

# GeoVision Product Overview

## with 8.3 New Features



**GeoVision**  
The Vision of Security

- DVR System
- DVR Hybrid DVR NVR
- Compact DVR Support GPS
- Video Analytics
  - Face Recognition
  - Fire Detection
  - Video Substitution
  - Unattended Object Detection
  - Missing Object Detection
  - Event Change Detection
  - People Counting and More...
- Video Server
- POS/ATM Integration
- LPR Camera 10/20/30M
- DSP LPR
- 1.3M IP Camera
- LPR System
- Access Control
- CMS

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**Awards**

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- **V8.3 New Features** NEW
- **Video Analytics**
  - **Advanced Video Analytics** NEW
  - **Embedded Video Analytics**
- **Hybrid/ IP Solution** NEW
  - **IP Camera**
  - **Compact DVR**
  - **GV-NVR**
- **Central Monitoring Solution**
- **Point of Sales Integration**
- **GeoGIS Solution**
- **License Plate Recognition** NEW

## GV-1120, GV-1240, GV-1480 support Two-Cards Mode

**V8.3**

### ■ Requirement:

GV-1120/1240/1480 (PCI + PCI-E, or 2xPCI-E)



# 32 Channel Video/Audio (Combo Cards)

**NEW**

**GV-1120, GV-1240, GV-1480  
support Two-Cards Mode**

**V8.3**

■ **Requirement:**

**GV-1120/1240/1480 (PCI + PCI-E, or 2xPCI-E)**



+



**= up to 32  
Channels Video  
+ Audio**

## 32 Channels Recommended Spec

<b>GV-1120 x 2</b>	Intel Core 2 Duo E6300, 1.86 GHz
<b>GV-1240 x 2</b>	Intel Core 2 Duo E6850, 3.0 GHz
<b>GV-1480 x 2</b>	Intel Core 2 Quad Q6600, 2.4 GHz





**Canon**

**VB C50i**  
**VB C300**



**AV3130**  
**AV8360**



**VN V25**



**211M**  
**216MFD**  
**241Q**



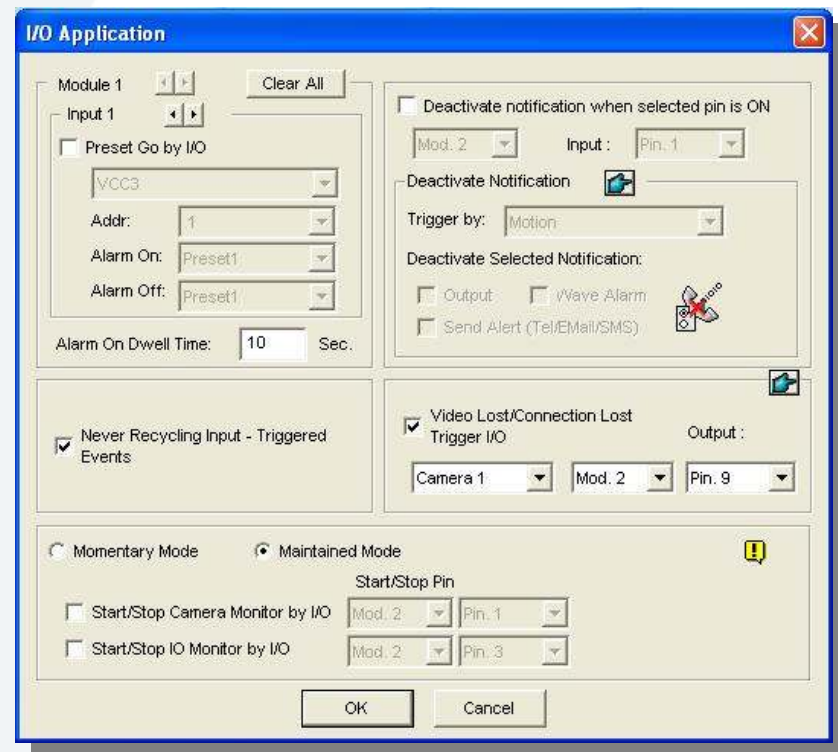
**SONY**

**SNC RX530N**    **RX570N**  
**DM110**        **DS10**  
**DM160**        **DS60**  
**DM120**        **CS20**





- Expands PTZ presets to 256
- Individual video lost channel trigger specific I/O device output
- Storage Group expands to 16 groups
- Limit recording frame rate of IP Cameras
- Object Index/ Monitor expands to 16 channels



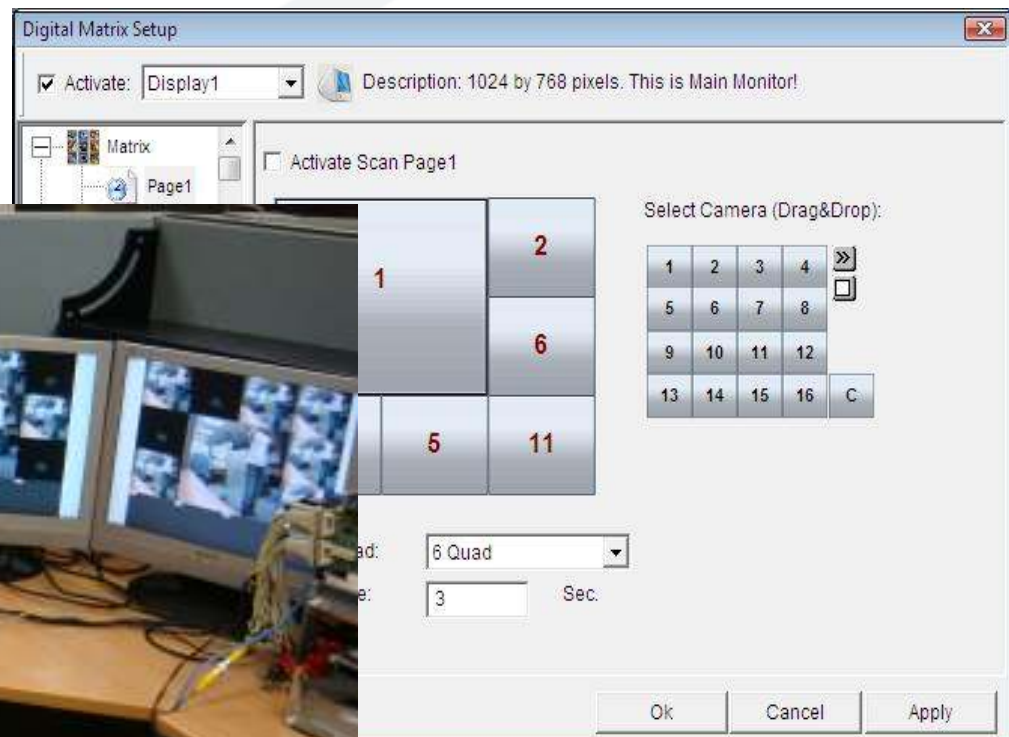
- Customizable 16 channel video playback
- Playback Tracking info under Google map from Video Server or Compact DVR

**V8.3**



- Up to 4 Monitor Displays per DVR
- Independent scanning and video pop-up

**V8.3**





- **BlackBerry Viewer for Remote Webcam Viewing**
- **JPEG image automatically refreshes every 4 seconds**

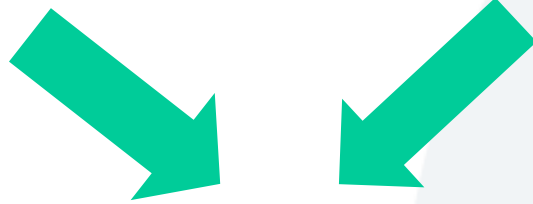


**V8.3**



- **Panorama View (Option)**
- **Defogger (Option)**
- **Stabilizer (Option)**
- **Picture in Picture**
- **Picture n Picture**
- **Visual Automation**
- **E-Map Monitoring**
- **Object Detection**
- **Face Detection**
- **Scene Change Detection**
- **Intruder Detection**
- **Object Counting**
- **Privacy Mask**
- **Advanced Motion Detection**

## Panorama View (Option)



- Stitch multiple cameras together
- Vertical/Horizontal stitch
- Stitch up to 16 cameras
- Panorama View in Playback

