

## GV-NVR System Lite V2 (Rev. B)



### Introduction

The GV-NVR System Lite V2 is an ultimate upgraded mini NVR system, which you can record video files directly to the internal hard drive. The GV-NVR System Lite V2 supports up to 16 GV IP cameras or 10 third-party IP cameras (license required) for networking surveillance, with the plug-and-play function for GV IP cameras to connect to the unit automatically. Plus, with supported HDMI output, you could connect the unit to HDTV for better video quality. The GV-NVR System Lite V2 is a perfect NVR system for small business, retail stores, and home security.

Its four USB ports enable to connect with multiple peripheral devices, such as USB HDD, USB DVD player and etc. Its Gigabit Ethernet function enables high-speed Internet access for seamless Web browsing. Moreover, our VESA mounting solution allows you to mount the ultra-slim unit on the back of a computer monitor.

### The Supported IP Camera Combinations:

The GV-NVR Lite V2 supports connections to GV IP cameras and third-party IP cameras. You can adopt one of the following combinations:

#### IP cameras excluding GV Fisheye cameras

- Connect up to 16 GV IP cameras. See **Section A**.
- Connect up to 8 third-party cameras (of 640 x 480 resolution, H.264). See **Section C**.
- Connect up to 10 third-party cameras (of 1280 x 720 resolution, H.264). See **Section C**.
- Connect up to 10 third-party cameras (of 1280 x 1024 resolution, H.264). See **Section C**.
- Connect up to 8 third-party cameras (of 1920 x 1080 resolution, H.264). See **Section C**.
- Connect up to 2 third-party cameras (of 2048 x 1536 resolution, H.264). See **Section C**.
- Connect 1 third-party camera (of 2048 x 1944 resolution, H.264). See **Section C**.
- Connect 1 third-party camera (of 2560 x 1920 resolution, H.264). See **Section C**.
- Connect up to 8 cameras from GV-IP cameras and third-party IP cameras (of 640 x 480 resolution, H.264). See **Section A** and **C**.
- Connect up to 10 cameras from GV-IP cameras and third-party IP cameras (of 1280 x 720 resolution, H.264). See **Section A** and **C**.
- Connect up to 10 cameras from GV-IP cameras and third-party IP cameras (of 1280 x 1024 resolution, H.264). See **Section A** and **C**.
- Connect up to 8 cameras from GV-IP cameras and third-party IP cameras (of 1920 x 1080 resolution, H.264). See **Section A** and **C**.
- Connect 2 cameras from GV-IP cameras and third-party IP cameras (of 2048 x 1536 resolution, H.264). See **Section A** and **C**.
- Connect 1 camera from GV-IP cameras and third-party IP cameras (of 2048 x 1944 resolution, H.264). See **Section A** and **C**.
- Connect 1 camera from GV-IP cameras and third-party IP cameras (of 2560 x 1920 resolution, H.264). See **Section A** and **C**.

### IP cameras including GV Fisheye cameras

- **GV-Fisheye Camera 1.3 MP** + one of the following options:
  - GV-IP Camera x 15
  - Third-party Camera (VGA) x 6
  - Third-party Camera (1 / 1.3 / 2 MP) x 8
  - Third-party Camera (3 / 4 / 5 MP ) x 1
- **GV-Fisheye Camera 2 MP** + one of the following options:
  - GV-IP Camera x 15
  - Third-party Camera (VGA) x 5
  - Third-party Camera (1 / 1.3 / 2 MP) x 6
  - Third-party Camera (3 / 4 / 5 MP ) x 1
- **GV-Fisheye Camera 4 MP** + one of the following options:
  - GV-IP Camera x 11
  - Third-party Camera (VGA) x 5
  - Third-party Camera (1 / 1.3 / 2 MP) x 4
  - Third-party Camera (3 / 4 / 5 MP ) x 1
- **GV-Fisheye Camera 5 MP** + one of the following options:
  - GV-IP Camera x 8
  - Third-party Camera (VGA) x 3
  - Third-party Camera (1 / 1.3 / 2 MP) x 3
  - Third-party Camera (3 / 4 / 5 MP ) x 1

### Analog cameras through GV-Compact DVRs and GV-Video Servers

- Connect up to 14 analog cameras through GV-Video Servers (of 704 x 480 resolution, H.264). See **Section D**.
- Connect up to 14 analog cameras through GV-Video Servers (of 352 x 240 resolution, H.264). See **Section D**.
- Connect up to 10 analog cameras through GV-Compact DVR V3 Series (of 704 x 480 resolution, de-interlace). See **Section D**.

