BLACKVUE™

DR590-2CH IR
DR590W-2CH IR
User Guide

Infrared Interior Camera

www.blackvue.com

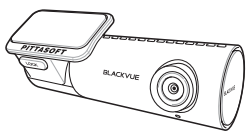
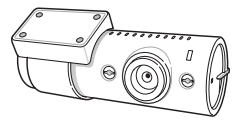
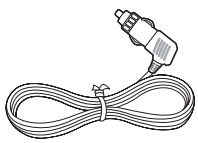
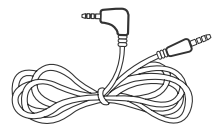
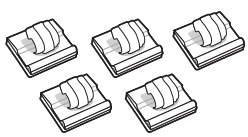
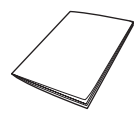
BLACKVUE

DR590-2CH IR
DR590W-2CH IR

For manuals, customer support and FAQs go to www.blackvue.com

In the box

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

	Front camera		Infrared Interior/ Rear camera
	Power cord		Rear camera connection cable
	microSD card adapter		microSD Card
	Cable clips (5 EA)		User guide
	External GPS (Optional)		

Need help?

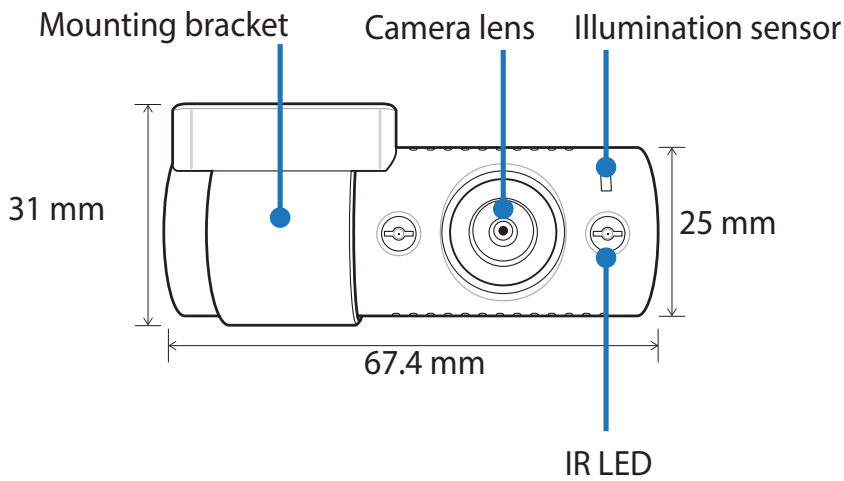
Download the manual (including FAQs) and the latest firmware from **www.blackvue.com**

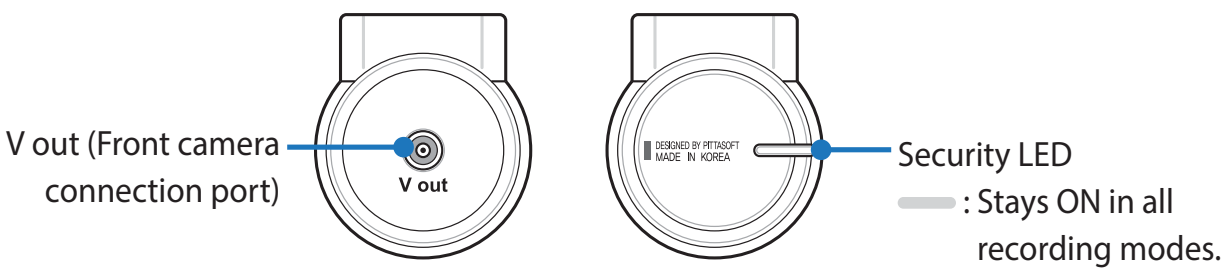
Or contact a Customer Support expert at **cs@pittasoft.com**

The DR590-2CH IR and DR590W-2CH IR models use the same firmware as the DR590-2CH and DR590W-2CH models, respectively.

At a glance

The following diagrams explain each part of the Infrared interior camera.



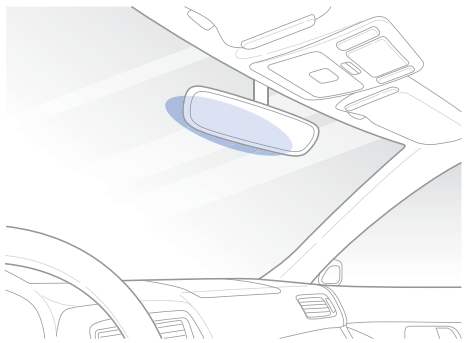


The illumination sensor detects when it is dark and activates the IR LEDs for optimal interior recording.

