

MOMENTO

M5



MD-5200 USER'S MANUAL

Full HD Driving Image Recorder

Before Using MOMENTO's MD-5200

- Copyright laws prohibit this manual to be copied, modified or translated without the written consent of MOMENTO.
- The contents in this manual can be changed or modified due to technical errors or improvements therefore we cannot guarantee the manual's precise information.
- MOMENTO has the right to change or modify the product and manual contents at anytime without prior notice for improvements or customization.

< CAUTION >

- MOMENTO is not responsible for damages that can occur from using unauthorized parts and accessories other than from the manufacturer.
- It is dangerous to operate this device while driving.
- The device and the recorded videos are intended for personal use and reference only.
- Based on the user's setting and environment, please be informed that the device may NOT record videos of all accidents.
- Please test the Micro SD card for errors frequently and because it is a consumable item, it should be replaced periodically.
- Handle the device with care.
- Install the device where it doesn't interfere the driver's vision.
- Check for local driving rules before installing the device (as it may be different according to each region).
- Do not use wet hands when operating this device.
- Please use this device with the original parts provided from the manufacturer.

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01

Warning and Caution

Warning and Caution



These cautions are provided for user's safety and prevent damages in the device.

Please take the time to read the manual for proper product usage.

	Warning	Information to prevent factors that can cause physical damage
	Caution	Information to prevent service errors or system damage



- Do not disassemble, repair, or remodel the device – this can cause an electric shock.
- Unplug the power cable if you smell something burning , smoke coming out or anything unusual.
- Do not spray water or liquid on the device as the device will not function properly.
- Handle the device with care.
- Plug the power cable all the way in to make sure it is connected to the device.
- Do not use damaged power cable.
- Do not cut, bend, or mishandle the power cable.
- Place the device and the cables away from heat or expose to high temperature.
- If the device is not being used for a long period of time disconnect the power cable from the main device. as this can cause battery discharge in the vehicle.
- Do not use the device next to flammable liquids or gas.
- It is dangerous to operate this device while driving.
- Use only the voltage that is provided for this device.
- Do not apply extreme force and place heavy items on the device and the power cable.
- Do not use wet hands when operating this device.

Warning and Caution



Caution

- Always keep the camera lens cleaned.
- Make sure the device is firmly mounted during installation as it has a tendency to shift when driving over speed bumps or unpaved roads.
- If the device breaks, call or bring it to a service center.
Do not touch the device as your hands might get hurt from the broken parts.
- Do not use the device for a long period of time with the vehicle's engine turned off.
- Collision recording may not be enabled if the impact is very minor.
- Install the hardwire cable through a professional installer.
- Use this device only with the original parts provided from the manufacturer.
- Reception of the GPS signal can be affected by the weather, environment, or road conditions.
- Install the device where it does not interfere with the driver's view.
- Do not apply excessive force on the Micro SD card or insert it in the wrong direction.
- Store Micro SD card separately when an accident occurs or if the device is not operating properly.
- Stay away from parking in areas with direct sunlight.
- The resolution quality of the video can be affected by the environmental conditions.
- Maintain the device and the power cable in a safe area.
- Do not use the device in high temperature or humidity.
- The recommended operating temperature is -20° ~ 60°C / -4° ~ 140°F.
- Windows of the vehicle should be always cleaned to use the device at best.
- Contact customer service if you feel the device is not working properly.

Warning and Caution



Caution

- Do not use a pin or a nail to push the LCD.
- Do not use excessive force when using the control buttons.
- Do not use chemicals to clean the device.
- Keep the product away from children and pets.

02

Product Features

Product Features

- Sony Exmor R Sensor

- Provides clean and clear video quality

- Full HD Resolution

- FHD (1920x1080) resolution for both Front / Rear cameras

- 3.5" TFT LCD

- Provides high clarity and extreme brightness

- Format Free Technology

- Provides automatic memory format and maximizes the stability and minimizes file errors of Micro SD Card

- Automatically overwrites files when storage capacity is needed

- PIP Multi Screen

- Multi Screen feature allows you to view front / rear view screens simultaneously.

- Audio / Voice Guide

- Provides voice guide and alert sounds / messages

- Micro SD Card Format

- Micro SD card can be formatted directly using the device.