[DEMO](#)

# Video Defogging (Option)

**Before**



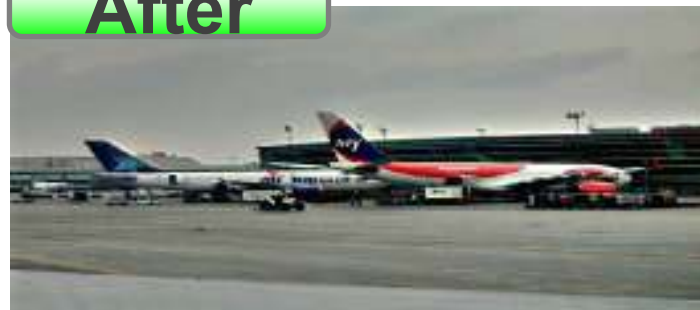
**After**



**Before**



**After**



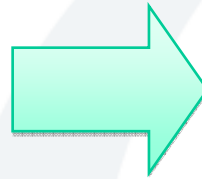
**Before**



**After**



DEMO



- ***New in V8.2/NVR***
- **Reduce camera shake**
- **Video Stabilization during playback**

[DEMO](#)

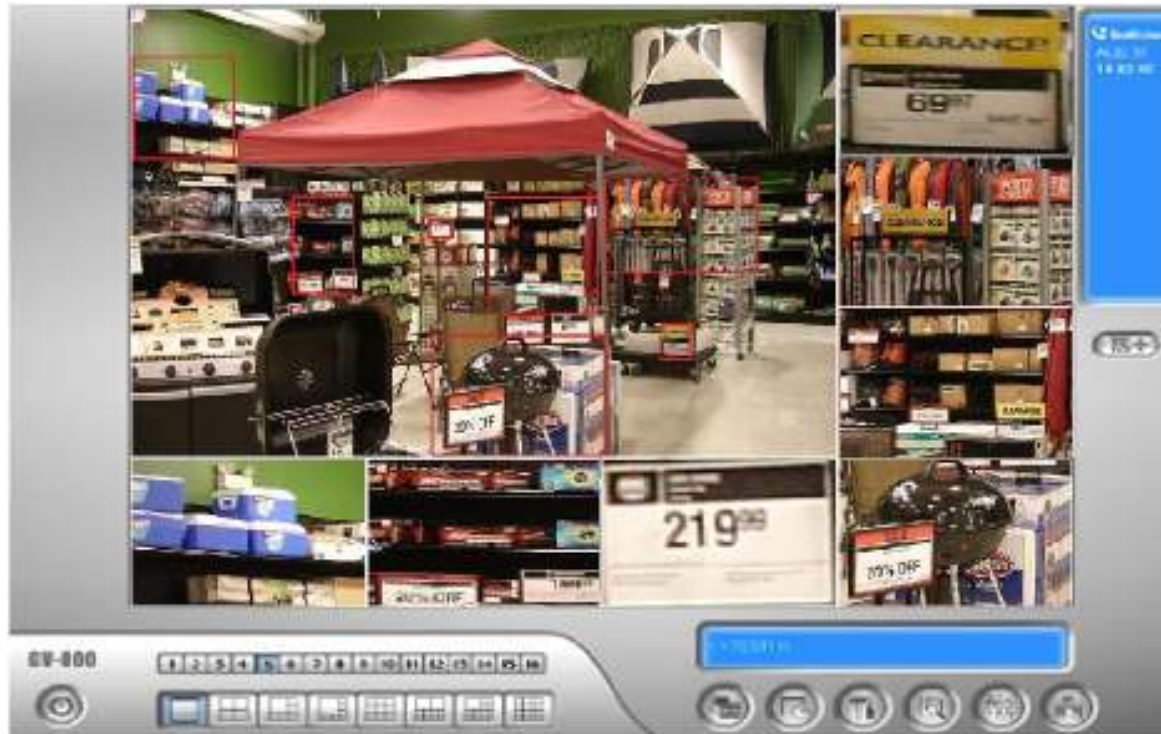
# Picture-in-Picture View



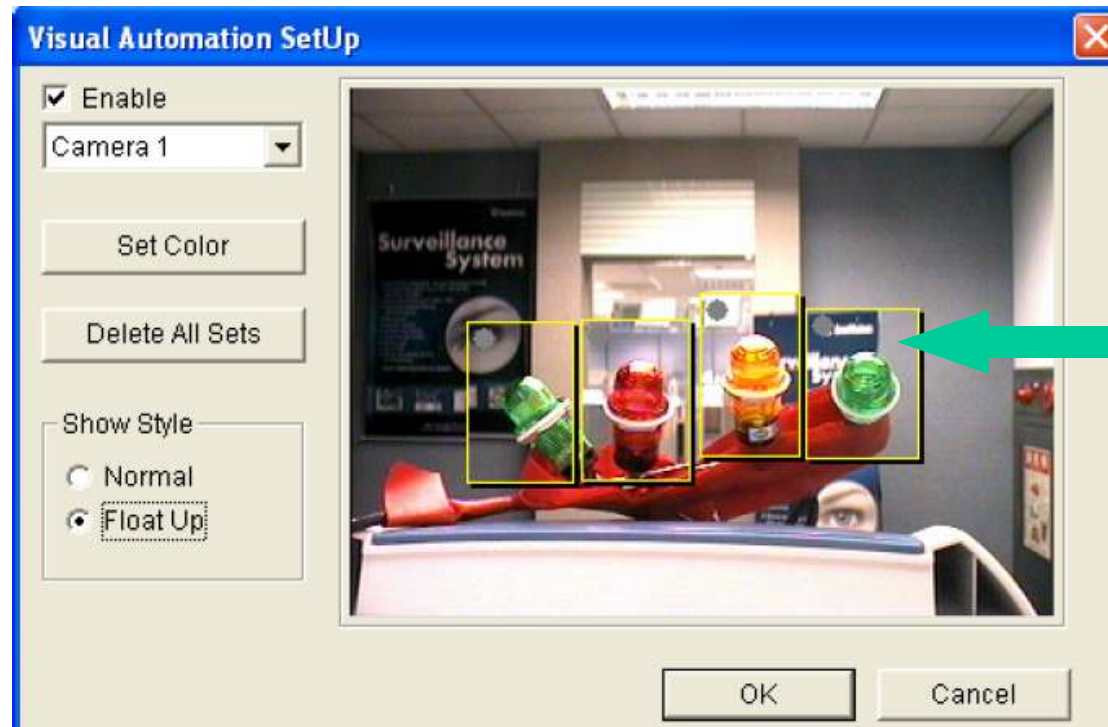
← **Sub screen**

- Taking full advantage by integrating with mega pixel camera
- Zoom to the specific area
- Available in Playback
- Available in IE Viewer

# Picture-and-Picture View



- Taking full advantage by integrating with mega pixel camera
- Up to 7 split video sub screen
- Available in Playback
- Available in IE Viewer



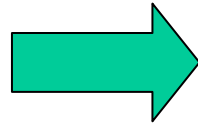
**CLICK**

DEMO

- Control the output device by clicking on the screen
- Automate any electronic device by triggering the connected output
- Remotely trigger the output device on the internet

## ■ Unattended Object Detection

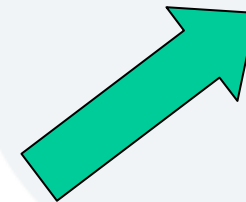
DEMO



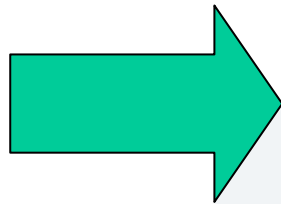
## ■ Missing Object Detection

DEMO

**ALERT!**

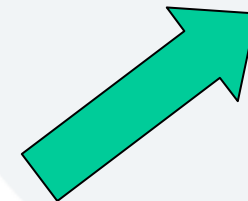
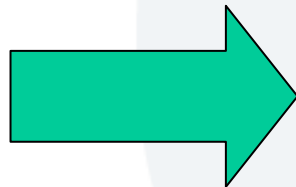


