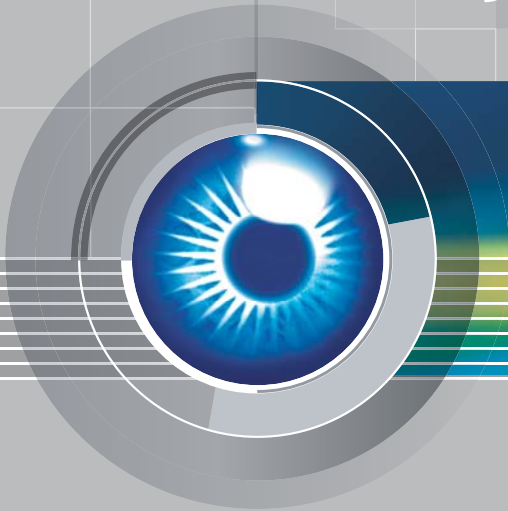


Quick Start Guide



The Vision of Security

GV-Tower System



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



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April 2015

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1. Introduction

Welcome to the *GV-Tower System Quick Start Guide*. In the following sections, you will learn about the basic installations and configurations of the *GV-Tower System User's Manual* (GV-Desktop > **Program** button > **User Manual**).

1.1 Packing List

1.1.1 GV-Tower DVR/NVR System

- GV-Tower DVR / NVR System x 1
- LFH Audio and Video Cable x 1 (only for GV-Tower DVR System)



- Key for Hard Disk Safety Lock x 2
- Hard Disk Drive Screw x 16



- GV-IR Remote Control x 1



- AC Power Cord x 1



- GV-Tower System Quick Start Guide x 1

1.1.2 GV-Tower VMS System

- GV-Tower VMS System x 1
- Key for Hard Disk Safety Lock x 2
- Hard Disk Drive Screw x 16



- GV-IR Remote Control x 1



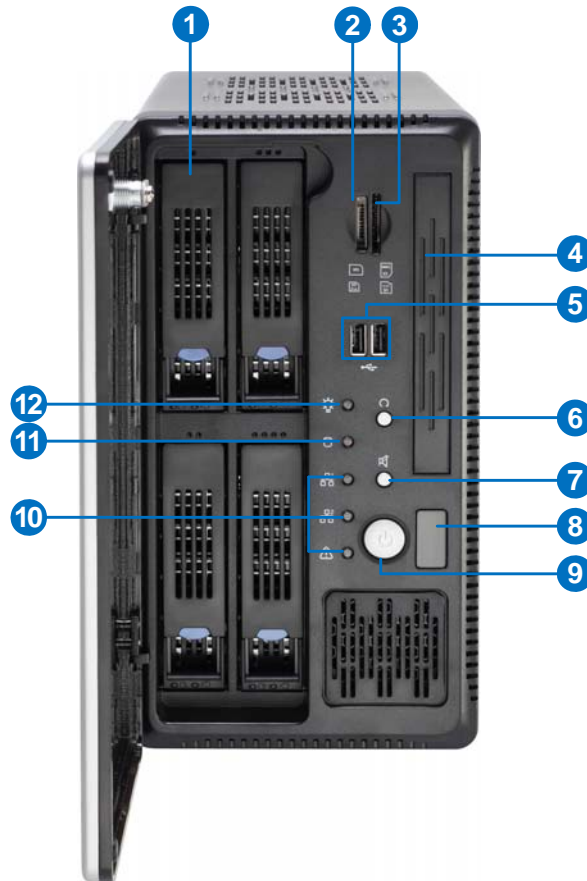
- AC Power Cord x 1



- GV-Tower System Quick Start Guide x 1

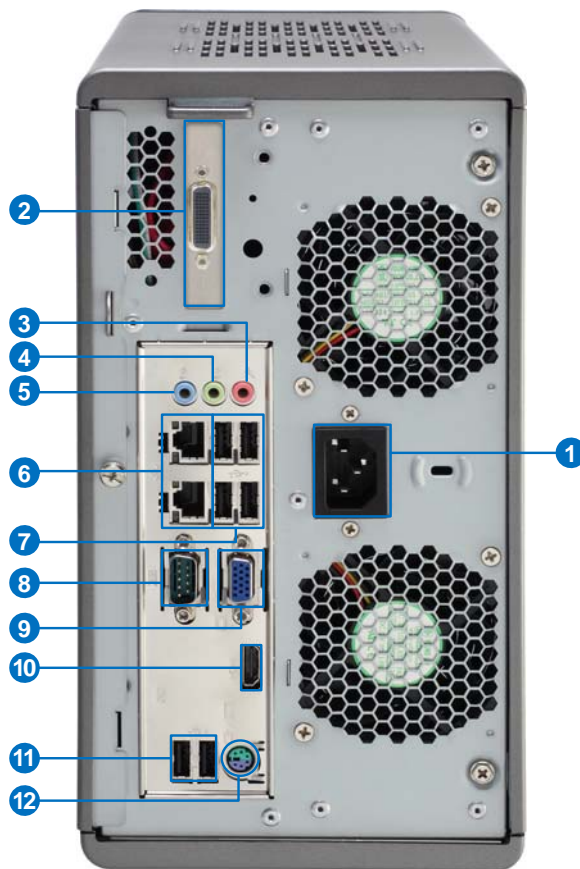
1.2 Front View & Rear View

Front View



No.	Name	No.	Name
1	HDD x 4	7	Not Functional
2	Not Functional	8	IR Receiver
3	Not Functional	9	Power Button
4	Not Functional	10	Not Functional
5	Not Functional	11	HDD Activity LED (Red)
6	Reset Button	12	Power LED (Blue)

Rear View

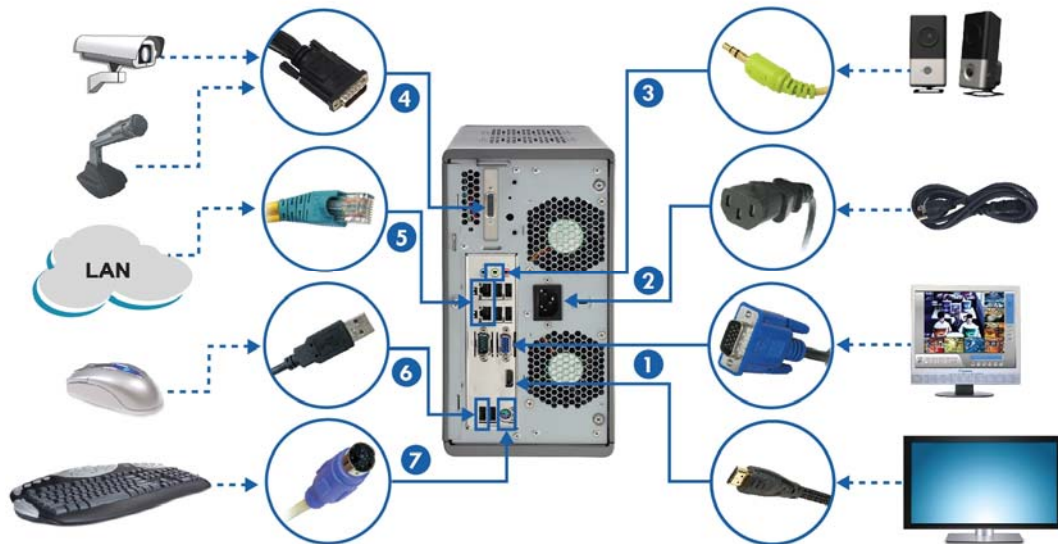


No.	Name	No.	Name
1	Power Connector	7	USB 2.0 Port x 4
2	LFH Audio and Video Connector *	8	Not Functional
3	Audio Microphone In Port	9	VGA Monitor Output
4	Audio Line Out Port	10	HDMI Port
5	Audio Line In Port	11	USB 2.0 Port x 2
6	Ethernet Port x 2	12	PS/2 Port (only for the keyboard)

Note: The feature marked with * is for GV-Tower DVR System only.

1.3 Basic Installation

Here we use GV-Tower DVR System as the example.



1. There are two ways to connect the monitor to the GV-Tower DVR/NVR System and GV-Tower VMS System.
 - Using the VGA cable supplied by the monitor manufacturer, connect the VGA monitor.
 - Using the HDMI cable supplied by the HDTV manufacturer, connect the HDTV.
2. Using the supplied power cord, connect one end to the AC input and the other end to the power outlet.
3. Connect speakers to the Audio Line Out port.
4. Using the supplied LFH Audio and Video cable, connect the yellow ends to the cameras, and the red ends to the microphones.
5. Using the RJ-45 cable, connect one end to the Ethernet port and the other end to Network.
6. Connect the mouse to the USB port.
7. Connect the keyboard to the PS/2 port.

Once the above hardware is properly connected, press the Power button on the front panel to start the system. It takes about 1 minute for startup. The system should load automatically and display cameras in the main screen.

Using the IR Remote Control

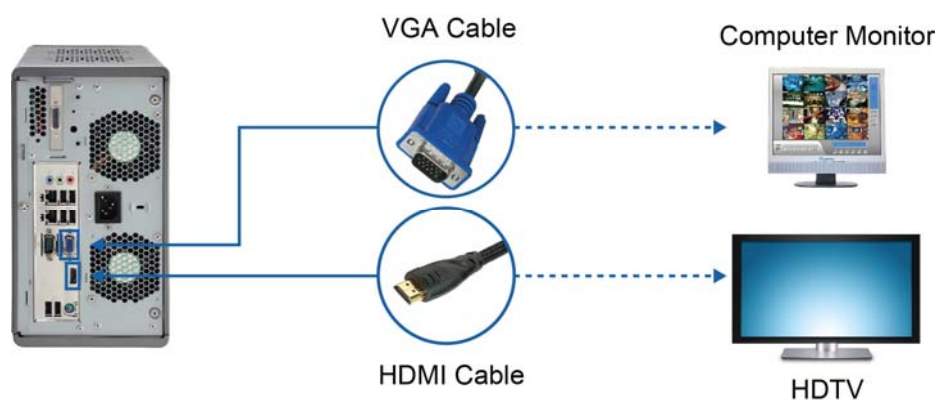
The GV-IR Remote Control provides easy control of the GV-Tower DVR/NVR System and GV-Tower VMS System. Its receiver is a built-in device.

