



GV-IP Device Utility

GV-IP Device Utility detects any GeoVision devices within the same LAN. It allows you to quickly set the IP address, update firmware, export or import device settings, and reboot IP devices, as well as monitor the power status of PoE switches.

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IMPORTANT

If you are a first-time user of GeoVision products, it is essential to use the GV-IP Device Utility to proceed with the following two settings:

1. Set up a unique username and password for your device. See [3. Creating Login Credentials](#).
2. Update the firmware of your device to the latest. See [4. Updating Firmware](#).

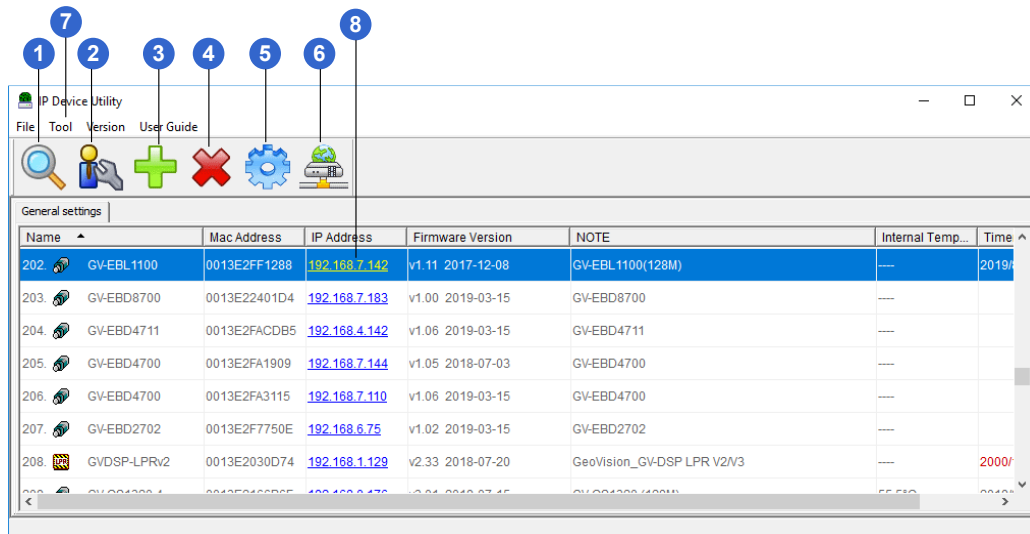
1. Installing GV-IP Device Utility

Download and install [GV-IP Device Utility](#) to a PC under the same LAN as your devices:

Once started, the utility will automatically search for GV devices connected in the same LAN.



2. The GV-IP Device Utility Window



The controls in the window:

No.	Name	Description
1.	Search	Searches for any GV devices under the same LAN.
2.	Auto Set IP Address	Automatically assigns unused IP addresses on the LAN to the devices with the same username and password.
3.	Add	Adds a GV device to the list.
4.	Delete	Deletes a device from the list.
5.	Configure	Specifies a network adaptor.
6.	Check the Latest Firmware	Lists all GV devices with newer firmware available. Select the desired devices, with the same ID and password, from the list to install firmware updates together. See 4. Updating Firmware .
7.	Tool (on the menu bar)	Contains these features: Temperature Monitoring (sets up a value for temperature monitoring, by which the Internal Temperature of a device will be shown in red when its temperature exceeds the value), Show cameras connected by GV-VMS/Recording Server (displays the devices connected to GV-VMS/GV-Recording Server in green), GV-Software Camera Setting (see 7. Assigning Camera Channels for GV-DVR / NVR / VMS for details), Export device list for optional functions and Import optional functions to device list (for optional ACC audio function), UPnP function (enables and disables UPnP on the devices with the same username and password)



8.	IP Address	Click on the field to access these features: Web Page (directs to the Web interface of a device), Live View (accesses the live view of a device), Camera Adjustment (adjusts live images and quality), Focus Value (adjusts image clarity of certain IP cameras), Configure (accesses advanced settings). Note: The features available vary among models of GV devices.
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Note:

1. **Listen Port in Temperature Monitoring** must match with Camera's VSS Port.
 2. **Show cameras connected by GV-VMS/Recording Server** only supports GV-Recording Server V1.3.0.0, GV-VMS V15.10 or later versions.
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3. Creating Login Credentials

When purchasing new GeoVision devices, or after resetting them, you must create a login username and password.

