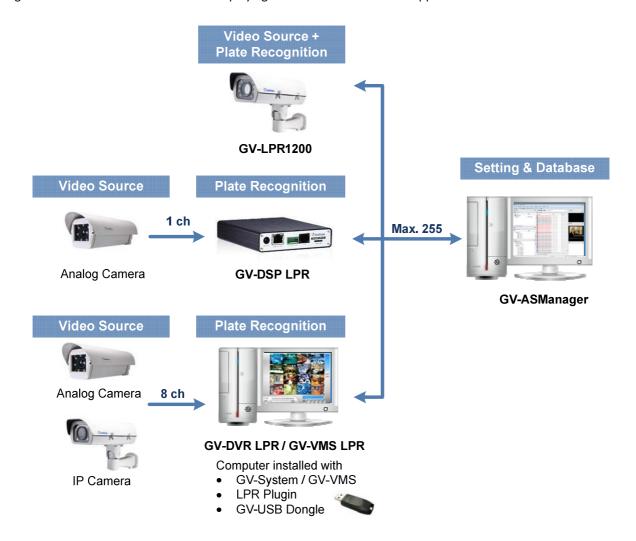


Introduction

GeoVision's License Plate Recognition is an effective and low-maintenance solution to ensure the security of parking lots, which are prone to crimes due to isolated and unstaffed corners. In addition to providing high-resolution video monitoring and recording, the LPR solution detects and recognizes vehicle license plates upon motion or I/O trigger.

A GV-LPR1200, GV-DSP LPR, GV-DVR LPR or GV-VMS LPR recognizes license plates detected in the video source, and sends the LPR results to GV-ASManager. Access can be granted when the detected license plate numbers match the vehicle registered in GV-ASManager's database. Alarm notifications and playing back LPR results are also supported.





Available Version

| • | Argentina | ** | Australia | | Austria | | Belgium |
|---|-----------|-----|-----------|-------|----------------|---|---------|
| | Brazil | * | Canada | ·2 | China | | Chile |
| | Columbia | -8- | Croatia | | Czech Republic | | France |
| | Germany | | Hungary | | India | | Ireland |
| 0 | Israel | | Italy | * | Morocco | ٠ | Mexico |
| ╬ | Norway | | Poland | • | Portugal | | Qatar |
| | Russia | 0 | Slovakia | \gg | South Africa | c | Spain |
| | Taiwan | 38 | UK | | USA | * | Vietnam |

There is a Global version which is suitable for most of the other countries. More are to be implemented.

Features

GV-ASManager Access Control System

- Control up to 255 GV-DVR LPR / GV-VMS LPR / GV-DSP LPR / GV-LPR1200
- Up to 8 recognition channels per GV-DVR LPR / GV-VMS LPR
- Up to 100,000 vehicles
- Up to 100 Web browser connections
- Multiple vehicles per user
- Import / export of vehicle data in Access or Excel file format
- Vehicle hotlist to help locate stolen vehicles or other vehicles of interest
- Parking lot management to control vehicle access, maximum stay time allowed and number of vehicles allowed
- GV-Access mobile applications to remotely open LPR lanes
- GV-ASWeb: Remotely enroll vehicles and set up GV-DVR LPR / GV-VMS LPR / GV-DSP LPR / GV-LPR1200 on GV-ASManager
- GV-ASWeb: Remotely search detected vehicles, see license plate snapshots, watch recordings from connected GV-DVR LPR / GV-VMS LPR / GV-DSP LPR / GV-LPR1200
- Languages supported: English, French, Hebrew, Japanese, Portuguese, Russian, Serbian, Spanish, Traditional Chinese, Turkish





System Requirements

GV-ASManager

The following are minimum system requirements to run GV-ASManager.

| 05 | 32-bit | Windows 7 / 8 / 8.1 / 10 / Server 2008 |
|----------------------|--------|---|
| OS | 64-bit | Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2 |
| CPU | | Core 2 Duo E8400, 3.0 GHz |
| Memory | | 2 x 1 GB Dual Channels |
| Hard Disk | | 500 GB |
| VGA DirectX Software | | PCI-Express, 1280 x 1024, 32-bit color and support DirectX 10 |
| | | End-User Runtimes (November 2008) |
| | | .NET Framework 3.5 |
| Software | | SQL Server 2005 Express (optional) |
| Browser | | Internet Explorer 9.0 or later |

Note: GV-ASManager has ended support for Windows XP and Vista.