## ■ Scene Change Detection

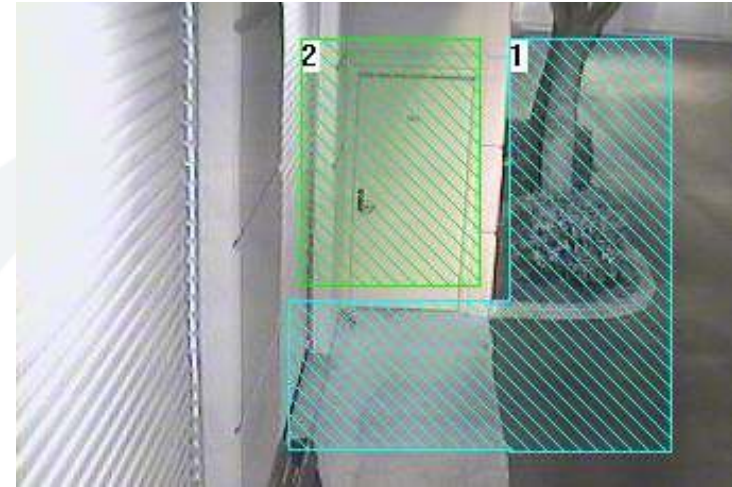
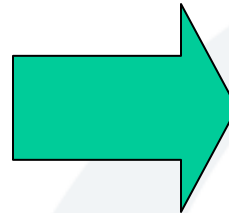
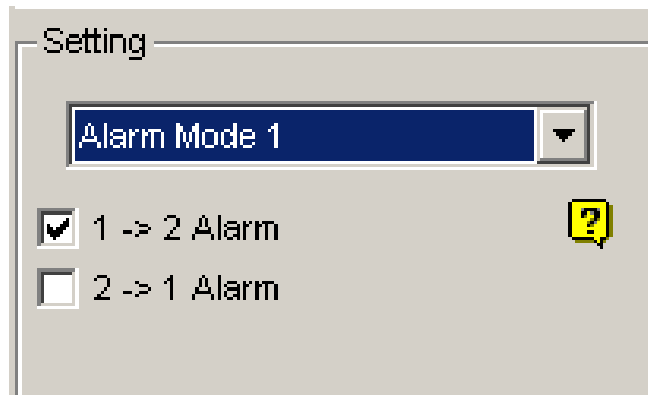


**ALERT!**

## ■ Focus Change Detection



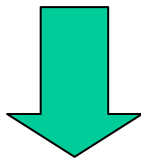
**ALERT!**



- When someone walks from zone 1 to zone 2, alarm will be triggered.
- Two-way alarm
- User-defined regions.
- Two intruder alert mode **New!**

# Object Counting

- Define regions 1 and 2
- One-way counting/ Two-way counting

An aerial view of a road with a zebra crossing. Two regions are defined: Region 1 is a blue hatched area on the left side of the road, and Region 2 is a green hatched area on the right side of the road. A yellow car is visible in Region 1, and another yellow car is visible in Region 2. Below the image is a control panel with a dropdown menu set to 'Traffic Demo' and a 'Stop' button. To the right, a 'Counting Result' box shows 'In : 1' and 'Out : 1'.

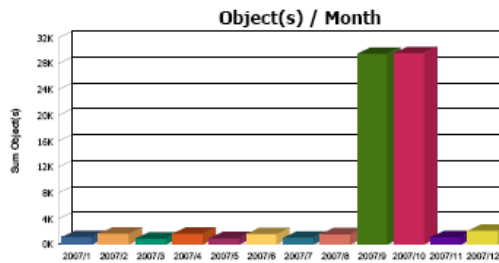
Test Count		Counting Result	
Traffic Demo	Stop	In :	1
		Out :	1



## QCounter Demo Report

Summary overview of : London

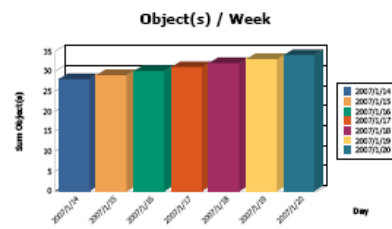
Total 75,207 Object(s) for the year 2007 was encountered.



January	1,172
February	1,888
March	930
April	1,887
May	992
June	1,839
July	1,054
August	1,802
September	20,523
October	29,858
November	1,155
December	2,139
<b>總和</b>	<b>75,207</b>

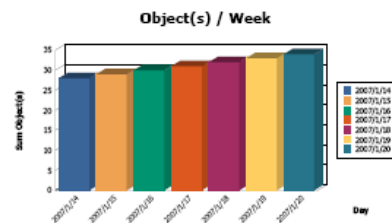
Total 347.00 Object(s) were encountered on the week Jan 01

Day	總和
Mon 1/1	248
Tue 1/2	27
Wed 1/3	17
Thu 1/4	18
Fri 1/5	19
Sat 1/6	20



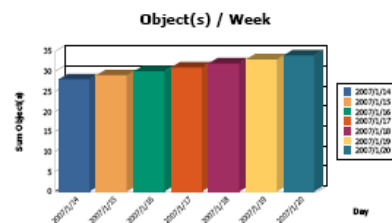
Total 168.00 Object(s) were encountered on the week Jan 07

Day	總和
Sun 1/7	21
Mon 1/8	22
Tue 1/9	23
Wed 1/10	24
Thu 1/11	25
Fri 1/12	26
Sat 1/13	27



Total 217.00 Object(s) were encountered on the week Jan 14

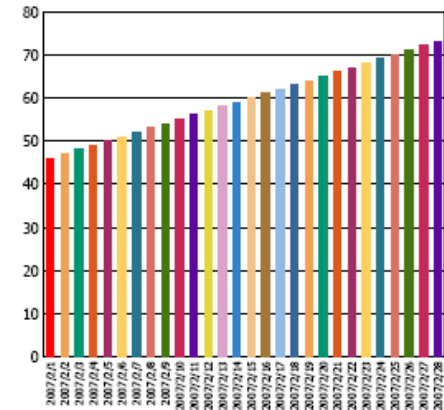
Day	總和
Sun 1/14	28
Mon 1/15	29
Tue 1/16	30
Wed 1/17	31
Thu 1/18	32
Fri 1/19	33
Sat 1/20	34



February 2007

Day	總和
31	46
30	47
29	48
...	49
...	50
...	51
...	52
...	53
...	54
...	55
...	56
...	57
...	58
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...	88
...	89
...	90
...	91
...	92
...	93
...	94
...	95
...	96
...	97
...	98
...	99
...	1,000

### Object(s) / Day



To better protect customer's confidentiality.