For details, see *GV-IR Remote Control User's Manual* (GV-Desktop > **Program** button > **User Manual**).



Connecting to 2 Monitors

You can connect the 2 monitors to the ports labeled below on the back panel of the GV-Tower DVR/NVR System and GV-Tower VMS System. Here we use GV-Tower DVR System as the example.



1.4 Recommended Hard Drive

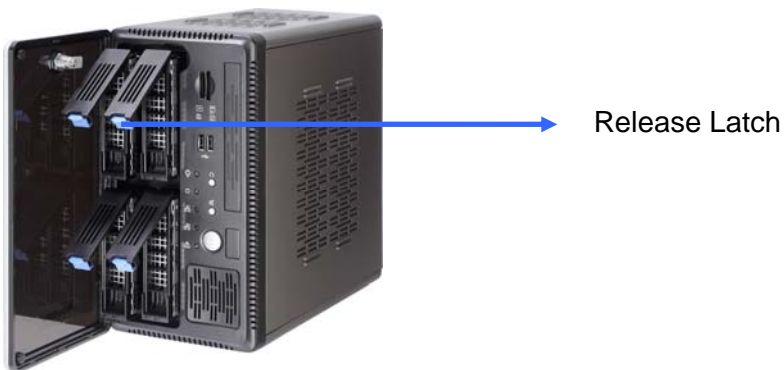
For system efficiency, we recommend the following enterprise level hard disk drives. Avoid using desktop level or green HDD which may affect system efficiency.

- WD RE series
- Seagate Constellation ES.3 series
- HGST Ultrastar series

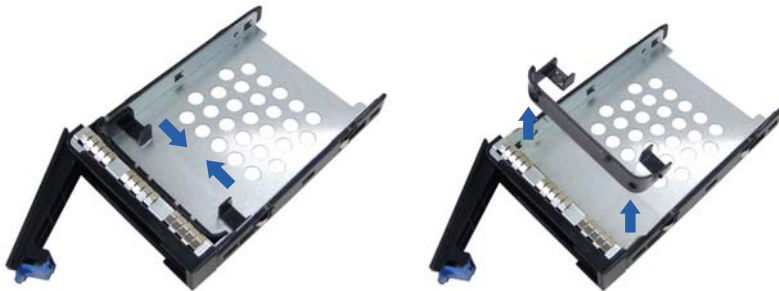
2. Install the Hard Drive

The GV-Tower DVR/NVR System or GV-Tower VMS System uses SATA hard drives for video and audio data storage. Before recording, ensure to install your hard drives. Follow the below steps to install the hard drive.

1. Press the release latch. The drawer handle pops up.



2. Pull out the drive drawer.
3. Remove the plastic carrier from the chassis.



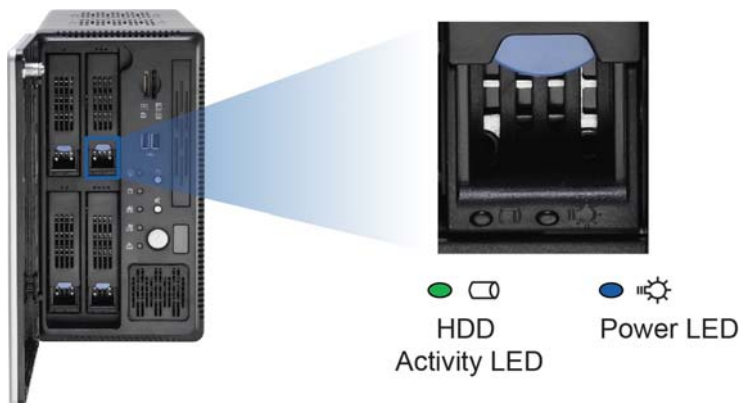
4. Insert the hard drive in the drawer.



- Secure the hard drive with the 4 screws, and make sure all screw heads flush with the surface.



- Put the drawer back in the drive bay of the GV-Tower DVR/NVR System or GV-Tower VMS System, and push the latch until it locks.
- When the Power LED on the drawer shines blue, the hard drive is now ready to use.



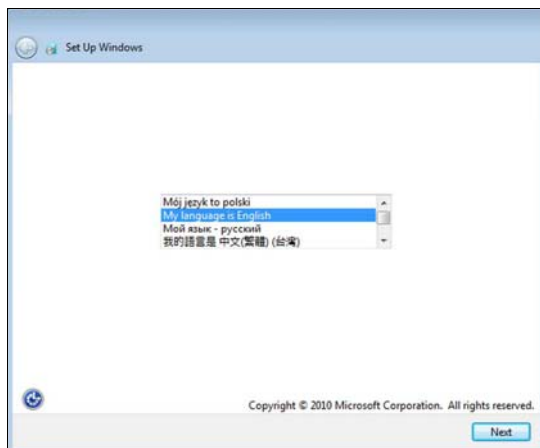
- To format the hard drive, see *3.3 Formatting the Hard Drive in GV-Tower System User's Manual* (GV-Desktop > **Program** button > **User Manual**).
- To add the hard drive to the recording path, see *3.4 Adding the Hard Drive to the Recording Path in GV-Tower System User's Manual* (GV-Desktop > **Program** button > **User Manual**).

3. Turn On the Power

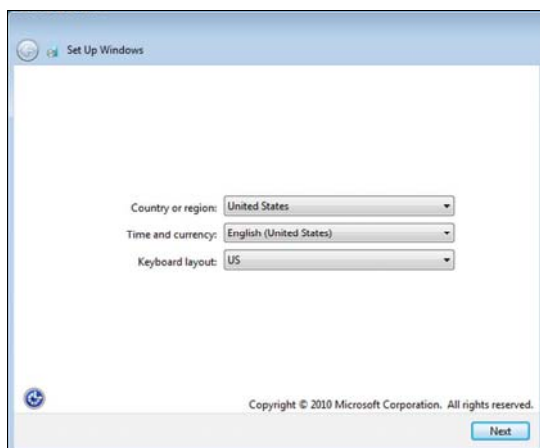
3.1 Windows Setup Installation

The Windows setup is preparing your computer for first use.

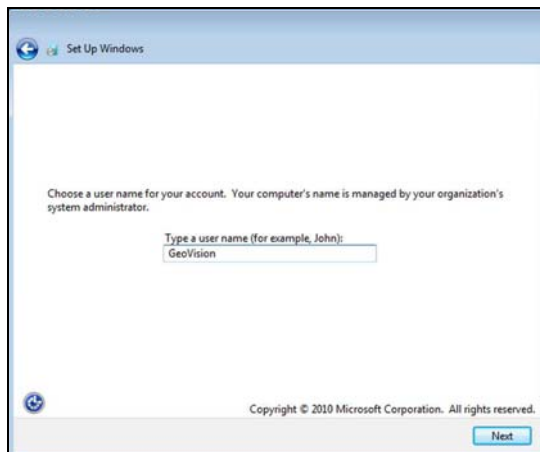
1. After the Windows starts, the following screen pops up. Select your language and click **Next**.



2. Select your country or region, time and currency and keyboard layout. Then click **Next**.



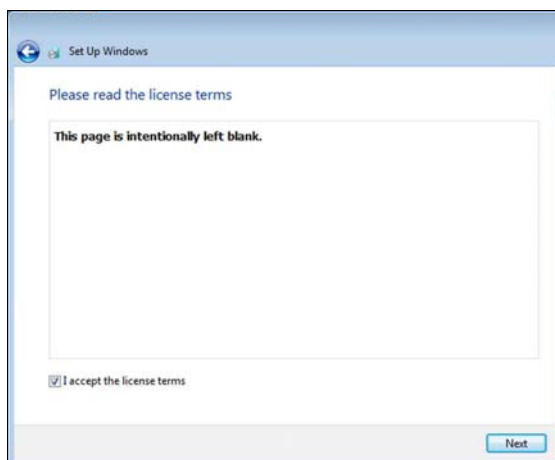
3. Type a user name for your account and then click **Next** to continue.



4. It is recommended that you create a password for your account and then click **Next** to continue.



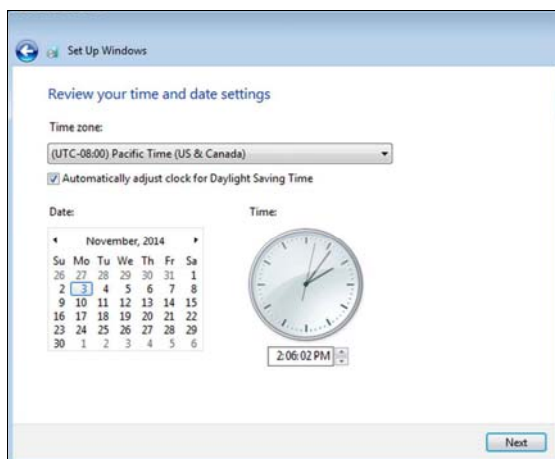
5. Since no license terms are specified, the page is left blank intentionally. Select **I accept the license terms** and click **Next**.



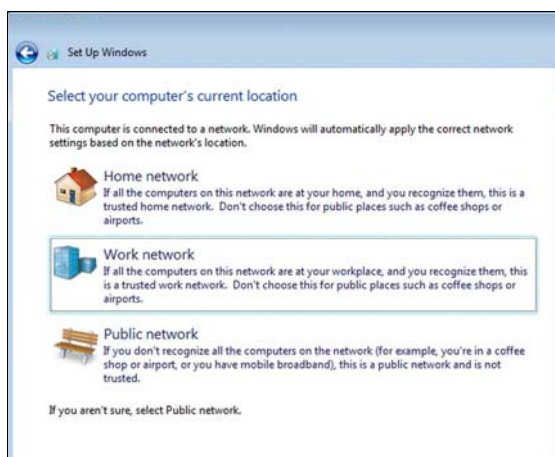
- You are suggested to select **Ask me later** to disable Windows automatic update. Selecting the other two options may generate temporary files and result in wasting the internal disk space.



