

# **GV-Mobile Server**

# User's Manual V1.3



MBSV13-A



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# **Chapter 1** Introduction

GV-Mobile Server is an application that can encode up to **32** video channels and subsequently allows for live view access from GV-IP Decoder Box, GV-Pad, and mobile devices including Android Smartphone, iPad, iPhone, and iPod Touch. Third-party surveillance software can also access video channels from GV-Mobile Server through RTSP. The advantages of GV-Mobile Server include:

- Live view access of analog camera (connected to GV-System)
- Live view access of up to 4 user-selectable matrix channels
- Provides for dual streams
- Significantly reduces CPU loading and bandwidth usage of IP video devices
- User-configurable frame rate, quality, codec type and resolution for each camera stream
- Remote access to live view using non-IE browsers

Through GV-Mobile Server, the clients can:

- access GeoVision and third-party cameras connected to the GV-System.
- access GeoVision and third-party IP channels connected to GV-Video Gateway / GV-Recording Server
- directly access GeoVision and third-party devices



1. To encode channels connected to GV-System, install GV-Mobile Server on the same computer as GV-System.







2. With a GV-USB Dongle, the professional version allows you to access IP channels from a GV-Recording Server / GV-Video Gateway. GV-Mobile Server can be installed on any computer and remotely connect to GV-Recording Server / GV-Video Gateway.



Figure 1-2



 With a GV-USB Dongle, the GV-Mobile Server can directly encode IP channels from GeoVision and third-party IP advices through ONVIF and PSIA protocols. The GV-Mobile Server can be installed in any remote server.



Figure 1-3

For each camera stream, you can set up different frame rate, codec and resolution. In addition, up to 32 cameras can be arranged into a matrix screen that counts as 1 channel when transmitting to clients. The matrix channels are also available in dual streams.

# 

### **1.1 Packing List**

- GV-USB Dongle for connection with GV-Recording Server / GV-Video Gateway, third-party IP devices and GV-IP Devices directly.
- GV-Mobile Server Software CD
- GV-Mobile Server Quick Start Guide

# **1.2 Minimum System Requirement**

Depending on the resolution, video compression format and the number of connected channels, **Standard Version** or **Advanced Version** requirements shall be met.

#### **Standard Version**

OS	32-bit	Windows 7 / Server 2008			
	64-bit	Windows 7 / Server 2008 R2			
CPU		Core i3 2120K, 3.3 Ghz			
RAM		2 GB x 2			
Hard Disk		1 GB or more for installation			
Graphic Card		AGP or PCI-Express, 1024 x 768, 32-bit color			
DirectX		9.0c			
LAN		Gigabit Ethernet X 1			
Hardware		Internal or external GV-USB Dongle			

#### **Advanced Version**

OS	64-bit	Windows 7 / Server 2008 R2				
CPU		Core i7 2600K, 3.4 Ghz				
RAM		2 GB x 2				
Hard Disk		1 GB or more for installation				
Graphic Card		AGP or PCI-Express, 1024 x 768, 32-bit color				
DirectX		9.0c				
LAN Gigabit Ethernet x 2		Gigabit Ethernet x 2				
Hardware		Internal or external GV-USB Dongle				



#### Note:

- 1. The memory required may vary depending on the number of channels and resolution of videos received.
- 2. A GV-USB Dongle is required when you install the GV-Mobile Server V1.3 in an independent PC.
- 3. Optionally purchase an internal USB dongle for the Hardware Watchdog function.

Resolution	Codec	No. of Connected Channels			
CIF	H.264	32			
VGA	H.264	12 or more			
D1	H.264	11 or more			
1 MP	H.264	5 or more			
2 MP	H.264	3 or more			
3 MP	H.264	3 or more			
4 MP	H.264	3 or more			
5 MP	H.264	6 or more			
Note: These data may vary in different scenes (different data bitrates).					

The Advanced Version is highly recommended in any of the following conditions:

### 1.3 Options

The optional device can be purchased to assist with your surveillance management.

Optional Device	Description
Internal GV-USB	An Internal GV-USB Dongle provides the hardware watchdog
Dongle	function to GV-Mobile Server by restarting the computer when
	Windows crashes.

### **1.4 Compatible Firmware**

- GV-System: V8.5.3 or later
- GV-Recording Server / GV-Video Gateway: V1.1.0.0 or later
- GV IP device: V1.09 or later

# 

# **Chapter 2** Installation

# 2.1 Installing the GV-Mobile Server

- 1. Insert GV-USB Dongle to a dedicated computer or server.
- 2. Insert the Software CD to the computer. This window pops up automatically.