**ATM Keypad**

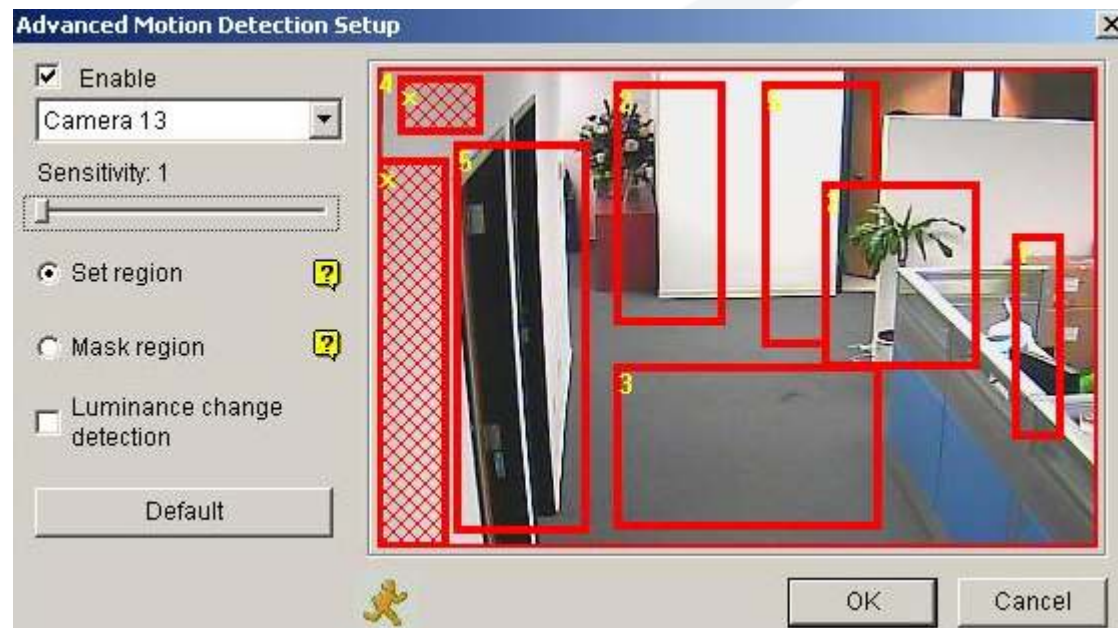


**Access Keypad**

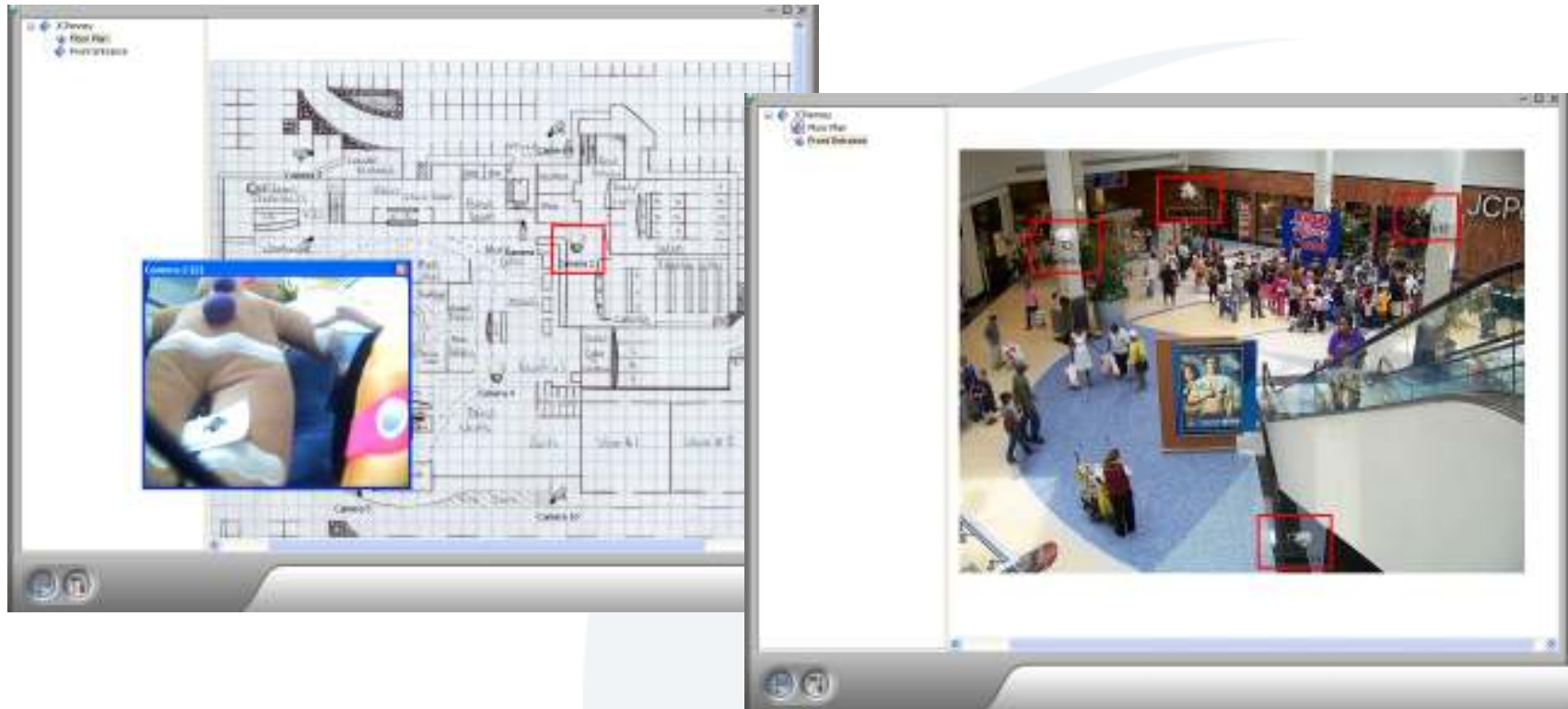


**Private House**

**Smart Surveillance of Wide Area with Multi-Level of Sensitivity...**



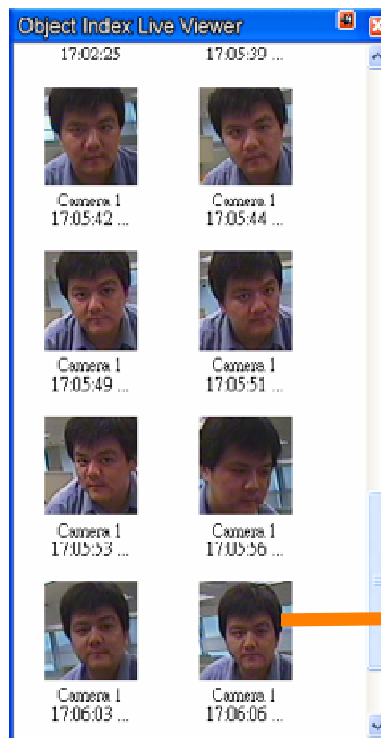
**5 Different Sensitivity Level For Different Camera!**



- Application: Control room
- Remote view E-Map from IE
- Application: EAS Integration, Airport, Construction Sites, Shopping malls, Parking Lots etc

# Face Detection

## Face Index



- Capture all customers' faces at the counter
- Differentiate people from objects when motion is detected
- Easy playback by faces index



