FULL HD
BLACK BOX

Vehicle Video Recorder

FINE Vu

Full HD
1080p

FINE DIGITAL
HD CR-500HD
VIDEO RECORDER

FINEVu CR-500HD

SONY Exmor CMOS Sensor

CR-500HD User Manual

FINE DIGITAL

Thank you for choosing the Finevu Car black box.

Before using the product, please read this manual carefully.
Finedigital has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date.
Please visit the Finevu website (www.finevu.com) for current updates and the latest information.

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Certifications

This product has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications.

Contents

Safety and Precautions

 WARNING Breaching the following precautions may result in serious personal injury or even death.

Power

- Do not use a damaged or modified power cable. Doing so may cause explosion or fire, and may result in personal injury or damage to the vehicle.

- Only use this product within the rated voltage. Failing to do so may cause explosion or fire, and result in personal injury or damage to the vehicle.

- Do not connect the power cable arbitrarily. Doing so may result in fire or product failure.

Installation

- Do not use this product in a place where there is a danger of exposure to high humidity or flammable liquids or gases. Doing so may result in explosion or fire.

- Do not leave the black box in a place with a high temperature, such as in the closed vehicle or in direct sunlight. Doing so may result in fire or product failure.

- Ensure that you install the product in a position where it won't obstruct your view. Doing so could cause a car accident.

- Plug the USB and video cables in properly. Failure to do so may result in fire or product failure.

Use

- Do not allow the product to come into contact with flammable and explosive liquids or gases. Doing so may result in explosion or fire.

- Do not allow metal or flammable substances to get into the memory card slot or cord outlet of your black box. This may result in electric shock or fire.

- Do not operate the product with wet hands. This may result in electric shock.

- Do not leave the product or its accessories within reach of children, since they may swallow small components. Doing so may result in serious personal injury or death.

- Do not cover the black box with a cloth or a blanket while in use. Continuous heating may cause fire or product failure.

- Do not operate the black box while driving. It could cause a car accident.

⚠ CAUTION — Breaching the following precautions may result in personal injury or property damage.

Installation

- Do not connect the uninterrupted power supply arbitrarily. It may result in vehicular or product failure. Make sure to consult an expert for installation.

Use

- Do not apply excessive force to the black box and the lens. Doing so may result in product failure.

- Do not use an awl or a sharp object when using the black box. Doing so may result in product failure.

- Do not spray water or wax directly onto this product. Doing so may result in electric shock or product failure.

- When you use the black box for an extended period of time, the internal heat it generates may cause your skin to burn at the contact area if touched.

- Do not disassemble or modify this product arbitrarily. Doing so may cause breakage of the product or data loss. Consult the A/S center for inspection and repair of the product.

Management

- Do not leave the product or its accessories within reach of a pet. Foreign objects could get into the inside of the product, and cause an explosion or product failure.

- Disconnect the power cable if you are not using the product for an extended period of time. Failure to do so may result in fire or product failure.

- Do not move the product while the cigar jack cord or cables are plugged in. This may result in fire or electric shock.

Notes

- The specifications and user manual of this product are subject to change without notice to improve its performance.

Features

Clear video quality

- 16:9 widescreen and full HD video recording
- Still image capture
- 2 megapixels digital CMOS Sensor
- High resolution, 119° horizontal wide angle camera lens
- Adjust the brightness of the video in 5 levels at night

Various recording modes

- Normal recording while driving
- Shock recording while driving
- Shock recording while parking
- Motion detection recording while parking
- Recording with the built-in/external battery
- Emergency recording
- Taking pictures

Recording while parking

- Detection feature to prevent the vehicle battery from discharging

Voice recording and audio output

- Vivid audio recording with a high sensitivity microphone
- Clear sound output with a speaker

Built-in battery

- Even when the ignition is turned off, the built-in battery enables the black box to record video (max. 4 mins)

- The built-in battery supplies power to the RTC (Real Time Clock): You can set the system time with the setup program after connecting the black box to the PC.

Video display for adjusting the recording angle

- Use this feature when adjusting the recording angle after initial installation.

Easy installation

- Always recording in the correct direction by automatically changing the image orientation no matter where it is installed
- Easy removal of the black box from the mount

