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# 1. Safety Warnings and Cautions

The following contains important information for ensuring safety of the user and preventing potential damage or inconvenience due to improper use. Please read the following warnings and cautions thoroughly before using the product.

\* The safety warnings and cautions are categorized as below, depending on the level of potential risks and damages that may result from improper use.

## -Warnings

Failure to follow safety warnings may lead to serious injury or death.

## -Cautions

Failure to follow cautions may lead to injury or property damages.

## Warnings

1. Do not disassemble, or modify the product on your own or install the product in a way other than intended.

Improper installation, disassembly, or modification of the product may cause product to malfunction. Such malfunctions are not covered under product warranty.

2. Do not operate the product while driving.

Operating the product while you driving may cause an accident. If you need to operate the product, do so after coming to a full stop in a safe location .

3. Do not operate the product if it malfunctions.

If any foreign matters or water has entered the product or if the product releases smoke, stop using the product immediately and contact Customer Support.

4. Before connecting/disconnecting rear camera, make sure that the power is turned off.

Connecting/disconnecting rear cameras to the product while power is on may cause a malfunction.

5. Before installing the product, make sure that the vehicle's ignition is turned off.

Installing the product while the ignition is on may result in electric shock or accident.

6. Do not install the product on where it may obstruct the driver's view or cause any kind of disturbance to driver.

Installing the product in such positions may lead to an accident.

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

This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

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

This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

## 1. Safety Warnings and Cautions

7. Do not use this product when it is not functioning properly.

Continuing use of the product may lead to an accident.

8. Do not drop the product in water or store it in a humid environment for an extended period of time.

If the product is damaged by water or humidity, contact your retailer or Customer Support.

9. Maintain the appropriate temperature (0°C to 50°C) during use.

Operating the product beyond this temperature range may lower the product's performance and/or damage the hardware.

10. Do not apply heat to the product using a furnace, microwave, or hair drier.

It may cause explosions, deformations, or defects.

11. Do not expose the product to direct sunlight for an extended period of time during summer.

It may lead to a product malfunction or a fire.

12. Always use genuine parts and accessories from manufacturer.

Using non-genuine parts or accessories may lead to malfunctions or defects.

13. When installing the product, make sure it does not interfere with the operation of other onboard devices, such as airbags.

Failure to do so may interrupt proper operation of such devices and cause injuries.

14. Use the product only with recommended voltage.

It may lead to a product malfunction or a fire.

15. Firmly install the product on a proper position.

If it is not attached firmly, the product may fall while driving, and may cause traffic accidents.

# 1. Safety Warnings and Cautions

## Cautions

1. Avoid strong impact to the product.

It may damage the product or cause malfunctions.

2. Be careful when you touch this product while in use. The heat generated from the product may cause burn injuries.

Prolonged continuous use of this product may generate heat and cause burn injuries.

3. Dramatic changes in the surroundings such as brightness or backlight may degrade video recording quality.

Video recording quality may be affected in situations where brightness changes quickly, such as entering and exiting tunnels, or when facing strong backlight.

4. Do not touch this product with greasy or wet hands.

It may damage the product or cause malfunctions.

5. Keep the camera lens clean at all times.

Failure to keep the camera lens clean may lower quality of recordings.

6. Using the product in a vehicle with a tinted windshield may alter the video recording.

7. Event Recording may not be initiated if external impact is not strong enough.

In such case, you can use the Manual Recording button to record the event.

## 1. Safety Warnings and Cautions

8. Do not operate the product with a sharp objects such as nails or awls.

It may damage the product or cause malfunctions.

9. Do not place the product near a magnet or areas with strong magnetic fields.

It may damage the product or cause malfunctions.

10. You should always backup important data to another storage medium.

If the data must be preserved for a long period of time, always backup the data to an additional storage medium..

11. Check the condition of the product and recording quality on regular basis.

Make sure that the Micro SD card inserted in the product is working properly. If any problems are found, stop using the product and contact Customer Support.