Note:

1. Certain devices do not support this feature to create login credentials using GV-IP Device Utility.
 2. If your device has default login credentials (admin/admin) already, for safety concerns, it is strongly recommended to change the default password by double-clicking the device in the list > the **Other Settings** tab > **Change Password**.
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1. Double-click on a device in the list. This dialog box appears.

MacAddress: 0013E2F90131 IP Address: 192.168.0.91

User Login

User Name: admin VSS Port: 10000

Password: *****

Set IP Address | **Create User Account**

New account: []

New Password: []

Confirm New Password: []

Password strength: [Weak]

For safety reasons, the password must be at least 8 characters long. It must contain three character categories among the following: uppercase letters (A-Z), lowercase letters (a-z), digits (0-9), and special characters (!@_+[]=-).

Upgrade all devices


OK Cancel

2. Click the **Create User Account** tab and type a username and password. The password must meet the password strength required.
3. Optionally, click **Upgrade all devices** to apply the created username and password to the devices that do not yet any login credentials.



4. Updating Firmware

To install the latest firmware, use either of the two methods:

- A. **Online Update (Internet):** Click **Check the latest firmware**  on the toolbar to detect and install firmware updates. See [section 4.2](#) for details.
- B. **Manual Update:** Click on the IP address of your device in the list, select **Configure**, click the **Firmware Upgrade** tab, and locate the latest firmware downloaded from GeoVision website to update. See [section 4.3](#) for details.

4.1. Important Notes Before Firmware Update

Before updating firmware, read through these important notes:


- Stop camera's monitoring function.
- Stop all remote connections, such as connection to GV-VMS.
- During firmware update:
 - A. Ensure the power supply is not interrupted.
 - B. Do not unplug the Ethernet cable if it serves as the power source (PoE supported).
- If firmware upgrade fails, restore the device to its default settings.

WARNING: The interruption of power supply during updating causes not only update failure but also damages to the device. In this case, please contact our sales representative and send your device back to GeoVision for repair.



4.2. Online Update (Internet)

For online firmware update, your devices must be accessible from *Internet*.

1. Click **Check the latest firmware**  on the toolbar to detect firmware updates.
2. Select the desired devices in the list and click **Upgrade**.
3. You will be prompted to enter a username and password. The firmware updates will be applied to the selected devices, with the same username and password you entered.

Note:

1. **Certain devices do not have default login credentials (admin/admin).** For these devices, you must create a user account before firmware update. See [3. Creating Login Credentials](#) for details.
 2. **Certain devices do not support online firmware update.** For these devices, see [4.3 Manual Update](#) for details.
 3. **Certain devices have intermediate firmware.** After completing the firmware update, it is recommended to click **Check the latest firmware** again to verify whether a newer version is available for your device and perform an additional update if necessary.
 4. The error message “Unable to download the firmware file” will appear if a slow Internet connection causes the download to fail. In such circumstances, re-run the online update procedure to resume the download.
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4.3. Manual Update

1. Double-click the desired device in the list and select the **Firmware Upgrade** tab.
2. Click **Browse** to locate the firmware file downloaded from [GeoVision website](#).
3. Type the username and password of the device under **User Login**.
4. Optionally, select **Upgrade all devices** to update the firmware of the devices, of the same model with an identical username and password, in the list.
5. Click **Upgrade**.

MacAddress: 0013E211FE8B | IP Address: 192.168.100.15

User Login

User Name: admin | VSS Port: 10000

Password: []

Set IP Address | **Firmware Upgrade** | Device Name | Export settings | Import settings | Camera []

Version: [] | Browse...

Upgrade all devices

5. Advanced Settings

Double-click a device in the list to open the setting dialog box. Click the different tabs described below to access advanced settings. Before you change any settings, make sure to type username and password of the device.

IMPORTANT: The advanced settings available vary among models of GV devices.

MacAddress: 0013E20BE1EF | IP Address: 192.168.5.61

User Login

User Name: admin | VSS Port: 10000

Password: []

Set IP Address | **Firmware Upgrade** | Device Name | Export settings | Import settings | Camera []

IP Address: 192 . 168 . 5 . 61



[Set IP Address] Change the IP address and ports of a device.

[Firmware Upgrade] Update firmware to the latest. See [4.3. Manual Update](#) for details.

[Device Name] Rename a device.

