GeoVision inc
The Vision of Security

Quick Start Guide

GV-SNVR System

The Vision of Security

Thank you for purchasing GV-SNVR. This guide is designed to assist the new user in getting immediate results from the GV-SNVR. For advanced information on how to use the GV-SNVR, please refer to *GV-SNVR User's Manual* (GV-Desktop < **Program** button < **User Manual**).

SNVR-QG-A

![GeoVision, Inc. logo]

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Contents

1. Introduction

1.1 Packing List

You can choose to purchase a GV-SNVR package or a bundled package which includes 4 GV-Target IP Camera of your choice and a GV-PoE switch.

1.1.1 GV-SNVR Package

GV-SNVR0400F

1. GV-SNVR0400F
2. AC power cord
3. AC/DC adapter
   (DC 19V, 3.42A, 65 W)
4. Screw x 6 (for HDD)
5. SATA cable

GV-SNVR1600

1. GV-SNVR1600
2. AC power cord
3. SATA cable x 4
4. HDD Mounting Bracket Kit (4 pairs and 32 screws included)
5. Rack Mount Kit (2 L-shaped brackets and 6 screws included)

1.1.2 Bundled Package for GV-SNVR0400F

1. GV-SNVR0400F Package x 1

2. Target IP Camera x 4

3. GV-POE0400 x 1

Note: For the Target IP Camera, select any 4 models from GV-EBL1100 / 2100, GV-EBX1100 / 2100, GV-EDR1100 / 2100, GV-EFD1100 / 2100. For more information, contact our sales representatives.

1.2 Compatible Devices and System Requirements

1.2.1 Supported GV-IP Cameras

The GV-SNVR is compatible with the following GV-IP Cameras:

- GV-Target Series IP Camera (Firmware V1.0 or later)
- GV-SD220/220-S (Firmware V1.02 or later)
- All the other GV-IP Cameras (Firmware V2.11 or later) **EXCEPT** the models below:
  - GV-BX110
  - GV-BL110
  - GV-Fisheye IP Camera
  - GV-MFD110
  - GV-PT110
  - GV-PTZ010D
  - GV-SD010/200/200-S

IMPORTANT:

1. The GV-SNVR supports the recording frame rate of up to 30 fps only.
2. The GV-SNVR supports the recording bandwidth of up to 50 /100 Mbps only for GV-SNVR0400F / GV-SNVR1600 respectively.

1.2.2 System Requirements

Recommended Hard Disks

GV-SNVR0400F supports 1 SATA HDD (3.5") with up to 4 TB capacities, and GV-SNVR1600 supports 4 SATA HDD (3.5") with total up to 16 TB capacities. For system efficiency, it is recommended to use the enterprise-level hard disk drives instead of desktop-level or green HDD. For tested hard disk drives, see *Appendix* in *GV-SNVR User's Manual*.

Note: The GV-SNVR does not support the 2.5" SATA HDD.

Supported Web Browsers

1. Internet Explorer 8 or later
2. Google Chrome 33.0 or later
3. Mozilla Firefox 28.0 or later

1.3 Options

Optional devices can expand your GV-SNVR's capabilities and versatility. Contact your dealer for more information.

Options	Description
GV-Joystick V2	The GV-Joystick V2 facilitates the PTZ camera control. It can be plugged into the GV-SNVR for independent use to empower the operation of PTZ cameras.
GV-POE Switch	The GV-POE Switch is designed to provide power along with network connection for IP devices. The GV-POE Switch is available in various models with different numbers and types of ports.
Slide Rail Kit (for GV-SNVR1600 only)	The Slide Rail Kit is used to mount a rail for the GV-SNVR1600 in a 19" cabinet.

2. Overview

2.1 Front View

2.1.1 GV-SNVR0400F

No.	Name	Function
1	USB 2.0 Port	Connects to keyboard, mouse, storage device or GV-Joystick V2.
2	Audio In	Not functional.
3	Audio Out	Not functional.
4	Power LED	Shows constant blue when the power is supplied for the device.
5	HDD Error LED	Shows constant red when the following situations occur: • No hard drive is installed. • The hard drive is not formatted. • The hard drive fails.
6	Power Button	Turns on/off the power.