Quick and easy connection to the PC

- Direct connection with the black box via the USB port
- Auto recognition of USB storage devices
- Setup program provided (for Windows only)
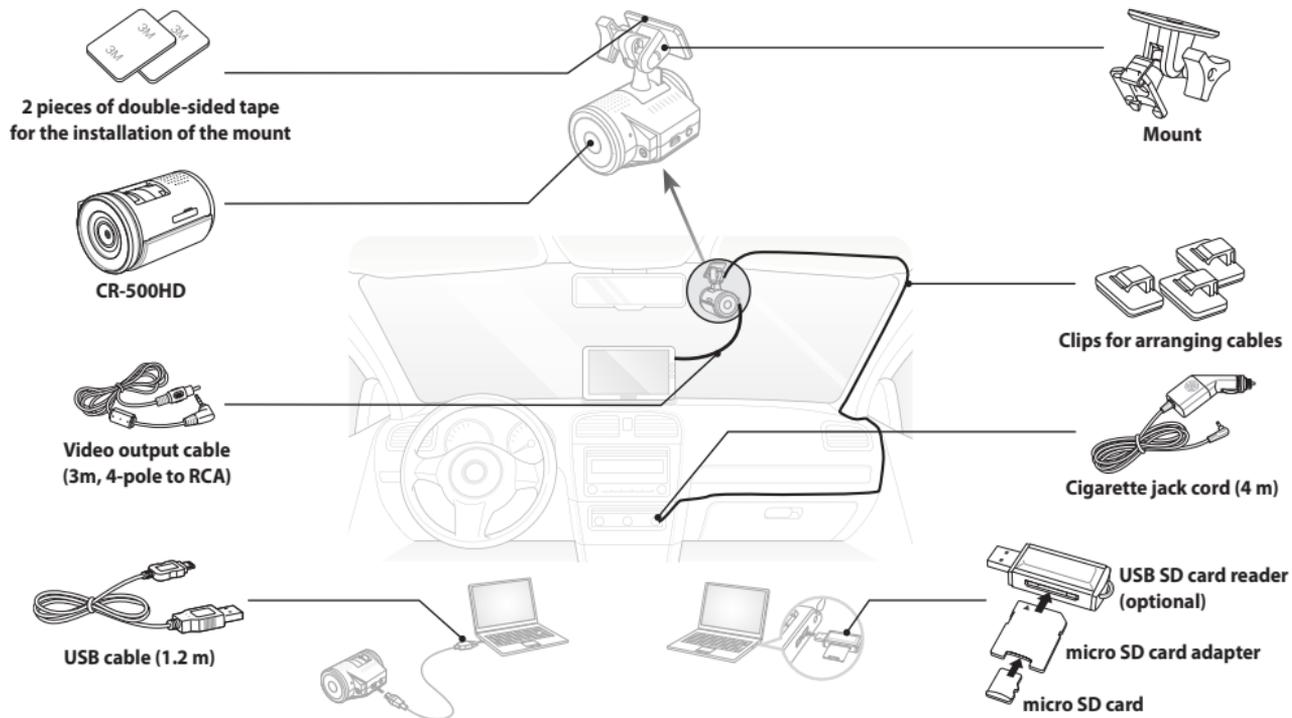- Play video with a normal video player

Expand memory

- You can easily expand the memory using an external memory card (16 GB/ 32 GB micro SD)

Memory management

- You can allocate memory space for each recording mode.

Components and names

Components

2 pieces of double-sided tape for the installation of the mount

Mount

CR-500HD

Clips for arranging cables

Video output cable (3m, 4-pole to RCA)

Cigarette jack cord (4 m)

USB cable (1.2 m)

USB SD card reader (optional)

micro SD card adapter

micro SD card

※ The components of this product are subject to change without notice in order to improve its performance.

Optional Accessories

USB SD card reader
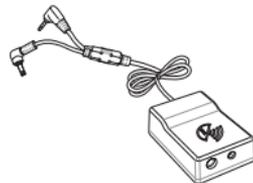
Video output cable 4-pole to 4-pole

Power adapter
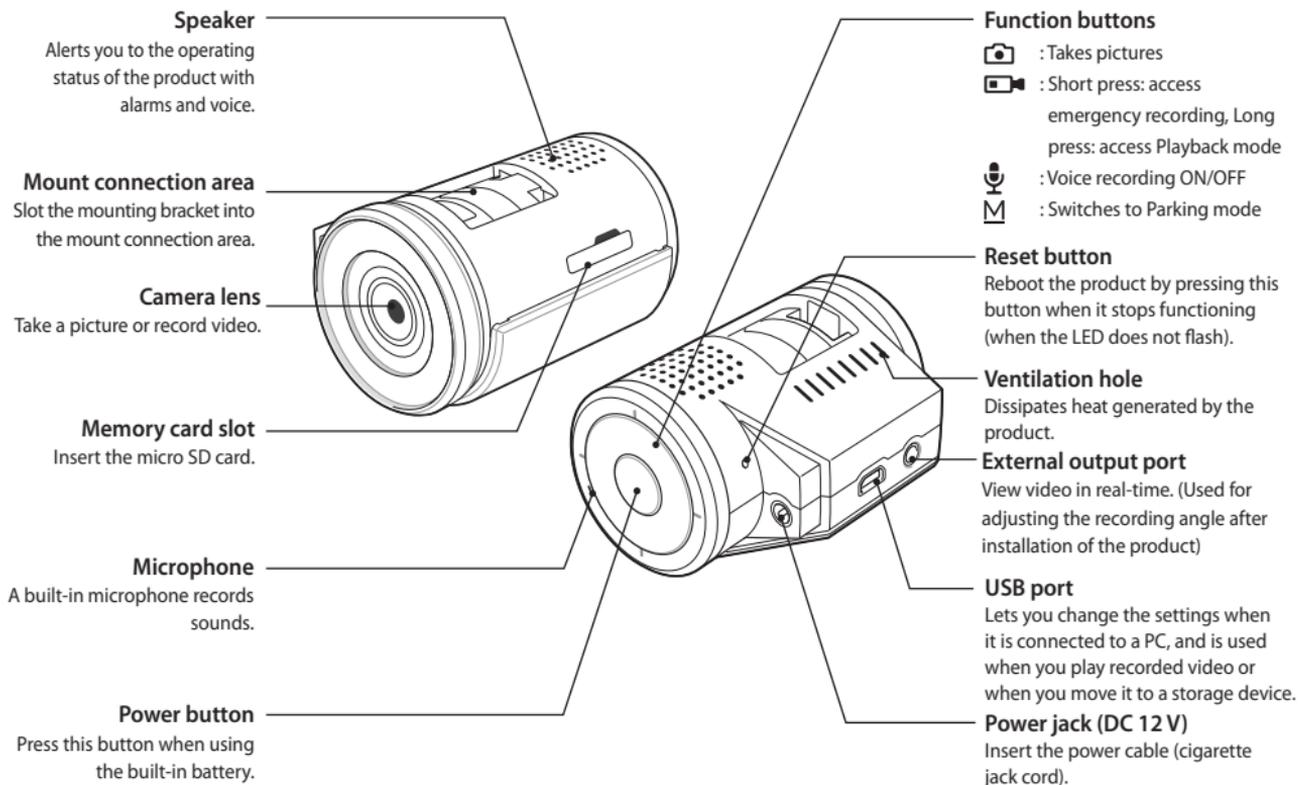
Polarizing filter

External USB battery pack

GPS

Note

All accessories are available from the store where you purchased the product.

