



2CH Wi-Fi DASHCAM LK-7950 WD

User Manual ver. 1.0

LUKAS DashCam

- ※ The Lukas application can be found on the Google Play Store and the App store.
- ※ The Lukas application can be used with Android 4.0 or later, iOS 5.0 or later.

※ Lukas Application can be different in actual depending on version or model.

Thank you for choosing Lukas Dash Camera.

This manual is based on the LK-7950 WD model.

The latest firmware & manual version can be found at our website www.lukashd.com.

■ Please read carefully before using this product ■

- ※ This manual should be reviewed and retained for future reference.
- ※ Qrontech reserves all rights to this manual in accordance with the copyright law.
- ※ Content of this manual is subject to change without notice to ensure quality control.
- ※ Differences in device functionality may differ depending on firmware.
- ※ This product was designed as an accessory for safe driving. In the event of an accident, all responsibility is borne by the vehicle operator. Please use this product responsibly.

■ Scope of guarantee and responsibility ■

- ※ This product is a vehicle-accessory for recording video image and sound for the simulation of an accident. Recorded data may then be used as evidence and/or reference purposes. We cannot guarantee this product to capture all accident related video image and sound. Quality may differ due to weather condition(s).
- ※ We will not be held responsible for any damages and/or data corruption or loss caused by a malfunction of this product.
- ※ In general, the memory card lifespan for this product is 6 months and may be subject to data corruption or loss due to static electricity and/or external voltage. For this reason, it is highly recommended for the user to copy and save important data to other media (hard disk, CD, portable memory etc.).
- ※ Memory card may contain corrupt images (image recording omissions, image cuts, frame change and omission, other defect in image recording) due to a decrease in reading/writing speed and other defects. For the best results, please use Lukas genuine SD memory cards and format periodically (Once a week for 8G SD memory card, and once a month for 8G microSD memory card).
- ※ We will not be held responsible for any damages related to engine output if user records in parking mode without a portable auxiliary battery.



LK-7950 WD

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1. Instruction for Use

■ 1-1. Device Precautions ■

- 1. Do not expose device to direct sunlight or cold weather for extended periods of time.**
Device exposure to direct sunlight and extreme temperatures may cause damage to the device.
- 2. Do not dismantle or alter the product.**
Do not disassemble, modify, or attempt to repair the device. Any alterations to the device can void the manufacturer's warranty. Please contact your local dealer or the C/S Centre for more information.
- 3. Do not dismantle or alter the device accessories.**
Do not disassemble, modify, or attempt to repair any accessories for this product (Cigar Jack Cable, Mount, etc.). This may cause damage to the vehicle and/or device. Any resulting damage shall be the responsibility of the user and is not covered under manufacturer's warranty.
- 4. Do not allow liquid to come into contact with device.**
Please note this device is not waterproof and exposure to liquid and foreign substances may cause a device malfunction, short circuit, and/or fire. Use caution when cleaning the device and clean with a soft and dry cloth.
- 5. Do not expose the device to heavy impacts.**
Excessive impacts to this device can cause a malfunction. Handle the product with care.
- 6. Only use manufacture approved power cable and accessories.**
Any damages or loss to device/vehicle as a result of accessory incompatibility will not be covered under manufacturer's warranty.
- 7. Do not operate the device for extended periods of time while the vehicle is not running.**
Excessive use of the device while vehicle is off can cause drainage to the vehicle's battery.
- 8. Video quality may vary depending on extreme lighting conditions**
Quality is subject to alterations in extreme dark/light areas and conditions. Most notably when entering/exiting a tunnel or parking garage.
- 9. Data may not be recorded if accident impact is lower than a predetermined threshold.**
In extreme cases, the device may not record data during an accident due to possible low impact forces. In addition, a high force impact may disrupt power to the device and data may be lost.

10. Do not disconnect the power source while the device is turned-on.
Disconnecting the power source may cause the device to malfunction. Please use only the recommended voltage for power connection.
11. Some PCs may not support Lukas Viewer or there may be some disconnections in voice/image depending on the PC's specifications.
12. AE operations at night may vary depending on vehicle (black, red) low light reflection.
13. There may be frame omissions due to rapid AE operational changes in low light areas.
Please reset the installation angle of the device if AE operation malfunctions.
14. There may be noise in the video when recording in poor lighting environments.
15. In the event of a sudden frame change or switching between parking & driving modes, there may be a loss of data.
Please reset the installation angle of the black box if AE operation malfunctions.
16. Motion detectors may malfunction in the event of an extreme increase/decrease to the surrounding lighting conditions of the vehicle.
17. The motion detection function may not operate properly in environments with poor lighting conditions due to noise and vehicle security LED(s).
18. The left/right side image quality of this device may vary due to characteristics of the wide-angle lens.
19. Image quality may display 'flickers' of light due to traffic and street light.
20. This product supports OBD II, but users are recommended to inquire of distributor or customer center about applicable vehicle, model and more informaton before use. (Software/hardware modification).
21. Please ensure all accessories are connected to device(s) to avoid data loss.
22. We will not be held responsible for any damages related to engine output if user records in parking mode without a portable auxiliary battery.
23. The device can't be connected to WiFi at the same time, it is limited to access internet with a connecting device.
24. For playback of recorded videos using Wi-Fi, the reception may vary according to the data transfer rate and the smartphone.
25. The range of Wi-Fi reception may vary.
26. Do not continue to use this device if a malfunction is apparent. Please contact our C/S centre or your local distributor with any questions and/or concerns about this product.

