

Surveilance System

New Feature Guide V8.5



The Vision of Security



© 2011 GeoVision, Inc. All rights reserved.

Under the copyright laws, this manual may not be copied, in whole or in part, without the written consent of GeoVision.

Every effort has been made to ensure that the information in this manual is accurate. GeoVision, Inc. makes no expressed or implied warranty of any kind and assumes no responsibility for errors or omissions. No liability is assumed for incidental or consequential damages arising from the use of the information or products contained herein. Features and specifications are subject to change without notice.

GeoVision, Inc. 9F, No. 246, Sec. 1, Neihu Rd., Neihu District, Taipei, Taiwan Tel: +886-2-8797-8377 Fax: +886-2-8797-8335 http://www.geovision.com.tw

Trademarks used in this manual: *GeoVision*, the *GeoVision* logo and GV series products are trademarks of GeoVision, Inc. *Windows* and *Windows XP* are registered trademarks of Microsoft Corporation.

July 2011

Feature Guide for V8.5 GeoVision Surveillance System

Welcome to the Feature Guide for V8.5 GeoVision Surveillance System.

This Guide provides an overview of key features in V8.5 GV-System. It also includes information about how the features differ from similar features in earlier versions.

Cards Supported

V8.5 only supports the following GV video capture cards:

- GV-600(S) V3.20 and later
- GV-650(S) V3.30 and later
- GV-800(S) V3.30 and later
- GV-804A V3.10 and later
- GV-600A
- GV-650A
- GV-800A
- GV-900A
- GV-600B
- GV-650B
- GV-800B
- GV-1120, GV-1120A All Series
- GV-1240, GV-1240A All Series
- GV-1480, GV-1480A All Series
- GV-1008
- GV-3008
- GV-4008, GV-4008A

Note that GV-600 (V4), GV-650 (V4) and GV-800 (V4) and GV-804 (V4) Cards are renamed to GV-600A, GV-650A, GV-800A and GV-804A. These V4 and A Cards are the same video capture cards

Contents

Cont	ents	ii
1. Ne	w Supports and Specifications	1
1.1	Enhanced H.264 and Support for GPU Decoding	1
1.2	Enhanced Multi-Channel Playback and Related Specifications	5
1.3	Support for 16 kHz / 16 bit Audio Codec	5
1.4	Support for New IP Devices	6
1.5	Setting Configuration without Stopping Recording	8
1.6	Support for PTZ Functions through ONVIF	8

2. Main System.....9

2.1	Standard and GeoVision Format Codec	9
2.2	Live View Frame Rate Control and Buffer	11
2.3	Automatic Daylight Saving Time Synchronization	12
2.4	Automatic Setup of IP Devices	13
2.5	Accessing Control Panel of GV-IP Devices	14
2.6	Wide Angle Lens Dewarping to Correct Distortion	15
2.7	Display Ratio Adjustment in Fisheye Live View	16
2.8	Object Tracking in Fisheye Live View	17
2.9	Enhanced Object Definition in Intrusion Alarm	19
2.10	Ignoring Environmental Changes in Advanced Motion Detection	20
2.11	Noise Tolerance in Object Index and Face Detection	21
2.12	Setting Snapshot Frequency in Object Index	22
2.13	Enhanced Support for POS Text Sender	23

3.1	Wide Angle Lens Dewarping in ViewLog	27
3.2	Enhanced Features When Saving in AVI Format	28
3.3	Monitoring of Vehicle's Average Speed in GV-Compact DVR V3	31
3.4	Face Mask in ViewLog	32
3.5	Enhanced Single Player	34
3.6	Backing Up to Blu-ray Disc Using OS-Burning	35

4.	Cer	nter V2	36
	4.1	Adding Device Information into Alert Messages	36
	4.2	Enhanced Features on the Main Window	38
	4.3	New and Enhanced Video Storage Functions	43
	4.4	Configuring a Virtual I/O Box	47
	4.5	Enhanced EZ Player	49

5. VSM (Vital Sign Monitor) 51

5.1	Enhanced Features on the Main Window	51
5.2	Temperature Alarm	54
5.3	Enhanced Notification Messages	57

6. Control Center 61

6.1	Displaying Images on Multiple Screens	61
6.2	Wide Angle Lens Dewarping	68
6.3	Enhanced I/O Central Panel	70
6.4	Enhanced VMD System	72
6.5	Setting the Matrix Display Monitor	73
6.6	Query Data Event from GV-System	74

7.1	Manually Re-Distributing Subscribers	76
7.2	Designating a Primary Center V2 Server	77

8. GV-GIS 78 8.1 Configuring the Basics 78 8.2 Recording Manually 81

8.3	Recording by Events	.83
8.4	Recording upon Input Trigger	85

9. Authentication Server 87

9.1 Importing Users and Groups from Active Directory	87
--	----

10.	Mobile Server	90
10.1	Starting the Mobile Server	90
10.2	Connecting through RTSP	91
10.3	Connecting through GeoVision Protocol	93
10.4	Setting Up Individual Cameras	94
10.5	Setting Up Matrix	95

1. New Supports and Specifications

This chapter introduces the new supports and specifications in version 8.5.

1.1 Enhanced H.264 and Support for GPU Decoding

In V8.5, **enhanced H.264 decoding** and **support for GPU (Graphics Processing Unit) decoding** are added to lower the CPU loading and to increase the total frame rate supported by a GV-System.

GPU decoding only supports the following software and hardware specifications:

	Supported	Not Supported
Operating	Windows Vista (32-bit) / 7 (32 / 64-bit)	Windows 2000 / XP /
System	/ Server 2008 R2 (64-bit)	Server 2008 (32 / 64-bit)
Resolution	1 M / 2 M	CIF / VGA / D1 / 3M / 4M / 5M
Codec	H.264	MPEG4 / MJEPG
Stream Single Stream Dual Stream		Dual Stream
Note: To apply GPU decoding, the recommended memory (RAM) requirements is 8 GB or		
more for 64-bit OS and 3 GB for 32-bit OS.		

Hardware Specifications

MotherboardSandy Bridge chipset with onboard VGA (external VGA cannot be installed)Ex: Intel® Q67, H67, H61, Q65, B65, Z68 Express Chipset.

Increased Frame Rate

With the new H.264 and GPU decoding, GV-System now has the ability to process significantly more frames per second. The tables below compare the total number of frames a GV-System can process per second using:

- the previous H.264 decoding
- the enhanced H.264 decoding, and
- both the enhanced H.264 and GPU decoding

The two tables show the results of four different operating systems using video of 1 M and 2 M resolution, respectively.



1 M Video Source

In both tables, GV-System with the enhanced H.264 decoding can process higher frame rate than the old codec, and when GPU decoding is applied in addition to the enhanced decoding, an even higher frame rate can be achieved. In the example of processing 1 M video source with 64-bit Win 7, Core i7, the maximum frame rate increases from 300 fps to 480 fps when V8.5 H.264 decoding is applied and reaches 840 fps when GPU decoding is added.

Reduced CPU Loading

Although the total frame rate supported is considerably higher, the CPU loading does not increase and in some cases, have decreased by a large percentage. This is because the enhanced H.264 decoding can be processed more efficiently and the CPU loading is now shared with GPU.



The V8.4 CPU loading marked with * is slightly lower than the CPU loading of V8.5 H.264 decoding, because the maximum frame rate is obtained using 70% CPU loading with 5% margin of error, so the CPU data ranges between 65% and 75%. Considering the small margin of error (5%), the CPU loading is actually not increased in these cases. The maximum frame rate, however, is much higher with V8.5 H.264 and GPU decoding as noted in the parentheses.

We can see that the CPU usage dropped from about 70% to around 50% when processing 1 M video using 64-bit Win 7, Core i7 and when processing 2 M video source using 32-bit Win 7, Core i3 and 64-bit Win 7, Core i7.

Memory Requirements

The enhanced H.264 decoding and GPU decoding effectively improve the frame rate without raising the CPU usage, but require more memory. As a result, the recommended memory (RAM) requirements are 8 GB or more for 64-bit OS and 3 GB for 32-bit OS.

Testing Environment

Below are the specifications of the PC used in obtaining the above test results.

	PC 1	PC 2	
08	Win7 x64 SP1	Win7 x64 SP1	
05	Win7 x86 SP1	Win7 x86 SP1	
Motherboard	ASROCK	ASROCK	
Wotherboard	H67M	H67M	
CDU	Intel Core i7 2600K	Intel Core i3 2120K	
CPU	3.4 G	3.3 G	
Chipset	Intel H67	Intel H67	
DAM	Transcend	Transcend	
RAM	DDR3 1333 4 G x2	DDR3 1333 4 G x2	
VGA Intel HD3000		Intel HD2000	
VGA Driver 8.15.10.2361		8.15.10.2361	
S/W Version	V8.5.0.0 Beta	V8.5.0.0 Beta	

1.2 Enhanced Multi-Channel Playback and Related

Specifications

In V8.5, multi-channel playback in ViewLog has been enhanced to improve the smoothness of the video by producing higher frame rate. However, playing back multiple channels at high resolution can increase the CPU loading especially if the GV-System is processing other tasks simultaneously. As a result of the high CPU loading, dropped frames may sometimes occur in recorded video when playing back multiple megapixel channels.

To avoid the problem, it is recommended to play back megapixel video in single view.

1.3 Support for 16 kHz / 16 bit Audio Codec

Audio will now be recorded in AAC 16 kHz / 16 bit codec instead of the previous 8 kHz / 8 bit to provide clearer audio with less distortion in both live view and playback.

AAC 16 kHz / 16 bit codec is supported in the following video capture cards: GV Combo A Card (1120A / 1240A / 1480A), GV-600A, GV-650A, GV-800A, GV-3008A, GV-4008A, GV-600B, GV-650B, GV-800B, GV-900A, GV-4008A, GV-4008, GV-3008 and GV-1008.

1.4 Support for New IP Devices

The following GeoVision and third-party IP devices will now be supported in V8.5.

- Audio: A "O" mark indicates the GV-System supports the two-way audio communication with the device; "N/A" indicates the function is unavailable in the device.
- Codec: The video codec supported by GV-System are listed.
- **PTZ:** A "O" mark indicates the GV-System supports the PTZ function of the device; "N/A" indicates the function is unavailable in the device.

Brand	Model	Audio Codec		PTZ
ACTi	TCM-7811	0	JPEG / MPEG-4 / H.264	N/A
	AV10005	N/A	JPEG / H.264	N/A
	AV2825	N/A	JPEG / H.264	N/A
A #000#1	AV1325	N/A	JPEG / H.264	N/A
Vision	AV5125DN	N/A	JPEG / H.264	N/A
¥151011	AV5115	N/A	JPEG / H.264	N/A
	AV3115	N/A	JPEG / H.264	N/A
	AV3125	N/A	JPEG / H.264	N/A
Avia	M3113	N/A	JPEG / H.264	N/A
AXIS	P5532	0	JPEG / H.264	0
	DCS-2102	0	JPEG / MPEG-4	N/A
D-Link	DCS-3410	0	JPEG / MPEG-4	N/A
	DCS-3430	0	JPEG / MPEG-4	N/A
GeoVision	GV-BL120D	0	JPEG / MPEG-4 / H.264	N/A
	GV-BL130D	0	JPEG / MPEG-4 / H.264	N/A
	GV-BL220D	0	JPEG / MPEG-4 / H.264	N/A
	GV-BL320D	0	JPEG / MPEG-4 / H.264	N/A
	GV-BX120DW	0	JPEG / MPEG-4 / H.264	N/A
	GV-BX130D	0	JPEG / MPEG-4 / H.264	N/A
	GV-BX520D	0	JPEG / MPEG-4 / H.264	N/A
	GV-CB120	0	JPEG / MPEG-4 / H.264	N/A
	GV-CB220	0	JPEG / MPEG-4 / H.264	N/A
	GV-FD120D	0	JPEG / MPEG-4 / H.264	N/A
	GV-FD130D	0	JPEG / MPEG-4 /H.264	N/A
	GV-FD220D	0	JPEG / MPEG-4 / H.264	N/A
	GV-FD320D	0	JPEG / MPEG-4 / H.264	N/A

	GV-FE420	0	JPEG / MPEG-4 / H.264	0
	GV-FE520	0	JPEG / MPEG-4 / H.264	0
	GV-MFD120		JPEG / MPEG-4 / H.264	N/A
	GV-MFD130	0	JPEG / MPEG-4 / H.264	N/A
	GV-MFD220	0	JPEG / MPEG-4 / H.264	N/A
	GV-MFD320	0	JPEG / MPEG-4 / H.264	N/A
	GV-MFD520	0	JPEG / MPEG-4 / H.264	N/A
	GV-VD120D	0	JPEG / MPEG-4 / H.264	N/A
	GV-VD220D	0	JPEG / MPEG-4 / H.264	N/A
	GV-VD320D	0	JPEG / MPEG-4 / H.264	N/A
	GV-Compact DVR V3 (4CH)	0	H.264	0
GV-Compact DVR V3 (8CH)		0	H.264	0
	GV-VS04H	0	H.264	0
	HLC-15M	N/A	JPEG / MPEG-4	N/A
HUNT	HLC-81M	0	JPEG / MPEG-4	N/A
	HLC-84M	0	JPEG / MPEG-4	N/A
	D5118	N/A	JPEG / H264	0
Pelco	IM10C10	N/A	JPEG / H264	0
	IX10DN	N/A	JPEG / H264	N/A
Samsung	SNB-3000	0	JPEG / MPEG-4 / H.264	N/A
Sony	SNC-CH120	N/A	JPEG / MPEG-4 / H.264	N/A

Note:

- The models of GV-Compact DVR V3 (4CH) include GV-LX4C3D1, GV- LX4C3D2, GV-LX4C3D2W, GV-LX4C3V (ACC Model). The models of GV-Compact DVR V3 (8CH) include GV-LX8CD1, GV-LX8CD2, GV-LX8CD2W, GV-LX8CV1 (ACC Model), GV-LX8CV2 (ACC Model).
- 2. When manually adding the IP device to GV-System, select **Auto Detect** if the model is not listed in the Device drop-down list.
- 3. Arecont Vision AV5125DN, AV5115, AV3115 and AV3125 are not listed in the Device drop-down list, but can be connected through PSIA.