GV-DVR LPR

| Number of LPR Channels | | 1-4 Channels | 5-8 Channels | |
|------------------------|-------|--|-----------------------|--|
| OS | | 64-bit Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2 | | |
| CPU | 1.3 M | Core i5 2400, 3.1 GHz | Core i7 2600, 3.4 GHz | |
| CPU | 2 M | Core i7 4770, 3.4 GHz | Core i7 6700, 3.4 GHz | |
| Memory | | 2 x 2 GB Dual Channels | | |
| Hard Disk | | 500 GB | | |
| VGA | | PCI-Express, 1280 x 1024 , 32-bit color and support DirectX 10 | | |
| DirectX | | End-User Runtimes (November 2008) | | |
| GV-DVR / NVR | | GV-ASManager 4.2.1 - 4.2.3: V8.5.9.0 GV-ASManager 4.3: V8.6.0.0 GV-ASManager 4.3.5 - 4.4: V8.6.2.0 GV-ASManager 4.4.1: V8.6.2.0 or V8.7.0.0 GV-ASManager 4.4.2: V8.7.0.0 or V8.7.1.0 GV-ASManager 4.4.3: V8.7.1.0 GV-ASManager 5.0: V8.7.1.0 GV-ASManager 5.0.1.0 - 5.0.2.0: V8.7.3.0 | | |
| Hardware | | External or internal GV-LPR Capture Dongle | | |

Note:

- 1. It is recommended to use separate PCs for GV-ASManager and GV-DVR LPR.
- 2. If no LPR dongle is inserted, license plates will be captured but the plate numbers will not be recognized.
- 3. The above system requirements were determined with a bit rate of 2 Mbits for 1.3 MP resolution and 2 MP resolution.

GV-VMS LPR (for 32 CH)

| Number of LPR Channels | | 1-4 Channels | 5-8 Channels | |
|------------------------|--------|---|-----------------------|--|
| OS | | 64-bit Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2 | | |
| CPU | 1.3 MP | Core i7 3770, 3.4 GHz | Core i7 4770, 3.4 GHz | |
| CPU | 2 MP | | | |
| Memory | | 2 x 2 GB Dual Channels | | |
| Hard Disk | | 500 GB | | |
| VGA | | PCI-Express, 1280 x 1024, 32-bit color and support DirectX 10 | | |
| DirectX | | End-User Runtimes (November 2008) | | |
| | | GV-ASManager 4.3.5 - 4.4.1: V15.10 | | |
| | | GV-ASManager 4.4.2: V15.10 or V15.11 | | |
| GV-VMS | | GV-ASManager 4.4.3: V15.11.3 | | |
| | | GV-ASManager 5.0: V16.11.0.0 | | |
| | | GV-ASManager 5.0.1.0 – 5.0.2.0: V16.11.0.0 | | |
| Hardware | | External or internal GV-LPR Capture Dongle | | |

Note:

- 1. It is recommended to use separate PCs for GV-ASManager and GV-VMS LPR.
- 2. If no LPR dongle is inserted, license plates will be captured but the plate numbers will not be recognized.



3. The above system requirements were determined with a bit rate of 2 Mbits for 1.3 MP resolution and 2 MP resolution.

GV-VMS LPR (for 64 CH)

| Number of LPR Channels OS | | 1-4 Channels | 5-8 Channels | |
|---------------------------|--------|---|--------------|--|
| | | 64-bit Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2 | | |
| CPU | 1.3 MP | Core i7 6770, 3.4 GHz (Only 2 Lanes) | N/A | |
| СРО | 2 MP | Core i7 6770, 3.4 GHz (Only 1 Lane) | N/A | |
| Memory | | 2 x 2 GB Dual Channels | | |
| Hard Disk | | 500 GB | | |
| VGA DirectX | | PCI-Express, 1280 x 1024, 32-bit color and support DirectX 10 | | |
| | | End-User Runtimes (November 2008) | | |
| | | GV-ASManager 4.3.5 - 4.4.1: V15.10 | | |
| GV-VMS | | GV-ASManager 4.4.2: V15.10 or V15.11 | | |
| | | GV-ASManager 4.4.3: V15.11.3 | | |
| | | GV-ASManager 5.0: V16.11.0.0 | | |
| | | GV-ASManager 5.0.1.0 – 5.0.2.0: V16.11.0.0 | | |
| Hardware | | External or internal GV-LPR Capture Dongle | | |

Note:

- 1. It is recommended to use separate PCs for GV-ASManager and GV-VMS LPR.
- 2. If no LPR dongle is inserted, license plates will be captured but the plate numbers will not be recognized.
- 3. The above system requirements were determined with a bit rate of 2 Mbits for 1.3 MP resolution and 2 MP resolution.