■ 1–2. Installation ■

1. Keep device clear of clutter.
Please ensure the surrounding area is clutter free to avoid reflections/vibrations that may reduce the image/audio quality.
2. Ensure camera lens is clean at all times.
Please ensure the surrounding area is clutter free to avoid reflections/vibrations that may reduce the image/audio quality
3. Do not attempt to operate or install the device while driving.
For your safety, do not attempt to operate or install the device while driving to avoid a traffic accident,
4. Please keep the device is securely fixed to mount.
Please check that the device is secured before operating the vehicle. This will ensure the best image quality and avoid distractions to the driver while in motion.
5. Please avoid excessive window tints, as this may distort image quality.
6. Install this product at the point furthest away from the antenna or receiver as possible.
The electromagnetic waves produced by the device may distort receiving sensitivity.
7. Videos may appear dark when using a CPL filter.
We don't recommend using a CPL filter at night or with vehicles with excessive window tints.
Depending on tinting conditions, a 'rainbow' effect may appear on recorded data.
8. Please remove the UV filter when using a CPL filter.
A vignette effect may occur when combining the filters by diagonal size.

■ 1–3. GPS ■

1. GPS signal may not be received depending on the surrounding environment such as buildings, underground parkades, and trees.
2. A combination of factors including weather can delay the time to receive the first GPS signal after power is connected to the device.
3. External electronic devices and window tinting may affect the GPS reception.
4. Vehicle speed accuracy may vary between 1–30km/h (0.5–19mph) depending on the reception area when stopping the vehicle.
5. GPS information may be lost when switching off the device.

■ 1-4. Memory Card ■

1. Do not remove the memory card by force while the product is in recording mode.

Be sure to turn off the product before removing the memory card. Removing the memory card while the device is on may damage the video file or cause an operation error of the memory card.

2. Formatting SD card once a week (8G), microSD once a month at minimum (8G) is recommended.

Repetitive writing and deletion by the device can cause damage to the memory card(s) and files. Accordingly, periodic formatting of the memory cards can prevent files from being damaged. The lifespan of a memory card is 6 months and we are not responsible for any recording errors that may take place as a result of prolonged usage after the 6 month period.

3. Even after reformatting a memory card, it can be used in the device without configuration files such as firmware.

The latest set values are contained within the device, and will be automatically applied to the SD card(s) when inserted.

4. Please format the SD card through Lukas viewer program on PC or dash cam itself.

5. Please use Lukas Genuine memory cards to ensure the best quality.

We will not be held responsible for any problems related to the usage of memory cards not provided by us.

6. Handle with care when inserting and removing the memory card(s) to avoid burns.

The memory card(s) operate at high temperatures, and we recommend you use caution when inserting and removing.

7. Operating temperatures may vary depending on the performance of memory cards.

8. Be sure to backup your recorded videos using an extra storage device. (PC, external HDD, etc.).

A backup of the memory card data using an external storage device may prevent the loss of important data.

9. Be sure to insert the microSD card into the device.

Without a microSD card, event recordings will not be saved.

2. Features

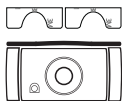
- ▶ **Supports a variety of recording functions** : Vivid picture quality with dedicated sensors Front view / Rear view dash cam : 2.1M Effective Pixel(1/2.9")
Sony IMX322 Full HD dedicated sensor
- ▶ **Distortion-free recording with wide angle lens**
Front view : 1920X1080p Full HD recording, wide screen with max. 30fps /
16:9 (diagonal (approx. 135°) / effective viewing angle: horizontal (approx. 107°), vertical (approx. 55°)
Rear view : 1920X1080p Full HD recording, wide screen with max. 24fps / effective viewing angle: horizontal (approx. 105°), vertical (approx. 54°)
- ▶ **Supports Wi-Fi (802.11b/g/n (2.4~2.4835GHz))**
- ▶ **Equipped with car battery discharge prevention function** : Multi-booting support, Leakage current 100uA or less
- ▶ **Supports a variety of recording functions** : Continuous recording : generates recording files at three-minute or five-minute interval continuously
: Event recording : records before/after impact occurs for 30 seconds in total
: Dual Slot (SD+microSD), Dual Save (Always+Event / Motion+Event)
- ▶ **Supports largest memory capacity of 512GB (SD Card 256GB + micro SD 256GB)**
- ▶ **Supports voice guidance in 20 languages** (English, Korean, French, Spanish(America), Arabic, Chinese(Mandarin, Cantonese), Russian, Japanese, Thai, Italian, Vietnamese, German, Mogolian, Turkish, Hindi, Czech, Portuguese, Bahasa Indonesia, Bahasa Melayu)
- ▶ **Supports Dual security LED & 37mm UV filter(standard), CPL filter(optional)**
- ▶ **Supports Built-In GPS (GPS+GLONASS), OBD II (optional)**
- ▶ **Detachable fixed/rotating mounts**
- ▶ **No electric current interruption by minimizing height of rear view camera**
- ▶ **Built-in microphone** : device formats memory card without connection to PC.
- ▶ **Direct memory card format** : able to format memory card without connecting to PC
- ▶ **Built-in super capacitor** : internal battery replacements are not necessary due to a built-in semi-permanent super capacitor.
When the vehicle is turned off, the device will save all data before terminating.
- ▶ **Firmware upgrade support** : firmware will be upgraded from time-to-time for quality control.
- ▶ **Configuration setting available** : aconfiguration settings available directly on the device itself.