12. To install a product to a constant power source of your vehicle, always seek help of a trained professional.

13. Your vehicle's battery may be fully discharged if your car is parked for an extended period of time.

## 2. Features

1. Front/Rear 30Frame Full HD
2. 3.5 inch Full Touch LCD
3. Internal Wi-Fi
4. Internal GPS
5. Easy Separation of bracket and main body
6. Convenient way of upgrading the firmware through the mobile application

### Note

User should rerun the mobile application in case of rebooting after connecting between the product and the mobile application through WIFI.

### 3. What's in the Box

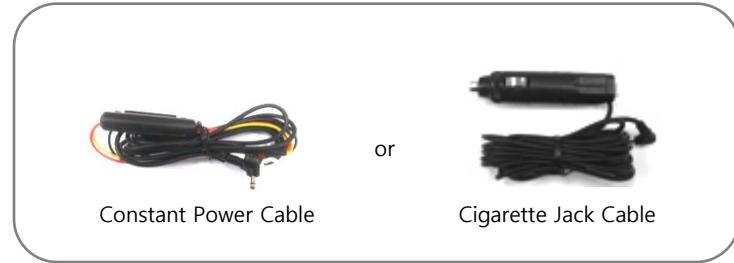
The parts included in your package may not look identical with the following figures.  
And some parts can be changed without notice.



Main Unit



Rear Camera & Extension Cable



Constant Power Cable

Cigarette Jack Cable

Power Cable



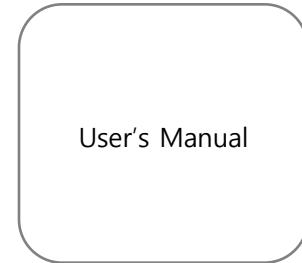
micro SD Card



micro SD Card Adapter



Clips



User's Manual

Quick Guide

Note.

- User's Manual and dedicated viewer program can be downloaded from the manufacturer's web site.
- A Manufacturer is not responsible for loss of data due to defective Micro SD Card .

## 4. Name of Parts and Functions

### Main Unit



\*Check the right direction before inserting the Micro SD Card.

\*The figures shown in this manual may vary from the actual product.

\*The contents of this manual are subject to be change without notice for performance enhancement.

## 4. Name of Parts and Functions

### Rear Camera



\*The figures shown in this manual may vary from the actual product.

\*The contents of this manual are subject to be change without notice for performance enhancement

## 5. How to use

### 1) Power On/Off

After connecting the power cable and turning on the vehicle's ignition, the power is on with the following message in audio : "Please, drive safely today". After that, the device will be displayed the Live video with the following message in audio :"Driving mode is on". If the recording doesn't go smoothly, the device will be rebooted automatically with the following message on the LCD: "Camera error. Rebooting."

If the power is lower than the standard voltage, the device will be turned off with the following message on the LCD : "System will be shutdown" If the device temperature is higher than the standard temperature, the device will be turned off with the following message on the LCD: "System will be shutdown"

### 2) Playback Screen

After booting, the device will be displayed the Live video automatically.

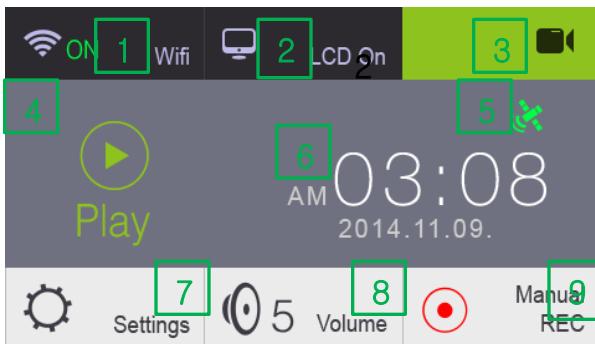


1	Live Video(Live View)	Display the video currently being recorded.
2	Main Menu	Touch the icon  in the upper left to go to Main Menu.
3	Manual Recording	Touch the icon in the middle of the left to start Manual Recording.
4	Voice Recorder ON/OFF	Touch the icon in the bottom left to stop or start voice recording.
5	Live video Selecting	Both : Display Live video of the front and rear view as a default value. Front : Display Live video of the front view. Rear : Display Live video of the rear view.