- Select your time zone, date and time and click **Next**.



- You are recommended to select **Work network** in the screen below to disable the network management share functions for security reasons.



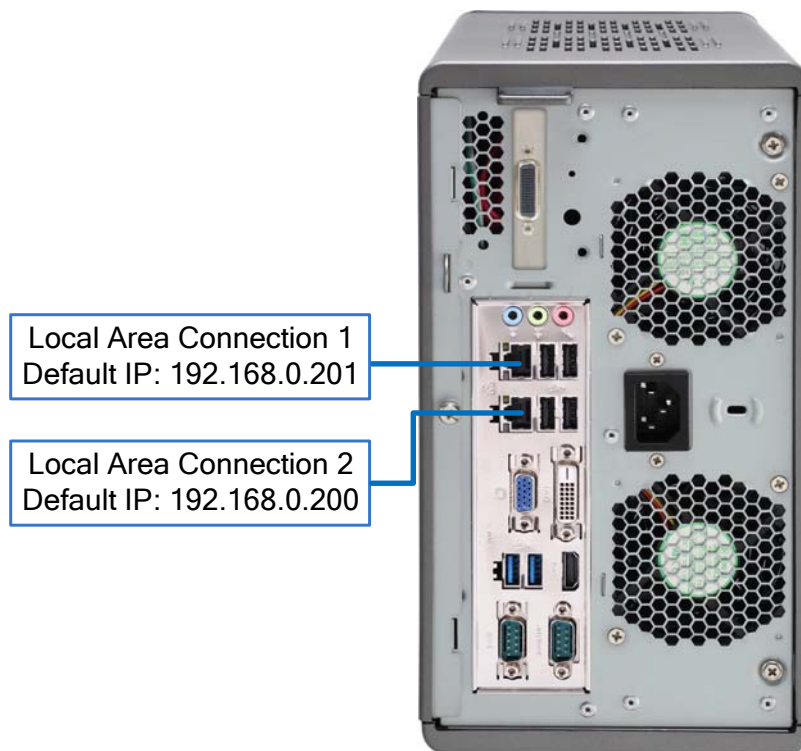
When the above setup process is complete, Windows will finalize your settings automatically in the background and restart.

3.2 Configuring the IP Address

GV-Tower DVR/NVR System and GV-Tower VMS System support remote monitoring, control and configuration over a network connection. The following default IP addresses will automatically be assigned.

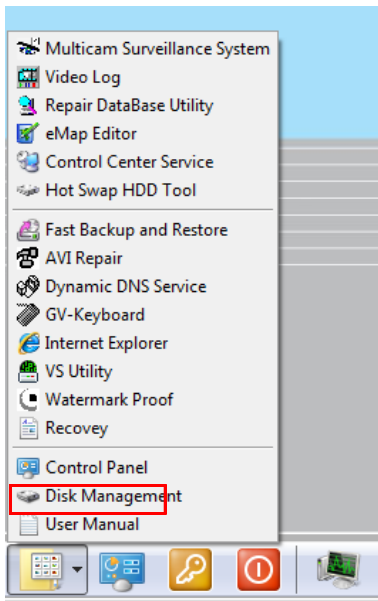
- **Connection 1: 192.168.0.200**
- **Connection 2: 192.168.0.201**
- **Default Subnet Mask: 255.255.252.0**

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

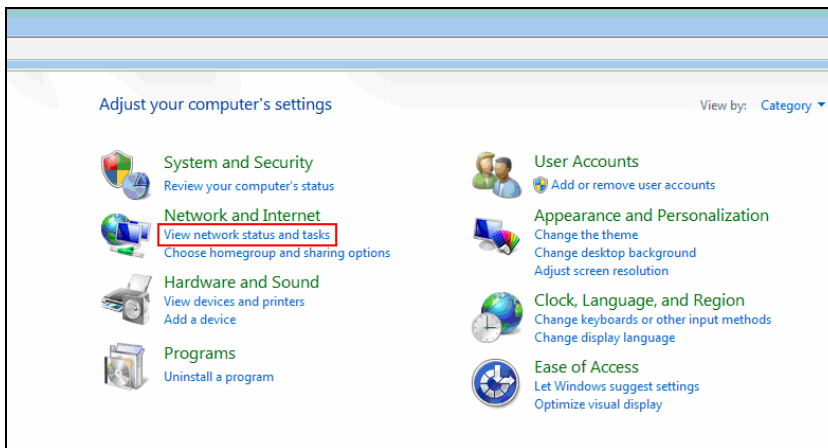


To change the above default IP addresses, follow the steps below.

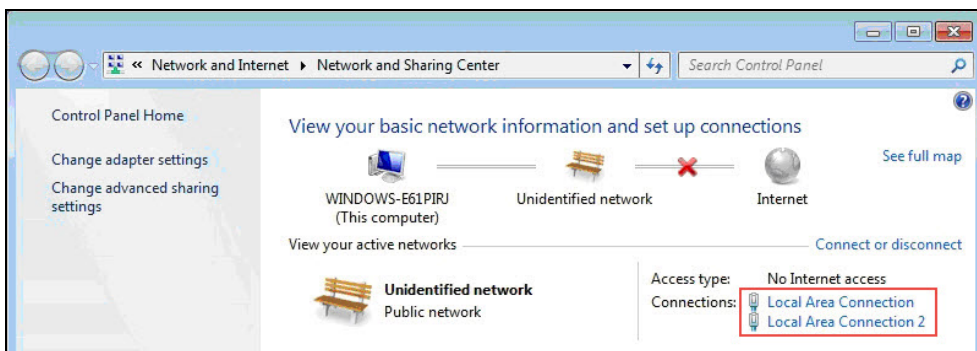
1. On the GV-Desktop, click the **Programs** button, and select **Control Panel**.



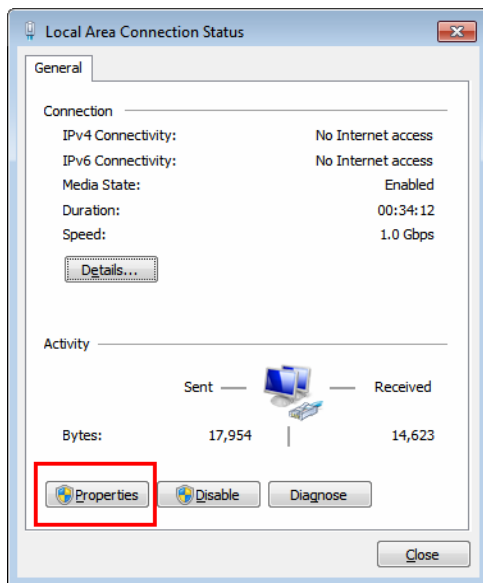
2. Type the ID and password. The default ID and password are "0000". The Control Panel window appears.
3. Under Network and Internet, click **View network status and tasks**.



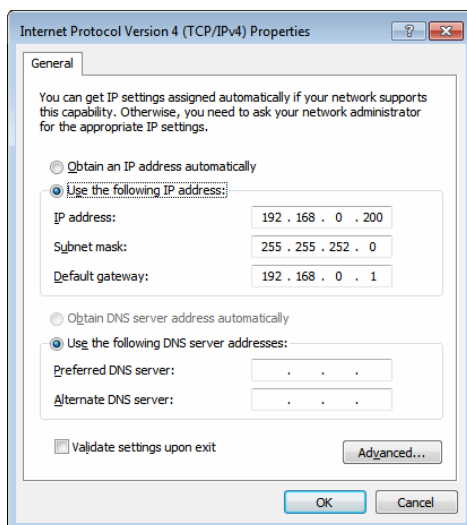
4. Under Connections, select the **Local Area Connection** you want to configure.



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



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.




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

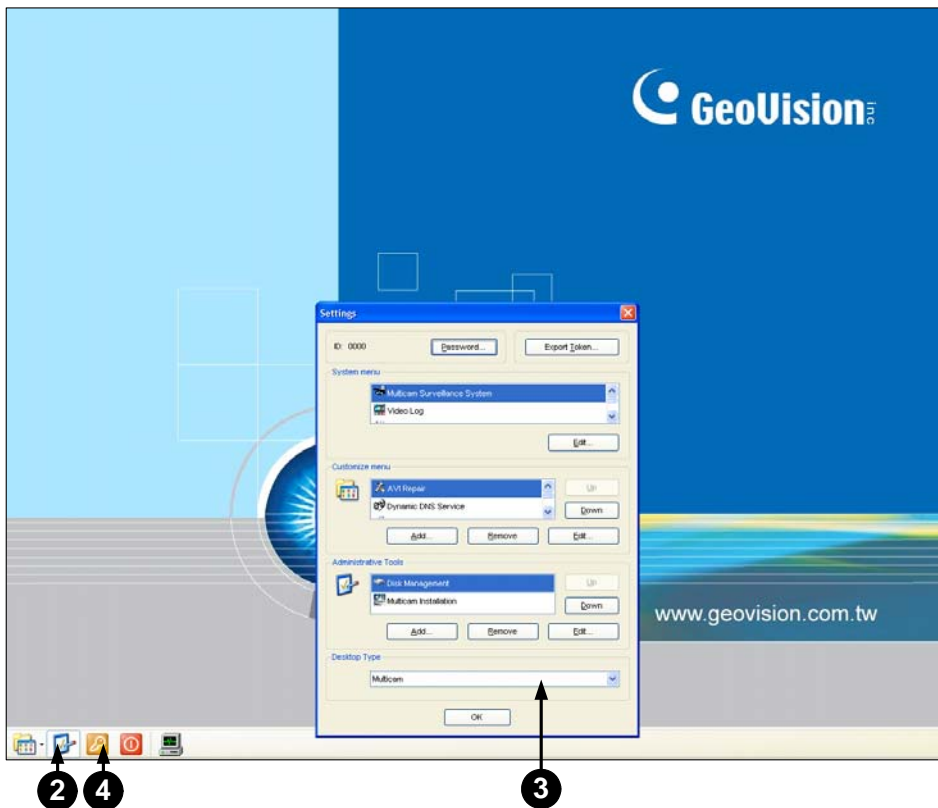
3.3 Exiting to Windows

GV-Tower DVR/NVR System and GV-Tower VMS System is protected by GV-Desktop that is limited to run the selected programs. If you need to exit to Windows desktop, follow these steps.

