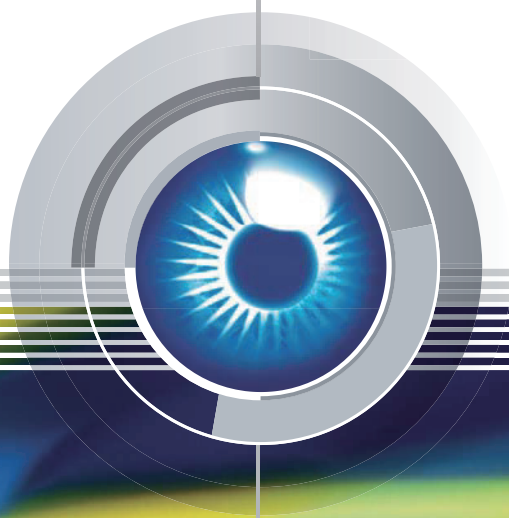


GV-Mobile System

User's Manual





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September 2026

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[Warranty]



[Technical Support Policy]

User's Manual for GV-Mobile System

Welcome to the GV-Mobile System User's Manual.

The Manual provides an overview of the GV-Mobile System and its accessories. It also includes the instructions to guide you through the installation and use of the GV-Mobile System:

- **Chapter 1, Introduction**

Identifies the GV-Mobile System's accessories and options.

- **Chapter 2, Overview**

Identifies the GV-Mobile System's components.

- **Chapter 3, Getting Started**

Provides step-by-step instructions on setting up the GV-Mobile System.

- **Chapter 4, Optional Wireless Connection**

Introduces how to connect to 4G mobile network and how to receive GPS data.

- **Chapter 5, System Restoration**

Instructs to restore the system to all the preinstalled software and operating system.

- **Chapter 6, NVR Health Analysis**

Introduces how to collect data to obtain the service of NVR health analysis from GeoVision.

- **Chapter 7, Troubleshooting**

Suggests courses of action if the GV-Mobile System does not seem to be working properly.

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Safety Instructions

 Observe these safety instructions to help ensure against injury to yourself and damage to the product.

- **Read** all safety and installation instructions before you operate the product.
- **Do not operate** the product in high humidity areas or expose it to water or moisture.
- **Do not put** the product in an unstable, a slanting or vibrated place.
- **Do not block** any ventilation opening
- **Do not install** the product near any heat sources such as radiator, heat register or other apparatus that produce heat.
- **Operate** the product using only the type of power source indicated on the marking label.
 - If you are in an area with unstable voltage, make sure to install an automatic voltage regulator (AVR) or a UPS power supply with AVR function, to maintain a constant voltage.
 - All damages to the power supply caused by unstable voltage are not included in the 2-year warranty service.
- **Do not defeat** the safety purpose of the grounding-type plug. A grounding plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- **Do not overload** wall outlets or extension cords, as this may cause fire or electric shock.
- **Do not use** the product when abnormality occurs, such as emitting smoke from the product, smelling burning, being damaged by drop, invasion of foreign objects inside the product, etc. Be always sure to remove the AC adaptor at once and contact your dealer.
- **Do not use** accessories or attachments not recommended by the manufacturer, as they may cause hazards and void the warranty.
- **Do not attempt** to service the product yourself, as removing the casing may expose you to dangerous voltage and void the warranty.
- **Do not touch** the top panel when you replace the storage drive. The top panel is a dissipation of heat.



Chapter 1 Introduction

1.1 Models

GV-MNVR1000 has 1 hot swappable bay of HDD/SSD and records up to 24 IP channels.

Models:

- GV-MNVR1000
- GV-MNVR1000 with 4G module (3G backward compatible)
- GV-MNVR1000 with Wi-Fi module (2.4G / 5G)

GV-Mobile System 2710 has 2 hot swappable bays of HDD/SSD and records up to 32 IP channels through GV-NVR and 64 IP channels through GV-VMS.

Models:

- GV-Mobile System 2710
- GV-Mobile System 2710 with 4G module (3G backward compatible)
- GV-Mobile System 2710 with Wi-Fi module (2.4G / 5G)

1.2 Packing List

The GV-Mobile System package includes the following items. If any of the items are missing or damaged, contact your dealer to arrange a replacement.

IMPORTANT: Please keep the original carton and all packing materials for future shipping needs.

GV-MNVR1000

1. GV-MNVR1000
2. 3-pin Terminal Block (for ACC Connection and DC In)



3. HDD screw x 4
4. GPS Antenna
5. GV-NVR Dongle for third-party IP Camera Connection (Optional)

GV-Mobile System 2710

1. GV-Mobile System 2710
2. 5-pin Terminal Block (for ACC Connection and DC In)



3. HDD screw x 8
4. GPS Antenna
5. GV-NVR Dongle for third-party IP Camera Connection (Optional)
6. GV-VMS Dongle for 64CH or third-party IP Camera Connection (Optional)
7. GV-ASManager Dongle (Optional)
8. GV-AI FR Dongle (Optional)

1.3 Software License

The following Maximum License for IP devices is available as a paid service. The license is based on your requirements for the number of connection channels. The USB dongle for software license will be inserted to the system before shipment.

GV-MNVR1000 / GV-Mobile System 2710 (NVR Model)

For GV-NVR software license details, see the [GV-NVR Datasheet](#).

GV-Mobile System 2710 (VMS Model)

GV-Mobile System 2710 (VMS Model) supports GV-VMS V20 (1–64 channels) and V17 / V18. For software license details, see the [GV-VMS V20 Datasheet](#) and [GV-VMS V17 & V18 Datasheet](#).

GV-Mobile System 2710 (Access Control Model)

For GV-ASManager software license details, see the [GV-ASManager Datasheet](#).

GV-Mobile System 2710 (Face Recognition Model)

For GV-AI FR software license details, see the [GV-AI FR Datasheet](#).

1.4 Recommended Hard Disks

GV-MNVR1000 supports up to 1 SATA HDD / SSD (2.5") with up to 2 TB capacity, while **GV-Mobile System 2710** supports up to 2 SATA HDD / SSD (2.5") with up to 4 TB capacity. For optimal system performance, it is recommended to use an SSD (MLC or SLC) or an enterprise-level HDD.

1.5 Options

Optional devices can expand your system's capabilities and versatility. See the datasheets for available options:

- [Datasheet GV-MNVR1000 System](#)
- [Datasheet GV-Mobile System 2710](#)

Chapter 2 Overview

2.1 GV-MNVR1000 – Front View

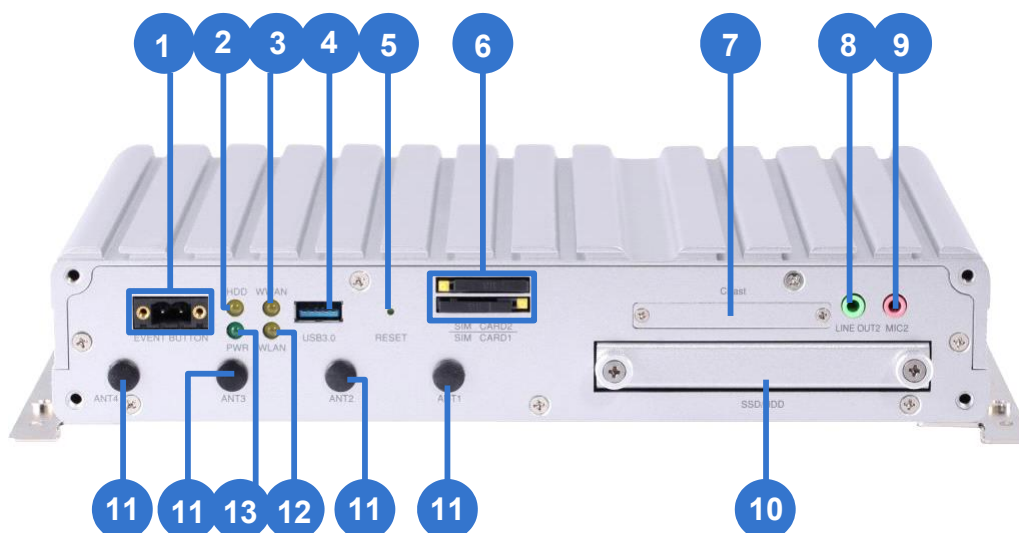


Figure 2-1

No.	Name	No.	Name
1	Event Button (Not Functional)	8	Audio Line Out Port
2	HDD Status LED	9	Audio Microphone In Port
3	WWAN LED	10	2.5" HDD/SSD Slot
4	USB 3.0 Port	11	Antenna Port x 4
5	Reset Button	12	WLAN LED
6	SIM Card Slot x 2	13	Power Status LED
7	CFast Card Slot		

Note:

1. For LED indicator status, see [2.3 Status Indicator LEDs of GV-MNVR1000](#).
2. WLAN (Wi-Fi) and WWAN (4G) functions require the corresponding optional modules.

2.2 GV-MNVR1000 – Rear View

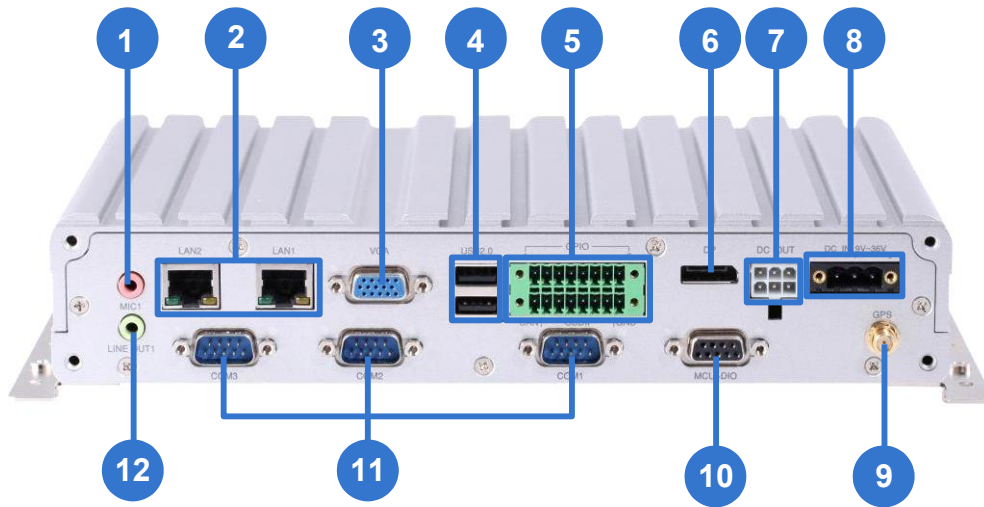


Figure 2-2

No.	Name	No.	Name
1	Audio Microphone In Port	7	DC Power Output (Not Functional)
2	Gigabit Ethernet Port x 2	8	DC 10 ~ 35V Power Input
3	VGA Output	9	GPS Antenna Port
4	USB 2.0 Port x 2	10	MCU DIO Port (Not Functional)
5	GPIO Terminal Block (Not Functional)	11	COM Port x 3
6	DisplayPort	12	Audio Line Out Port

2.3 Status Indicator LEDs of GV-MNVR1000

See the below descriptions for each status LED.

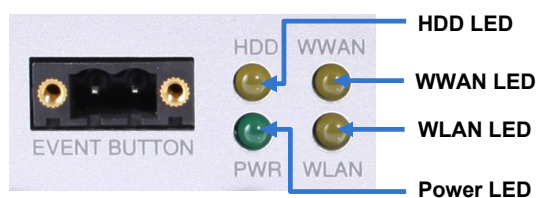


Figure 2-5

Indicator LED	Color	Description
HDD LED	Orange	Glowes when HDD/SSD is active.
WWAN LED	Orange	Glowes when the WWAN is active.
WLAN LED	Orange	Glowes when the WLAN is active.
Power LED	Green	Glowes when power is turned on.