- Various Recording

- Continuous, Incident-Continuous, Incident-Parking, Parking, Manual Recording types

- Battery Discharge

- Measures the voltage (battery) real time and prevents the vehicle from being discharged

Product Features

■ Operation Temperature Sensor

Automatically senses over heating and high temperature of the devices and shuts off the power for protection

■ PC Viewer

PC Viewer for Windows is used to watch recorded videos.

■ Location and Speed Limit Sensor

Provides information about the vehicle's location and speed

Compatible with Google Map and allows to check travel routes

■ Front Vehicle Move Alert (FVMA)

Alerts the driver when the front vehicle starts to move from a complete stop

03

Product Overview

Product Overview

■ Package Components



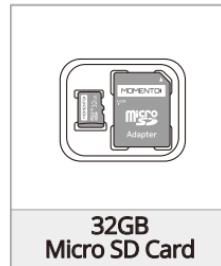
Main Unit



Windshield Mount



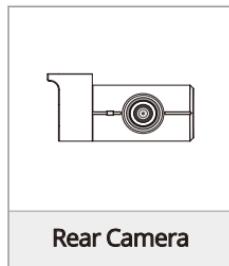
Quick Start Guide



32GB Micro SD Card



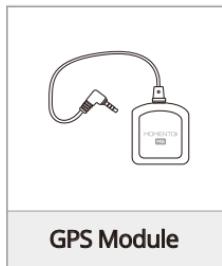
Hardwire Cable



Rear Camera



Rear Camera Cable

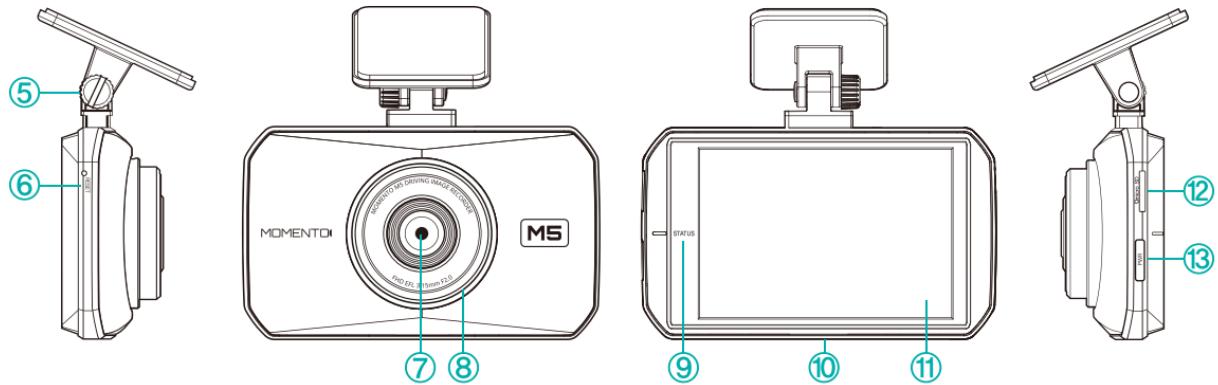
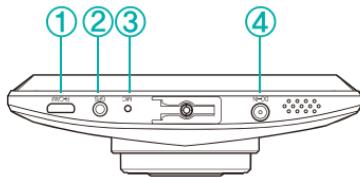


GPS Module

- ※ Check for any missing components.
- ※ The product and manual contents can be changed or modified at anytime without prior notice for improvements or customization.
- ※ Additional components are sold separately.

Product Overview

■ Main Unit (Front Camera)