3. Package & Part Names

3-1. Package Guide



Front Camera
(8G microSD + UV Filter
and Wi-Fi dongle included)



Rear Camera
+ Adhesive Tape



Hard Wire Power Cable



Front/Rear Connection Cable(5m)



User Manual



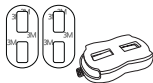
SD Card



microSD Card Adapter



Fixed Type Bracket Set



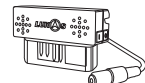
Rotating Type Bracket Set
(optional)



Cigar Power Cable (optional)



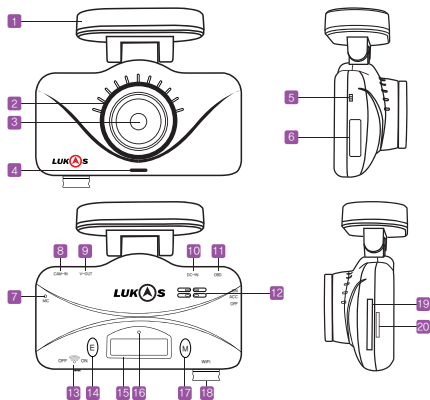
CPL Filter (optional)



OBD II module (optional)

- This package guide is described based on type B model.
- Product package is subject to change depending on models and types.
- Hard wire power cable is not included in type D model.
- Do not use microSD card adaptor in the device or it may malfunction.

3-2. Name & Functions of Each Part



Direct Format from Dash Cam

1. First, insert SD card into the dash cam and wait until booting is completed.
2. Press 'E' button (14) and 'M' button (17) at the same time.
3. segment message 'FOR' will appear/blink on screen and wait 15 seconds
4. Formatting starts: Press 'E' button (14) again, LED segment will disappear with voice alarm and will reboot. (Time consumed 12sec/32G standard time)

※ Both SD/microSD will be formatted automatically from dash cam.



	Name	Function
1	Stand & GPS(built-in)	Installed to car & receive GPS info(only applied to device with GPS stand)
2	37mm UV filter	Used to protect lens through UV protection filter and lengthen sensor lifespan
3	Camera Lens	Video signal input (CMOS Digital Sensor)
4	Security LED	Display dash cam operation status, give warning during recording
5	Power Switch	Dash cam power supply switch
6	S/N	Product name & Product serial number
7	MIC	Voice signal input
8	CAM-IN	Rear camera input connection
9	V-OUT	Real time video output of dash cam using video output terminal
10	DC-IN	Power supply with the power connector
11	OBD	OBD connector
12	Sound output	Various effect sound and sound output
13	Wi-Fi Switch	Wi-Fi On/Off switch
14	Emergency Recording Button	Emergency(event) recording(video is recorded at 30sec in event folder)
15	Segment LED	Displays time, speed, status, etc.
16	Operation status LED	Display dash cam operation status etc
17	Emergency Recording Button (E)	Press longer than 3 sec : Segment LED switch On/Off, Voice guidance On/Off (Switch of function On/Off) Press shorter than 2 sec: voice recording
18	Wi-Fi	Wi-Fi dongle connector
19	SD Slot	Used to insert/separate SD card
20	microSD Slot	Used to insert/separate microSD card

	Name	Function
1	Stand	Through which rear view camera can be installed to the car
2	Security LED	Display dash cam operation status, give warning during recording
3	Camera Lens	Video signal input (Sony IMX 322 Sensor)
4	Cable Connection	Rear view cable connection terminal

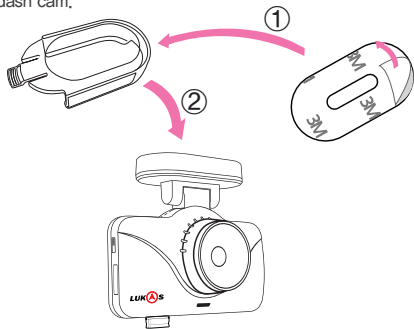
4. Installation

4-1. Precautions

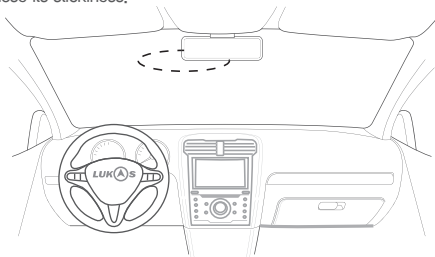
- ※ Before installation, park your vehicle on a flat surface and an area with normal light exposure.
Turn off the engine and remove the key from the ignition. **(Be sure parking brake is ON)**
- ※ Pick a spot for the device around the rear view mirror not blocking the driver's view.
- ※ Clean the windshield area where the dash cam will be installed.
- ※ Do not install the device with the lens facing upwards or it may cause a GPS and/or an event malfunction.
(With no GPS detection, keeps recording in event mode).
- ※ Adjust camera lens angle to show still image(car bonnet) on approx. 40% of the recording screen.
 - If the lens is installed too low, it blocks traffic signs, keeping you from seeing exact information. When the lens is installed too high, the screen looks dark overall due to the bright sky.

4-2. Installation Steps

- 1 Put on two-sided adhesive tape on front/rear stand of the dash cam.

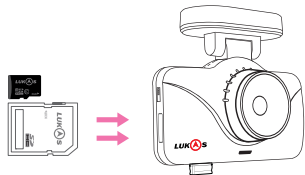


- 2 Select a place not blocking the driver's view, install front camera onto the windshield around the rear view mirror. Do the same with the rear camera onto rear windshield.
 - ※ Detaching and reattaching the adhesive tape causes the tape to lose its stickiness.