2.1.2　GV-SNVR1600

No.	Name	Function
1	Power Button	Turns on/off the power.
2	Power LED	Shows constant blue when the power is supplied for the device.
3	HDD Status LED	Glows blue when the hard drive is writing or reading data.
4	HDD Error LED	Shows constant red when the following situations occur: • No hard drive is installed. • The hard drive is not formatted. • The hard drive fails.
5	WAN LED	Shows constant blue when the WAN port is receiving activity.
6	LAN LED	Shows constant blue when the LAN port is receiving activity.
7	USB 2.0 Port	Connects to keyboard, mouse, storage device or GV-Joystick V2.

2.2 Rear View

2.2.1 GV-SNVR0400F

No.	Name	Function
1	Gigabit Ethernet Port	Connects to the network.
2	HDMI Output	Connects to the HD TV.
3	USB 2.0 Port	Connects to keyboard, mouse, storage device or GV-Joystick V2.
4	Default Button	Restores the device to default settings. Press the button for 15 seconds to load default.
5	Power Input	Connects to power supply.

2.2.2   GV-SNVR1600

No.	Name	Function
1	Audio Microphone In Port	Not functional.
2	VGA Monitor Output	Connects to the VGA monitor.
3	HDMI Port	Connects to the HD TV.
4	USB 2.0 Port x 4	Connects to keyboard, mouse, storage device or GV-Joystick V2.
5	Power Input	Connects to power supply.
6	Gigabit Ethernet Port (LAN)	Connects to the network.
7	Gigabit Ethernet Port (WAN)	Connects to the network.
8	Audio Line Out Port	Connects to the speaker.
9	Audio Line Out Port	Connects to the headphone.

Note: When the two Ethernet ports (No. 6 and 7) are used together, one is LAN port and the other is WAN port.

![GeoVision Inc logo]

3. Installing the Hard Drive

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

3.1 GV-SNVR0400F

Follow the steps below to install the hard drive to the GV-SNVR0400F.
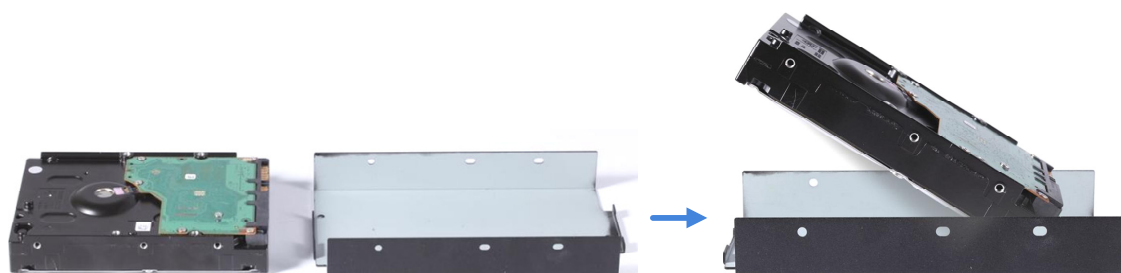
1. Unscrew the two screws on the rear panel and remove the cover.
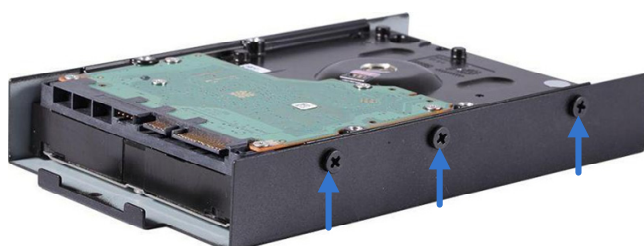

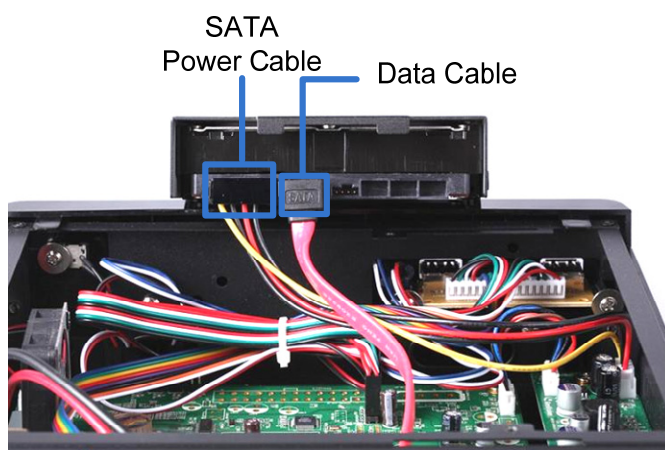2. Unscrew the drive drawer and take it out from the device.