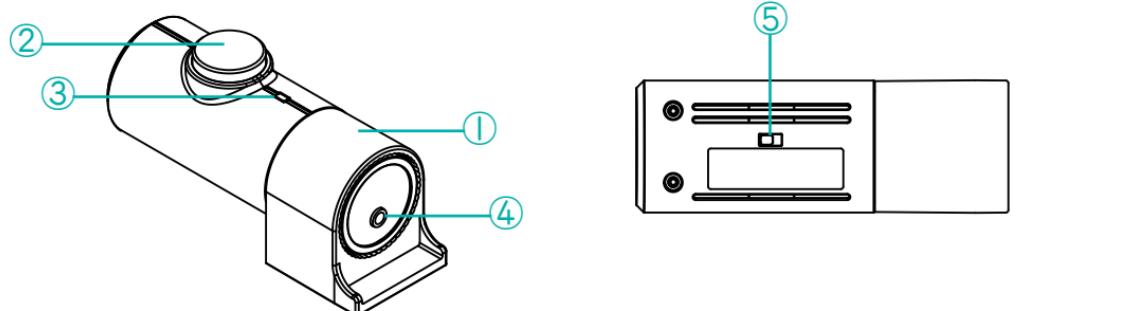


Product Overview

① R-CAM	Rear camera port
② GPS Port	GPS module port
③ MIC	Microphone for voice and audio recording
④ DC-IN	Power cable port
⑤ Mount	Installation mount
⑥ RESET	Reset button
⑦ Camera Lens	Front camera for video recording
⑧ Front LED	Indicates parking status and provides security effect
⑨ STATUS	Notification for recording
⑩ Speaker	Voice guidance
⑪ LCD	3.5" TFT LCD for live view, playback, menu operation
⑫ Micro SD Card	Memory card slot (check for insert / remove direction)
⑬ Power / Manual Record	Press more than 3 secs : Power ON/OFF Press less than 3 secs : Manual Record

Product Overview

■ Rear Camera



① Mount	Installation mount
② Camera Lens	Rear camera for video recording
③ LED	Indicates vehicle is equipped with dash cam
④ Mini USB Port	Mini USB port to connect the main (front camera) unit
⑤ Mirror Switch	Mirror feature to change left / right view of the rear camera ※ Turn the dashcam off, disconnect the rear camera, and operate the mirror switch

04

Device Installation

Device Installation

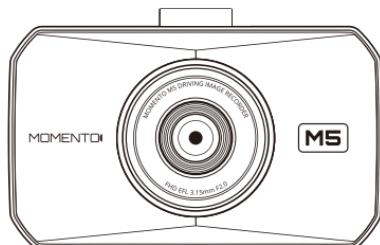
< CAUTION >

- It is dangerous to operate this device while driving.
- Please check if the Micro SD card is inserted correctly before connecting to power.
- Make sure the installation area is clean.
- Disconnect the power cable if you are not using the device for a long period of time.
- Handle the device with care.
- Do not drop the product as it may not function properly.
- Please make sure that the device is used in the suggested operating temperatures between -4° ~ 140°F.
- During extreme high temperatures or hot weathers, parking indoors is suggested.

Device Installation

1) Main Unit Installation

■ Insert / Remove Micro SD Card

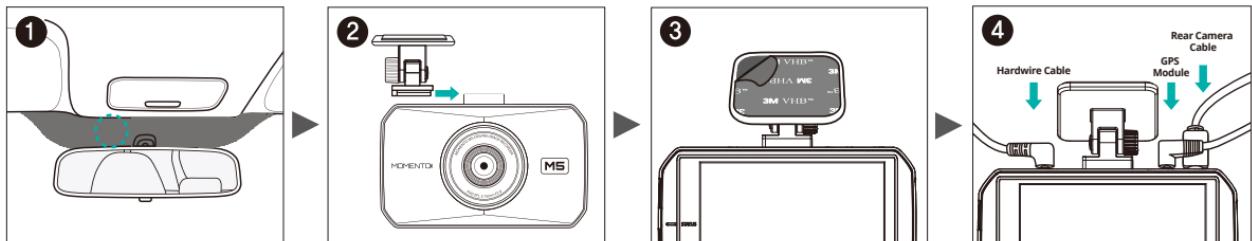


⚠ Do not apply excessive force to the Micro SD card or insert it in the wrong direction.

- ▶ Refer to the above image and check the direction before inserting the Micro SD card into the slot.
 - ▶ Push the Micro SD card all the way.
 - ▶ You will hear a voice guide that the Micro SD card has been inserted correctly when the power is on.
-
- ※ Do not apply excessive force on the Micro SD card or insert it in the wrong direction
 - ※ Push the Micro SD card until you hear a click sound or recording will not start.
 - ※ Make sure there are no particles on the Micro SD card.
 - ※ It is recommended to use the Micro SD card with this device only.
 - ※ Do not remove the Micro SD card when the device is operating.
 - ※ Backup the video files (PC, USB) periodically.