🕮 GV-Mobile Server V1.3.0.0 Install program							
GeoUision:							
Install or Remove GeoVision GV-Series Driver.	1. Install or Remove GeoVision GV-Series Driver						
	2. Install GeoVision GV-Mobile Server V1.3.0.0 (Multi Language Version)						
	3. Browse User's Manual (PDF Format)						
	4. Download Adobe Acrobat Reader						
	5. Import Translation Revision						

Figure 2-1

- 3. To install USB driver, select Install or Remove GeoVision GV-Series Driver to start.
- To install GV-Mobile Server, select Install GeoVision GV-Mobile Server V1.3.0.0 Server System and select GeoVision GV-Mobile Server V1.3.0.0 Server System to start.

### 2.2 Starting the GV-Mobile Server

- 1. Go to Windows **Start**, point to **Programs**, select **GV-Mobile Server**, and then run **Mobile Server**. The GV-Mobile Server window appears.
- 2. To change the server name or to configure UPnP settings, click the **Network** tab. This page appears.

👤 GV-Mobile Server (For GeoVision DVR/NVR)			
🖃 🗐 MobileServer	~	DTCD Co-Durband Network Univ MIDEC	
🖃 🚍 Physical Cameras		HISF GEOFICIOCOL (HERMON) HICP-MUFEG	
		Server Name MobileServer	
- 🥥 [03] GV-DVR/NVR			
		UPnP Setting	
🥥 [07] GV-DVR/NVR			
🥥 [08] GV-DVR/NVR			
🥥 [10] GV-DVR/NVR			
🥥 [11] GV-DVR/NVR			
🥥 [12] GV-DVR/NVR			
🥥 [13] GV-DVR/NVR			
🥥 [14] GV-DVR/NVR			
🛛 💓 [22] GV-DVR/NVR			
🛛 💓 [23] GV-DVR/NVR			
🛛 💓 [25] GV-DVR/NVR			
🛛 💓 [26] GV-DVR/NVR			
- 👷 [27] GV-DVR/NVR			
- 💓 [28] GV-DVR/NVR	~	Apply Exit	
E I I I I I I I I I I I I I I I I I I I			

Figure 2-2

- 3. Type a new server name.
- 4. Click the **UPnP Setting** button to list the GV-Mobile Server in the network devices table for the operation system. Then you can connect to the GV-Mobile Server directly by clicking on the listed server.



 By default, the ID and password for logging in the GV-Mobile Server are admin, and the Command Port for client connection is 55000. To customize these values, click the GeoProtocol tab to modify the Command Port and select Custom to modify the login ID and password.

📕 GV-Mobile Server Professional		
■         •		RTSP GeoProtocol Network Http-MJPEG Command Port 55000 Login Information O GeoVision DVR/NVR O Custom ID admin Password *****
27] GV-DVR/NVR 28] GV-DVR/NVR 29] GV-DVR/NVR 29] GV-DVR/NVR 20] GV-DVR/NVR	*	Apply Exit

Figure 2-3

**Note:** If you are installing GV-Mobile Server and GV-System on the same computer, select **GeoVision DVR/NVR** to apply the currently logged-in ID and Password of the GV-System to the GV-Mobile Server. To apply the login values of the GV-System to GV-Mobile Server, the GV-System must be run in the background.

6. Click Apply.

# **Chapter 3 Establishing Connections**

### 3.1 Connecting to GV-System

The GV-Mobile Server can encode up to 32 channels from GV-System. To configure connection to GV-System:

1. Select a camera from the left menu and click the **Stream Source** tab. This window appears.

📕 GV-Mobile Server Professional		
🖃 📑 MobileServer	^	Enable
Physical Cameras		Conorol
		Camera Name Camera 1
		Stream Setting
- 🥥 [05] GV-DVR/NVR		Stream Source Stream 1 Stream 2
- 🥥 [06] GV-DVR/NVR		
- 🥥 [07] GV-DVR/NVR		Brand Gv DVR/NVR 🗸
- 🧶 [08] GV-DVR/NVR		IR Address 127.0.0.1
U9] GV-DVR/NVR		IF Address
- VII GV-DVR/NVR		Command Port 80
- VR (11) GV-DVR/NVR		
- VR [12] GV-DVR/NVR		User Name
		Boogward
		Fassword
		Source Camera 1
		Only decode Keyframe when service is IP device
		Only decode Reyname when source is in device.
	¥	Apply Exit

Figure 3-1

- 2. Select GV DVR/NVR for Brand.
- 3. To only decode key frames, select Only decode key frame when source is IP device.
- 4. Click Apply.

When the camera is connected, the red icon turns green. You can right-click the camera icon to access the live view.

**Note:** The audio output of a channel is only accessible by clients when the channel is connected to GV-System and is accessed through RTSP.



