Manuals+ — User Manuals Simplified.

BLACKVUE DMC200 Driver Monitoring System User Guide

Contents

BLACKVUE DMC200 Driver Monitoring System

In the box (DR750X DMS Plus / DR900X DMS Plus Package)

Check the box for each of the following items before installing the BlackVue dashcam.
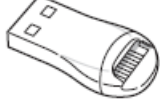
	Front camera		DMS camera
	Front camera Cigarette Lighter power cable (3p)		Front camera Hardwiring power cable (3p)
	DMS connection cable		DMS Hardwiring power cable (2p)
	microSD card		microSD card reader
	Quick start guide		Double-sided tape for the Mounting Brackets
	Pry tool		Cable clips (8 EA)

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**

In the box (For DR750X DMS LTE Plus Package)

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

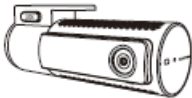|			
	Front camera		DMS camera
	Front camera Cigarette Lighter power cable (2p)		DMS Hardwiring power cable (2p)
	DMS connection cable		DMS Cigarette Lighter power cable (2p)
	Quick start guide		Pry tool
	Double-sided tape for the Mounting Brackets		Cable clips (8 EA)
	SIM eject tool		microSD card reader
	microSD card		SIM card (optional)

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 DMS camera.

Mounting bracket

Indicator LED   IR LED (Inside)   Camera lens (Inside)
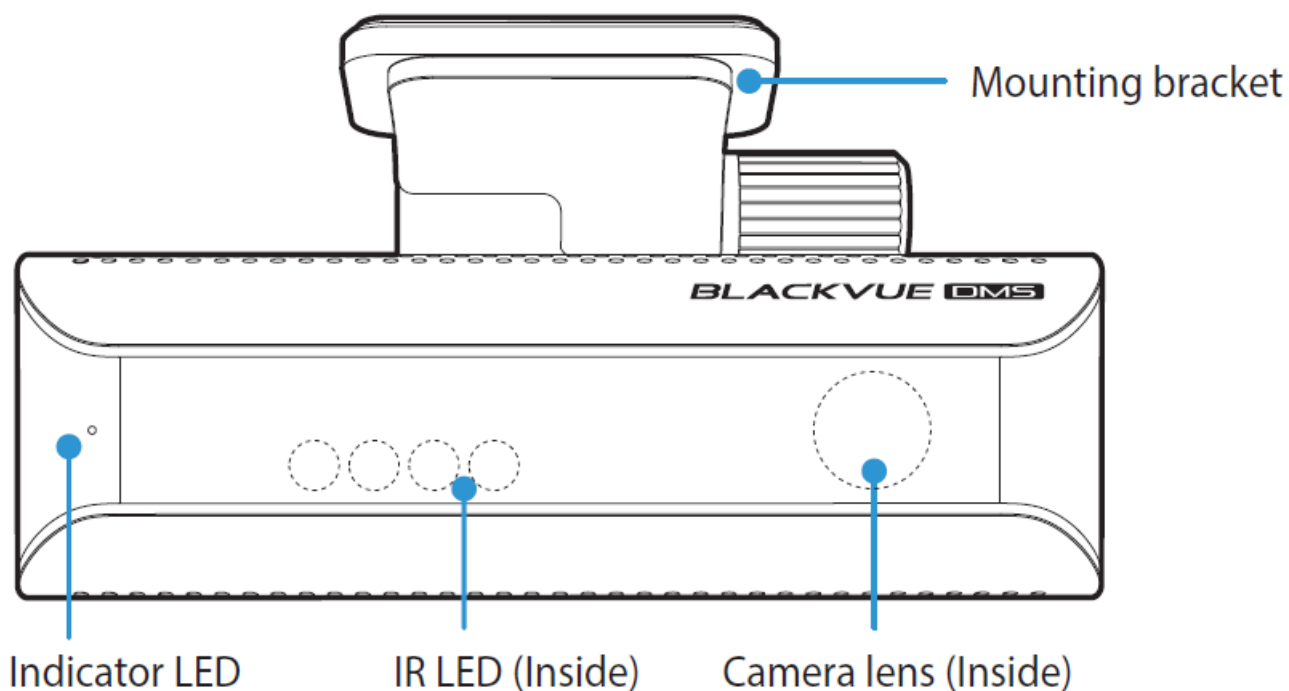
- Light Blue in Calibration