Device Installation

1) Main Unit Installation

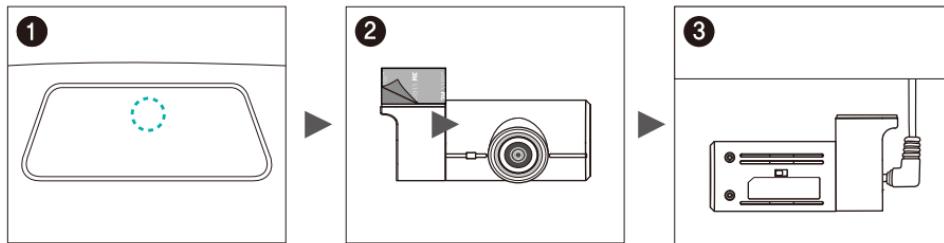


1. Select and clean the area where the product will be installed.
2. Connect the main device and the mount.
3. Remove the double sided tape and attach the device.
4. Connect the rear camera and GPS cables first, then connect the power cable

- ※ Before installation, make sure the engine is turned off.
- ※ Do not install the device that interferes with the driver's vision.
- ※ Make sure the installation area is cleaned.

Device Installation

2) Rear Camera Installation

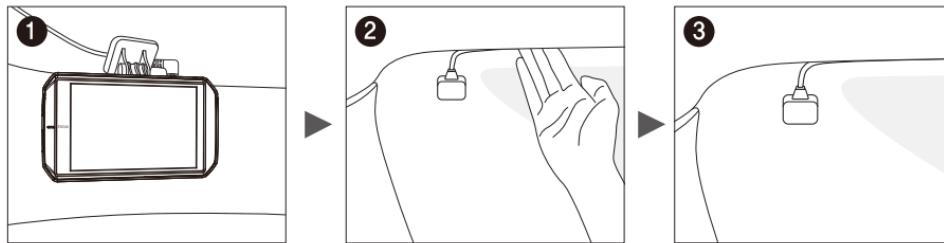


1. Select and clean the area where the product will be installed.
2. Remove the double sided tape and attach the device.
3. Connect the rear camera and the cable.

- ※ Make sure the installation area doesn't interfere with the window's infrared signals.
- ※ Before installation, make sure the engine is turned off.
- ※ Make sure the installation area is clean.
- ※ Turn the main power off to use the rear camera's mirror function.

Device Installation

3) External GPS Module Installation



1. Connect the external GPS module to the right connector in the device.
2. Organize the cable lines across the car's ceiling.
3. Remove the double sided tape and attach the module.

※ Before installation, make sure the engine is turned off.

※ Make sure the installation area is cleaned.

05

Basic Operation

1. Using the Touch Screen

1) Live View

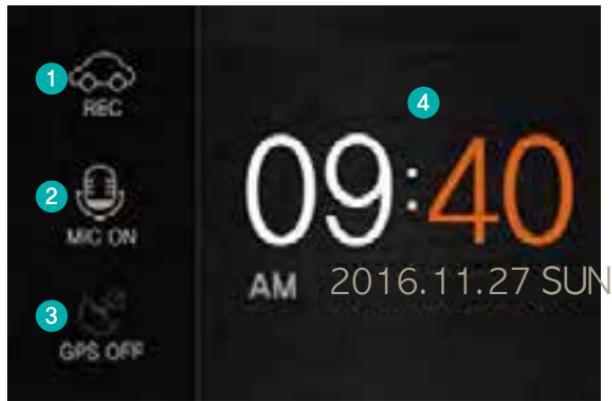


※ Touch the LCD to use front view / rear view / PIP features
(Rear camera needs to be connected for rear view feature to work)

	Current Date and Time
①	Main Menu → System Settings → Time Settings * Automatic setting if GPS is connected
②	GPS Status
	GPS ON / OFF
③	Voice & Audio Record
	Main menu → MIC ON/OFF MIC ON: recording / MIC OFF: not recording
④	Main Menu
	Main menu screen

1. Using the Touch Screen

2) Screen Saver



	Recording Status
①	REC: continuous record EVENT: incident / manual record
②	Voice & Audio Recording Status MIC ON: recording / MIC OFF: not recording
③	GPS Signal Status GPS ON / OFF
④	Current Time and Date Shows current time and date

- ▶ Turn ON Screen Saver Mode → Main Menu → LCD Time Out : Clock
- ▶ Touch screen to go back to Live View Screen

1. Using the Touch Screen

3) Main Screen



► Recording stops in **Settings, ADAS, File List**.