## 5. How to use

### 3) Main Menu

After booting, touch the icon  on the Playback, and then this page will be appeared on the screen.

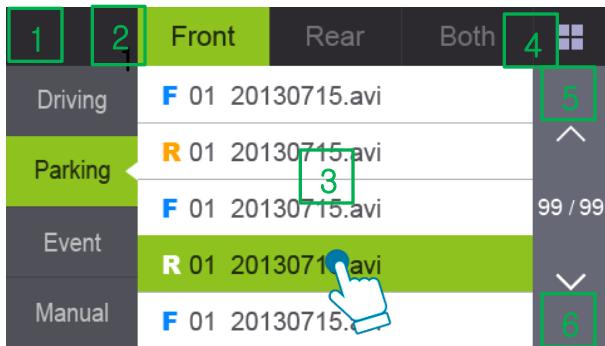


1	Wi-Fi	Being able to check the status of Wi-Fi connection
2	LCD OFF	Touch the screen to turn LCD OFF and the re-touch the screen to turn LCD ON.
3	Live Video(Live View)	Touch the screen to switch to the live video that you are currently watching.
4	Playlist	Touch the Play to check the recorded playlist and touch the file name to play the video.
5	GPS Connection	When the GPS is connected, then the green is displayed. When the GPS is disconnected, then  is displayed.
6	Time and Date	Display the time currently being recorded.
7	Settings	Touch the screen to go to Settings of the Black Box.
8	Volume Control	Touch the screen to configure voice guidance ON/OFF.
9	Manual	Touch the screen to commence manual recording

## 5. How to use

### 4) List of Files

Touch the Play on the Main Menu, and then this page will be appeared on the screen.



### 5) Playing files

Touch the file names from the list of files to play videos.



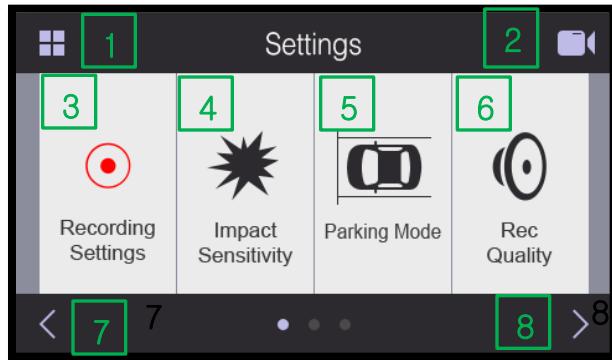
1	Video Recording Modes	Display the playlist by its folder Display a list of files stored in the folder. Driving : Display recorded video for Driving Mode Parking : Display recorded video(Motion Detection Recording) for Parking Mode Event : Display recorded video for Event Mode Manual : Display recorded video for Manual Mode
2	Video Recording Methods	Select the video recording methods. Display a list of files stored in the folder. Front : Display Recorded front view Rear : Display Recorded rear view Both(Default) : Display Recorded front/rear view
3	Playlist	The files are displayed sequentially depending on the video recording modes and methods. Touch the file to play the video.
4	Recording Button	Touch the screen to start recording.(<-Can I go back to the previous screen?)
5	Previous/Next Button	In case of many filmed video files, these buttons enable you to move to previous/next page.

1	Playback Screen	Recorded video is displayed on the LCD screen. Touch the screen and the control bar at the bottom is disappeared. Once you touch the screen during playback, the control bar is appeared again. Return to the main menu when the video is ended.
2	Video File Information	The time of recording, date and file name will be displayed.
3	Previous File	Play the previous video.
4	Play/Pause	Press the button once to pause during playback and to resume playback when paused.
5	Next File	Play the next video.
6	Previous screen	Touch the screen, and then the playlist will be appeared.

## 5. How to use

### 6) Settings screen 1

Touch the Settings on the Main Menu, and then this page will be appeared on the screen.  
Recording stops while setting up.