3. Place the hard drive in the drive drawer as below by aligning the three holes.

4. Secure the hard drive with the drive drawer using the supplied 6 screws (3 screws on each side).

5. Connect the SATA Power Cable and Data Cable to the hard drive.

6. Put the drive drawer back in the device and secure the two screws on the drive drawer. Refer to Step 2.

7. Assemble the cover with the device by tightening the screws on rear panel. Refer to Step 1.
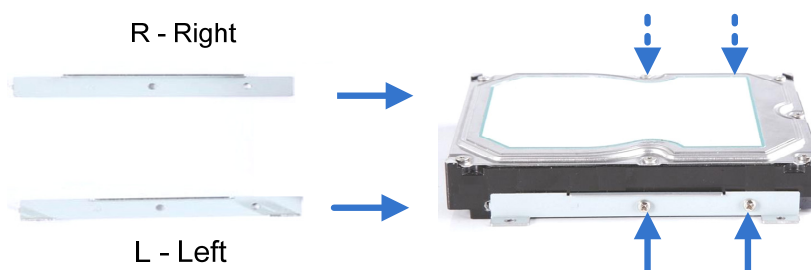
The hard drive is now ready to use.

3.2 GV-SNVR1600

Follow the steps below to install the hard drive to the GV-SNVR1600.
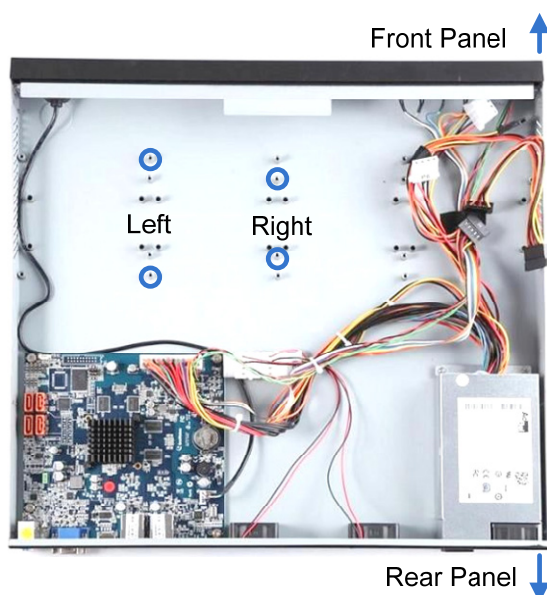
1. Loosen the 6 screws and remove the cover.

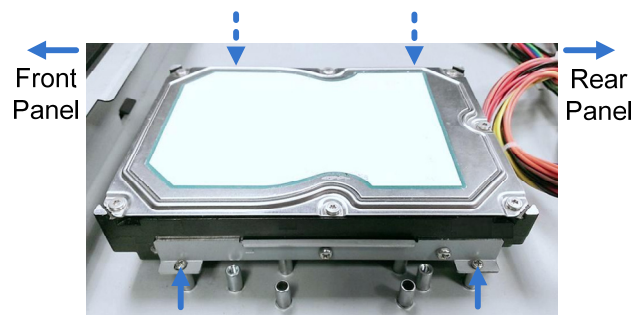2. Assemble the mounting brackets with the hard drive and tighten the screws on both sides.

R - Right

L - Left

Note: Each mounting bracket is labeled **L** or **R** for recognition. Align the mounting bracket with the holes on the hard drive and make sure it is secured to the correct side.

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3. Align the mounting bracket with the holes inside the unit.