- Light Green in Normal mode
- When DMS event detected, Light Red is turned on
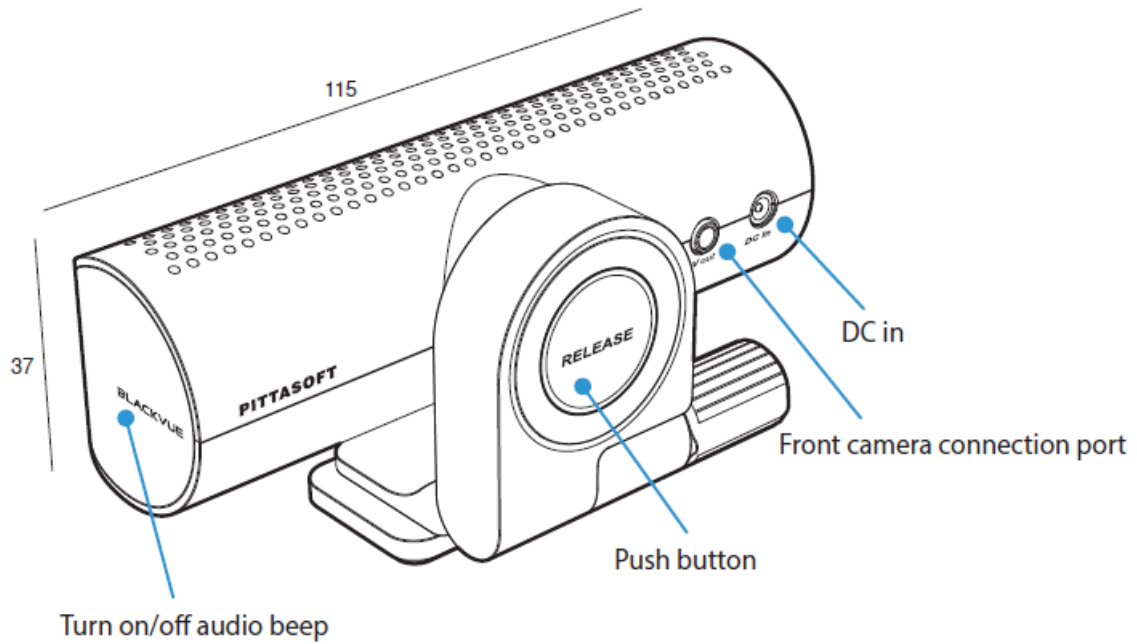
Install and power up

Install the front camera behind the rear view mirror. Install the DMS camera on the driver's dashboard or front windshield.
Remove any foreign matter and clean and dry the installation area before setup.
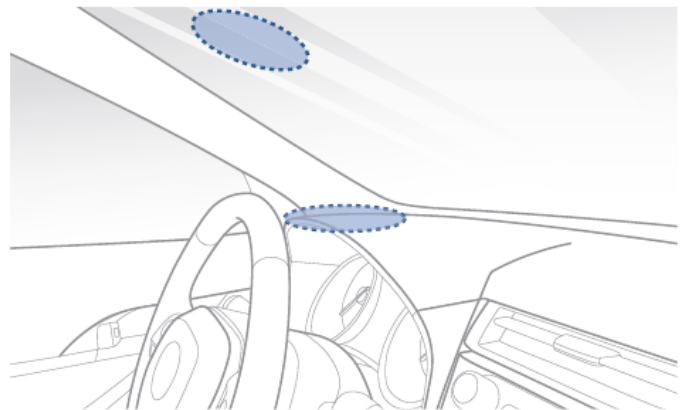
Note

- Depending on the mounting position of the product, DMS functions may not operate normally.

