

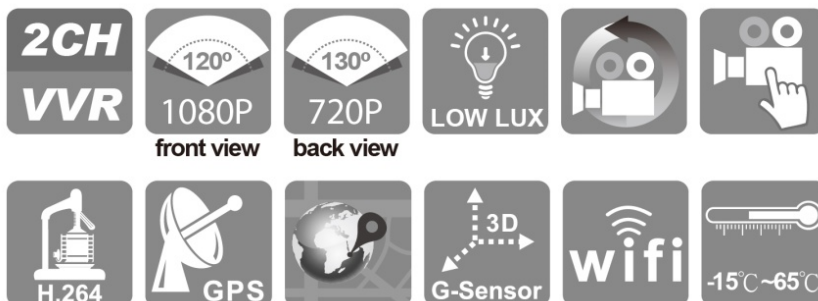
VENTRA

Ventra VDR-760 2 CH HD Vehicle Video Recorder

User Manual



05 19. V1.3



Safety Precautions

To ensure device working correctly, please test record and play video function before use. Please note that manufacturer, subsidiaries, affiliates, and distributors are not liable for any consequential damages arising from any malfunction of main device accessory. Including the losses cause by memory card that failed to record image or recorded files unable to read on any device.

Before using the product, please ensure that you read the safety precautions below. Always make sure the product is used correctly.

- Please keep device away from children
- Only using the power supply as recommended or supplied by the manufacture
- Do not attempt to disassemble, alter or modify the product
- To avoid the risk of injury, do not touch the interior of the product if it has been dropped or otherwise damaged
- Stop using the product immediately if it emits smoke, a strange smell, or otherwise behaves abnormally
- Do not use organic solvents such as alcohol, benzene, or thinner to clean the product
- Do not let the product come into contact with liquid or moisture
- Do not allow liquids or foreign objects to enter the VDR
- Do not place the VDR nearby or direct contact with flame
- Do not handle the power cord with wet hands
- Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories.
- Do not use the damaged power cords or plugs
- Do not allow direct or metal objects (such as pins or keys) contact with the terminals or plugs.
- Avoid using, placing or storing the product in humid or dusty areas

Windshield Mounted Device Notice

1. Please check and comply with ALL local, state and federal laws and or regulations regarding windshield mounted devices. Some state laws prohibit drivers from using suction mounts on their windshield when operating motor vehicles. Other state laws allow the suction mount to be mounted to be located only in specific locations on the windshield. Numerous states have enacted restrictions against placing objects on the windshield in locations that obstruct the driver's vision.
2. **IT IS THE USER'S RESPONSIBILITY TO MOUNT VENTRA EQUIPMENT IN COMPLIANCE WITH ALL PPLICABLE LAWS AND ORDINCANCE.**

Audio and Video Recording Notice

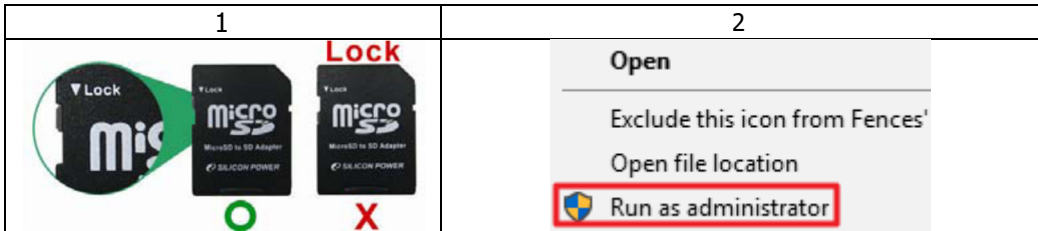
3. Certain local, state and federal laws may prohibit recording of audio and or video in vehicles or public area, or without knowledge and or consent, please check and comply with ALL local, state and federal laws and regulations.
4. Certain local, state and federal laws may require signage or display that indicate recording of audio and or video in vehicles or public area. Please check and comply with ALL local, state and federal laws and regulations.
5. **IT IS THE USER'S RESPONSIBILITY TO USE VENTRA EQUIPMENT IN COMPLIANCE WITH ALL PPLICABLE LAWS AND ORDINCANCE.**
6. Use of this product other than its intended purpose is strictly prohibited.
7. Disconnect the power of the VDR if not used for an extended period of time
8. Ventra Technologies Inc. does not assume any responsibility for any fines, violation, penalties or damages that may be incurred as a result of the use of the product.
9. Ventra Technologies Inc. is not responsible for any direct, indirect, incidental or consequential damages, arising out of use, misuse or inability to use of our products.

IMPORTANT: FORMAT SD CARD PRIOR TO USE



When you use the Micro SD card for the first time or use a new card, the SD card MUST be formatted prior to use.

***Notice:**

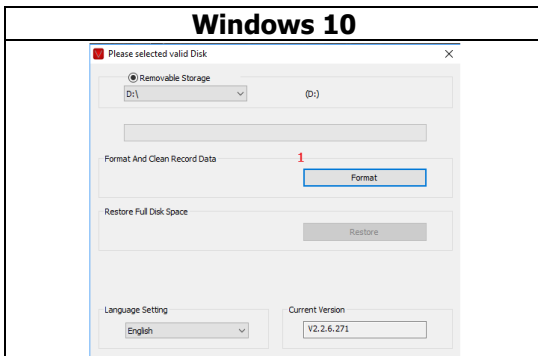
1. Before formatting Micro SD card, please ensure to **UNLOCK** it first.
2. If the card is unlocked but still cannot be formatted, please run the program as Administrator to prevent from this problem.



Format steps :

- i. Insert the CD in your PC and open the file
- ii. Install the VDR-760 / VDR-220 PC Software
- iii. Run  program and click on  "Format Micro SD Card".
- iv. Click on 『Format』 to start formatting the Micro SD card as following steps:

NOTICE: The SD card capacity, regardless of size 32GB, 64GB or 128GB will show 77.5 to 80.5MB



<p>Regardless of SD card capacity (i.e. 16GB, 32GB, 64GB or 128GB)</p> <p>Once its formatted via the Ventra PC player or VDR760, the SD card capacity will show between 77.5MB to 80.5MB</p> <p>This is due to the system design of the VDR760 and is completely normal</p>	

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Note: VDR-760 and VDR-220 utilizes proprietary file format. The SD card **MUST** be Formatted via the VDR 760 desktop software prior to use