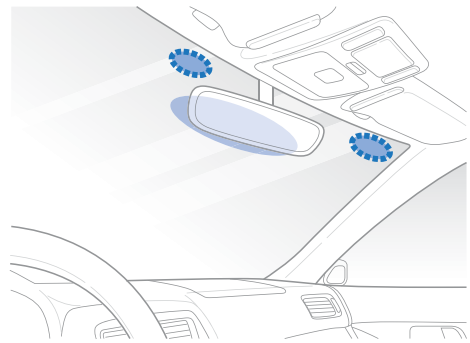
STEP 1 Install and power up

Install the front camera behind the rear view mirror. Install the Infrared interior camera at the top of the front or back windshield.

Front camera



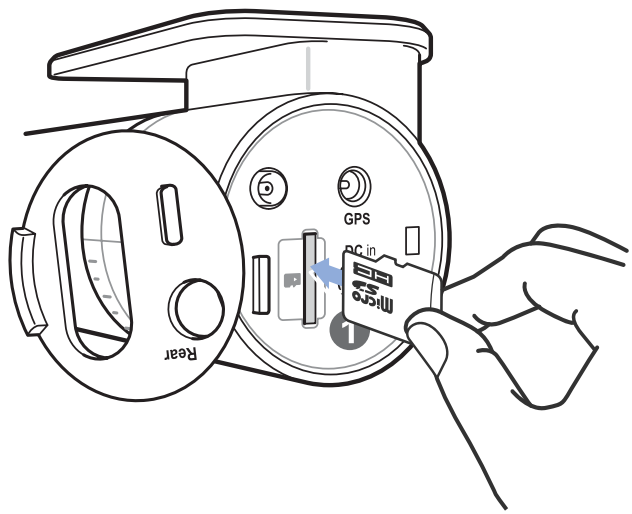
Infrared interior camera



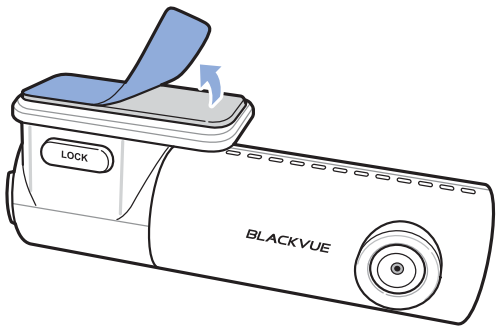
Warning

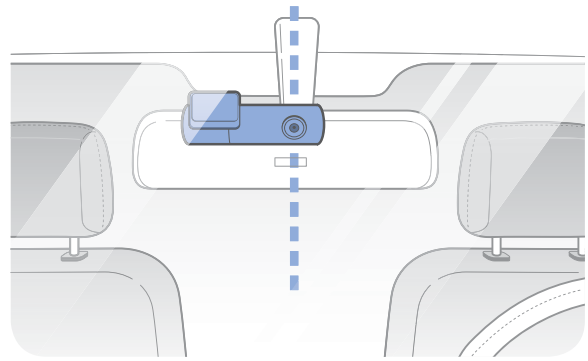
- Do not install the product in a location where it can obstruct the driver's field of vision.

Ⓐ 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.



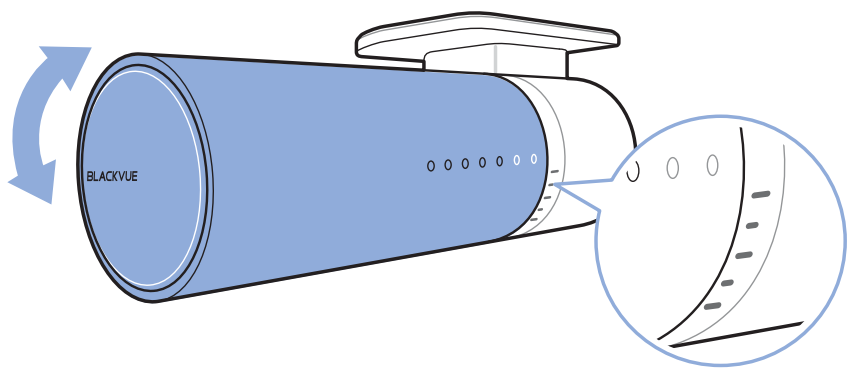
Ⓑ Peel off the protective film from the double-sided tape and attach the front camera to the windshield behind the rear-view mirror.