Warning

- Do not install the product in a location where it can obstruct the driver's field of vision.
- Be careful not to interfere with the product when operating the vehicle handle.

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.
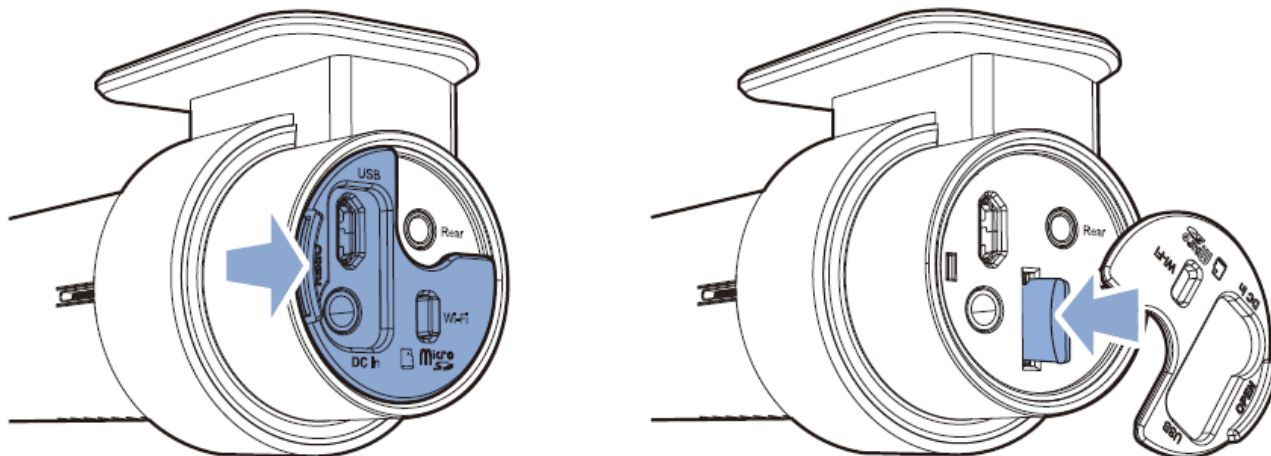
Peel off the protective film from the double-sided tape and attach the front camera to the windshield behind the rear-view mirror.
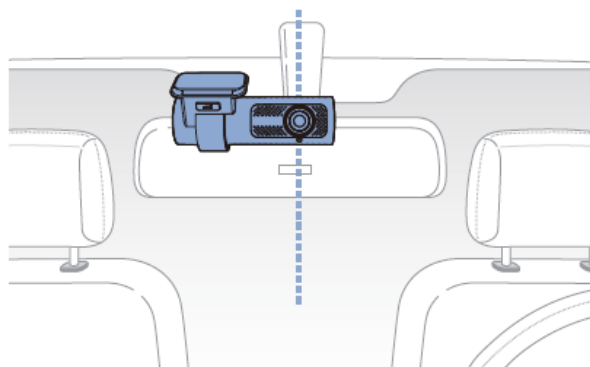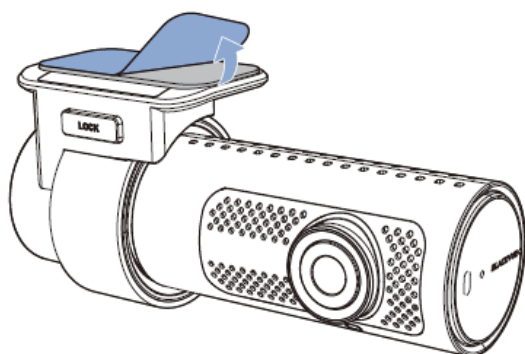
Adjust the angle of the lens by rotating the body of the front camera. We recommend pointing the lens slightly downwards (≈10° below horizontal), so as to record video with a 6:4 road to background ratio.
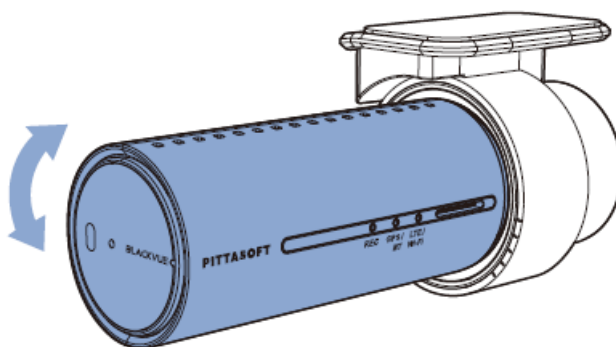
Note