<https://ventrainc.com/ventra-products-all-in-one-vdr-760/>

A. Feature Highlight

1. Ultra low-light high-resolution CMOS sensor
2. Record 1080P HD Video (Front Camera) and 720P HD (Interior Cab View) simultaneously
3. Record HD Video, Audio, G-Sensor and GPS data
4. Auto continuous loop recording
5. Normal and Event Recording Files

6. Vandal Resistant SD card slot
7. Built-in Supercapacitor for power to ensure video files are saved when system powers off
8. Plug and Play
9. Front view angle 120 degrees. Cab view angle 130 degrees
10. Driving Route and Speed history in Ventra software playback with Google Map Integration
11. G-sensor sensitivity adjustable according to vehicle type and road condition
12. Event videos are saved and marked for easy identification
13. Proprietary file format
14. Password protection
15. Assign Company and Vehicle ID
16. Wi-Fi adapter for optional VentraCloud Service

B. Specifications

Sensor	Front 1080P CMOS Sensor
	In-cab 720P CMOS Sensor
Camera view angle	Front camera view angle 120°
	In-cab camera view angle 130°
Voltage	(a) 5VDC 800mA Hardwired connection
	(b) Built-in 1.5F super capacitor as backup power for file storage
Operating Temp	5F ~ 140F
Storage device	Max 128GB MicroSD Card. Class U1 / U3 speed and higher
Recording Frame	Front 1920 x 1080 Max. @ 25 FPS
	In-cab 1280 x 720 Max. @ 15 FPS
	Auto record when vehicle / system power on. Cab facing camera can be disabled via software setting
Recording contents	Video, Audio, Date, Time , G-sensor data, GPS data
Storage format	(a) Specific format for software player
	(b) H.264 compression
Microphone	Built-in high sensitivity microphone for automatic voice adjustment
Time setting	GPS auto adjustment, use built in calendar clock if no GPS signal
G-Sensor	Internal 3D G-Sensor
GPS	Built-in GPS
	GPS position, drive route and speed history
WiFi	Optional USB WIFI Adapter

Recording Resolution and Frame Rate

	Front Camera	In-Cab Camera
Resolution / Frames Per Second	1080P @ 25 FPS	720P @ 10 FPS
Upload to Server Storage (Optional Fee Based Service)	720P @ 15 FPS	720P @ 10 FPS

c. Included Components

- (a) VDR760 Dual Channel Vehicle Camera
- (b) Micro SD card* (see model below)
- (c) 4 PIN, 3.5 inch headphone jack to RCA output cable
- (d) IR remote controller
- (e) Window mount bracket
- (f) Bracket holder
- (g) Hard wired power cable
- (h) Product CD
- (i) User Guide
- (j) USB WiFi Adapter

Models	VDR-760	VDR-760BT	VDR-760ZT
SD Card Included	32GB Micro SD	64GB Micro SD	128GB Micro SD

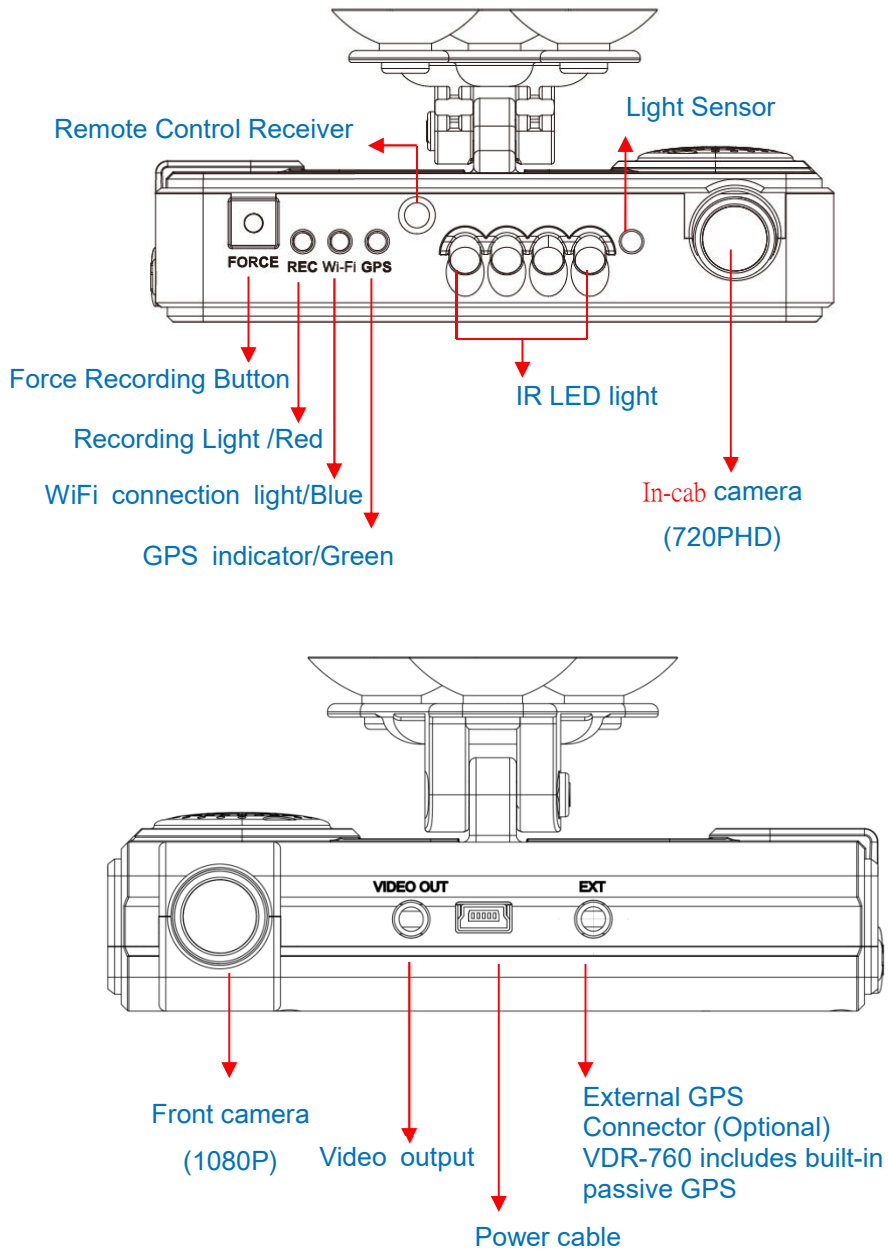
All VDR-760 models are the same except for the SD card included