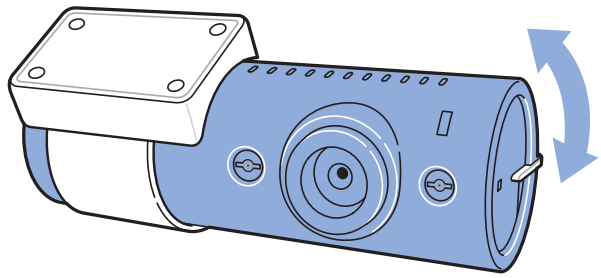


B-1 ***Optional GPS receiver***: Plug in the GPS receiver and attach it in a corner of the windshield. Tuck the cable into the windshield trim using the pry tool.

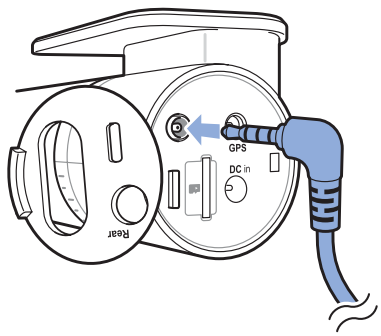
Ⓒ Adjust the angle of the lens by rotating the body of the front camera. We recommend pointing the lens slightly downwards (≈10° below horizontal), so as to record video with a 6:4 road to background ratio.

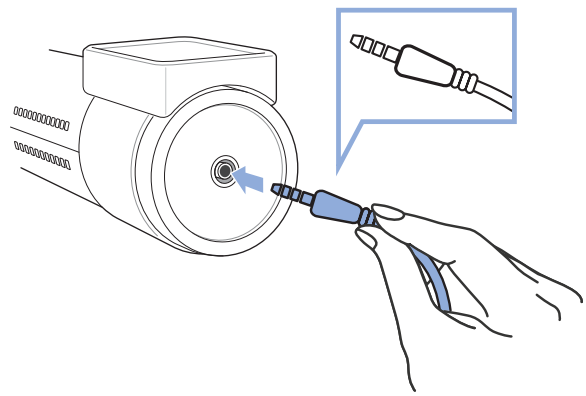


Ⓓ Peel off the protective film from the double-sided tape and attach the Infrared interior camera to the front or rear windshield. Adjust the angle of the lens by rotating the body of the camera.



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

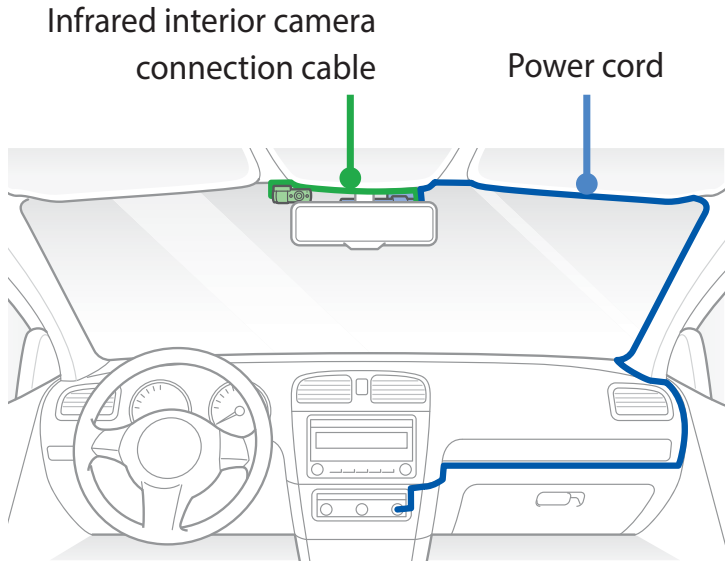




Ⓕ Use the pry tool to lift the edges of the rubber window sealing and/or molding and tuck in the rear camera connection cable.

Ⓖ Plug the power cord into the cigarette lighter socket and the front camera.

Ⓗ Use the pry tool to lift the edges of the windshield trim/molding and tuck in the power cord.



Turn on the engine. The BlackVue dashcam will power up and start recording. Video files are stored on the microSD card. When the microSD card fills up, the newest video files will start to replace the oldest video files (called **loop recording**) – so you will always have the most recent video files.

