

BLACKVUE LCD

Manual

PITTASOFT

BLACKVUE LCD



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Introduction to the Manual

Thank you for purchasing this product manufactured by Pittasoft Co., Ltd.

This document contains information on how to operate this product. Before using the product, make sure to read through this document so as to use the product properly. In order to enhance the performance of the product, the contents of this document may be changed without prior notice.



Warranty & Support

- This product records and saves videos on vehicle accidents; however, it is not guaranteed to record all accidents. Accidents with a light impact that is not enough to activate the impact detection sensor may not be recorded.
- In accordance with Personal Information Security Law & related acts, Pittasoft Co., Ltd. is not accountable for any issues or problems due to the illegal use of this product.
- A video recorded by this product constitutes the secondary data that may help to determine the circumstances of an accident. Pittasoft Co., Ltd. is not accountable for any loss or damage caused by an accident.



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- It is prohibited to reproduce, copy, modify, or translate this document without permission.
-  **BLACKVUE** BlackVue is a registered trademark of Pittasoft Co., Ltd. Pittasoft Co., Ltd. reserves the rights regarding all works related to the BlackVue brand such as product design, trademarks, and product-promotional images. It is prohibited to reproduce, copy, or use related works without the permission of Pittasoft Co., Ltd. Any violation may be penalized in accordance with the relevant regulations.



The purpose of these cautions is to maintain user safety and to avoid damage to property. Please make sure to read through this document so as to use the product properly.



Danger Death or property damage can be caused for users if the following directions are not followed:

- **Do not disassemble, repair, or alter the product yourself.**
It can cause fire, an electric shock, or malfunction. For internal inspection and repair, call your customer service center.
- **If any foreign matter gets inside the product, detach the power cord right away.**
Call the customer service center for repair.
- **Do not operate the product while driving.**
It can cause an accident. Stop or park your car in a safe place to operate it.
- **Do not install the product where it can interfere with the driver's vision.**
It can cause an accident.
- **Do not use a damaged or altered power cord. Use the cords provided by the manufacturer.**
Otherwise, it can cause an explosion, fire, or malfunction.
- **Do not operate this product with wet hands.**
It can cause an electric shock.
- **Do not install it in a place with high humidity, or combustible gases or liquids.**
It can cause an explosion and fire.



Warning

Death or serious injury can be caused for users if the following directions are not followed:

- **Do not leave the product where infants, children, or pets can reach it.**

They might swallow small components, or their saliva could get into it and cause an explosion due to a short circuit.

- **While cleaning the inside of the car, do not spray water or wax directly onto the product.**

It can cause fire, an electric shock, or malfunction.

- **If smoke or an unusual smell is emitted from the power cord, detach it immediately.**

Call the customer service center or the reseller.

- **Keep the terminal of the power cord clean.**

A dirty terminal can cause excessive heat and fire.

- **Use the correct input voltage.**

Otherwise, it can cause an explosion, fire, or malfunction.

- **Connect the power cord firmly so that it cannot easily be disconnected.**

Otherwise, it can cause fire.

- **Do not cover the product with cloth or blanket.**

It can cause the external deformation of the product or fire. Use the product and peripherals in a place where ventilation is ensured.



Caution

Injury or property damage can be caused for users if the following directions are not followed:

- **Do not spray a detergent directly onto the exterior of this product.**
It can discolor or have a crack. Also, the product can have an error.
- **If the product is used outside the optimal temperature range (0°C ~ 60°C), performance can degrade or malfunction can be caused.**
- **Check if this product has been properly installed.**
The product can have malfunction by being dropped due to vibration, or you can be injured.
- **While entering or exiting a tunnel, at a daytime in the face of bright sunlight, or at dark night with no light, the quality of a recorded video can deteriorate.**
- **If the product is damaged or the power supply is cut due to an accident, a video may not be recorded.**
- **Excessively tinted windshield glass can distort the recorded video or cause it to be indistinct.**
- **Prolonged use of the product can increase the interior temperature and cause burns.**
- **Since microSD cards are consumables, replace them with new ones after prolonged use.**
If a microSD card is used for a long period of time, a video may not be properly recorded. Thus, check regularly if recording is being properly done. If not, replace the card with a new one.
- **Clean the lens on a regular basis.**
If the lens is not clean, it may affect recording.
- **While data are being saved into the microSD card or the card is reading data, do not detach the card.**
The data may be damaged or malfunction caused.
- **It is recommended to install this product at the installation spot. The installation spot can be checked from the website of BlackVue (www.blackvue.com).**
- **When this product does not need to be used for a long period of time, it is recommended to detach the power cord.**
- **Do not press the LCD screen with a sharp or pointed object.**
- **Do not press the LCD screen too firmly.**
- **Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.**

Checks for the External GPS

Even if the GPS isn't working the video is recorded, but position coordinates and driving speed are not recorded. When used for the first time, or when the product is not used for three consecutive days, it will take some time for GPS to find the current position.

If the recorded video is checked using a viewer program, or the BlackVue application, and an error occurs with the GPS time, it is recommended to turn on and off the power after a GPS signal is received.

Comply with the following for an uninterrupted GPS signal:

- Do not have the windshield glass tinted with a metallic component.
- Be careful with the installation of devices that may interfere with GPS reception (e.g. some wireless starters & alarms and MP3/CD players).
- Do not use the product simultaneously with other devices that use GPS signals.
- Cloudy weather can interfere with GPS reception.
- GPS reception can be poor when driving under overpasses or in tunnels, underpasses, streets with skyscrapers or high rise buildings, generating stations, military bases, or broadcasting transmitters, etc

Checks for the microSD Card

Refer to the following for trouble-free use of microSD card:

- It is recommended to format it on a weekly basis.
- If the recorded video breaks up, format the microSD card.
- In order to ensure the reliable use of the card, format the card by using the official program recommended by the SD Card Association. For detailed information, see the website of BlackVue (www.blackvue.com).
- Before formatting it, copy important files to other storage media.
- The microSD card can be formatted in BlackVue without connection to a PC. (Page 31)
- Insert the formatted microSD card into the product. Then, the microSD card will be automatically initialized and the firmware installed on it.
- Insert or remove the microSD card only when the product is turned off.
- microSD cards are consumables, and warranted for six months.
- If a microSD of another company is used, a compatibility issue may occur. Therefore, you must use the original microSD card from Pittasoft Co., Ltd.
- **If the Battery Discharge Prevention Device(ex. Power Magic Pro) is used, the microSD may not be able to be used for a long period of time.**
- If a 64GB microSD card needs to be used, format it using BlackVue Viewer and insert it into the product. (Page 32)

Management During Summer Season

- Park in a shady place or an indoor parking lot.
- If an outdoor parking lot is used, park away from direct sunlight. Also, open the window by 1 or 2 cm.
- If the product is exposed to direct sunlight, cool the product down for a specific amount of time before use.
- During summer, the temperature inside the vehicle may rise to 80°C-90°C due to sunlight. Keep the inside of the vehicle at an appropriate temperature.

Product Features



Full High Definition and Smooth Image

This product allows you to record front view, at full high definition and rear view high definition videos, to ensure smooth images.



Real-Time Image Check Due to Touch LCD

This product enables the PIP feature, which allows you to easily operate, using the 4.0" touch LCD; and view front and rear view screens simultaneously.



Automatic Power-Off at High Temperature

Due to the built temperature detection sensor, once the black box reaches a high temperature, automatic power supply will be suspended to protect the product.