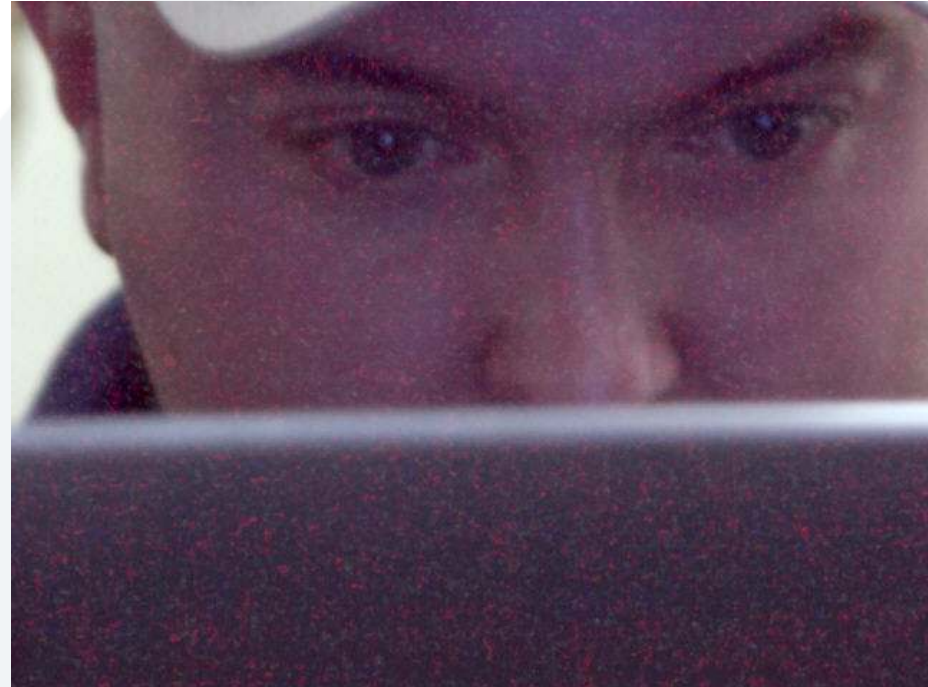
DEMO

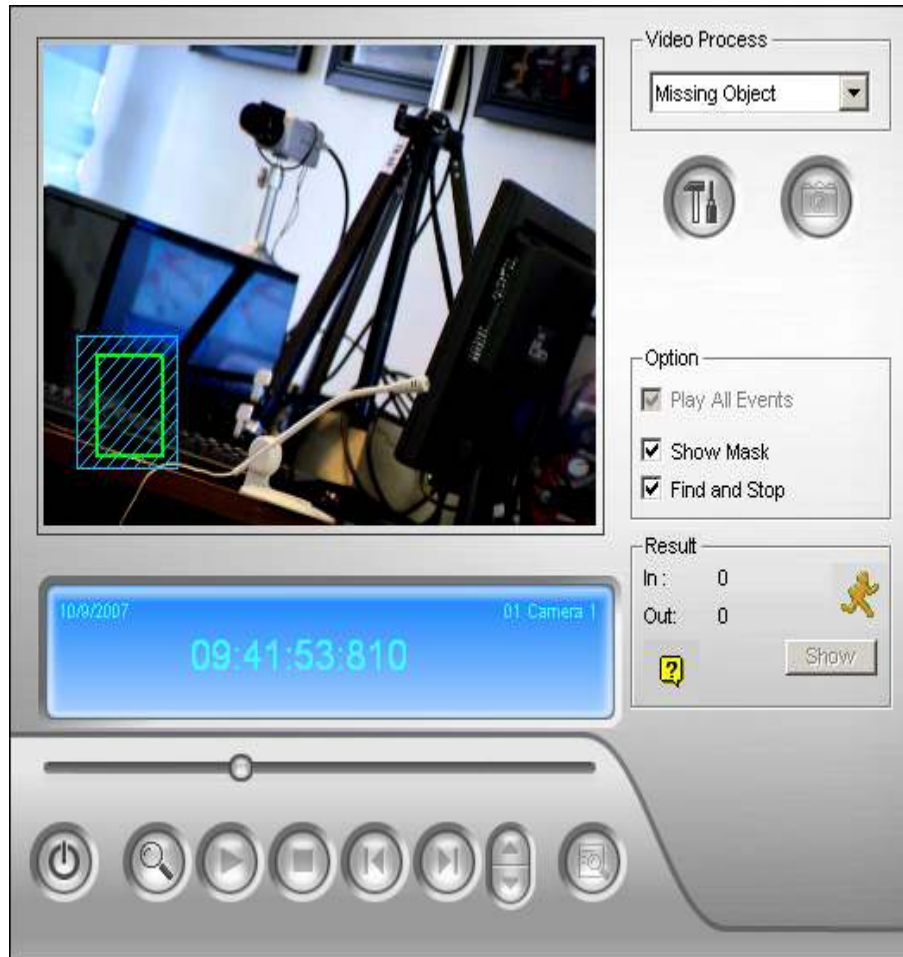
## Reduce false motion detection in bad weather or at night time.

Two types

1. Noise Tolerance
2. Noise Detection

- Reduce False Motion Detection
- Save storage space

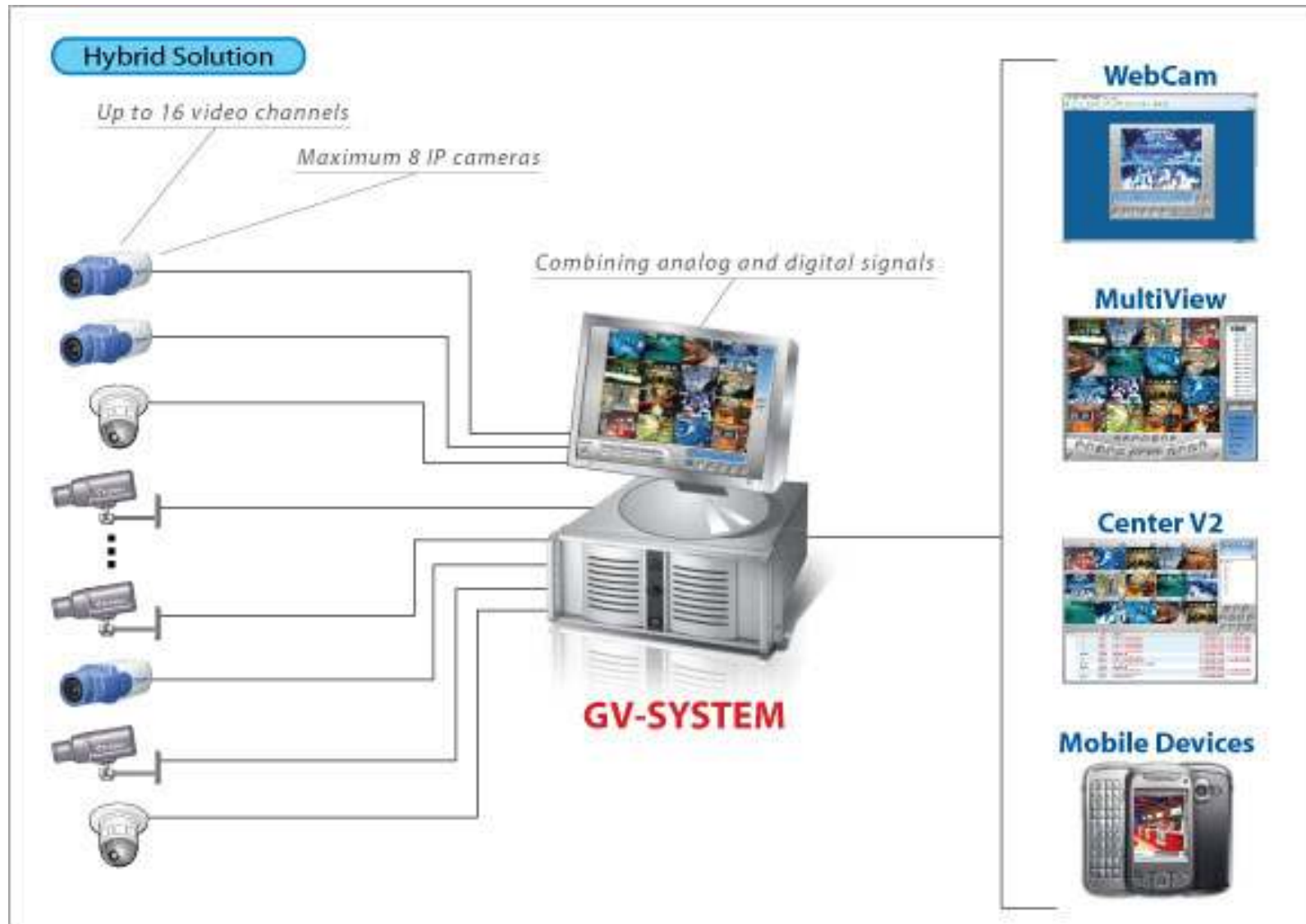




## Post-Event Intelligent Search


- Alarm Event
- Intrusion Event
- Object Counter
- Unattended Object Detection
- Missing Object Detection

# GV-Hybrid Solution



- Complete software-based surveillance solution

**No video capture card needed!**

- Support up to 16/**32** channels  of IP integration
- Supported IP products include **GV-Video Server, GV-Compact DVR, GV-IP Camera, and 3rd Party IP Cameras:**
- Sony, Panasonic, AXIS, JVC, IQEye, and Mobotix
- V8.2 software capability

**V8.3**



*\* Coming up*



■ **GV-IP 1.3M Box Cam**



CE FC

■ **GV-IP 1.3M Varifocal Cam**



CE FC

■ **GV-IP 1.3M Dome Cam**



CE FC

Megapixel IP Camera

Analog Camera



# GV-Video Server (Linux-based)

Analog Camera




+

GV-Video ServerV2 (MPEG4) or  
GV-Video ServerV3 (H264)\* 




= IP Surveillance System

- Power over Ethernet (POE)
- D1 Resolution (MPEG4) @ 30fps
- Up to 2 cameras with **dual streaming**
- Wireless capability
- USB 2.0/ SD Card storage

- Supports PTZ camera
- Schedule recording
- 3G Mobile viewing
- Supports GPS through UMTS (3G)\* 