Note

- There are 3 recording modes: Normal, Event and Parking. The dashcam starts recording in normal mode, switches to event mode when an impact is detected, and switches to parking mode if the vehicle is stationary for 5 minutes. For parking mode recording, a Parking Mode Battery Pack (Power Magic Battery Pack) or a Parking Mode Hardwiring Kit (Power Magic Pro) is required.
- 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.

Product specifications

DR590-2CH IR

Model Name	DR590-2CH IR
Color/Size/Weight	Front: Black / Width 111.8 mm x Height 34 mm / 63g Rear: Black / Width 67.4 mm x Height 25 mm / 21g
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) 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: STARVIS™ CMOS Sensor (Approx. 2.1 megapixels) Rear: CMOS Sensor (Approx. 2 megapixels)
Viewing Angle	Front: Diagonal 139°, Horizontal 116°, Vertical 61° Rear: Diagonal 140°, Horizontal 115°, Vertical 60°
Resolution/Frame Rate	<Front - Rear> Full HD (1920x1080) @ 30 fps - Full HD (1920x1080) @ 30 fps Full HD (1920x1080) @ 30 fps - HD (1280x720) @ 30 fps HD (1280x720) @ 30 fps - HD (1280x720) @ 30 fps
Image Quality	Highest, High, Normal
Video Compression Mode	MP4
GPS	External (optional)
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

Wavelength of Interior camera IR light	940 nm (2 Infrared (IR) LEDs)
Button	Short press: Mic on/off Press and hold: Format microSD card
Sensors	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	Avg. 290mA (3.60W at 12V, when there is no external GPS receiver) Avg. 310mA (3.84W at 12V, when an external GPS receiver is connected) * Approx. 60mA increase in current when IR LEDs are ON. * 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 – 80°C (-4°F – 176°F)
High Temperature Cut-Off	Approx. 80°C (176°F)
Certifications	FCC, CE, RoHS
Software	BlackVue Viewer * Windows XP or higher and Mac Yosemite OS X (10.10) or higher
Other Features	Adaptive Format Free File Management System

*STARVIS is a trademark of Sony Corporation.

DR590W-2CH IR

Model Name	DR590W-2CH IR
Color/Size/Weight	Front: Black / Width 111.8 mm x Height 34 mm / 64g Rear: Black / Width 67.4 mm x Height 25 mm / 21g
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) 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: STARVIS™ CMOS Sensor (Approx. 2.1 megapixels) Rear: CMOS Sensor (Approx. 2 megapixels)
Viewing Angle	Front: Diagonal 139°, Horizontal 116°, Vertical 61° Rear: Diagonal 140°, Horizontal 115°, Vertical 60°
Resolution/Frame Rate	<Front - Rear> Full HD (1920x1080) @ 30 fps - Full HD (1920x1080) @ 30 fps Full HD (1920x1080) @ 30 fps - HD (1280x720) @ 30 fps HD (1280x720) @ 30 fps - HD (1280x720) @ 30 fps
Image Quality	Highest, High, Normal
Video Compression Mode	MP4
Wi-Fi	Built-in (802.11n (2.4 – 2.4835 GHz))
GPS	External (Optional)
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
Wavelength of Interior camera IR light	940 nm (2 Infrared (IR) LEDs)

Button	Short press: Wi-Fi on/off Press and hold: Format microSD card
Sensors	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	Avg. 300mA (3.60W at 12V, when Wi-Fi is off and no external GPS receiver is connected) Avg. 350mA (4.2W at 12V, when Wi-Fi is on and an external GPS receiver is connected) * Approx. 60mA increase in current when IR LEDs are ON. * 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 – 80°C (-4°F – 176°F)
High Temperature Cut-Off	Approx. 70°C (158°F)
Certifications	FCC, CE, RoHS, Telec, WEEE, IC
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 8.0 or higher)
Other Features	Adaptive Format Free File Management System

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The DR590-2CH IR and DR590W-2CH IR models use the same firmware as the DR590-2CH and DR590W-2CH models, respectively, and have all of the same great features. For more information about using the DR590-2CH IR or DR590W-2CH IR, please download the DR590-2CH or DR590W-2CH manual from **www.blackvue.com** > Support > Downloads.

Notes

Notes

Product | Car Dashcam

Model Name | DR590-2CH IR, DR590W-2CH IR

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

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