7

1.5 Setting Configuration without Stopping Recording

Previously, most settings can only be changed when cameras are not recording. Now, you can change settings such as video analytic functions, general settings and camera configurations, without interrupting recording.

Note:

- 1. Functions not supported include:
 - Analog camera install
 - Video source change (resolution and NTSC / PAL video standard)
 - schedule start / stop
 - I/O device add / remove
 - Storage location change (for video / audio / system log)
- 2. Startup settings and PTZ device settings can be changed while cameras are recording, but the changes will not be applied until the Main System is restarted.

1.6 Support for PTZ Functions through ONVIF

PTZ functions are now supported when connecting to IP devices through ONVIF protocol. To see how to add IP devices using ONVIF protocol, see *ONVIF and PSIA Connection*, Chapter 2, *DVR User's Manual* on the Surveillance System Software DVD.

2. Main System

This chapter introduces the new features and enhancements of Main System.

2.1 Standard and GeoVision Format Codec

In addition to the codec created by GeoVision, you can now choose to record analog and IP cameras in standard format codec. Video recorded in standard format can be played back using standard media players.

To set the codec format of IP cameras:

- 1. Click the **Configure** button, select **System Configure**, and select **IP Camera Install**.
- 2. Right-click the camera and select **Record Stream Type**.

IP Device Setup						
Server address	Port	Cam. NO.	Status	Video Resolution	Brand	Add Camera
192.168.3.199 192.168.1.165 192.168.1.231 192.168.1.183	10000 10000 10000 10000	Camera3 Camera2 No Camera1	Connected Connected Disconnect Connected	2048x1944(H264) Disconnect camera Change position Delete camera Change Resolution Remote camera setting Network Time Out On Demand Display Change live view codec Change live view codec Live view frame rate contro Live view frame rate contro Image Orientation Frames to keep in live view Record stream type GIS Setting	GeoVision_GV-FE420_Series IL110D_Seri mart Box(C S12(Camer))) (Sub stream)))) (Main stream))))))))))))))	Add Camera Scan Camera Import Camera IP Device Utility Automatic Setup OK

Figure 2–1

- 3. Select **Standard** or **GeoVision**.
- 4. To select codec type, click **Change record codec** to select MPEG4, H.264 or JPEG.

To set the codec format of analog cameras:

1. Click the **Configure** button, select **System Configure** and select **Camera Configure**.

Camera Configure	
Camera Name	Camera Lens
Camera 2	General
Rec Control 🛃	Video Attributes
🔽 Rec Video: 🛛 Day-Night 💽 🛃 💽	Brightness: 128
Rec. Frame Rate Setting: ▶	Contrast: 128
Recording Quality: 4	Saturation: 128
Apply Advanced Codec Setting	Hue: 128 Default
Motion Sensitivity: 9.5	
Mask Filter: 🔄 🔹 🖽	
🔽 Invoke Alarm: Notify 💽 📢)	
✓ Invoke to Send Alerts: Low	
▼ Output Module: Mod. 1 ▼ Pin. 1 ▼ ▶	
Register Motion Event	
Output Module: Mod 1 Pin 1 P	
	OK Cancel

Figure 2–2

- 2. Select Apply Advanced Codec Setting and click the 🔤 icon.
- 3. Select **Standard**.
- 4. To select codec type, click the button next to **Rec Video** and select **Geo MPEG4** or **Geo H.264**. Although the codec names are still listed as "Geo", the video will be encoded in standard format when standard format is enabled.

Note: When standard codec is enabled, video effects such as privacy mask, text overlay, digital watermark and any video effect involving flashing alarm box will not be included in the recorded video.

2.2 Live View Frame Rate Control and Buffer

You can now place a limit on the live view frame rate of each IP camera and adjust the number of frames to keep in live view buffer. To access these settings, click the **Configure** button, select **System Configure**, select **Camera Install** and select **IP Camera Install**. Right-click a connected camera to see the frame rate control and live view buffer settings.

IP Device Setup							
Server address	Port	Cam. NO.	Status	Video Resolution	Brand		Add Camera
192.168.3.199	10000	Camera3	Connected	2048x1944(H264)	GeoVision_G	V-FE420_Series	Add Camera
192.168.1.165	10000	Camera2	Connected	Disconnect camera		TL110D_Seri	Scan Camera
192.168.1.183	10000	Nu Camera1	Connected	Change position Delete camera Change Resolution		'S12(Camer	Import Camera
				Remote camera setting Network Time Out		•	
				On Demand Display		•	Automatic Setup
				Change live view codec Change record codec		• ·	ок
				Live view frame rate contro Live view frame rate contro	ol (Sub stream) ol (Main stream)		
				Image Orientation		P	
				Frames to keep in live view	buffer	<u>۲</u>	
				Record stream type		•	
				GIS Setting Automatically adjust DST		;	

Figure 2–3

Frame Rate Control

- Live view frame rate (Sub stream): Sets the live view frame rate of the sub stream to help reduce the CPU usage. If you have set the live view codec to be JPEG, select the number of frames to allow in a second. If the live view codec selected is MPEG4 or H.264, select one of the following options:
 - Maximum Live-view Frame Rate: View the video at the maximum frame rate possible.
 - Live-view Key Frame only: You can choose to only view the key frames of the live view instead of all frames on the live view. This option is related to the GOP setting of the IP camera. For example, if the GOP value is set to 30, there is only one key frame among 30 frames.
- Live view frame rate (Main stream): Sets the live view frame rate of the main stream with higher resolution when On Demand function is enabled. Refer to *Live-view frame rate control* above to see the options available.

Live View Buffer

Frames to keep in live view buffer: Specifies the number of frames to keep in the live view buffer.

When CPU loading is high, selecting **Live-View Key Frame Only** can reduce CPU loading by jumping from key frame to key frame and dropping the non-key frames in between. When CPU performance is poor or live view display is slow, select **Frames to keep in live view buffer** to reduce the number of frames kept in buffer and achieve a real-time appearance by dropping frames. These settings do not affect the frame rate of the recorded videos.

2.3 Automatic Daylight Saving Time Synchronization

You can now use the daylight saving time (DST) synchronization function to avoid manually setting the DST time on GV-IP devices every year. When DST period starts or ends on the GV-System, the time on the GV-IP device Web interface will be synchronized with the time of the GV-System.

- Click the Configure button, select System Configure, select Camera Install and select IP Camera Install.
- 2. Right-click a GV-IP Device, select **Automatically adjust DST** and select **Enable automatic adjustment of DST**.

IP Device Setup							
Server address	Port	Cam. NO.	Status	Video	Resolution	Brand	Add Camera
192.168.3.199	10000	Display pos	ition .			GeoVision_GV-FE420_Series	
192.168.2.171 192.168.1.166	10000 10000	Delete cam	era	ŕ	52(MPEG4)&192 56(MPEG4)&128	GeoVision_GV-BX220D_Seri GeoVision_GV-BX110D_Seri	Scan Camera
		Change set Remote car	ting nera setting				Import Camera
		Duplicate C Network Tir	amera ne Out				IP Device Utility
		Change Co Frames to k	dec keep in live view bu	⊧ ffer ⊧			Automatic Setup
		Recording of GIS Setting	odec format				ок
		Automatica	lly adjust DST	Þ	 Enable automatic ad Disable automatic a 	djustment of DST djustment of DST	

Figure 2–4

3. Click OK.

To see how to set the GV-System to automatically adjust to DST time, see *Daylight Saving Time Recording*, Chapter 1, *DVR User's Manual* on the Surveillance System Software DVD.

2.4 Automatic Setup of IP Devices

The Automatic Setup function allows you to quickly add all GeoVision and third-party IP cameras within an IP address range to GV-System.

- 1. Click the **Configure** button, select **System Configure**, select **Camera Install** and select **IP Camera Install**.
- 2. Click Automatic Setup. A dialog box appears.

Automatic Setup	X
Settings for Automatic Setup	
Start IP address:	192 . 168 . 0 . 1
Number of addresses in the IP pool:	10
	OK Cancel

Figure 2–5

- Type a Starting IP address and specify the number of addresses in the IP pool to include. In the case of the figure above, IP devices using IP address between 192.168.0.1 and 192.168.0.10 will be added.
- 4. Click **OK**.

GV-System will automatically try to establish connection with IP devices within the defined IP range. The username and password are set to **admin** by default. If the camera does not use the default settings, the status will be displayed as "Connecting." To change the login settings, right-click the camera and click **Disconnect Camera**. Right-click the camera again and click **Change Setting** to modify the username and password.

2.5 Accessing Control Panel of GV-IP Devices

You can now access the control panel of GV-IP Cameras from the Camera Configure page. The control panel allows you to quickly adjust image quality, view alarm notification and look up camera information.

1. Click the **Configure** button, select **System Configure** and select **Camera Configure**.

Camera Configure	
Camera Name Camera 1	Camera Lens Wide Angle
Rec Control	Video Attributes Brightness: 169 Contrast: 128 Saturation: 128 Hue: 128

Figure 2–6

2. Select the camera and next to Video Attributes, click the **Advanced** button. The camera's live view appears.



Figure 2–7

3. In the control panel, adjust the advanced image settings.

For more details on the control panel, refer to *The Control Panel of the Live View Window* section in the manual of the connected GV-IP device.

2.6 Wide Angle Lens Dewarping to Correct Distortion

If the camera image appears warped toward the edges, you can enable the Wide Angle Lens Dewarping function to correct the distortion.

- 1. Click the **Configure** button, select **System Configure** and select **Camera Configure**.
- 2. Use the **Camera Lens** drop-down list to select **Wide Angle**.

Camera Configure	X
Camera Name	Camera Lens
Rec Control 👉	Video Attributes Brightness: 169
Rec. Frame Rate Setting: D	Contrast: 128 Saturation: 128 Advanced
	Hue: 128 Default

Figure 2–8

3. Click the \square button. This dialog box appears.



Figure 2–9

- 4. Move the slider at the bottom to adjust the degree of warping. The adjusted view is shown on the right.
- 5. Click **OK**.
- On the main screen, right-click the live view, select the camera number and select Wide Angle Lens Dewarping to apply the setting.

Note:

- Wide angle lens dewarping enabled at the Camera Configure page is only applied to live view and does not affect the recorded video, but this feature can also be applied after a video is recorded. Refer to the *Wide Angle Lens Dewarping* in ViewLog section in Chapter 3.
- If dual-stream IP channels are applied, for better image quality, it is recommended to change the streaming to single stream before you enable wide angle lens dewarping. This effect does not support On Demand Display for automatic adjustment of live video resolution in single-channel division.

2.7 Display Ratio Adjustment in Fisheye Live View

You can now specify the display ratio of fisheye live view.

- 1. Right-click the fisheye view, select the camera number and select **Geo Fisheye**.
- 2. Right-click the fisheye view, select **Fisheye Option** and select **Settings**. This dialog box appears.

Settings		
Frame Rate Control	▲ ▼ 15	I▼ Apply All
🔽 Show Original Video i	n Low Resolution	Apply All
Screen Ratio Setting:		
• 4:3 C 16	5:9	
		OK Cancel

Figure 2–10

- 3. Under Screen Ratio Setting, select the display ratio that best fits your monitor.
- 4. Click OK.

2.8 **Object Tracking in Fisheye Live View**

You can now set up object tracking in fisheye live view to track moving object. The function is only available when the fisheye camera mode is set to be **Geo Fisheye: 360 degree**. When motion is detected in the fisheye, the top-right channel will start tracking the moving object and in the 360 degree view at the bottom, the moving object will be highlighted.



Figure 2–11

- 1. Right-click the fisheye view, select the camera number and select **Geo Fisheye**.
- 2. Right-click the fisheye view, select **Fisheye Option**, select **Camera Mode** and select **Geo Fisheye: 360 degree**.
- 3. Right-click the fisheye view, select **Fisheye Option**, select **360 Object Tracking** and select **Advanced Settings**. This dialog box appears.



Figure 2–12

- 4. Use the options below to customize object tracking.
 - Mask Region: Use the mouse to outline a mask region where motion will be ignored.
 - Object Size: Click the button to pause the live view and then use the mouse to outline the maximum and minimum size of the targeted object.
 - Dwell Time of Motion: After a targeted object stops moving, the highlighted region and the top-right channel will remain fixed on the area for the number of seconds specified. Any new motion detected during the dwell time will be ignored to prevent the camera view from frequently jumping from one area to another.
 - Schedule: Click Schedule to activate object tracking at certain times only. Refer to *Video Analysis Schedule*, Chapter 3, *DVR User's Manual* on the Surveillance System Software DVD for more details.
- 5. Right-click the fisheye view, select **Fisheye Option**, select **360 Object Tracking** and select **Tracking** to enable object tracking.



2.9 Enhanced Object Definition in Intrusion Alarm

In Intrusion Alarm, you can now define two sets of object sizes for objects that will be moving toward or away from the camera along a path, for example, a hallway. Since objects appear larger when closer to the camera, defining a larger object size for areas closer to the camera will make object detection more precise. Follow the steps below to define different object sizes according to proximity to the camera.