4-2. Installation Steps

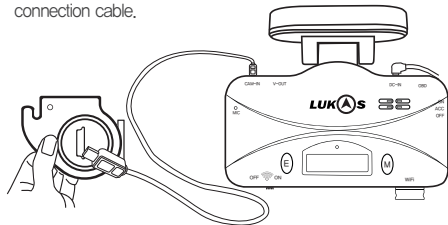
- 3 Insert SD card and microSD card into front camera.



※ If you do not insert microSD, event files are not saved.

※ Do not insert the microSD card into the device without the microSD card adaptor or a malfunction may occur.

- 5 Connect front camera and rear camera with front/rear connection cable.

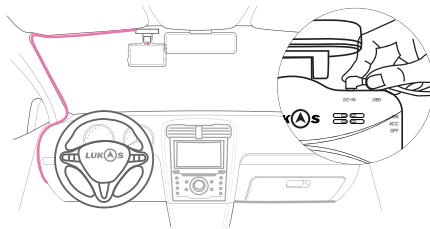


※ If there is no SD card, the device will not work.

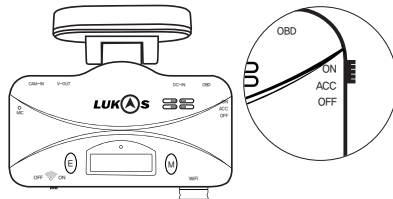
※ Device will reboot after rear camera cable is connected and disconnected.

※ Please ensure cable connection is snug, as the device may malfunction.

- 4 After connecting power cable to the front camera, arrange and hide the power cable along the filler.














- 6 After installation, turn the engine on and select the power option (ACC or ON) on the device.












※ Please ensure rear connection cable is connected/disconnected only when device power is off. Otherwise, the product may be damaged.

4-3. Segment LED Messages

※ Entire segment message will blink when event recording occurs.

Segment LED Message	Voice Guidance	Details
	Welcome, this is Lukas blackbox. Drive safely.	Firmware version appears at the initial boot of the device. (Firmware version may differ depending on the device model.)
	-	After boot is completed, parking/stopping time is displayed. (This may differ according to configuration)
	-	After boot is completed, parking/stopping date is displayed. (This may differ according to configuration)
	-	Displays the *speed when driving. (Depends on configuration) *it isn't displayed below 5km or 5miles.
	Voice recording started. Voice recording stopped.	When the sound recording function is activated, the top dot will blink. (3 second intervals)
	-	When the Wi-Fi connects by way of the Wi-Fi On/Off switch, the bottom dot will blink.
	-	Appears when the voltage of input power is low. Dash cam is on standby and segment message blinks.
	Driving mode recording started.	When switched to driving mode, 'drv' is displayed.
	Parking mode recording started.	When switched to parking mode, 'PAR' is displayed.
	-	When starting a firmware update, 'UPdA' is displayed.
	-	When the device turns off, 'SEE You' is displayed.

4-3. Segment LED Messages

Segment LED Message	Voice Guidance	Details
	Formatting on hold. Press the left key to format. Formatting the SD card.	When formatted by force, it blinks 'For' and stays in standby mode.
	No SD card.	When SD Card is not inserted or removed by force, 'Sd_FAIL' is displayed.
	–	Appears when SD Card is in need of formatting.
	This vehicle is subject to No-Driving Day program.	If the function is activated, 'dAY' is displayed.
	Recording failure 2 / Recording failure 3 Please format.	'CHK' is displayed if the SD Card requires immediate formatting.
	–	Appears when micro SD Card is not inserted.
	Do not turn off the power. Completed.	Update firmware after downloading firmware files.
 	–	Err0 : RTC problem occurred, Device needs to be repaired. Err1 : Camera cannot be connected, Device needs to be repaired. Err2 : Memory card problem occurred, Please reformat the SD Card(s). Err3 : Memory card problem occurred, (Restart the device) Device needs to be repaired if this segment message continues. Err4 : OBD module communication problem occurred. Check that cord connection is snug. Err5 : Firmware update incomplete on mobile device. Err6 : Detach Wi-Fi dongle to reboot the device.

※ The segment LED will discontinue while in parking mode.

4-4. Memory Card Usage

- Video is recorded in 3 or 5minute intervals for continuous recording, 30 second intervals for motion and event recording.
- The number of files and usage times below is standard when set at 70% continuous recording and 30% motion recording.

1. SD Card usage time

	Continuous Recording (Based on 3min)			Motion Detection Recording (Based on 3min)		
	No. of files for front view	No. of files for rear view	Total usage time	No. of files for front view	No. of files for rear view	Total usage time
8G	22	22	Approx. 1h 6min	56	56	Approx. 28min
16G	45	45	Approx. 2h 15min	116	116	Approx. 58min
32G	91	91	Approx. 4h 33min	236	236	Approx. 1h 58min
64G	184	184	Approx. 9h 12min	473	473	Approx. 3h 56min 30s
128G	368	368	Approx. 18h 24min	948	948	Approx. 7h 54min

2. microSD card usage time (event recording)

	8G	16G	32G	64G	128G
No. of files for front view	188	386	786	1578	3160
No. of files for rear view	188	386	786	1578	3160
Total usage time	Approx. 1h 34min	Approx. 3h 13min	Approx. 6h 33min	Approx. 13h 19min	Approx. 26h 20min

※ Based on front view 6M/sec, rear view 4M/sec. (high definition in configuration setting)

※ Number of files is based on 3min.

※ Total recording time is calculated by considering front/rear view video as one video. (Videos are saved after they are separated into front/rear view)

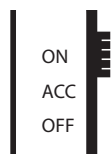
※ Number of files and storage time may differ more or less during actual use.