Names

Speaker
Alerts you to the operating status of the product with alarms and voice.

Mount connection area
Slot the mounting bracket into the mount connection area.

Camera lens
Take a picture or record video.

Memory card slot
Insert the micro SD card.

Microphone
A built-in microphone records sounds.

Power button
Press this button when using the built-in battery.

Function buttons
- 📷 : Takes pictures
- 🎥 : Short press: access emergency recording, Long press: access Playback mode
- 🎤 : Voice recording ON/OFF
- M : Switches to Parking mode

Reset button
Reboot the product by pressing this button when it stops functioning (when the LED does not flash).

Ventilation hole
Dissipates heat generated by the product.

External output port
View video in real-time. (Used for adjusting the recording angle after installation of the product)

USB port
Lets you change the settings when it is connected to a PC, and is used when you play recorded video or when you move it to a storage device.

Power jack (DC 12 V)
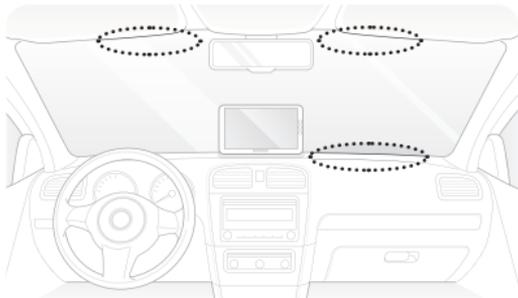Insert the power cable (cigarette jack cord).

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Installation

Finding an installation location

- We recommend that the product is installed on the front windshield, either to the left or the right of the rear view mirror, and in a position that doesn't prevent you from adjusting the position of the mirror.
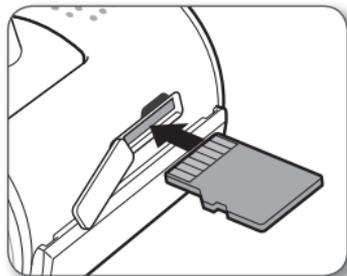- You can also install it on the dashboard.

- You can also install it on the rear windshield.

Note

Install the product in a position where it won't obstruct the driver's view.

Inserting micro SD card

Note

Insert the micro SD card with the golden contact area facing upwards.

Installation

1 Before commencing installation, plan where you will be routing the cable so that it is secure, safe, and that the cable is long enough.
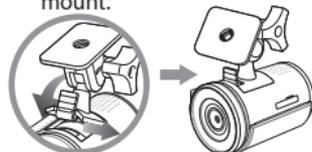
7 (Optional) When viewing footage from the camera via a navigation device, connect the video output on the camera to the video input on the navigation device.

Plug the cigarette jack cord into the cigarette jack.
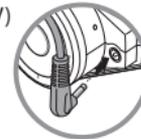
6
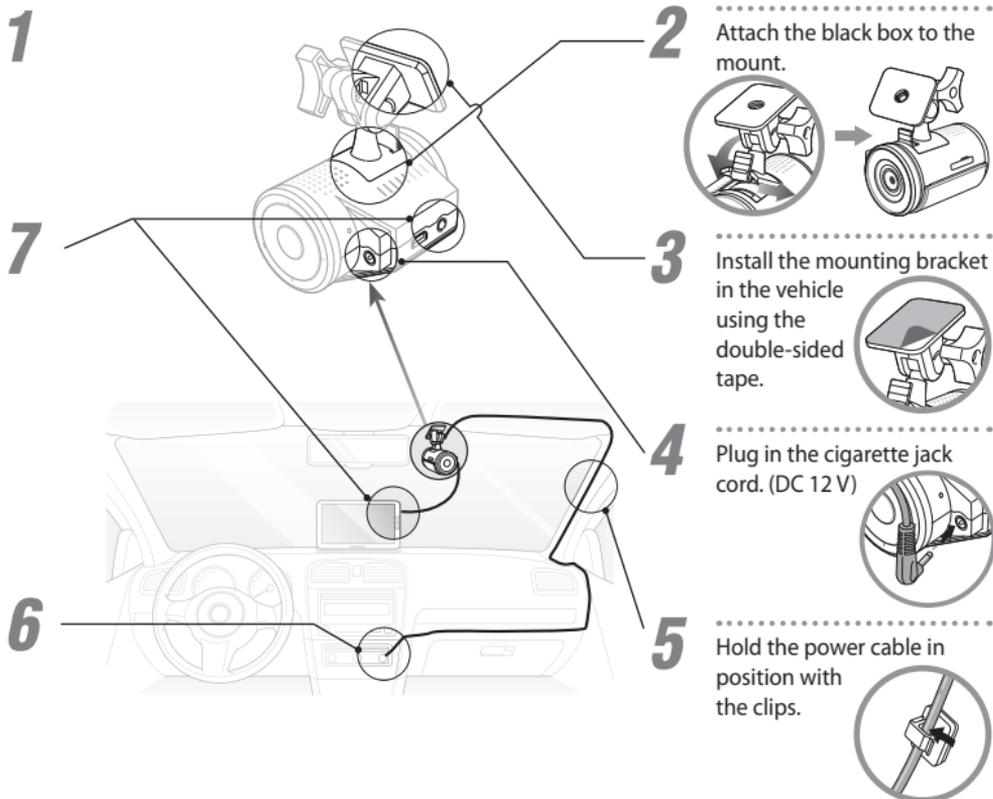
2 Attach the black box to the mount.