Prevention of Electric Drainage in Batteries for the Vehicle

Once the power is below the current value set in the product, automatically power supply will be stopped to prevent the batteries for the vehicle from drainage.



SONY EXMOR CMOS Sensor

Due to the SONY image sensor that ensures excellent image quality, clearer identification is ensured during the day and night



Coaxial Cable For Excellent Data Transfer

For reliable data transfer, high quality coaxial cables are used to prevent missing data and data loss.



High Definition Wide-Angle Lens

Using a high definition wide-angle lens, accidents can be accurately recorded.



Premium Design

BlackVue is designed with stylish and sophisticated premium micro-patterns.



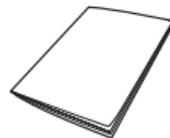
Diverse Recording Modes

Four diverse recording modes according to user convenience (e.g. Emergency/Normal/Event/Parking)

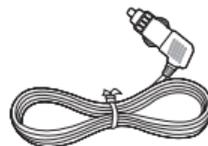
Package Components



Front Camera



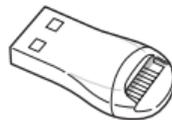
Manual



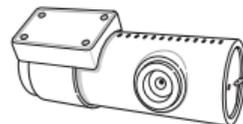
Power Cable



Cable Clips (8 EA)



microSD Card Reader



Rear Camera



Double-Sided Tape
for the Mounting Holder



microSD Card



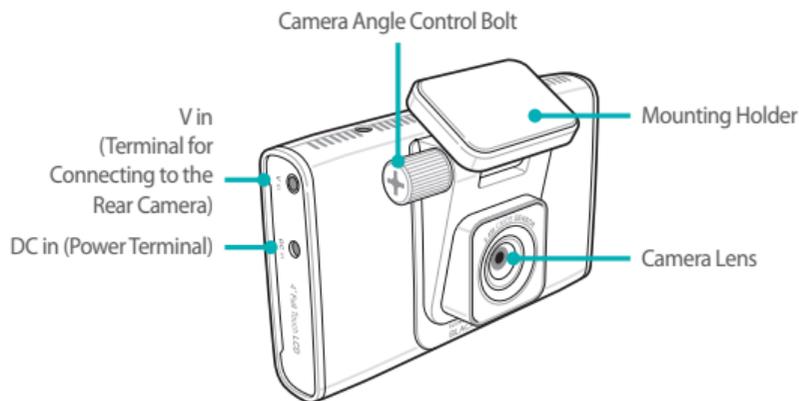
Rear Camera Connection Cable

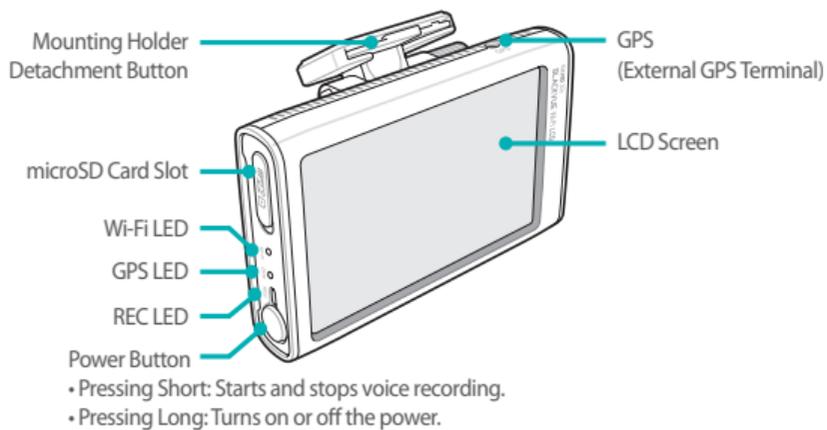
✓ Note

- Pictures of the components may differ from the actual.
- To enhance the performance of the product, the components may be changed without prior notice.
- The additional package components and parts sold separately can be purchased from the website of BlackVue (www.blackvue.com).

Name of Each Part

Front Camera

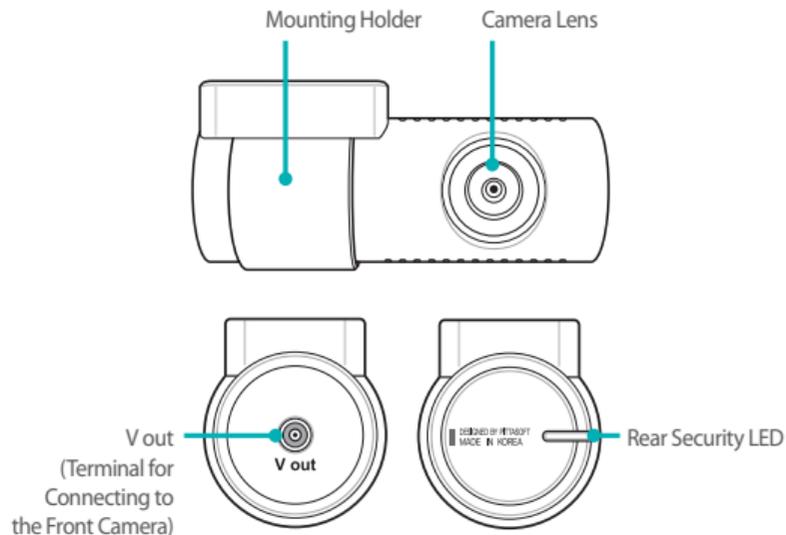




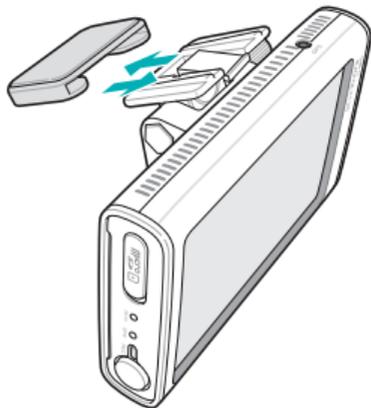
✓ Note

- The external GPS is sold separately.

Rear Camera

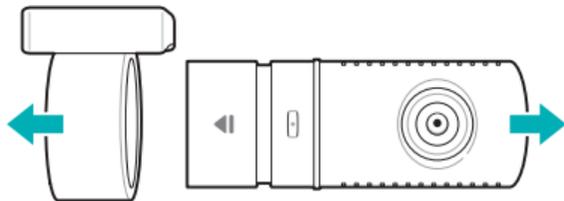


Attach & Detach the Mounting Holder of the Front Camera



- 1 Press the mounting holder detachment button and pull the front camera.
- 2 Push the front camera into the mounting holder to assemble the mounting holder to front camera.

Attach & Detach the Mounting Holder of the Rear Camera

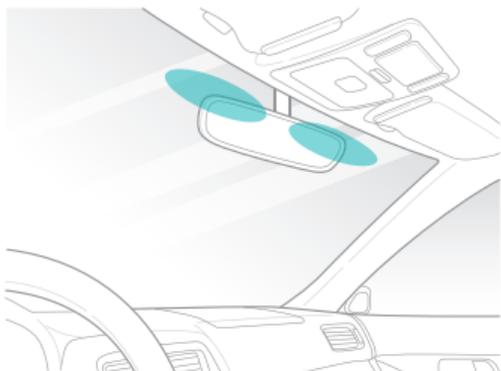


- 1 Hold the mounting holder, and pull the rear camera.
- 2 In order to assemble the mounting holder of the rear camera, push the rear camera into the mounting holder until a clicking sound occurs.