5. Product Usage

5-1. Standard Operation Guide

1. Start & Stop Recording

You can set power safety function conveniently by manipulating power switch on dash cam.



- ON : supports recording during driving/parking (operates up to set voltage or time during parking)
 - ACC : supports recording during driving (dash cam begins to operate when the engine is on and it stops operating when engine is off)
 - OFF : power not supplied to black box.
- ※ Check if memory card is in the device before turning the device on.
- ※ When booting proceeds after power is supplied, Lukas logo will be showed up on LCD screen.
- ※ After dash cam is booted, it starts to record right after voice message "This is Lukas black box, Drive safely." is announced.

2. Standard Recording Mode

	Continuous Recording	Motion Detection Recording	Event Recording	Emergency Recording
Storage Place	SD card	SD card	SD card/microSD card	microSD card
Folder	AlwaysMovie	MotionMovie	AlwaysMovie / EventMovie	EventMovie
Storage Time	3min or 5min	30sec	30sec	30sec
Video Display	always	parking / motion	always + event / event	event
Characteristics	Record continuously while driving	<ul style="list-style-type: none">- Record motion detection in parking mode with selecting motion detection function- Able to set motion detection sensitivity	<ul style="list-style-type: none">- Record when impact takes place during driving or parking- Able to set G-sensor sensitivity	Record whenever you need to by pressing emergency recording button

※ If there is a microSD card inserted, videos from event recordings are saved onto the microSD card in the EventMovie folder. Continuous recordings will be saved in the AlwaysMovie folder of the SD card.

※ If there is no microSD card inserted, video from event recordings will not be saved. Only videos from continuous recording will be saved onto the SD card.

3. Video Playback

- Check recorded video : you can watch recorded video when you select SD card button on the Lukas App. You can also access and format your recorded video using the Lukas dedicated viewer by connecting the SD/micro SD card to your computer.

4. Security LED Operation

	During Continuous Recording	During Recording while Parking	Event/Motion taking place
Front LED Status	Blue LED stays on continuously	Blue LED blinks slowly	Red LED blinks fast
Rear LED Status	Blue LED stays on continuously	Blue LED blinks slowly	Blue LED blinks fast

※ You can set the Security LED to On/Off on your device: Configuration > Additional Function. (When it is Off, the security LED doesn't work)

5. Working LED Operation

During Continuous Recording	During Recording while Parking	Event/Motion taking place	ACC OFF	Entering battery discharge prevention
Blue LED stays on continuously	Red LED stays on continuously	Red LED blinks slowly	Blue LED blinks slowly	Blue LED blinks fast

※ The device will terminate power if the vehicle's battery drops below a predetermined voltage and will be indicated by a fast blue blinking light.

6. Recording while Driving

- Continuous Recording : Files saved to the AlwaysMovie folder on the SD card.
 - ※ User can choose driving footage time in 3 or 5 minute intervals.
 - ※ "Always" is displayed on the lower part of the screen when continuous recording is playing.
- Event Recording : Footage records for 30 seconds in total - 10 seconds before / 20 seconds after an event occurs.
Files saved to the EventMovie folder on the microSD card.
- Emergency Recording : When pressing the Emergence Button ('E' Button) for approximately 1 second; recording will begin (with sound notification) for 30 seconds and is saved to the microSD card in the EventMovie folder.
 - ※ Emergency recording cannot operate during event recording and event recording does not operate during emergency recording.

6. . Recording While Parked

- Parking mode is active when the device power is ON.
 - ※ Note that recording and the device itself will terminate power if the vehicles' battery drops below a predetermined voltage
- How to change to parking mode : How to change to parking mode: The device can be programmed with a set time to initiate the 'auto-conversation to parking mode' function. When the device converts to parking mode, a voice segment ("Switched to parking mode") is announced.
 - ※ Automatic conversation to parking mode can be programmed in the "Configuration Setting > Basic Functions" of the Lukas viewer or on the Lukas mobile app: "LUKAS Setting > Basic Functions".
 - ※ As recoding stops and converts to parking or driving mode, less than 5 seconds of video may be lost.
- Recording in parking mode : "Motion" LED segment will be displayed on lower part of the screen when saved video playing.
 - ※ When converting from continuous, event, or manual recording mode to parking mode, each recorded file is terminate and converted into parking mode. For this reason, video loss can occur.
- When selecting 'Use motion detection' in the configuration settings, video will be recorded for 30 seconds in total when motion is detected 10 seconds before / 20 seconds after. Files will be saved in the Motion Movie folder.
 - ※ For efficient memory management only the rear/front camera that detects the motion will activate.
 - ※ You can set the motion detection function on the Lukas Viewer : "Configuration Setting > Motion Detection" or directly from the Lukas App : "LUKAS Setting > Motion Detection".
 - ※ RED LED will blink while motion recording is active.
 - ※ Motion detection may fail when the vehicle is in extreme lighting conditions.
 - ※ Recording time during parking mode may vary depending on the vehicles' battery voltage.
 - ※ Motion recording may continue according to changes in the environment, the sensitivity must be set to in accordance with your parking environment (E.g. When parking in an alley or underground, frequent movements may interfere with motion recording if set on a high sensitivity.).

7. Driving Information Check

- Lukas back box can record up to approximately 1 million driving information points onto the SD card. After you have set the storage intervals for driving information on the configurations settings, the desired data points will then be saved at every programmed interval.

5-2. Getting started with The Lukas App

※ Download the Lukas application on your smartphone.