3 Install the mounting bracket in the vehicle using the double-sided tape.

4 Plug in the cigarette jack cord. (DC 12 V)

5 Hold the power cable in position with the clips.

Using the product

Recording videos and taking pictures

Basic operation

Note $\overset{\backslash\;/}{color}$ indicates that the LED is blinking.

Mode	LED Buttons					Description
	📷	📹	⏻	🎤	Ⓜ	
Booting	White	White	Red	Green	Green	Booting is completed within 30 seconds of power-up.

Recording while driving

Mode	LED Buttons					Description
	📷	📹	⏻	🎤	Ⓜ	
Normal recording	$\overset{\backslash\;/}{Blue}$	$\overset{\backslash\;/}{Blue}$	Red	Green	Green	• When booting is complete, the **Normal Recording** mode starts. • The recorded video is in the **normal** folder on the memory card.
Shock recording	$\overset{\backslash\;/}{Red}$	$\overset{\backslash\;/}{Red}$	Red	Green	Green	• The **Normal Recording** mode switches to the **Shock Recording** mode when a shock is detected. • Records video 5 seconds before and 35 seconds after impact (in total 40 seconds), in the **event** folder. • The video recorded in **Normal Recording** mode before impact will also be saved as **_normal_to_event** in the **event** folder. **Note** You can set the shock sensitivity.

Recording while driving

Mode	LED Buttons					Description
	📷	📹	⏻	🎤	M̲	
Emergency recording	Red	Red	Red	Green	Green	• If you press the 📹 button in **Normal Recording** mode, the mode changes to **Emergency Recording** mode. • You can record video for max. 1 minute, and the recorded video will be saved in the **camcorder** folder on the memory card.
Taking pictures	Red	Red	Red	Green	Green	• You can press the 📷 button in **Normal Recording** mode to take a picture. • The picture will be saved in the **photo** folder on the memory card. **Note** You can only shoot again once 3 seconds have elapsed.
Auto recording	Red	Red	Red	Green	Off	• Video records for 30 seconds when turning off the ignition. • The recorded video is saved in the **event** folder on the memory card. • When recording is complete, the black box switches to the **Standby** mode.
Standby	Green	Green	Red	Green	Off	• When auto recording is complete, the black box switches to the **Standby** mode. • The black box goes on standby for 30 seconds and then turns off automatically. • Or, when you press and hold down the ⏻ button for 5 seconds, the black box turns off.

Note

• If the voltage of the built-in battery is low, the black box may turn off without a standby time of 30 seconds.

Recording while parking

Mode	LED Buttons					Description
	📷	🎥	⏻	🎤	M	
Parking	Off	Off	Red	Green	Green ⚡	• If you press and hold down the M button in **Normal Recording** mode or if there is no movement of the vehicle for 10 minutes, the mode automatically changes to the **Parking** mode. • If you press the M button once again, the mode changes to **Normal Recording** mode.
Shock recording	Red ⚡	Red ⚡	Red	Green	Green ⚡	• If an external impact to the vehicle is detected in **Parking** mode, the black box will start to record video. The recorded video will be saved as _**parking** in the **event** folder on the memory card.
Motion detection recording	Purple ⚡	Purple ⚡	Red	Green	Green ⚡	• If the black box detects a moving object in **Parking** mode, it records video. • The recorded video will be saved as _**motion** in the **event** folder on the memory card.

Note

- When you use Parking mode, you need to use the uninterrupted power supply. With the exception of certain vehicle types, the uninterrupted power supply should be connected separately. Please consult an expert.
- Parking mode only records video when there is external impact to the vehicle or if motion is detected.
- When you operate Parking Recording mode for an extended period of time using the vehicle's uninterrupted power, the black box stops working if the voltage of the vehicle battery goes down below a certain voltage level so as to prevent the vehicle battery from discharging.
- Do not cut the enclosed original cigar jack cord. Doing so may result in product malfunction.

Recording with built-in battery

Mode	LED Buttons					Description
	📷	📹	⏻	🎤	M̲	
Booting	White	White	Red	Green	Green	• If you press and hold down the ⏻ button for 2 seconds, booting will be completed within 30 seconds.
Emergency recording	Red	Red	Red	Green	Off	• If you press the 📹 button in **Standby** mode, the mode changes to **Emergency Recording** mode. • You can record video for max. 1 minute, and the recorded video will be saved in the **camcorder** folder on the memory card. • When recording is complete, the black box switches to the **Standby** mode.
Taking pictures	Red	Red	Red	Green	Off	• You can press the 📷 button in **Standby** mode to take a picture. • The picture is saved in the **photo** folder on the memory card. **Note** You can only shoot again once 3 seconds have elapsed.
Standby	Green	Green	Red	Green	Off	• After booting is completed, the black box goes on **Standby** mode. • The **Standby** mode lasts for 30 seconds and then turn off automatically. • Or, when you press and hold down the ⏻ button for 5 seconds, the black box turns off.

Note

• If the voltage of the built-in battery is low, the black box may turn off without a standby time of 30 seconds.