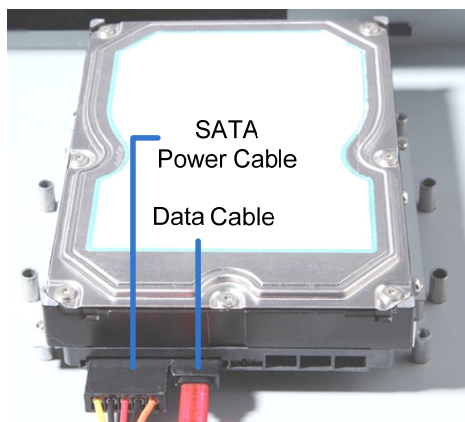Front Panel

Left   Right

Rear Panel

4. Tighten the 4 screws on the side of the hard drive.

Side View of the HDD

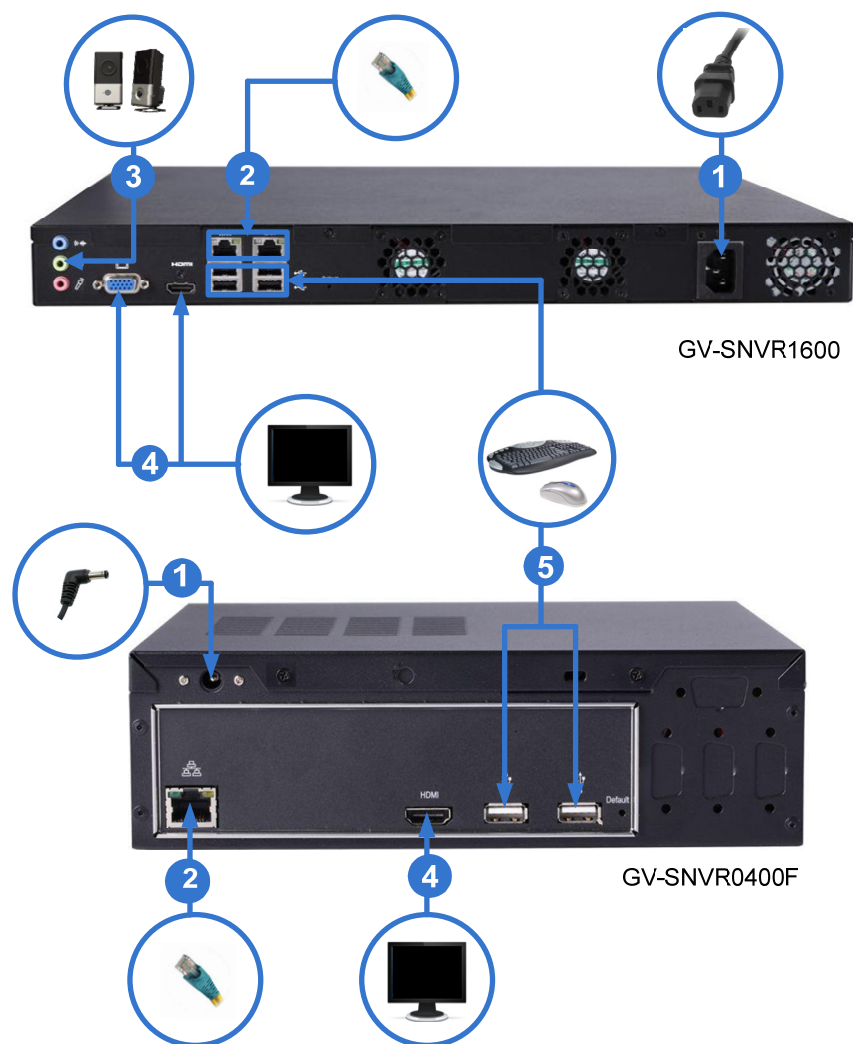5. Connect the SATA Power Cable and Data Cable to the hard drive.

6. To install more HDDs, repeat the steps above.

7. Place the cover back and tighten the screws.

The hard drive is now ready for use.

![GeoVision Inc logo]

4. Installing GV-SNVR

Follow the steps below to connect the GV-SNVR.