2.4 GV-Mobile System 2710 – Front View

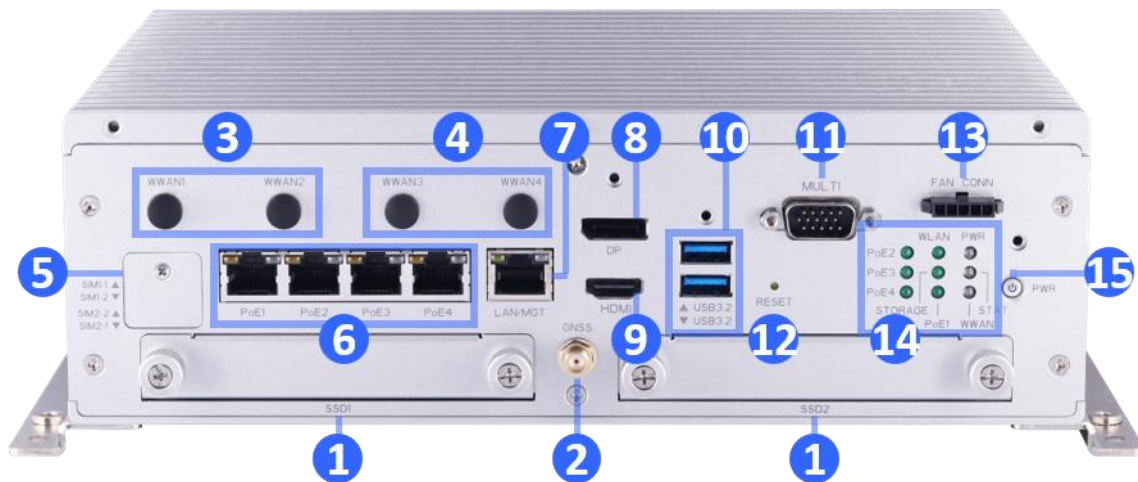


Figure 2-6

No.	Name
1	2.5" HDD/SSD Slot x 2
2	GPS Antenna Port x 1
3	4G Antenna Port x 2
4	Not Functional
5	Nano SIM Card Slot x 4
6	2.5 GbE PoE Port x 4
7	1 GbE Management Port x 1
8	DisplayPort x 1
9	HDMI x 1
10	USB 3.2 Port (Type-A, 10 Gbps) x 2
11	Not Functional
12	Reset Button x 1
13	Fan Power Connector x 1
14	LED Indicator x 9
15	Power Button x 1

Note:

- For LED indicator status, see 2.6 Status Indicator LEDs of GV-Mobile System 2710.
- WLAN (Wi-Fi) and WWAN (4G) functions require the corresponding optional modules.

2.5 GV-Mobile System 2710 – Rear View

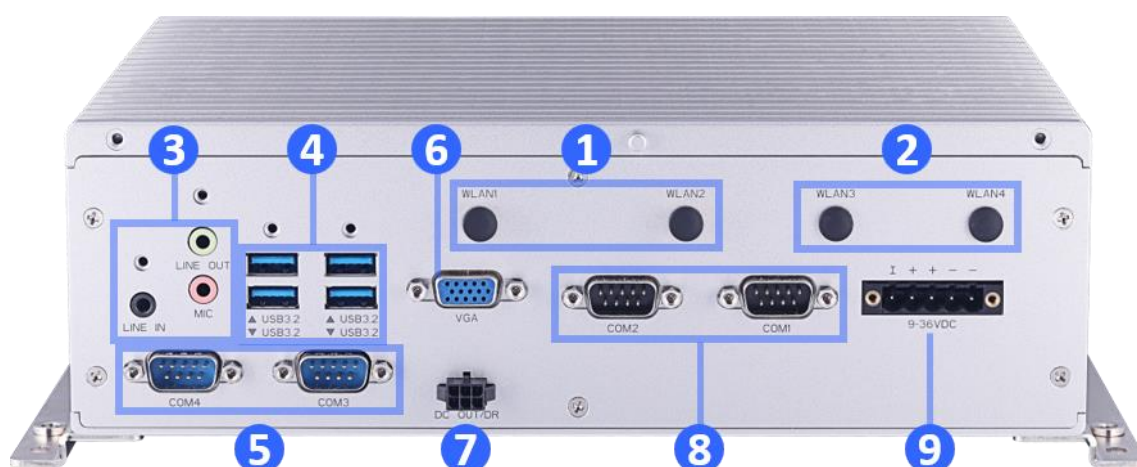


Figure 2-7

No.	Name
1	Wi-Fi Antenna Port x 2
2	Not Functional
3	Audio Jack x 3 ➤ Line In (Black) ➤ Line Out (Green) ➤ Mic In (Pink)
4	USB 3.2 Port (Type-A, 10 Gbps) x 4
5	COM Port (RS-232) x 2
6	VGA Port x 1
7	6-pin Mini-Fit Connector (DR Signal & DC Power Output) x 1
8	COM Port (RS-232 / RS-422 / RS-485) x 2
9	DC 9 ~ 36V Power Input

Note: WLAN (Wi-Fi) and WWAN (4G) functions require the corresponding optional modules.

2.6 Status Indicator LEDs of GV-Mobile System 2710

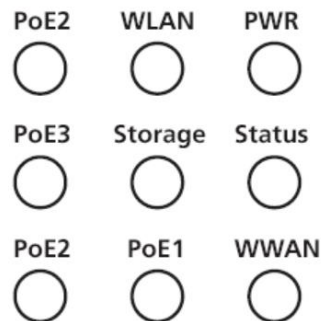


Figure 2-8

Indicator LED	Color / Status	Description
PoE LED x 4	Solid Green	Power is being supplied to a powered device.
WLAN LED x 1	Solid Green	Wireless link is active.
	Blinking Green	Data is being transmitted.
Storage LED x 1	Off	No storage device is installed.
	Solid Green	HDD/SSD is powered on and ready.
	Blinking Green	Data is being read from or written to the HDD/SSD.
Power LED x 1	Off	Power is off.
	Solid Green	Power is on.
	Solid Red	Power failure.
Status LED x 1	Off	Power is off.
	Blinking Green (1 Hz)	System is booting (BIOS POST).
	Solid Green	System is ready.
	Blinking Red (2 Hz)	System has stalled (power is on, but the
	Solid Red	A fatal error has occurred.
WWAN LED x 1	Solid Green	WWAN is connected.
	Blinking Green	Data is being transmitted.

2.7 Wireless Antenna

2.7.1 GV-MNVR1000

An example of GV-MNVR1000 installed with 4G, Wi-Fi, and GPS antennas is shown below. For supported 4G frequency bands, see *Specifications*. For connection details, see *Chapter 4 Optional Wireless Connection*.

Note:

1. 4G / Wi-Fi / GPS antennas must be connected to their corresponding antenna ports.
2. The GV-Mobile System includes a built-in GPS module (GPS features are only available in GV-NVR). Wi-Fi and 4G modules are optional.

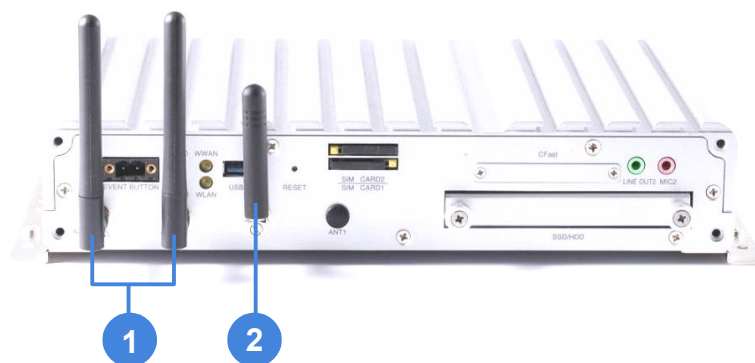


Figure 2-9

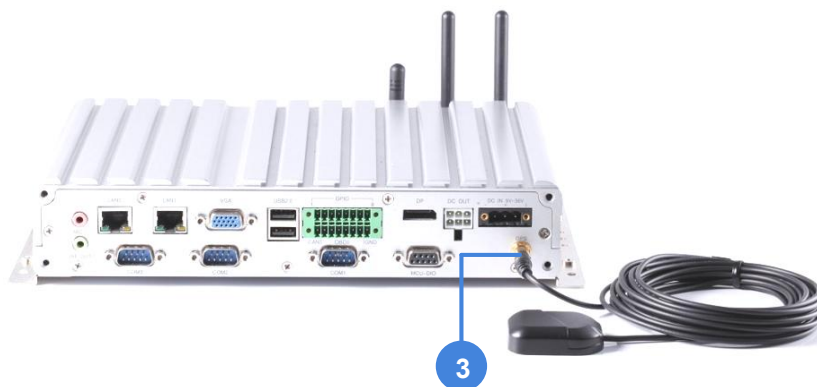


Figure 2-10

No.	Name
1	Wi-Fi Antenna x 2
2	4G Antenna x 1
3	GPS Antenna x 1

2.7.2 GV-Mobile System 2710

An example of GV-Mobile System 2710 installed with 4G, Wi-Fi, and GPS antennas is shown below. For supported 4G frequency bands, see *Specifications*. For connection details, see *Chapter 4 Optional Wireless Connection*.

Note:

1. 4G / Wi-Fi / GPS antennas must be connected to their corresponding antenna ports.
2. The GV-Mobile System includes a built-in GPS module (GPS features are only available in GV-NVR). Wi-Fi and 4G modules are optional.

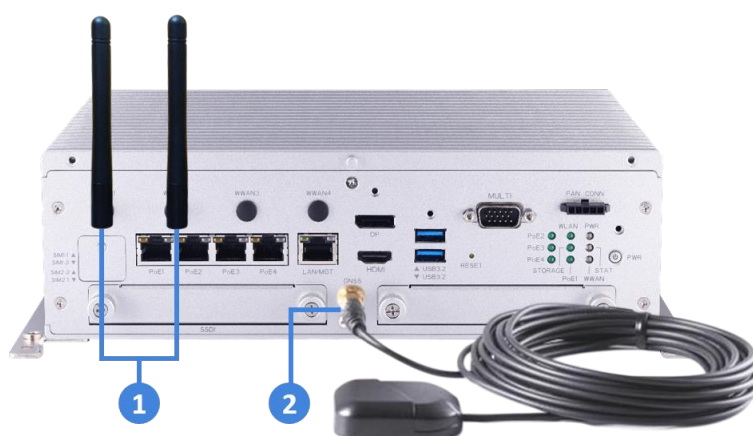


Figure 2-11



Figure 2-12

No.	Name
1	4G Antenna x 2
2	GPS Antenna x 1
3	Wi-Fi Antenna x 2

Chapter 3 Getting Started

3.1 Interface Connection

This section describes the equipment required to operate the GV-Mobile System. Here we use **GV-Mobile System 2710** as an example.

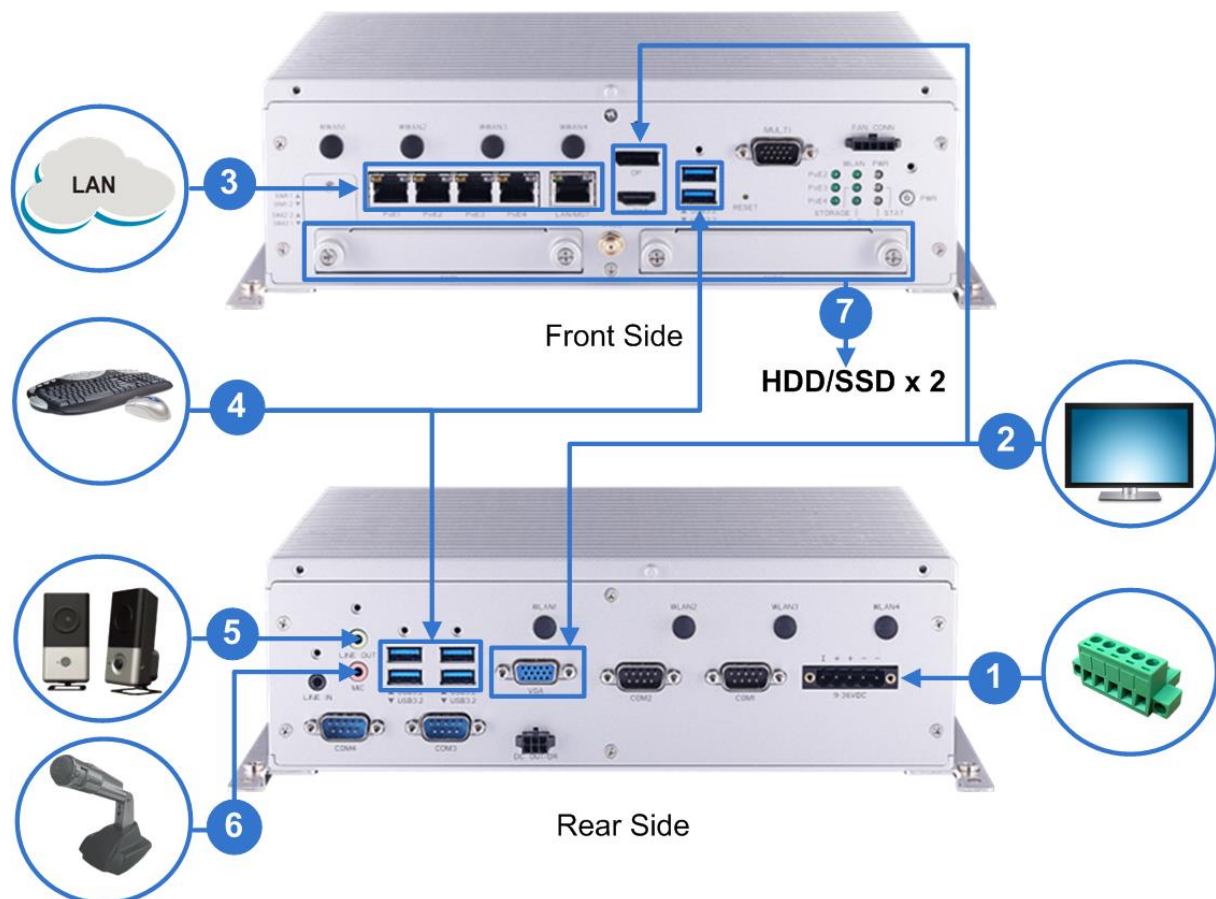


Figure 3-1

1. There are two options for connecting the power.
 - A. Connect the GV-Mobile System to the vehicle's power battery and ACC wire using the supplied 5-pin terminal block. The system will automatically start after you turn on the vehicle ignition. Power is supplied to the system as long as the vehicle ignition is on.