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

- GV-DVR/NVR: 
- GV-VMS: 

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.



The GV-Desktop

4. GV-Tower DVR/NVR System

4.1 Main Screen



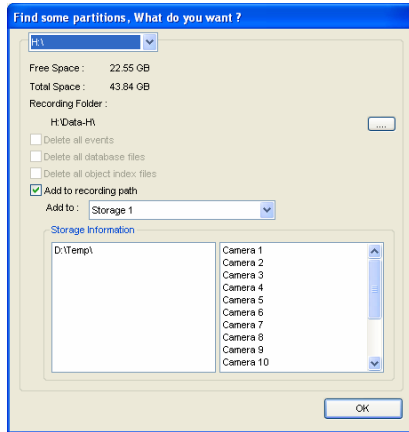
No.	Name	No.	Name
1	Logout / Exit / Minimize	8	Start/stop screen rotation
2	Select screen divisions	9	Access remote applications
3	Select a camera for full screen mode	10	Camera Name
4	Start/stop recording	11	Date / Time / Storage Space
5	Set up recording schedules	12	Status indicators for remote applications
6	Access system settings	13	Click to call up PTZ Control Panel
7	Access ViewLog to play back video	14	Click to call up I/O Control Panel

4.1.1 Adding Hot Swap Drive to Recording Path

Before recording, you need to add the formatted hard drive to the recording path.

Note: The default recording path for the hot-swap drives starts from D:\

1. On the GV-Desktop, click the Programs button, and select **Hot Swap HDD Tool**.
2. If a hard drive is already inserted, right-click it in the MediaMan Tools window, select **Add for recording**, and then select the storage group from the drop-down list.
3. If a hard drive is not inserted, follow these steps:
 - A. Insert a hot-swap hard drive or plug a portable hard drive to the GV-Tower NVR/DVR System. This dialog box appears.



- B. Select **Add to recording path**, and select the storage group from the drop-down list.
4. Click **OK** to automatically configure the hard drive to the recording path.
5. In the MediaMan Tools window, if the hard drive is successfully added to store data, its Status field should display “Standby”.

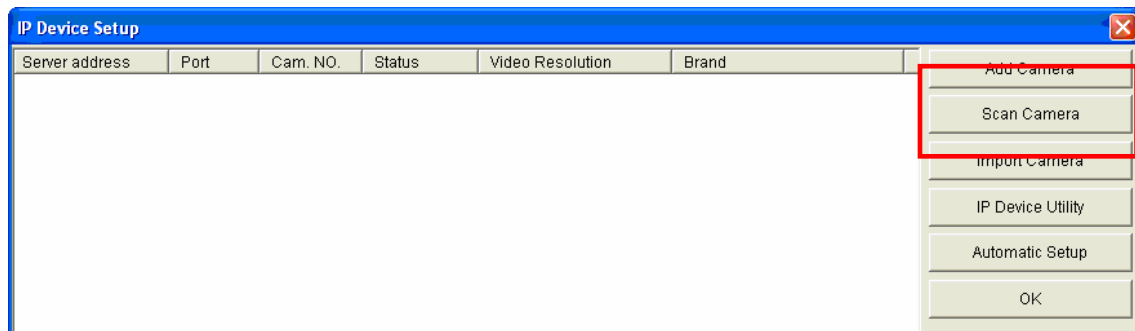


6. To add another formatted hard drive for storage, repeat the above steps.

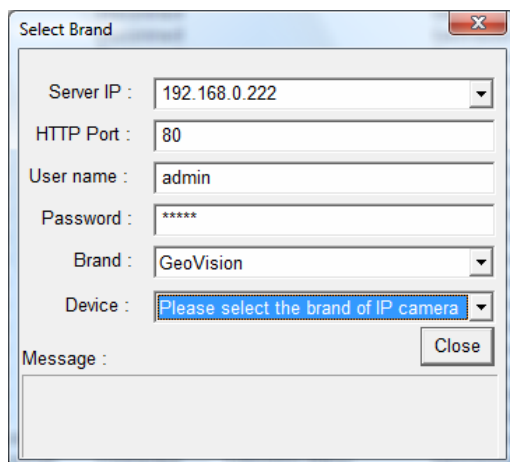
4.1.2 Adding IP Video Devices

The procedures for adding an IP camera, Video Server and Compact DVR may vary. The following instructions are the setup procedure for adding an IP camera in the system.

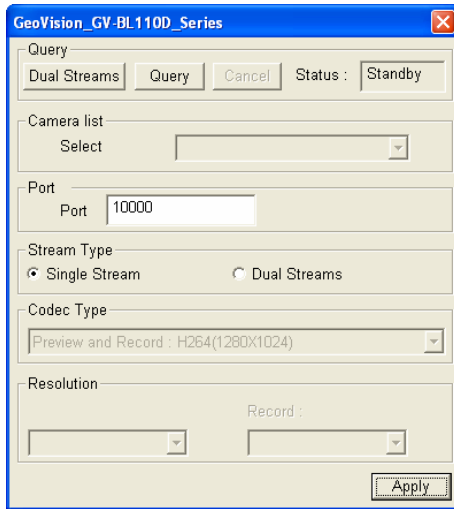
1. On the main screen, click the **Configure** button, select **System Configure** and click **IP Camera Install**.
2. To automatically add an IP camera on the LAN, click **Scan Camera**. To manually set up an IP camera, click **Add Camera** and follow the steps below.



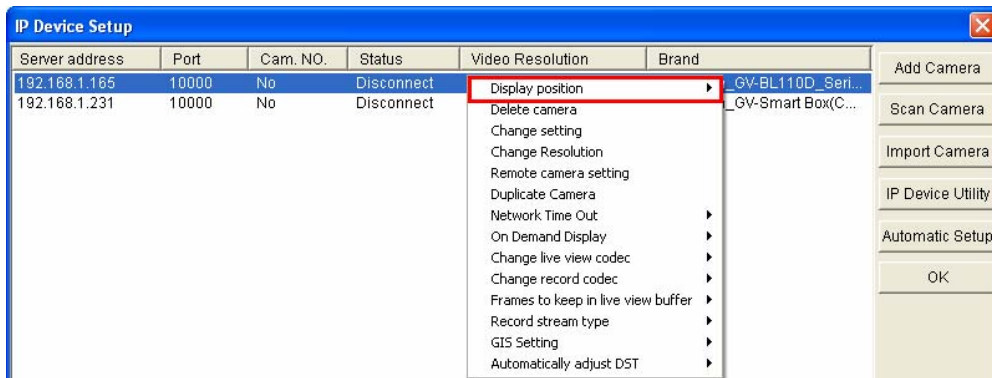
3. Type the IP address, username and password of the IP camera. Keep or modify the default HTTP port 80.



- Select a camera brand and model from the **Brand** and **Device** drop-down lists respectively. This dialog box appears.




- The options in the dialog box may vary depending on camera brands.
 - Dual Streams:** Click the button to apply the default codec and resolution of the GV-IP camera.
 - Query:** Use the current codec and resolution setting on the GV-IP camera.
 - Camera list:** Select a camera number.
 - Port:** Keep or modify the default video streaming port 10000.
 - Stream Type:** You may have the option of single or dual streaming depending on camera models.
 - Codec Type:** You may have different codec options depending on camera models. If the selected camera supports dual streaming, the preview codec and recording codec can be set differently.
 - Resolution:** Select the resolutions for preview and recording.
- Click **Apply**. The IP camera is added to the list.
- Right-click the camera and select **Display position** to map the camera to a channel.



8. The Status column now should display "**Connected**". Click **OK**.


For details, refer to *Hybrid and NVR Solution*, Chapter 2, *GV-DVR User's Manual* on Software DVD (or GV-Desktop > **Program** button > **User Manual**).

4.1.3 Renaming the Camera

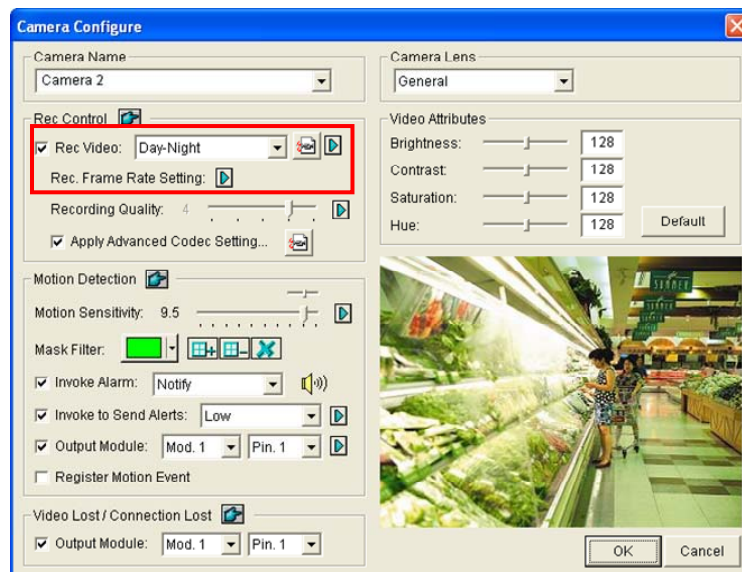
1. Click  on the main screen, click **System Configure** and select **Camera Configure**.
2. In the Camera Name field, type a new name for the camera.
3. Click **OK**.

4.1.4 Choosing Recording Mode

You can set each camera's recording mode individually for Motion Detection, Round-the-Clock or Day-Night.