The Lukas application can be found on the Google Play Store and the App Store for iPhone.

- The Lukas application can be used with Android 4.0 or later, iOS 5.0 or later.
- The Lukas App may not be supported depending on the smartphone.

※ Turn the Wi-Fi button to On located at the bottom of the dash cam.

※ For playback of recorded videos using Wi-Fi, the reception may vary according to the data transfer rate.

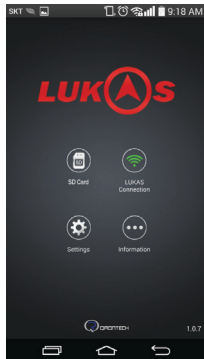
※ The range of Wi-Fi reception may vary.

※ The path of recorded videos may vary depending on the smartphone.

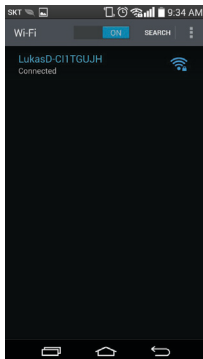


[Download the Lukas App on Google Play]

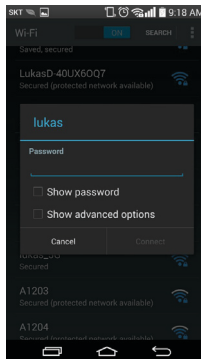
5-3. Connecting to The Lukas App



[LUKAS APP main menu]



[Connect smartphone with Wi-Fi]

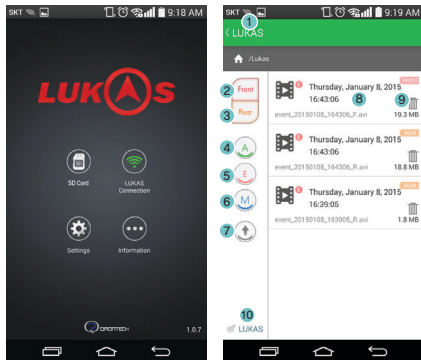


[Put password]

1. Select the Lukas Connect button on the main screen.
 - ※ When the black box is connected with your smartphone, the Lukas Connect icon will turn green.
 2. Select 'Lukas' on the Wi-Fi list.
 3. Enter in the default password : '11111111'.
- ※ For a stable connection, please remain within close proximity with your dash cam.
 - ※ Change your password to prevent others from accessing your device.
 - ※ Configure your device name and password on the Lukas Viewer program or Lukas App.

5-4-1. Using the Lukas App - SD Card

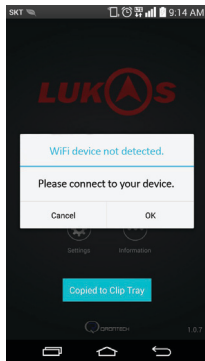
※ You can view your recorded footage saved on the SD Card right from the Lukas App.



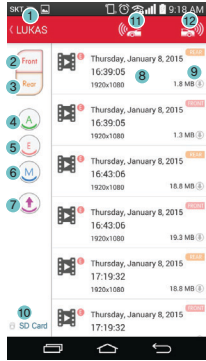
1. Navigation : Navigate to the Main Screen.
2. Front Camera : Display footage captured by the Front Camera.
3. Rear Camera : Display footage captures by the Rear Camera.
4. Always Video : Display footage captured in Always Recording mode.
5. Event Video : Display footage captured in Event Recoding mode.
6. Motion Detection Video : Display footage captured in Motion Detection mode.
7. Customize : Arrange order of footage by time sequence (ascending/descending).
8. Play : View footage file.
9. Delete : Delete footage file.
10. Wi-Fi : Navigate to 'LUKAS Connection'.

5-4-2. Using the Lukas App - LUKAS Connection

- ※ Connect with your Lukas device to view captured footage.
- ※ Green indicates a successful connect on the Main Screen.



[Disconnect Wi-Fi]

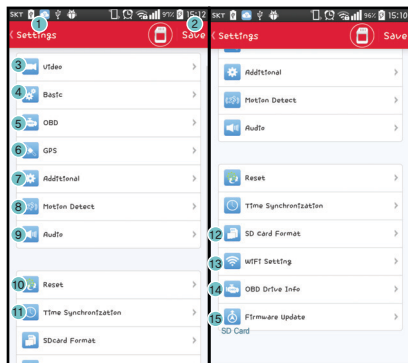


[Wi-Fi Connection]

1. Navigation : Navigate to the Main Screen.
2. Front Camera : Display footage captured by the Front Camera.
3. Rear Camera : Display footage captures by the Rear Camera.
4. Always Video : Display footage captured in Always Recording mode.
5. Event Video : Display footage captured in Event Recoding mode.
6. Motion Detection Video : Display footage captured in Motion Detection mode.
7. Customize Order : Arrange order of footage by time sequence (ascending/descending).
8. Play : View footage file.
9. Download : Save footage file onto your Smartphone as a movie clip.
File path may vary depending on Smartphone and OS.
10. SD Card : Navigate to 'SD Card'.
11. Front Camera LIVE : View a live video stream from the Front Camera.
12. Rear Camera LIVE : View a live video stream from the Rear Camera.

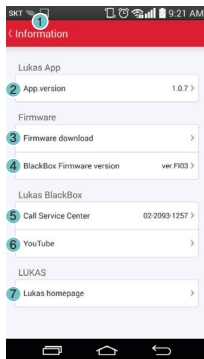
5-4-3. Using the Lukas App – Configuration

- ※ Configuration only available when Lukas device is connected to your Smartphone.
- ※ Menu items may vary depending on Lukas model.