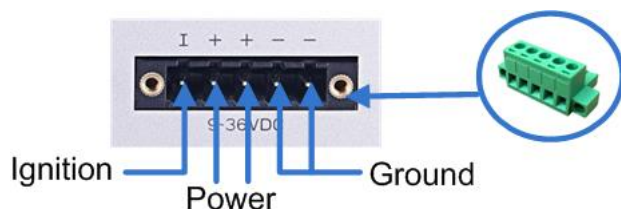


Figure 3-2

- B. Optionally purchase a power adapter from GeoVision. See *3.2 Turning on and off the Power*.
2. Use the VGA cable, HDMI cable, or the DisplayPort cable to connect the unit to the monitor.

Note: GV-Mobile System 2710 supports simultaneous display on up to three monitors. You can connect the monitors using the VGA connector, HDMI port, and DisplayPort.

3. Connect one end to the Ethernet port and the other end to the network by using the RJ-45 cable.
4. Connect the keyboard and the mouse to the USB ports.
5. Connect the speaker to the Audio Line Out port.
6. Optionally connect the microphone to the Audio Microphone In port for two-way audio with IP cameras.
7. Insert the 2.5" HDDs or SSDs into the storage slots. For details, see *3.3 Installing the Storage Drive*.

After the unit is powered on, the Power Indicator LED shows constant green.

Before recording, you need to format the storage drive and add it to the recording path of the system. For formatting the storage drive, see *3.4 Formatting the Storage Drive*. For adding the storage drive to the recording path, see *3.5 Adding the Storage Drive to the Recording Path*.

3.2 Turning on and off the Power

The GV-Mobile System is designed to connect to the vehicle's ACC wire. However, you can optionally purchase a power adapter (AC 100 ~ 240V) from GeoVision for power connection.

3.2.1 Connecting to the ACC Wire

To turn on the GV-Mobile System, connect the vehicle's ACC and power wires to the unit's power input using the supplied 3-pin or 5-pin terminal block. The system will automatically start after you power on the vehicle for 5 seconds.

After you power off the vehicle for 3 seconds, the system will turn off automatically.

3.2.2 Using the Power Adapter

To turn on and off the GV-Mobile System using an optional power adapter from GeoVision, follow the steps below.

1. Plug the 3-pin or 5-pin terminal block connected with power adapter to the panel's power pins. The GV-Mobile System will be powered on about 5 seconds later.

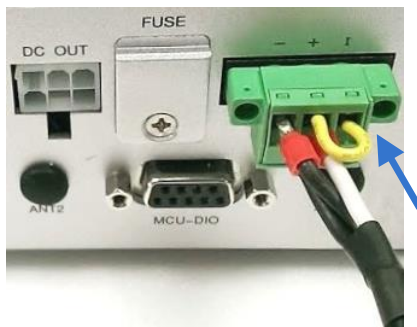


Figure 3-3

2. To turn off the GV-Mobile System, shut down the system through the Windows desktop.

Using Rocker Switch to Simulate ACC Ignition

For quick control of turning on or off the GV-Mobile System, you can install a rocker switch to the 3-pin or 5-pin terminal block with the optional power adapter. For the connection and operation, follow the steps below.

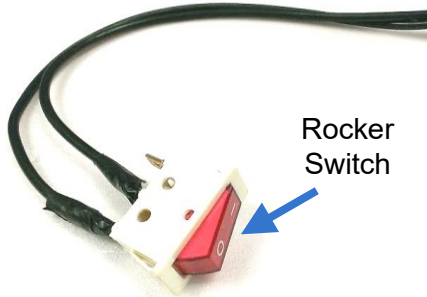


Figure 3-4

1. For the 3-pin or 5-pin terminal block with optional power adapter, unplug the U-shaped wire from the Power and Ignition pins.

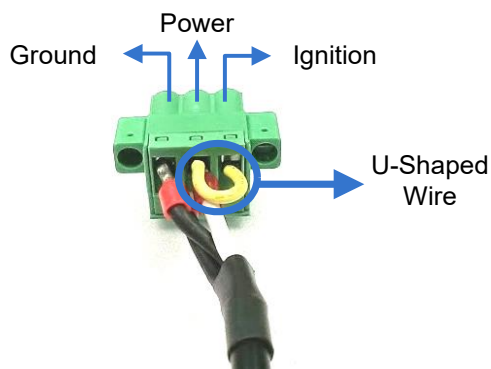


Figure 3-5

2. Connect the wires of the rocker switch to the Power and Ignition pins respectively.



Figure 3-6

3. Plug the terminal block to the panel's power pins.

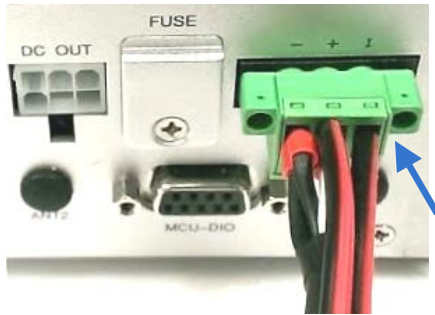


Figure 3-7

4. Press the rocker switch to turn on the GV-Mobile System without operating on the Windows desktop. Once the rocker switch is on, the GV-Mobile System will be powered on about 3 seconds later.
5. To turn off the GV-Mobile System, press the rocker switch again.

Note: After the power is on, the GV-Mobile System will run a series of self-tests, and a series of messages may be displayed as various hardware and software subsystems are activated. After the process is finished, GeoVision software should load automatically and bring you to the main screen.

3.3 Installing the Storage Drive

The GV-Mobile System uses SATA hard drive / SSD for video data storage. Before recording, be sure to install the storage drive.

3.3.1 GV-MNVR1000 System

1. Loosen the thumb screws on the HDD/SSD slot and pull out the drive drawer.



Figure 3-8

2. Insert the storage drive into the drive drawer with the SATA data and power connector facing towards the end.



Figure 3-9

3. Secure the storage drive with the drive drawer using the supplied 4 screws.



Figure 3-10

Note: For convenience, it is suggested to secure the screws with the drive drawer being placed downward.

4. Insert the drive drawer into the HDD/SSD slot and secure the thumb screws.

3.3.2 GV-Mobile System 2710

1. Loosen the thumb screws on the HDD/SSD slot and pull out the drive drawer.



Figure 3-16

2. Put the black anti-vibration dampers into the holes on the drive drawer.



Figure 3-17

3. Insert the storage drive into the drive drawer with the SATA data and power connector facing towards the end.
4. Align the storage drive's mounting holes with the mounting holes on the drive drawer, and secure the storage drive with the drive drawer using the supplied 4 screws.



Figure 3-18

5. Insert the drive drawer into the HDD/SSD slot and secure the thumb screws.



Figure 3-19

3.4 Formatting the Storage Drive

After installing HDD / SSD to your system, you will need to format the storage drive before recording.

For GV-MNVR1000:

1. Click the **Programs** button on the GV-Desktop, and select **Disk Management**.

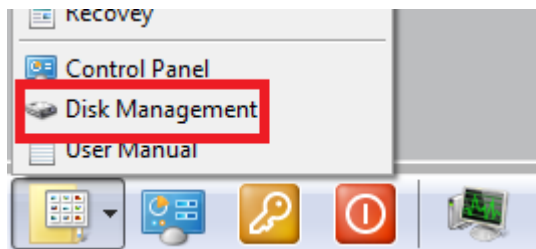


Figure 3-20

2. Type the ID and password in the dialog box. The default ID and password are "0000".

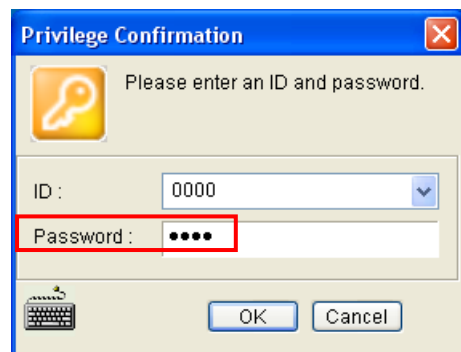


Figure 3-21

3. Skip to Step 7

For GV-Mobile System 2710:

4. Right-click the **Computer** icon  on your desktop, select **Manage**, and select **Disk Management** when the Computer Management window appears.
5. On the main page of Disk Management, the Initialize Disk dialog box appears for the new drive. Click the created disk and select a partition style.

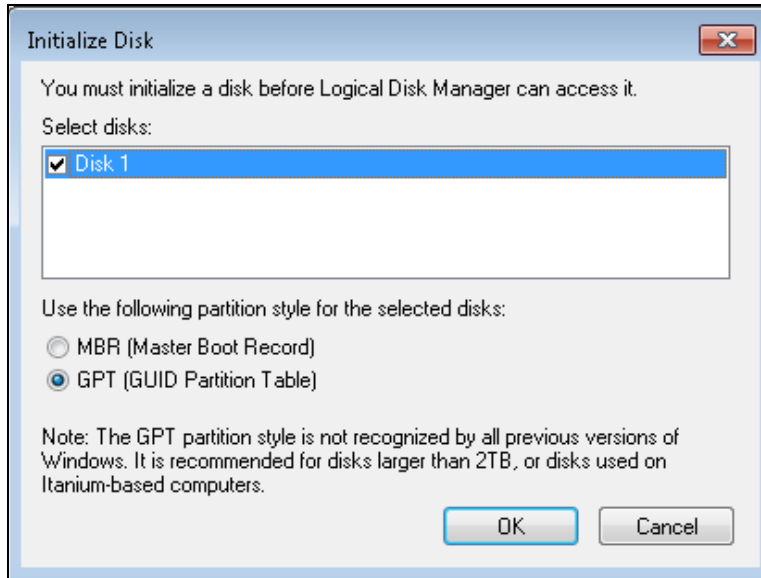


Figure 3-22

6. Click **OK**. The created disk is successfully initialized.
7. On the main page of Disk Management, right-click in the unallocated space of a new drive and select **New Simple Volume**.

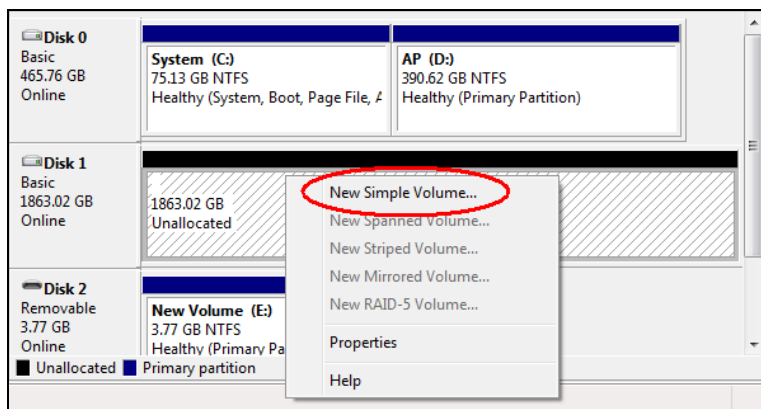


Figure 3-23

8. The New Simple Volume Wizard appears. Click **Next** to continue.

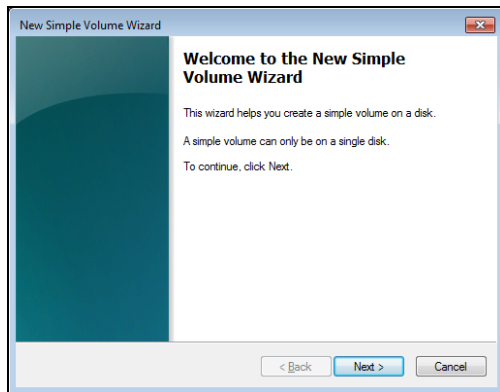


Figure 3-24

9. The default partition size is the same as the maximum disk space. Make changes if necessary. Click **Next** to continue.