Recording with external USB power (external battery)

| Mode	LED Buttons					Description
	📷	📹	⏻	🎤	M̲	
Booting	White	White	Red	Green	Green	• Booting is completed within 30 seconds of power-up.
Normal recording	Blue	Blue	Red	Green	Off	• If the external power is supplied to the black box through the USB port, booting will be complete and then the black box will switch to the **Normal Recording** mode. • The recorded video is stored in the **normal** folder on the memory card.
Emergency recording	Red	Red	Red	Green	Off	• If you press the 📹 button in **Normal Recording** mode, the mode changes to **Emergency Recording** mode. • You can record video for max. 1 minute, and the recorded video will be saved in the **camcorder** folder on the memory card. • When recording is complete, the black box switches to the **Normal Recording** mode.
Taking pictures	Red	Red	Red	Green	Off	• You can press the 📷 button in **Normal Recording** mode to take a picture. • The picture is saved in the **photo** folder on the memory card. **Note** You can only shoot again once 3 seconds have elapsed.

Note

• The Parking mode is not supported when using the external USB power.
• Shock recording is not supported when using the external USB power.
• If the external USB power is supplied by a PC, recording is not available.

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Viewing videos and pictures
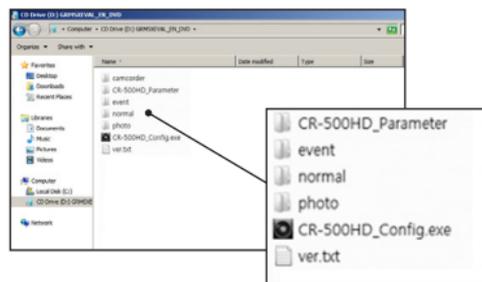
Viewing on PC (connecting the black box)

1 Connect the black box to the PC with the USB cable.
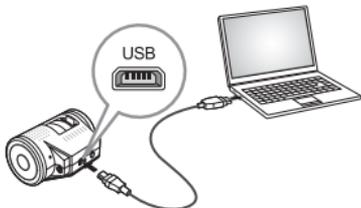
2 After booting is complete, the black box switches to USB mode and is executed as a removable disk.

3 When you click '**Open folder to view files using Windows Explorer**', the folders containing videos and pictures will appear.

4 You can play the recorded videos and view the pictures saved in each folder.

Note

- Each folder contains:
  camcorder: Emergency recording,
  event: Shock recording,
  normal: Normal recording,
  photo: Pictures
- Please make sure that you back up important videos and pictures on your PC or other storage devices.

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Viewing on PC (memory card)

1 Remove the micro SD card from the black box and place it in the micro SD adapter. Use the memory card reader for connection with a PC.

2 When you connect the micro SDHC card to the PC, it is executed as a removable disk.

3 When you click '**Open folder to view files using Windows Explorer**', the folders containing videos and pictures will appear.

camcorder
event
normal
photo
ver

4 You can play the recorded videos and view the pictures saved in each folder.

Note

- Each folder contains:
  camcorder: Emergency recording,
  event: Shock recording,
  normal: Normal recording,
  photo: Pictures
- Please make sure that you back up important videos and pictures on your PC or other storage devices.

18
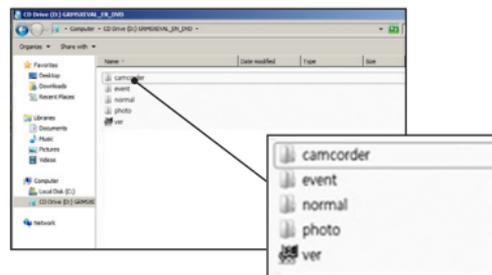
Viewing on navigation device

1 Connect the video output cable from the black box to the navigation device.

2 Press and hold down the ▣◀ button for 5 seconds to switch to the Playback mode.

Mode	LED Buttons				
	🔲	▣◀	⏻	🎤	Ⓜ
Playback	Green	Green	Red	Off	Off

3 Recently recorded video files play automatically 3 or 4 seconds after switching to Playback mode.

4 All video files are played in order from the latest files to the oldest ones, regardless of the shooting modes. (All video files in the normal, event and camcorder folders are played.)

5 The simple menu displays along with the video on the external input screen of the navigation device.

Note

- Audio is not supported when playing video on the navigation device.
- Use this feature when adjusting the recording angle after initial installation.

6 Playback screen

You can play the recorded video on the navigation device as below.

Previous file

If you press the 🎤 button while playing a recorded video, the **previous file** will play automatically.

Next file

If you press the M button while playing a recorded video, the **next file** will play automatically.

Built-in battery voltage

Vehicle voltage

Acceleration sensor value

Repeat the current file

If you press the 📷 button, **the current video** will replay from the beginning.

Exit

If you press and hold down the 🎥 button for 3 seconds, the Playback mode will stop. The black box then reboots and switches to Normal Recording mode.

Settings information

Recorded date/time

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Settings

Before configuring the settings, find out about the video range of each recording mode and the number of files to be saved in the memory.

Memory management

The start and end recording times differ for each recording mode, depending on the resolution of the video.

Mode		Storage time for each recording mode				Folder name
Resolution		1080 P	900 P	720 P	540 P	
Normal recording		3 minutes in total				**normal**
Shock recording		5 seconds before and 35 seconds after (40 seconds in total)		10 seconds before and 30 seconds after (40 seconds in total)		**event**
Recording while parking	**Shock recording**					
	Motion detection recording					
Auto recording when the ignition is off		5 seconds before and 25 seconds after (30 seconds in total)		10 seconds before and 20 seconds after (30 seconds in total)		
Emergency recording		5 seconds before and 55 seconds after (1 minute in total)		10 seconds before and 50 seconds after (1 minute in total)		**camcorder**

Note

- In Shock Recording mode, the black box records video for up to 2 minutes for a series of events.