GV-SNVR1600

GV-SNVR0400F

1. Connect the GV-SNVR to power.
2. Connect the GV-SNVR to the LAN port using the RJ-45 cable.
3. For GV-SNVR1600, connect speakers to the Audio Line Out port.
4. Connect the HDTV to HDMI connector for video output. For GV-SNVR1600, optionally connect the VGA monitor to the D-Sub connector for dual-monitor display.
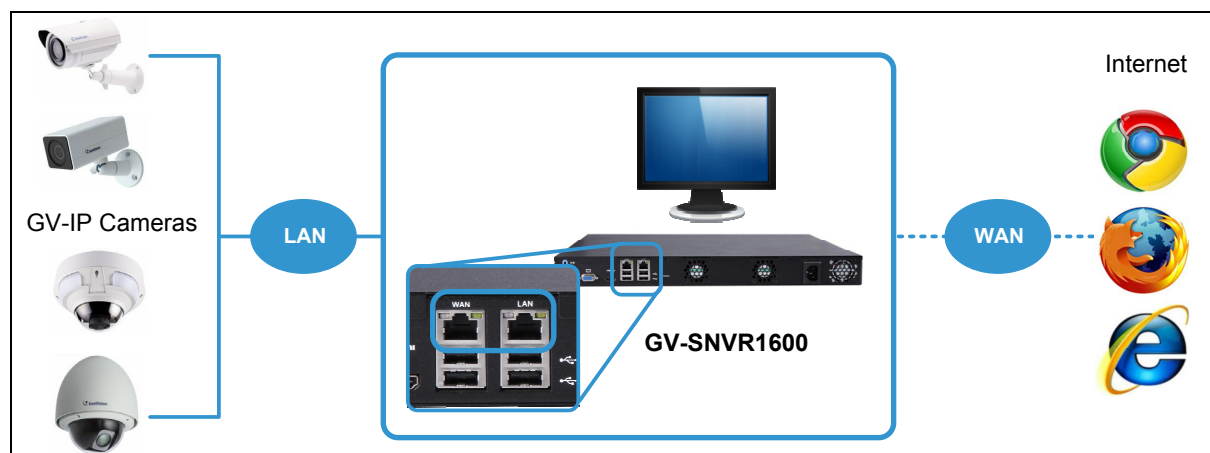5. Connect the mouse and the keyboard to the USB ports.

Press the power button to turn on the GV-SNVR.

Note:

1. The GV-SNVR is DHCP enabled. When it is connected to the network, it will be automatically assinged an IP address.

2. For GV-SNVR1600, the monitor used for VGA output must be capable of having a screen resolution of 1080p.

4.1 Network Connection for GV-SNVR1600

There are two network ports, LAN and WAN, for the GV-SNVR1600. If both network ports are used simultaneously, only the WAN port can be connected to the Internet. Therefore, it is recommended to connect the devices as below.

1. Connect GV-IP Cameras to the GV-SNVR1600 through the LAN port.
2. Connect GV-SNVR1600 to the Internet through the WAN port.

Note: When the LAN and WAN ports are used together, the Auto Search function is only supported by the LAN port. To connect to GV-IP Cameras under the WAN, you can add the cameras manually.

IMPORTANT: It is required to divide LAN and WAN networks into different subnets or segments; otherwise, your network will fail. For details, see *3.3 Network* in *GV-SNVR User's Manual*.

5. Connecting to GV-IP Cameras

After you have installed the IP cameras under the same LAN with the GV-SNVR, you are ready to display the channels on GV-SNVR. To automatically setting up GV-IP Cameras, see the section below. To manually add GV-IP Cameras, see *2.3.2 Manually Connecting GV-IP Camera* in *GV-SNVR User's Manual*.

1. Power on the GV-SNVR. It automatically searches and lists the IP cameras under the same LAN.

2. You are prompted with a dialog box asking if you want to automatically assign IP address. The automatic assignment will only apply on the cameras with IP address **192.168.0.10**.

No.		CH	Model	IP Address ▲	Port	MAC Address	Resolution	Bandwidth	Status	Brand		
1	☐		GV-PT320D	192.168.0.10	10000	0013E20550D4				Geovision	✂	🗑
2	☐		GV-MFD520	192.168.0.10	10000	0013E2054F23				Geovision	✂	🗑
3	☐		GV-MFD1501	192.168.0.10	10000	0013E2FF0A44				Geovision	✂	🗑
4	☐		GV-MFD2400	192.168.0.10	10000	0013E20551CC				Geovision	✂	🗑
	☐										✂	🗑
	☐										✂	🗑
	☐										✂	🗑
	☐										✂	🗑
	☐										✂	🗑

Do you want to automatically assign IP devices?