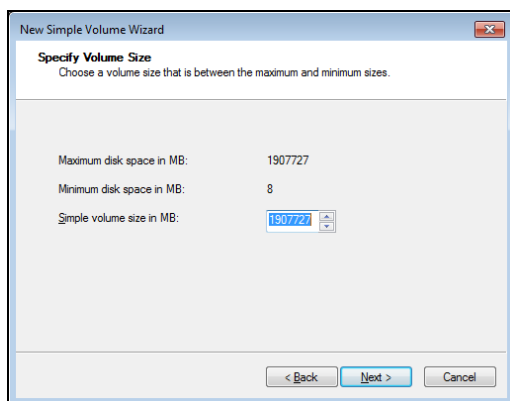


Figure 3-25

10. Assign a drive path that is not in use by other devices, and click **Next** to continue.

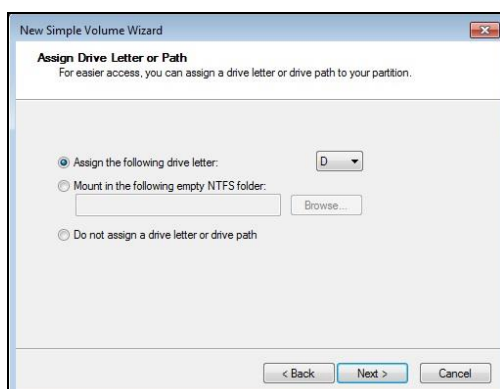


Figure 3-26

Note: The default drive path starts from D:\.

11. Type a name in the **Volume label** box, ex. HDD1, and click **Next** to continue.

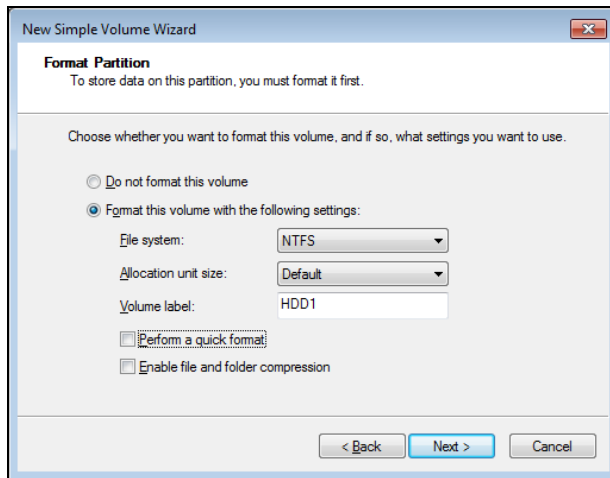


Figure 3-27

12. When the formatting is complete, click **Finish** to close the wizard.

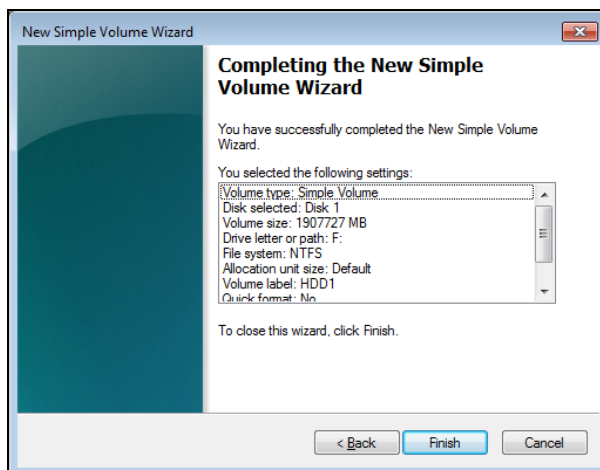


Figure 3-28

When the drive is successfully initialized, partitioned, and formatted, its status description should display “*Healthy*”.

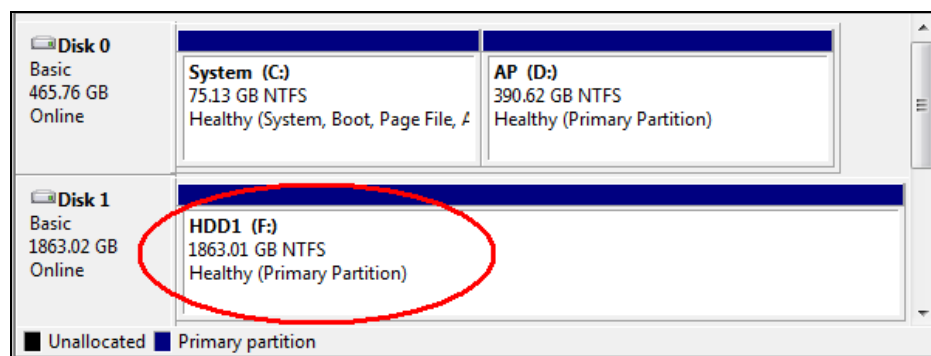


Figure 3-29

3.5 Adding the Storage Drive to the Recording Path

For GV-Mobile System, you need to add the formatted storage drives to the recording path before recording.

Note: This section does not apply to GV-VMS V20, as Media Man Tools is no longer supported.

3.5.1 GV-MNVR1000

1. Click the **Programs** button on the GV-Desktop and select Hot Swap HDD Tool. The Media Man Tools window appears.

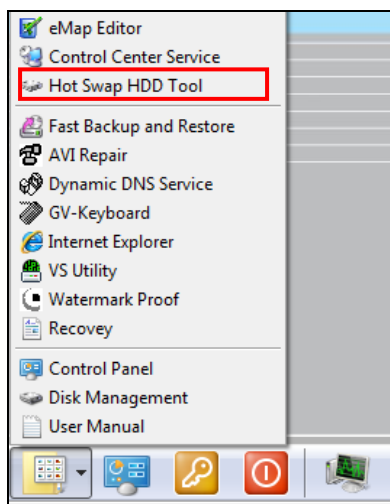


Figure 3-30

2. If a storage drive is already inserted, right-click it in the Media Man Tools window, select **Add for recording**, and select the storage group from the drop-down list.
3. If a hard drive is not inserted, follow these steps:
 - A. Insert a HDD / SSD to the GV-Mobile System. This dialog appears.

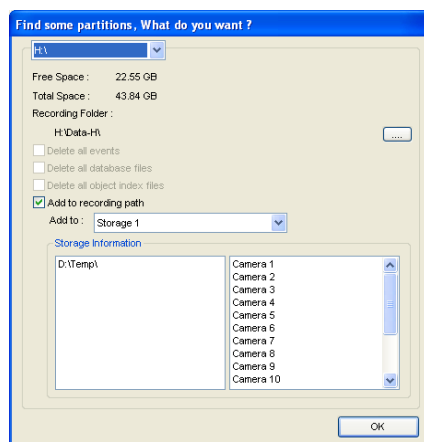


Figure 3-31

- B. Select **Add to recording path**, and select the storage group from the drop-down list.

Note: Storage 1 is the default storage group.

4. Click **OK** to automatically configure the hard drive to the recording path.
5. In the Media Man Tools window, if the hard drive is successfully added to store data, its Status field should display “Standby”.

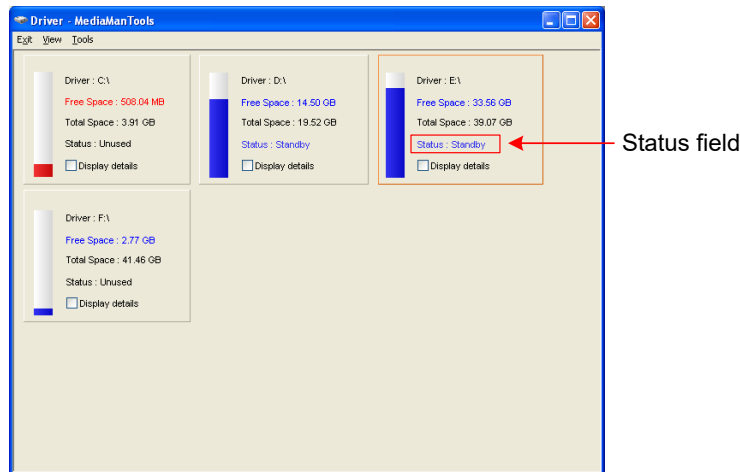


Figure 3-32

6. To add another formatted hard drive for storage, repeat the above steps.

3.5.2 GV-Mobile System 2710 (NVR Model)

1. Click the Windows **Start** button, click **GV-NVR**, and select **Hot Swap HDD Tool**. The Media Man Tools window appears.

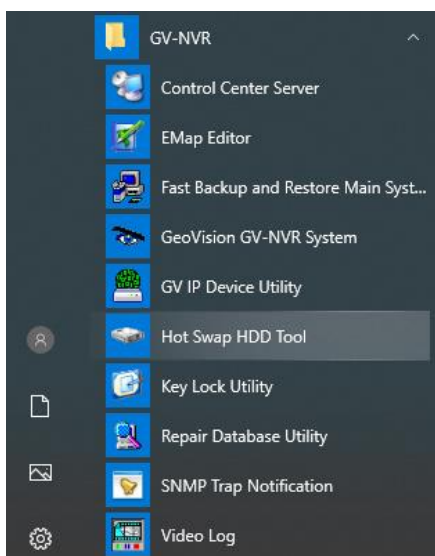


Figure 3-33

2. Follow Steps 2-6 in 3.5.1 GV-MNVR1000.

3.5.3 GV-Mobile System 2710 (VMS Model)

1. On GV-VMS, click **Home**  > **Toolbar**  > **Configure**  > **System Configure** > **Record Setting**. This dialog box appears.

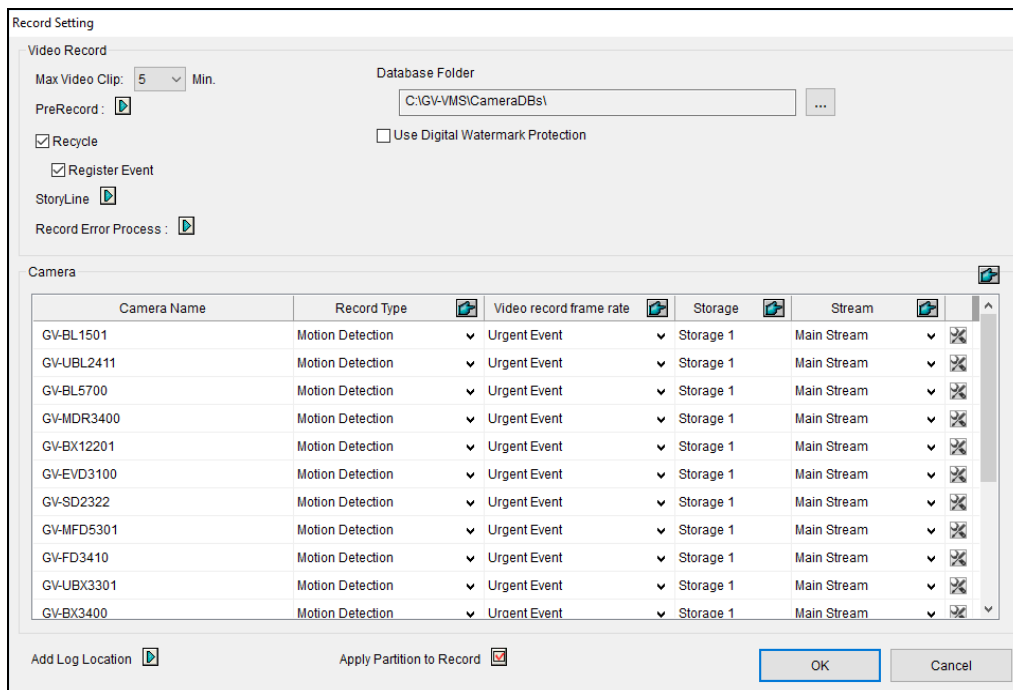


Figure 3-34

2. Click the Arrow button  next to **Storage**. This dialog box appears.

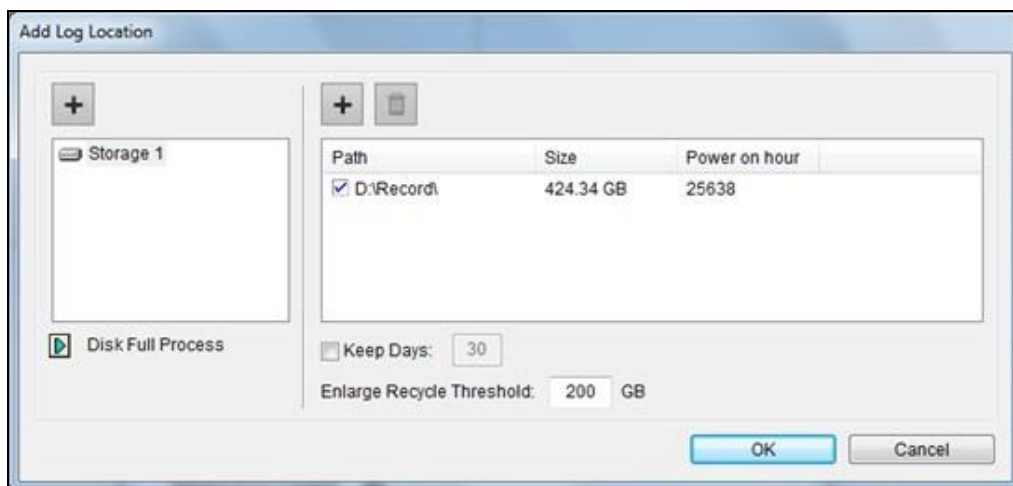


Figure 3-35

- To add a hard drive to the recording path, follow these steps:

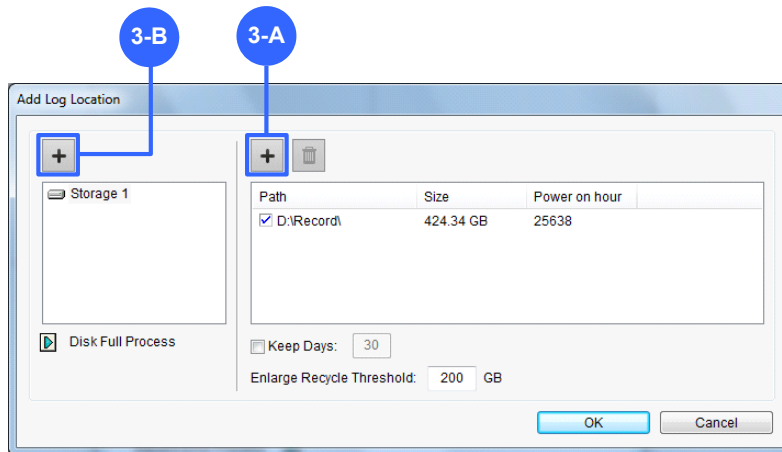


Figure 3-36

- To add a new folder in the first storage group, click the **Add** button  on the right pane and select a folder. Only 1 folder can be assigned as storage folder for each partition (e.g. only 1 folder in D drive).
 - To add a new storage group, click the **Add** button  on the left pane and repeat the step 3-A to assign at least one folder to the storage group.
 - Click **OK**.
- To add another formatted hard drive for storage, repeat the above steps.

3.6 Replacing the Storage Drive

You can replace the HDD / SSD without shutting down the GV-Mobile System.

- Stop the recording and make sure the HDD LED for GV-MNVR1000 (*Figure 2-5*) or Storage LED (*Figure 2-8*) for GV-Mobile System 2710 is off.
- To replace a new storage drive:
 - For GV-MNVR1000, see 3.3.1 *GV-MNVR1000*.
 - For GV-Mobile System 2710, see 3.3.2 *GV-Mobile System 2710*.

WARNING: Do not touch the top panel when you replace the storage drive. The top panel is a dissipation of heat and it may be extremely hot.

3.7 Setting Up On-Screen LED Panel

For GV-Mobile System, a LED panel on the screen provides a quick indication of the activity status of the storage drives.



Figure 3-37

LED Color	Description
Gray	- No storage drive is assigned to this LED. - The system is not started.
Green	A storage drive is assigned to this LED.
Red	The storage drive is full.
Flashing Green	The system drive is recording.
Flashing Red	The storage drive is recycling.

1. Click the Windows Start button, and select Hot Swap HDD Tool.
2. Click **Tools** on the menu bar, and select **Setup LED Panel**. This dialog box appears.

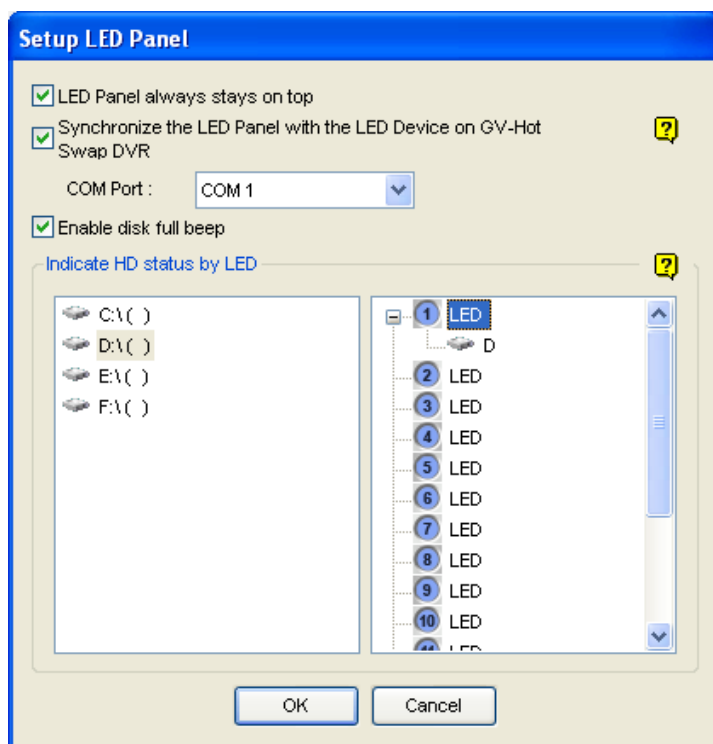


Figure 3-38

- **LED Panel always stays on top:** This option makes the LED panel stay on top of other windows when the Media Man Tools window is minimized.
 - **Synchronize the LED Panel with the LED Device on GV-Mobile DVR:** Not functional.
 - **Enable disk full beep:** When the storage drive is full, the system sounds on. Note this function only works when speakers are connected to the GV-Mobile System.
3. By default, only the hard disk drive D will be assigned to LED. If you want to re-assign the storage drive or assign other drives to LEDs, freely drag and drop the hard disk drive to the desired LED on the tree.
 4. Click **OK** to apply the settings, and minimize the Media Man Tools window to display the LED panel on the screen.
 5. If you want to return to the Media Man Tools window, right-click the LED panel and select **Switch to the setup window**.

Note:

1. Because the LEDs are designed to indicate the video and audio files are being written or read, it is not recommended to assign the storages that store log files to the LEDs.
 2. If the storage that stores log files is assigned to a LED and its LED turns red, make sure the log files are not being written before you remove it. Otherwise, the log files might be lost during the removal.
-

3.8 Configuring the IP Address

GV-Mobile System supports remote monitoring, control, and configuration over a network connection. For **GV-MNVR1000**, the following default IP addresses will automatically be assigned.

- **Connection 1: 192.168.0.200**
- **Connection 2: 192.168.0.201**
- **Default Subnet Mask: 255.255.252.0**

Note: GV-Mobile System 2710 does not have a default IP address. You can follow Steps 3 to 7 below to set up an IP address using Windows' **Network and Internet**, or check your current IP address assigned by a DHCP server by clicking **Details** on the **Local Area Connection Status** dialog box under Step 5.

The local area connections listed correspond to the Ethernet ports as shown below:



Figure 3-39

To change the above default IP addresses, follow the steps below.

1. On the GV-Desktop, click the **Programs** button, and select **Control Panel**.

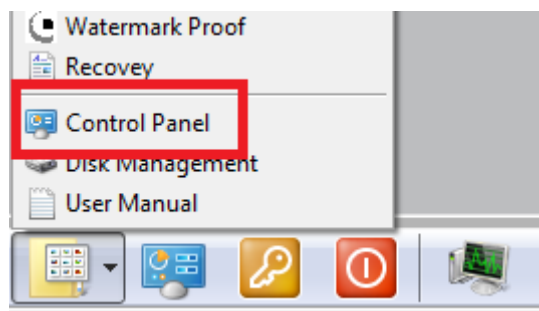


Figure 3-40

2. Type the ID and password. The default ID and password are “0000”. The Control Panel window appears.
3. Under Network and Internet, click **View network status and tasks**.

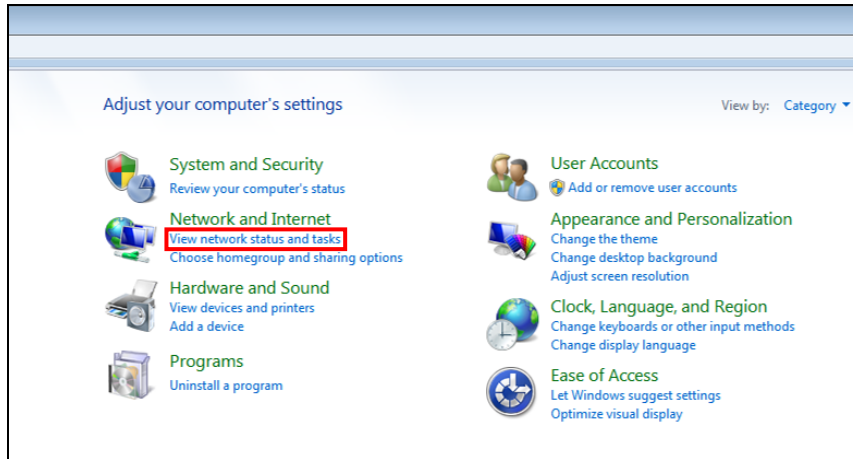


Figure 3-41

4. Under Connections, select the **Local Area Connection** you want to configure.

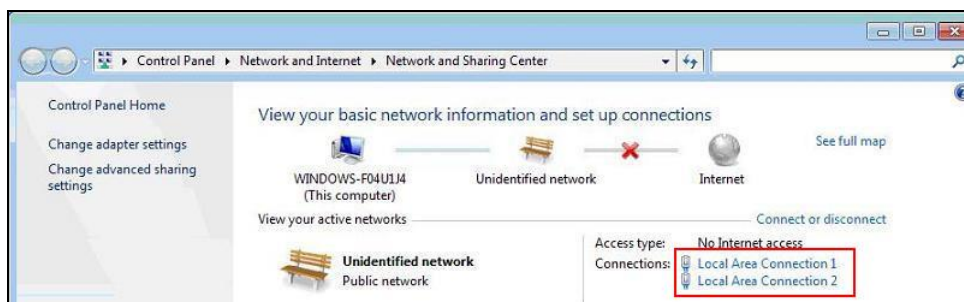


Figure 3-42

5. Select **Internet Protocol Version 4 (TCP/IPv4)**, and select **Properties**.

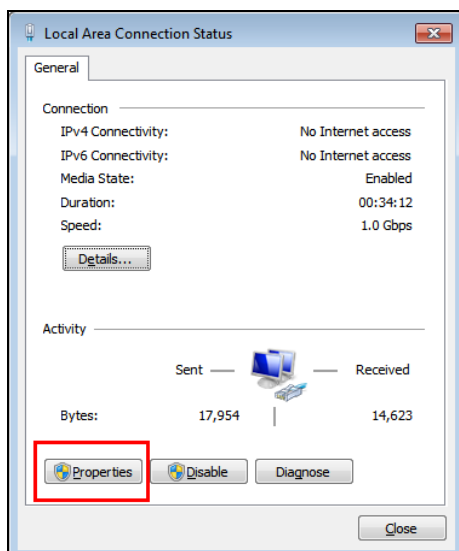


Figure 3-43

6. Select **Use the following IP address** and type the new IP information in the fields. Or select **Obtain an IP address automatically** to enable dynamic IP address.

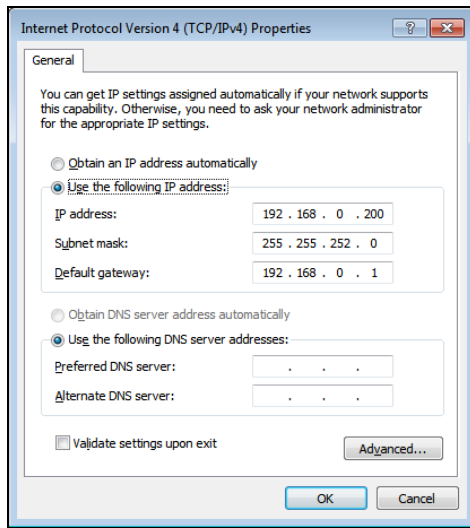


Figure 3-44

7. Click **OK** to finish the setting.

3.9 Exiting to Windows

GV-Mobile System is protected by GV-Desktop that is limited to run the selected programs. For **GV-MNVR1000**, follow the steps below to exit to Windows desktop.