Memory map

The maximum **recording time** and **number of files** for each recording mode are as follows:

Memory size	Category	Normal recording	Shock/Motion detection recording	Emergency recording	Taking pictures	Remarks
16GB Max. 3 hrs 30 mins	Max. size	7.8 GB	6.0 GB	0.6 GB	0.1 GB	1080p 30fps, H.264 encoding / 10Mbps (Ultra High Definition)
	Max. storage time	114 mins	88 mins	8 mins	-	
	Max. files	38 files	150 files	8 files	100 - 200 files	
32 GB Max. 6 hrs 50 mins	Max. size	15.0 GB	12.0 GB	0.6 GB	0.1 GB	
	Max. storage time	222 mins	175 mins	8 mins	-	
	Max. files	74 files	300 files	8 files	100 - 200 files	

Note

- When there is insufficient space for recording, the old video files are deleted and the new video files are stored.
- Format your memory card at least once a month with FAT32 filesystem to prevent memory card error.

Connecting the black box to a PC

1 Connect the black box to the PC with the USB cable.
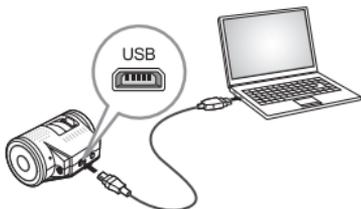
2 After booting is complete, the black box switches to USB mode and is executed as a removable disk.

3 When you click **'Open folder to view files using Windows Explorer'**, a folder with the executable file will be displayed as shown in the figure.
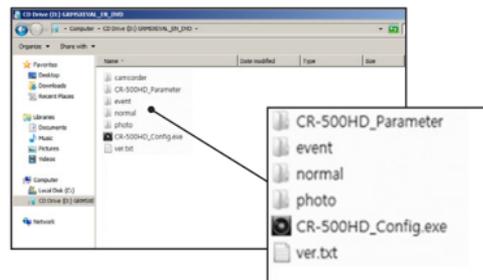
4 When you execute **'CR-500HD_Config.exe'**, the **'CR-500HD_Settings.exe'** setup program is copied onto the desktop and then executed.

CR-500HD_S ettings.exe

Setup program

Information display
Displays the model name and the firmware version.

Shock Sensitivity in Driving Mode
Adjust the shock sensitivity in Driving mode.

Shock Sensitivity in Parking Mode
Adjust the shock sensitivity in Parking mode.

Nighttime Brightness
Adjust the brightness of the video at night in low lighting conditions.

System Time
Displays the system time of the PC.

Reset
Initializes the set values.

Advanced Settings
Set the advanced settings. Refer to next page.

Setup Program

Model: CR-500HD　　　Firmware: 1.00.100

Recording Mode
- 1920×1080 1080p Full HD
- 1600×900 900p HD+
- 1280×720 720p HD
- 960×540 540p qHD

Shock Sensitivity in Driving Mode　OFF　Low　Normal　High

Auto Parking Mode　● ON　● OFF

Shock Sensitivity in Parking Mode　Low　Normal　High

Motion Detection in Parking Mode　OFF　Low　High

Nighttime Brightness　Normal　Medium　Bright

Speaker Volume　OFF　1　2　3　4

Voice Recording　● ON　● OFF

System Time　2012-10-12 오후 05: 23: 43

Reset　Advanced Settings　✓ O K

Recording Mode
Allows you to set a recording mode.

Auto Parking Mode
Set the method for accessing Parking mode to Manual or Auto (auto accessing 10 minutes after parking).

Motion Detection in Parking Mode
Set the motion detection value in Parking mode.

Speaker Volume
Set the speaker volume and enable/disable the voice recording feature.

OK
Changed values are applied to the black box. (Make sure to reboot the product to apply the changes.)

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Advanced settings

Advanced Settings

Video Quality	Ultra High	High	Standard
Video Sharpness	Low	Normal	High
Recording fps in Driving Mode	30 fps	24 fps	15 fps	5 fps
Recording fps in Parking Mode	30 fps	24 fps	15 fps	5 fps
Video Rotation	Auto	Lock	Upside down
Video Recording in Black and White (Nighttime)	ON	OFF
Video Out Image Flip	ON	OFF
Video Out Format	NTSC	PAL
Vehicle Speed (GPS Option)	OFF	km/h	mph
Memory Allocation	Default	Custom Setting

0%   20%   40%   60%   80%   100%

(Driving Mode Portion)   (Event Portion)   (Dedicated)

✔ O K

Video Sharpness
Set the sharpness of the recorded video.

Recording fps in Parking Mode
Set the frames per second for video in Parking/Motion Detection Recording mode.

Video Recording in Black and White (Nighttime)
Switches video to black and white at night in Parking mode.

Video Out Format
Set the video format NTSC or PAL.

Memory Allocation
Set the memory allocation ratio for Normal recording, and Shock/Parking/Motion Detection recording.

Video Quality
Set the video resolution (Ultra High/ High/ Standard).

Recording fps in Driving Mode
Set the recording frames per second.

Video Rotation
Set the Rotation in which the black box is installed.

Video Out Image Flip
Flip the video output image. (Use this feature when you view rear camera footage via the navigation device.)

Vehicle Speed (GPS Option)
Set the speedometer by GPS.

Voice Recording, SD Card Format, and Alarm Sound

Recording

Status	LED Buttons					Operation
	📷	🎥	⏻	🎙	M	
Voice Recording ON	⸜Blue	⸜Blue	Red	Green	Green	• **When voice recording is OFF,** press the 🎙 button. An alarm will sound and voice recording will start.
Voice Recording OFF	⸜Blue	⸜Blue	Red	Off	Green	• **When voice recording is ON,** press the 🎙 button. An alarm will sound and voice recording will stop.

> **Note**
>
> The default setting is **Voice Recording ON**.