# 3.2 Connecting to GV-Recording Server / GV-Video Gateway

Using a GV-USB Dongle, GV-Mobile Server can encode up to 32 IP channels from GV-Recording Server / GV-Video Gateway. To configure connection to GV-Recording Server / GV-Video Gateway:

1. Select a camera from the left menu and click the **Stream Source** tab. This window appears.

💂 GV-Mobile Server Professional		
🖃 🗐 MobileServer	^	Enable
😑 📾 Physical Cameras		Conorol
- 💓 [02] GV-DVR/NVR		Camera Name Camera 1
[03] GV-DVR/NVR		
		Stream Setting
		Stream Source Stream 1 Stream 2
		Dural David D
		Brand Geovision Record
		IP Address 127.0.0.1
- 6 [10] GV-DVR/NVR		
- 🍊 [11] GV-DVR/NVR		Command Port 11000
- 🥌 [12] GV-DVR/NVR		User Name admin
		Password *****
		Source Camera 1
- 💓 [17] GV-DVR/NVR		
- 💓 [18] GV-DVR/NVR		
[19] GV-DVR/NVR		
		Only decode Keyframe when source is IP device.
[25] GV-DVB/NVB		
60 gv-DVB/NVB		
IZ71 GV-DVR/NVR		
[28] GV-DVR/NVR		
[29] GV-DVR/NVR		Apply
i 301 GV-DVR/NVR	~	Coppily CEAR

Figure 3-2

- 2. Configure the connection settings.
  - A. Select GeoVision Recording Server for Brand.
  - B. Type the Command Port, IP Address, User Name and Password of the GV-Recording Server / GV-Video Gateway. The default command port for GV-Recording Server / GV-Video Gateway is 11000.
  - C. Type the camera number for live viewing in **Source Camera**. The default setting is**1**.
  - D. To only decode key frames, select **Only decode key frame when source is IP device**.
- 3. Click **Apply**.



When the camera is connected, the red icon turns green. You can right-click the camera icon to access the live view.

**Note:** The TCP/IP Connection port (active connection port) on the GV-Recording Server / GV-Video Gateway must match the Command port setting (default 11000) here.



# 3.3 Connecting to IP Devices Directly

Using a GV-USB Dongle, GV-Mobile Server can encode up to 32 IP channels directly from GeoVision IP devices and also third-party IP devices (through ONVIF or PSIA protocol). To configure connection to IP devices:

1. Select a camera from the left menu and click the **Stream Source** tab. This window appears.

📕 GV-Mobile Server Professional	
MobileServer	🗹 Enable
Physical Lameras	General
	Camera Name Camera 1
	- Stream Setting
	Chean Secure Law and Care and
	Stream Source Stream 1 Stream 2
	Brand Cool/ligion Pagers w
61 GV-DVB/NVB	
091 GV-DVB/NVB	IP Address 127.0.0.1
T101 GV-DVR/NVR	
[11] GV-DVR/NVR	Command Port 11000
🧉 [12] GV-DVR/NVR	User Name admin
🧉 [13] GV-DVR/NVR	
	Password *****
- 🥥 [15] GV-DVR/NVR	
	Source Camera 1
- 🥥 [19] GV-DVR/NVR	
- 🥥 [20] GV-DVR/NVR	Only decode Keyframe when source is IP device.
🛛 🍚 [21] GV-DVR/NVR	
- \varTheta [22] GV-DVR/NVR	
🚽 💓 [25] GV-DVR/NVR	
[26] GV-DVR/NVR	
[27] GV-DVR/NVR	
	Apply Exit
I I III GV-DVR/NVR	



- 2. Configure the connection settings.
  - A. Select GeoVision IP Device for Brand. To connect to a third-party IP device, select ONVIF or PSIA for Brand.
  - B. Type the IP Address, User Name and Password of the IP device.

Make sure the **Command Port** matches the **VSS Port** of the IP device. The default command port for GeoVision IP device is **10000** and **80** for third-party IP devices connected through ONVIF / PSIA.

- C. Type the camera number for live viewing in **Source Camera**. The default setting is**1**.
- D. To only decode key frames, select Only decode key frame when source is IP device.
- 3. Click Apply.



When the camera is connected, the red icon turns green. You can right-click the camera icon to access the live view.

# 

# **Chapter 4 Configuring the Channel**

# 4.1 Setting the Individual Channel

For each individual channel, you can set up two streams, each with different frame rates, video qualities, codec and resolutions. The maximum resolution is D1 (720 x 480).