Note: GV-Desktop is not supported by GV-Mobile System 2710.

1. Exit the main screen to display the GV-Desktop screen.



Figure 3-45

2. Click the **Settings** button, and type the valid ID and password. The default ID and Password are "0000". The Settings dialog box appears.
3. Under Desktop Type, select **Windows** from the drop-down list, and click **OK**.
4. Click the **Log Off** button, and type the ID and Password to display the Windows desktop.

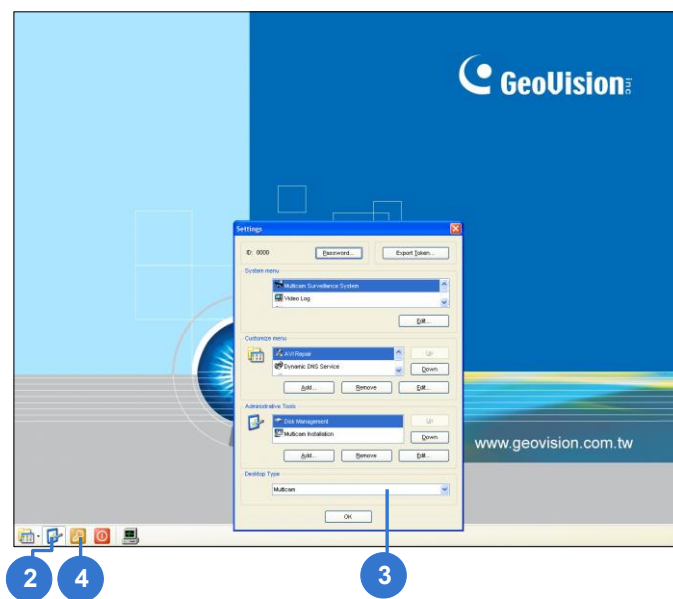


Figure 3-46

3.10 Returning to GV-Desktop

To return to GV-Desktop on **GV-MNVR1000**, click the Windows **Start** button, point to **All Programs**, click **GV-NVR**, and click **Key Lock Utility**.

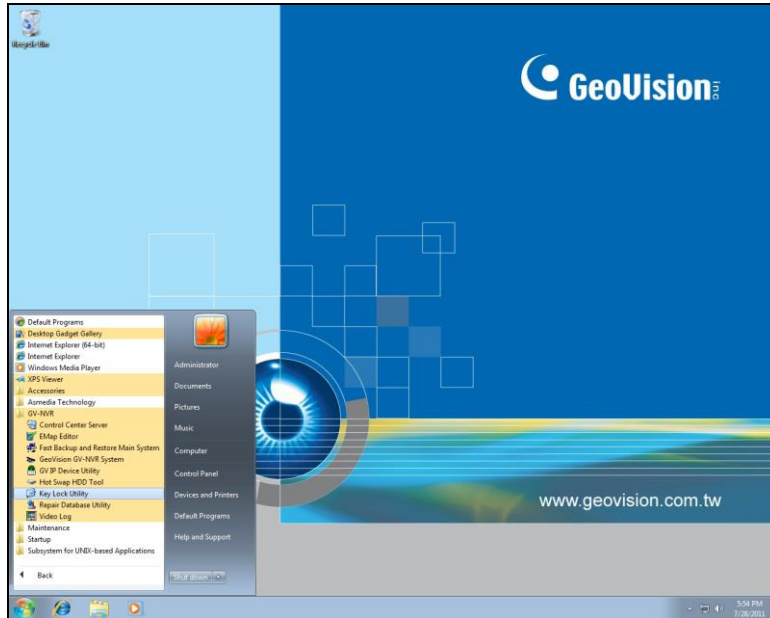


Figure 3-47

3.11 Updating GV-Mobile System

If you like to update your GV-Mobile System, contact your dealer for more information.

Before contacting your dealer, you may check software update news at our website:

<http://www.geovision.com.tw>

Chapter 4 Optional Wireless Connection

You can optionally connect GV-Mobile System to 4G mobile network. With the built-in GPS module, you can even get the GPS location of the system.

Note: The GPS module is already built into the GV-Mobile System. The Wi-Fi / 4G modules are optional.

Wireless Connectivity

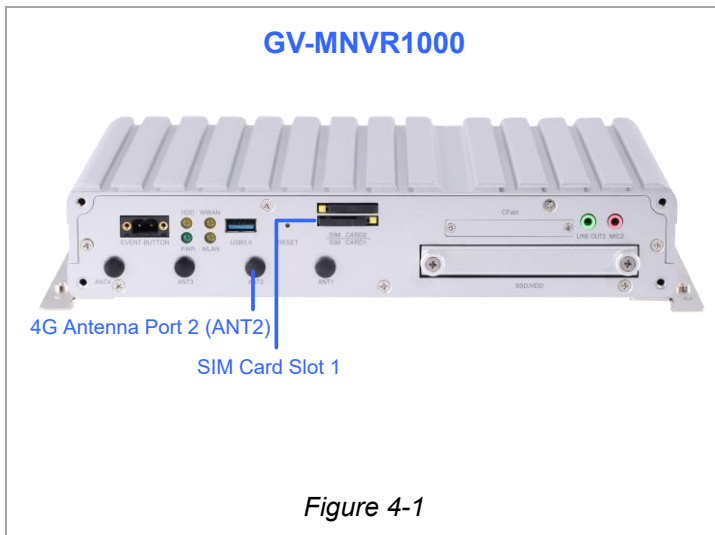
GV-MNVR1000 / GV-Mobile System 2710	
Built-in GPS	Supported Satellite Systems: • GPS / QZSS, Galileo, GLONASS, BeiDou
4G Module	Global Frequency Bands: • LTE-FDD: B1 / B2 / B3 / B4 / B5 / B7 / B8 / B12 / B13 / B14 / B18 / B19 / B20 / B25 / B26 / B28 / B66 / B71 • LTE-TDD: B38 / B39 / B40 / B41 • 3G (WCDMA): B1 / B2 / B4 / B5 / B6 / B8 / B19 • 2G (GSM / EDGE): Not supported • CDMA Bands: Not supported
Wi-Fi Module	Supported Standards: • Wi-Fi: IEEE 802.11a/b/g/n/ac/ax • Bluetooth: Bluetooth 5.2

4.1 4G Mobile Network Connection

With a mobile device or an Internet browser, you can access the live view and recorded events anywhere.

For GV-MNVR1000, follow all the steps below. For GV-Mobile System 2710, follow only Steps 1 to 3 below.

1. Turn off the GV-Mobile System.
2. Insert a SIM card to **SIM Card Slot 1**.
3. For **GV-MNVR1000**, install a 4G antenna to the 4G Antenna Port 2 (ANT2), as shown in *Figure 4-1* below. For **GV-Mobile System 2710**, install a 4G antenna to the 4G Antenna Ports 1 and 2 (WWAN1 & WWAN2), as shown in *Figure 4-2* below.



4. For GV-MNVR1000, after starting the system, click **Telit Connection Manager** (TCM) from GV-Desktop.

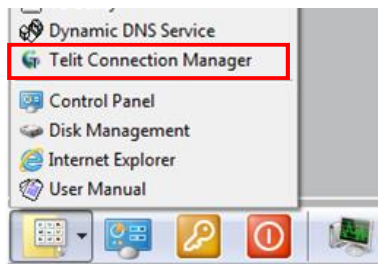


Figure 4-5

5. When the main dialog box appears, a successful connection of the utility will output real-time network traffic as shown below.



Figure 4-6

4 Optional Wireless Connection

6. If you want to enable automatic connection of TCM at computer startup, exit to Windows desktop first. For details, See 3.9 *Exiting to Windows*.
 - A. Upon exiting, click **Start**, right-click **Startup** and select **Explore All Users**.
 - B. Go to **C:** > **GV-NVR** folder > **TCM** folder.
 - C. Copy the **Telit Connection Manager** shortcut and paste it to the **Startup** folder.

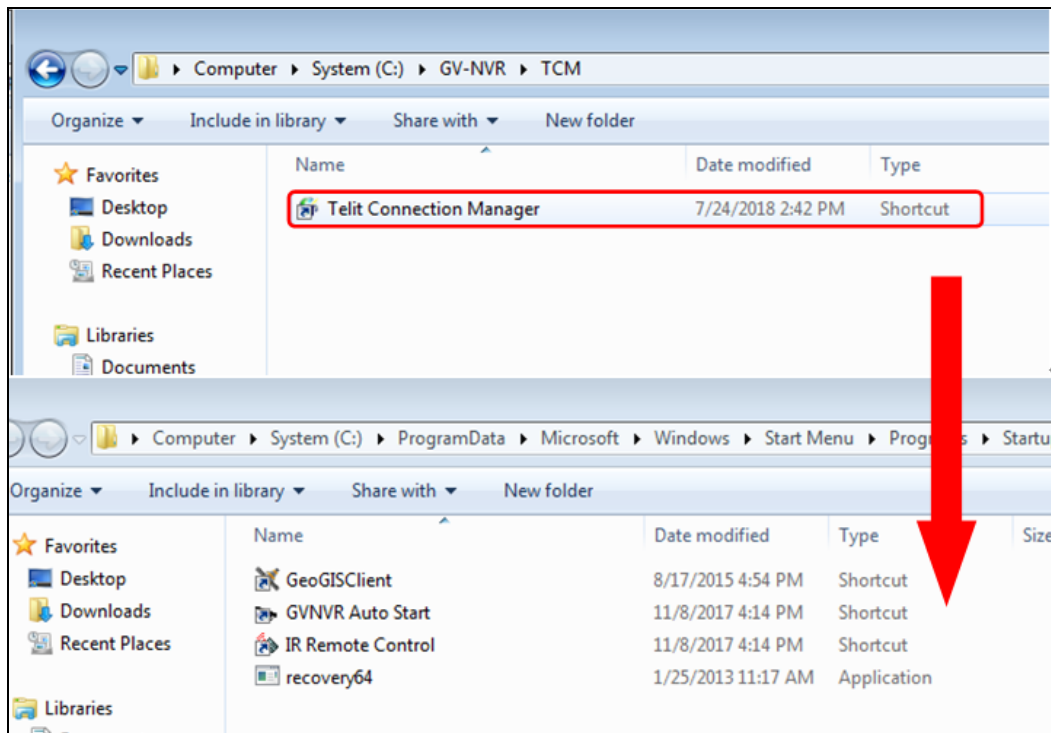


Figure 4-7

- D. Click the **Telit Connection Manager** shortcut to start the program and click the



- E. When the Setting page appears, click the **Application Preferences** button



F. Select **Autoconnect when TCM starts** and close the program.



Figure 4-8

G. TCM will automatically run at the next Windows reboot.

7. Minimize the utility to the system tray.

4.2 GPS Connection

With the supplied GPS antenna, the GV-Mobile System can receive GPS data and display GPS coordinates with the recordings.

Note: GPS function is only supported by GV-Mobile System with GV-NVR software.

1. Install the GPS antenna to the GPS antenna port of the GV-Mobile System.

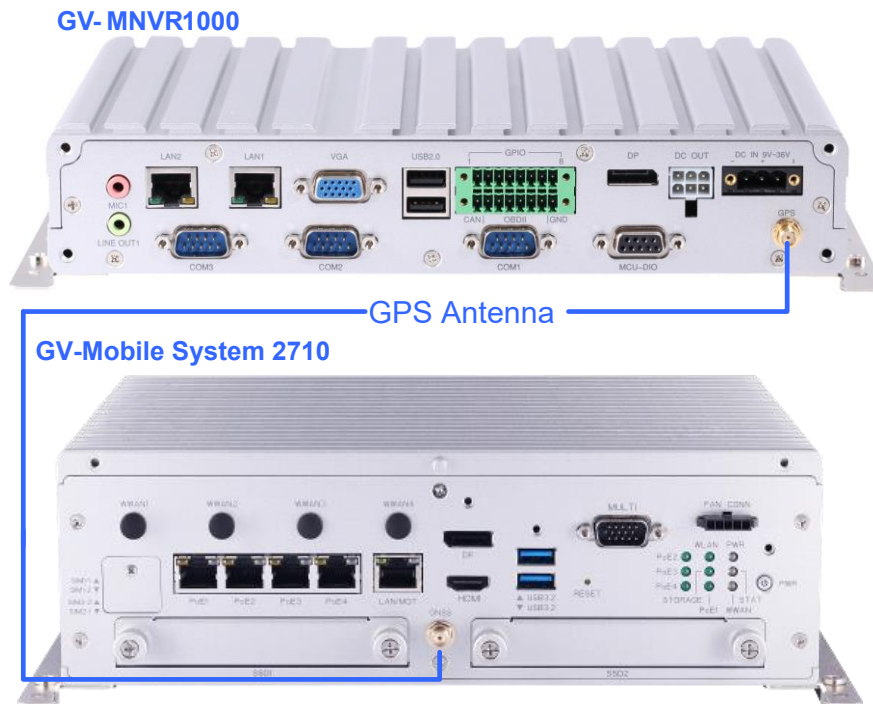


Figure 4-9

Note: The GPS antenna must point toward outdoors.