- 1. Click the Configure button, select Video Analysis and select Counter/Intruder Alarm Setting.
- 2. Select the cameras to be configured and click **Configure**. The Setup dialog box appears.
- 3. Click the Alarm tab.



Figure 2–13

- 4. Select **Define Image Depth** and select **With Depth** in the drop-down list. A line
 appears.
- 5. Place the line along the path where the objects will be moving by dragging the line. The larger icon indicates the point closer to the camera and the smaller icon indicates the point farther away from the camera.
- Select **Define Object Size**. Click the Solution to pause the live image and click the larger icon . Use the mouse to outline the maximum and minimum size of objects when they are close to the camera.

7. Click the smaller icon and use the mouse to outline the maximum and minimum size of objects when they are far from the camera.

You have now defined two sets of object sizes at the two ends of the 4 line.

2.10 Ignoring Environmental Changes in Advanced Motion Detection

You can reduce false alarm in Advanced Motion Detection by ignoring environmental changes, which can include rain, snow, and moving tree branches.

- 1. Click the **Configure** button, select **Video Analysis** and select **Advanced Motion Detection**.
- 2. Select the cameras to be configured and click **Configure**. This dialog box appears.



Figure 2–14

- 3. Select the camera from the drop-down list and click **Enable**.
- 4. Select Ignore environmental changes.
- 5. Click **OK**.

2.11 Noise Tolerance in Object Index and Face Detection

Noise tolerance adjustment is added to Object Index and Face Detection to reduce false detection.

- 1. Click the **Configure** button, select **Video Analysis** and select **Object/Index Monitor Setup**.
- 2. Select the cameras to be configured and click **Configure**. The Video Object Setup dialog box appears.



Figure 2–15

- 3. Select the camera and enable Camera.
- 4. Select **Noise Tolerance** and use the slider to adjust the level. The higher the level, the more tolerant the system is to video noise.
- 5. Click OK.

2.12 Setting Snapshot Frequency in Object Index

Previously, the automatic snapshot function in Object Index is set to 2 snapshots per second by default. Now you can customize the frequency of automatic snapshot function.

- Click the Configure button, select Video Analysis and select Object/Index Monitor Setup. The Video Object Setup dialog box appears.
- 2. Select the desired cameras to be configured.
- 3. Select Video Snapshot and click the [...] button. A dialog box appears.

Video Object Setup	×
Object Index Object Monitor	
Camera	
Camera 3 🔹	
Mask Filter:	
Storage	
Available: 3.98GB	
Set Location	
Recycle Keep Days 30	
Video Player	
Quick Search	
Setup-	1 Seconds 2 Frames
C Object Index	
C Face Detection	V Save as JFEO life
🕑 Video Snapshot 👘 👘	
	Mod. 1 Pin. 1
1 anow object	OK Cancel
Noise Tolerance	
Level:1	
Schedule	OK Concol

Figure 2–16

- 4. Specify the number of snapshots to take within a time period and click **OK**. For example, 5 snapshots will be taken every 2 seconds if you type 2 seconds 5 frames.
- 5. Click OK.

2.13 Enhanced Support for POS Text Sender

Previously, only Windows-based POS devices that can generate TXT, INI or JNL files are supported by GV-System. GV-System can now be integrated with POS devices that are compatible with Internet or OPOS Printer Driver protocols.

Note: OPOS is a widely adopted POS protocol developed to integrate POS devices into Windows-based applications.

There are two ways to connect a POS device to GV-System:

1. Using a cross-over RS-232 cable and Internet



Figure 2–17

2. Through LAN or internet



+ POS Text Sender

Figure 2–18

To set up the POS devices:

- 1. Insert the Surveillance System Software DVD to the POS computer. It runs automatically and a window appears.
- 2. Click Install V 8.5.0.0 System.
- 3. Select **POS Text Sender** and follow the on-screen instructions. This dialog box appears.



Figure 2–19

4. Click **New**. This dialog box appears.

Monitor Type
File
File
Internet OPOS Printer Driver

Figure 2–20

- 5. Select one of the following options:
 - a. Select **Internet** if the POS device is compatible with Internet protocol. Click **OK**. In the dialog box that appears, type the IP address of the POS device and the connection port. The default port value is 5111.

Choose Mo	onitor Source Type	
Type IP	TCP 192.168.11.81	_
Port	5111	
	OK Cancel	

Figure 2–21



b. Select OPOS Printer Driver if the POS device is compatible with OPOS protocol.
 Click OK. In the dialog box that appears, type the connection port. The default port value is 5111.

Choose Monitor Source Type		
Type IP	OPOS Printer Driver	_
Port	5111	-
OK Cancel		

Figure 2–22

6. Click **OK**. This dialog box appears.

Configure		
Printer Type:	Serial Port 📃	
File Path:		
POS Index:	POS1 💌	
COM Port:	COM1 -	
9600,None,8,1		
Add	Cancel	



- Printer Type: Select Serial Port if you are connecting using cross-over RS232 and select TCP/IP Port if you are connecting through LAN or Internet.
- **POS Index:** Number the POS device.
- **COM Port:** Select the COM port that is used in connection with GV-System.
- The parameter/IP address button:

For the serial type of POS device, click this button to configure Baud Rate, Data Bits, Parity and Stop Bits of the POS device.

For the TCP/IP type of POS device, click this button to configure Device Port and Password to match those of the GV-System. By default, the port value is 4000, and the password fields in both POS Data Sender and GV-System are left blank.

7. Click Add to apply the settings.

8. In the POS Text Sender dialog box, the POS device is added to the connection list. Click **Start** to start the connection. You can also minimize the dialog box to the notification area



You will also need to set up the POS device on the GV-System. Refer to *Network Connection*, Chapter 7, *DVR User's Manual* on the Surveillance System Software DVD for detailed instruction.



3. ViewLog

This chapter introduces the new features and enhancements of ViewLog.

3.1 Wide Angle Lens Dewarping in ViewLog

You can apply Wide Angle Lens Dewarping effect to recorded video to correct warping toward the edge of the camera view.

1. Click the Effect button, select Advanced Video Analysis and select Wide angle lens dewarping. This dialog box appears.

Wi	Wide Angle Lens Dewarping				
Г	Select the desired cameras —				
	Host Name	Camera Name			
	🗹 Local	Camera 1			
	🗹 Local	Camera 2			
	🗹 Local	Camera 3			
	🗌 Local	Camera 4			
	1	· · · · · · · · · · · · · · · · · · ·			
	ОК				

Figure 3–1

- 2. Select the cameras to apply Wide Angle Lens Dewarping.
- 3. Click the 🎯 button to adjust the level of dewarping. This dialog box appears.



Figure 3–2

- 4. Move the slider to adjust the degree of warping. The adjusted view is shown on the right.
- 5. Click OK.

3.2 Enhanced Features When Saving in AVI Format

3.2.1 Saving Dewarped Fisheye in AVI Format

Previously, videos recorded by fisheye cameras are saved in circular source image. You can now dewarp the circular image and adjust the image before saving the video in AVI format.

- 1. In ViewLog, select the video recorded by fisheye cameras.
- Click the View Mode button, select Single View, select Geo Fisheye and select the View Mode to display the fisheye image.
- 3. Adjust the view angle and zoom level.
- 4. Click the **Save as AVI** button and select **Save as AVI**. The camera view you have adjusted appears.

Save Avi File		
Avi View Setting	🗖 Direct Merge (Higher Speed)	2
Start-Time : 11:40:32	End-Time : 11:40:59	
Export with new Privacy Mask region(s) C Un-recoverable Recoverable ?	Remove Recoverable Privacy Mask region(s) ID : 1 Password : *	
	ОК Са	ncel

Figure 3–3

5. Click **OK** to save the video in AVI format. When you play the AVI file, the fisheye image will be dewarped and positioned according to the angle and zoom level you have adjusted.



3.2.2 Direct Merge When Saving as AVI

When saving video as AVI files, you can select the **Direct Merge** option to save the video file in the codec type that it was originally recorded in. When Direct Merge is selected, you will not be able to customize the video settings, but the time required for conversion is significantly reduced.

1. In ViewLog, click the **Save as AVI** button and select **Save as AVI**. This dialog box appears.



Figure 3–4

- 2. Select **Direct Merge (High Speed)**. You will not be able to customize settings such as codec selection, privacy mask recoverability and digital watermark.
- 3. Click **OK** to save the file as AVI.

3.2.3 Enhanced Codec Types When Saving as AVI

When saving recorded video in AVI format, the codec options have been changed to WMV9 and Geo H.264, which produce higher quality image than the previous codec types. When WMV9 is selected, you can play the video with Windows Media Player directly without using GeoVision codec.

To select the codec type:

- 1. In ViewLog, click the Save as AVI button and select Save as AVI.
- 2. Click the **Setting** tab. This dialog box appears.

Save Avi File		×
Avi View Setting	🔲 Direct Merge (Higher Speed)	?
Set Location D:/TESTING DIRECT MERGE\File20110617154018	.Avi	
Normal	7	
🕐 🦵 Time merge		
🕐 🦵 Save as Exe		
Add digital watermark		
Date / Time : 🕟		
Video Effects : 🝺		
Audio Export : 🕟		
GPS Export : 🕟		
Codec Selection		
WMV9 Geo H264		
	ОК	Cancel

Figure 3–5

- 3. Use the **Codec** drop-down list to select Geo H.264 or standard WMV9.
- 4. Click OK.


3.3 Monitoring of Vehicle's Average Speed in GV-Compact DVR V3

When playing back video recorded by GV-Compact DVR V3, you can enable GIS display to see the coordinates and the average speed of the vehicle.

1. In ViewLog, click the **Setting** button, click the **Display** tab and select **Display GPS positions**.

System Configuration
Play Setting Display Database / Cache Quad View Thumbnail View
User Interface
Aspect ratio : 4:3
Camera / Image Setting
Apply deinterlace render
Apply scaling render
Apply deblocking render (single view only)
Apply text overlay's camera name / time / alarm render
Apply text overlay's POS / GV-Wiegand render
Apply camera name render
✓ Display GPS positions
Use image instead of blue screen
Replace blue screen during playback or merging video clips
D:\GV-800 (Main System)\CommRes\Camlogo.jpg

Figure 3–6

2. Play back a video clip recorded by GV-Compact DVR V3. The coordinates and the average speed of the vehicle will be displayed in the top-left corner.



Figure 3–7

3.4 Face Mask in ViewLog

The face mask function was added to detect and blur the human faces in ViewLog for privacy purposes. You can change the account privileges to apply face masks or to display faces for Power User, User and Guest accounts. All Supervisor accounts can see the recorded video without face masks.



Figure 3–8

Note: The Face Mask function is designed to detect front-view faces only, and the area of the detected face must take up 10% to 50% of the live image. For other limitations, see *Face Detection*, Chapter 3, *DVR User's Manual* on the Surveillance System Software DVD.



To Enable the Face Mask for an User Account

- 1. Click the **Configure** button, select **System Configure**, select **Password Setup**, and select **Local Account Edit**.
- 2. Select a Power User, User or Guest account and click the **Viewlog** tab at the bottom.

Password Setup	
Guest User PowerUser Supervisor	Account is disabled Expire in day (s) ID : Bill Lumbergh Password : *** Hint : *** Level : User User cannot change password Force password change at next login Disable account if user does not login after day (s) Export this ID for IR Remote Control (GV-Keyboard) Send password by E-mail
	Image: System Log Image: System Log Image: System EventLog Image: System Log
New Remove Search	Fast Backup & Restore Control Center Privacy Mask Other

Figure 3–9

- 3. Clear the selection for **Display detected faces** to blur human faces when the user watch recorded events in ViewLog.
- 4. Click OK.

3.5 Enhanced Single Player

New functions have been added to Single Player to allow you to dewarp any distortion toward the edge of camera view and to save dewarped fisheye recordings in AVI format.

Tip: To access Single Player:

- Play back recorded videos in Event List Query through Webcam server. Refer to *Event List Query*, Chapter 8, *DVR User's Manual* for more details.
- Select to include Single Player when backing up recorded videos in ViewLog. Refer to *Backing Up Recorded Files*, Chapter 5, *DVR User's Manual* for more details.

Monitor					
Event Type	Device	Information	Note	Date	Submit Query
Motion 💌	~	*		DST Rollback	
				2011/06/16-00:00:01 📰	
				2011/06/16-23:59:5:	
		I	1]]	
Chart Txt 🔽 Export					
1 Page: 1/1, To	tal record(s): 1		_	∃ Video	
ID Event Device Information N Type	lote <mark>DST</mark> Rollback Tim	e Video			1
4665 Motion 4	6/18 5:18	5/2011 🕞 🗐			
1 Page: 1/1, To	tal record(s): 1				4
			6/16/2011 17:16:32.60		▶ ▶1 ▲ ★ ▼ ▼

Figure 3–10 Event List Query through Webcam Server

To access Wide Angle Lens Dewarping:

- 1. Right-click the Single Player camera view, select **Render**, select **Wide Angle Dewarping**, and select **Setting**. A dialog box appears.
- 2. Use the slider at the bottom to adjust the degree of dewarping and click **OK**.
- To apply Wide Angle Lens Dewarping, right-click the Single Player camera view, select Render, select Wide Angle Dewarping, and select On / Off.



To save dewarped fisheye view in AVI format:

- 1. Right-click the Single Player camera view, select **Fisheye** and select a type a camera mode.
- 2. You can adjust the angle and the zoom level of the fisheye view.
- 3. Right-click the Single Player camera view, select **Tools** and select **Save as AVI**. The camera view you have adjusted appears.
- 4. Click **OK** to save the video in AVI format. When you play the AVI file, the fisheye image will be dewarped and positioned according to the angle and zoom level you have adjusted.