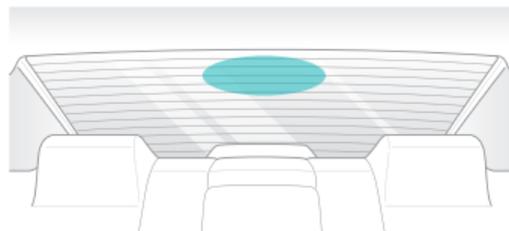


Install the BlackVue | Checking Installation Position

- 1** It is recommended to install the front camera next to the room mirror. Clean any foreign substances and moisture from the place where the product will be installed with a dry cloth.



- 2** It is recommended to install the rear camera at the higher part of the back window.

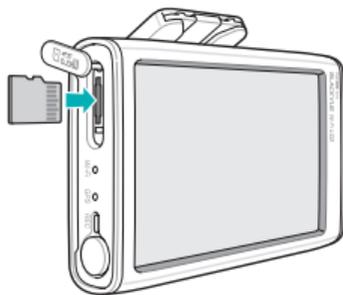


✓ Note

- Do not install the product where it can interfere with the driver's vision.
- It is recommended to install the product at the spot specified.

Insert & Remove the microSD Card

- 1 Insert the microSD card into the microSD card slot, of the front camera, in the direction as shown in the figure below:



- 2 In order to detach the microSD card, gently push the center of the microSD card with your thumb and pull out the card. Make sure that the microSD card does not spring out when detaching the card.

Caution

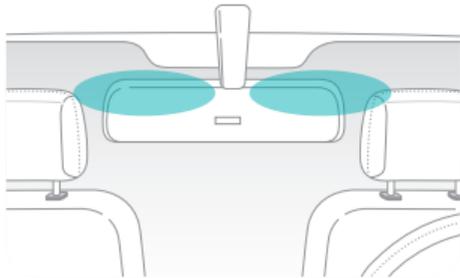
- Do not remove the microSD card while it is saving or reading data. This may cause data damaged or malfunction.
- Copy important data to other storage medias. Pittasoft Co., Ltd. is not accountable for data loss resulting from carelessness.

Note

- Insert or remove the microSD card only when the product is turned off.
- microSD cards are consumables. Replace them with new ones after prolonged use.

Installation

- 1 In a bright and safe place, stop the vehicle engine and pull out the vehicle key.
- 2 Attach the front camera on the vehicle windshield glass with double-sided tape.

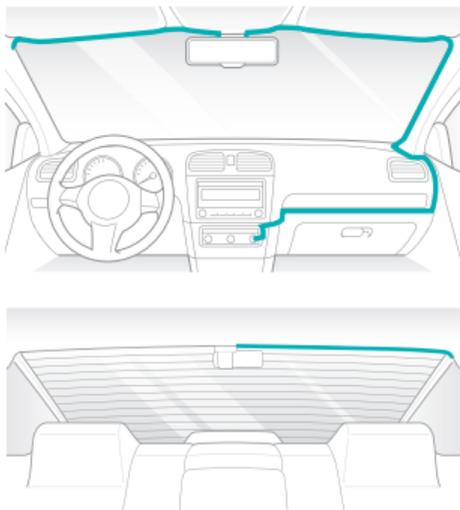


- 3 Attach the lens of the rear camera on the vehicle's back window with double-sided tape, so that the lens can also be placed at the center of the vehicle.
- 4 Connect the V in terminal of the front camera to the V out terminal of the rear camera by using the cable for connecting to the rear camera.
- 5 Use the power cable to connect the DC in of the front camera to car's power socket.

✓ Note

- It is necessary to use the Battery Discharge Prevention Device(ex. Power Magic Pro) to record video while the car is parked.
- To use BlackVue with other equipment that uses a power cable, purchase and use a dual power outlet adaptor.

- 6 Organize the cables, using the cable clip, to prevent the driver's vision from being interrupted.



- 7 Start-up of the vehicle, then check if the product is properly operating.

- 8 Adjust the camera angle to view the LCD screen. Slightly unfasten the camera angle control bolt to adjust the angle; then fasten the bolt. Even if the prop is detached, the camera angle can be maintained. Thus, the camera can be installed at the same lens angle as before.

⚠ Caution

- Do not remove the microSD card while it is saving or reading data. This may cause data damaged or malfunction.
- If BlackVue is used for the first time, set time in Settings first. (Page 29)

✓ Note

- After a test drive, check if the video has been properly recorded.
- The recorded video is saved in MP4 format.

PLEASE CONNECT REAR CAMERA FIRST BEFORE CONNECT THE POWER CORD ON FRONT CAMERA.



Video Recording | Normal Recording

- 1 Once you start the vehicle engine, the BlackVue will automatically power on.
- 2 When the BlackVue is powered on, the normal recording will automatically start. The video can be checked from the LCD screen.



Parking Recording

- 1 When in normal recording mode, if the vehicle does not move for five minutes or longer, the mode will automatically switch to parking recording mode.
- 2 In parking recording mode, if camera motion or vehicle impact is detected, event recording will start.



✓ Note

- If a file is recorded in parking recording mode, a message will appear on the LCD screen when the mode switches to normal recording mode.

Event Recording

- 1 During normal recording mode or parking recording mode, if an impact to the vehicle is detected, event recording will start. 10 seconds before impact to the vehicle will also be recorded.



✓ Note

- The degree of sensitivity, which impact detection sensitivity, can be set in Settings. (Page 29)

Emergency Recording

- 1 Press the  on the LCD screen to record the desired image. The recorded file will be saved in the form of an event recording file.



✓ Note

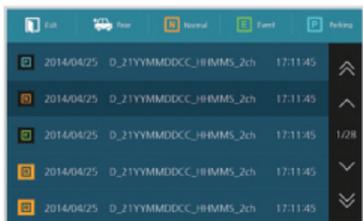
- The emergency recording file can be recorded depending on the file unit setting. (Page 27)
- The emergency recording cannot be interrupted during recording.



Simple Video Playback | Playback in BlackVue

You can directly check recorded videos from the LCD screen.

- 1 Press  on the LCD screen. A list of recorded videos will appear.



- 2 From the list, select the recorded video you want to play back.



Note

- When playing back a video, a video recording cannot be made using BlackVue.

Playback Using a microSD Card

Playback Using a Smartphone

With a Smartphone that supports microSD cards, a video can be viewed.

- 1 Turn off the power of this product, and detach the microSD card.

✓ Note

- For details on how to detach the microSD card, refer to **Insert & Remove the microSD Card**. (Page 15)

- 2 Insert the microSD card into the Smartphone.
- 3 Run the application for video playback, and select the video you want to play back.

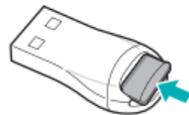
✓ Note

- A method for playing back recorded videos may differ depending on the type of Smartphone; therefore refer to your User's Guide for details.
- If there are numerous recorded videos in the microSD card, it may take a long time to load the file.

Playback Using a GPS Navigation

Recorded videos can be played back using GPS navigation.

- 1 Insert the included microSD card into the microSD card reader.



- 2 Connect the microSD card reader to navigation.



- 3 Run the video playback program, and select the recorded video you want to play back from the removable drive.

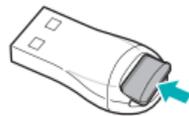
✓ Note

- A method for playing back recorded videos may differ depending on navigations. For details, refer to the User's Guide on Navigations.
- If there are many recorded videos in the microSD card, it may take long to load a file.
- Some navigations do not enable full HD video playback.