- Recorded videos from DMS are saved to the microSD card on the front dashcam.
- For DR750X DMS LTE Plus users, please insert the SIM card following QSG that's included in the box.

Adjust the angle of the lens by rotating body of DMS and mounting bracket and peel off the double-sided tape.
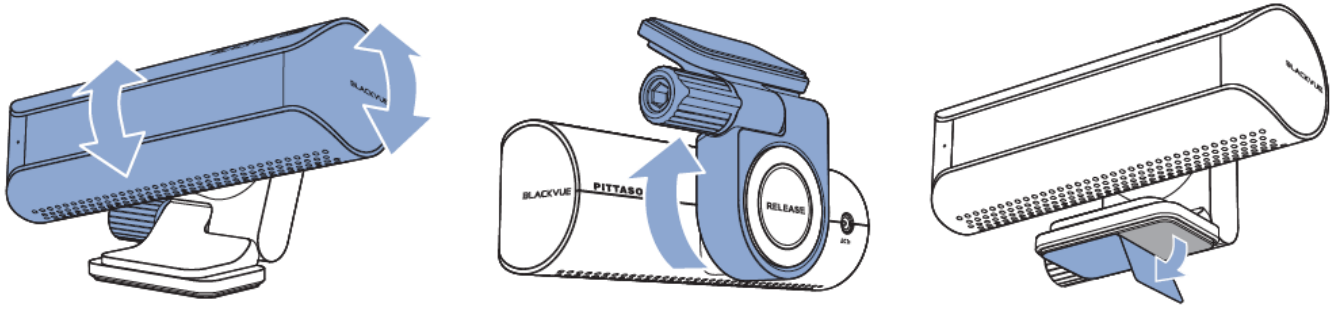
Attach the DMS camera to the windshield or dashboard. Attach the DMS camera to the windshield or dashboard.

Windshield Installation

Dashboard Installation

Note

- For best accuracy of DMS, install the DMS camera in the recommended area.