3.6 Backing Up to Blu-ray Disc Using OS-Burning

Previously, only DVD and CD are supported when using the built-in software of the operating system to back up files. You now back up files to blu-ray disc using the built-in software of the operating system.

Refer to *Back Up Recorded Files*, Chapter 5, *DVR User's Manual* on the Surveillance System Software DVD for more details.



4. Center V2

This chapter introduces the new features and enhancements of Center V2.

4.1 Adding Device Information into Alert Messages

You can include the subscriber name and ID into E-mail and SMS notification messages. The following is an example with e-mail alert messages.

1. On the Center V2 window, click the **Preference Settings** button 💿 and select **Notification**. This dialog box appears.



Figure 4-1

 Select the event into which you wish to insert subscriber name and ID, and select Send E-Mail Alerts. The E-Mail dialog box appears.

E-Mail	×
Subject	
Notice from CenterV2 [Camera Motion]	
Text Content	S
OK Cancel Macros >>	

Figure 4-2



3. Type the message text and click the **Macros** button. This dialog box appears.



Figure 4-3

4. Place the pointer to the place you wish to insert subscriber name and ID in the text, select the corresponding symbol and click **Insert**. The symbols will be replaced with real information when the message is displayed to the user.

GeoVision

4.2 Enhanced Features on the Main Window

4.2.1 Categorizing the Events

Event category tabs are added to the V8.5 Center V2 Professional by default. Click the desirable category tab at the bottom of the main screen to view events by category on the Center V2 window. For example, click **Motion** to view all the motion events:



Figure 4-4

Note: This feature is supported by the Professional version using a GV-USB dongle.



To configure the Event tabs on the main screen:

1. On the main screen, click the **Preference Settings** button 💿 and select **My Favorite Events**. A sub-menu appears.

System Configure Event Log Settings	
Password Setup	
E-Mail Setup	
SMS Setup	
Local I/O Device	
Virtual I/O	
Notification	
Customize Alarm Report	
Customize Message Settings	
5 5	
My Favorite Events	🕨 🗸 System
My Favorite Events	 ✓ System ✓ Motion
My Favorite Events Automatic Failover Support	 System Motion Trigger
My Favorite Events Automatic Failover Support Version Information	 System Motion Trigger Connection
My Favorite Events Automatic Failover Support Version Information	System Motion Trigger Connection Alarm
My Favorite Events Automatic Failover Support Version Information	System Motion Trigger Connection Alarm Login/Logout
My Favorite Events Automatic Failover Support Version Information	System Motion Trigger Connection Alarm Login/Logout Attachment
My Favorite Events Automatic Failover Support Version Information	V System Motion Trigger Connection Alarm Login/Logout Attachment Wiegand Data
My Favorite Events Automatic Failover Support Version Information	System Motion Trigger Connection Alarm Login/Logout Atachment Wiegand Data Device Lost
My Favorite Events Automatic Failover Support Version Information	V System Value Value

Figure 4-5

2. Select or unselect the Event Categories as required.

GeoVision

4.2.2 Setting up the Customized Event Tab

With the V8.5 Center V2, you can group the event types you want to monitor under the **Customize Event** tab.

Note: This feature is supported by the Professional version using a GV-USB dongle.



Figure 4-6

- On the Center V2 window, click the Preference Settings button is and select
 Customize Message Settings. The Customize Message Settings dialog box appears.
- 2. Select an event from the left and select Add to Customized Event Tab.

📥 Camera Motion	~	Text Color
Video Lost		Assign By Priority
VO Trigger		· · · · · · · · · · · · · · · · · · ·
I/O Module Lost		High 😽
The network connection is lost.		
Disk Full		O Customize Color
Login		
Logout	_	
Start Service		
Stop Service		Sample
Detected change of bind IP, restart the serv	ice	
Failed to establish the connection.		Sample Text !!
Multicam Surveillance System is abnormall	уc	
Show Camera by I/O Trigger.		
Failed to start recording.		Add to the Customized Event Tab.
Record File.		
Failed to Login Dispatch Server.		
Recycling is started	\mathbf{v}	

Figure 4-7

3. To view the customized events, click the **Customized Event** tab on the event category of the main screen.



4.2.3 Setting Alert Levels of Event Messages

In the upgraded V8.5 Center V2, you can assign an alert level to each event type. Each alert level can be distinguished by color. You can customize the color for each alert level or assign a color exclusively for a particular event type.

Note: This feature is supported by the Professional version using a GV-USB dongle.

MX 19 14:38:06 0 \bigcirc Message Tin Camera 4 Video Lost Camera 4 Video Lost Camera 9 detected motion Record file of Camera 1. [Live] Video signal of Camera 4 has resume. Record file of Camera 2. [Live] Record file of Camera 4. [Live] Record file of Camera 4. [Live] Camera 2 detected motion 5/11/2011 3:46:37 PM 5/11/2011 3:46:39 PM 5/11/2011 5:51:23 P 5/11/2011 3:46:39 P 5/11/2011 3:46:39 PM 5/11/2011 3:46:41 PM 5/11/2011 3:46:41 PM 5/11/2011 3:46:42 PM 5/11/2011 3:46:42 PM 5/11/2011 3:46:44 PM 5/11/2011 3:46:48 PM 5/11/2011 3:46:39 PM 5/11/2011 3:46:36 PM 5/11/2011 5:51:26 PM 5/11/2011 5:51:22 PM 5/11/2011 3:46:39 PM 5/11/2011 3:46:33 PM Motion Attachment 2 DVR DVR2 DVR2 DVR1 DVR1 Device Lost Attachment 2 Attachmen Attachmen Motion Motion Device Lost Device Lost nera 2 Camera 2 Video Lost Video signal of Camera 14 h 3:46:50 PN as resume Record file of Camera 1. [Live] 5/11/2011 3:46:53 PM 5/11/2011 3:46:48 PM DVR1 Attachment Trigger Connection d Data Devi ce Lost Offli Alarm e Event Cus

Figure 4-8

- On the Center V2 window, click the Preference Settings button and select
 Customize Message Settings. The Customize Message Settings dialog box appears.
- 2. On the left, select an event type you wish to configure.

Customize Message Settings	×
Camera Motion Video Lost Video Lost I/O Trigger I/O Module Lost The network connection is lost. Disk Full Login Logout	Customize Color
Start Service Stop Service Detected change of bind IP, restart the service Failed to establish the connection. Multicam Surveillance System is abnormally c	Sample Sample Text !!
Show Camera by I/O Trigger. Failed to start recording. Record File. Failed to Login Dispatch Server.	Add to the Customized Event Tab.
Recycling is started.	OK Cancel

Figure 4-9



- 3. To assign an alert level, select **Using Priority Color** and choose from the drop-down list. To change the color for this alert level, click the color box and select a desired color.
- 4. To customize the color of this event type, select **Using Custom Color** and click the color box to assign a desired color.
- 5. Click **OK** to complete

4.3 New and Enhanced Video Storage Functions

Several new and enhanced features are added for more efficient data storage and recycling.

Preference	Preference
General Layout Network Record Dispatch Server	General Layout Network Record
	Recycle
Path	Path Free size Storage Gr
✓ D:\Center V2\Data	D:\Center V2\Data 4.37 GB Storage 1
	Enlarge path threshold: 500 MB
	Keep days: 30
Enlarge recycle threshold: 800 MB	Enlarge recycle threshold: 800 MB
OK Cancel	OK Cancel
V8.4	V8.5

Figure 4-10

4.3.1 Accessing the Video Storage Settings

- 1. On the Center V2 window, click the **Preference Settings** button 🕖 and select **System Configure**. The Preference dialog box appears.
- 2. Select the **Record** tab. This dialog box appears.

Preference			
General Layout Network	Record		
* ×			Recycle
Path		Free size	Storage Gr
✓ D:\Center V2\Data		4.37 GB	Storage 1
Enlarge path threshold:	500	МВ	
🔽 Keep days:	30	IJ	
Enlarge recycle threshold:	800	МВ	
			OK Cancel

Figure 4-10

GeoVision

Recycle: In Center V2 V8.4, 400 MB of old files are deleted when the storage space falls short of the recycle threshold. In V8.5, this feature is enhanced by considering the number of channels connected. When 1 to 49 channels are connected and the storage space falls short of 800 MB, 400MB of old files will be deleted. This recycle size increases by 100 MB with every addition of 50 channels. That is, with 50 to 99 channels connected, 500 MB of the old files will be deleted as the storage space falls short of the recycle threshold. See the following table for the corresponding recycle size:

No. of Channels Connected to Center V2 Server	Recycle Size (MB)
1 ~ 49	400
50 ~ 99	500
{	ł
800	1500

- Storage Group: With Center V2 V8.5, you can store the recordings of different subscriber at separate locations using the storage group feature. For details, see 4.3.3 Storing Video Files in Separate Locations.
- Enlarge Path Threshold: When the current storage path falls short of 500 MB (default threshold), recordings are saved to the next path of the same storage group. To enlarge the path threshold, select this option and specify the path threshold.
- Keep Days: The recordings are stored for the specified number of days before they are recycled.
- Enlarge Recycle Threshold: When the current storage path falls short of 800MB (default recycle threshold), recycle starts. To enlarge the recycle threshold, select this option and specify the recycle threshold.



4.3.2 Storing Video Files in Separate Locations

In Center V2 V8.4, video files from all the subscribers are saved to the same location. Now you can keep video files from each subscriber in separate locations by setting up storage groups. You need to set up storage groups and then assign each subscriber with a storage group.

To add storage paths and set up storage groups:

- 1. To access the video storage settings, click the **Preference Settings** button (20), select **System Configure** and click the **Record** tab. The Preference dialog box appears.
- 2. Add storage locations using the Add New Path button 😹.
- 3. Assign a storage group to each path using the drop-down list.

Preference			
General Layout Network Record	Dispatch S	erver	
		🗹 Rec	cycle
Path	Free size	Storage Group	
D:\Center V2\Data	19.61 GB	Storage 1	~
C:\Center V2 Data\Subscriber 1	10.20 GB	Storage 1 Storage 2 Storage 3 Storage 4 Storage 5 Storage 6 Storage 7	
Enlarge reserved space: 5	00 MB		
Keep days:	80 I)		
Enlarge recycle threshold: 8	00 MB		
	(ОК	Cancel

Figure 4-11

Important: The system will first save video files to the path that appears on the top of the list, and switch to the next path (of the same group) as soon as the current location reaches the specified path threshold.



To assign a storage group to a subscriber:

- 1. On the Center V2 window, click the **Accounts** button . The Address Book window appears.
- 2. Select the subscriber and click the **Subscriber Settings** button **P**. The Subscriber Settings dialog box appears.
- 3. Select a storage group from the drop-down list.

Subscriber Settings - DVR1
Monitor Option Image Size: Normal Video
Record Mode Ive Mode Settings Attachment Mode Settings Both (Live & Attachment)
Any changes of this property will be applied in next trigger. Color of Channel Caption Storage Group Storage 1 Storage 2 UK Cancel

Figure 4-12

4.4 Configuring a Virtual I/O Box

Now the Center V2 operator can also activate alarm outputs installed through the network (hence, a virtual I/O device) to inform the Center V2 operator when events occur. A maximum of 9 I/O boxes (including local and remote I/O boxes) can be connected to one Center V2 server.

Note:

- 1. Only 8-port and 16-port GV-I/O Boxes can be connected to Center V2 through Ethernet.
- 2. The GV-I/O Box must be installed in the same LAN with the Center V2 server.

To set up a virtual GV-I/O Box on Center V2 server:

- On the Center V2 window, click the Preference Settings button and select Virtual I/O. The Virtual I/O Device dialog box appears.
- 2. Click the **Add** button. This dialog box appears.

Virtual I/O	Device					
Device:	GV-IO BOX (8) 🛛 🗸					
IP:	192.168.2.11					
Port:	10000 Default					
ID:	admin					
Passwor	d: •••••					
	OK Cancel					

Figure 4-13

3. Select the device using the drop-down list, and type the **IP address**, **ID** and **Password** of the GV-I/O Box.



To trigger outputs by event:

- On the Center V2 window, click the **Preference Settings** button in and select **Notification**. The Alarm Settings dialog box appears.
- 2. From the left column, select the event type for which the alarm output is to be triggered.



Figure 4-14

- 3. Select **Output Module** and define the module number and pin number using the drop-down lists. The output will be triggered when the selected event occurs.
- 4. To set up more event types for alarm output, repeat steps 2 and 3.

To trigger outputs manually:

1. On the Center V2 window, click the **Tools** button (1) and select **Force Output**. This dialog box appears.



Figure 4-15

2. Select a desired module and then click the Finger button *f* to trigger the output.

4.5 Enhanced EZ Player

4.5.1 Wide Angle Lens Dewarping

When viewing videos through EZ player, these images may be curved near the corners. The new Wide Angle Lens Dewarping feature is designed to correct image distortion.

- 1. Click an attachment to open the EZ player.
- 2. Right-click the video image on EZ player and select **Wide Angle Lens Dewarping** to enable this function.
- Right-click the video image again and select Wide Angle Lens Dewarping Settings. The dialog box appears.



Figure 4-16

- 4. Move the slider at the bottom to correct the degree of warping. The adjusted view is shown on the right.
- 5. Click **OK** to complete.



4.5.2 Fitting Window Size

When the source image is bigger than the EZ player screen, use this feature to adjust its size to fit the screen. Right-click the video image on the EZ player and select **Fit Window Size**. The image size should be immediately adjusted.



Figure 4-17



5. VSM (Vital Sign Monitor)

This chapter introduces the new features and enhancements of VSM.

5.1 Enhanced Features on the Main Window

5.1.1 Device Tree

Previously the VSM center only displays the connected subscriber without showing the connected devices and their status. With the Vital Sign Monitor V8.5, the status of the connected devices such as cameras and I/O modules can be easily monitored from the main window.