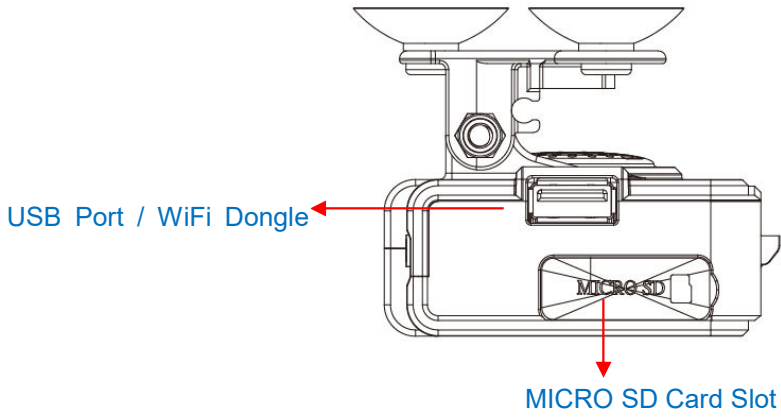
Recording Time

Models	VDR-760	VDR-760BT	VDR-760ZT
SD Card	32GB Micro SD	64GB Micro SD	128GB Micro SD
Recording Time	6 - 8 Hours	12 - 15 Hours	24 –30 Hours

Recording duration is an approximate time provided as reference and may vary

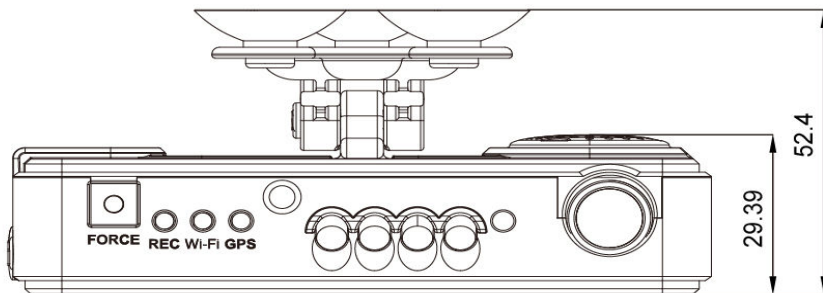
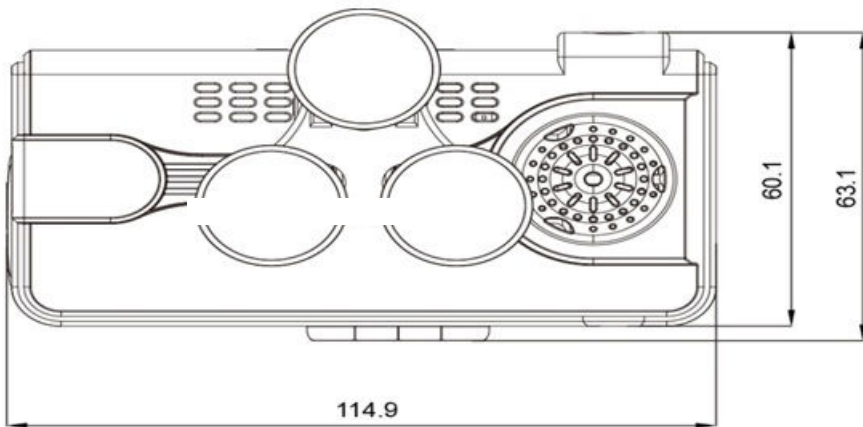
D. Product Diagram





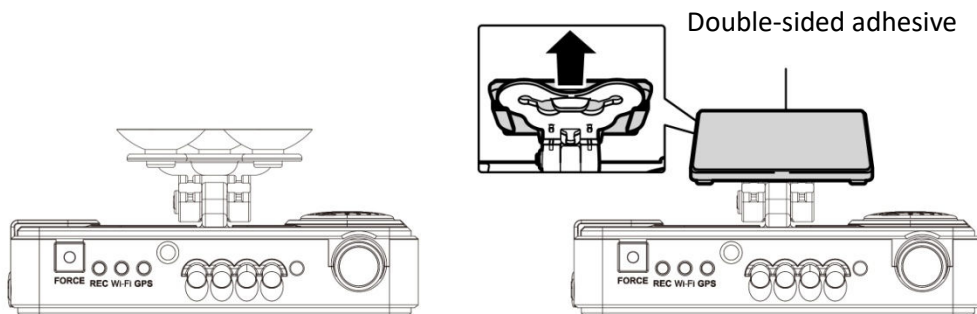
E. Product Dimension

Unit : millimeter

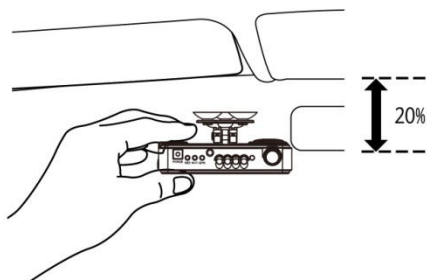


F. Installation

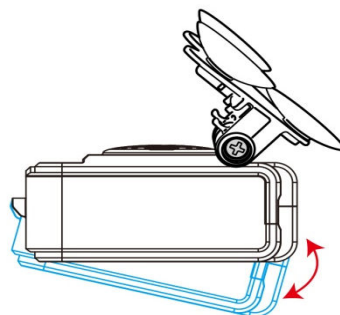
1. Use 「suction cup」 or 「Double-sided adhesive」 install device on vehicle front windshield.



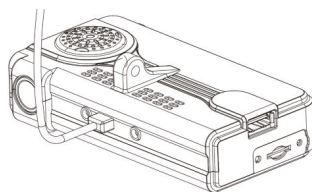
2. Set up the system in proper position



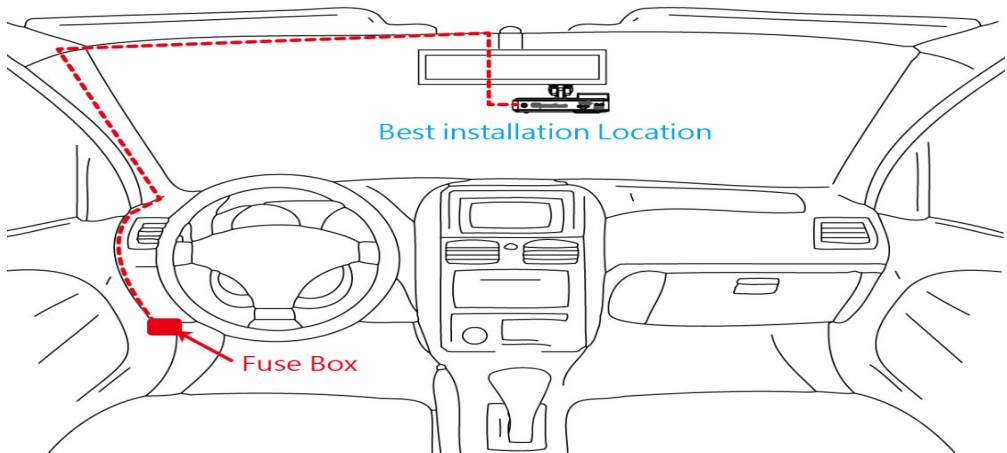
3. Adjust the camera view to desired angle by loosening the bracket screw