\* Coming up

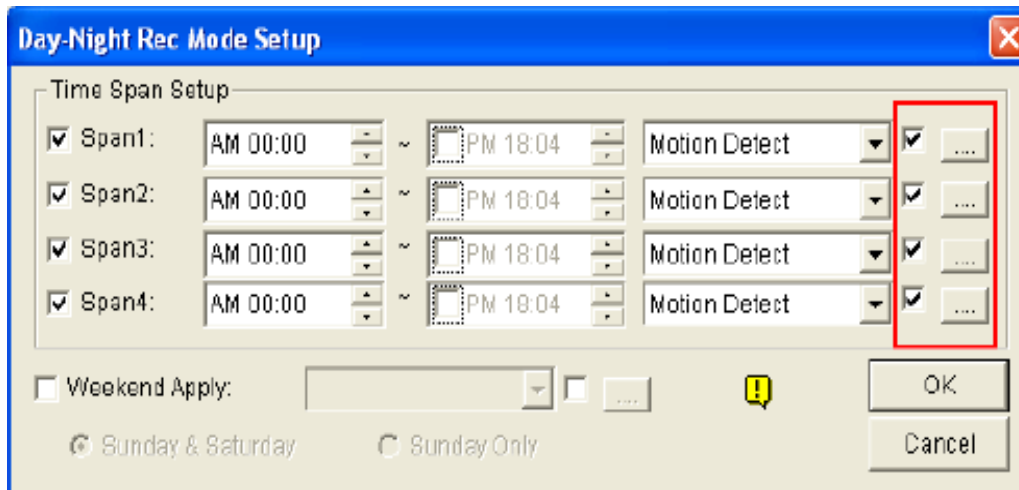
# GV-Compact DVR (Linux-based)

- Up to 4 channels video and audio recording/ playback
- Support 4 external USB + 1 mobile 3.5"/2.5" IDE Hard Drive
  - 4CIF @30fps
  - 4 Half D1 @30fps
  - 4 D1 @15fps
- TV/VGA output + spot monitor
- Support PTZ devices
- Integrate with DVR 、 NVR 、 Control Center, Center V2, and Access Control
- Supports GPS through UMTS (3G)\* 



\* Coming up

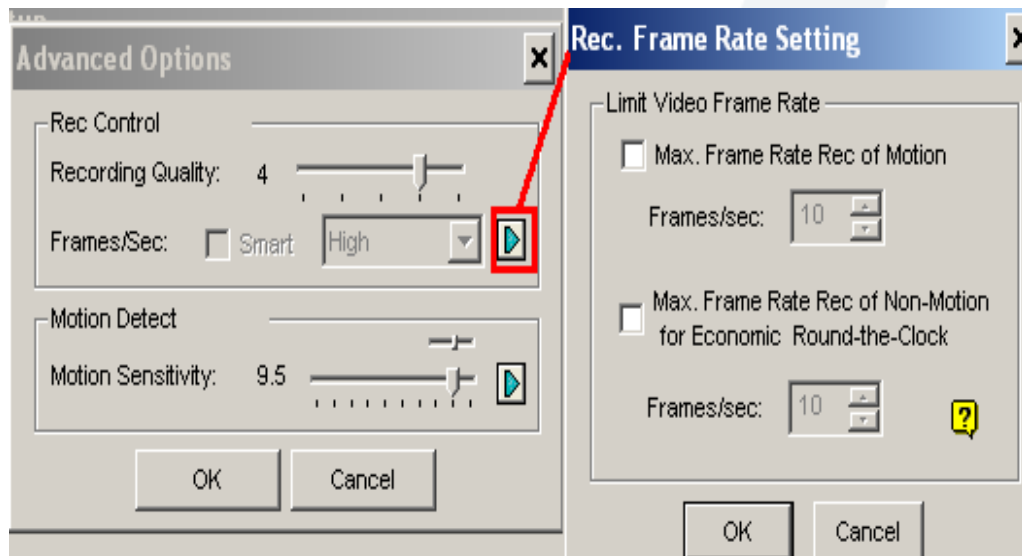
- **System Configuration Settings**
- **Alarm Triggering**
- **System Idle Protection**
- **Keylock Mode VS Windows Mode**
- **Remote View**

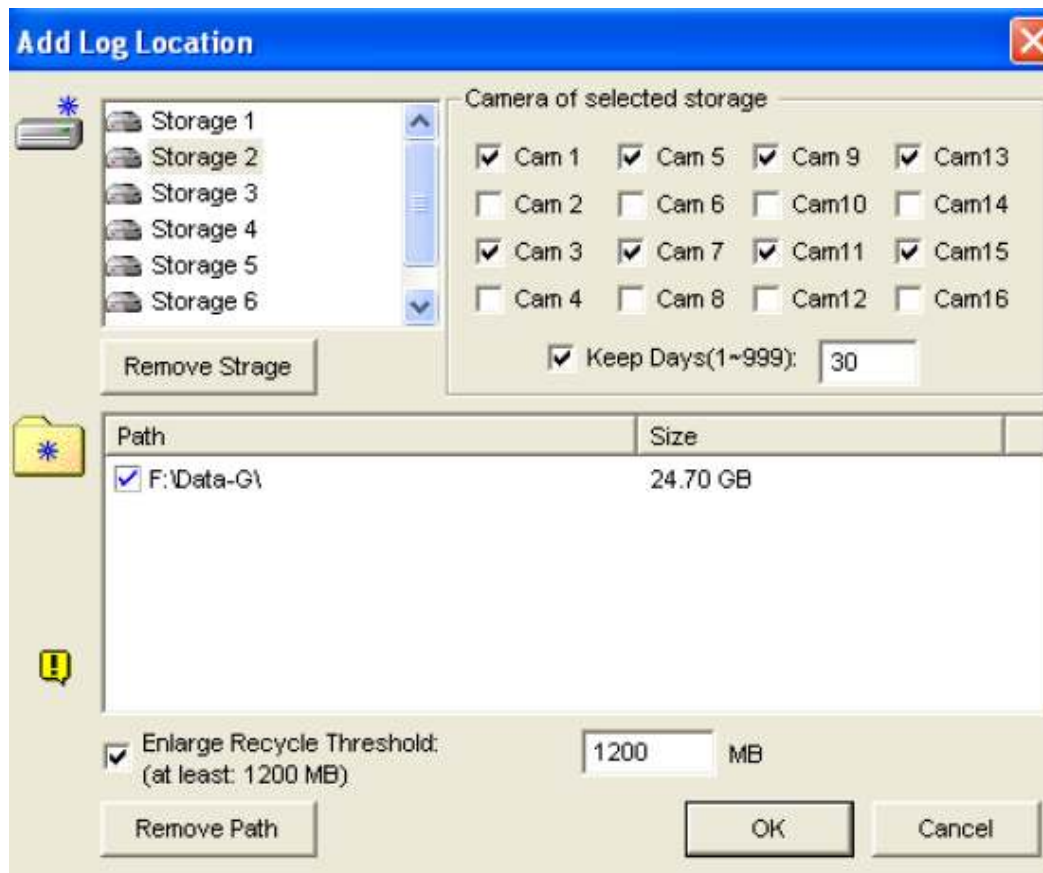


- Customized motion sensitivity level

- Customized frame rate

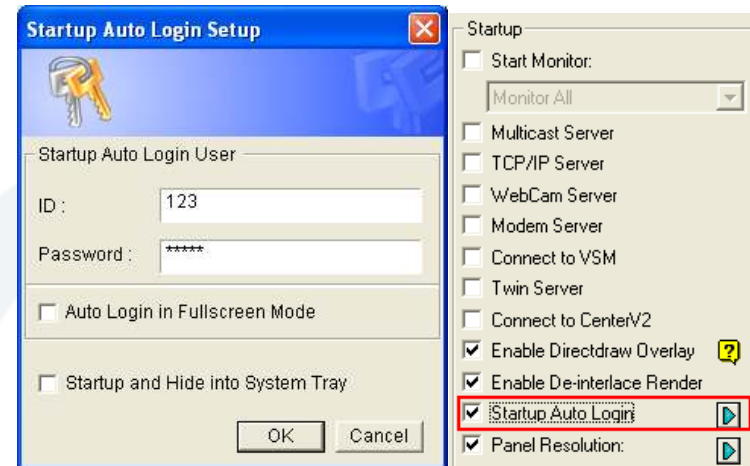
- Customized recording quality





- Dedicated HDD for specific camera(s)
- Increase performance for network storage