1. Click  on the main screen, click **System Configure** and select **Camera Configure**.
2. From the Camera Name drop-down list, select one camera.
3. In the Rec Control field, select **Rec Video**, and use the drop-down list to select **Motion Detect**, **Round-the-Clock** or **Day-Night**.
4. If you select Day-Night, click the **Arrow** button after the Rec Video option to set up time frames.
5. Click **OK**.

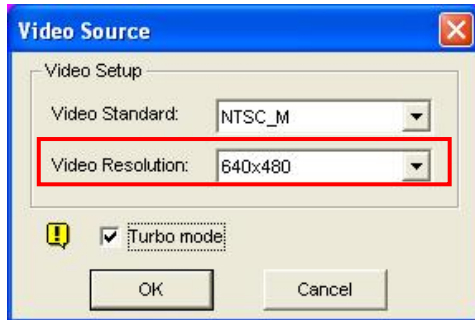
For details on setting camera properties, refer to *Adjusting Individual Camera*, Chapter 1, *DVR User's Manual* (GV-Desktop > **Program** button > **User Manual**).




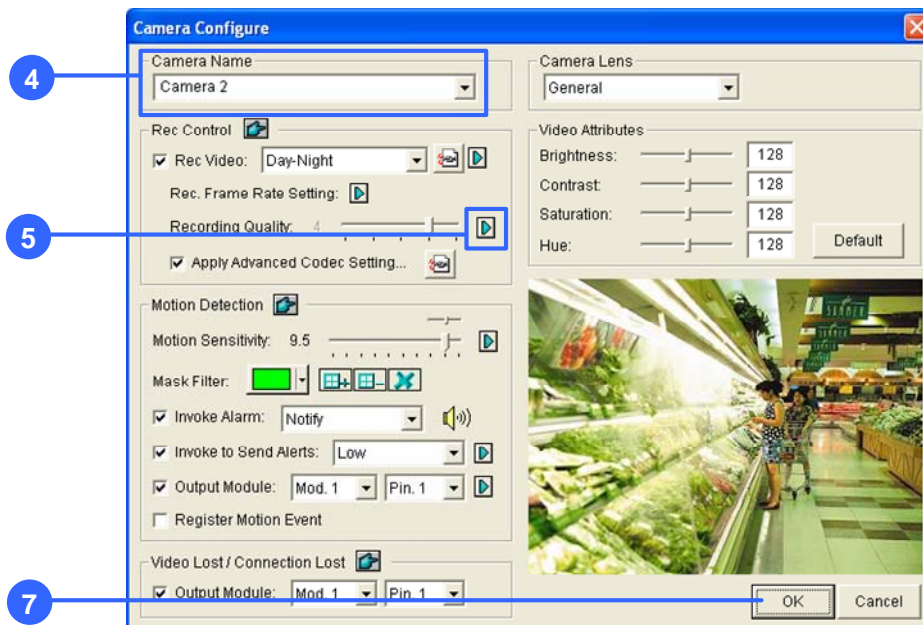
4.1.5 Changing Recording Resolution

You can set each camera's recording resolution individually.

1. Click  on the main screen, click **AV Setting** and select **Video Source**.
2. Select the desired video resolution from the drop-down list, and click **OK**.




3. Click  on the main screen, click **System Configure** and select **Camera Configure**.
4. From the **Camera Name** drop-down list, select one camera.
5. Click the arrow button next to **Recording Quality** to select the desired resolution.
6. Repeat step 4 and 5 to set up each camera.
7. Click **OK**.

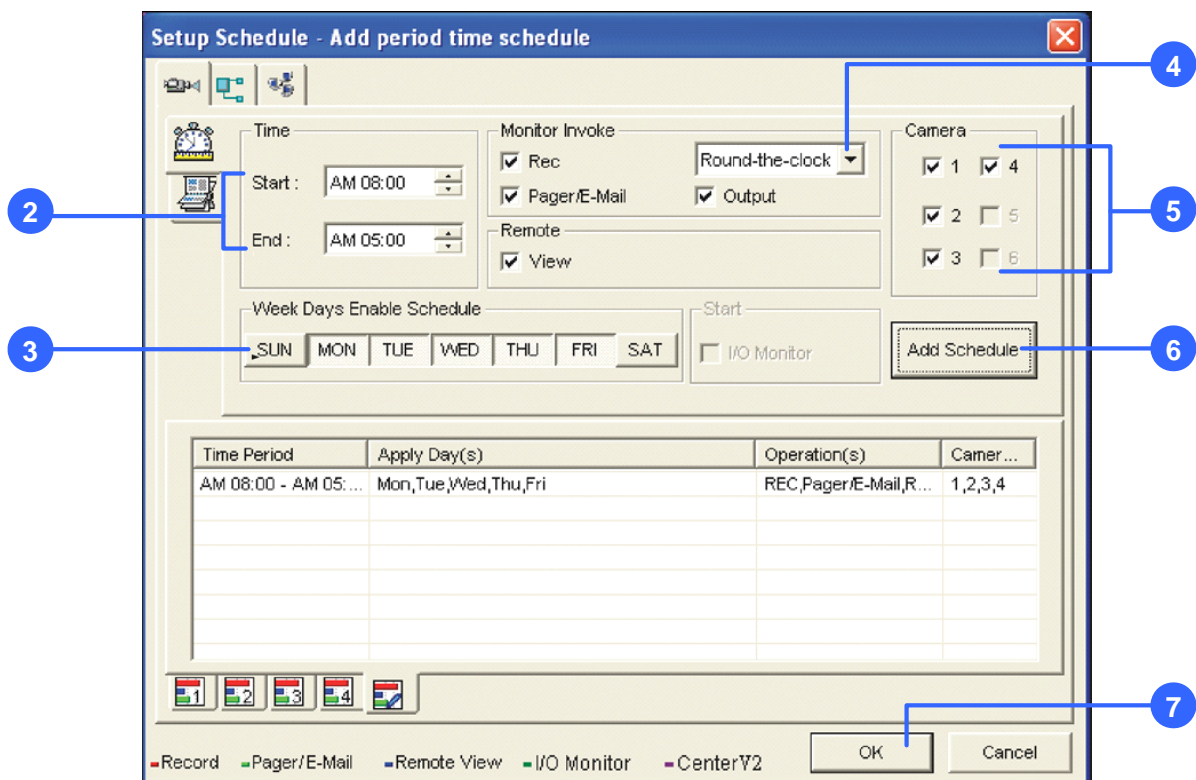


4.2 Set Up a Recording Schedule

You can program recording to turn on and off at a specific time each day.



1. Click  on the main screen, and select **Schedule Edit**.
2. Select or enter the Start and End time of the schedule.
3. Select day(s).
4. Select **Rec**, and use the drop-down list to select **Round-the-Clock** or **Motion Detect** for recording mode.
5. Select camera(s).
6. Click **Add Schedule**.
7. Click **OK**.

For details, refer to *Recording Schedule*, Chapter 1, *DVR User's Manual* (GV-Desktop > **Program** button > **User Manual**).



4.3 Play Back Video

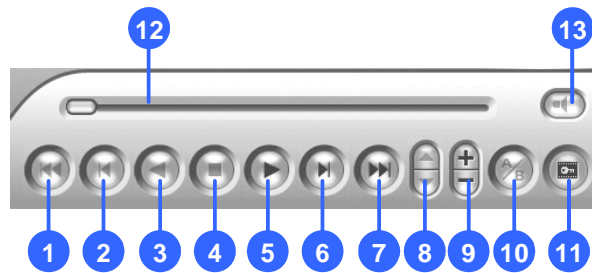
You can play back video recorded during a particular date and time.

1. Click  on the main screen, and select **Video/Audio Log**.
2. Select the camera you wish to view.
3. Select a date folder from the date tree.
4. Select a time from the Video Events list.
5. Click  to begin playback.

For details, refer to *Playing Back on ViewLog*, Chapter 4, *DVR User's Manual* (GV-Desktop > **Program** button > **User Manual**).



Playback Controls





No.	Name	No.	Name
1	Rewind to Beginning	8	Speed up/down
2	Frame-by-Frame Reverse	9	Zoom in/out
3	Rewind	10	A to B Playback
4	Stop	11	Frame-by-Frame / Real Time Playback
5	Play	12	Playback Scroll
6	Frame-by-Frame Forward	13	Audio on/off
7	Forward to End		

Using the Zoom

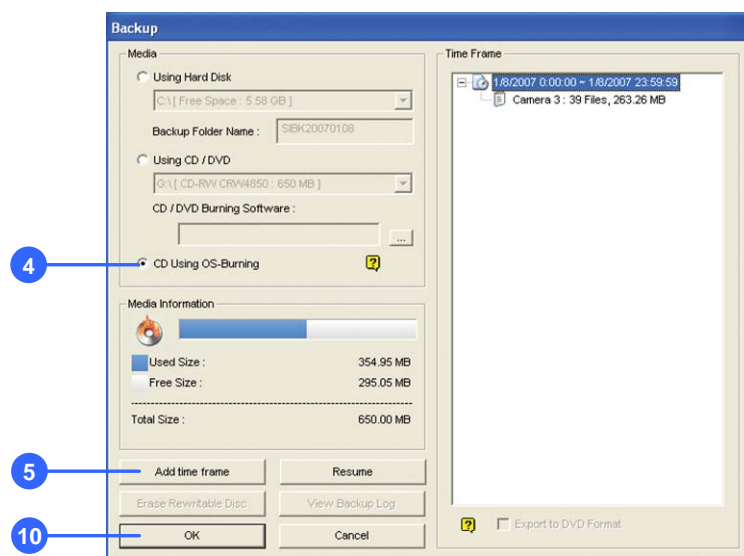
- **Zoom in:** Click the Zoom-in button, and then click on the area you want to magnify. Each click will increase the zoom level.
- **Zoom out:** Click the Zoom-out button, and then click on the image to zoom out. Each click will decrease the zoom level.