[Export Settings] Export the configuration settings of a device.

[Import Settings] Import a configuration file to the device. You can specify the imported items:

Device Name, General Settings, Password Settings and/or **Network Settings**. The

Upgrade all devices option will import configuration settings to all other devices of the same username, password, model and firmware version.

Note: Export and Import Settings are only compatible with IP devices of the same model and firmware version. Using mismatched devices may result in import failure or abnormal device functionality.

[Camera Adjustment] This tab is only available for GV-IP Cameras.

- **Live View:** Access live images.
- **Camera Adjustment:** Adjust live images and quality settings.
- **Focus Value:** Adjust image clarity. For details, see *Adjusting Image Clarity* in [GV-IPCAM Quick Start Guide](#).
- **Codec Configure:** Change image ratio, streaming codec, resolution, fps, etc. The **Apply settings to all devices** option will apply the settings to all other devices with the same username and password.

[Other Settings]

- **Reboot:** Restart the device.
- **Load Default:** Reload factory defaults of the device including username and password. The **Upgrade all devices** option will reload defaults to all other devices with the same username and password.
- **Sync Time with PC:** Synchronize the date and time with those of a local computer. The **Sync all devices** option will synchronize all other devices with the same username and password.
- **Change Password:** Change the current password. The **Sync all devices** option will synchronize all other devices with the same username and password.



6. Setting GV-PoE Switch

When connecting multiple GV-PoE Switches within the LAN, you can use GV-IP Device Utility to quickly view the PoE power and port status of each connected switch.

Note: The function is only supported by GV-PoE switches with web management functions.

1. Click on the IP address of the desired switch in the list and select **Configure**. This dialog box appears.

Port	Conne...	Power	POE	Host Name	IP Address	Mac Address
1		0.0W	<input checked="" type="checkbox"/>			
2		3.3W	<input checked="" type="checkbox"/>	GV-FER521	192.168.7.84	0013E203466E
3		2.7W	<input checked="" type="checkbox"/>	GV-EBL1100	192.168.7.90	0013E2FF1293
4		0.0W	<input type="checkbox"/>			
5		0.0W	<input type="checkbox"/>			
6		8.9W	<input checked="" type="checkbox"/>			00408CA5064D
7		0.0W	<input checked="" type="checkbox"/>			
8		0.0W	<input checked="" type="checkbox"/>			
9		0.0W	<input checked="" type="checkbox"/>			
10		0.0W	<input type="checkbox"/>			
11		3.7W	<input checked="" type="checkbox"/>	DVR-FD2510	192.168.7.219	0013E2FF0E5C
12		0.0W	<input type="checkbox"/>			
13		0.0W	<input type="checkbox"/>			
14		0.0W	<input type="checkbox"/>			

If a new GV-IP Device is connected with the GV-POE Switch, you must close this dialog box and click the Search button to update the port connection status.

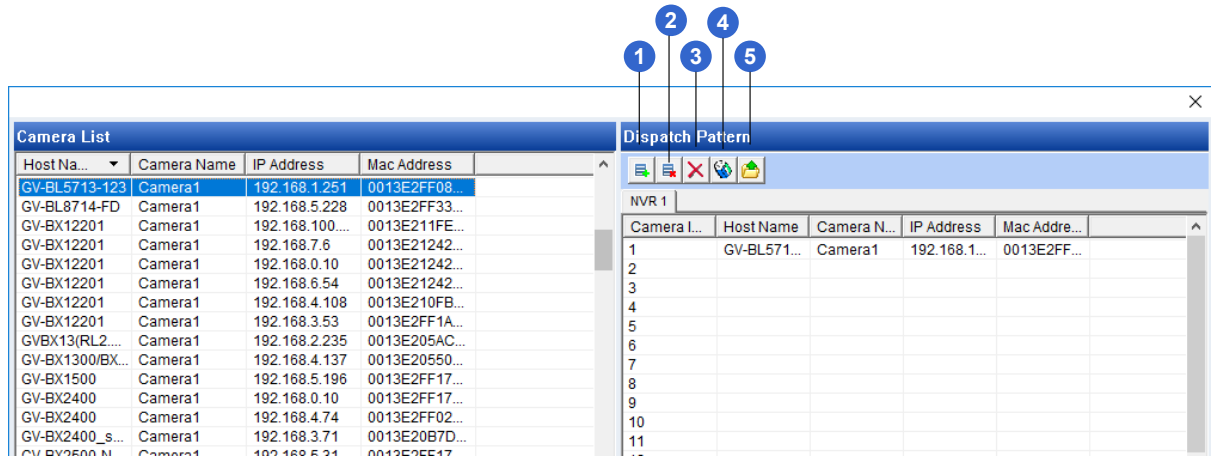
2. To enable or disable PoE for a device connected to the switch, select or deselect the **POE** checkbox.
3. Click **Refresh** to retrieve the port information, and **Apply** to confirm the settings.