☐ Don't ask me again

Cancel   Apply

3. Click **Apply**. The GV-SNVR assigns unused IP addresses to the cameras in an ascending numerical order and enables the connection.

No.		CH	Model	IP Address ▲	Port	MAC Address	Resolution	Bandwidth	Status	Brand		
1	☑	1	GV-PT320D	192.168.0.3	10000	0013E203465D	H264:1920x1080 H264:448x252	5.7Mbps	Connected	Geovision	✂	🗑
2	☑	2	GV-MFD520	192.168.0.11	10000	0013E204FFFA	H264:1920x1080 H264:448x252	2.1Mbps	Connected	Geovision	✂	🗑
3	☑	3	GV-MFD1501	192.168.0.17	10000	0013E2025584	H264:1280x1024 H264:320x256	4.0Mbps	Connected	Geovision	✂	🗑
4	☑	4	GV-MFD2400	192.168.0.79	10000	0013E20550EE	H264:1280x1024 H264:320x256	1.8Mbps	Connected	Geovision	✂	🗑

Upon successful connection, the status displays "Connected". When you close the Camera page, you can access the live view.

IMPORTANT:

1. By default, GV-IP Cameras have the IP address 192.168.0.10. The GV-SNVR will automatically assign unused IP addresses to these cameras to avoid IP address conflict with others under the same LAN.

2. The GV-SNVR connects with IP cameras with the default ID and password **admin**. If you fail to log in the IP camera, click the **Edit** icon [✕] and type the correct ID and password for connection.

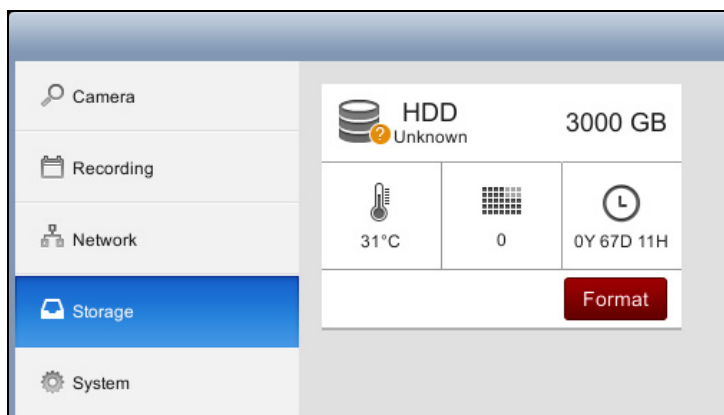| CH1	
Camera Name	CH01
Username	admin
Password	•••••
IP Address	192.168.0.79
Port	10000
Connect	✓

6. Formatting the Hard Drive

After installing the hard drive to GV-SNVR, you need to format the hard drive before enabling the monitoring.
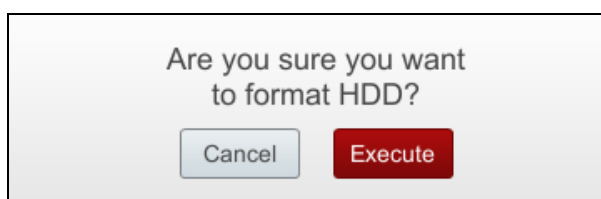
1. On the main screen, click the **Setting** button.
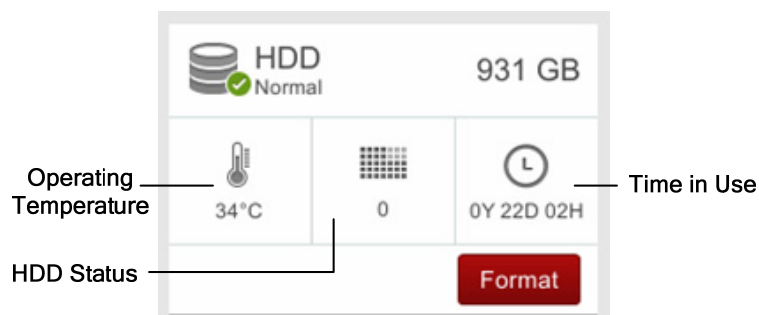