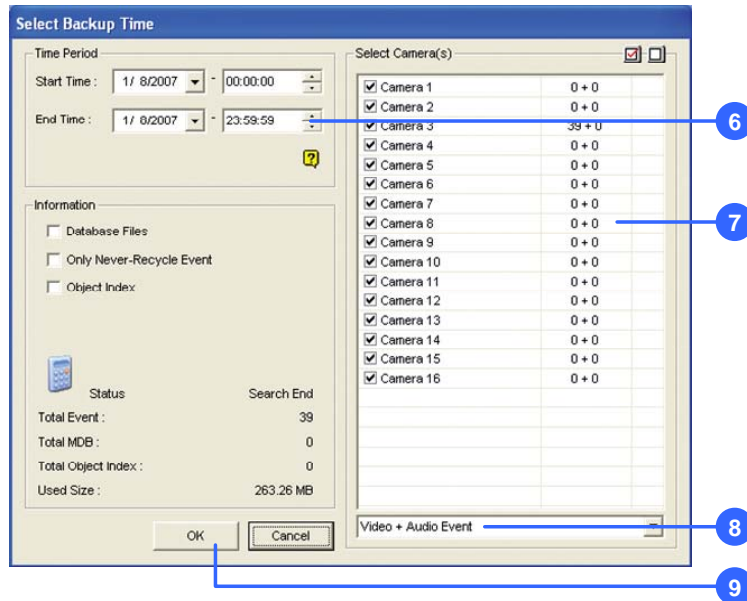
4.4 Back Up Video Files

You can back up video files of the desired time to CD / DVD.

1. Insert the CD / DVD media into the drive.
2. Click  on the main screen, and select **Video/Audio Log**.
3. Click  on the functional panel.
4. Select **CD Using OS-Burning** to burn files with the inbuilt software of Windows.
5. Click **Add time frame**.
6. Enter the Start Time and End Time for backup.
7. Select the desired camera(s) for backup. The number of video and audio files of each camera is indicated respectively, e.g. “Camera 3 39+0” means the camera 3 has 39 video files and 0 audio file.
8. Select the types of events for backup, e.g. video, audio or both together.
9. Click **OK** to add the time frame. You can repeat steps 5-8 to create up to 10 time frames.
10. Click **OK** to start burning.

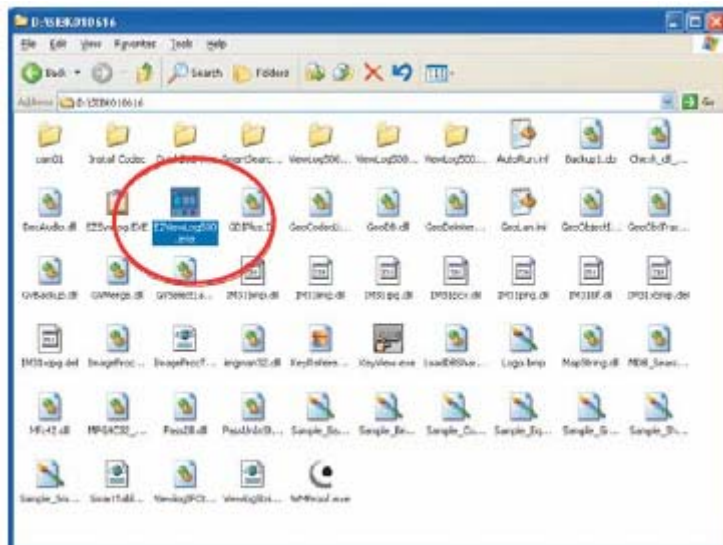
For details, refer to *Backing Up Video Files Using ViewLog*, Chapter 5, *DVR User's Manual* (GV-Desktop > **Program** button > **User Manual**).





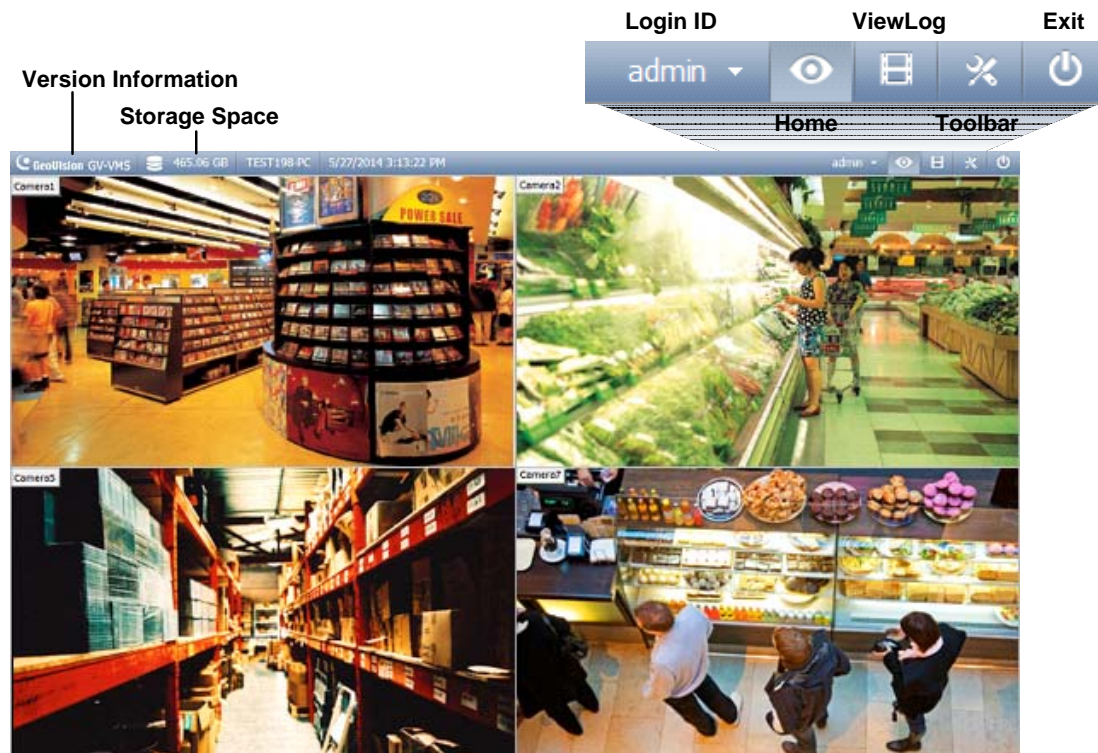
Playback Controls

Open the backup folder, run **EZViewLog500.exe**, and then follow the instructions in the *Play Back Video* section.



5. GV-Tower VMS System

5.1 Main Screen





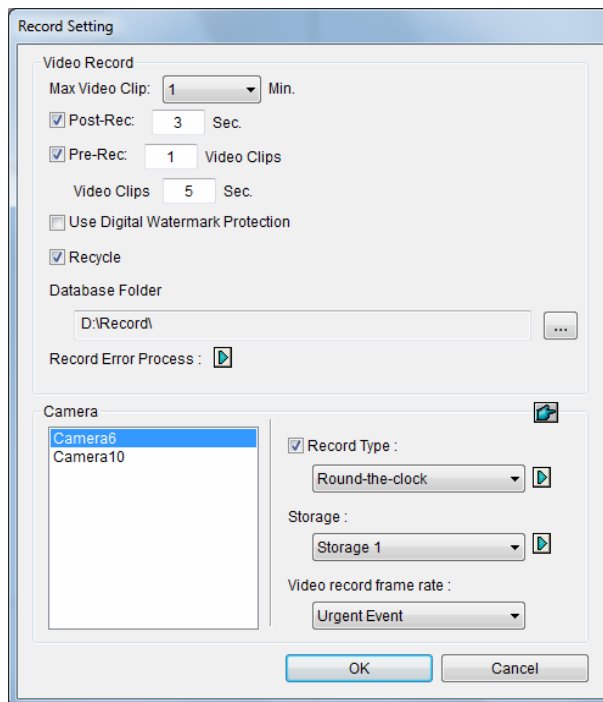
Name	Description
Login ID	Click to manage accounts and passwords for accessing GV-VMS.
Home	Shows the live view of connected cameras.
ViewLog	Shows a timeline of recorded events for playback.
Toolbar	<p>Brings up these options when Home is selected:</p> <ul style="list-style-type: none"> • Monitor: Start / Stop monitoring, I/O monitoring and schedule monitoring • Network: Enable Webcam Server and connection to other GeoVision software. • Tools: Show / hide volume indicator and set up Object Index. • Configure: Set up camera, recording, system, schedule, video processing and I/O devices • Content List: Access live view layout, camera list, I/O device list and Panorama view. <p>Brings up these options when ViewLog is selected:</p> <ul style="list-style-type: none"> • Display Play Panel: Display or hide the ViewLog timeline. This function is grayed out when the Pinned button is selected in the bottom-right corner. • Tools: Manage event search, system log, event backup and event export. • Configure: Apply video effects and text overlay during playback. • Content List: Manage playback layout and access camera list.
Exit	Brings up these options: Minimize and Exit.


5.1.1 Adding Hot Swap Drive to Recording Path

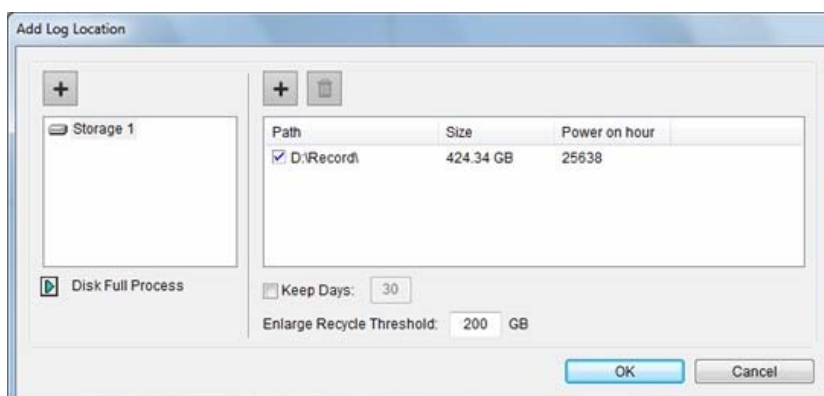
Before recording, you need to add a formatted hard drive to the recording path.