	Settings
①	Main menu settings → System Settings / Dashcam Settings / F/W version
②	ADAS ADAS menu settings → FVMA
③	File List List of recorded files
④	LCD Time Out LCD screen off setting menu → 30sec / 1min / 3min / clock / always on
⑤	Volume Changes the volume level (5=loudest) → OFF / 1 / 2 / 3 / 4 / 5
⑥	MIC Audio / voice record using the microphone → ON / OFF
⑦	LIVE Go to Liveview

1. Using the Touch Screen

4) System Settings



► Main Menu → Settings → System Settings

①	Language Language setting → English / Francais
②	Time Settings System's time setting * Automatic setting if GPS is connected
③	Touch Calibration Resetting touch screen
④	SD Card Format Micro SD Card Format * Saved files will be deleted. Backup the files before formatting
⑤	Factory Reset Reset settings to factory settings (except for recorded files)
⑥	HOME Move to Main menu screen
⑦	BACK Back to previous screen

1. Using the Touch Screen

5) Dashcam Settings



► Main Menu → Settings → Dashcam Settings

①	Video Quality Able to select the recording video quality → Low / Normal / High ※ If the Video Quality is changed, the SD card will be formatted.
②	Impact This feature senses incidents while driving and records them * When a incidents is detected, driver will be notified with a tone alert and incident recording will start. → OFF / 1 / 2 / 3 / 4 / 5 / 6
③	Front LED Enable / disable the LED on the main unit (in parking mode) → ON / OFF
④	Parked Storage Priority Allocating storage capacity on memory card for park recording modes → OFF / 25% / 50% (* OFF : not using parking mode) ※ If the Parked Storage Priority is changed, the SD card will be formatted.
⑤	Parked Cam Timer → 6H / 12H / 24H / 48H / OFF
⑥	Power Save If the vehicle's battery falls below the indicated value, the ignition will not start. → 11.7V / 11.9V / 12.0V / 12.1V / 12.2V

1. Using the Touch Screen

6-1) File List

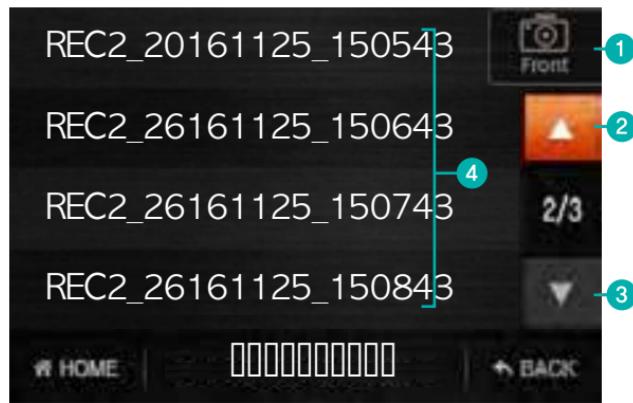


► Main Menu → File List

①	Continuous
	Continuous record
②	Motion Detection
	Motion detection record during parking
③	Incident
	Incident record during driving, Incident record during parking
④	Manual
	Manual record

1. Using the Touch Screen

6-2) File List



①	Front / Rear Camera File List
	Sorting the file list according to front / rear recordings
②	File List : Up
	Moving file list up
③	File List : Down
	Moving file list down
④	File List
	Select the file to play from the list

1. Using the Touch Screen

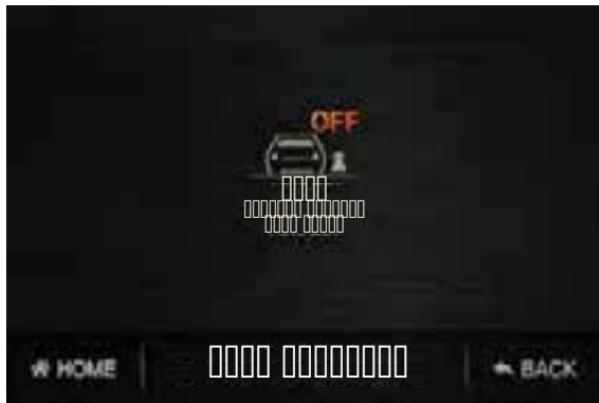
6-3) Main Menu - File List



①	HOME
	Go back to Main Menu
②	PREVIOUS
	Play previous file
③	PLAY
	Play file
④	STOP
	Pause
⑤	Next
	Play next file
⑥	BACK
	Back to previous screen

