

PRODUCT OVERVIEW

Front 1 Main Camera Lens Dash Cam Security LED

- 3 Main Bracket / Both side Tape
- 4 Bracket angle adjustment screw
- 6 GPS LED 6 REC LED
- WiFi registration button 8 Power Button
- 9 Power connection slot
- 10 Rear Camera connection port 11 GPS connection slot 12 WiFi USB

13 SD memory card slot



14 Rear Camera Lens

SPECIFICATION

Video / Audio Compress

lmage Sensor

WiFi enabled

ADAS

15 LED 16 Rear Camera Bracket Dash Cam



DR 820

17 Front cable connection port

Full HD CMOS Sensor

LDWS, FCWS, FVDW

Front / Rear Full HD 1080P (1920x1080)

Standby mode for mobile registration.

H264/ADPCM

Max. 30fps

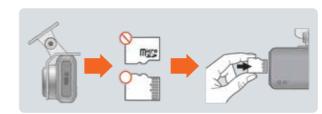
SD Memory Capacity and Recording Time

| SD Card Capacity | 1080P Video Recording Time |
|------------------|----------------------------|
| 4GB | 30 min |
| 8GB | 1 hrs |
| 16GB | 2 hrs |
| 32GB | 4hrs |
| 64GB | 8 hrs |
| 128GB | 16 hrs |
| 256GB | 32 hrs |

Class 10 SD card recommended.
It is recommended to change your SD card every 6 months.

INSTALLATION

Memory Card Insert



DR 820



6 Detach the adhesive tape on the rear dash cam and place it on the rear

4 Connect direct power cable to fuse box in the vehicle.

5 Connect direct power cable to power connection slot on the front dash cam

DR 820

DR 820

2 3 4

DR 820

3 Setup the product via smart phone easily if touch the "Settings" icon. It will be rebooted once when press

save button after finishing setup.

4 If you touch the "help" button, you can check the WiFi setting help page.

PACKAGE COMPONENTS

Basic Components

Rear Camera

(Including bracket)

HELLF





connection cable

USB Reader, 16GB Micro SD Memory card (Class 10)

Optional Accessories:





Direct power cable

DR 820

DR 820

0

0

DR 820

PC VIEWER

1 Recording File list 2 GPS reception

Playback speed

8 Playback Recording

3 Google MAP Only available when there is GPS connection.

Screen Switch Color / Black and White Mode

Reverse Play, Normal Play

5 G-Sensor (Acceleration) Gra

Repeat event

1 Frame Play

Step Reverse, Step

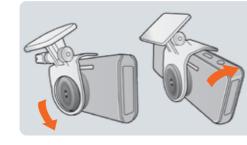
Starts recording when it senses external impact oice Guide (Speaker) Operation Status alarm / Voice guidance xternal GPS Senso Synched with Google map, Keep track of location and peed of the vehicle Windows XP/7/8/10, Support 32Bit / 64Bit, Supported over OSX 10.7 64Bit Synchronizing Google map with PC viewer is supported over Windows7 and explorer 10 as per Google's policy.

DC 12V - 24V -20°C ~ 70°C

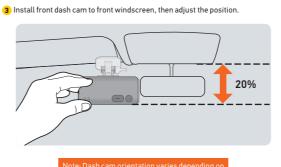
• Improvement on Specifications and Components may be changed without further notice.

PRODUCT INSTALLATION

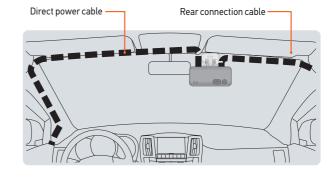
1 Secure the bracket to the front dash cam until a click sound is heard.



2 Insert the memory card into memory card slot.



7 Tuck power cable and rear dash cam connection cable to roofline and pillar.



DR 820

5 Press the WiFi registration button on the device to

6 The registration has to be done within 2 minutes.

to activate the registration mode again. (If re-registering, it automatically registers last installed smartphone)

Front/ Rear Real-Time Image

Check real time recording.

Play recorded video files in list which

are organized on the timeline.

In the case where registration is not active or connection is failed in standby mode, voice guidance

will appear and you will have to pressthe WiFi button

(Voice guidance: "Stand-by mode for the registration")

ADAS SETTING

ADAS is only possible when using an external GPS connection (sold separately) ADAS Setting - Android Smartphone



- 1 ADAS use: By pressing button, you can select features.
- 2 LDWS: Triggers the alarm when the vehicle is out of lane. This activates when over speed limit of setting speed.
- 3 FVSA: When the front vehicle departs away over 2M distance, the alarm will trigger.
- 4 FCWS: When the front vehicle distance is sharply decrease, the alarm will trigger. 5 LDWS speed: Setting the minimum speed detection (50km/h, 60km/h, 70km/h)
- 6 LDWS sensitivity: Setting the sensitivity (Lower, Medium, Higher) 7 FCWS sensitivity: Setting the FCWS (Lower, Medium, Higher)

ADAS Setting – Apple iOS

ADAS use: The "Use ADAS" button allows

when over speed limit of setting speed.

FCWS: When the front vehicle distance is sharply decrease, the alarm will trigger.

LDWS sensitivity: Setting the sensitivity (Low, Medium, High)

FCWS sensitivity: Sets the FCWS (Low, Medium, High)

LDWS speed: Sets the minimum

(50km/h, 60km/h, 70km/h)

LDWS: Triggers the alarm when the

ay over 2M distance, the alarm

vehicle is out of lane. This activates

the user to select features.

will trigger.