Note: The default recording path for the hot-swap drives starts from D:\

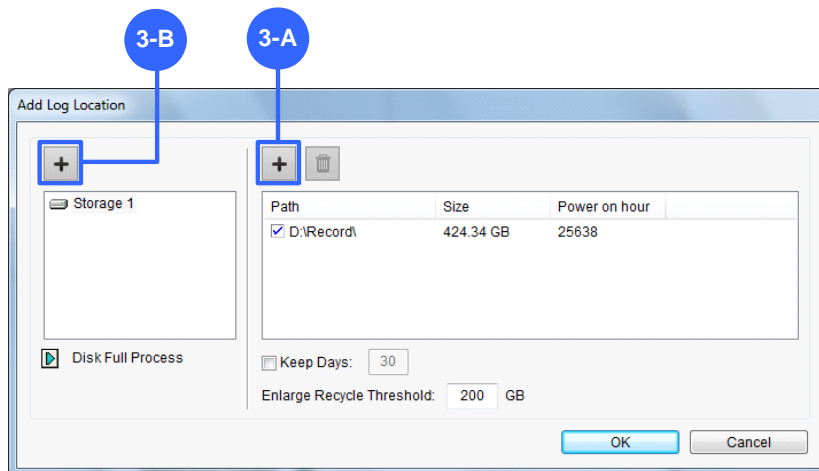
1. On the GV-VMS, click **Home** , select **Toolbar** , select **Configure** , select **System Configure**, and click **Record Setting**. This dialog box appears.



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



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



A. 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).

B. 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.

C. Click **OK**.

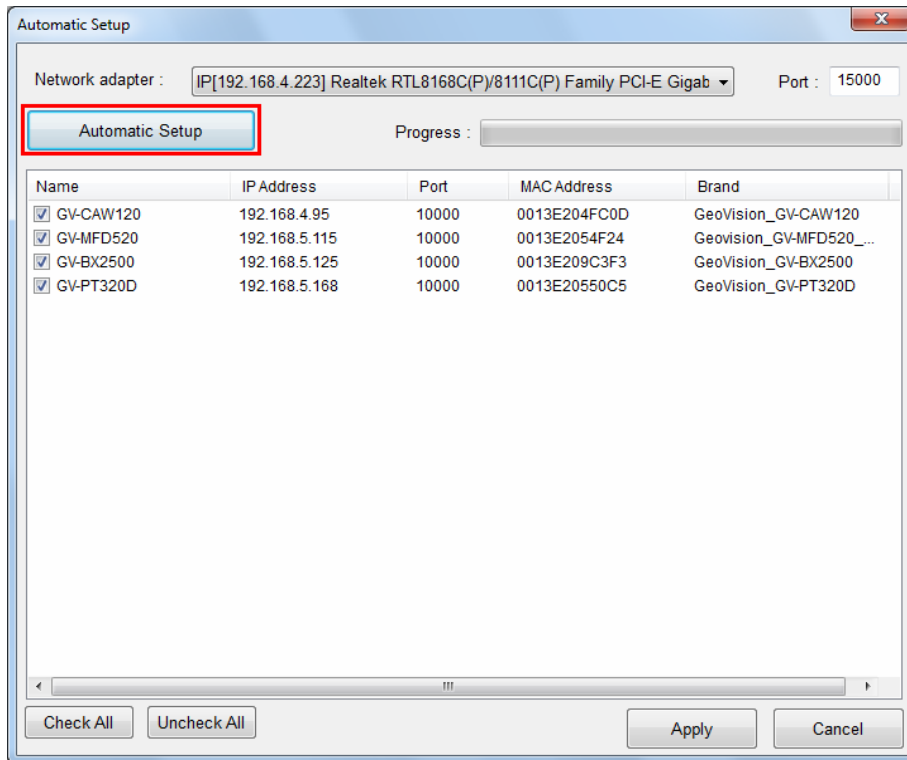
4. To add another formatted hard drive for storage, repeat the above steps.

For the details on setting the recording path, see *Setting Up the Video Storage Location* Chapter 1, *GV-VMS User's Manual* (GV-Desktop > **Program** button > **User Manual**).

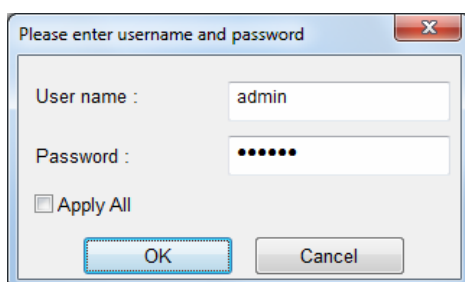
5.1.2 Adding IP Cameras to GV-VMS

The **Automatic Setup** dialog box appears automatically.

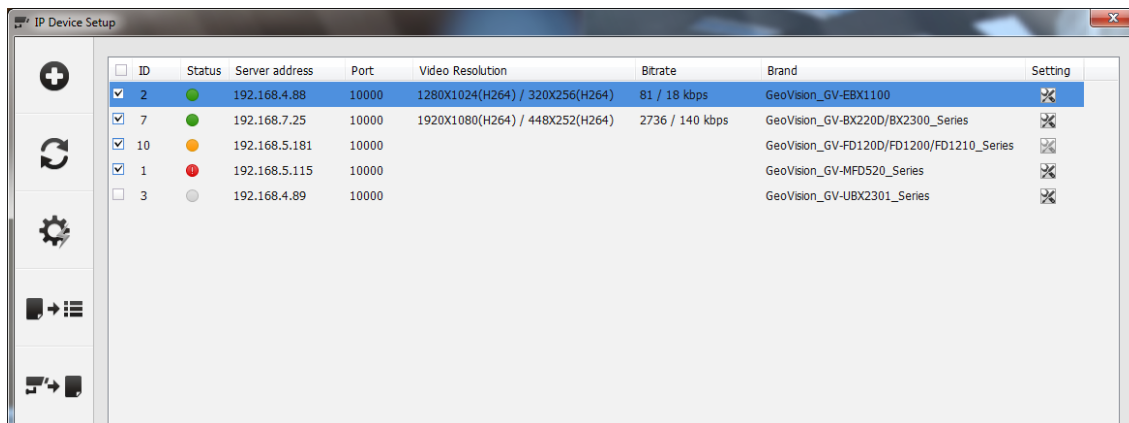
1. Click **Automatic Setup** to see the list of IP cameras detected on the LAN.









2. The default login information for cameras is **admin / admin**. Double-click the camera to type different ID and password in the dialog box below if needed.




3. Make sure the cameras you want to add are selected and click **Apply**. The cameras added are now listed in the IP Device List.



Status icons available:

-  **Connected** The camera is connected.
-  **Connecting** GV-VMS is trying to connect to the camera.
-  **Connection Failed** Unable to connect to the camera. Place the cursor on the red icon to see the error message.
-  **Inactive Camera** The camera is inactive. Click the checkbox to connect.
-  **Started Monitoring** The camera is under monitoring.
-  **Pre-Rec Enabled** Pre-recording is enabled.

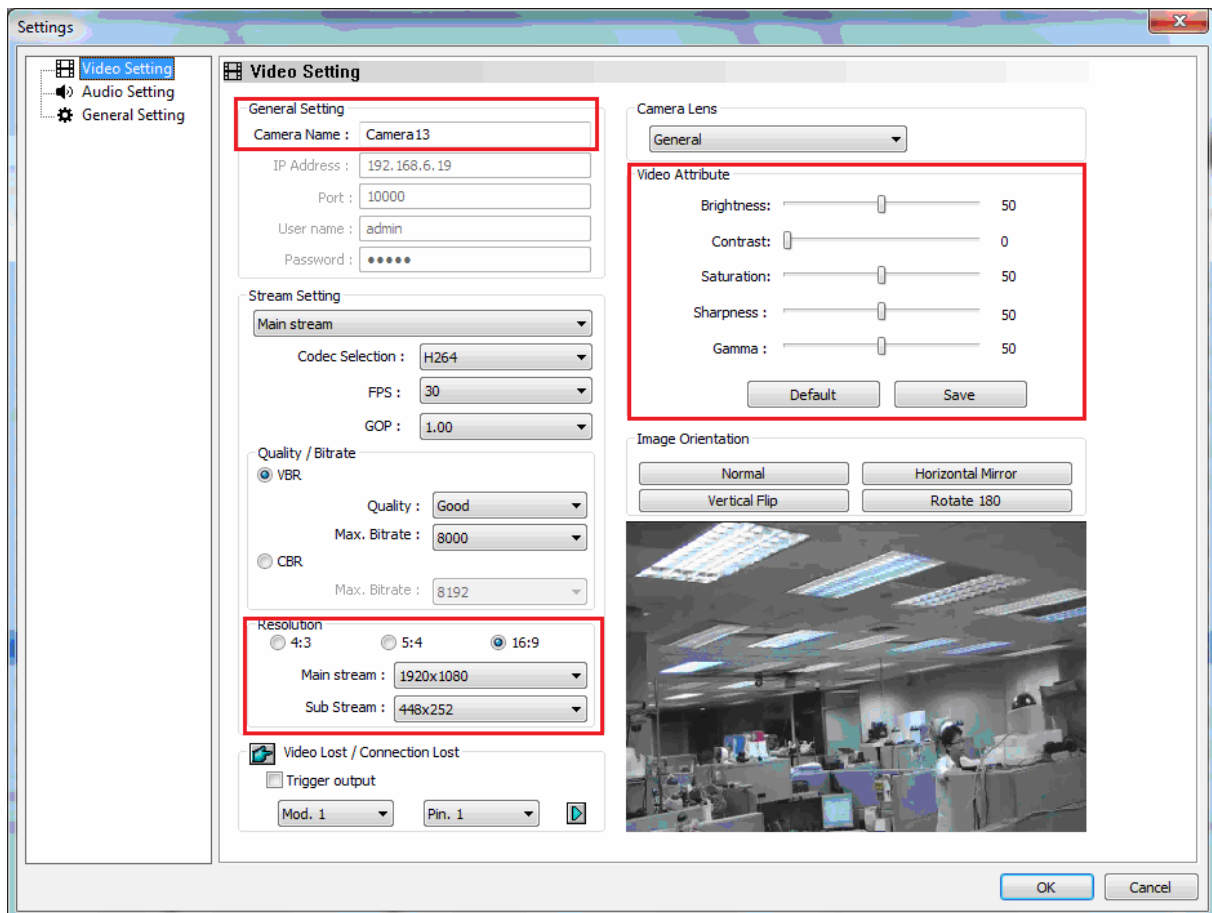
4. To adjust camera settings, click the **Setup** button  of a camera. Refer to 3.1 *Configuring the IP Address* for details.
5. Close the dialog box by clicking X on top-right corner. When adding camera for the first time, the cameras will be automatically assigned to the live view grid.