Playback Using a PC

Recorded videos can be checked immediately, using the video playback PC program.

- 1 Insert the included microSD card into the microSD card reader.



- 2 Connect the microSD card reader to navigation.



- 3 Run the video playback program, and select the recorded video you want to play back from the removable drive.

Playback Using the BlackVue application

Wi-Fi is required to play back a video via BlackVue application.

- 1 Install the BlackVue application in a Smartphone, and run the application. The BlackVue application can be downloaded from Google Play Store, Apple App Store, or Windows Store.

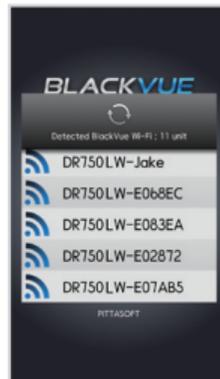
✓ Note

- The BlackVue application is enabled in Android 2.3 or higher, iOS 6.0 or higher, or Windows 8.0 or higher.
- Some features may not be enabled depending on the type of Smartphone.
- The BlackVue application is optimized for iOS 7.0.

- 2 Press **Wi-Fi ON** on the LCD screen to enable Wi-Fi.



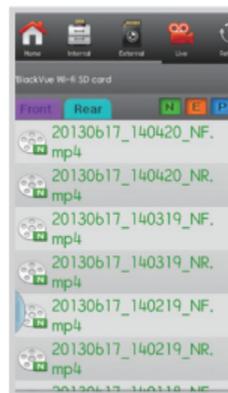
- 3 Touch the **Search Wi-Fi** button of the BlackVue application. Select the device you want to connect, and enter the password. (E.g. DR750LW-A682DE) Touch the **OK** button to connect to the selected device. The initial password is **blackvue**, but the user can change it.



✔ Note

- If information on Wi-Fi connection is saved, touch the **BlackVue Wi-Fi** button of the BlackVue application, without enabling the Wi-Fi feature of the Smartphone, to automatically connect to Wi-Fi.
- For the Live View function, Wi-Fi can be used within a 10m range, although the range may vary depending on the circumstances during use
- When playing back recorded videos using Wi-Fi, the reception may vary according to the data transfer rate.
- For details on Wi-Fi settings, refer to **Wi-Fi and Other Settings**. (Page 43)
- Wi-Fi will automatically disabled 10 minutes after not being in use. This cannot be changed.

4 Select the recorded video you want to play back from the list of recorded videos.



✔ Note

- Press the **Live** button to check a video in real-time.
- If Live View or the VOD playback & copy functions are used by connecting to Wi-Fi while recording at full HD (1920x1080) @30 fps, the recording frame will be reduced to 20 fps.
- For detailed information on the BlackVue application, refer to the Manual on the BlackVue application. The manual can be downloaded from the website of BlackVue (www.blackvue.com).

Using the BlackVue | Switch to Live View

The front/rear screen recordings in this product can be checked in real-time.

- 1 Press  on the LCD screen. If the screen is turned off, press the LCD screen to turn on the screen. Then, press .
- 2 Whenever  is selected, Live View will appear.

→ Front + Rear PIP → Front Screen → Rear Screen →



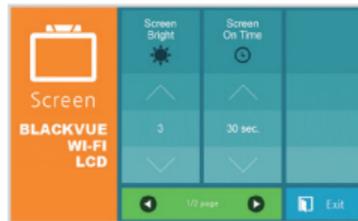
Settings

A setting can be changed in BlackVue. Press  on the LCD screen.

✓ Note

- When selecting settings, no videos can be recorded in BlackVue.
- After changing a setting, you must save the changes.
- If a setting is changed in BlackVue, the setting cannot be changed using the BlackVue application.

Screen Settings



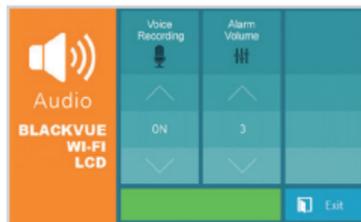
Item	Description
Screen Bright	The brightness of the LCD screen can be adjusted.
Screen On Time	The waiting duration of the LCD screen can be set.
Touch revision	If touch revision is required on the LCD screen, this option is available.

Video Settings



Item	Description
Resolution	The resolution of a recorded video can be set.
Front Bright	The brightness of a recorded video can be set from 1-5 levels.
Rear Bright	The brightness of a recorded video can be set from 1-5 levels.

Audio Settings

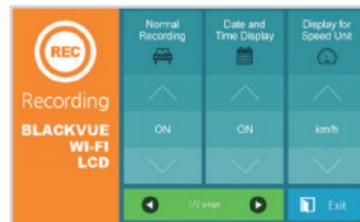


Item	Description
Voice Recording	Voice recording can be enabled or disabled.
Alarm Volume	The BlackVue voice alarm volume can be adjusted.

✓ Note

- Press the Power button briefly to enable or disable voice recording.

Recording Settings



Item	Description
Normal Recording	Enables or disables normal recording mode.
Date and Time Display	Turns on or off the date and time display recorded in a video.
Display for Speed Unit	Changes the speed unit recorded in a video. Displays unit as Km/h or mph; or disables the display unit.
File Unit	Changes the unit of saving a recorded video. Selects the unit of saving among 1 min, 2 mins and 3 mins.
P Mode Auto Switch	Enables or disables automatic shift to parking mode.

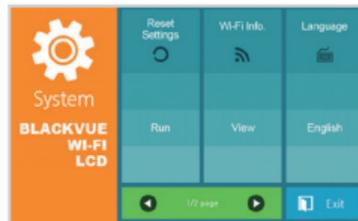


Note

- If **Normal Recording** and **P Mode Auto Switch** are set to **OFF**, only event recording videos will be saved.



System Settings



Item	Description
Reset Settings	Initializes settings.
Wi-Fi Info.	Wi-Fi connection information (e.g. SSID and password) can be checked.
Language	The language can be checked.
System Info.	The model name and firmware version can be checked.
Timezone	The time zone can be checked. The time zone setting is used as information on a recorded video.

Time Settings

The current time can be set. If an external GPS is connected, the time will be automatically set according to the time zones.



✓ Note

- The time zone can be changed in the **System** settings or BlackVue Viewer. (Page 40)
- The time can be synchronized with the smartphone by pressing **Config** > **Firmware Setting** > **Basic Setting** > **TIME SYNC** on the BlackVue application.

Sensitivity Settings

The sensitivity can be set. A higher number results in greater sensitivity to sudden shocks.



Item	Description
Normal Mode	In Normal recording mode, the impact sensitivity can be set when switching to event recording mode. The impact sensitivity of top and bottom, left and right, front and rear each can be set from 0-10 levels.

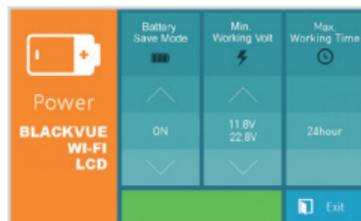
Item	Description
Parking Mode	In parking recording mode, the impact sensitivity and motion detection sensitivity that switch to event recording mode can be set. The impact sensitivity of top and bottom, left and right, front and rear each can be set from 0-10 levels; and the motion detection sensitivity can be set from 0-5 levels.