2. Select **Storage**.

3. Click **Format**. This dialog box appears.

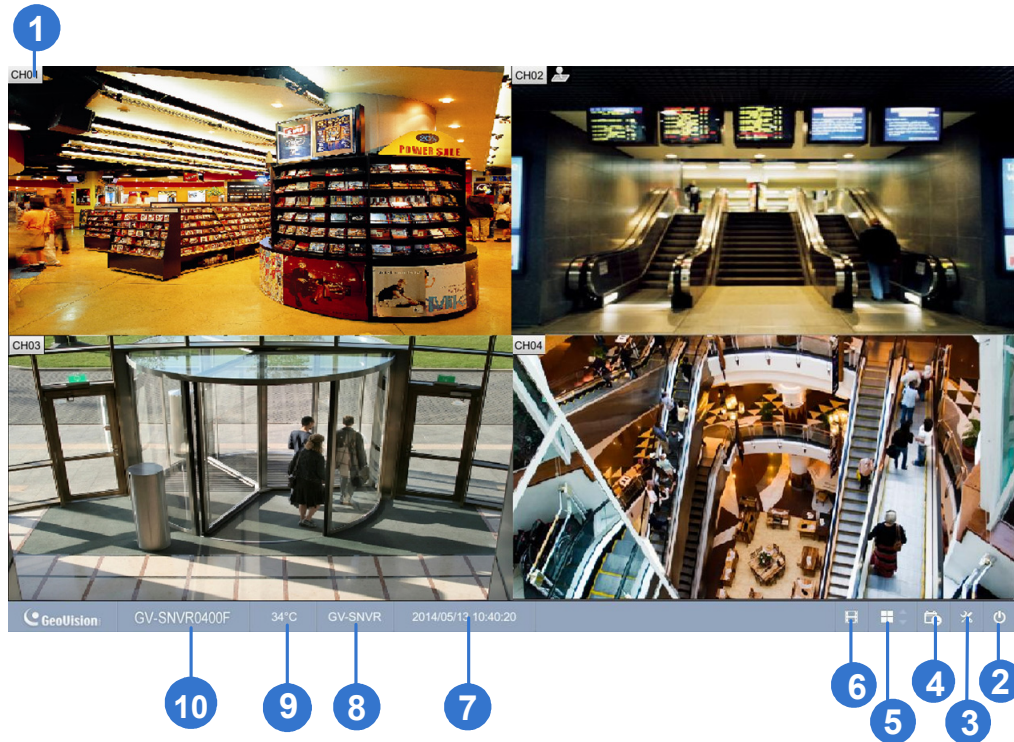4. Click **Execute** to format the hard drive.

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When the hard drive is successfully formatted, its icon should be marked with a green tick, and the "Normal" message appears. The information of operating temperature, hard drive status and total time in use is also displayed.

Note: When the hard drive status displays other value instead of **0**, replace the hard drive with a new one to ensure proper video recording.

7. Main Screen

Close the Camera page to display connected channels on the main screen.

No.	Name	Description
1	Camera Name	Indicates the camera name. The column changes from gray to red when the recording is enabled.
2	System	Brings up the options: Log Out and Shutdown.
3	Setting	Accesses the settings of Camera, Recording, Network, Storage and System.
4	Record	Starts/Stops monitoring.
5	Division & Page Up / Down	Selects screen divisions and switch between cameras in single division.
6	Playback	Displays the playback panel.
7	Date / Time	Displays the current date and time.
8	Device Name	Displays the device name of GV-SNVR. See *Device Name* in *3.5 System*.
9	Temperature	Displays the current temperature.
10	Model Name	Displays the model name of GV-SNVR.

7.1 Enabling the Recording

To start recording, click the **Record** button and select a camera. To enable recording for all the connected cameras, select **Start All Monitoring**. For details, see *2.6 Enabling the Recording* in *GV-SNVR User's Manual*.

7.2 Playing Back Video

You can instantly play back the recorded video without interrupting the monitoring and recording.