For details, refer to *IP Camera Setup*, Chapter 2, *GV-VMS User's Manual* (GV-Desktop > **Program** button > **User Manual**).

5.2 Configuring Camera Settings





After the cameras are added, you can configure their settings, such as video, audio and other general settings. Click the Setup button of an active camera in the IP Device List (**Home** > **Toolbar** > **Configure** > **Camera Install**).

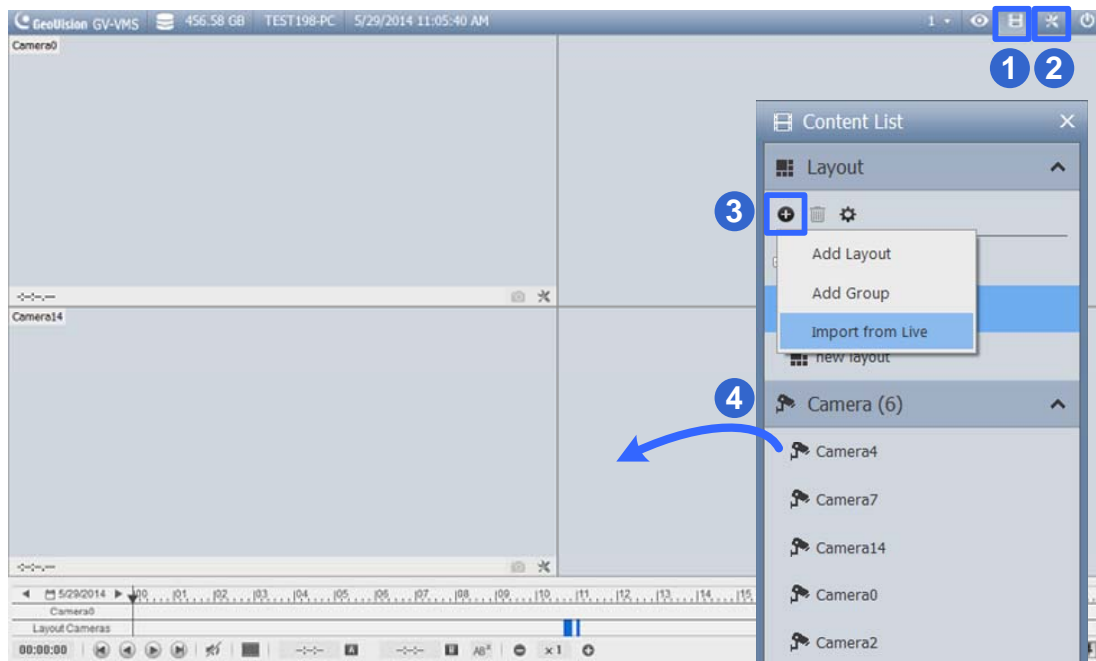
In the Video Setting, you can change the camera name, the display ration and resolution of the videos and adjust video attributes.



For details, refer to *Configuring Individual IP Cameras*, Chapter 2, *GV-VMS User's Manual* (GV-Desktop > **Program** button > **User Manual**).

5.3 Play Back Recorded Videos

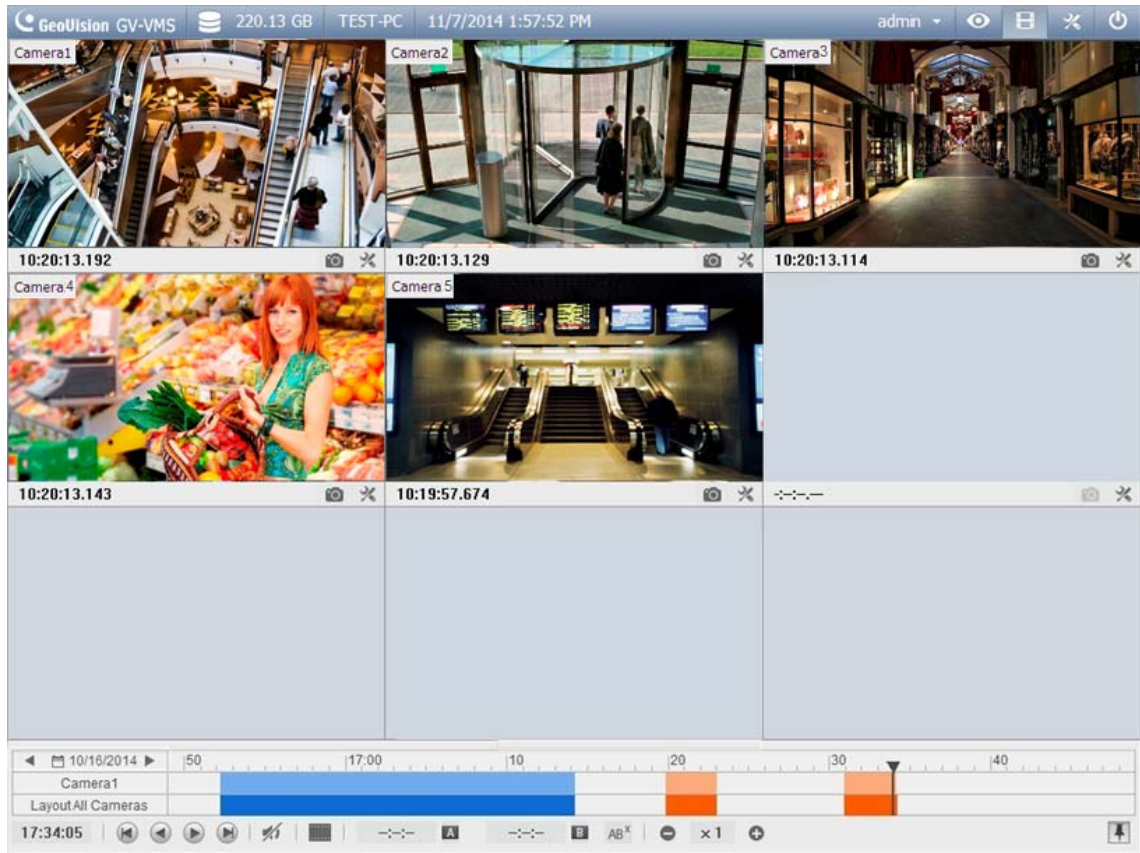
- 1 To access recorded videos, click the **ViewLog** icon  in the top-right corner.
- 2 Open the Content List by clicking **Toolbar**  and selecting **Content List** .
- 3 Click **Layout** in the Content List, click the **Add** button , and select **Add Layout** to create a new layout or select **Import from Live** to import existing layouts from live view.
- 4 You can also drag camera you want to play back onto the playback screen from the Content List if needed.



- 5 On the left of the timeline, select a date.





- Click on the timeline to select a time with video recordings. You can scroll the mouse to zoom in and out on the timeline.



- Use the playback control buttons to play back recordings. Place the cursor on the buttons to see the name of the function.

5.4 Back Up Recorded Videos

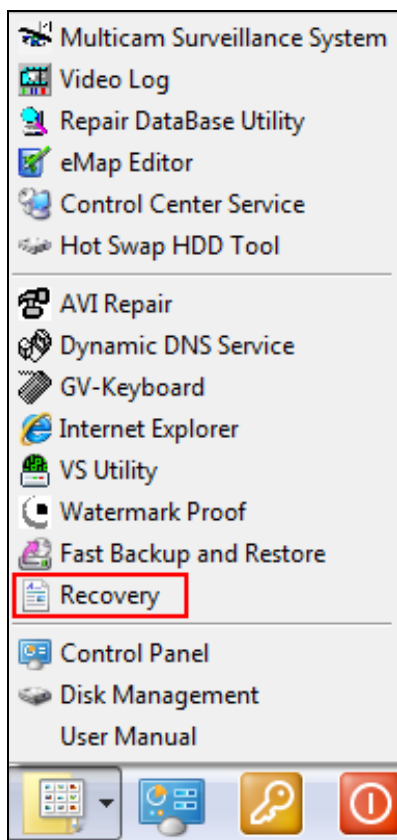
- 1 In ViewLog, click **Toolbar** , select **Tools**  and select **Backup**. This dialog box appears.
- 2 Click **Add time frame** to select the time period and the cameras you want to back up and click **OK**.
- 3 Select a media to back up the recorded files using **Hard Disk**, **CD / DVD / BD** or **OS-Burning**. The supported software for burning to CD / DVD / BD is Nero Burning Rom version 9 or before.
- 4 To include the ViewLog player to the backed up files, select **Include Player** at the bottom-right of the dialog box. If no player is selected, you can only play the recordings using computer installed with GV-VMS or GeoVision video code.

6. Restore System

You can restore preinstalled files once they are damaged by running the recovery from the hidden partition. To restore the operating system and all preinstalled software, follow the steps below.

Note: After recovery, you need to re-install all settings and passwords. But the recovery will not delete your recording files saved in the other partitions since it only reformats the partition C.

1. On the GV-Desktop, click the **Program List** button and select **Recovery**. The system will run this command by itself.



2. Restart the GV-Tower DVR/NVR System or GV-Tower VMS System.
3. Press **F11** button several times to avoid accessing the GV-Tower DVR/NVR System or GV-Tower VMS System.

4. When the below screen appears, click the **Recovery** button. to restart the Windows.



For how to change video standard after recovery, see section 3.12.2 in *GV-Tower System User's Manual* (GV-Desktop > **Program** button > **User Manual**).