

## 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 8 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 |                    | Stream1                          | Stream 2              |                 |                   |
|                    | GV-VS11 / GV-VS14  | 704 x 480                        | 352 x 240             | 30 fps          | 420 fps           |
|                    | GV-VS12 / GV-VS04H | 352 x 240                        | N/A                   | 30 fps          | 420 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 or 1.5 TB hard drive
- Video analysis
- 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



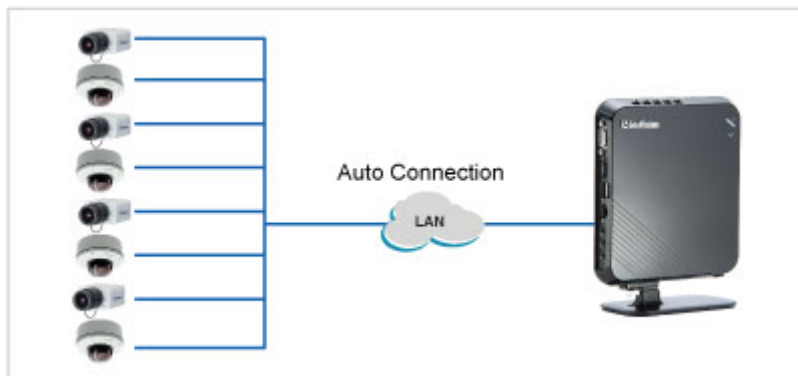
Dewarped Image: 2 PTZ views & 1 360 degree view

- 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

|                                       |  |                       |
|---------------------------------------|--|-----------------------|
| <b>System</b>                         |  |                       |
| CPU                                   | Intel Processor  |                       |
| RAM                                   | 2 GB   |                       |
| Storage                               | GV-NVR Lite V2 (Rev. B) 1 TB   | 1 TB                  |
|                                       | GV-NVR Lite V2 (Rev. B) 1.5 TB   | 1.5 TB                |
| OS                                    | Microsoft Windows 7 Embedded 32-Bit  |                       |
| DirectX                               | 10.0c  |                       |
| Power                                 | Output: 65W, 19V, 3.42A;<br>Input: 100~240V, 50~60Hz   |                       |
| <b>System Monitoring and Recovery</b> |  |                       |
| Power Restoration                     | Power restored after AC power loss   |                       |
| Monitoring                            | Software Watchdog  |                       |
| Recovery                              | Automatic system rebuild from internal hard disk   |                       |
| <b>Connector</b>                      |  |                       |
| 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               |
| <b>Sensor and Alarm</b>               |  |                       |
| 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  |                       |
| <b>Audio</b>                          |  |                       |
| Audio Input                           | 16 channels  |                       |
| <b>Video</b>                          |  |                       |
| 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  |                       |
| <b>Searching and Playback</b>         |  |                       |
| 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<br>* For backup function, you need to connect an external USB DVD/CD burner.  |                       |
| <b>Remote Client Software</b>         |  |                       |
| 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   |                       |
| <b>Networking</b>                     |  |                       |
| Type                                  | TCP/ IP, LAN, WAN, Internet, ISDN  |                       |
| <b>Environment</b>                    |  |                       |
| 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            | 8 channels from third-party IP Cameras (*)  |
| Increment for Each License | 1, 2, 4, 6 or 8 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.