2. Start the system.
3. Start recording.

4. To see the GPS coordinates with recordings, click **ViewLog** in GV-NVR software and enable **Display GPS positions (Setting > Display tab > Display GPS positions)**. The GPS coordinates are displayed in the top-left corner of the recording. This function is only available for GV-MNVR1000.

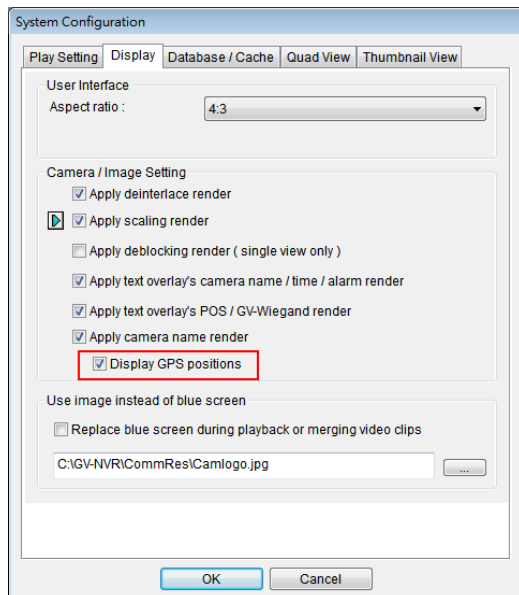


Figure 4-11

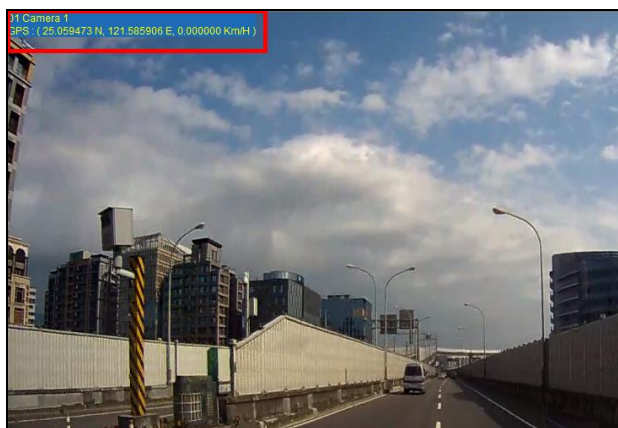


Figure 4-12

You can also view the GPS location of the GV-Mobile System on Google Maps or other map API. For details, see *Viewing GPS Locations during Playback*, Chapter 11, *GV-DVR/NVR User's Manual*.

Note:

1. The GPS coordinates aren't displayed on the live view.
2. If the GV-Mobile System doesn't receive any GPS data, check the following settings.

A. Make sure the default GPS Receiver settings are as below:

GV-MNVR1000: COM Port 3, Baud Rate 9600

GV-Mobile System 2710: COM Port 5, Baud Rate 38400

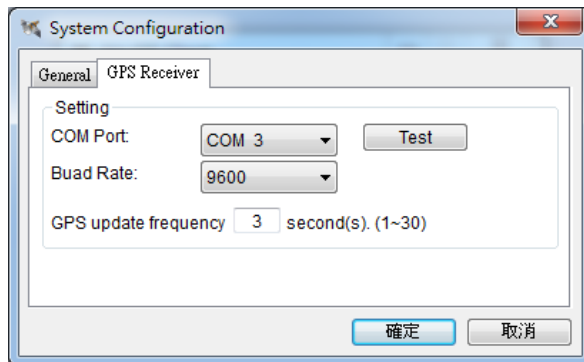


Figure 4-13

- B. Make sure the GIS function of GV-NVR software is enabled (**Configure > Accessories > Enable Local GIS**).

Chapter 5 System Restoration

You can restore the operating system and system software backup files using Windows Tool. Refer to the instructions [here](#).

Chapter 6 Health Analysis

GeoVision offers health analysis to GV-Mobile System. The service is intended to give diagnosis for early and immediate detection of problems.

It is recommended to have the health analysis during the first week after you install the GV-Mobile System, and then have the checkup every three months. It will take 5 working days for a response.

Please prepare the following data for analysis, and send it to support@geovision.com.tw:

- **System Settings**
- **System Log**
- **Information of your computer system (Processor; Drives; Voltage, Temperature and Fans)**

6.1 System Settings

Please back up your system configurations using the **Fast Backup and Restore** application.

1. Run **Fast Backup & Restore Main System** from the Start menu.

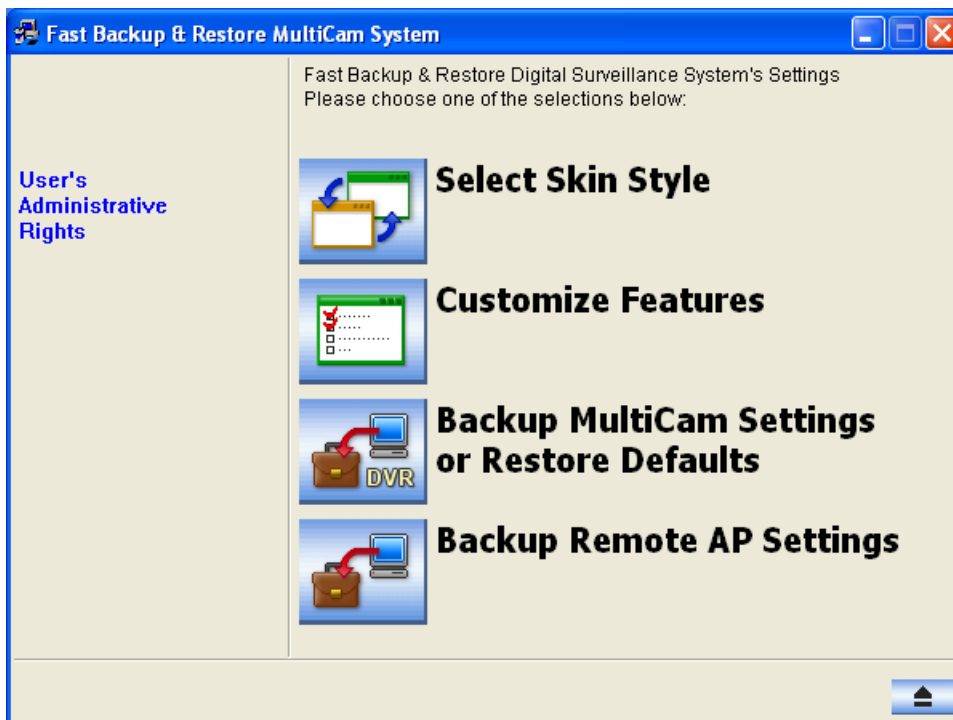


Figure 6-1

2. Select **Backup MultiCam Settings or Restore Defaults**, and select **Backup Current System**. This dialog box appears.

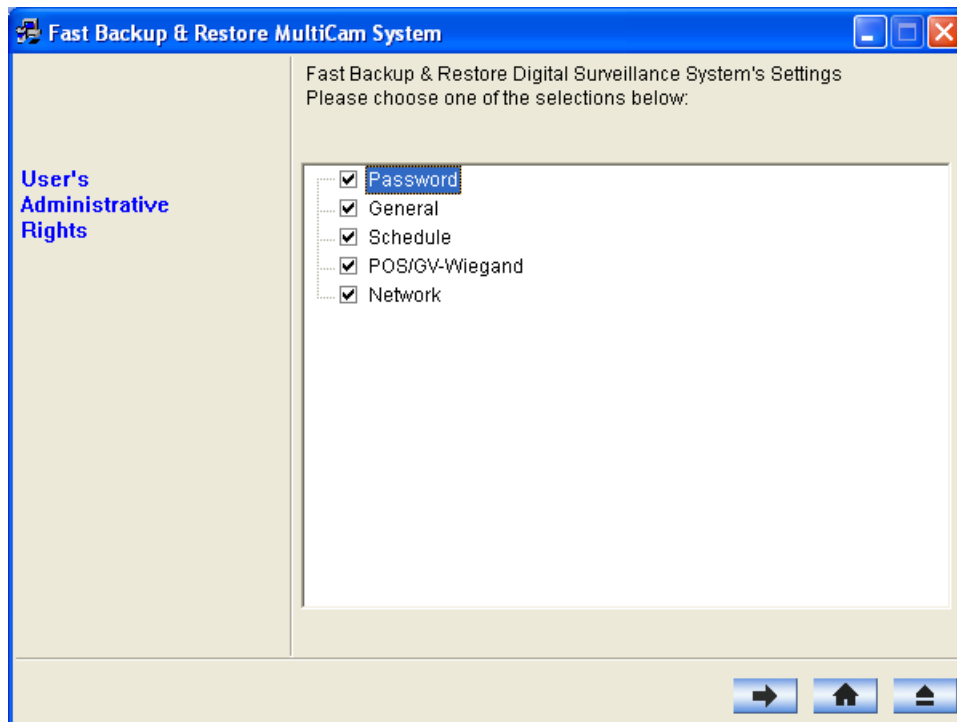


Figure 6-2

3. Press the **Next Step** button  to back up all your system settings. The Save As dialog box appears.
4. Select the destination drive to store the backup file. When the backup is complete, this message "*Successfully Backup MultiCam System Settings*" will appear.

6.2 System Log

Please provide the **sys*.mdb** files of system log. The files by default are saved at **C:\GV folder\database**. If you have modified the default location, you can check the path by the following steps:

1. Click the **Configure** button on the Main System, select **System Configure**, and select **System Log Setting**. This dialog box appears.

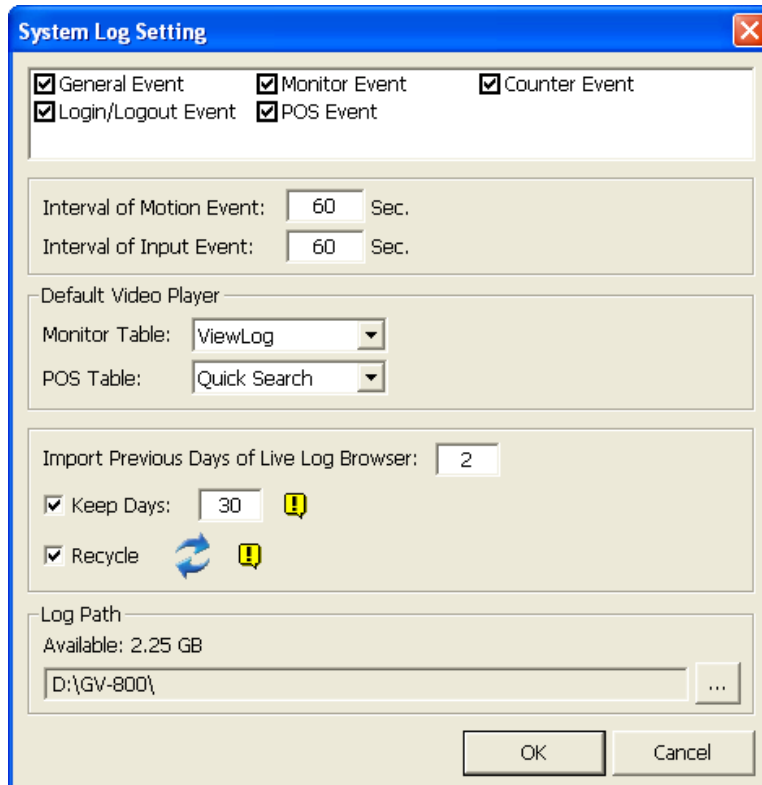


Figure 6-3

2. The location of your system log is listed after **Log Path**.

6.3 Information of Your Computer System

To get the information of your computer system, please follow the steps below to install the free software PC WIZARD. By using the software, the following computer information can be easily collected and saved for analysis:

- **Processor:** includes Type, Frequency, Data Cache L1, Trace Cache L1, Cache L2, Voltage, Processor Temperature, FPU Coprocessor.
- **Drives:** includes Number of Hard Disk, Number of Drive, Total Size and Free Space of Drive.
- **Voltage, Temperature and Fans:** includes Monitoring Chip, Voltage CPU, Chassis Fan, Processor Temperature, Mainboard Temperature, Hard Disk Temperature.