By activating the application, you can set-up ADAS setup menu.

FVSA: When the front vehicle departs 3 Front Vehicle Start Alarm

iOS Smartphone ADAS Lane Compensation

1 Use ADAS

4 Foward Collision Warning

5 Lane Departure Warning

7 Lane Departure Speed Detection

view button



Tamper Check

TAMPER CHECK / PARKING MONITORING MODE

- 1 By pressing user registration button for 5 seconds or more, the Tamper Check Feature will be activated with voice guidance.
- 2 All recording files in SD card will be verified though inspection, there will be buzzer sound every time each
- 3 When it detects tampered recording file, the record will be saved as designated directory (sdroot/config/tamper.txt)
- The result of tamper check will be notified to user with Voice guidance.
 No tamper detection: "Data verification passed."
 Tamper detection: "Data verification failed."
- 5 If user pressed the button again, the dash cam will restart to activate normal recording.

Park Monitoring Mode (Smart Motion Detection)

 $\bullet \ When \ parking \ mode \ is \ ON \ and \ motion \ detection \ is \ OFF, the \ dash cam \ continuous \ records$ with low image resolution (10 fps) • When parking mode is OFF, the dashcam continuous records with high image resolution

• When parking mode is ON and motion detection is ON, recording starts when there is

SMARTPHONE CONNECTION

How to connect - Android



2 The screen of HELLA app is shown horizontally. For initial set-up, the message to guide you to register dash cam will show up. Select "No" to terminate th application or select "Yes" to go to the product



DR 820

3 It will search and display registered dash cams, SSID and model name.



be voice guidance "Stand-by mode for the registration" and select the product on the list that you want to register by tapping the "Search" button. Press the "Search" button If you want to search the device again.
The registration has to be done within 2 minutes.

Press the WiFi registration button of product, there will



connection is failed in standby mode, voice guidance will appear and you will have to press the WiFi button to activate the registration mode again. (If re-registering, it automatically registers last installed smartphone)

Main Menu/ Real-Time Image

Main Menu Overview

Settings
Tap on the setting button to change settings. Once setting changes are

saved, the app is rebooted.

Connect Real time image appears after

pressing the "Connect" button.

5 In the case where registration is not active or



6 Registration process is completed as right picture shown. User can modify dash cam name as desired and this can be useful when the user needs several product connections.

DR 820

Real Time Image Menu

Capture

PRECAUTION

Voltage Issues
- Please use recommended/stable voltage only. Otherwise, improper use may cause product failure and fire accidents, explosion or damage to the vehicle. Installation

Do not mount dash cam on area where it obstructs the driver's view or the operation of the vehicle itself.
Do not install the device on colored or heavily tinted windshield as it may affect video quality.

/hen it is playing video, Dash Cam will not be recorded for stabilization. fter it is changed to "live mode", the recording will be started automatically

Usage and General Management • Image quality could deteriorate when the temperature of the device exceeds the optimal operating Iffridge quality source - I temperature.

Please check whether the device is functioning before driving a car.

Do not remove SD card or turn off the power cable during firmware update, it may cause malfunction or

Memory Card and Precaution

There is the lifetime of memory card for rewriting which is expendable product. Periodic care is required.
The device must be turned off when ejecting the memory card. It may cause loss of data or malfunction of the memory card when user forces switch-off while it is running.
Video data may be damaged due to a defective memory card or shorten lifetime of memory card.
Genuine memory card is recommended to avoid error, incompatibility or malfunction of the product.
Please check your memory card once every month for maintenance and stability. It is recommended that you check memory card through SD formatter program(www.sdcard.org).
Time required may vary depending on the memory capacity to use SD card if it is the first time of using it. Please do not remove the SD card while the device is running or when it is being turned off.

DISCLAIMER

The device is not intended to be used for illegal purposes and/or surveillance. It shall not be used in any form as evidence for claim purposes.

Some countries prohibit drivers from mounting anything on the windshield, or restrict mounting to specific areas of the windshield. It is the owner's responsibility to mount the device in compliance with

 $\label{prop:condition} Errors\, may\, occur\, depending\, on\, the\, surrounding\, environment\, and\, the\, voltage\, of\, the\, car.$ Please check date/time if the device is not used for a long period of time. If user doesn't use dash cam for a long time, dash cam would be initialized except for connecting with External GPS.

Though this product records and saves footages in the event of accident, it does not guarantee every single accident scenes are fully recorded. $\label{thm:condition} Accident scenes \, may \, not \, be \, recorded \, if \, there \, is \, minor \, impact \, on \, the \, vehicle \, as \, the \, impact \, sensor \, may \, not \, be \, able \, to \, detect.$

HELLA is not liable/responsible for non-recorded event, missing files, etc. In the event that the product is used as proof of accident, HELLA will not be responsible for any gain or loss caused by the accident.

DR 820

• Magnifying glass disappears by double Pressing "Add" button will bring the user to the device registration page. Return to main menu

• Tap on the screen display to view settings

Set up a favourite

FrontCam Front Dash cam view screen

Save screen captures Search Watch saved front/rear images
Rear Cam Rear Dash Cam view screen

menu on the bottom of the screen.

9 Speed meter Available only when installed GPS. Open file How to connect - Apple iOS How to check the G-sensor data

10 Video Control

Print

Backup

Setup

Thumbnail

Drawing a lane

DR 820



When play the video, you can check the G-sensor data of X-axis (direction), Y-axis (left and right), Z-axis (height).

Click on "Delete" button to delete existing camera info.







* * (I) √ iptime_jk DR 820

DR 820

qwertyuiop