Software License

| Free License | N/A | | |
|----------------------------|--|--|--|
| Maximum License | 8 channels | | |
| Increment for Each License | 1 channels | | |
| Dongle Type | Internal or external | | |
| Optional Combinations | LPR GV-VMS + LPR (1 to 8 license) GV-NVR + LPR (1 to 8 license) GV-DVR + LPR (1 to 8 license) | | |

GV-DSP LPR and GV-LPR1200

GV-ASManager V4.2.1 – 4.2.2 is only compatible with GV-DSP LPR firmware V2.0.3.

GV-ASManager V4.2.3 is only compatible with GV-DSP LPR firmware V2.0.4.

GV-ASManager V4.3 – 4.3.5 is only compatible with GV-DSP LPR firmware V2.10 and GV-LPR1200 V1.01.

 ${\sf GV-ASManager~V4.4-4.4.3} \ is \ only \ compatible \ with \ {\sf GV-DSP~LPR~firmware~V2.20} \ and \ {\sf GV-LPR1200~V1.1.}$

 ${\rm GV-ASManager}\ V5.0-5.0.2.0\ is\ only\ compatible\ with\ {\rm GV-DSP}\ LPR\ firmware\ V2.30\ and\ {\rm GV-LPR1200}\ V2.0.$

Options

For GV-DVR LPR and GV-VMS LPR

| GV-IO Box | The GV-IO Box provides 4, 8 or 16 inputs and relay outputs. It supports both DC and AC output voltages, and provides a USB port for PC connection. |
|---------------------|--|
| GV-IP LPR Camera 5R | Ideal for parking lot installation, the GV-IP LPR Camera 5R is a 1.3 MP B/W network camera designed for recognition of reflective license plates on vehicles traveling at 60 km/hr (37 mph) or less. |
| GV-LPC1100 | The GV-LPC1100 is a 1.3 MP B/W network camera designed for recognition of reflective license plates on vehicles traveling at 120 km/hr (75 mph) or less. |
| GV-LPC1200 | GV-LPC1200 is a 1 MP B/W network camera designed for recognition of reflective license plates on vehicles traveling at 200 km/h (124.27 mph) or less. |
| GV-LPR1200 | GV-LPR1200 is a 1 MP B/W network camera designed for recognition of reflective license plates on vehicles traveling at 200 km/h (124.27 mph) or less. With a built-in LPR processor, the camera is capable of recognizing the plate numbers and comparing the captured license plates with a database. |
| GV-LPC2210 | GV-LPC2210 is a 2 MP color network camera designed for recognition of reflective license plates on vehicles traveling up at 120 km/h (75 mph) or less. |

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| GV-LPC2211 | GV-LPC2211 is a 2 MP color network camera designed for recognition of reflective license plates on vehicles traveling up at 120 km/h (75 mph) or less. |
|------------|--|
| GV-LPC2011 | GV-LPC2011 is a 2 MP color network camera designed for recognition of reflective license plates on vehicles traveling up at 60 km/h (37 mph) or less. |

For GV-DVR LPR and GV-DSP LPR

| GV-LPR Cam 10A ANPR Camera | The GV-LPR CAM 10A provides 570 TVL high-contrast license plate recognition video to GV-DVR LPR or GV-DSP LPR that identifies license plates. The camera features 7 high-efficient LEDs for an illumination range of $7 \sim 12$ m (22.96 ~ 39.37 ft). |
|-------------------------------|---|
| GV-LPR Cam 20A ANPR Camera | The GV-LPR CAM 20A provides 570 TVL high-contrast license plate recognition video to GV-DVR LPR or GV-DSP LPR that identifies license plates. The camera features 24 high-efficient LEDs for an illumination range of 15 $^{\sim}$ 25 m (49.21 $^{\sim}$ 82.02 ft). |
| GV-DSP LPR V3 | The GV-DSP LPR is a Linux-based license plate recognition system built in a small box. Integrating with a Web server, the GV-DSP LPR can host its own Web site and compare captured license plates with the database downloaded from GV-AS Manager and open a gate barrier when there is a match. |

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