✓ Note

- In normal recording mode, 0 level indicates the minimum of impact sensitivity.
- In parking recording mode, 0 level of motion detection sensitivity indicates that motion recognition is off.

Power Settings

When the Battery Discharge Prevention Device(ex. Power Magic Pro) is connected to the vehicle battery, the battery save mode may prevent car battery drainage during parking. Depending on the user setting, BlackVue may be automatically powered off. The below menu is activated only when battery save mode is turned on.



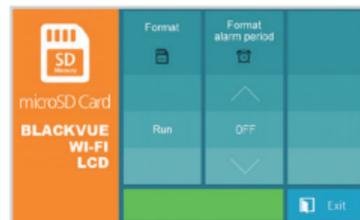
Item	Description
Min. Working Volt	The minimum working volt can be set. When vehicle is parked after engine turned off, the power automatically turns off when the car battery volt falls below the minimum set level.
Max. Working Time	The maximum working time can be set. When vehicle is parked after engine turned off, the power automatically turns off after a set time. The time can be set at 3, 8, 12, 24 or 36 hours and the default setting is 24 hours.

✓ Note

- The battery save mode is available when vehicle is parked after its engine is off.
- It is recommended to set the battery save mode to OFF, when user is using the Battery Discharge Prevention Device(ex. Power Magic Pro) with battery protection function.

MicroSD Card Formatting

The microSD card can be formatted or a format cycle message can be set. If a format cycle message is set, a message will appear in the cycle when this product is turned on.



Using the BlackVue Viewer | Screen Description

Double-click the BlackVue Viewer icon in the microSD card to run BlackVue Viewer. In order to install BlackVue Viewer on the PC, connect to the BlackVue website (www.blackvue.com) and download it.



No.	Name	Description
1	Recorded Video Playback Window	Videos can be played back using this window. The screen can zoom in/out by using a mouse.
2	Language Setting	If you change the language on playback screen, the language for BlackVue Viewer can be changed. For details about language configuration for BlackVue, refer to the Basic Settings . (Page 39)
3	microSD Card Formatting	The microSD card connected to the PC can be formatted.
4	G-Sensor Information	G-sensor information of video recording can be confirmed.
5	GPS Information	GPS information when the video was recorded can be checked.

No.	Name	Description
6	Recorded Video List	<p>Using the file list and map tab, the recorded video list, including recording location can be confirmed. Click Front to display only rear camera files in the recorded video list. Click Rear to display only front camera files in the recorded video list.</p> <p>: This is a normal recording file and marked with green in the timeline.</p> <p>: This is an event and emergency recording file and marked with orange in the timeline.</p> <p>: This is a parking mode recording file and marked with blue in the timeline.</p>
7	Timeline	<p>Videos can be searched by date, hour, minute, or second of video recording. For detailed information about Timeline, refer to Timeline. (Page 35)</p>
8	Playback Option Button	<p>While playing back recorded video, the screen, playback speed, and volume can be adjusted. For detailed information regarding playback option button, refer to Playback Control. (Page 34)</p>

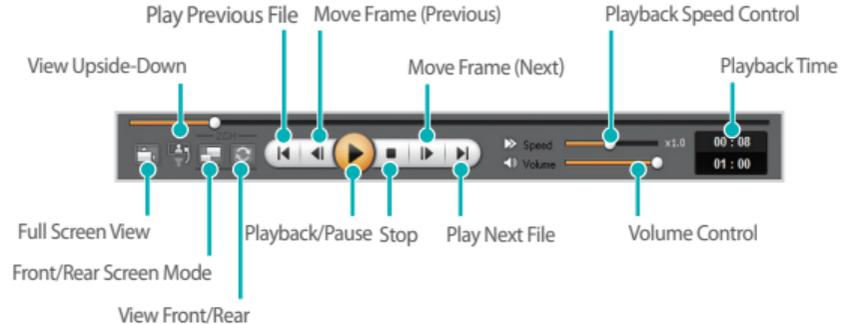
Note

- In order to save GPS information while recording a video, connect an external GPS to BlackVue.

Video Playback

Playback Control

A recorded video can be played back in full screen mode or reversed upside down. The playback speed can be adjusted to fast forward the video.

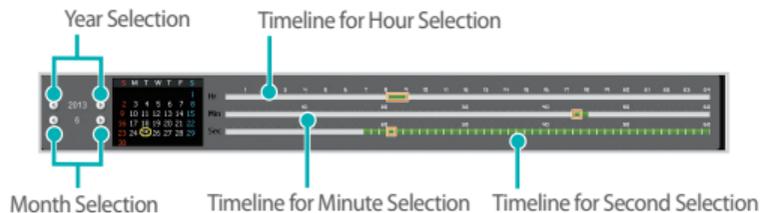


✓ Note

- While playing back recorded video, double-click the screen to switch to full screen view mode. Double-click the screen again or press ESC to return to default view.
- While playing back recorded video, use the mouse wheel to zoom in/out.
- While playing back recorded video, right-click the screen to view the 100 % zoom-in screen.

Timeline

Video can be explored with the date, hr, min, and sec of when a video was recorded.



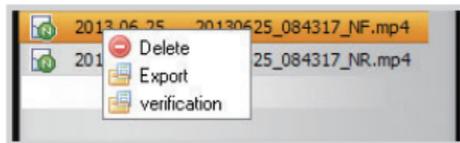
Note

- In the date selection area, a date of video recording is marked by a red circle and the currently-selected date is marked by a yellow circle.

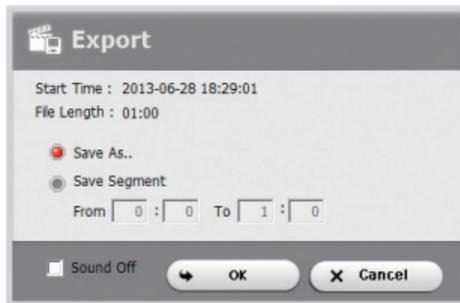
File Management

With the recorded video list, a file can be deleted or saved with a different name.

- 1 Select a file from the recorded video list and right-click it.



- 2 To delete a file, click **Delete**.
- 3 To save it with different name, click **Export** and select the option you want.





Note

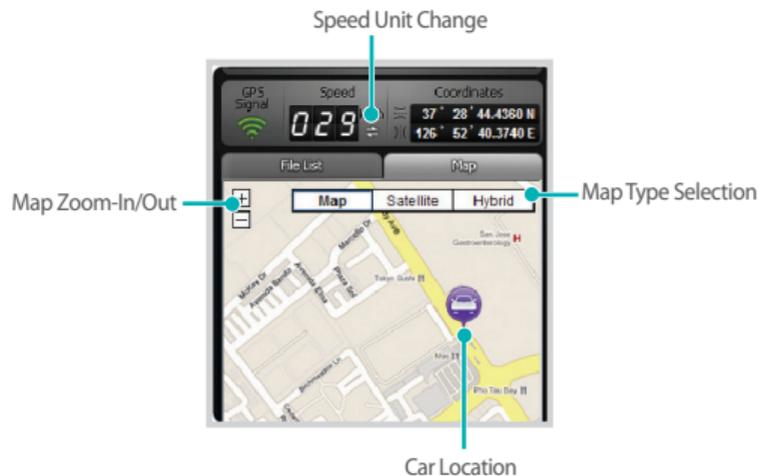
- When you select **Sound Off**, the voice is removed from the recorded video to be saved.

- Click the **OK** button and select the file name you want, together with the path.
- Click the **Save** button to finish.