1. In the left menu, click a camera channel. The setting page for that camera appears.

📕 GV-Mobile Server Professional		
🖃 🚺 MobileServer	^	Enable
		General
[U2] 192.168.4.209.10000		Camera Name Camera 1
		Otroom Potting
		Other Charles and
		Stream Source Stream 1 Stream 2
6071 GV-DVR/NVR		EBC: 20
68) GV-DVR/NVR		JU
		Quality Best 🔽
		Codec H264 🗸
- 💓 [13] GV-DVR/NVR		
		Recolution Maximum 👽 🛛
		Only decode Keyframe when source is IP device
I211 GV-DVB/NVB		
6 [22] GV-DVR/NVR		
🧉 [23] GV-DVR/NVR		
- 🥥 [27] GV-DVR/NVR		
💓 🥥 [28] GV-DVR/NVR		
[29] GV-DVR/NVR	~	Apply Exit
I III GV-DVR/NVR		

Figure 4-1

- 2. Select **Enable** to enable the camera.
- 3. Under Stream Setting, the following settings are available. When a client connects to stream 1 of the camera, the settings will be applied to the transmitted camera view.
  - **FPS:** Specifies the frames per second.
  - **Quality:** Set the image quality to **Best**, **Better** or **General**.
  - Codec: Select a codec type from H.264 or MPEG4.
  - Resolution: Select a resolution. When Maximum is selected, the resolution will be D1. If the camera's maximum resolution is lower than D1, the maximum resolution will be applied.
- 4. To set up the other stream, click the **Stream 2** tab and complete the above settings.
- 5. Click **Apply**.

- 6. In the left menu, right-click a camera channel to access the options below:
  - View Actual Stream: Watch the camera view received by GV-Mobile Server. If the camera resolution is larger than D1, D1 resolution will be applied. If the camera resolution is lower than D1, the maximum resolution will be applied.
  - View Encode Stream 1: Watch the camera view according to the settings you specify in step 3 for stream 1.
  - View Encode Stream 2: Watch the camera view according to the settings you specify in step 3 for stream 2.



### 4.2 Setting the Matrix Channel

You can establish up to 4 matrix channels on GV-Mobile Server, each consisting of up to 32 cameras. You can also set up different settings (frame rates, codec video quality and resolution) for stream 1 and stream 2 of a channel. The maximum resolution supported is 1.3 MP (1280 x 1024).

To set up the matrix:

1. In the left menu, click a matrix channel. This window appears.

💂 GV-Mobile Server Professional		
	^	Enable
		Canaval
		General
		Camera Name Matrix 1
- 🥥 [12] GV-DVR/NVR		Stream Setting
		Stream 1 Stream 2
- 🥥 [15] GV-DVR/NVR		FPS: 30
- 🥥 [16] GV-DVR/NVR		
		Our life
- 🥥 [18] GV-DVR/NVR		
[19] GV-DVR/NVR		
- VI GV-DVR/NVR		Codec H264 🗸
		Recolution Maximum 🔽 🛛
		Mathie Balling
		Matrix Setting
Matrix 1		
Matrix 2		
Matrix 3		
Matrix 4		Annly
_	~	

Figure 4-2

 Complete the settings for Stream 1 of the matrix channel. When a client connects to stream 1 of the matrix channel, the settings will be applied to the transmitted matrix view. Refer to Setting Up Individual Cameras section above for details.

Note: When Maximum is selected, the resolution of the matrix channel will be 1.3 M.

3. Click the **Stream 2** tab to set up stream 2.



4. Click the Matrix Setting button to arrange the matrix. This window appears.



- 5. Select a type of screen division and select the display ratio. The display ratio selected will be applied to the matrix view in GV-Mobile Server.
- 6. Drag and drop the camera numbers to the desired positions on the divisions.
- 7. Click **OK** and then click **Apply**.
- 8. In the left menu, right-click a camera channel to access the options below:
  - View Actual Stream: Watch the matrix view in the display ratio selected in step 5.
  - View Encode Stream 1: Watch the camera view according to the settings you specify in step 2 for stream 1.
  - View Encode Stream 2: Watch the camera view according to the settings you specify in step 3 for stream.

# 

# **Chapter 5 Accessing the Live View**

# 5.1 Using GV-IP Decoder Box / GV-Pad

There are two ways to access GV-Mobile Server channels from GV-IP Decoder Box / GV-Pad:

- To add channels one by one, see Displaying Channels by Browsing in this section.
- To add **multiple channels** at a time, *Displaying Channels Using GV IP Device Utility* in this section.

**Note:** The GV-Mobile Server, GV-IP Decoder Box / GV-Pad and GV-IP Device Utility must be installed under the same LAN.

#### Accessing Channels by Browsing

- 1. On GV-Mobile Server window (Figure 2-3), change the Command Port to **10000**.
- 2. On the main menu of GV-IP Decoder Box, select **Q** and press **OK** to search. The channels of GV-Mobile Server will be listed.