1. Download and install **PC WIZARD** from <http://www.cpuid.com/pcwizard.php>.
2. After installation, run the program.
3. Right-click the **Processor** icon  and click **Save as**.

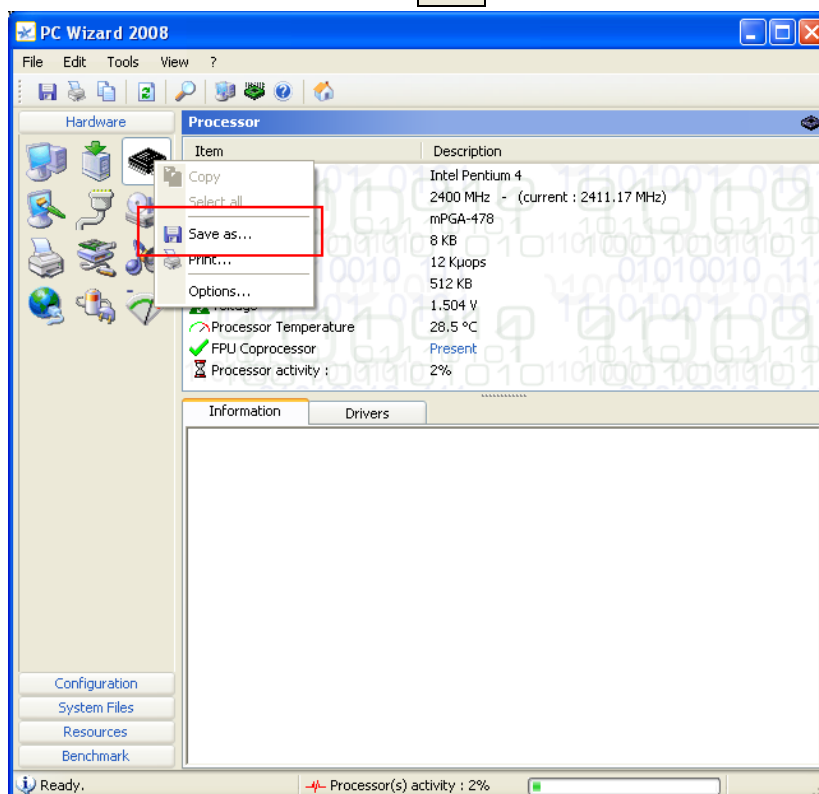


Figure 6-4

4. In the Save As dialog box, select **Format HTML** and click **OK**.

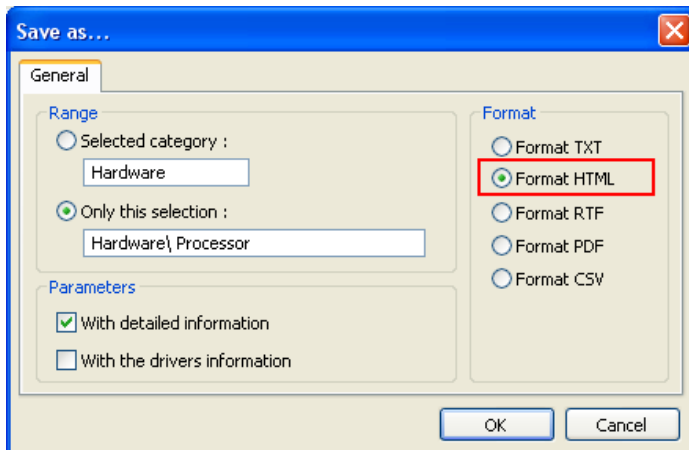


Figure 6-5

5. Select the Save location, type the file name, and then click **Save** to save the Processor information as HTML file.
6. Repeat Steps 3-5 to save the **Drives** information  as HTML file.
7. To save the **Voltage, Temperature and Fans** information , please follow these steps:
- Click the **Voltage, Temperature and Fans** icon. The related data is displayed at the right window.
 - Click the first item **Monitoring Chip**.
 - Click **Edit** on the menu bar and click **Select All** to highlight all the contents.
 - Click **Edit** on the menu bar and select **Copy**.
 - Open a Notepad. Paste and save the information to TXT file.

6.4 Health Analysis Form

Please send the related data for analysis along with this Health Analysis Form to support@geovision.com.tw.

Health Analysis of GV-Mobile System	
Contact Person:	Title:
Company Name:	
Telephone: (O)	(H)
Fax:	
E-Mail:	
Model:	
Bar Code:	

6.5 Check List

Read this check list before submitting the health analysis request:

- System Settings- **EXE file**
- System Log- **sys*.mdb**
- Computer System- Processor information of **HTML file**
- Computer System- Drives information of **HTML file**
- Computer System- Voltage, Temperature and Fans information of **TXT file**
- Health Analysis Form

Chapter 7 Troubleshooting

GV-Mobile System storage drive becomes corrupted.

If you are experiencing file system corruption problems, such as lost clusters, cross-linked files or invalid files or directories, try these steps:

1. Use the **HD Tune** utility to scan the storage drive for errors. Follow these steps:
 - A. Download and install **HD Tune** from <http://www.hdtune.com/>.
 - B. Click the **Error Scan** tab and click **Start** to scan. Any found defects will be shown as red blocks (see Figure 5-1).

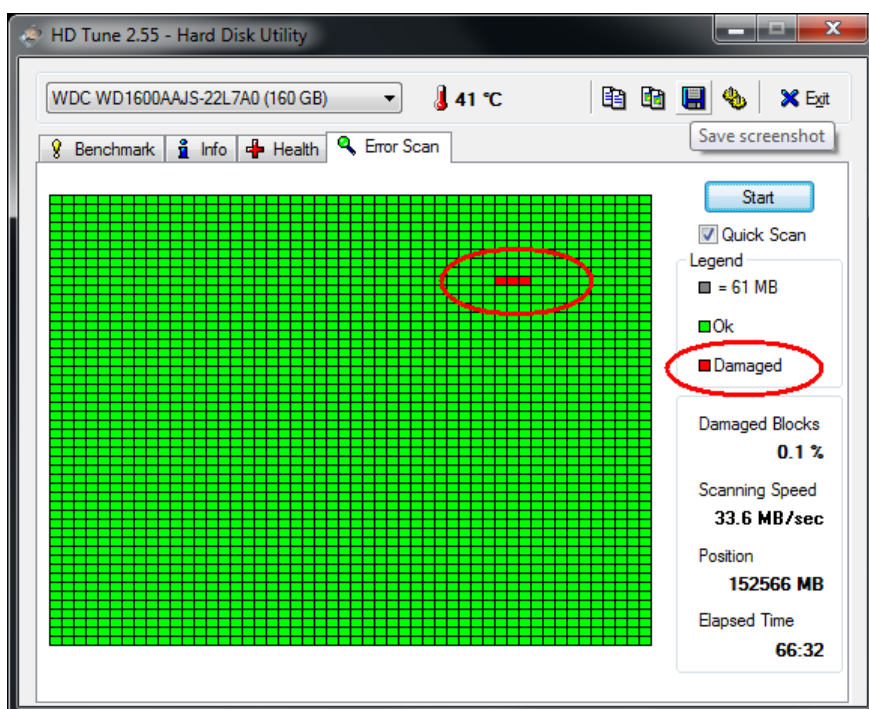


Figure 7-1

- C. If your storage drive is damaged, replace a new one.

2. If the HD Tune utility does not find any defects, use the Windows built-in utility to attempt to fix the errors. Follow these steps:

- A. For **GV-MNVR1000**, click the **Programs** button on the GV-Desktop, and select **Disk Management**.

For **GV-Mobile System 2710**, right-click the Computer icon  on your desktop, select **Manage**, and select **Disk Management**.

- B. Right-click the desired storage drive and select **Properties** from the file menu to display the Properties window.

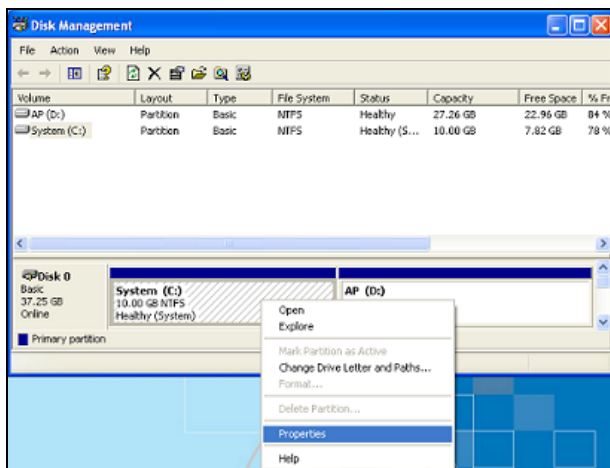


Figure 7-2

- C. Click the **Tools** tab in the upper portion of the window.
- D. Under Error-checking, click the **Check Now** button.



Figure 7-3

- E. Select **Automatically fix file system errors** and **Scan for and attempt recovery of bad sectors**.

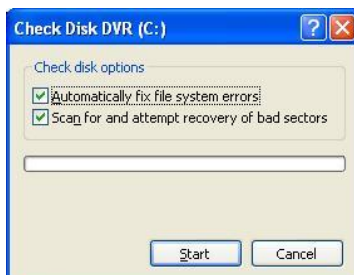


Figure 7-4

- F. Click **Start**.

3. If the Windows hard disk utility still cannot fix the problem in Partition C, try rebuilding the operating system and GeoVision software by running the recovery from the hidden partition. Refer to *Chapter 5 System Restoration*.

Live video is not displayed smoothly.

If some of live videos are not displayed smoothly, check the following status:

1. Check the bandwidth status of the network that is connected to GV-Mobile System.
2. Check if several users are accessing the Web interface of GV-IP camera. Try to close some of the open Web interfaces.

Unable to locate all the GV-IP cameras by using the IP Device Utility.

If you can not locate any GV-IP cameras by using the IP Device Utility, try the following instructions:

1. Ensure GV-IP cameras are connected to the same LAN with the GV-Mobile System and check the network connectivity.
2. Ensure you have powered on GV-IP cameras.
3. Click the Search button on the IP Device Utility again to detect GV-IP cameras.

Black images are displayed.

1. Check the IP cameras and make sure they are functioning well.
2. Check the GV-Mobile System's connection over network.

How can I find more help?

Visit our website at <https://www.geovision.com.tw/>

Write us at support@geovision.com.tw

Specifications

For hardware and software specifications, and total frame rate and max number of channels supported, see the datasheets.

[GV-MNVR1000](#)

[GV-Mobile System 2710](#)

Warranty Requirements

Thank you for purchasing the GV-Mobile System. GeoVision understands that accidents happen, and has developed a warranty policy in place.

See <http://www.geovision.com.tw/warranty.php> for more warranty information.

Before you return the product

Some problems you experience may be related to software or the operating system. It is important to investigate other sources of assistance first. Before returning the product, try the following:

1. Review troubleshooting sections in the documentation for software and peripheral devices.
2. Try rebuilding the operating system and GV-System. Refer to *3.10 System Restoration*.
3. Consult your dealer. They are your best sources for current information and support. Or you can call or email GeoVision offshore offices for assistance.

When you call or e-mail, please inform us of the following:

- Model name
 - Bar Code
 - Details of the defect or problem
 - Attempted solutions
 - Your contact information
 - Reseller's contact information
4. If you find that it is a software problem, please check our website or your dealer for software updates.

Obtaining Warranty Service

If you are still unable to solve the problem and suspect that it is hardware related, follow these:

1. Send an e-mail to GeoVision to start Return Merchandise Authorization (RMA) process.
E-Mail: sales@geovision.com.tw or support@geovision.com.tw
2. Securely pack the product in its original carton using the original packing material, or in equivalent packaging.
3. The product shall be returned to **GeoVision, Taiwan** at your expense for shipping and insurance costs.

BEFORE YOU DELIVER YOUR GV-MOBILE SYSTEM FOR WARRANTY SERVICE, IT IS YOUR RESPONSIBILITY TO BACK UP YOUR DATA. YOU WILL BE RESPONSIBLE FOR REINSTALLING ALL DATA, SETTINGS AND PASSWORDS. DATA RECOVERY IS NOT INCLUDED IN THE WARRANTY SERVICE AND GEOVISION IS NOT RESPONSIBLE FOR DATA THAT MAY BE LOST OR DAMAGED DURING TRANSIT OR A REPAIR.