4. Connect the power cable from the VDR760 to the extension cable square plug. From the ext. cable, connect to the wires to the vehicle fuse

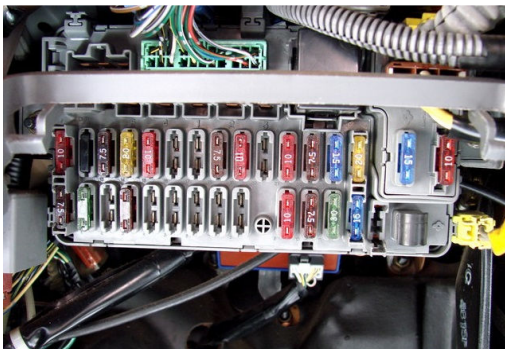


6. Device wire installation diagram. During the wire installation, avoid set wire on left side above GPS. Set wire through device front hole to vehicle ceiling to get better GPS signal.



VDR requires 2 wires - **WHITE** (12V DC) and **Black** (Ground) for installation. Use the power cable included with the system.

Do not modified the power cable or remove the inline power box included with the VDR system.

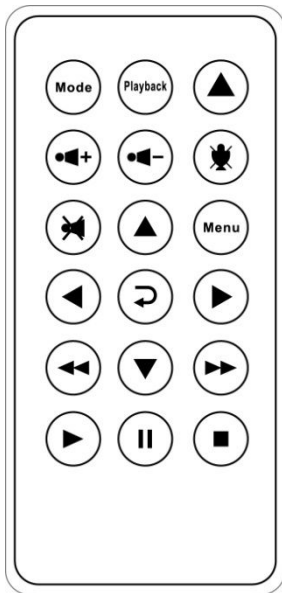




Notices

- (a) GPS positioning accuracy may be affected by the installation position, sun, environment or weather condition
- (b) For video clarity, install device in the wiper washable area
- (c) Tinted window film with metal components may lead to GPS signal interference
- (d) Infrared (IR) start-up time and off time depends on the light intensity, which affected by the installation location, sun visor and other factors
- (e) The day and night mode with a delay of about 30 seconds
- (f) Before using the memory disk, please format the disk first via the VDR-760 player. If not, device will automatically erase all data in the memory disk before recording, then recording as default setting
- (g) To ensure recording quality, please do not use adapter card with Micro SD card. Doing so may lead to bad connection due to shock and vibration
- (h) Memory card has life span. To ensure working correctly, please test and format the memory card on VDR-760 Player regularly
- (i) Use new memory card insert device, it will format proprietary files format which will take about 2 minutes
- (j) After SD card format by device or PC player, 8G, 16G, 32G, 64G or 128G SD card all showing **77.5 - 80.5MB** storage space under Windows system, other storage space as hidden files, user have to play video records by VDR-760 player. The restore SD card also have to use the VDR-760 player refer to format/restore memory card chapter.
- (k) The collision and high frequency vibration may cause physical damage to the memory card magnetic field, resulting in video intermittent or unable to playback. It is recommended to perform regular inspection and backup important data.
- (l) If the device power consumes more than the standard USB output 500mA, the computer power supply may be insufficient, and require additional DC 5V / 1A above the power supply wire.
- (m) Device video output normally divided into two systems: NTSC or PAL. Ensure using suitable system according to different devices and monitors.

G. Remote controller



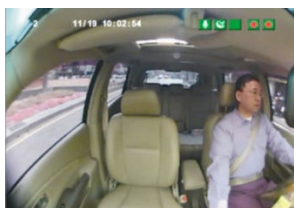
Buttons		Functions
▲	Force recording button	Manually establish a recorded file which cannot be overwritten
Mode	Mode button	Full screen / Half screen spilt shift
Menu	Menu button	show the device firmware version & server ip information
🔇	Mute button	Audio recording On/Off

◆Introduction of OSD Interface: (Video output from connecting TV-OUT line to the device):

(1)Press Mode button in Live view interface switch CH1 front camera, CH2 in-cab camera and dual front and in-cab camera image as below:



Front camera image(CH1)

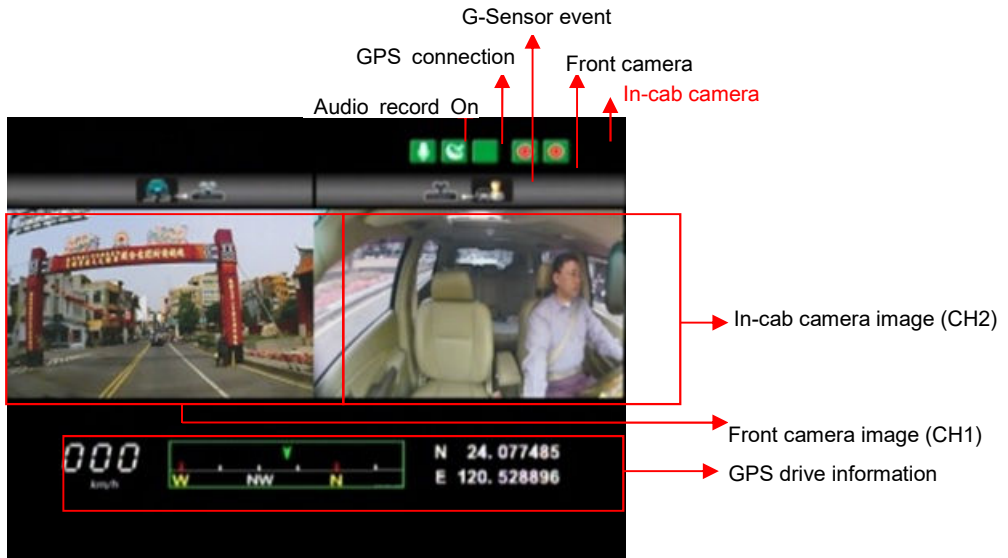





In-cab camera image(CH2)






Front & In-cab camera image display



(2) Illustration Description



1. Event Record:  Appears in the top right side of LIVE screen, it means that G-Sensor didn't receive abnormal signal. When you press the record button  from the remote control or click  this icon at the right top to force the machine to record manually.