GV-BX520D/BX52	192.168.3.235	BX520	camera1
GV-BX110D	192.168.3.237	BX110	camera1
demosite_sd010	192.168.3.40	IP Speed Dome	camera1
GV-PT110D	192.168.3.55	PT110	camera1
MobileServer			
MobileServer			
MobileServer	192.168.3.69	Mobile_Server	camera3
MobileServer	192.168.3.69	Mobile_Server	camera4
age ( 27/ 32)			

#### Figure 5-1

- 3. To move on the list, press the up and down arrow keys. The yellow shows the cursor position.
- 4. To select a channel, press the right arrow key. The selected channels will be in red.
- 5. Repeat step 3 to select multiple channels.
- 6. Press the **OK** key. The selected channels will be displayed.

**Note:** The GV-IP Decoder Box supports Stream 1 and H.264 codec only.

#### Accessing Channels Using GV IP Device Utility

- 1. Make sure you have installed the GV IP Device Utility program from *GV-IP Decoder Box and GV-Pad Software DVD*.
- 2. Double-click the **GV IP Device Utility** icon on the desktop. The GV IP Device Utility window appears. It will automatically search for all the video channels under the same LAN.

🚔 GV	IP Device Utility					
File 1	[ool					
	🔪 🏡 🕂 🤅	<b>X</b>				
Gene	ral settings NVR camera setti	ngs				
Nar	ne	Mac Address	IP Address 🔻	Firmware Version	Temperature	NOTE 🔼
1	GV-CB120_222	0013E2025531	192.168.2.122	v1.04 2011-06-02		
	GV-DecoderBox	0016E8480C1D	<u>192.168.2.13</u>	v1.00 2011-09-27		
5	GV-BX220D	0013E2019085	192.168.2.142	v1.04 2011-06-02	49.5°C	_
5	Demo-GVBX120D	0013E2024733	192.168.2.170	v1.06 2011-09-15	48.5°C	
	Demo-GVBX220	0013E20245D8	192.168.2.171	v1.05 2011-07-08	46.5°C	✓
<						>

Figure 5-2

3. Click on the IP address of your GV-IP Decoder Box and select **Connect Setting**. This dialog box appears.

Login	
User Name	admin
Password	
ОК	Cancel

Figure 5-3



Type the ID and password of your GV-IP Decoder Box and click **OK**. For detail, see 2.4.
 *Configuring the Basics* in *GV-IP Decoder Box and GV-Pad User's Manual*. The Video Connection Setting window appears.

Host Name         Camera Name         IP Address         Port         Cam         Host Name         Camera Na           MobileServer         Camera 1         192.168.2.100         39000         1         GeoVision_G         Camera 1           MobileServer         Camera 2         192.168.2.100         39000         1         GeoVision_G         Camera 1           MobileServer         Camera 4         192.168.2.100         39000         1         GeoVision_G         Camera 1           MobileServer         Camera 5         192.168.2.100         39000         1         GeoVision_G         Camera 1           MobileServer         Camera 6         192.168.2.100         39000         1         GeoVision_G         Camera 1           MobileServer         Camera 7         192.168.2.100         39000         1         GeoVision_G         Camera 1           MobileServer         Camera 9         192.168.2.100         39000         ImbileServer         Gamera 1         192.168.2.100         GeoVision_G         Ge			ction Information	Connec					amera List
MobileServer         Camera 1         192.168.2.100         39000           MobileServer         Camera 2         192.168.2.100         39000           MobileServer         Camera 3         192.168.2.100         39000           MobileServer         Camera 4         192.168.2.100         39000           MobileServer         Camera 4         192.168.2.100         39000           MobileServer         Camera 6         192.168.2.100         39000           MobileServer         Camera 6         192.168.2.100         39000           MobileServer         Camera 7         192.168.2.100         39000           MobileServer         Camera 8         192.168.2.100         39000           MobileServer         Camera 10         192.168.2.100         39000           MobileServer         Camera 11         192.168.2.100         39000           MobileServer         Camera 12         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100	me IP Address	Camera Name	Host Name	Cam	^	Port	IP Address	Camera Name	Host Name
MobileServer         Camera 2         192.168.2.100         39000           MobileServer         Camera 3         192.168.2.100         39000           MobileServer         Camera 4         192.168.2.100         39000           MobileServer         Camera 5         192.168.2.100         39000           MobileServer         Camera 6         192.168.2.100         39000           MobileServer         Camera 7         192.168.2.100         39000           MobileServer         Camera 8         192.168.2.100         39000           MobileServer         Camera 8         192.168.2.100         39000           MobileServer         Camera 8         192.168.2.100         39000           MobileServer         Camera 10         192.168.2.100         39000           MobileServer         Camera 11         192.168.2.100         39000           MobileServer         Camera 12         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100	192.168.3.155	Camera1	GeoVision_G	1		39000	192.168.2.100	Camera 1	MobileServer
MobileServer         Camera 3         192.168.2.100         39000           MobileServer         Camera 4         192.168.2.100         39000           MobileServer         Camera 5         192.168.2.100         39000           MobileServer         Camera 6         192.168.2.100         39000           MobileServer         Camera 7         192.168.2.100         39000           MobileServer         Camera 7         192.168.2.100         39000           MobileServer         Camera 1         192.168.2.100         39000           MobileServer         Camera 10         192.168.2.100         39000           MobileServer         Camera 11         192.168.2.100         39000           MobileServer         Camera 12         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100						39000	192.168.2.100	Camera 2	MobileServer
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MobileServer         Camera 11         192.168.2.100         39000           MobileServer         Camera 12         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000						39000	192.168.2.100	Camera 10	MobileServer
MobileServer         Camera 12         192.168.2.100         39000           MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000					-	39000	192.168.2.100	Camera 11	MobileServer
MobileServer         Camera 13         192.168.2.100         39000           MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000					<u> </u>	39000	192.168.2.100	Camera 12	MobileServer
MobileServer         Camera 14         192.168.2.100         39000           MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000						39000	192.168.2.100	Camera 13	MobileServer
MobileServer         Camera 15         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000           MobileServer         Camera 16         192.168.2.100         39000						39000	192.168.2.100	Camera 14	MobileServer
MobileServer Camera 16 192.168.2.100 39000						39000	192.168.2.100	Camera 15	MobileServer
MahileCovier Comerc 17 103 160 3 100 30000						39000	192.168.2.100	Camera 16	MobileServer
MubileBerver Camera 17 192.100.2.100 39000						39000	192.168.2.100	Camera 17	MobileServer
MobileServer Camera 18 192.168.2.100 39000 🗸					~	39000	192.168.2.100	Camera 18	MobileServer
				<		>			
Items selected : 0 / 64	Number of cameras	Nun			/ 64	elected : 0 /	Items s		