Note: If a new device is connected to the PoE switch, close the settings dialog box and click the **Search** button on the toolbar to update its port status.



7. Assigning Camera Channels for GV-DVR / NVR / VMS

To assign a channel to each camera connected to GV-DVR / NVR / VMS, select **Tool** from the menu bar > **GV-Software Camera Setting**.



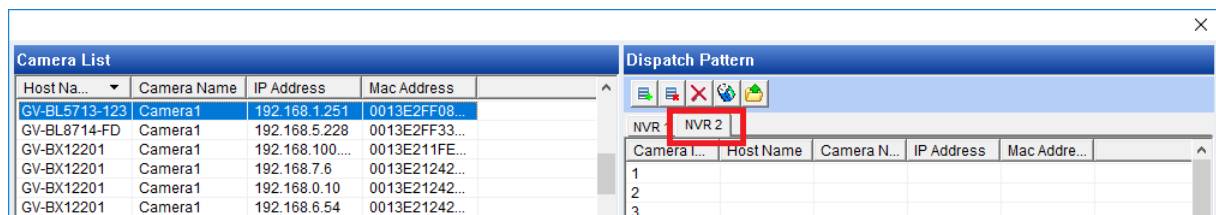
The buttons in the Dispatch Pattern toolbar:

No.	Name	Description
1.	Add	Adds a new tab to create another camera channel arrangement.
2.	Delete	Deletes the selected tab.
3.	Delete Selection	Deletes the selected camera from Dispatch Pattern.
4.	Clear all	Clears all cameras in the selected tab.
5.	Export	Exports the channel arrangement settings.



7.1 Assigning a Camera Channel

1. Drag devices from **Camera List** to the desired camera channels in **Dispatch Pattern**.
2. By default, the login username and password for all devices both are set to **admin**. If the added device does not have the login default, right-click it in **Dispatch Pattern** and select **Login User Information** to modify its login credentials.
3. To arrange a different set of camera channels, click the **Add** button on the **Dispatch Pattern** toolbar. A new tab (NVR 2) is created.

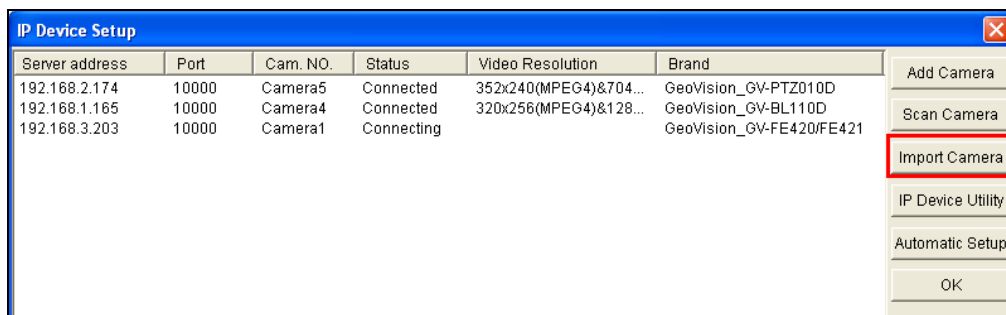


4. Repeat steps 1 and 2 to assign camera channels in the new arrangement.
5. To export the configuration settings, select a NVR tab (e.g. NVR 2), and click the **Export** button.