- To instantly play back the recording of one single channel, click the **Camera Name** and select **Instant Playback**.
- To instantly play back the recording of all channels, click the **Playback** button .

For details on playing back the recording, see *Chapter 4 Video Playback* in *GV-SNVR User's Manual*.
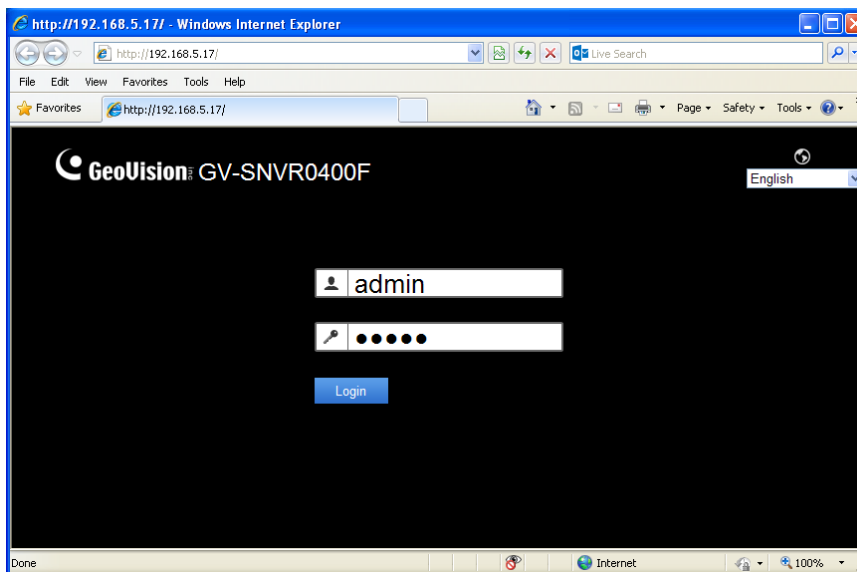
7.3 Live Monitoring

To set up the division of channel display and access the functions of snapshot, audio and PTZ control, see *2.8 Live Monitoring* in *GV-SNVR User's Manual*.

8. Remotely Accessing Live View

To access the live view through Web interface, follow the steps below. Here we use the GV-SNVR0400F for illustration.

1. Open your Web browser and type the IP address of the GV-SNVR.
2. In both Username and Password fields, type the default value **admin**.

3. Select a desired language from the drop-down list at the upper-right corner for the Web interface and click **Login**.
4. To enable the update of live view on your Web browser, you must set the Web browser to allow ActiveX controls and perform a one-time installation of GeoVision's ActiveX components on your computer.

After the installation, live view will be displayed.
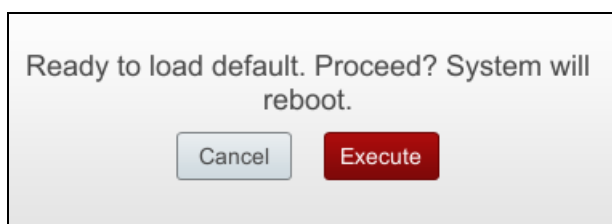

Note:
1. The maximum number of remote network connection is **10** in total for GV-SNVR0400F and **34** in total for GV-SNVR1600. Every connected channel will be counted as 1 connection.
2. The audio function is not supported for the live view through the Web interface.

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9.   Upgrading Firmware

GeoVision periodically release the updated firmware on the Website. You can upgrade the firmware using an USB storage drive of FAT32 format.

To upgrade the firmware, follow the steps below.

1.   Download the firmware file to an USB storage drive.
2.   Connect the USB drive to the GV-SNVR.
3.   On the main screen, click the **Setting** button ⚒ and select **System**.
4.   Click the **Advanced Option** button and select **Firmware Upgrade**.
5.   Find the firmware file and click **Apply**. This dialog box appears.

Ready to load default. Proceed? System will reboot.
Cancel   Execute

6.   Click **Execute**. The system starts upgrading firmware and automatically reboots after completing the process.

After the system reboot, the main screen will be displayed automatically.

To upgrade the firmware remotely through GV-IP Device Utility, see *6.2.3 Upgrading System Firmware* in *GV-SNVR User's Manual*.