support expert at <u>cs@pittasoft.com</u>

Product specifications:

DR900X-2CH		
Front: Black / Width 118.5 mm x Height 36 mm / 106 g Rear: Black / Width 67.4 mm x Height 25 mm / 25 g		
microSD Card (32 GB / 64 GB / 128 GB / 256 GB)		
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.		
Front: 8-Megapixel CMOS Sensor Rear: STARVIS™ CMOS Sensor (Approx. 2.1 M Pixel)		
Front: Diagonal 162°, Horizontal 136°, Vertical 77° Rear: Diagonal 139°, Horizontal 116°, Vertical 61°		
<front -="" rear=""> 4K UHD (3840x2140) @30fps - Full HD (1920x1080) @30fps * Frame rate may vary during Wi-Fi streaming.</front>		
H.265 (HEVC), H.264 (AVC)		
Highest (Extreme), Highest, High, Normal		
MP4		
Built-in (802.11 a.b.g.n.ac)		
Built-in (Dual Band : GPS, GLONASS)		
Built-in (V2.1+EDR/4.2)		
External		

ENGLISH

Microphone	Built-in	
Speaker (Voice Guidance)	Built-in	
LED Indicators	Front: Recording LED, GPS/BT LED, LTE/Wi-Fi LED, Front Security LED, Proximity Sensing indicator LED Rear: Rear Security LED	
Button	Wi-Fi button: * Press once to turn on/off Wi-Fi. Proximity sensor: Touching the proximity sensor turns on/off audio recording or triggers manual recording depending on the firmware settings.	
Sensor	3-Axis Acceleration Sensor	
Backup Battery	Built-in super capacitor	
Input Power	DC 12V-24V (DC Plug (Ø3.5 x Ø1.1)) to Wires (Black: GND / Yellow: B+ / Red: ACC)	
Power Consumption	Normal Mode (WiFi On / GPS On / 2CH) : 450mA / hour Normal Mode (WiFi Off / GPS On / 2CH) : 410mA / hour Parking Mode (WiFi On / GPS Off / 2CH) : 365mA / hour Parking Mode (WiFi Off / GPS Off / 2CH) : 325mA / hour * Actual power consumption may vary depending on use conditions and environment.	
Operation Temperature	-20 °C – 70 °C (-4 °F – 158 °F)	
Storage Temperature	-20 °C – 90 °C (-4 °F – 194 °F)	
High Temperature Cut-Off	Approx. 75 °C (167 °F)	

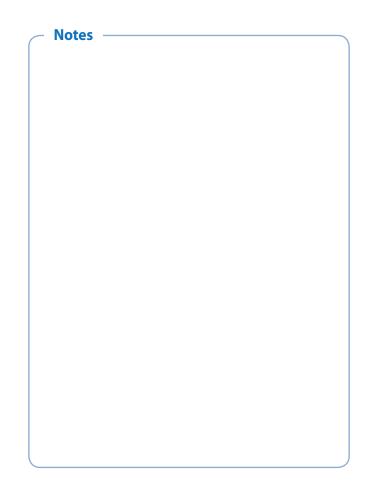
Certifications	Front: FCC, CE, RoHS, Telec, WEEE, IC Rear: FCC, CE, RoHS, WEEE	ENGLISH
Software	BlackVue Viewer * Windows 7 or higher and Mac Yosemite OS X (10.10) or higher	
Application	Application BlackVue Application (Android 5.0 or higher, iOS 9.0 or higher)	
Others	Adaptive Format Free File Management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

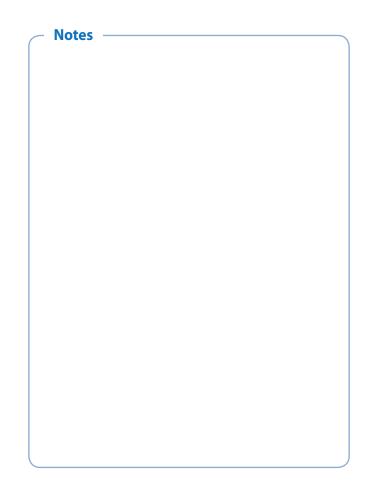
Product Warranty

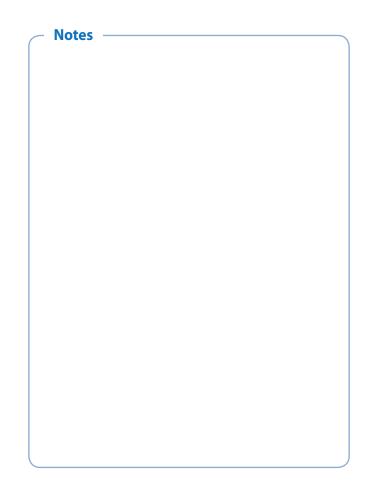
- The term of this product warranty is 1 year from the purchase date. (Accessories such as an External Battery/ microSD Card: 6 Months)
- We, PittaSoft Co., Ltd., provide the product warranty according to the Consumer Dispute Settlement Regulations (drawn up by the Fair Trade Commission). PittaSoft or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

Circumstances			Warranty		
			Within the Term	Outside of the Term	
	For serious repair required within 10 days of purchase		Exchange/ Refund		
	For serious repair purchase	required within 1 month of	Exchange	N/A	
	For serious repair exchange	required within 1 month of	Exchange/ Refund		
	When not exchan	geable	Refund		
For performance/		For Defect	Free Repair	Paid Repair/ Paid Product Exchange	
for performance functional problems under normal use conditions	Repair (If Available)	Repeated problem with the same defect (up to 3 times)			
		Repeated trouble with different parts (up to 5 times)	Exchange/		
	Repair (If Unavailable)	For the loss of a product while being serviced/repaired		Refund after depreciation	
		When repair is unavailable due to lack of spare parts within the component holding period	Refund	plus an additional 10% (Maximum: purchase price)	
		When repair is unavailable even when spare parts are available		Exchange/ Refund after depreciation	
damage, unre - Malfunctior unauthorize Service Cente - Malfunction & consumables, 2) Other Cases - Malfunction c - Expired life sp	& damage caused asonable operation, a & damage after d third party, and r r. & damage due to the or separately sold p	ers (fire, flood, earthquake, etc.) part	Paid Repair	Paid Repair	

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









C E FC 🗳 🖉 😂

FCC ID: YCK-DR900X-2CH / HVIN : DR900X-2CH

Product	I	Car Dashcam	
Model Name	I	DR900X-2CH	
Manufacturer	I	Pittasoft Co., Ltd. / South Korea	
Headquarter	I	Pittasoft 4F, 331, Pangyo-ro, Bundang-gu, Seongnam-si,	
		Gyeonggi-do, Republic of Korea, 13488	
Service Center	I	7F, BYC HIGHCITY Building A 131, Gasan Digital 1-ro, Geumcheon-gu,	
		Seoul, Republic of Korea, 08506	
Customer Support	I	cs@pittasoft.com	
Product Warranty	I	One-Year Limited Warranty	
f facebook.com/BlackVueOfficial			
instagram.com/BlackVueofficial			
www.blackvue.com			

Made in Korea

COPYRIGHT©2020 Pittasoft Co., Ltd. All rights reserved.