1. Navigation : Navigate to the Main Screen.
2. Save Changes : Changes will be saved and applied.
3. Video : Configure video settings.
4. Basic : Configure basic settings & functions.
5. OBD : Configure OBDII settings.
 - ※ Only applicable to devices connected to OBDII module.
6. GPS : Configure GPS settings.
7. Additional : Additional settings and functions.
8. Motion Detection : Configure setting for Motion Detection.
9. Audio : Configure audio quality and settings.
10. Reset : Reset all settings applied to device to default factory settings.
11. Time Synchronization : Synchronize device time with Smartphone.
12. SD Card Format : Format microSD / SD Card.
13. WiFi Settings : Verify changes to the Wifi network of the device.
14. OBD Driving Information : View the OBD driving screen.
15. Firmware Update : Updates available for your device.

5-4-4 Using the Lukas App – Miscellaneous



1. Navigation : Navigate to the Main Screen.
2. Application Version : Displays current mobile app version.
3. Firmware Download : Download the latest firmware.
4. Firmware Version : Displays current firmware version of your device.
5. Call Service Center : Contact Lukas for more information.
6. YouTube : View our YouTube channel.
7. Lukas Homepage : Visit our homepage for more information.

5-5. Upgrading Firmware on the Lukas App

1. Connect to your Lukas device to view current firmware version. ('Information → BlackBox Firmware version')
 2. Navigate to Firmware Download ('Information → Firmware Download') after disconnecting Smartphone from Wi-Fi.
 3. Download the latest firmware available (Charges may apply depending on carrier).
 4. Ensure device and smartphone maintain a stable connection after connecting Smartphone from Wi-Fi again.
 5. Upload firmware to your device ('Lukas Configuration → Firmware Update').
 6. Please wait until it works well when dash cam reboot after the latest firmware upload to dashcam.
- ※ Please do not restart your Smartphone or dash cam while firmware is being installed.

■ 5-6. Lukas Viewer ■

1. Program Installation



※ Lukas Viewer can be found on the SD card(s) that come with your product.

You can download the Lukas Viewer for the LK-7950 WD at any time from our website (www.lukashd.com).

※ Name of viewer icon may vary depending on OBDII compatibility.

Recommended PC specification for using Lukas viewer

OS: Windows XP SP3, Vista (32Bit), WIN 7,8 (32/64bit)

H/W: Quad core 2.8Ghz/ 4G RAM

Web browser: Microsoft internet explorer 7.0

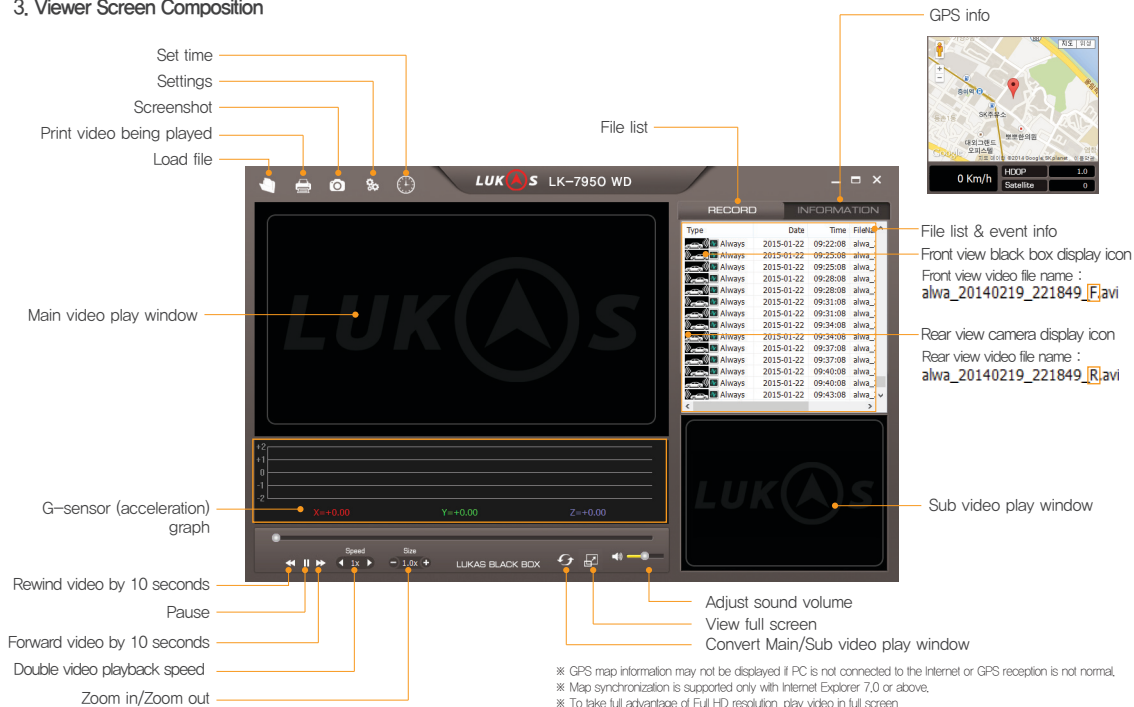
Direct X version: Direct X9.0 (JUNE2010)

Others: Windows,NET Framework 4

※ For best result, please use the Lukas Viewer supplied with your product.

There may be occasional display and sounds cuts, changes in play speed and other errors depending on your computer make and model.