🛿 Vital Sign Monitor								
ervice <u>C</u> onfigure <u>T</u> ools <u>View</u>	Help							
🜉 😫 🔛 🕮	0	ID:			23 👰 🛃	5		
×	29	ID	Туре	Message		Message Time	Start Time	
Subscriber List [2/2]	8	DVR 1	System	Stop all cameras	monitoring	7/5/2011 10:42:42 AM	7/5/2011 10:42:42 AM	
GeoVision	8	GV-FD120D	Login/Logout	Login		7/5/2011 10:42:44 AM		
E Camera 1		DVR 1	Device Lost	Camera 6 Video I	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 2		DVR 1	Device Lost	Camera 7 Video I	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 3		DVR 1	Device Lost	Camera 8 Video I	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
'BP Camera 4	8	DVR 1	Device Lost	Camera 9 Video L	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 5	8	DVR 1	Device Lost	Camera 10 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 6		DVR 1	Device Lost	Camera 11 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 7	W.	DVR 1	Device Lost	Camera 12 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
🚳 Camera 9		DVR 1	Device Lost	Camera 13 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🍲 Camera 10		DVR 1	Device Lost	Camera 14 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🌚 Camera 11		DVR 1	Device Lost	Camera 15 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 12		DVR 1	Device Lost	Camera 16 Video	Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 13	52	GV-ED120D	Motion	Camera detected	motion	7(5)2011 10:42:45 AM	7(5(2011 10:18:10 AM	
Camera 15		GV ED 120D	Sectors	Stan all camerae	monitoring	7/5/2011 10:42:45 AM	7/5/2011 10:10:10 AM	
amera 16	822	GV-FD120D	System	Stop all Cameras	monitoring	7/5/2011 10:42:46 AM	7/5/2011 10:18:10 AM	
😑 🌍 GV-FD120D	Y	0v-FD120D	System	Stop I/O Monitorin	y	7/5/2011 10:42:46 AM	7/5/2011 10.16.10 AM	
Camera	_	GV-FD120D	Motion	Camera detected	motion	7/5/2011 10:43:00 AM	7/5/2011 10:18:24 AM	
■ Module 1	<u> </u> ≥	GV-FD120D	Motion	Camera detected	motion	7/5/2011 10:43:15 AM	7/5/2011 10:18:39 AM	
	⊠	GV-FD120D	Motion	Camera detected	I motion	7/5/2011 10:43:47 AM	7/5/2011 10:19:11 AM	
		System	Device Lost	Offline Event	ustomized Event	J		
ID								
Name								
Telephone (H)								
Telephone (O)								
F-mail								
Address								

Figure 5-1



5.1.2 Configuring the Customized Event Tab

With the VSM V8.5, you can group the event types you want to monitor under the **Customized Event** tab on the main window.

Vital Sign Monitor	Jale						2
Service Compute Toos Tem i	Teh	ID:					
×	2 9	ID	Туре	Message	Message Time	Start Time	ł
Subscriber List [2/2]		DVR 1	Device Lost	Camera 6 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
E 32 GeoVision		DVR 1	Device Lost	Camera 7 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
E TVR 1		DVR 1	Device Lost	Camera 8 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 2	82	DVR 1	Device Lost	Camera 9 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 3	12	DVR 1	Device Lost	Camera 10 Video Lost	7/5/2011 10:42:44 AM	7(5(2011 10:42:44 AM	
Camera 4		DVR 1	Device Lost	Camera 11 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- Camera 5	112	DVR 1	Device Lost	Comera 13 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🥝 Camera 6	Y	DVR1	Device Lost	Camera 12 video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🍪 Camera 7		DVR 1	Device Lost	Camera 13 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 8		DVR 1	Device Lost	Camera 14 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 9		DVR 1	Device Lost	Camera 15 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 11		DVR 1	Device Lost	Camera 16 Video Lost	7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 12	8	GV-FD120D	Motion	Camera detected motion	7/5/2011 10:42:45 AM	7/5/2011 10:18:10 AM	
- 🍘 Camera 13		GV-FD120D	Motion	Camera detected motion	7/5/2011 10:43:00 AM	7/5/2011 10:18:24 AM	
- 🍪 Camera 14		GV-FD120D	Motion	Camera detected motion	7/5/2011 10:43:15 AM	7/5/2011 10:18:39 AM	
- 🍲 Camera 15		GV-FD120D	Motion	Camera detected motion	7/5/2011 10:43:47 AM	7/5/2011 10:19:11 AM	
Camera 16		GV-FD120D	Motion	Camera detected motion	7/5/2011 10:44:03 AM	7/5/2011 10:19:27 AM	
GV-FD120D		GV-FD120D	Motion	Camera detected motion	7/5/2011 10:44:19 AM	7/5/2011 10:19:43 AM	
Module 1		GV-ED120D	Motion	Camera detected motion	7/5/2011 10-44-33 AM	7/5/2011 10:19:58 AM	
C THE FOULD I	6	GV-FD120D	Motion	Camera detected motion	7/5/2011 10:44:55 MM	7/5/2011 10:13:30 AM	
		Svetom	Device Lost	Offling Event Customized Event	7/5/2011 10.45.00 AM	7/5/2011 10.20.51 AM	
× [System	Device Losi	Customized Event			
ID							
Name Telephone (10)							
Telephone (H)							
Mobile Phone							
E-mail							
Address							
l landu						NI M	-

Figure 5-2

- 1. On the VSM window, click **Configure** and select **Customize Message Settings**. The Customize Message Settings dialog box appears.
- 2. Select an event from the left and select Add to Customized Event Tab.

Customize Message Settings	×
Camera Motion Video Lost Video Lost ViO Trigger ViO Module Lost Connection Lost Disk Full Login Logout Start Service Stop Service Multicam Surveillance System is abnormally c The storage for Event Log is low, Event Log w GV-I/O Module is not found. Video signal has resumed. The input module is reconnected. The input status is changed. Evidet be losin GMD Genere	Assign By Priority High Customize Color Sample Sample Text !! Add to the Customized Event Tab.
Failed to send SMS.	OK Cancel

Figure 5-3



 To view these events, click View on the VSM window, select My Favorite Events and select Customized Event. The Customized Event Tab appears on the VSM window. Click to display the customized event types.

5.1.3 Setting the Alert Level of Event Messages

In the upgraded VSM V8.5, you can color an event type by assigning an alert level. The event types of the same alert level will be shown in the same color. However, you can also assign a color exclusively for a particular event type.

🍯 Vital Sign Monitor										PX
Service ⊆onfigure Tools ⊻iew	Help									
🖳 😫 🚼 🏖 🗉	9 d		ID:			- 🖅 🚰 🖬 🛙	2			
J:	x P	Ø	ID	Type	Message			Message Time	Start Time	^
Subscriber List [2/2]	8		DVR 1	System	Stop all came	ras monitoring		7/5/2011 10:42:42 AM	7/5/2011 10:42:42 AM	
GeoVision	8	0	V-FD120D	Login/Logout	Login			7/5/2011 10:42:44 AM		
EP Camera 1			DVR 1	Device Lost	Camera 6 Vid	eo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 2			DVR 1	Device Lost	Camera 7 Vid	eo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
BP Camera 3			DVR 1	Device Lost	Camera 8 Vid	eo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- Camera 4	8		DVR 1	Device Lost	Camera 9 Vid	eo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 5	8		DVR 1	Device Lost	Camera 10 Vi	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 6			DVR 1	Device Lost	Camera 11 V	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 8	V		DVR 1	Device Lost	Camera 12 V	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🥁 Camera 9			DVR 1	Device Lost	Camera 13 V	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🥁 Camera 10			DVR 1	Device Lost	Camera 14 V	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- 🍲 Camera 11			DVR 1	Device Lost	Camera 15 V	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
- Samera 12			DVR 1	Device Lost	Camera 16 V	deo Lost		7/5/2011 10:42:44 AM	7/5/2011 10:42:44 AM	
Camera 14	872		V 5D120D	Motion	Comoro doto	ted motion		7/5/2011 10:42:45 AM	7/5/2011 10:12:10 AM	1
Camera 14			SV-FU1200	Motion	Camera dete	ted motion		7/5/2011 10:42:45 AM	7/5/2011 10:18:10 AM	
🎯 Camera 16			W-FD120D	System	Stop all came	eras monitoring		7/5/2011 10:42:46 AM	7/5/2011 10:18:10 AM	
😑 🎲 GV-FD120D	Y	6	9V-FD120D	System	Stop I/O Monin	oring		7/5/2011 10:42:46 AM	7/5/2011 10:18:10 AM	r I
🛁 🔏 Camera		6	W-FD120D	Motion	Camera dete	cted motion		7/5/2011 10:43:00 AM	7/5/2011 10:18:24 AM	
. Module 1		0	V-FD120D	Motion	Camera dete	cted motion		7/5/2011 10:43:15 AM	7/5/2011 10:18:39 AM	
			V-FD120D	Motion	Camera dete	cted motion		7/5/2011 10:43:47 AM	7/5/2011 10:19:11 AM	~
		All	System	Device Lost	Offline Event	Customized Event	J			
* ID										
Name										
Telephone (H)										
Telephone (O)										
Mobile Phone										
C-mail Address										
1000022										
eady									NUM	

Figure 5-4

On the VSM window, click **Configure** and select **Customize Message Settings**. The Customize Message Settings dialog box appears. For detail setup, see *4.2.3 Setting Alert Levels of Event Messages*.



5.2 Temperature Alarm

In the new VSM center, you can monitor temperature of the connected subscriber (GV-IP Cameras and GV-System with GV-3008 Card only) by checking the current temperature and setting up a critical temperature upon and beyond which the VSM operator and the subscriber can be notified.

Note: For the GV-IP Cameras that support temperature display, please refer to the *GV-IPCAM H.264 User's Manual* for detail.

To look up the temperature of the connected subscriber:

On the VSM window, click **Tools** and select **View Subscriber Status**. The dialog box appears. The default unit is Celsius. To configure the units shown, see the following section for detail.



Figure 5-5

Alternatively, right-click the subscriber from the Subscriber List on the VSM window and select **View Subscriber Status**.



To configure the temperature alarm:

- If you have a GV-System subscriber, make sure the Send temperature status to Vital Sign Monitor option is enabled. For details, see 5.3.2 Notification messages on System Status.
- 2. On the VSM window, click **Configure** and select **Temperature Monitor**. The Temperature Monitor dialog box appears.
- 3. In the Units section, select **Celsius** or **Fahrenheit**. The selected unit will be used in the alarm message.

Temperature Monitor	
Units Celsius (°C) Fahrenheit (°F) Show both units	J
Alarm Critical temperature:	80 0°C~100°C
	OK Cancel

Figure 5-6

4. To show both units in the Subscriber Status (Figure 5-5), select **Show both units**.

Tip: With the **Show both units** option is selected, select either **Celsius** or **Fahrenheit** for the unit to come before the other in the Subscriber Status.

- 5. In the Alarm section, specify the critical temperature.
- 6. Click **OK**. Once the temperature reaches or exceeds the critical temperature, an alarm event will be shown on the VSM window.



vice ⊆onfigure <u>I</u> ools <u>V</u> iew	Help						
🛒 😫 😫 🖉	2 🥜	ID:		📑 🐼 😴 😢			
		ID	Type	Message	Message Time	Start Time	
Subscriber List [2/2]		System	Alarm	Can't find USB Protection Key	7/5/2011 2:06:54 PM		
GeoVision		GV-FD120D	Connection	The network connection is lost	7/5/2011 2:07:06 PM		
B Camera 1		System	System	Stop Service	7/5/2011 2:07:06 PM		
- EP Camera 2		System	System	Start Service	7/5/2011 3:34:18 PM		
Camera 3		DVR 1	Login/Logout	Login	7/5/2011 3:34:19 PM		
- Camera 4		DVR 1	System	Start Monitoring All Type Events	7/5/2011 3:34:19 PM	7/5/2011 3:34:19 PM	
Camera 5		GV-FD120D	Login/Logout	Login	7/5/2011 3:34:22 PM		
Camera 6		GV-FD120D	System	Stop all cameras monitoring	7/5/2011 3:34:23 PM	7/5/2011 3:09:44 PM	
🚭 Camera 8		GV-FD120D	System	Stop I/O Monitoring	7/5/2011 3:34:23 PM	7/5/2011 3:09:44 PM	
- 🍄 Camera 9		GV-FD120D	Alarm	Critical Temperature Alarm [44.5°C]	7/5/2011 3:34:42 PM		
Camera 10		GV-FD120D	Motion	Camera detected motion	7/5/2011 3:34:43 PM	7/5/2011 3:10:04 PM	
Camera 12		GV-FD120D	Motion	Camera detected motion	7/5/2011 3:35:13 PM	7/5/2011 3:10:34 PM	
🚭 Camera 13		DVR 1	System	Stop all cameras monitoring	7/5/2011 3:35:17 PM	7/5/2011 3:35:17 PM	
- 🍪 Camera 14		DVR 1	Device Lost	Camera 6 Video Lost	7/5/2011 3:35:20 PM	7/5/2011 3:35:20 PM	
Camera 15		DVR 1	Device Lost	Camera 7 Video Lost	7/5/2011 3:35:20 PM	7/5/2011 3:35:20 PM	
Camera 16		DVR 1	Device Lost	Camera 8 Video Lost	7/5/2011 3:35:20 PM	7/5/2011 3:35:20 PM	
E 6 00101200		DVR 1	Device Lost	Camera 9 Video Lost	7/5/2011 3:35:20 PM	7/5/2011 3:35:20 PM	
		DVR 1	Device Lost	Camera 10 Video Lost	7/5/2011 3:35:20 PM	7/5/2011 3:35:20 PM	
		DVR 1	Device Lost	Camera 11 Video Lost	7/5/2011 3:35:20 PM	7/5/2011 3:35:20 PM	
	All	System	Device Lost	Offline Event Customized Event			
ID							
Name							
Telephone (H)							
Telephone (O)							
Mobile Phone							
E-mail							
AUULESS							

Figure 5-7

 You can also invoke computer alarm, local output device and send SMS and e-mail alerts using the Alarm Settings. For details, see 1.16 Notification Settings, 2.14 SMS Alerts and 2.15 E-Mail Alerts in the GV-CMS Series User's Manual V8.5 on the software DVD.