Figure 5-4

- 5. Use the **right i** button to add video channels.
- 6. Right-click each added channel, select **Edit** and type its username and password to log in. By default, the login ID and password for all GV IP devices are **admin**.
- 7. Use the **up •** and **down •** buttons to change the order of the added channels. The channels will be displayed accordingly.
- 8. Click **Save**. The cameras on the Connection Information column will be updated to the GV-IP Decoder Box and displayed on the monitor.



# 5.2 Using iPhone / iPod Touch / iPad

Follow the steps below to access GV-Mobile Server channels from iPhone, iPod Touch and iPad:

1. Download **GV-Eye V1.2** app from App Store. The **GV-Eye** icon appears on the desktop.



Figure 5-5

2. Tap the **Add** button **=** to create connection.



3. Type the connection information, login username and password of the GV-Mobile Server.



Figure 5-6

- Host name: Name the GV-Mobile Server.
- **Domain/IP:** Type the domain name or public IP address of the GV-Mobile Server.
- Port: Type the default port number 55000, or modify the port number to match the command port on the GV-Mobile Server.
- Username: Type the login username of the GV-Mobile Server. The default value is admin.
- Password: Type the login password of the GV-Mobile Server. The default value is admin.



4. Tap the Save button. The GV-Mobile Server is added to the connection list. Click the GV-Mobile Server on the list to access live images.

Edit 🤂 Live (1)	+
mobile server 192.168.0.192	>
IPCam Search	

Figure 5-7

For detailed instructions, see this document http://www.geovision.com.tw/upload/en/mobileap/GV-Eyev112.pdf



### **5.3 Using Android Smartphone / Tablet**

Follow the steps below to access GV-Mobile Server channels from Android Smartphone or tablet:

 Download GV-Eye V1.2 app from Android market. The GV-Eye icon appears on the desktop.



Figure 5-8

2. Tap the **GV-Eye** icon, and then the login page appears.



3. Type the connection information, login username and password of the GV-Mobile Server.





- Profile Name: Name the GV-Mobile Server.
- IP: Type the domain name or public IP address of the GV-Mobile Server.
- **Port:** Type the default port number 55000, or modify the port number to match the command port on the GV-Mobile Server.
- Username: Type the login username of GV-Mobile Server. The default value is admin.
- **Password:** Type the login password of GV-Mobile Server. The default value is admin.
- 4. Tap the Connect button *and* receive the live images from GV-Mobile Server.

For detailed instructions, see this document: http://www.geovision.com.tw/upload/en/mobileap/GV-Eye AndroidV10.pdf



### 5.4 Using Third-Party Surveillance Software

To allow third-party software to connect to GV-Mobile Server through RTSP protocol, complete the settings below.