Map Check

The location of video recording can be confirmed on the map.

- Select a file from the recorded video list and play it back.
- Click the **Map** tab.
- With the +/- button or mouse wheel, the map can be zoomed in/out.



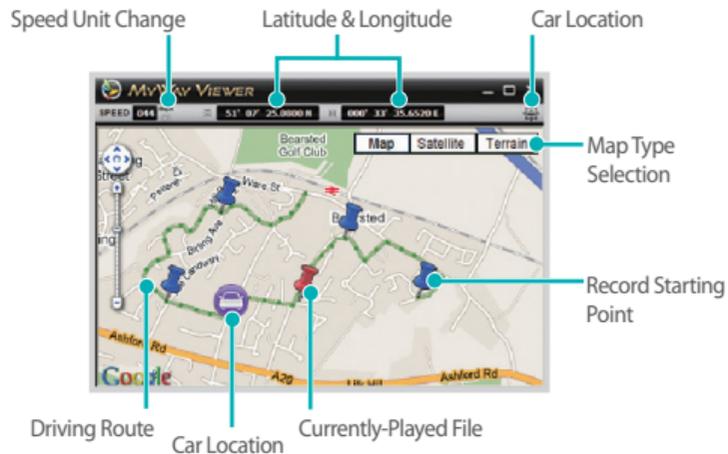
✓ Note

- Internet connection is required to use the map service.
- Only from recorded files with GPS information, data can be checked.

MyWay Viewer Check

The driving route of the video recording can be checked.

- 1 From the recorded video list, select and play back the desired file.
- 2 Press the  button. Then, the driving route will be displayed on the map.
- 3 Double-click the map to play back the video recording from the driving route, nearest to the spot clicked.



✔ Note

- Internet connection is required to use the map service.
- Only from recorded files with GPS information, data can be checked.

📄 Saving as an Image

When playing back a recorded video, the desired part can be saved as an image.

- 1 From the recorded video list, select and play back the desired file.
- 2 Press the  button on the part to be saved as an image.

✔ Note

- Use Timeline or press the  /  button to explore the window in detail.

- 3 Click the  button.
- 4 Select the desired file name and path. Then, click the **Save** button.

✔ Note

- JPG and BMP are supported as image file formats.

📄 Image Printing

When playing back a recorded video, the desired part can be saved as an image.

- 1 From the recorded video list, select and play back the desired file.
- 2 Press the  button on the part to be saved as an image.

✔ Note

- Use Timeline or press the  /  button to explore the window in detail.

- 3 Click the  button.
- 4 Select the printer, and click the **OK** button.

Settings

Basic Settings

Time, video, and recording settings can be changed.

- 1 Click the  button and click the **Basic** tab.
- 2 After changing the configuration click **Save & Close**.



No.	Function	Description
1	Time Zone Settings	The time zone can be set for location used. The time zone setting is used as information on a recorded video. The time can be set via BlackVue application. (Page 29)
2	Image Settings	The quality and brightness of front/rear recorded videos can be set. For detailed information on video recording time, refer to Recording Time . (Page 49)
3	Recording Settings	Normal Record, Voice Record, Date and Time Display and Auto Switching to Parking Mode function can be turned on/off. Speed Unit Display and Record File Unit can be changed.
4	Language Setting	The language of BlackVue can be changed.

✓ Note

- With the **normal recording function disabled**, only event and parking mode recording videos are saved.
- With the **speed display unit disabled**, the vehicle speed is not displayed when the recorded videos are played back.
- On microSD cards, older files are deleted first to create space for newly-recorded videos in microSD cards. Copy and store important files, such as event recording, files to other storage media.
- Press the Power button briefly to enable or disable voice recording.

Time Setting

If an external GPS is not connected, set time manually before use.

If time is not set, the time of a recorded video may not be correctly saved.

- 1 Format the microSD card, and then upgrade the firmware.
- 2 Connect to the website of BlackVue (www.blackvue.com), and download the time setting program.
- 3 Run the time setting program before setting time.

Note

- When setting time, set time when BlackVue power is on. The product boots approximately 15 seconds after power supply.
- If an external GPS is connected, time will be automatically set.

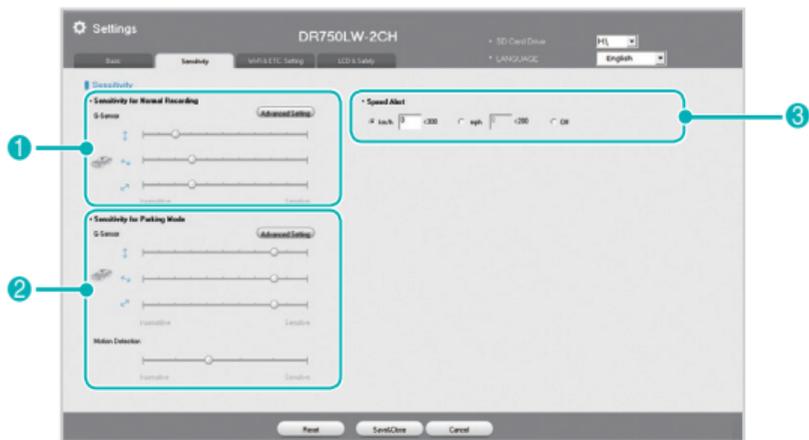
Sensitivity Setting

In recording mode, the G-sensor sensitivity(impact sensitivity) and motion detection sensitivity can be set for each start event recording. The speed alert can be set to start event recording when vehicle exceeds the set speed level.

- 1 Click the  button and click the **Sensitivity** tab.
- 2 Change a setting, and click **Save & Close**.

Note

- For details about advanced sensitivity settings, refer to **Advanced Sensitivity Settings**. (Page 42)



No.	Function	Description
2	Sensitivity for Parking Mode	It is possible to set the G-sensor and motion detection sensitivity to start event recording during parking recording mode. The G-sensor sensitivity of top and bottom, left and right, front and rear each can be set from 0-10 levels; and the motion detection sensitivity can be set from 0-5 levels.
3	Speed Alert	When the vehicle speed exceeds the set level, a beep of event recording is created and switches to event recording mode. You can enter the number of speed limit that triggers the speed warning.

No.	Function	Description
1	Sensitivity for Normal Recording	It is possible to set the G-sensor sensitivity for event recording when shock is applied. The G-sensor sensitivity of top and bottom, left and right, front and rear each can be set from 0-10 levels.

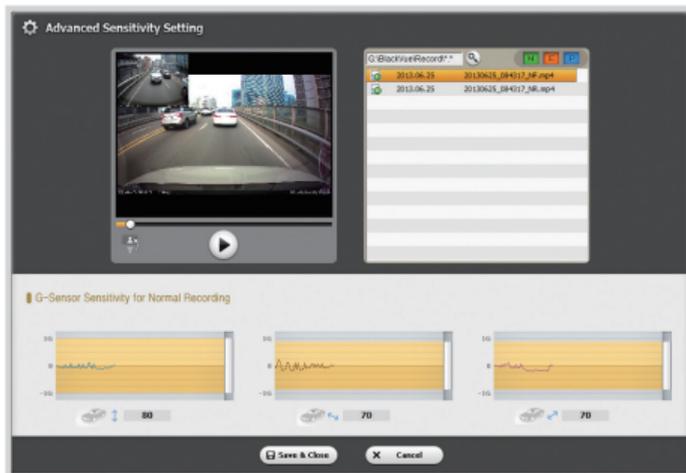
✓ Note

- In normal recording mode, 0 level indicates the minimum of impact sensitivity.
- In parking recording mode, 0 level of motion detection sensitivity indicates that motion recognition is off.