# System Idle Protection



## The More Secured Surveillance System

- Protect the system
- Auto logout when idle for certain time
- Auto switch account
- Auto start monitoring

# Keylock Mode Option



- GeoVision Keylock mode ensures maximum security
- Prevent users from accessing file system
- **Dedicated security system**



## Monitor remotely via:

### ■ Internet Explorer

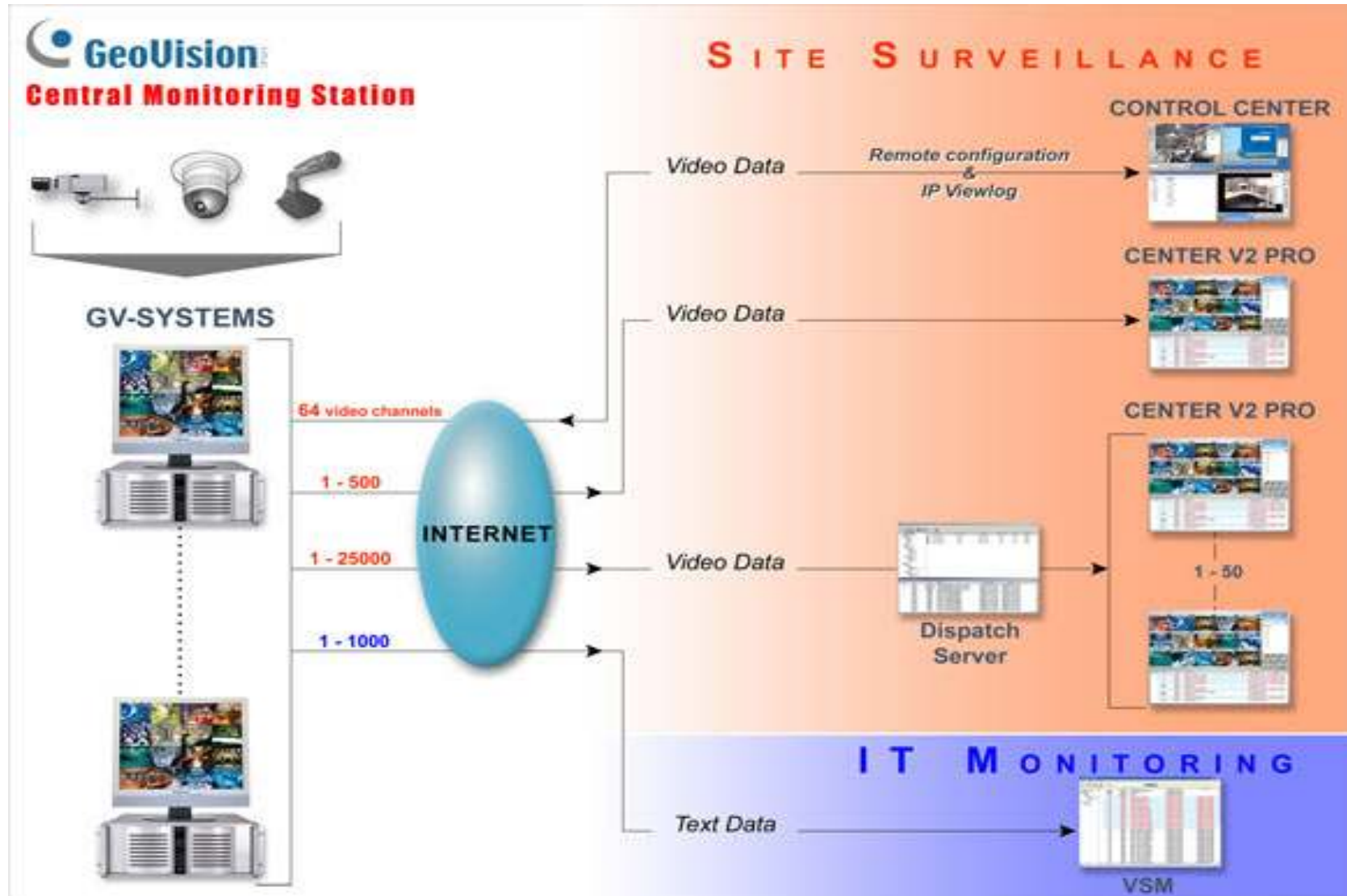
- 16 cameras monitoring
- Two way audio
- PTZ Control

### ■ PDA/Smart phone

- Live video monitoring
- Up to 30 FPS with broadband network
- PTZ Control
- Remote playback
- Support various popular models: Palm Treo 700w, Motorola Q, ATT 8525, Samsung SCH-i830, HTC Touch, Blackjack

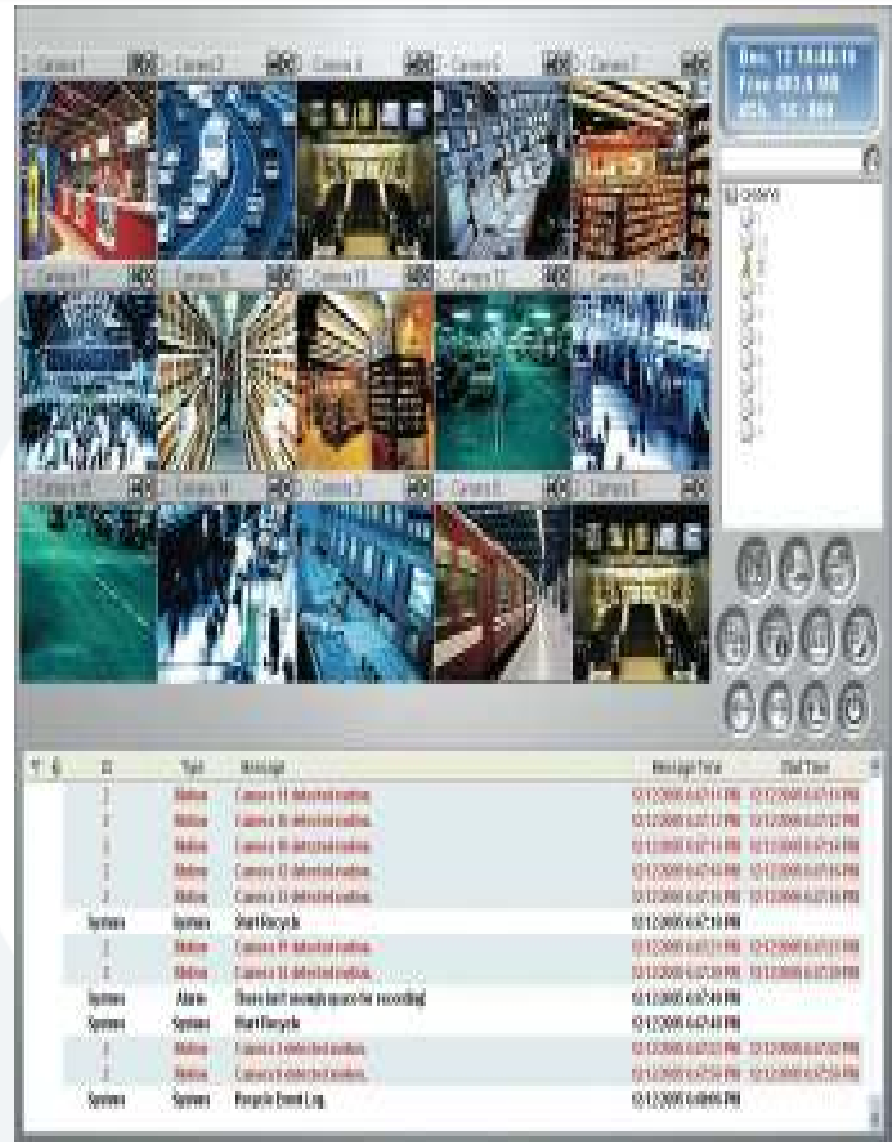
- **Central Monitoring Solution**
- **POS Integration Solution**
- **Mobile Solution (GeoGIS)**
- **License Plate Recognition**

# Central Monitoring Solution



# Center V2 Servers

- Support to 800 live channels from 500 DVRs
- Storing redundant video clips on demand at the Center V2 Server
- Remote control of PTZ Camera and I/O devices
- Live 2 way audio
- Live log all the events and store them in the database
- Alarm report that links with video event
- Instant playback of the video
- **Perfect for the security operator in central room!**