5.3 Enhanced Notification Messages

5.3.1 Notification Messages for Lost Connection

You can configure the GV-System for VSM operator to be notified of the events that occur. In V8.5, the VSM operator can also be notified when connection to a video is lost.

🍯 Vital Sign Monitor							
Service Configure Iools ⊻iew	Help						
📕 👥 🚼 🚳 💯	1	ID: bx120		📰 🐼 式 🐹			
×	20	ID	Туре	Message	Message Time	Start Time	^
Subscriber List [2/2]		DVR	Device Lost	Video signal of Camera 1 has resume.	5/3/2011 4:09:54 PM	5/3/2011 4:09:54 PM	
■ to bx120		DVR	Device Lost	Camera 1 Video Lost	5/3/2011 4:10:08 PM	5/3/2011 4:10:08 PM	
- Module 1		DVR	Device Lost	Video signal of Camera 1 has resume.	5/3/2011 4:10:16 PM	5/3/2011 4:10:16 PM	
linput1		bx120	Motion	Camera detected motion	5/3/2011 4:10:17 PM	5/3/2011 7:08:03 AM	
🖃 🎓 DVR		DVR	Device Lost	Camera 1 Video Lost	5/3/2011 4:10:31 PM	5/3/2011 4:10:31 PM	
- 🍪 Camera 1		DVR	Device Lost	Video signal of Camera 1 has resume.	5/3/2011 4:10:39 PM	5/3/2011 4:10:39 PM	
Camera 2		DVR	Device Lost	Camera 1 Video Lost	5/3/2011 4:10:54 PM	5/3/2011 4:10:54 PM	
- Camera 3		bx120	Motion	Camera detected motion	5/3/2011 4:10:56 PM	5/3/2011 7:08:43 AM	
- 🍪 Camera 5		DVR	Device Lost	Video signal of Camera 1 has resume.	5/3/2011 4:11:03 PM	5/3/2011 4:11:03 PM	
- 鑃 Camera 6		bx120	Motion	Camera detected motion	5/3/2011 4:11:08 PM	5/3/2011 7:08:55 AM	
- 🤡 Camera 7		bx120	Motion	Camera detected motion	5/3/2011 4:11:21 PM	5/3/2011 7:09:08 AM	
- 😂 Camera 8		DVR	Device Lost	Camera 1 Video Lost	5/3/2011 4:11:21 PM	5/3/2011 4:11:21 PM	
Camera 10		DVR	Device Lost	Video signal of Camera 1 has resume.	5/3/2011 4:11:40 PM	5/3/2011 4:11:40 PM	
- 🍲 Camera 11		DVR	Device Lost	Camera 1 Video Lost	5/3/2011 4:11:44 PM	5/3/2011 4:11:44 PM	
- 🍪 Camera 12		DVR	Device Lost	Video signal of Camera 1 has resume.	5/3/2011 4:11:54 PM	5/3/2011 4:11:54 PM	
Camera 13		bx120	Motion	Camera detected motion	5/3/2011 4:11:59 PM	5/3/2011 7:09:46 AM	
- Camera 14		DVR	Device Lost	Camera 1 Video Lost	5/3/2011 4:12:11 PM	5/3/2011 4:12:11 PM	
- 🍪 Camera 16		bx120	Motion	Camera detected motion	5/3/2011 4:12:12 PM	5/3/2011 7:09:59 AM	
- Module 1							~
	All	Motion					
× ID by120							
Name							
Telephone (H)							
Telephone (O)							
Mobile Phone							
E-mail							
Address							
Ready						NUM	

Figure 5-8

This option is enabled by default. To access this feature:

On the GV-System's main screen, click the Network button and select Connect to VSM. The dialog box appears.

Connect to Vital Sign Mo	nitor
Connect Exit	Configure 🥹
 Login after 30 Monitoring all type events 	seconds nts
IP	Status
127.0.0.1	-
, •×/	

Figure 5-9



- 2. Click the **Configure** button. The Advance Settings dialog box appears.
- 3. On the Advance Settings dialog box, select the **Camera** tab. The dialog box appears.

Ivance Settings					
General Camera I/O Device System Information					
Camera 1					
Event	Event Type				
Motion	Emergency				
	Emergency				
Missing Object	Emergency				
Unattended Object	Emergency				
Scene Change	Emergency				
Wiegand Data	Emergency				
Video Lost	Emergency				
Crowd Detection	Emergency				
Advanced Unattended Object Detection	Emergency				
Advanced Scene Change Detection	Emergency				
Advanced Missing Object Detection	Emergency				
	OK Cancel				

Figure 5-10



5.3.2 Notification Messages on System Status

The VSM operator can be notified of the recycling status of video/audio log, storage information and others by configuring its subscribers (GV-Systems).

Vital Sign Monitor						. @ 🗙
Service Configure Tools View	Help					
🛒 😫 🔚 🎕 🖬	2 🥜	ID: DVR 1				
×	Y 🛛	ID	Туре	Message	Message Time	^
Subscriber List [2/2]		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:50:11 PM	7/5/2
GeoVision		DVR 1	System	Stop all cameras monitoring	7/5/2011 5:50:20 PM	7/5/2
Ella Camora 1		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:50:26 PM	7/5/2
EP Camera 2		DVR 1	System	Start all cameras monitoring	7/5/2011 5:50:39 PM	7/5/2
🖼 Camera 3		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:50:55 PM	7/5/2
- 😂 Camera 4		DVR 1	System	Stop all cameras monitoring	7/5/2011 5:50:57 PM	7/5/2
- 😂 Camera 5		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:51:10 PM	7/5/2
Camera 6		DVR 1	System	The POS is online, IPOS 1, Mapping Camera:1, 192,168,3,2421	7/5/2011 5:51:21 PM	7/5/2
Camera 8		DVR 1	System	The Multicam Surveillance System starts recycling. [Storage 1]	7/5/2011 5:51:21 PM	7/5/2
Gamera 9		DVR 1	System	The Multicam Surveillance System starts recycling. [Storage 1]	7/5/2011 5:51:21 PM	7/5/2
- 🍄 Camera 10		DVR 1	System	The Multicam Surveillance System starts recycling [Storage 1]	7/5/2011 5·51·21 DM	7/5/2
- 🥸 Camera 11		DVR 1	System	The Multicam Surveillance System starts recycling. [Storage 1]	7/5/2011 5:51:21 PM	7/5/2
- Camera 12		GV ED120D	Alarm	Critical Temperature Alarm [43.5%]	7/5/2011 5:55:50 DM	115/2
Camera 13		GV-FD 120D	Aidiii	Critical remperature Alarm [45.5 C]	7/5/2011 5.55.30 PM	7/5/2
Camera 15	Ľ-	GV-FD120D	Motion		7/5/2011 5:50:29 PM	71512
🚭 Camera 16		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:56:58 PM	7/5/2
🖃 🎲 GV-FD120D		DVR 1	System	1 succeeded to log in Surveillance System.	7/5/2011 5:57:30 PM	7/5/2
— 🏄 Camera		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:57:41 PM	7/5/2
🕀 💯 Module 1		GV-FD120D	Motion	Camera detected motion	7/5/2011 5:57:56 PM	7/5/2 ~
	<	-	1 1			>
	All	System	Device Lost	Offline Event Customized Event		
* ID DVR 1						
Name						
Telephone (H)						
Telephone (O)						
Mobile Phone						
E-mail						
Address						
Ready						NUM

Figure 5-11

In VSM V8.5, more features are added and the VSM operator is also notified of the following (by default):

[Storage Information]

• when the storage device is lost or undetectable

[Other]

- when the GV-System starts recycling
- when the subscriber logs in or changes
- when the critical temperature is reached
- the POS device connection status



To access these options:

1. Follow steps 1 and 2 in *5.3.1 Notification Message on Events* and select the **System Information** tab. The dialog box appears.

Advance Settings
General Camera System Information Video / Audio Log
Storage Information Allow Vital Sign Monitor to inquire the storage information Report the total amount of free storage space to Vital Sign Monitor Report Interval: 2 Hours Notify Vital Sign Monitor when the total amount of free storage space is lower than GB Notify Vital Sign Monitor when storage is full Notify Vital Sign Monitor when any storage is lost
Other Notify Vital Sign Monitor when the user logs in or is changed Notify Vital Sign Monitor when the user fails to log in the Multicam Notify Vital Sign Monitor when the USB Protection Key is removed Notify Vital Sign Monitor when the Multicam starts recycling Send temperature status to Vital Sign Monitor OK

Figure 5-12

2. Select or unselect the notification events as required.

6. Control Center

This chapter introduces the new features and enhancements of Control Center.

6.1 Displaying Images on Multiple Screens

In V8.5 Control Center, you can set up a video wall over multiple screens which allows you to display a maximum of 144 channels on a maximum of 16 monitors. Multiple screens can be built using monitors from a local computer or remote computers through the network.

Note: Multiple screens can only be built from either a local computer or remote computers. Mixed sources are not supported.

6.1.1 Configuring Multiple Screens from a Local Computer

- Before setting up for multi-screen display, make sure you have established a group consisting of the channels you want to display. For how to set up a group, see 4.4 Hosts and Groups, GV-CMS Series User's Manual V8.5 on the Surveillance System Software DVD.
- 2. On the Control Center service toolbar, click the **Multi-Screen** button **U**. This window appears.



Figure 6-1

GeoVision

- To add a layout template, select the Control Layout List on the left and click the Add A
 New Layout button on the toolbar. The Add Control Layout dialog box appears.
- 4. Configure the layout in the Add Control Layout dialog box.

Add Control Layout		
Name: Video Wall 1		
Setting		
⊙ Manual		
Monitor Layout	2 × 2	
Channel Layout	3 × 3	
⊖ Selecting		
Control List	✓	
Zoom In Setting		
 All Monitor 		
◯2×2 Channels	O Left Top	
○ 3 x 3 Channels	O Right Top	
○ 4 x 4 Channels	O Left Bottom	
\bigcirc 5 x 5 Channels	O Right Bottom	
[OK Cancel	



- A. Name the layout in the **Name** field.
- B. Configure the Settings section. Select Manual or Selecting.

[Manual] Setups up a new layout template.

■ Monitor Layout: Defines the number of monitors in columns and rows. For example, the following monitor layout is 3 x 2 instead of 2 x 3.



Figure 6-3

Channel Layout: Specify the number of screen divisions on the Multi-Screen in columns and rows. A 3 x 3 channel layout on 2 x 2 monitor layout will render 9 channels over 4 monitors.

[Selecting] Apply a template already created using the drop-down list.



C. Configure the Zoom In Settings. Select All Monitor or a channel layout (e.g. 2 x 2 Channels) to display an enlarged channel.

[All Monitor] Zooms a channel over all the channels by double-clicking the image.

[2 x 2 Channels] Zooms a channel over 4 channels by double-clicking the image. The options for the number of channel vary according to the Channel Layout setting in step B.

[Left Top / Right Top / Left Bottom / Right Bottom] Defines the location of the zoomed-in channel on the Multi-Screen. If you have a 3×3 channel layout, and you select the zoom-in channels to be 2×2 , left top, your zoomed-in image will be displayed in the shaded area:



Figure 6-4

5. The layout name and its channel division should appear in the Multi-Screen dialog box.



Figure 6-5



- 6. Define monitor layout.
 - A. Double-click the established layout and select **Monitor Layout**.
 - B. Look up the coordinates from the Windows Display Properties and assign coordinates by dragging them from the bottom of the dialog box to each monitor.

🗱 MultiScreen 📃 🗖 💌						
💱 😪 🗩 🔿 🖓 🖏 😻 🧿						
Control Layout List - Video Wall 1 - Monitor Layout	Local_Monitor 2 [-1920, 0]		Local_Monitor 1 (0, 1080)			
	Local_Monitor 3 (0, 0)		Local_Monitor 4 (1920, 0)			
	Monitor List (3840 x 2160)				
🥩 Local	Name Local_Monitor 1(0, 1080) Local_Monitor 2(-1920, 0) Local_Monitor 3(0, 0) Local_Monitor 4(1920, 0) Local_Monitor 5(1920, 1080)		E			

Figure 6-6

- 7. To import channels, drag the already established group from the group list to the top left channel of the Multi-Screen window. A menu pops out.
- 8. Select either Put cam by order or Use scan function.
 - Put cam by order: Displays source channels from left to right, top to bottom (See Figure 6-4), starting from the selected channel.
 - Use scan function: Displays source channels in slide show on a single selected channel of the Multi-Screen.





Figure 6-7

Note: A source channel can only be displayed by a single channel on the Multi-Screen at the same time. A new configuration will take priority and any repeated channel will be removed from the previous configuration.

🗱 MultiScreen						
💐 😪 💬 🤿 🗣 👯 💐 🚳 🧿						
Control Layout List	Host 1 Camera 1	Host 2 Camera 1	Host 3 Camera 1			
	Host 4 Camera 1	Host 5 Camera 1	Host 6 Camera 1			
	Host 7	Host 8	Host 9			
	Camera 1	Camera 1	Camera 1			

9. A preview of channel layout appears.

Figure 6-8



To enable this layout, click the Apply the Selected Layout button so on the Multi-Screen toolbar. To close the display, click the Close button on the MultiScreen toolbar.