1. Using the Touch Screen

7) FVMA(Front Vehicle Move Alert)



①	FVMA (Forward vehicle move alert) If the front vehicle starts to move from a complete stop, "GO" message is shown on the screen. → ON / OFF
---	--

- ※ FVMA may not operate correctly if the distance between the front car is more than 9ft (3m).
- ※ ADAS features' accuracy can be affected by conditions below.
 - continuous operation of wipers,
 - heavy reflection from the window,
 - driving at night, through tunnels,
 - heavy rain and snow,
 - road and environmental conditions

2. Device Control

No.	Control Function	Description
1	Power ON	<ul style="list-style-type: none">- Main power ON button- Once the device is connected it will automatically turn ON / OFF by vehicle's ignition.Green LED light means the device will start to record.A voice guide will alert the driver "continuous recording mode".- The device will be set at continuous recording mode when the power is connected.
2	Touch LCD	TFT Touch LCD is used to control the menus.
3	Event Record	<ul style="list-style-type: none">- Incident Record during continuous record mode when the device senses an impact or a collision.- After the event has been recorded, Continuous Record will start again.
4	Parking Mode Record	<ul style="list-style-type: none">- Motion record during parking.- Battery Discharge features are enabled to prevent the vehicle's battery from being discharged.The device will automatically turn off based on the Parked Cam Timer Settings' duration and Power Save Settings' voltage level.
5	Event Record during Parking	<ul style="list-style-type: none">- Event (incident) record during parking.- The device either senses an impact or a collision and detects a motion while the car is parked and records the event or the motion.

3. LED Indicator Light

No.	Recording Type	Rear Green LED	Front Blue LED	Meaning
1	Driving Continuous	ON	OFF	Continuous record during driving
2	Driving Incident	Blink every 1 sec	OFF	Incident record during driving
3	Parking Motion Detection /Incident	Blink every 1 sec	Blink every 0.5 sec	Motion Detection /Incident Record during parking
4	Parking	OFF	Blink every 1 sec	Parking

4. File List Management

- ▶ Recorded files are saved in Micro SD card.
- ▶ Files are saved in the same sizes due to format free technology.
Continuous : 80MB / Parked, Motion, Incident, Manual : 40MB
- ▶ In order to use the format free technology at best, a folder is not created in the Micro SD card.
- ▶ Recorded files are saved in Micro SD card by date and hour.

REC1_20161127_110707.avi

File Name & Camera Channel Date Time
(1: front / 2: front & rear)

File Name	Meaning	File List
REC	Continuous Record	Continuous File
MOT	Record during Parking (motion detection)	Motion Detection File
EVT	Incident during driving (Incident – Continuous)	Incident File
IMP	Incident during parking (Incident – Parking)	
MAN	Manual record	Manual Record File

4. File List Management

► Recording Time : Format Free Technology allows the file sizes to be preset.

Recording time may vary based on the video quality.(refer below)

Type	Front Camera Resolution		
	High	Mid	Low
Continuous	38 sec	51 sec	1min 16sec
Incident-Continuous			
Incident-Parking			
Parking	19 sec	25 sec	37sec
Manual			

4. File List Management

■ Storage Partition by Parked Storage Priority

	Directory	Percentage	SD Card
Parked Storage Priority : 50%	Driving	38%	5.62GB
	Parking (motion)	37%	5.47GB
	Manual	5%	740MB
	Event	15%	2.22GB

Parked Storage Priority : 25%	Driving	57%	8.43GB
	Parking (motion)	18%	2.66GB
	Manual	5%	740MB
	Event	15%	2.22GB

Parked Storage Priority : 0%	Driving	75%	11.1GB
	Parking (motion)	0%	0GB
	Manual	5%	740MB
	Event	15%	2.22GB

► Storage partition can be modified manually : Settings → Dashcam Settings → Parked Storage Priority

※ Reference numbers may vary depending on recording environment and image quality (also after firmware update).

5. Firmware Update

- ▶ Turn the device off and remove Micro SD card
- ▶ To format Micro SD card, connect PC and Micro SD card (File System : FAT 32 / Allocation Unit Size : 64KB)
- ▶ After format is completed, copy the updated file on Micro SD card
- ▶ Insert the Micro SD card in the device and turn the device on and update will start.
- ▶ Once the update is complete, recording will start.