2. Click Menu button on remote controller under LIVE screen to display current software version.

3. In the LIVE screen you can choose whether open the recording or not, click Mute button on remote controller, the icon  will showing on top right of LIVE screen, this icon  stand for stop recording audio, start and being recording the top right screen will showing  icon.

4. GPS display: When  icon appears at the top right of the LIVE screen, it means there is no GPS signal; when the icon  appears in the top right of the LIVE screen, it indicates that the GPS is working.

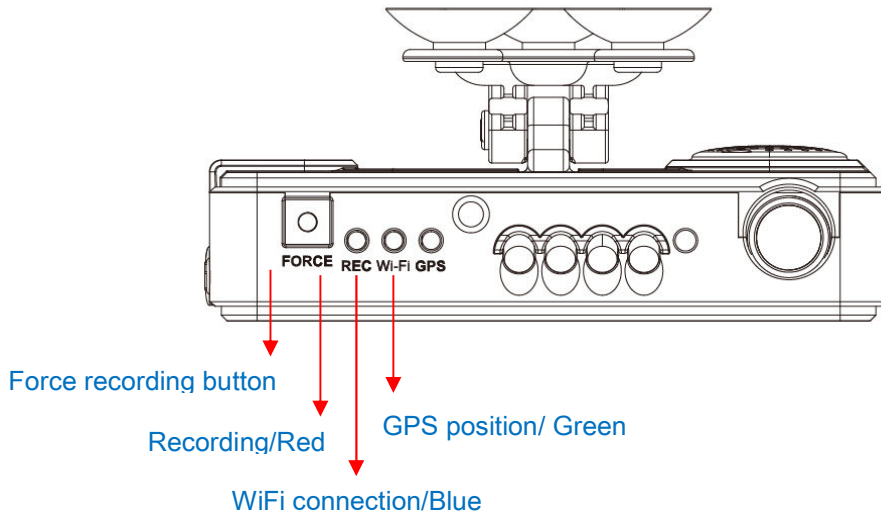
* The boot screen and LIVE screen image may change due to software update or revision without any notice.

H. Recording and stop recording

When the device powers on, the screen will show a welcome message if connected to TV-Out. Software will display current software version as 「 Firmware Version : XXXX 」 before going into LIVE screen.

a. Power on/ Start recording:

Power on, device boots up after approx. 1 minute. The red light flash indicate device being recording.



Light indicator:

- FORCE: Force recording button (Manual Event Bookmarking)
- REC Red light: Steady ON: Recording, OFF: Not recording; Flashing: Event recording
- Wi-Fi Blue light: Steady ON: Connected; OFF: Not connected.
- GPS Green light: Flashing: Searching; Steady ON: Connected.

b. Power Off/ stop recording

Power off and then remove the memory card to read the recording file in computer.

I. Playback video records

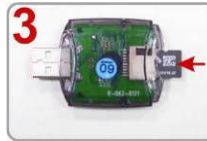
How to read the files from Micro SD card?



1 Remove the vandal resistant and gently press the Micro SD card with finger.



2 Remove the card





3 Insert the Micro SD card into the card reader (please make sure the direction is correct).



4 Connect the card reader to the PC and use the software in CD to play the files.

1. Video playback

Start the program  (you can locate it in the disk), Press  button, and choose the memory card player list to play the files.









Note: Direct X 9.0 above is required for this program














2. Main Screen

PC Player interface



Control Interface Description:

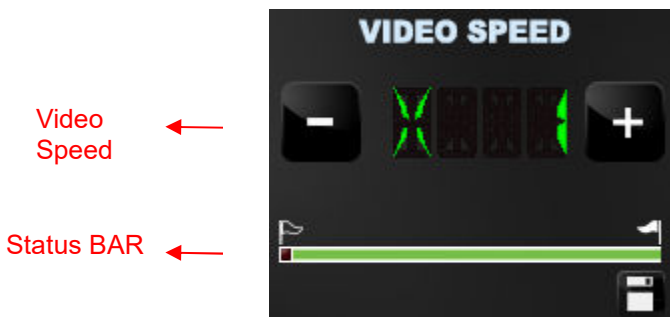
	Pause
	Play
	Stop
	Reverse
	play previous frame
	Play next frame
	Play previous file
	Play next file

	Google Map API Key
	.TS File (uploaded event video to server, may not be applicable to all customers)
	.SD File (Native recorded file on SD card)
	Close the PC Player
	Minimize the PC Player
	Playback
	Calendar
	Backup / Save Video
	Snapshot
	Configuration
	Format
	G-Sensor Graph
	Compass

a. Speed & Volume




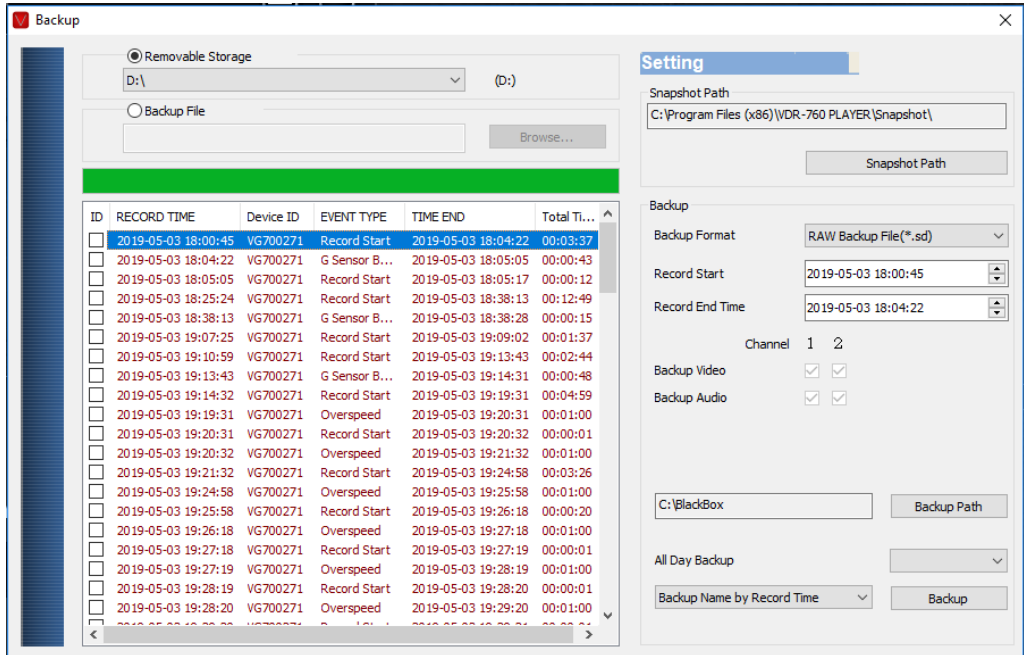
b. Video Playback



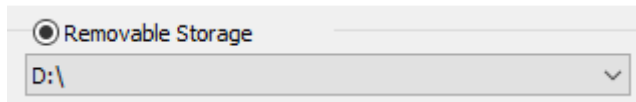
- (1) Play BAR: Move the play BAR by mouse
The flag above BAR can be move to backup video files
- (2) Video speed: Support 2x, 4x, 8x fast forwarding and -2x, -4x, -8x slow play mode.