SD Card Format

1 Press and hold the M button and supply power to the black box. Hold down the M button for about 7 seconds.

2 When 7 seconds have passed, the LEDs of the 📷 and 🎥 buttons will blink for 2 seconds in white.

3 After booting, formatting will be performed with an alarm sound, "Beep~ Beep~ Beep~". (The LED will light in yellow during formatting.)

4 When formatting is complete, recording starts after rebooting.

> **Note**
>
> • Video images will be deleted after the SD card is formatted, and cannot be restored. Therefore, be sure to copy important video images to your PC or personal mobile storage device.

Status alarms

Status	Alarm
Booting sound & Start recording	"Ding-Dong~ Video recording starts."
Emergency recording	"Cha-Re-Rook" (sound of projector)
Removing power	"Dong-Ding~"
Memory recognition error sound	"Beep~ Check your memory card."
Recording starts in Parking mode	"Ding-Dong~ Parking mode."
Recording in Shock mode	"Beep~"
USB mode	"Ding-Dong~ USB mode."
Shooting	"Click~" (sound of shutter)
Finishing sound	"Dong-Ding~"
Playback mode for recorded video	"Ding-Dong~ Video playback mode."
Turning off MIC	"Ding~"

Status	Alarm
Turning on MIC	"Ding-Dong~"
Reset time*	"Beep~ Please check the time setting."
Formatting Sound	"Beep Beep~, Beep Beep~, Beep Beep~"
GPS Sound	"GPS is received."
Status alarm 1	"Ding-Dong~ Normal recording mode."
Status alarm 2	"Ding-Dong~ Parking mode."
Status alarm 3	"Ding-Dong~ Emergency recording mode."
Status alarm 4	"Ding-Dong~ Video playback mode."
Switch to Normal recording	"Ding-Dong~"

* If a system time error occurs, an alarm will sound whenever you reboot the black box. Connect the black box to your PC and set the system time again in the setup program.

Management

Firmware upgrade

**1** Download the latest firmware from the website.

2 Remove the micro SD card from the black box and place it in the micro SD adapter. Use the memory card reader for connection with a PC.

3 When you connect the micro SD card to a PC, it is executed as a removable disk. (It is recommended that you format the memory card prior to the firmware upgrade.)

4 Unzip the downloaded firmware and copy it to the root directory of the memory card.

FileSystem_CR500HD
FileSystem_CR500HD.md5
Kernel_CR500HD
Kernel_CR500HD.md5
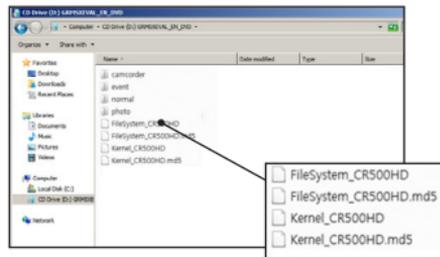
5 When you insert the micro SD card into the black box and turn the power on, 4 LEDs will flash and the upgrade will start.

Note

- The upgrade takes approximately 3 minutes. When the upgrade is complete, the firmware file will automatically be deleted.
- Prior to upgrade, it is recommended that you back up all important files on the micro SD card.

Cleaning and storage

Cleaning

* If there is a foreign object on the lens, wipe it down with a soft cloth.
  - To obtain high quality video, do not touch the lens with your hands or allow it to make contact with other objects.
* Clean the black box with a tissue or a dry cloth if there is a foreign object on its exterior.
* Do not attempt to disassemble the black box and take out a foreign object using a tool if it is inside the black box. Contact the A/S center.

Storage

* If you are not using the black box, remove it from your vehicle and keep it indoors.
* Make sure to disconnect the power while storing it.
* Keep the black box enclosed if possible and avoid damp places.
* Remove the memory card to prevent it from degrading while storing the black box.

Troubleshooting

The black box does not turn on.

- Check if the power (cigarette jack cord) is connected.
- If the product is not working at all, press the RESET button with the tip of a clip. (Resetting only blocks power, and thus does not affect the product or the stored video.)

The buttons are not working.

- Check if the black box is in the video recording state after booting.
- If the buttons are not working in the recording state, request after sales service.

The black box does not boot up.

- Check if the cigarette jack cord is the original one.
- Check if the power LED of the cigar jack cord is on.
- Check if the micro SD memory card has been inserted into the black box properly.
- Check if the external memory card format is FAT32. (NTFS or exFAT are not recognized.)
- Check if the external memory card is faulty or not an original component.

Booting is complete, but there is no sound.

- On the Setup Program screen, check if the alarm volume is set to its lowest.
- If there is still no sound after adjusting the volume, request after sales service.

Recorded video does not play.

- Video may not play depending on the characteristics of the video player.
- If the problem still persists, request after sales service.

My PC does not recognize the black box.

- If the black box does not turn on when connected to the PC or does not switch to USB mode, press the RESET button.
- If the connection often disconnects or becomes unstable, connect the black box directly to a USB port on the PC without using a USB hub. Connection through a USB hub may not provide stable power to the black box.

The black box is recognized on the PC USB, but is disconnected.

* Connect the black box to the USB port of the PC main board if possible.

* Remove any other USB devices connected to the PC. Connect the black box only or connect it to the USB host card.

* Check if the same problem occurs on other PCs. If so, request after sales service.

The black box is connected to the USB port of a navigation device, but it is not working.

* Recording is unavailable with power through the USB port of a navigation device. It is, however, recognized as a USB movable disk.

There is no recorded video image.

* Check if the black box booted properly.

* If only audio plays without a video image display, request after sales service.

I would like to change the external memory card.