6.1.2 Configuring Multiple Screens from Remote Computers

- 1. Before you start, make sure:
 - A. The Control Center V8.5 is installed in both PCs.
 - B. The GV-USB dongle is connected to both PCs.
- 2. On the additional PC, locate and execute the **IPMC.exe** file in the Control Center folder. The IP Matrix Client dialog box appears.
- 3. Click the **Service** button to allow connection from the Control Center.

👺 IP Matrix Client			
Control Center			
IP:	~		
Port: 5620 Default			
Status			
Stand by			
Service Connect Advanc	e Disconnect		

Figure 6-9

- 4. On the computer that runs the Control Center, click the **Connect to Server** button 💐 on the Multi-Screen window. The Connect to dialog box appears.
- 5. Type the IP address of the additional PC and clcik **Connect**.



Figure 6-10


6. A "Connected" message should appear and the additional monitor should appear at the bottom.

MultiScreen			or g	
繁 🤿 📮 🖷 🦛	R 🕄 🗟 🖸			
Control Layout List O- Video Wall 1 Monitor Layout				
	Monitor List	(3840 x 2160)		
Local TEST232-PC(192.168.0.107)	Name TEST232-PC_Monitor 1(0, 0)			
< >				



- 7. Follow steps 4 to 6 in *6.1.1 Configuring Multiple Screens from a Local Computer* to configure channel layout, monitor layout and zoom-in settings.
- 8. Follow steps 7 to 9 in *6.1.1 Configuring Multiple Screens from a Local Computer* to import channels and define how they will be displayed.
- 9. Follow step 10 in *6.1.1 Configuring Multiple Screens from a Local Computer* to start displaying multi screens.



6.2 Wide Angle Lens Dewarping

When viewing images through Live View or Matrix View, these images may be curved near the corners. The new Wide Angle Lens Dewarping feature is designed to correct image distortion.

To access this feature from Live View:

- 1. Right-click a camera from the host list or the group list and select **Live View**. The Live View window appears.
- To adjust the distortion, select the Change Size button and select Wide Angle Settings. The Wide Angle Dewarping Setting dialog box appears.



Figure 6-12

3. Move the slider at the bottom to correct the degree of warping. The adjusted view is shown on the right.



Figure 6-13

4. To apply the configuration, select the **Change Size** button **and select Wide Angle Lens Dewarping**.

To access this feature from Matrix View:

On the Matrix View, right-click on the channel for which you want to adjust the distortion and select **Wide Angle Lens Settings**. The Wide Angle Dewarping Setting dialog box appears. For setup details, see descriptions on live view earlier in this section.



Figure 6-14



6.3 Enhanced I/O Central Panel

Previously with the I/O Central Panel, live views popped up upon input trigger can only be displayed in a separate window. In V8.5, if you have enabled both I/O Central Panel and VMD (Video Motion Detection) functions, you can choose to pop up live view on the VMD window when an input is triggered.

1. Make sure you have set up the I/O trigger pattern on the I/O Central Panel. For setup details, see *Creating a Group for Cascade Trigger*, I/O Central Panel in the GV-CMS Series User's Manual.



Figure 6-15

- 2. On the I/O Central Panel dialog box, click the **Configure** button 💦 and select **Panel Setting**. The Panel Configuration dialog box appears.
- 3. Select the **Notify** tab, select **Enable digital input to invoke the associated camera** and select the **VMD Integration Mode**.



Figure 6-16



- 4. Assign a camera for its live view to pop up upon input trigger.
 - A. Right-click the input on the Advanced I/O List and select **Setting**. The **Pin Setting Input** dialog box appears.
 - B. Select Associated Camera and map a camera using the drop-down list.

Pin Setting - Input			
Display Setting			
🎨 Input1 💌			
C Text Color 🕟 Background Color			
Alarm Level Level Undefined			
Trigger Setting			
Trigger Associated Outputs			
🔲 Latch Trigger			
Associated Camera Camera 1			
Digital Input Invokes the Associated Camera			
Default OK Cancel			

Figure 6-17

- C. Select Digital Input Invokes the Associated Camera.
- D. Click **OK**. When the input is triggered, the assigned camera view will pop up on the VMD window.

GeoVision:

6.4 Enhanced VMD System

In Control Center V8.4, live views pop up on the VMD window upon motions only. In Control Center V8.5, live view can also pop up on the VMD window when the critical temperature is reached or exceeded.

You can set up a critical temperature upon or beyond which the live view will pop up on the VMD window for easy monitoring. This feature is only supported by GV-System with GV-3008 Card and most GV-IP Cameras.

Note: For the GV-IP Cameras that support temperature detection, please refer to the *GV-IPCAM H.264 User's Manual* for detail.

- 1. Add the desired cameras to the VMD Group by dragging them from the Host List.
- 2. To enable pop-up live view by critical temperature, right-click the camera under the VMD Group, select **Video Analysis** and select **Temperature Alarm**.
- 3. Click the VMD System icon **P**. The VMD window appears.
- 4. On the VMD window, click the **Show System Menu** icon **▼** on the top right corner and select **System Configure**. The System Configure dialog box appears.
- 5. Type the critical temperature.

System Configure	×
DirectX Fable DirectDraw	
Monitor Option Post-Motion: 10 Sec.	
Temperature Monitor Critical Temperature: 40 (0°C~100°C)	
 Centigrade (°C) C Fahrenheit (°F) 	
OK Cancel	

Figure 6-18

6. The live view should pop up on the VMD window when the camera's temperature reaches or exceeds the specified critical temperature.

6.5 Setting the Matrix Display Monitor

In Control Center V8.4, you can not specify a matrix to be displayed on a particular monitor. In V8.5, you can designate each matrix to be displayed on a specific monitor.

1. Configure the monitor positions according to Windows Display Properties. For details, see *Matrix Settings*, *System Configuration* in the *GV-CMS Series User's Manual* on the Surveillance Software DVD.

Syste	m Config	ure				
Ren	Remote Desktop RemoteDVR Remote			ViewLog		
Gen	eral	Network	IP Matrix	VM	D System	
1/0) Central Pa	nel	Matrix	Remot	Remote E-Map	
- Positio	on/Resolutio	n				
#	×	Y	Resolution	1 <u>8</u> 1	6 J	
1	0	0	1024 x 768	64		
2	0	768	1024 x 768	64		
3	1024	0	1024 x 768	64		
4	1024	768	1024 x 768	64		
5	0	0	1024 x 768	64		
6	0	0	1024 x 768	64		
7	0	0	1024 x 768	64		
8	0	0	1024 x 768	64		
Note:	Screen Res	olution is 1	124 × 768.		Ū,	
				OK	Cancel	

Figure 6-19

 To assign a matrix to a specific monitor, right-click the group on the Group List, select Set Start Position as and select a matrix number. The matrix numbers here correspond to the ones in step 1. The group folder turns red when its starting position is assigned.



Figure 6-20



6.6 Query Data Event on GV-System

You can query events that occur at DVR hosts by defining search criteria. The search results can be displayed in text or in chart. You can also export your research results in the form of text, html or excel.

Query Category	vies Search Criteri	а				
Event Data	Monitor					
Monitor System Login Counter POS	Motion	Device Camera 2 💌	Information	Note	Date DST Rollback [2011/06/14-23:59:5:	Submit Query
Submit Query	Chart Txt Camera 1 Page: 1/1, Tota 1 Page: 1/1, Tota 1 Page: 1/1, Tota 2 Original Camera 2 Original Camera 2 Original Camera 1 Page: 1/1, Tota	al record(s): 3 Post Rollback 6/14/2 2:12:3 6/14/2 2:13:11 6/14/2 2:54:31 1 record(s): 3	Video 011 PM 011 011 011 011 011 011 011 011 011 01	6/14/2011 14:13:19.097		
	Search Results		Video Ica	on Pl	ayback Window)



- 1. On the GV-System, click the **Network** button , select **WebCam Server** and click **OK** to enable the WebCam service.
- On the Control Center, right-click the desired DVR host on the host list and select Event Data Query. The Event Data window appears.
- 3. On the left panel, select a query category and then click **Submit Query** at the bottom to display its search criteria.
 - Monitor: events that are monitored
 - System: system activities
 - Login: user login/logout status



- **Counter:** counter events
- **POS:** POS transaction events
- 4. Define each search criteria such as Event Type, Device, Information, Date etc. The search criteria vary depending on the search category selected.
- 5. If you want to search the events recorded during the Daylight Saving Time period, select **DST Rollback** and specify the time period in the Date column.
- 6. Click Submit Query. The search results will be displayed in the text form.
- 7. To graph the search results, click the **Chart** button.
- 8. To playback any attached video, click the Video icon 📳.
- 9. To export the search results, select the file type using the drop-down list and click **Export**.

7. Dispatch Server

This chapter introduces the new features and enhancements of Dispatch Server.

7.1 Manually Re-Distributing Subscribers

The V8.5 Dispatch Server allows you to manually re-distribute subscribers to any online Center V2 Server.

- 1. Click the **Manual Dispatch** button is on the toolbar.
- 2. From the device tree, click and drag the desired subscriber to the desired Center V2 Server. The re-distributed subscriber will be disconnected and resumed shortly.

Note: The designated Center V2 Server must be online for the distribution to be effective.



7.2 Designating a Primary Center V2 Server

In V8.4 Dispatch Server, subscribers are distributed according to predefined groups or balanced loading of the connected Center V2 Servers. When a Center V2 Server disconnects, its subscribers will be distributed to other Center V2 Servers. However, when this Center V2 Server resumes, the already re-distributed subscribers will not be distributed back to this Center V2 Server. The V8.5 Dispatch Server allows you to designate a primary Center V2 Server is available.

 On the Dispatch Server window, click the **Configure** button and select **Customize Dispatch Setting**. The Customize Dispatch Setting dialog box appears.

Customize Dispatch Setting		×
ID	Dispatch Setup	
DVR1 DVR2	Center V2 Server 1	_
	Center V2 Server 1 Center V2 Server 2	
Auto re-dispatch subscriber after CenterV2 Se	rver is online. OK Cancel	

2. Select a primary Center V2 Server using the drop-down list.

Figure 7-1

3. Select Auto re-dispatch subscriber after Center V2 Server is online.



8. GV-GIS

This chapter introduces the new features and enhancements of GIS. The GIS V3.0.0 offers comprehensive features on storage, recording and recycling. With these features, you can set up multiple Storage Groups for each Mobile Host, configure the recording mode and time for event recordings and define recycle conditions. You can also record manually, by event that you specified and/or upon input trigger, depending on your needs.

8.1 Configuring the Basics

8.1.1 Configuring the Storage Group

A Storage Group has been created by default. You can add or delete Storage Groups as required.

1. On the main screen, click **Configure** and select **Record Setting**. This dialog box appears.

Secord Setting	X
Storage Group Video Setting I	Recycle
Storage 1	✓ Keep days(1~999): 30
Record Path C:\Temp	
	OK Cancel

Figure 8-1

- Storage: Adds Storage Groups to save video recordings. Storage 1 is established by default. You can create up to 16 Storage Groups, each consisting of different recording paths and Keep Days settings.
- Record Path: Specifies the recording locations for the selected Storage Group. Multiple recording paths can be set to a Storage Group. With Multiple recording paths, recordings are automatically saved to the next path of the same Storage when the current path is full.
- Keep days: The number of days that the video recordings are saved before being recycled.



- 2. To add a recording path, select a Storage Group, click the **Add New Path** icon and select a path.
- 3. To delete a Path, select the Path and click the **Remove Path** icon X.
- 4. To add another Storage Group, click the Add Storage Group icon
- 5. To delete a Storage Group, select a Storage Group and click the **Remove Storage** icon

8.1.2 Configuring the Video Settings

Define the maximum recording duration, recording time and recording mode. On the Record Setting dialog box, select the **Video Setting** tab. This dialog box appears.

Secord Setting			×
Storage Group Video Setting Recyc	e		
Max. Video Clip: 5		winutes	
Event	Sec.	Recording mode	
Out of Detection Area	100		-
Within the Detection Area	30		
Out of Detection Route	30	Record upon event	
Idle Speed	30	Record upon event	
Over Speed	30	Record upon event	
Input Trigger	30	Record upon event	
			_
			_
		OK Cano	:el

Figure 8-2

- Max. Video Clip: Specifies the maximum duration of the recording file.
- Sec: Specifies the length (5 ~ 300 seconds) you want to record for each event type.
 When the length you specify exceeds the Max. Video Clip time, the exceeded part will be separated into a second recording file.
- Recording Mode: Select Record upon event to start recording for the specified time (Sec.) as soon as an event occurs. Select Continue after event to start recording as soon as an event occurs, and then continue to record for the specified time (Sec.) after the event stops.



8.1.3 Configuring the Recycle Settings

On the Record Setting dialog box, click the **Recycle** tab. This dialog box appears. Configure the recycle settings as required.

😂 Record Setting		×
Storage Group Video Setting Recycle		
Enlarge recycle threshold:	1000 MB	<u>.</u>)
	ОК	Cancel

Figure 8-3

- Recycle: When all the recording paths of a Storage Group fall short of 1 GB, the oldest 500 MB of stored recordings will be deleted in each recording path. This option is enabled by default. With every addition of recording path, the recycle size (500 MB) increases by 500 MB.
- Enlarge recycle threshold: When all recording paths fall short of the recycle threshold (1 GB by default), recycle will start. You can also specify and increase the recycle threshold.