1) Select Micro SD Card

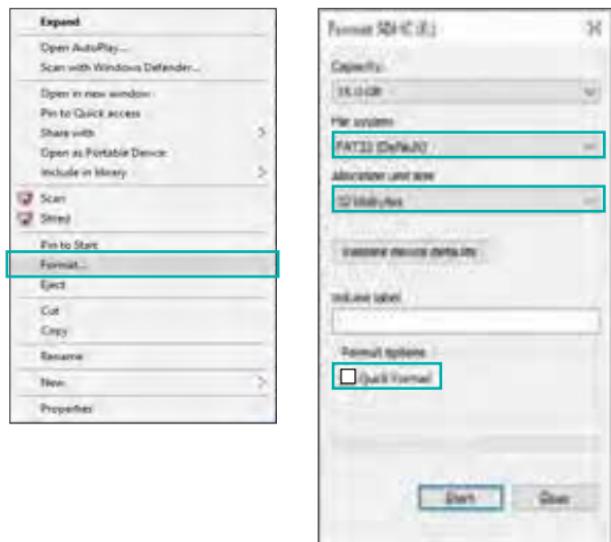
Select Micro SD Card (M4) in My Computer
Right click and select "Format"

2) Micro SD Card Format

In the Disc Format Window, select the :
▶ File System : FAT32
▶ File Size : 32KB
▶ Uncheck "Quick Format"

3) Copy the Update File to Micro SD Card

Place the file MD5200_1.0.0_ENG_Knl_App.rom file into the Micro SD card that has been already formatted and delete it.
※ File version can change based on each update.



06

PC Viewer

PC Viewer

1) Viewer Installation

Download the setup.exe file at www.momentocam.com

①



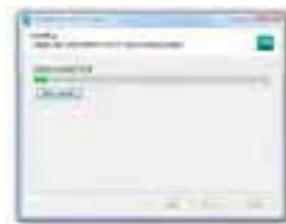
②



③



④



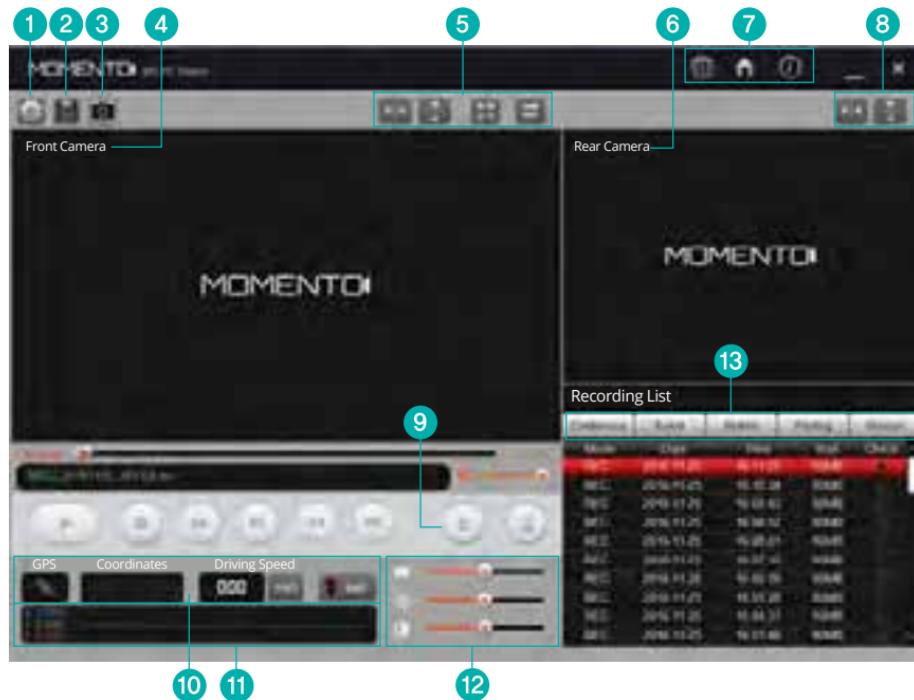
⑤



※ System Requirements

- Windows XP or higher
- Dual Core 2.8GHz or Intel i5 2.0GHz or higher
- IE 9.0 or higher
- Direct3D 9 graphic