* You can use any original micro SD card with the same specification as the card supplied. (or a card which does not exceed the recommended limit defined in the Specification section below.)

* The physical characteristics of micro SD cards differ from manufacturer to manufacturer. Some micro SD cards may not be compatible with Finedigital black box.

Specifications

Item	Specifications		Remarks
Model Name	CR-500HD		
Dimensions/ Weight	39x64x50 mm/ 88 g		
Memory capacity	micro SD	16 GB/ 32 GB	Class 10 or above recommended
Recording methods	Normal recording	Supported (1080p 30fps)	Records video in 3 minute intervals.
	Shock recording		Records video 5 seconds before and 35 seconds after impact (40 seconds in total).
	Emergency recording		Records video 5 seconds before and 55 seconds after (1 minute in total).
	Recording while parking		Records video 5 seconds before and 35 seconds after impact or motion detection (40 seconds in total). An additional device needs to be installed in vehicles that do not support uninterrupted power.
	Auto recording		Records video for 30 seconds when turning off the ignition (30 seconds in total).
	Still image capturing		1920*1080 1280*720
Angle of view	Diagonal 135°/ Horizontal 119°/ Vertical 70°		
Video	1920x1080	FULL HD 1080p 30fps	16:9 WIDE
Audio	Built-in microphone		
	Built-in speaker	8 ohms	
Acceleration sensor	3-Axis acceleration sensor	+2 g/ -2 g	
Input power	DC 12 V		USB 5V supported (external battery)
Battery	Built-in Li-Polymer battery		
Power consumption	Max. 2 W		Max. 3 W when charging
Operating/ Storage temperature	Operating temperature: -10°C ~ 60°C / Storage temperature: -20°C ~ 70°C		
Interface	USB 1.1/ 2.0 Mini B type	DC JACK 3.5Φ	
Video output	TV/ Navigation device output		NTSC/PAL

Installing and using FineVu Player

FineVu Player is the software that enables you to play a video recorded by the Finevu car black box.
Download FineVu Player from http://www.finevu.com and install it.

Main screen

When you install and then run FineVu Player, the following screen is displayed.
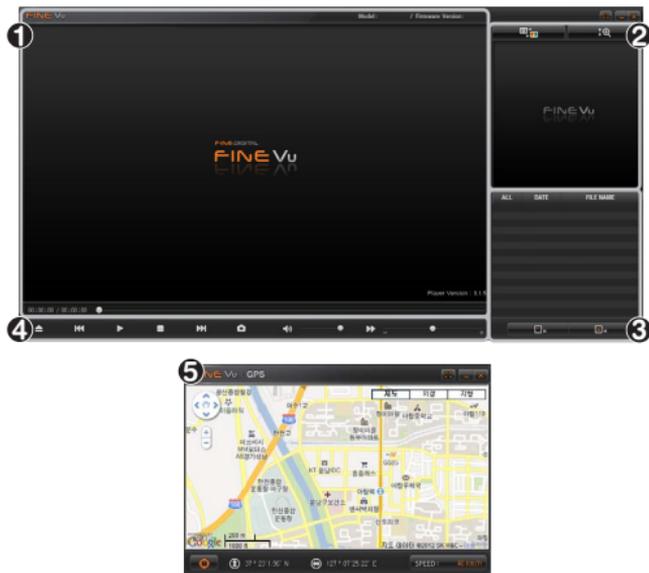
1 The main screen where a recorded video is played

2 The sub screen where the selected part of the main screen is shown enlarged

3 The List screen showing a list of recorded videos

4 The Control bar with which you can play and control recorded videos

5 The GPS popup displayed when the recorded video contains GPS information
(* It is not displayed when there is no GPS information available.)

Playing and checking recorded videos

1 Click the Open ▲ button in the control bar.

2 Select a folder containing recorded videos.

3 Select a video file listed in the List screen and then click the Play ▶ button to play the selected video.

ALL	DATE	FILE NAME
NORMAL	2012.08.10	17h46m17s_normal_to_...
EVENT	2012.08.10	17h46m22s_event.avi
NORMAL	2012.08.10	17h46m57s_normal_to_...
EVENT	2012.08.10	17h49m21s_event.avi
PARKING	2012.08.10	17h49m36s_parking.avi
NORMAL	2012.08.10	17h49m55s_normal_to_...
EVENT	2012.08.10	17h50m02s_event.avi

4 Now you can check the scenes being played. You can move around and check the scenes by time using the buttons in the Control bar.

Recommended PC specifications for FineVu Player

	Minimum	**Recommended**
OS	Windows XP SP3	Windows Vista, 7
HDD	30 MB	50 MB or more
CPU	Pentium4 3.0 GHz	Intel Dual Core or later / AMD AthlonX2 or later
VGA	128 MB	512 MB or more
RAM	1 GB	2 GB or more
DirectX	9.0c	9.0c

Limited Warranty

This product is guaranteed against manufacturing defects for one (1) year (six (6) months for battery and accessories) from the original date of purchase. Finedigital's sole obligation in the event of such defects during this period is to repair or replace the defective part or product with a comparable part or product at Finedigital's sole discretion. Except for such replacement, the sale, or other handling of this product is without warranty, condition or other liability even though the defect or loss is caused by negligence or other fault. Damage resulting from use, accident, or normal wear and tear is not covered by this or any warranty. Finedigital assumes no liability for any accident, injury, death, loss, or other claim related to or resulting from the use of this product. In no event shall Finedigital be liable for incidental or consequential damages relating to or resulting from the use of this product or any of its parts.

Finedigital is not liable for the costs of installing and removing the products and its accessories regardless of the warranty period.

FINE DIGITAL

www.FineVu.com