■ Disk Backup 

Save the recorded files from memory card to PC, click the  button and it will pop up backup window as below.



Step 1: select the SD card location

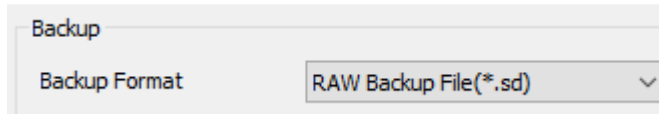


Step 2: select the records to backup

ID	RECORD TIME	Device ID	EVENT TYPE	TIME END	Total Ti...
<input checked="" type="checkbox"/>	2019-05-03 18:00:45	VG700271	Record Start	2019-05-03 18:04:22	00:03:37
<input type="checkbox"/>	2019-05-03 18:04:22	VG700271	G Sensor B...	2019-05-03 18:05:05	00:00:43
<input type="checkbox"/>	2019-05-03 18:05:05	VG700271	Record Start	2019-05-03 18:05:17	00:00:12
<input type="checkbox"/>	2019-05-03 18:25:24	VG700271	Record Start	2019-05-03 18:38:13	00:12:49

Step 3. Choose the backup file format

- (1) Micro SD Card Backup (*.sd)
- (2) AVI File Backup (*.avi)





Backup format :

- (1) Micro SD card backup format

	Micro SD Card File type (*.sd)
--	--------------------------------

- (2) AVI File Backup (*.avi)

	201 -11-19-12-26-52-CHN01.avi 24,794 KB	CH 01 is front camera recording The file name is *.avi.
	201 -11-19-12-26-52-CHN02.avi 6,958 KB	CH 02 is in-cab camera recording The file name is *.avi.

★Note: If backup by original format of Micro SD card, the file recorded with location of GPS (longitude and latitude), speed and G-SENSOR. If backup by the format of *.avi, the file recorded date, video and audio. We suggest to backup via original format of Micro SD card.

Step 4. Backup Path: Select your backup destination (e.g.: C:\blackbox)

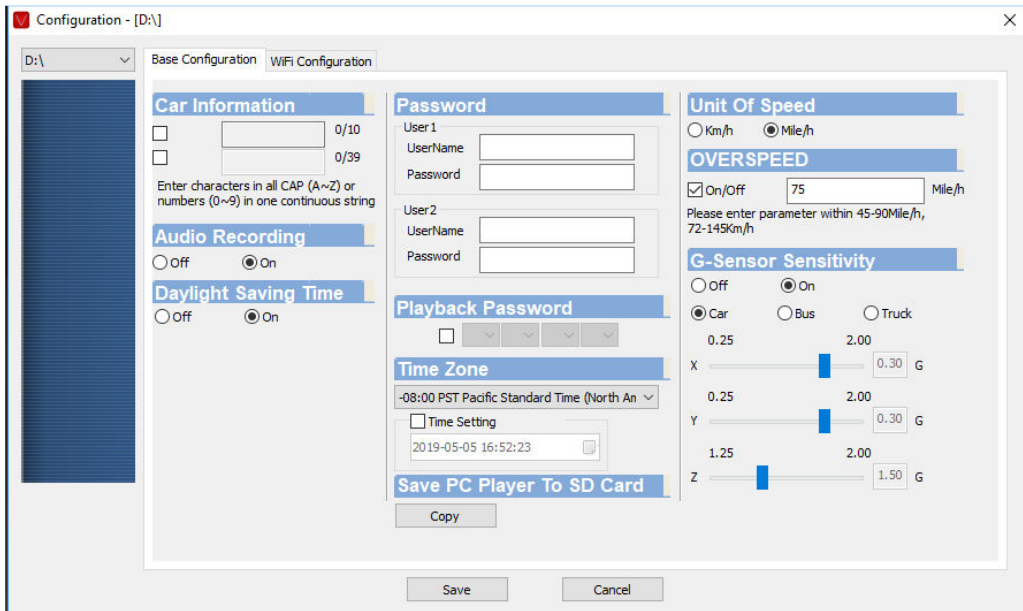


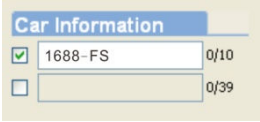
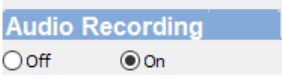
Step 5. Start backup

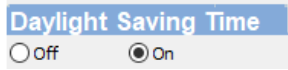

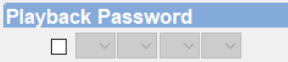
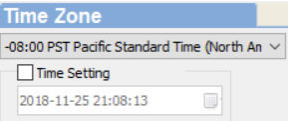


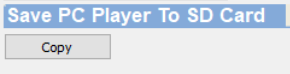

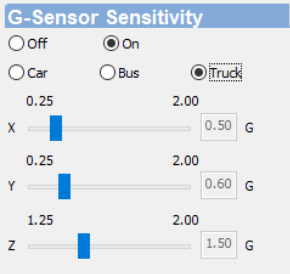
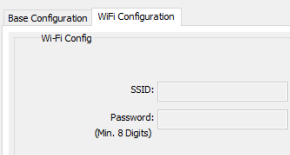
■ Configuration 

Insert memory card into adapter card before recording, and then plug in adapter card to PC USB slot. Click and run software to setting recording method, after setting complete, insert the memory card back to device and continue recording.