8.2 Recording Manually

If you want to track Mobile Hosts and save live videos for future reference, use this function to start round-the-clock recording. You can record up to 20 cameras simultaneously. Utilize the Storage Group feature to organize your recording files from different Mobile Hosts and the Recording List to keep track of the recording status on your mobile hosts.

- 1. Set up the storage, recording and recycling settings. See 8.1 Configuring the Basics.
- 2. Enable Recording.
 - A. On the main screen, click the **Account** button **\$2**. The Account window appears.
 - B. Select the desired Mobile Host and click the View/Edit A Mobile Host Setting button .
 The Subscriber Setting dialog box appears.
 - C. Select **Enable Record** and select a Storage Group to store your recording files using the drop-down list.

Subscriber Setting	X
Connection Inf	ormation
Login ID:	2
Password:	• ?
Host Type:	Video Server 🖌
Enable Record	Storage 1 💌 D
Input Trigger:	Setting
Record Map Even	t: Setting ▶
	OK Cancel

Figure 8-4



3. To start recording manually, right-click the camera from the Host List and select **Record**.

Mobile Host List Taipei Second State 1 Second State Camera List Camera List	A max → Shuangxi Pai A → Shuangxi Pai and Chinese Garden bhlin ⊕ ♥ 凝 △ □
Camera2 Camera3	Live View Audio Record
🔒 🥨 Module 1	Instant Playback (5 Min.)

Figure 8-5

- 4. To stop recording, right-click the camera from the Host List and unselect **Record**.
- To monitor recording status, click View on the main screen and select Manual Record List. The Recording List appears on the right side of the main screen.



Figure 8-6

From the Recording List, the mobile hosts and the channels enabled for manual recording are listed. The status types are detailed below:

Icon	Recording Status
•	The camera is connected and being recorded.
0	The camera is connecting to the GV-GIS.
	The camera is currently offline.



8.3 Recording by Events

You can record on Mobile Hosts by events. Follow the steps below to make sure you have configured the required storage, recording and recycling settings and selected the event types and cameras to be recorded.

- 1. Set up the storage, recording and recycling settings. See 8.1 Configuring the Basics.
- 2. Enable recording. See step 2 in 8.2 Recording Manually.
- 3. On the main screen, click the **Account** button **Solution**. The Account window appears.
- Select the desired Mobile Host and click the View/Edit A Mobile Host Setting button
 This dialog box appears.

Subscriber Setting	×
Connection Inf	ormation
Login ID:	2
Password:	• ?
Host Type:	Compact DVR
Enable Record	Storage 1 🔽 🕨
Input Trigger	Setting
input mgger.	
Record Map Even	t: Setting
	OK Cancel

Figure 8-7

5. Click the **Setting** button after Record Map Event. The Record Map Event dialog box appears.



6. Select the events and camera for recording.



Figure 8-8

7. Click **OK**. The selected cameras of this Mobile Host will be recorded when the selected events occur.



8.4 Recording upon Input Trigger

When an input device is triggered at the mobile host, the GV-GIS system can record and/or pop up live views on the assigned cameras. A maximum of 4 input-triggered live views can be shown simultaneously.

- 1. Set up the storage, recording and recycling settings. See 8.1 Configuring the Basics.
- 2. Enable recording. See step 2 in 8.2 Recording Manually.
- 3. On the Subscriber Setting dialog box, click the **Setting** button after Input Trigger. The Input Trigger dialog box appears.

Subscriber Setting	X
Connection Infe	ormation
Login ID:	2
Password:	• ?
Host Type:	Compact DVR
Enable Record	Storage 1 💌 🕨
Input Trigger:	Setting
Record Map Even	t: Setting
	OK Cancel

Figure 8-9

4. Define the cameras for live view pop up and/or recording.

Input Trigger		X
Module 1 Module 1 Pin 1	Popup	Camera
	Record	Camera
	OK	Cancel

Figure 8-10



- A. Select a Pin from the left.
- B. To enable pop-up live view upon input trigger, select the **Popup** option. This dialog box appears.

Input Trigger	×
Camera	٦
 ✓ 1 ✓ 2 	
✓ 3 ✓ 4	
OK	

Figure 8-11

- C. Select the camera for live views to pop up upon input trigger.
- D. To enable recording upon input trigger, select the **Record** option (Figure 8-10) and select the camera.
- E. When recording and/or live view pop up is enabled for a Pin, the pin is checked *in the Module tree.*

9. Authentication Server

This chapter introduces the new features and enhancements of Authentication Server

9.1 Importing Users and Groups from Active Directory

To avoid creating user accounts manually in Authentication Server, you can import groups and users from Microsoft's Active Directory. You will need to install Active Directory on a Windows Server 2008 and set up groups and users in the Active Directory before following the steps below.

Note:

- 1. This feature only supports Windows Server 2008.
- 2. User accounts in Active Directory need to be grouped into Groups settings first, because only groups can be imported into Authentication Server.
- On the Authentication Server window, click the Account Setup subtraction and select
 AD Setup to access the active directory setup page. This dialog box appears.

Configure	×
Source Database O Default Database O Active Directory	
Active Directory Setup Server IP Address Port : O Connect with current lo O Connect with administ User Name : Password :	192.168.3.97 389 ogin information trator login information administrator ••••••••
Group Mapping Setup Assign Authority L Manual Update Setup Reload User D Please restart Authenticatio	Level Auto Update Setup Level Auto update 5 Min. ata on Server for changes to take effect.

Figure 9-1



- 2. Under Source Database, select Active Directory to enable the function.
- 3. To connect to the server with Active Directory:
 - A. Type the Server IP Address and the Port number of the server.
 - B. To log into the server using your current login information, select Connect with current login information. To log into the server using the login information of its administrator, select Connect with administrator login information and type the User Name and Password.

Note: To be able to connect to the Active Directory server with the current login information, your current login information needs to be registered on the server or the Authentication Server and the Active Directory are installed on the same computer.

- C. Click **Test Connection** to see if you can connect to the server with Active Directory.
- 4. To assign groups in Active Directory to User, Poweruser or Supervisor authority levels:
 - A. Click the Assign Authority Level button. This dialog box appears.

Group Mapping Setup				X
	_	1		
Undefined Group	^		User	
Server Operators			Group002	
Domain Admins			Group003	
Cryptographic Operators				
Network Configuration Operators				
Remote Desktop Users				
Enterprise Admins				
Licers				
Certificate Service DCOM Access				
IIS IUSRS				>
Replicator				
Domain Guests			Poweruser	
Cert Publishers			Group001	
Performance Log Users				
Performance Monitor Users				
Read-only Domain Controllers				
GUESIS Terminal Server Licence Servers				
Domain Computers				
Distributed COM Users				
Print Operators				
Allowed RODC Password Replication				2
Incoming Forest Trust Builders			- ·	
Pre-Windows 2000 Compatible Acce			Supervisor	
Backup Operators				
Administrators				
Account Operators				
KAS and IAS Servers				
Event Log Readers				
Enterprise Read-only Domain Contro				
Schema Admins	v			
< · · · >			<	>
			ОК	Cancel

Figure 9-2

- B. Select the groups detected in Active Directory from the left side and use the arrow buttons
 to assign the groups to User, Poweruser or Supervisor level.
- C. Click **OK**. The user data will be imported into the Password Setup window.
- 5. To automatically update changes to user data in Active Directory, select **Auto Update** and type the update frequency in minutes.
- 6. To manually reload user data, click the **Reload User Data** button. Note that the current user data will be removed.
- 7. Click **OK** and restart Authentication Server to apply the settings.

GeoVision:

10. Mobile Server

The Mobile Server is an application that allows GV-Decoder Box and GeoVision mobile applications to access cameras connected to GV-System. Through the Mobile Server, third-party surveillance software can also access GV-System using RTSP protocols.

For each camera connected to GV-System, clients can choose to receive from one of the two streams available. You can set up different settings for the two streams such as frame rate, codec and resolution. In addition, up to 32 cameras can be arranged into a matrix and the matrix screen counts as 1 channel when transmitting to clients. The matrix channels are also available in dual stream.

10.1 Starting the Mobile Server

Follow the steps below to install the Mobile Server:

- 1. Insert the Surveillance System Software DVD to your computer. It runs automatically, and a window appears.
- 2. Click Install V 8.5.0.0 System.
- 3. Select Mobile Server, and follow the on-screen instructions.
- Go to Windows Start, point to Programs, select GV-Mobile Server, and then run Mobile Server. The GV-Mobile Server window appears.
- 5. To change the server name or to configure UPnP settings, click the **Network** tab.



Figure 10-1



- 6. Type a new server name.
- 7. Click the **UPnP Setting** button. Refer to *UPnP Settings*, Chapter 8, *DVR User's Manual* on the Surveillance System Software DVD for more details.
- 8. Click Apply.

10.2 Connecting through RTSP

To allow third-party software to access the devices connected to GV-System using RTSP protocol, complete the settings below.

1. Click the **RTSP** tab. This window appears.

🗜 GV-Mobile Server (For GeoVision DVR/NVR)				
MobileServer	^	RTSP GeoProtocol Network		
😑 Physical Cameras				
- Camera 1		🛛 🗹 Enable RTSP Streaming		
- Camera 2		ID and Password Rec	nuired	
- Camera 3				
- Camera 4		RTSP Username	admin	
Camera 5		PTSP Password	*****	
- Camera 6		1(10) 1 4550010		
Camera 7		RTSP Port	8554	
- Camera 8				
Camera 9		RTSP Data Port starts from	45000	
- Camera 10				
- Camera 11				
Camera 12				
- Camera 13				
- Camera 14				
- Camera 15				
- Camera 16				
- Camera 17				
- Camera 18				
Camera 19				
- Camera 20				
- Camera 21				
- Camera 22	~		Apply Exit	
Camara 23	×			

Figure 10-2

- 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 command below to connect:

rtsp://<ID>:<Password>@<IP of the GV-System>:<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 *Setting Up Matrix* section later in this chapter.

10.3 Connecting through GeoVision Protocol

GV-Decoder Box, GV-AView and GV-Eye can access the devices connected to GV-System through GeoVision protocol.

To change the command port and login method:

1. Click the **GeoProtocol** tab. This window appears.

👢 GV-Mobile Server(For GeoVision DVR/NVR)				
GV-Mobile Server (For MobileServer Physical Cameras Camera 1 Camera 2 Camera 3 Camera 3 Camera 4 Camera 5 Camera 5 Camera 6 Camera 7 Camera 7 Camera 8 Camera 9 Camera 10 Camera 11 Camera 12 Camera 13 Camera 14 Camera 15 Camera 16 Camera 17 Camera 18		GeoVision DVR/NVR)		
- Camera 19 - Camera 20 - Camera 21 - Camera 22 - Camera 23	*	Apply Exit		

Figure 10-3

- 2. Type a **Command Port** number or keep the default port number 50000.
- 3. To use the login information of GV-System, select **GeoVision DVR/NVR**.
- 4. To use custom login information, select **Custom** and type the IP and Password.
- 5. Click Apply.

Note: GV-Mobile Server is not supported on GV-AView V1.0 / 1.1 and GV-Eye V1.0. To check for latest updates on GV-Mobile Phone Applications, go to <u>http://www.geovision.com.tw/english/5_4.asp</u>.

10.4 Setting Up Individual Cameras

Follow the steps below to enable and set up individual cameras. When the camera view is being transmitted to a client, two streams are available to choose from. You can set up different settings for stream 1 and stream 2, such as frame rate, codec and resolution.

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

🖳 GV-Mobile Server(For GeoVision DVR/NVR)			
😑 MobileServer	~	Enable	
😑 Physical Cameras		O among l	
Camera 1		General	
- Camera 2		Camera Name Camera 4	
Camera 3			
Camera 4		Stream Setting	
Camera 5		Stream1 Stream2	
Camera 6			
Camera 7		FPS: 30	
Camera 8			
Camera 9		Durality David	
- Camera 10		Quality Best Y	
Camera 11			
- Camera 12		Codec Mpeg4 🗸	
Camera 13			
Camera 14		Decelution Maximum III	
Camera 15			
Camera 16			
Camera 17			
Camera 18	-		
Camera 19			
Camera 20			
Camera 21			
Camera 22			
Camera 23			
Camera 24			
Camera 25		Apply Exit	
Lamera 26	$\mathbf{\mathbf{v}}$		

Figure 10-4

- 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.
 - 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 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.

10.5 Setting Up Matrix

To display multiple camera views on a single channel, add up to 32 cameras to a matrix. Up to 4 matrixes can be created. When the matrix channel is being transmitted to a client, two streams are available to choose from. You can set up different settings for stream 1 and stream 2, such as frame rate, codec and resolution. The maximum resolution supported is 1.3 M.

To set up matrix:

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

🗜 GV-Mobile Server(For GeoVision DVR/NVR)				
Camera 10	^	C Enable		
Camera 11				
- Camera 12		General		
- Camera 13		Camera Name Matrix 1		
- Camera 14				
- Camera 15		Stream Setting		
- Camera 16		Stream1 Stream2		
- Camera 17				
- Camera 18		FPS: 30		
- Camera 19				
- Camera 20				
- Camera 21		Quality Best 🖌		
- Camera 22				
Camera 23		Codec Mpeg4 🗸		
- Camera 24				
Camera 25		Basalutian Marinema		
Camera 26		Resolution Maximum Y 🖸		
- Camera 27				
Camera 28				
Camera 29				
Camera 30				
Camera 31		Matrix Setting		
Camera 32				
🖃 Matrix Cameras				
Matrix 1				
- Matrix 2				
Matrix 3		Annly		
Matrix 4	Y			

Figure 10-5

GeoVision

 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.



Figure 10-6

- 5. Select a type of screen division and select the display ratio. The display ratio selected will be applied to the matrix view in 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 2.