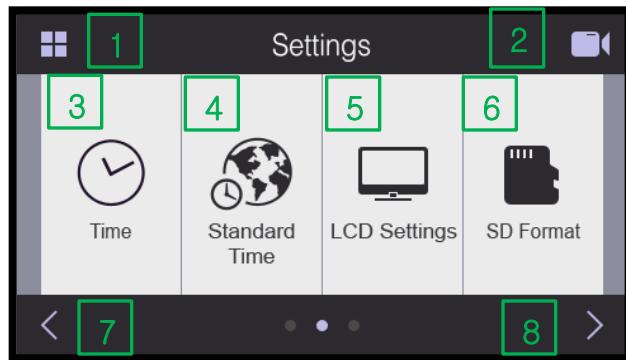


1	Main Menu	Go to the Main Menu. (Start recording.)
2	Video Recording	Go to the screen of real-time videos. (Start recording. )
3	Record Settings	Set up the resolution, FPS, brightness and video quality.
4	Impact Sensitivity	Set up the impact sensitivity while driving and parking.
5	Parking Mode	Enable and disable the Parking Mode.
6	Rec Quality	Set up the volume of audio guide.
7	Previous Page	Go to the previous page.
8	Next Page	Go to the next page.

## 5. How to use

### 7) Settings Screen 2

Touch the Next Page on Settings Screen 1, and then this page will be appeared on the screen.

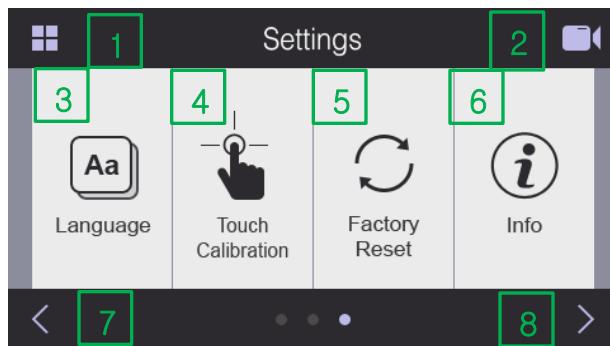


1	Main Menu	Go to the Main Menu. (Start Recording.)
2	Video Recording	Go to the screen of real-time videos. (Start recording.)
3	Time	Set up the date and time.
4	Standard Time	Set up the Standard Time.
5	LCD Settings	Set up the brightness of LCD and Sleep Mode.
6	SD Format	Format the SD Card.
7	Previous Page	Go to the Previous Page.
8	Next Page	Go to the Next Page.

## 5. How to use

### 8) Settings Screen 3

Touch the Next Page on Settings Screen 2, and then this page will be appeared on the screen.



1	Main Menu	Go to the Main Menu.(Start Recording.)
2	Video Recording	Go to the screen of real-time videos.(Start Recording.)
3	Language	Set up the language.
4	Touch	Set up the touch area of LCD Screen.
5	Factory Reset	Reset the product to Factory Settings.
6	Info	Display the Firmware Version.
7	Previous Page	Go to the Previous Page.
8	Next Page	GO to the Next Page.

## 6. Specifications

Category	Specifications
Model	MS-600F2
Lens	F2.2
Image Sensor	2.12 Megapixels Sony IMX322 Image sensor
LCD	3.5inch Wide Viewing Angle, Full Touch LCD(320*240)
Resolution/Frame Rate	Full HD(1920*1020), 30FPS
Viewing Angle	124°(Diagonal Angle), 103°(Horizontal Angle), 54°(Vertical Angle)
Recording Modes	Driving/Event/Parking/Manual
Video/Audio Compression	H.264(Video), AAC(Audio)
File Format	mp4
Dimension/Weight	Front : 120×76×63.7/ Rear : 192g, 28×76.3×25.8/ 28g
Operating Temperature	– 20°C~+65°C
Power Supply	DC12V, 24V
Storage Medium	SDHC(Recommended Type) Up to 32GB