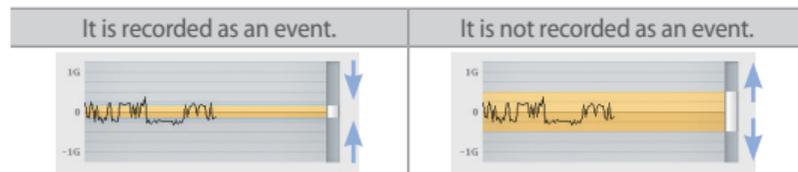
Advanced Sensitivity Settings

Sensitivity can be easily set while watching a recorded video.

- 1 Click the  button. Then, click the **Sensitivity** tab.
- 2 Click the **Advanced Setting** button for the desired setting.
- 3 Play back a recorded video. Save G-sensor information is displayed at the bottom of the recorded video playback.



- 4 Move the control bar upwards or downwards to adjust the sensitivity range. If the range is wide, it will be less sensitive. If the range is narrow, it will be more sensitive.



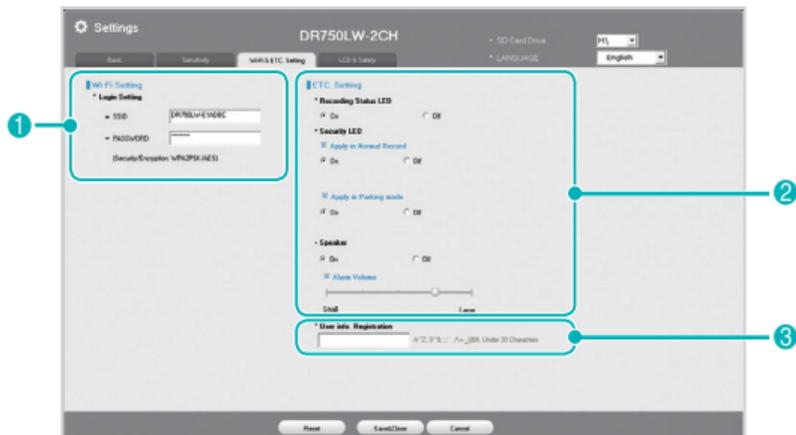
Note

- If an event recording occurs due to the sensitivity setting while a recorded video is being played back, the edge of the playback screen will blink in orange.

- 5 Change a setting, and click **Save & Close**.

Wi-Fi and Other Settings

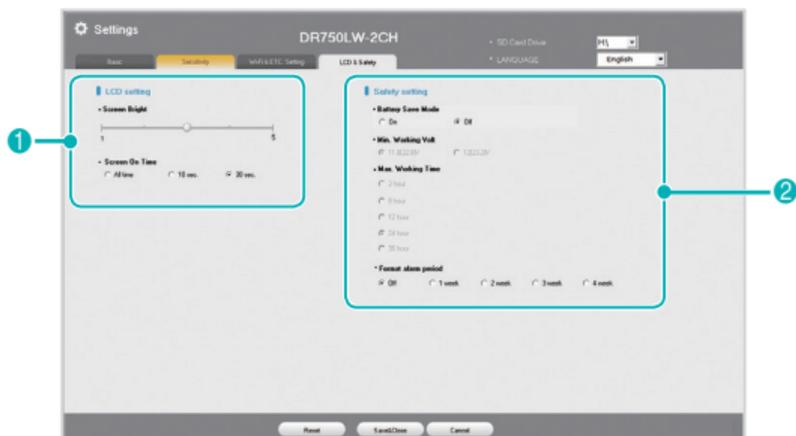
Settings for Wi-Fi, LED indication, and voice announcements can be changed and user information can be registered.



No.	Function	Description
1	Wi-Fi Setting	SSID and the password, which determines whether to automatically run Wi-Fi and enable Wi-Fi connection can be changed. You can connect to Wi-Fi with the SSID and password settings in the BlackVue application. If the password is forgotten, you can reset the password.
2	Other Settings	For video recording status, normal recording mode, and parking recording mode, the LED indicators can be turned on/off. The voice announcement or volume can be changed.
3	User info. Registration	When user information is registered in user information registration window, the text string is displayed in the recorded image. User may register a string of 20 characters or less, in combination of English uppercase characters (A-Z), numbers (0-9), symbol (; ' / \ _ () \$ #).

LCD and Protection Settings

The LCD screen, protection for vehicle batteries, and microSD card formatting cycle can be set.



No.	Function	Description
1	LCD Settings	An LCD setting can be changed. Screen brightness, screen waiting duration can be set.
2	Safety Settings	Setting for battery save mode and the microSD card format notification cycle can be changed. The battery save mode is available to protect vehicle battery when vehicle engine is off and parked. It is recommended to set battery save mode to OFF when user is using the Battery Discharge Prevention Device(ex. Power Magic Pro) with battery save mode function.

How to Apply Configuration

Your settings can be applied to the product.

- 1 Insert the microSD card into the product. For details on how to insert the microSD card, refer to **Insert & Remove the microSD Card**. (Page 15)
- 2 Once power is turned on, your settings will be automatically applied.

Note

- Insert the microSD card only when the product is turned off.

Firmware Upgrade

Connect the microSD card via PC, or BlackVue application via Wi-Fi to upgrade firmware.

Upgrade via PC Connection

- 1 Connect the microSD card to the PC. For details on how to connect, refer to **Playback Using a PC**. (Page 22)
- 2 Format the microSD card, and connect to BlackVue website (www.blackvue.com). Then, download the firmware upgrade file, in the form of a zip file.
- 3 Unzip the file, and copy the BlackVue folder to the microSD card.
- 4 Insert the microSD card in BlackVue, and turn on the power. Then, upgrade will automatically occur.

Note

- Once firmware upgrade is completed, all of the settings will be initialized.
- For details on how to insert the microSD card, refer to **Insert & Remove the microSD Card**. (Page 15)
- Insert the microSD card only when the product is turned off.

Upgrade via BlackVue Application

- 1 Select **Firmware Download** in BlackVue application.
- 2 Select **Model Name** and **Language Name** and press **OK**.
- 3 When firmware information to download is displayed, press **OK** to download.
- 4 Connect BlackVue via Wi-Fi. For details on how to connect, refer to Playback Using the BlackVue App.(Page 23)
- 5 Select **Config** > **Firmware Upgrade** in BlackVue application.
- 6 Press **OK** to transfer firmware to BlackVue.
- 7 After transfer is complete, BlackVue will reboot and firmware upgrade will automatically occur.

Note

- Firmware may only be downloaded when the smartphone is connected to the internet.
- **Firmware Upgrade** in **Config** is displayed only when a firmware file is available in the smartphone.
- BlackVue will automatically reboot after firmware upgrade is complete.

Caution

- Make sure that the power is never turned off while firmware upgrade is in progress.

'Hancom Inc.' owns the copyright of the 'HANDotum / HANDotumB / HANDotumExt' font used in DR750LW-2CH firmware.