Connect the front camera ('Rear' port) and the DMS camera('V' out) using the DMS camera connection cable.
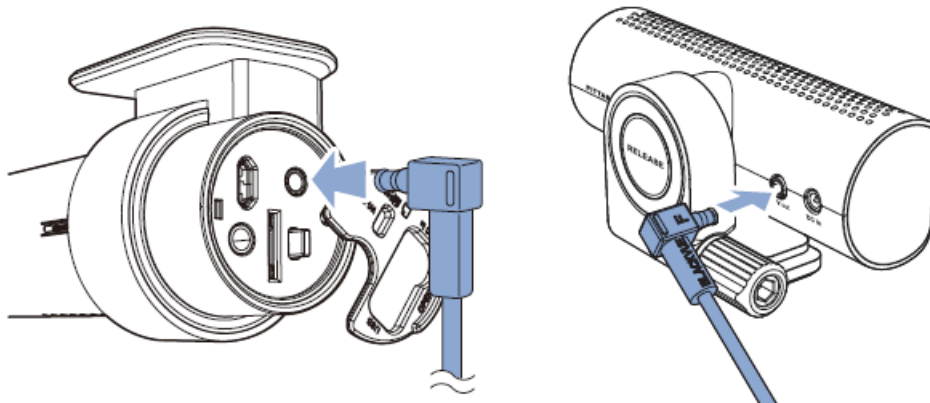
Use the pry tool to lift the edges of the rubber window sealing and or molding and tuck in the DMS camera connection cable.
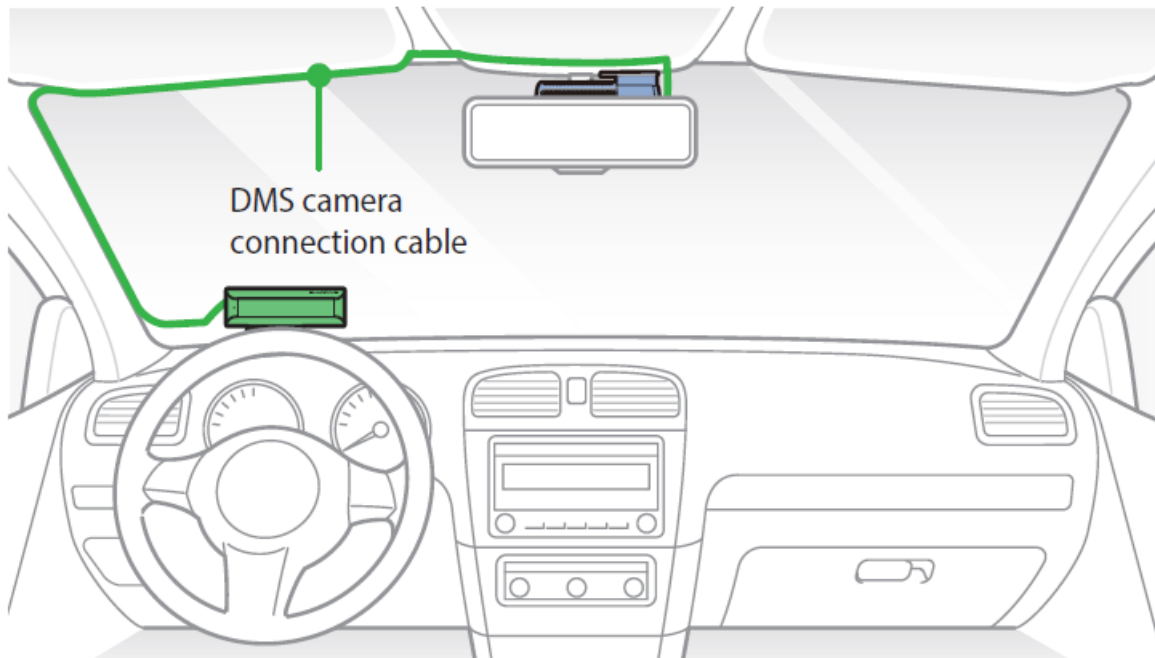
Connect the DMS camera (DC in) using DMS camera hardwiring cable (2p) to a car fuse, For details, Skip to for DMS Hardwiring Power cable setup.