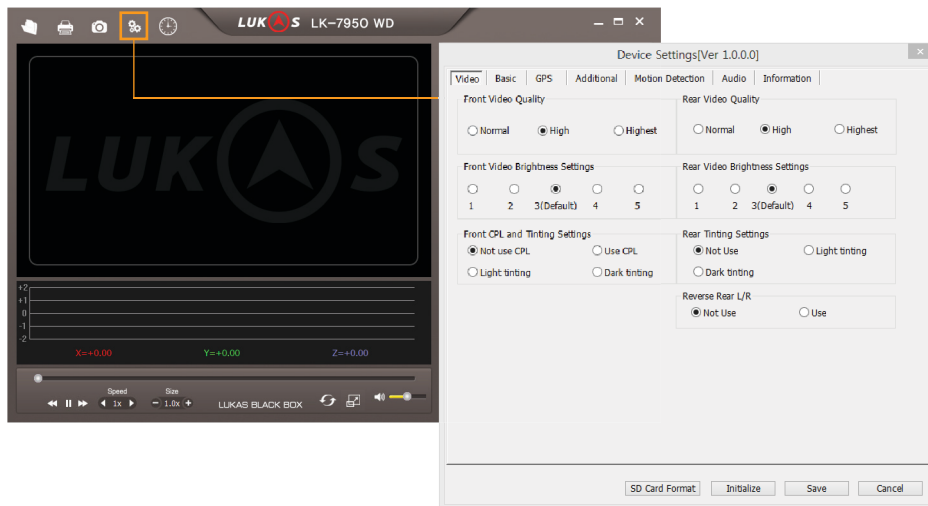
3. Viewer Screen Composition



- ※ GPS map information may not be displayed if PC is not connected to the Internet or GPS reception is not normal.
- ※ Map synchronization is supported only with Internet Explorer 7.0 or above.
- ※ To take full advantage of Full HD resolution, play video in full screen.
- ※ Viewer image may be different when in sync with OBD II.

3. Settings

- Please use the settings menu to make changes to your footage.



4. Video Playback Screen



1

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- 1 Date & Time
- 2 Driving Speed
※ Only with GPS or OBD II
- 3 GPS Communication Status
※ A : GPS received
※ V : no GPS reception
※ F : GPS power not connected
- 4 Mileage
※ Only with GPS or OBD II
- 5 Dash Cam Supply Voltage
- 6 Recording Mode
- 7 Vehicle Number (able to input max. 8 digits)
- 8 Recording Resolution
- 9 Image Quality (video saving data speed/sec)
※ S : Best quality
※ H : Good quality
※ N : Normal quality

6. Specifications & Customer Service

6-1. Specifications

*Specifications are subject to change without notice for improvement.

Item	Specification	Remark
Camera	Front : Full HD dedicated 2.1M Effective Pixel SONY IMX322 Sensor, 1/2.9(inch) Rear : Full HD dedicated 2.1M Effective Pixel SONY IMX322 Sensor, 1/2.9(inch)	
Viewing Angle	Front : Diagonal(approx. 135°) Effective Angle: horizontal (approx. 107°), vertical (approx. 55°) Rear : Diagonal(approx. 130°) Effective Angle: horizontal (approx. 105°), vertical (approx. 54°)	
Recording Resolution & Frame	Front : 1920×1080p(Full HD), 30fps Rear : 1920×1080p(Full HD), 24fps	
Wi-Fi	802.11b/g/n (2.4~2.4835 GHz)	Dongle Type
Video Compression	H.264(AVI format) / Codec profile : HIP(High profile)	
Gravity Sensor	Built-In 3-axis Impact sensor(impact, sudden brake, sudden start)	
GPS	Built-In Dual Band(GPS+Glonass)	Option
Storage Media	SD Card : SDHC / SDXC memory card (standard 8G, max. 256G) microSD : microSDHC / microSDXC (standard 8G, max. 256G)	
Player Program	General media player / Lukas viewer	
Audio	Built-In speaker, Microphone	
Power & Current Consumption	Power: DC 10V~24V, Power consumption: 370mA (13.4V), approx. 4.9W	Based on Type A
Low Voltage Cut-off	Able to set time & voltage, supports multi-booting	
Operating & Storage Temperature	Operating : -30°C ~ 80°C(-4°F~158°F), Storage : -30°C ~ 90°C(-4°F~194°F)	
Size/Weight	Front : 109 X 99 X 38 (mm), 161g / Rear : 50 X 26 X 31 (mm), 25g	Includes GPS, UV filter, Dongle



Quality Assurance

Model Name		Product S/N	
Customer Name		Date of Purchase	MM / DD / YY
Customer Phone No.		Place of Purchase	

1. A standard 1-year warranty is provided from the date of purchase.
However, a 6-month warranty is provided for accessories, including memory card.
2. This product has undergone strict quality control and inspection procedures.
3. Please provide all necessary information when making a warranty claim.
4. This user manual will not be re-issued with a warranty claim. Please retain this manual for future reference.
5. We are not responsible for any charges related to the installation or uninstallation of this product, regardless of warranty status.

■ Certified company info. ■



1. Certified company : Grontech Co., Ltd.
2. Device name (model name) : Lukas Black Box(Dash Cam)
(LK-7950, LK-7950G, LK-7950D, LK-7950GD)
3. Certificate No. : MSIP-REM-QRN-FFWD
4. Manufacturer/Manufacturing country : Grontech Co., Ltd. /
Korea

Distributor and user must note that this device is an electromagnetic device, and is meant as a vehicle accessory only.



Conformity European Marking
EU Joint Specification Certificate



U.S. Federal Communications
Commission /
Electromagnetic Wave
Compatibility Certificate