Product Specifications & Standards

Product Specifications

Model Name	DR750LW-2CH
Color/Size/Weight	Front: Black / Width 107.2mm x Height 67.5mm x Thickness 20.5mm / 136g Rear: Black / Width 67.4mm x Height 27.6mm / 30g
Memory	microSD card (16GB / 32GB / 64GB)
Recording Mode	Emergency Recording, Normal Recording, Event Recording (Impact Detection), and Parking mode Recording (Motion+Impact Detection) ※ For Parking mode recording, a battery discharge prevention device is required.
Camera	Front: CMOS Sensor 2.4 million pixel Rear: CMOS Sensor 2 million pixel
Viewing Angle	Front: Diagonal: 146°; Horizontal: 115°; Vertical: 85° Rear: Diagonal: 129°; Horizontal: 108°; Vertical: 57°

Resolution/Frame	Front	Rear
	Full HD (1920x1080) @30Fps	Full HD (1920x1080) @30Fps
	Full HD (1920x1080) @30Fps	HD (1280x720) @30Fps
	HD (1280x720) @30Fps	HD (1280x720) @30Fps
	※ The resolution/frame can be changed.	
LCD	4-Inch WVGA (800x480) Touch Screen ※ Front/rear PIP enabled	
Video Compression Type	MP4	
Wi-Fi	Internal(802.11b/g/n(2.4~2.4835GHz))	
GPS	External	
Microphone	Built-In	
Speaker	Built-In ※ Voice Announcement	

LED Indicators	Front: Front Security LED, Wi-Fi LED, GPS LED, Recording Status (REC)LED Rear: Rear Security LED	
Sensor	3-Axis Acceleration Sensor	
Button	Power Button ※ Pressing Short: Starts and stops voice recording. ※ Pressing Long: Turns on or off the power.	
Backup Battery	Built-In Super Capacitor	
Input Power	DC 12V-24V	
Power Consumption	Avg. 5.9W	
Power Settings	Battery Save Mode	ON/OFF (Subfunctions are activated only when Battery Save Mode is On)
	Min. Working Volt	11.8V/22.8V or 12V/23.2V can be selected.
	Max. Working Time	3 hours/8 hours/12 hours/24 hours/36 hours can be selected.
Operating Temperature	-20°C ~ 60°C	

Storage Temperature	-20°C ~ 70°C
High Temp. Cut-Off	Approx. 70°C
Certificates	Front: KC, CE, FCC, RoHS, Telec, WEEE Rear: KC, CE, FCC, RoHS, WEEE
Software	BlackVue Viewer ※ Windows XP or higher (Windows 8 supported) and Mac Leopard OS X(10.5) or higher
Application	BlackVue Application (Android 2.3 or higher, iOS 6.0 or higher, and Windows 8.0 or higher)

LED Indicators

State		LED	Recording State (REC)	Wi-Fi	GPS	Front Security	Rear Security
Boot-Up		Cross Blinking					Lighting White
Recording	Emergency	Blinking Red and Fast			Blinking White and Fast		
	Normal	Blinking Red			Blinking White		
	Event	Blinking Red and Fast			Blinking White and Fast		
	Parking	Blinking Red					
Wi-Fi ON/OFF			Lighting Blue				
Wi-Fi ON/OFF Change			Blinking Blue		Blinking White		
GPS ON/OFF				Lighting Green			
GPS ON/OFF Change				Blinking Green			
Software Control		Enabled	Disabled	Disabled	Enabled	Disabled	

Recording Time

Item		Resolution (Front+Rear)	Full HD + Full HD @30fps	Full HD + HD @30fps	HD + HD @30fps
Memory Capacity	16 GB		3 HR 20 MIN	3 HR 50 MIN	4 HR 30 MIN
	32GB		6 HR 40 MIN	7 HR 40 MIN	9 HR
	64GB		13 HR 20 MIN	15 HR 20 MIN	18 HR
Bit Rate	Front		6 Mbps	6 Mbps	4 Mbps
	Rear		4 Mbps	3 Mbps	3 Mbps

✓ Note

- Depending on your environment, the actual recording duration may vary.
- Depending on the image quality, the microSD card lifespan can be shorten.

Before Requesting A/S Service

It is required for users to back up important data regularly from storage device (to other separate media). Depending on the situation, it will be necessary to delete the data from the internal storage device (component). It might be needed to delete all the data from the product for A/S. So it is required for users to back up important data by themselves before requesting A/S. For all the A/S products, it is regarded that the user already backed up the data so there is no additional back-up process. Therefore, it is important to note that we are not responsible for any data lost during A/S.

FCC 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.

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

Note: 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.

Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

YCK-DR750LW-2CH

Product Warranty

- **This product is warranted for 1 year from the purchase date. (Accessories Such as Batteries and microSD Cards: Six Months)**
- Pittasoft Co., Ltd. warrants its products under the Standard on Consumer Dispute Settlement (Announced by the Korea Fair Trade Commission). It is as follows: If a service is requested, Pittasoft or its designated subcontractor will provide the service.

Product Name (Model Name)		Serial No.	
Purchase Date		Reseller	
Customer Information		Address / Phone Number	

Consumer Damage Type		Warranty	
		Within the Warranty Term	After the Warranty Term
Performance/Functional Issues or Problems Under Normal Use Conditions	Serious Repair Required Within 10 Days After Purchase	Product Exchange/Refund at Purchase Price	N/A
	Serious Repair Required Within One Month After Purchase	Product Exchange	
	Serious Repair Required Within One Month After Exchange	Product Exchange/Refund at Purchase Price	
	Exchange Disabled	Refund at Purchase Price	

Consumer Damage Type			Warranty	
			Within the Warranty Term	After the Warranty Term
Performance/Functional Issues or Problems Under Normal Use Conditions	Repair Enabled	Defects	Free Repair	Paid Repair/Paid Exchange/Free Repair After the Term of Free Warranty
		Failure Resulting From the Same Defect (Third Time) After Repair		
		Failure (Fifth Time) After the Repair of Failures in Different Parts		
	Repair Disabled	Loss of a Product Whose Repair was Requested	Product Exchange/ Refund at Purchase Price	Refund of the Amount Calculated by Adding 10% to the Fixed Depreciation Amount (Maximum: Purchase Price)
		When repair cannot be conducted due to a lack of spare parts within the component retention period		
		When repair cannot be completed with spare parts		Product Exchange/ Refund After Fixed Depreciation
1) Malfunction Resulting From Customer Faults <ul style="list-style-type: none"> - Malfunction and damage to the product due to your mishandling (e.g. dropping, impact, damage, and forced operation) or misuse - Malfunction and damage to the product conducted after you or a third party, not the after-sales service engineer of Pittasoft repairs alters the product - Malfunction and damage to the product caused by parts, consumables, or products sold separately, not specified by Pittasoft 2) Other Cases <ul style="list-style-type: none"> - Malfunction due to natural disaster (e.g. fire, submersion, and earthquake) - When consumable parts expire lifespan - Malfunction due to an external cause 			Paid Repair	Paid Repair

■ This warranty is effective only in the country where you purchased this product.

■ Product exchange or refund is possible only at the seller where you purchased the product



MSIP-CMM-PTA-DR750LW-2CH
MSIP-REM-PTA-RC750
YCK-DR750LW-2CH

Name | Car Dashcam

Manufacturer | Pittasoft Co.,Ltd. / Korea

Address | (Gasam-dong, BYC HIGHCITY), A-7th floor, 131, Gasan digital 1-ro, Geumcheon-gu, Seoul,
153-718, Republic of Korea

Sales Headquater | Tel: +82-2-6947-4670(#3) | Fax: +82-2-6947-4699
| e-mail: sales@pittasoft.com

PITTASOFT
www.blackvue.com