The number of supported channels is based on the following resolution:

Section A		Dual-stream Resolution		Max. Frame Rate	Total Frame Rate
		Stream 1	Stream 2		
GV-IP Camera	D1	704 x 480 / 704 x 576	352 x 240 / 352 x 288	30 fps / 25 fps	480 fps / 400 fps
	1 MP	1280 x 720	448 x 252	15 fps	240 fps
	1.3 MP	1280 x 1024	320 x 256	15 fps	240 fps
	2 MP	1920 x 1080	448 x 252	10 fps	160 fps
	3 MP	2048 x 1536	320 x 240	10 fps	160 fps
	4 MP	2048 x 1944	640 x 480	10 fps	160 fps
	5 MP	2560 x 1920	320 x 240	10 fps	160 fps
Section B		Single Stream Resolution (H.264)		Max. Frame Rate	Total Frame Rate
GV-Fisheye	1.3 MP	1280 x 1024 (4:3)			
	2 MP	1440 x 1376 (4:3)		7 fps	21 fps
	4 MP	2048 x 1944 (4:3)		6 fps	12 fps
	5 MP	2560 x 1920 (4:3)		6 fps	6 fps
Section C		Single Stream Resolution (H.264)		Max. Frame Rate	Total Frame Rate
Third-Party Camera	VGA	640 x 480			
	1 MP	1280 x 720		15 fps	150 fps
	1.3 MP	1280 X 1024		15 fps	150 fps
	2 MP	1920 X 1080		10 fps	80 fps
	3 MP	2048 x 1536		10 fps	20 fps
	4 MP	2048 X 1944		10 fps	10 fps
	5 MP	2560 X 1920		10 fps	10 fps
Section D		Dual-stream Resolution		Max. Frame Rate	Total Frame Rate
GV-Video Server V2	GV-VS11 / GV-VS14	Stream1	Stream 2		
		GV-VS12 / GV-VS04H	352 x 240	N/A	30 fps
	GV-Compact DVR V3	704 x 480 De-interlace	N/A	30 fps	300 fps

Note:

#### GV IP cameras

1. For GV IP cameras (excluding GV Fisheye), stream 1 is used for recording and single view, and stream 2 for live viewing in multi divisions.
2. The default resolution for stream 1 is set at its maximum. Several resolution, aspect ratio and codec options are available for each IP camera, except GV-Fisheye cameras.
3. It is highly recommended to set the panel resolution to 1280 x 1024 (default) or lower when connecting to GV Fisheye to get better CPU performance.

#### Third-party cameras

1. For third-party cameras, be sure the resolution and codec are configured as specified above to achieve the best performance and maximum frame rate. To find the supported third-party cameras, go to [http://www.geovision.com.tw/english/4\\_21.asp](http://www.geovision.com.tw/english/4_21.asp).

#### Frame Rate

1. Total Frame Rate equals to the Max. Frame Rate multiplies the supported channel numbers.
2. If you record the images, access live view and see the playback simultaneously, the CPU loading will increase massively. Therefore, the frame rates may drop.

## Main Features

- Compact and sleek
- Up to 16 channels
- Automatic connection to GV IP cameras
- Support for 3rd party IP cameras (license required)
- All-in-one solution (Live View, Playback, Recording, Backup, CMS)
- GPU decoding and dewarping
- H.264 / MJPEG / MPEG4
- Dual video streams
- VGA and HDMI outputs
- 1 TB hard drive
- Video analysis (Advanced Motion Detection, Privacy Mask, Scene Change Detection and Counter only)
- Standing mount and VESA mount options
- Direct recording to the internal hard drive
- Low power consumption
- Smart phones access
- Fisheye camera dewarping function
- Multiple (29) languages

## Applications

### One Shop, One Fisheye Camera, One GV-NVR System Lite V2

The easiest and most cost-efficient solution for video surveillance



**One Fisheye Camera**

- Megapixel resolution up to 5 MP
- Wide angle view to cover all angles of a location

The wide-angle fisheye camera eliminates the need to install multiple conventional cameras, saving both costs and the trouble of maintenance. The circular source image can be dewarped into rectangular view and adjust into different modes and positions according to your preference.