2) Main Screen Overview



2) Main Screen Overview

①	Settings
②	Save As : saving recorded files
③	Screen Capture : allows to capture screen during playback
④	Front Camera : playback front camera's files
⑤	Front - LEFT/RIGHT UP/DOWN FULL SCREEN CHANNEL CHANGE
⑥	Rear Camera : playback rear camera's files
⑦	Select Language / Homepage / Program Info
⑧	Rear - LEFT/RIGHT UP/DOWN
⑨	Select Micro SD Card Folder
⑩	GPS Information : Recognize vehicle speed and location
⑪	G-Sensor Information
⑫	Video Control Buttons
⑬	File List

3-1) Settings - System Setting



①	Language
	English / Francais
②	MIC
	ON/OFF
③	Volume
	OFF / 1 / 2 / 3 / 4 / 5
④	LCD Timeout
	30sec / 1min / 2min / Clock / Always ON
⑤	Time Setting

3-2) Settings – Dashcam Setting



①	Video Quality
	High / Normal / Low
②	Impact Sensitivity
	0 / 1 / 2 / 3 / 4 / 5 / 6
③	Front LED
	OFF / ON
④	Parking Storage Priority
	OFF / 25% / 50%
⑤	Power Cam Timer
	OFF / 6h / 12h / 24h / 48h
⑥	Power Saving
	11.7V / 11.9V / 12.0V / 12.1V / 12.2V
⑦	ADAS FVMA
	OFF / ON
⑧	Speed Unit
	mph / km/h

07
Others

1. Product Specifications

Item	Description
Model	MD-5200
GPS	Supports external GPS port
LCD	3.5" TFT LCD
Frame Rate	Up to 30fps (Front / Rear : 1080P)
Acceleration Sensor	3 Axis Acceleration Sensor
Input Power Source	DC 12/24V
Audio / Speaker	Embedded microphone, speaker
Auxiliary Power Unit	Super Capacitor
Resolution	Front / Rear : FHD (1920x1080)

Item	Description
Size / Weight	104 x 65.5 x 30.25mm / 89g 4 x 2.6 x 1.2in / 3.14oz
Capacity	Micro SD Card 16GB / 32GB / 64GB (FAT32 format)
Operation Temperature	-20°~ 60°C / -4 ~ 140°F 0° ~ 50°C / 32° ~ 122°F
Camera	Front : 1/2.8" CMOS Color Image Sensor Rear : 1/3" CMOS Color Image Sensor
Recording Mode	Continuous Record, Incident Record(driving, parked), Motion Detection Record, Manual Record

2. Troubleshooting

Condition	Description
No Power	<p>Check if power cable is properly connected.</p> <p>Check if power is ON.</p> <p>Unplug the power cable and reconnect after 3 mins.</p>
LCD Display doesn't turn ON	<p>LCD display doesn't turn on in parking mode.</p> <p>LCD is ON during continuous mode.</p>
Unable to record Audio / Voice	Check if MIC is not ON in main menu.
Unable to record during parking	Check Parked Storage Priority is not OFF in dashcam settings menu.
Unable to hear Audio/Voice	Check if Volume is not OFF in main menu.
Touch Screen is not working	Reset the feature in touch calibration menu.
How do I view recorded files?	Visit www.momentocam.com to download the latest Momento Viewer.
How do I update the camera firmware?	Visit www.momentocam.com to download the latest Momento Camera Firmware.

3. Limited Warranty on Parts & Labor

MOMENTO provides a warranty to the original purchaser of a new Product against defects in workmanship and materials for a period of two (2) years.

If a product covered by this warranty is determined to be defective within the warranty period, MOMENTO will either replace or repair the product at its sole option and discretion.

Products determined defective must be sent to an MOMENTO service center to obtain warranty service.

Proof of purchase in the form of a receipt is required to show that Product is within the warranty period and product must have original and legible serial number information. To obtain warranty service, please register your system at momentocam.com/warranty

- warranty@momentocam.com
- 888-820-3690

This Warranty is subject to change without notice.

FOR COMPLETE AND UPDATED WARRANTY INFORMATION PLEASE VISIT
[:momentocam.com/warranty](http://momentocam.com/warranty)

4. FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions :

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

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

FCC CAUTION :

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

MOMENTO

MD-5200 USER'S MANUAL