1.	Car Information		<p>The vehicle or driver ID can set and recorded.</p> <p>Enter characters in all <u>CAP</u> (A ~ Z) or numbers (0 ~ 9) in one continuous string.</p>
2.	Audio Recording		<p>Audio recording.</p> <p>On: Enable audio recording</p> <p>Off: Disable audio recording</p>

3.	Daylight Saving Time		<p>Enable or Disable Daylight Saving Time. If enabled, system will automatically adjust based on calendar</p>
4.	Password		<p>Assign Password to SD card to prevent unauthorized access. Set password to 15 characters max, for example: 123456789123456 After setting the password, it is required to enter password to access the playback file, setting, formatting memory card. ★ Note: Please DO NOT lose password. There is no master password to reset the card.</p>
5.	Playback Password		<p>Encrypted memory card to prevent unauthorized access the vehicle video recorder. Set password to a four figures number from 0 to 9.</p>
6.	Time zone		<p>Set time zone for the VDR system</p>

7.	Save PC Player To SD Card		Save a copy of PC player to the SD card
8.	Unit of Speed		<p>Km/h: kilometer per hour Mile/h: Mile per hour</p> <p>★ Note: 1 KM=0.6214 mile, 1 mile=1.6093KM</p>
9.	G-Sensor Sensitivity		<p>G Sensor: On /Off</p> <p>Off: Disable G Sensor Of: Enable G sensor</p> <p>If disabled, VDR will not detect impacts as Event.</p> <p>Sensitivity of G-Sensor to detect impact, collision and condition. May need to adjust based on vehicle type and road conditions</p>
10	Wi-Fi Setting		<p>WiFi Setting is to program how the VDR-760 will connect to a an external hotspot such as smartphone or Access Point</p> <p>SSID: Enter name of Wi-Fi SSID ID (character and number).</p> <p><u>SSID should NOT contain Hyphen (-) John-WFi or apostrophe (') John's WiFi</u></p> <p>Password: Enter Wi-Fi password</p>

■ Snapshot Tool 

While playing the recorded file, you can use this function  to snapshot the picture and save it into PC.

Default saving path for snapshot picture will be in /Snapshot folder.

File format as *.bmp

J. Format memory card

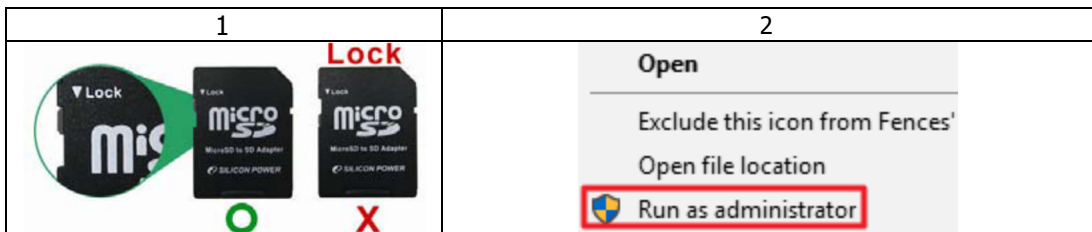
When You Should Format Micro SD CARD?

When you use the Micro SD card for the first time or use a new card, the SD card MUST be formatted prior to use.



★Note: this record system cannot delete a particular video, backup video before format SD card.

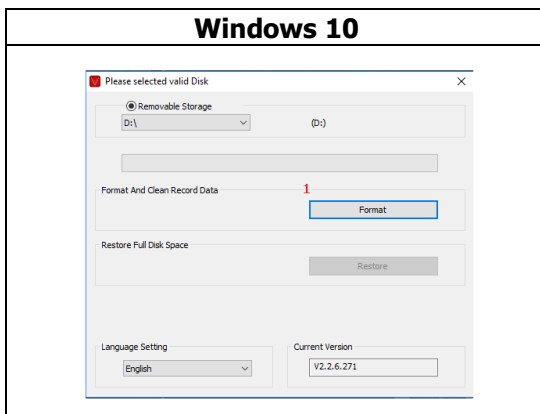
*Notice:

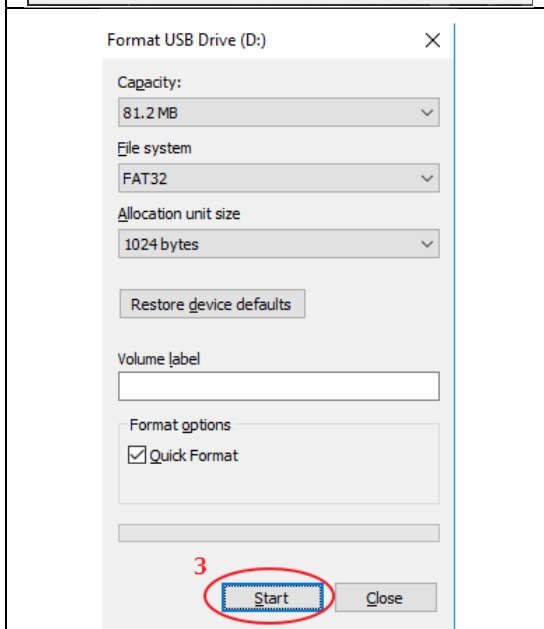
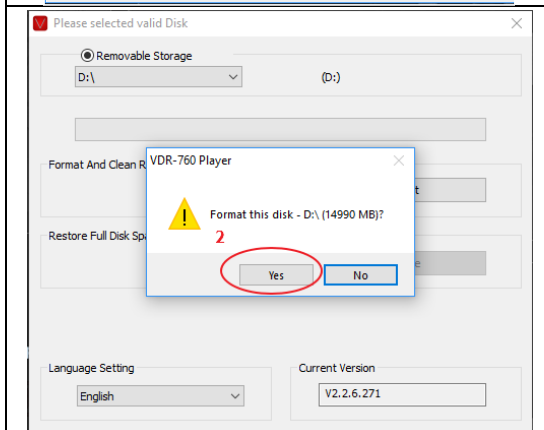
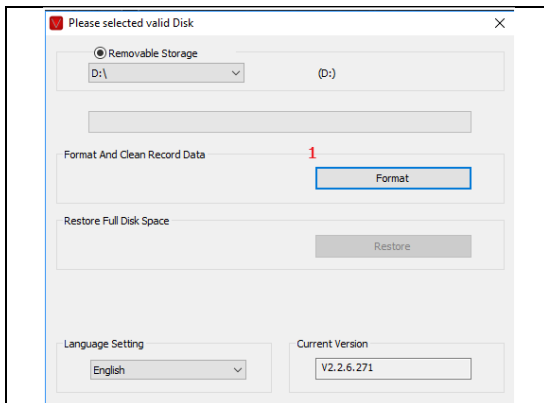
3. Before formatting Micro SD card, please ensure to unlock it first.
4. If the card is unlocked but still cannot be formatted, please run the program as Administrator to prevent from this problem.