7.2 Importing the Camera Channel Configuration

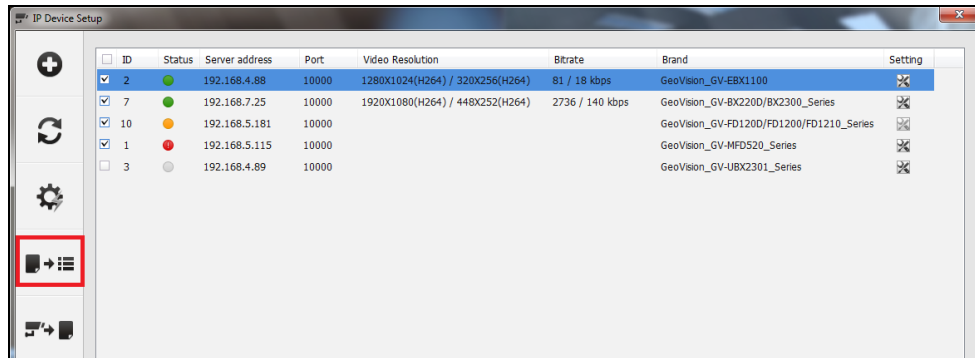
To import the configuration settings into GV-DVR / NVR / VMS, follow the steps below.

1. Close GV-IP Device Utility and run GV-DVR / NVR / VMS.
2. Open the IP Device Setup dialog box.
 - A. **GV-DVR / NVR:** Click the **Configure** button > **System Configure** > **Camera Install** > **IP Camera Install**.





B. **GV-VMS:** Click **Home**  > **Toolbar**  > **Configure**  > **Camera Install**.



C. Select **Import Camera**.

D. Locate a Configuration file and click **OK**. The camera channel arrangements are imported to GV-DVR / NVR / VMS.



8. Batch Configuration for Default GV-IP Cameras

By default, when GV-IP cameras are connected to a LAN with a DHCP server, they are automatically assigned with dynamic IP addresses. If the LAN does not have a DHCP server, you must manually assign IP addresses to multiple cameras before performing batch operations such as changing camera's login ID, password or upgrading firmware. To streamline this process, use **Auto Set IP address** to quickly configure IP addresses for a bunch of cameras.

The table shows the batch operations you can perform on different camera models:

Model	IP Address	Login ID	Password	Firmware	Export/Import Settings
GV-BL / GV-BX2700-FD / GV-BX4700 / GV-EBL / GV-EDR / GV-EFD / GV-EVD / GV-FER12700 / GV-VD / GV-MD / GV-MFD / GV-PPTZ / GV-SD2723-IR / GV-SD2733-IR / GV-UNFE / GV-UNP	Yes	Yes ³	Yes ³	Yes ⁴	Yes ³
GV-ABL / GV-ADR / GV-AVD / GV-BLFC / GV-EBD / GV-EBDP / GV-EBFC / GV-FER5702 / GV-PTZ5810-IR / GV-SD2322-IR / GV-SD2722-IR / GV-SD3732-IR / GV-SD4825-IR / GV-SD4834-IR / GV-TBL / GV-TBLP / GV-TDR / GV-TFD / GV-TMS / GV-TVD	Yes ¹	N/A	Yes ³	Yes ⁴	Yes ³
GV-QSD / GV-QFER	Yes ²	N/A	N/A	Yes ⁴	Yes ³
GV-FD8700-FR / GV-VD8700	Yes	N/A	N/A	Yes ⁴	Yes ³



Model	IP Address	Login ID	Password	Firmware	Export/Import Settings
GV-BX2802 / GV-BX4802 / GV-GBL / GV-GBLF / GV-GBLN / GV-GBLP / GV-GDR / GV-GDRF / GV-GDRN / GV-GEB / GV-GEBF / GV-GEBN / GV-GEBP / GV-GFER / GV-GPTZ / GV-GVD / GV-TMEB	Yes ¹	N/A	Yes ²	Yes ³	Yes ^{3 4}
GV-PBL / GV-PDR / GV-PFER	Yes ¹	N/A	Yes ²	Yes ³	Yes ^{3 4}
GV-RBL / GV-RDR / GV-REB / GV-RFER	Yes ¹	N/A	Yes ²	Yes ³	Yes ^{3 4}

Note:

1. The **Auto Set IP Address** function is supported only by GV-IP Utility Device V8.9.4 or later.
 2. You must first create a new password through the camera's Web interface before using the **Auto Set IP Address** function.
 3. Use the **Auto Set IP Address** function to assign IP addresses to each GV-IP camera. Then follow Steps 1 to 3, [3. Creating Login Credentials](#) to apply a login ID (New account) and password to the cameras.
 4. Firmware upgrades using the **Upgrade all devices** option are only applicable to the devices with the same username, password, and model.
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