- 💂 GV-Mobile Server Professional 🖬 📋 MobileServer RTSP GeoProtocol Network Http-MJPEG 📑 Physical Cameras Physical Cameras [10] 1192 168.0.122:10000 [10] 192 168.4.203:10000 [10] GV-DVR/NVR Enable RTSP Streaming ID and Password Required RTSP Username admin RTSP Password RTSP Port 8554 08] GV-DVR/NVR RTSP Data Port starts from 45000 [10] GV-DVR/NVR [12] GV-DVR/NVR [13] GV-DVR/NVR [14] GV-DVR/NVR [15] GV-DVR/NVR [16] GV-DVR/NVR [17] GV-DVR/NVR [18] GV-DVR/NVR [19] GV-DVR/NVR [20] GV-DVR/NVR [21] GV-DVR/NVR [21] GV-DVR/NVR
  [22] GV-DVR/NVR [22] GV-DVR/NVR [23] GV-DVR/NVR [24] GV-DVR/NVR [25] GV-DVR/NVR [26] GV-DVR/NVR 1271 GV DVR/NVR [28] GV-DVR/NVR [29] GV-DVR/NVR Apply Exit 301 GV-DVR/NVF
- 1. Click the **RTSP** tab. This window appears.

Figure 5-10

- 2. Click Enable RTSP Streaming.
- 3. For a more secure connection, select **ID and Password Required** and type an **RTSP Username** and **RTSP Password**.
- 4. Modify the default **RTSP Port** 8554 if necessary. By default, RTSP data port starts from 45000.
- 5. Click Apply.

Use the RTSP commands below to connect:

No ID and password required:

#### rtsp://<IP of the GV-Mobile Server>:<Port>/<CamNo\_StreamNo>

For example, rtsp:// 192.168.3.111:8554/cam1\_stream2



#### ID and password required:

### rtsp://<ID>:<Password>@<IP of the GV-Mobile Server>:<Port>/<CamNo\_StreamNo> For example, rtsp://admin:1234@192.168.3.111:8554/cam1\_stream2

Note: The 4 matrix channels can be accessed using camera number 33 to 36. For example, the RTSP command for the second matrix channel may be rtsp://admin:1234@192.168.3.111:8554/cam34\_stream1

To create a matrix channel, see 4.2 Setting Matrix Channels.



### 5.5 Using Non-IE Browsers

You can watch live view in MJPEG codec using non-IE browsers such as Google Chrome, Firefox and Safari.

To enable MJPEG Stream:

1. Click the **Http-MJPEG** tab and select **Enable MJPEG Stream**. This window appears.

📕 GV-Mobile Server Professional		
🖃 📑 MobileServer	^	RTSP GeoProtocol Network Http-MJPEG
Physical Cameras		Enable MIREC Stream
		HTTP Port 8080
		Deselution 100 - 120
		Resolution 160 x 120
		FPS 10
		Quality General 🖵 Best
IIII GV-DVB/NVB		
I121 GV-DVR/NVR		
- 6 [13] GV-DVR/NVR		
- 🍎 [14] GV-DVB/NVB		
🧉 [15] GV-DVR/NVR		
[16] 127.0.0.1:10000		
🧉 [17] GV-DVR/NVR		
- 🥥 [18] GV-DVR/NVR		
- 🥥 [19] GV-DVR/NVR		
💓 [26] GV-DVR/NVR		
🛛 💓 [27] GV-DVR/NVR		
28] GV-DVR/NVR		
		Apply Exit
🗉 🖂 😅 1301 GV-DVR/NVR	×	

Figure 5-11

- 2. Modify the default HTTP Port 8080 if necessary.
- 3. Set the **Resolution** using the drop-down list.
- 4. Set an **FPS** from 1-30 fps and **Quality** to **General**, **Medium** or **Best**.
- 5. Click **Apply**.

After completing the setting, you can now use the address below to access live view with non-IE browsers:

#### http://<GV-Mobile Server IP>:<Http Port>/cam\_video\_rs.cgi.jpg?cam=<CamNo>

For example, http://192.168.3.117:8080/cam\_video\_rs.cgi.jpg?cam=1

# **Chapter 6 Setting Up the Router**

Your GV-Mobile Server and other devices may be installed on a local area network (LAN), with a router connected to a broadband modem, as illustrated below. The router will typically assign private IP address to the connected devices such as 192.168.x.x. You cannot see the devices outside from the Internet by using the private IP address 192.168.x.x. What you use on the Internet is the public IP address from the ISP, which is the IP address of your router.