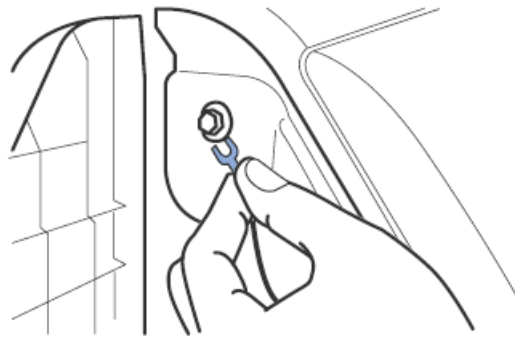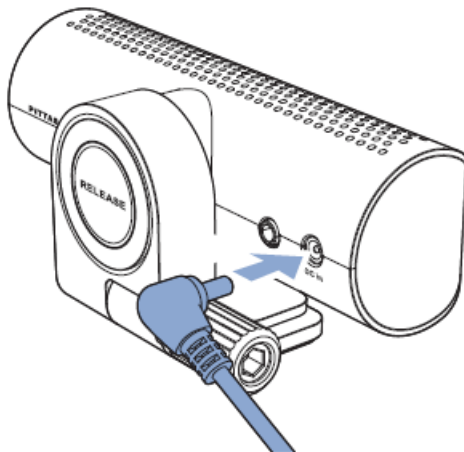
Use the pry tool to lift the edges of the rubber window sealing and or molding and tuck in the DMS camera Hardwiring power cable.
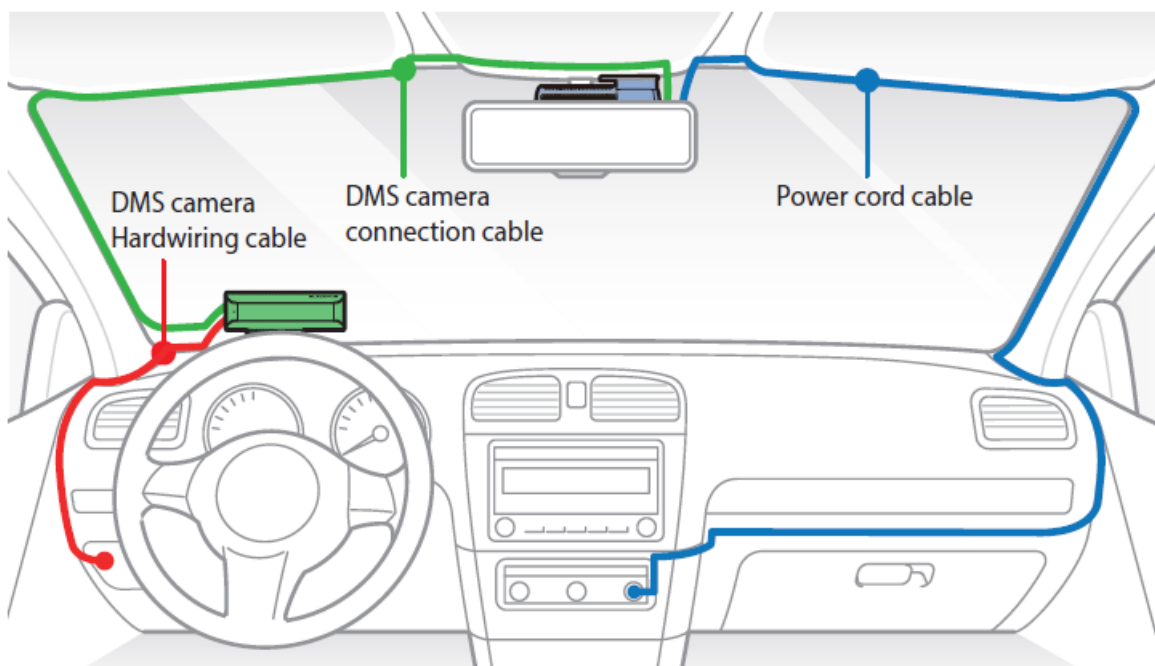
Plug the cigarette lighter power cable into the cigarette lighter socket and the front camera. Skip to for Hardwiring Power Cable setup (DR750X Plus, DR900X Plus only).