Source Image



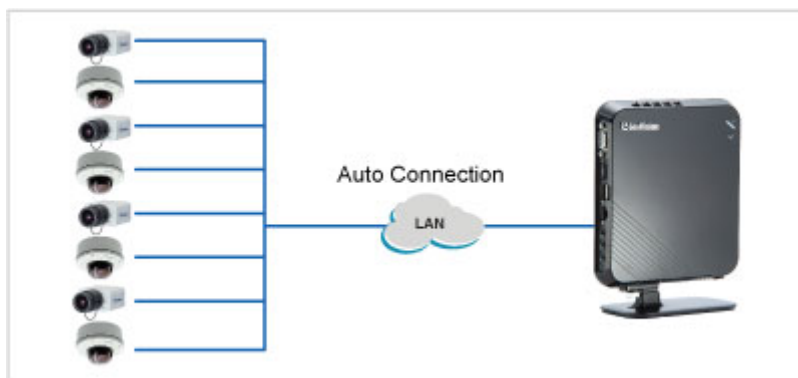
Dewarped Image: 2 PTZ views & 1 360 degree view

- GV-FE110/111
- GV-FE420/421
- GV-FE520/521
- GV-FER521

**One GV-NVR System Lite V2**

- Automatic connection with GV-IP devices without configuration
- Easy to install and use

Using GV-NVR System Lite V2, video files are recorded directly to the internal hard drive without setting up a separate computer. The user interface is intuitive and the plug and play function allows GV-IP devices to automatically connect to the unit without further configurations.



**Remote and Wireless Access**

- Remote access through IE browser
- Mobile applications to receive live view and play back recorded videos  
Mobile Application Download



### Centralized Monitoring for Multiple Locations

- GV-Control Center
- GV-Center V2
- GV-Dispatch Server
- GV-Vital Sign Monitor
- GV-GIS

The Central Monitoring Station programs provide a centralized management solution by allowing you to monitor live view, receive alarm notification and play back recordings from numerous cameras or GV-NVR System Lite V2.

### Specifications

System		
CPU		Intel Processor
RAM		2 GB
Storage	GV-NVR Lite V2 (Rev. B) 1 TB	1 TB
OS		Microsoft Windows 7 Embedded 32-Bit
DirectX		10.0c
Power		Output: 65W, 19V, 3.42A; Input: 100~240V, 50~60Hz
System Monitoring and Recovery		
Power Restoration		Power restored after AC power loss
Monitoring		Software Watchdog
Recovery		Automatic system rebuild from internal hard disk
Connector		
Ethernet		RJ-45, 10 / 100 / 1000 Mbps
Video Output		D-SUB and HDMI
USB 2.0	Right Side	1 ports
	Left Side	2 ports
USB 3.0	Right Side	1 ports
Sensor and Alarm		
Sensor and Alarm	GV-IO Box 16 ports (Optional)	16 inputs, 16 outputs
	GV-IO Box 8 ports (Optional)	8 inputs, 8 outputs
	GV-IO Box 4 ports (Optional)	4 inputs, 4 outputs
Motion Detection		16 channels
Audio		
Audio Input		16 channels
Video		
Video Input		16 channels
Compression		MJPEG / MPEG4 (ASP) / H.264
Live Resolution		CIF for 16 screen divisions
Recording Mode		Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording
Instant Playback		110 sec. / 30 sec. / 1 min. / 5 min.
Water Marking		Support
Searching and Playback		
Search Method		Date / Time
Date / Time / Event Search		Selectable on the tree list and calendar
Log Search		Through the log data to find the video event / time
Backup Type		DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW / CD-R / CD-RW * For backup function, you need to connect an external USB DVD/CD burner.
Remote Client Software		
Monitoring Environment		WebCam / CenterV2 / VSM / Control Center / IP Multicast / GView for Windows PDA / MSView for Windows Smartphone / SSView for Symbian Smartphone/ Remote View for BlackBerry Smartphone / 3GPP for 3GPP phone/ AView for Android Smartphone / iView for iPhone and iPod Touch / iView HD for iPad
WebCam Live View		Max. 16 channels transmission
Remote Search		WebCam's Remote Playback
Networking		
Type		TCP/ IP, LAN, WAN, Internet, ISDN
Environment		
Operating Temp		0 °C ~ 35 °C / 32 °F ~ 95 °F
Humidity		0% ~ 80% RH (non-condensing)

Physical	
Color	Black
Dimensions (W x H x D)	153.6 x 25.2 x 172.6 mm / 6.04 x 0.99 x 6.8 in
Weight	800 g / 1.77 lbs
Language	
Type	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Lithuanian / Norwegian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Swedish / Thai / Traditional Chinese / Turkish
Software License	
Free License	16 channels from GV-IP Cameras
Maximum License	10 channels from third-party IP Cameras (*)
Increment for Each License	1, 2, 4, 6, 8 or 10 third-party IP Cameras
Optional Combinations	N/A
Dongle Type	External

\* The Maximum License is a paid service.

Note: Product design and specifications are subject to change without notice.

## Packing List

- GV-NVR System Lite V2 x 1
- AC Power Cord x 1
- Power Adapter x 1
- Standing Mount Kit (1 Base Stand and 1 Base Stand Screw included) x 1
- VESA Monitor Mount Kit (1 Stand Screw and 4 Fix Screws included) x 1
- GV-NVR System Lite V2 Quick Start Guide x 1