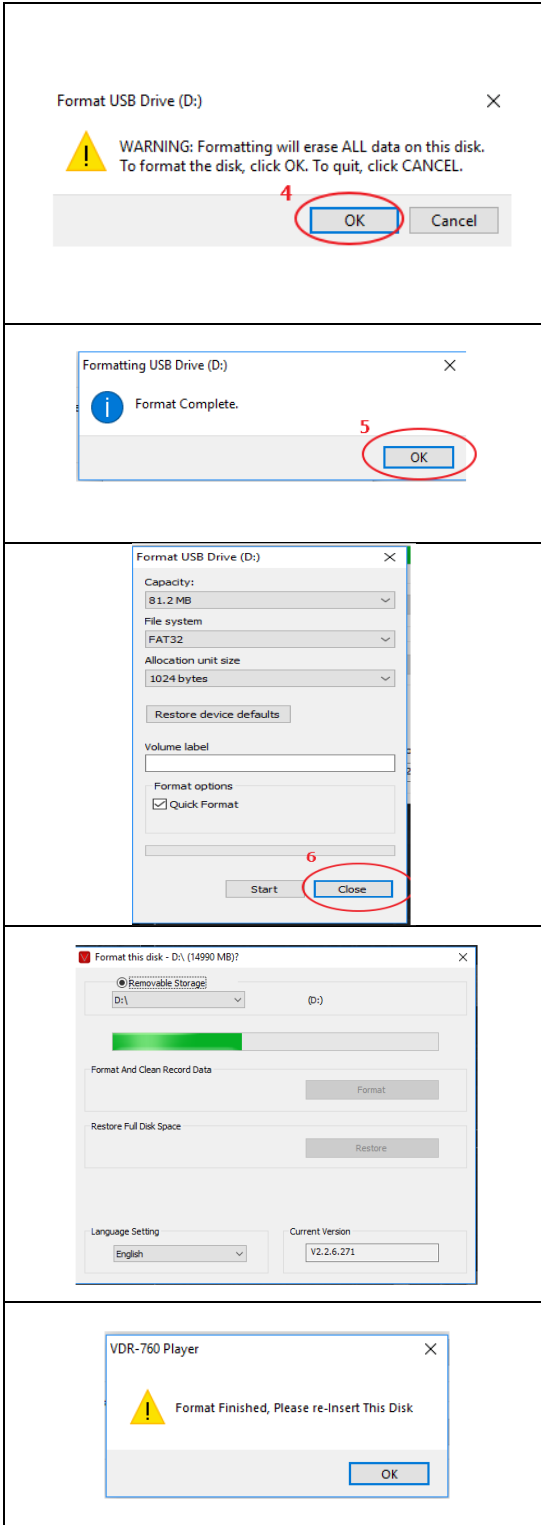


Format steps :

- i. Insert the CD in your PC and open the file
- ii. Run  program and click on  "Format Micro SD Card".
- iii. Click on 『Format』 to start formatting the Micro SD card as following steps:







iv. When formatting is completed, please insert the card into the VDR



1
Unlock the vandal resistant SD card slot via the included wrench



2
Insert the Micro SD card in correct direction. Mind the gap of the SD card slot



3
Close the Micro SD card until it is set



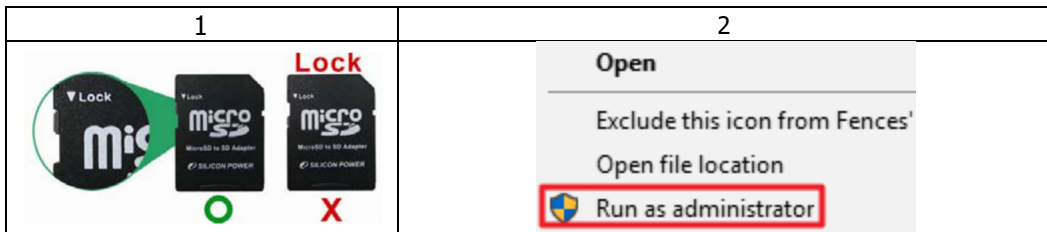
4
Secure the SD card slot via the special screw provided

K. Restore memory card

When you have backed up the recorded files into PC and want to use the Micro SD card for other purposes, you have to restore it first so it can be used correctly.

*Notice:

1. Before formatting Micro SD card, please ensure to unlock it first.
2. If the card is unlocked but still cannot be formatted, please run the program as Administrator to prevent from this problem.



How to restore memory card?

Steps as below :





Insert the Micro SD card into the card reader (Please make sure the direction is correct)



Connect the card reader with the PC

3、Insert the CD in your PC and open file

4、Find and run  program and click on  "**Format Micro SD Card**"

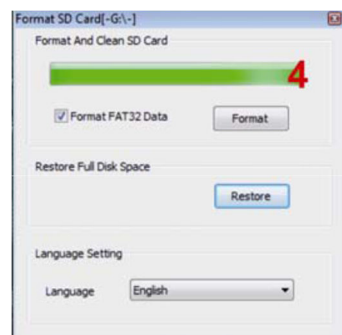
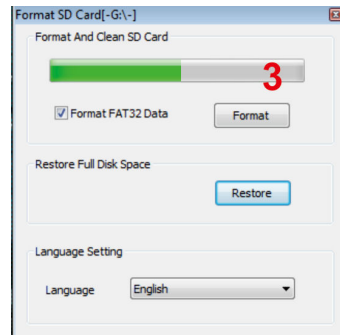
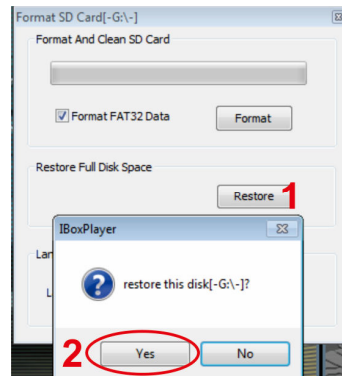
5、Click on 『**Restore**』 to restore the Micro SD card. Please see the following steps as reference. When finished, the SD card can be used for other purpose

IMPORTANT

Restoring the SD card will permanently DELETE all data from the SD card.

Restoring the SD card to the original format so it can be utilized for non Ventra system recording.

Windows 10



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Ventra Technology warrants the system against defects in material and workmanship for a period of **one (1) year** from the date of original purchase. During this period, Ventra's liability for any defective product, or any product part, shall be limited to the repair or replacement of the product, at Ventra's sole discretion.

This warranty does not apply to defects or damages resulting from mishandling, accident, abuse, negligence, lightning, water/liquid, power surges, improper interfacing, operation outside of design limits, misapplication, improper repair, or unauthorized modification.

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