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.
- If you want to use cigarette lighter power cable for DMS camera, plug the cigarette lighter power cable (2p) into cigarette socket.

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 (Front camera hardwiring cable (3p)) and BATT+ cable to a fuse that remains powered on after engine is turned off (Front camera hardwiring cable (3p) + DMS camera hardwiring cable (2p)).
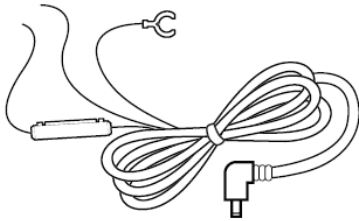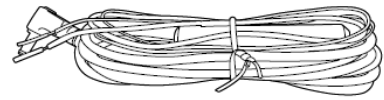
Front camera hardwiring cable (3p)   DMS camera hardwiring cable (2p)

2. Connect the GND cable to metal ground bolt (Front camera hardwiring cable (3p) + DMS camera hardwiring cable (2p)).
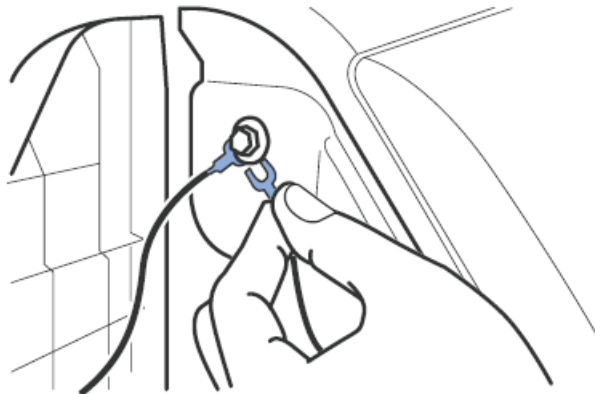
Connect the power cable to the DC in terminal of the front and DMS cameras. BlackVue will power up and start recording. Video files are stored on the microSD card.

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.
- To record in parking mode while the engine is off, 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.

DMS Calibration

Why do we need calibration?
To utilize AI-based DMS features, calibration process must be preceded to enable DMS. The calibration process is intended to improve the accuracy of driver recognition since driver's physical condition (height and eye size), driving position vary from person to person.

- Complete installation DMS camera and Front camera
- Turn on the engine, DMS booting up
- Adjust the camera angle if necessary to ensure the driver's head is within the camera. (Please check your face through "Live view" via Wi-Fi direct or BlackVue Cloud.)
- When DMS calibration starts, Blue LED blinks for 30 secs to 2 mins.
- When DMS calibration is completed, Green LED turns on.
- When DMS is enabled, the device can recognize Driver's behavior (Drowsy, Distracted, Hand Distraction, Mask)
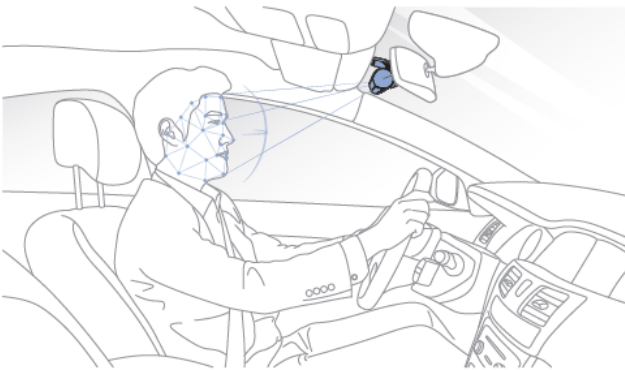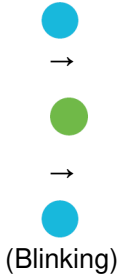
Windshield Installation   Dashboard Installation

Note

- During calibration process, the DMS camera is being recorded.
- Every time DMS camera starts, calibration operates. and it can recalibrate automatically while driving.

Driver Monitoring System Features

Functions	Descriptions	Indicator LED	Beep Alert

Power On	When power is turned on, the DMS booting up.	🔵 → 🟢 → 🔵 (Blinking)	X
Detected	Detects the face within the range of 15 degree to top, bottom, left and right based on the center of the lens.	🔵 → 🟢	X
Undetected	When driver is out of detection range for 60 seconds, it will be detected as No driver.	→ 🟢 🔴	O
Drowsy	When driver's eyes close for more than 1 second or yawning for 2 seconds, it will be detected as drowsy.	→ 🟢 🔴	O
Distracted	When driver turns head to one side (left or right) more than about 50 degrees for 5 seconds, or put his head down to send a text message using phone for 5 seconds, it will be detected as distracted.	→ 🟢 🔴	O

Hand Distraction	When there is hand movement around your face for 20 seconds it will be detected as hand distraction. (calling, smoking or eating may be suspected)	🟢 → 🔴	O
Mask	When driver take off mask, DMS alert driver to put on mask	🟢 → 🔴 (Blinking)	O
Power Off	When power is turned off, the DMS is turned off.	X	X

Note

- Among the functions, Distracted and Hand Distraction are not available if GPS is under 5km.
- Algorithm may change in order to improve accuracy.