### 6.1 Registering a Domain Name for the Router

If your router is receiving a dynamic IP address from the ISP, you may register a domain name linking to the ever-changing IP address of the router. Most broadband routers support a dynamic DNS service such as <u>www.dyndns.org</u>. Check your router's Web interface and document for the Dynamic DNS settings.

The following example is the **Dynamic DNS** settings on the D-Link DIR-825 router. The dynamic IP address of the router will be always directed to the domain name: **mobileserver.dlinkddns.com**.

DIR-825	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
	DYNAMIC DNS				Helpful Hints
TIME					To use this feature
SYSLOG	The DDNS feature allo	ws you to host a server () urshased (www.whatever	Web, FTP, Game Server, a	etc) using a domain	you must first have a
EMAIL SETTINGS	assigned IP address. M	lost broadband Internet S	ervice Providers assign dyr	namic (changing) IP	from one of the
SYSTEM	addresses. Using a DD your game server no r	NS service provider, your f natter what your IP addre	riends can enter your hos iss is.	t name to connect to	providers in the drop
FIRMWARE	,				ale fiffine fail
DYNAMIC DNS	Sign up for D-Link's Fr	ee DDNS service at			More
SYSTEM CHECK			_		
SCHEDULES	Save Settings	Don't Save Settings			
English 💌					
	DYNAMIC DNS				
	Enable Dyn	amic DNS: 🔽			
	Serve	r Address : www.dlinkdd	ns.com(Free < Select Dy	namic DNS Server 🔽	
	н	ost Name : mobileserver	.dlinkddns.com		
	Usernar	ne or Key : mobileserver			
	Passwo	rd or Key : ••••••	•		
	Verify Passwo	rd or Key : •••••••	•		
		Timeout : 576	(hours)		
		Status : Disconnect			

Note: Another alternative is to purchase a fixed public IP address from your ISP.

### 6.2 **Opening Ports on the Router**

To have more features of GV-Mobile Server, you need to open the following ports on the router.

Port type	Value	Description
итто	0000	To access live view with non-IE browsers. For details
	8080	see 5.5 Using Non-IE Browsers.
		To access live view with third-party surveillance
RTSP 8554	8554	software. For details see 5.4 Using Third-Party
		Surveillance Software.
		To access live view with mobile phone viewers. For
Command	55000	details see 5.1 Using GV-IP Decoder Box / GV-Pad, 5.2
		Using iPhone / iPod Touch / iPad, 5.3 Using Android
		Smartphone / Tablet.

In the following example of D-Link DIR-825 router, the port forwarding settings are in the **Advanced** tab. We correlate the public ports (HTTP, RTSP and Command ports) with the private IP address of the GV-Mobile Server (192.168.0.100).





#### [Non-IE browsers]

After you open HTTP port 8080 on the router, you can use the address below to access live view with non-IE browsers:

http://<Router's IP or domain name>:<Http Port>/cam\_video\_rs.cgi.jpg?cam=<CamNo> For example, http://mobileserver.dlinkddns.com:8080/cam\_video\_rs.cgi.jpg?cam=1

#### [RTSP command]

After you open RTSP port 8554 on the router, you can use the command below to access live view:

#### No ID and password required:

rtsp://< Router's IP or domain name >:<Port>/<CamNo\_StreamNo> For example, rtsp://mobileserver.dlinkddns.com:8554/cam1\_stream2 ID and password required:

rtsp://<ID>:<Password>@<IP of the GV-Mobile Server>:<Port>/<CamNo\_StreamNo> For example, rtsp://admin:1234@mobileserver.dlinkddns.com:8554/cam1\_stream2

#### [Mobile Phone Viewer]

After you open Command port 55000 on the router, you can use the GV mobile phone viewer to access live view. We use the **GV-Eye** login page to illustrate how to enter the IP address and port value. For details see *5.2 Using iPhone / iPod Touch / iPad.* 



# **Specifications**

Channels			
Maximum No. of Channels	32		
Maximum No. of Matrix Views	4		
Dual Stream Support	Yes		
Supported Connections			
GV-System	V8.5.3 or later		
GV-Recording Server / GV-Video Gateway	V1.1.0.0 or later		
GV IP devices	V1.09 or later		
Third-party IP devices	Yes (through ONVIF or PSIA)		
Live View Access			
From GeoVision IP devices	Yes (GV-IP Decoder Box and GV-Pad)		
From third-party surveillance software	Yes (through RTSP)		
From mobile devices	<ul> <li>Yes</li> <li>GV-Eye V1.2 or later for iPhone / iPod Touch / Android Smartphone and tablet</li> <li>GV-Eye HD V1.2 or later for iPad</li> </ul>		
Using non-IE browsers	Yes (in MJPEG format)		
General			
Language	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian /Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Swedish / Thai / Traditional Chinese / Turkish		

All specifications are subject to change without prior notice.