Product specifications

Model Name	DMC200
Color/Size/Weight	Black/width 115.0 mm x Height 37.88 mm
Camera	STARVIS™ CMOS Sensor (Approx. 2.1 megapixels)
Viewing Angle	Diagonal 115°, Horizontal 95°, Vertical 49°
Resolution/ Frame Rate	Full HD (1920×1080) @30fps * Frame rate may vary during Wi-Fi streaming.
Wi-Fi	Built-in (802.11 b.g.n)
Speaker (Voice Guidance)	Built-in
LED Indicators	Detection LED (Green/Red/Blue)
Wavelength of Interlor camera IR light	940nm (4 Infrared LEDs)
Button	Touch key: Press once to turn on/off beep alerts
Input Power	DC 12V –24V (DC Plug: (Ø3.5 x Ø1.35), MAX 1A/12V)

Power Consumption	• **DR900X-2CH DMS Plus** Normal Mode (WiFi On/GPS On): Avg. 700mA/12V Normal Mode (WiFi Off/GPS On): Avg. 660mA/12V Parking Mode (WiFi On/GPS Off): Avg. 650mA/12V Parking Mode (WiFi Off/GPS Off): Avg. 620mA/12V
	• **DR750X-2CH DMS Plus** Normal Mode (WiFi On/GPS On): Avg. 650mA/12V Normal Mode (WiFi Off/GPS On): Avg. 620mA/12V Parking Mode (WiFi On/GPS Off): Avg. 600mA/12V Parking Mode (WiFi Off/GPS Off): Avg. 580mA/12V
	• **DR750X-2CH DMS LTE Plus** Normal Mode (WiFi On/GPS On): Avg. 680mA/12V Normal Mode (WiFi Off/GPS On): Avg. 640mA/12V Parking Mode (WiFi On/GPS Off): Avg. 600mA/12V Parking Mode (WiFi Off/GPS Off): Avg. 560mA/12V
Operation Temperature	• **DR900X-2CH DMS Plus** -20°C–70°C
	• **DR750X-2CH DMS Plus** -20°C–75°C
	• **DR750X-2CH DMS LTE Plus** -20°C–75°C

Storage Temperature	DR900X-2CH DMS Plus -20°C–75°C
	DR750X-2CH DMS Plus -20°C–80°C
	DR750X-2CH DMS LTE Plus -20°C–80°C

High Temperature Cut-Off	• **DR900X-2CH DMS Plus** Approx. 70°C
	• **DR750X-2CH DMS Plus** Approx. 75°C
	• **DR750X-2CH DMS LTE Plus** Approx. 75°C
Certifications	FCC, CE, Telec, IC, UKCA, RoHS, WEEE
Software	BlackVue Viewer * Windows 7 or higher and Mac Yosemite OS X (10.10) or higher
Application	BlackVue Application (Android 5.0 or higher, iOS 9.0 or higher)
Other Features	Adaptive Format Free File Management System

* STARVIS is a trademark of Sony Corporation.

For more information about using the DMC200 please download the DMC200 manual from **www.blackvue.com** > Support > Downloads.

FCC/IC Compliance Information

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device should be installed and operated with minimum 20 cm between the radiator and your body.

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

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment should be installed and operated with minimum 20 cm between the radiator and your body.

Documents / Resources

[**BLACKVUE DMC200 Driver Monitoring System**](#) [pdf] User Guide
DMC200, YCK-DMC200, YCKDMC200, DMC200 Driver Monitoring System, DMC200, Driver Monitoring System, Monitoring System

References

- 🌐 [**4K Cloud Dash Cams for Cars and Trucks - BlackVue - BlackVue Dash Cameras**](#)