Nov. 29 19:06:15  
 28.15 GB  
 20 / 80

2F

CenterV2

- GeoVision
  - 1F
    - Camera 1-Door
    - Camera 2-Door
    - Camera 3-Door
    - Camera 4-Door
    - Module 1
  - 2F
  - 3F
  - 4F
  - 5F



ID	Type	Message	Message Time	Start Time
1F	Motion	Camera 3-Door detected motion	11/29/2006 7:01:04 PM	11/29/2006 6:02:47 PM
1F	Motion	Camera 4-Door detected motion	11/29/2006 7:01:04 PM	11/29/2006 6:02:47 PM
1F	Attachment	Record file of Camera 1-Door. [Live]	11/29/2006 7:01:06 PM	11/29/2006 6:02:48 PM
1F	Attachment	Record file of Camera 2-Door. [Live]	11/29/2006 7:01:06 PM	11/29/2006 6:02:48 PM
1F	Attachment	Record file of Camera 3-Door. [Live]	11/29/2006 7:01:06 PM	11/29/2006 6:02:48 PM
1F	Attachment	Record file of Camera 4-Door. [Live]	11/29/2006 7:01:06 PM	11/29/2006 6:02:48 PM
1F	Login/Logout	Logout	11/29/2006 7:01:06 PM	
1F	Login/Logout	Login	11/29/2006 7:01:15 PM	
1F	System	Start Monitoring All Type Events	11/29/2006 7:01:15 PM	11/29/2006 6:02:58 PM
1F	System	Stop I/O Monitoring	11/29/2006 7:01:15 PM	11/29/2006 6:02:59 PM
1F	System	Stop all cameras monitoring	11/29/2006 7:01:15 PM	11/29/2006 6:02:59 PM
System	System	Start Live View - [1F] Camera 1-Door	11/29/2006 7:01:29 PM	
System	System	Start Live View - [1F] Camera 2-Door	11/29/2006 7:01:29 PM	

# Faster Emergency Response

Connect to CenterV2

Connect... Exit

Mode: **Panic Button** Configure...

CenterV2 IP	Status
70.147.67.220	OK

**Settings for Panic Button**

Panic Button...

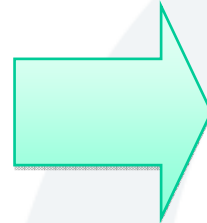
Trigger by I/O: Mod. 1 Pin. 1

Output Module: Mod. 1 Pin. 1

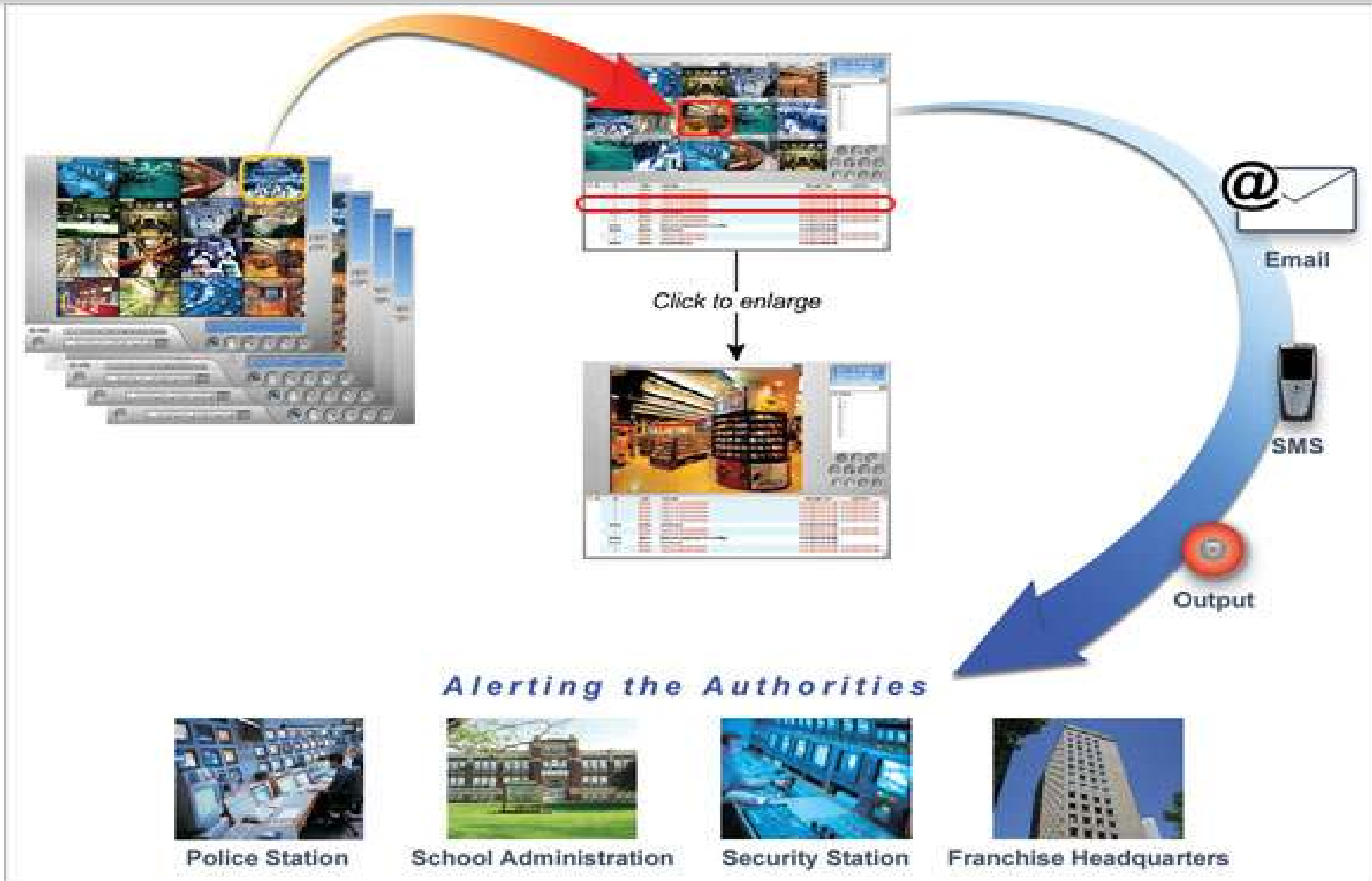
Send which Camera(s) to CenterV2...

<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 5	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 13	Select All
<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 10	<input checked="" type="checkbox"/> 14	
<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 15	Clear All
<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 16	

OK Cancel




ID	Time	Message	Message Time	File Name
1	10/10/2008 10:00:00 AM	Recording of Camera 1 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
2	10/10/2008 10:00:00 AM	Recording of Camera 2 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
3	10/10/2008 10:00:00 AM	Recording of Camera 3 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
4	10/10/2008 10:00:00 AM	Recording of Camera 4 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
5	10/10/2008 10:00:00 AM	Recording of Camera 5 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
6	10/10/2008 10:00:00 AM	Recording of Camera 6 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
7	10/10/2008 10:00:00 AM	Recording of Camera 7 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
8	10/10/2008 10:00:00 AM	Recording of Camera 8 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
9	10/10/2008 10:00:00 AM	Recording of Camera 9 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
10	10/10/2008 10:00:00 AM	Recording of Camera 10 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
11	10/10/2008 10:00:00 AM	Recording of Camera 11 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
12	10/10/2008 10:00:00 AM	Recording of Camera 12 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
13	10/10/2008 10:00:00 AM	Recording of Camera 13 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
14	10/10/2008 10:00:00 AM	Recording of Camera 14 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
15	10/10/2008 10:00:00 AM	Recording of Camera 15 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM
16	10/10/2008 10:00:00 AM	Recording of Camera 16 (Motion)	10/10/2008 10:00:00 AM	10/10/2008 10:00:00 AM



## GV-Control Center

Handy Tool  
For Security  
Control Center  
Operations



- Security Director
- 4 Matrices (**384 channels**)
- Complete Control of DVRs

# Control Center

**GeoVision**  
**Control Center Server**

**GV-SYSTEMS**



INTERNET

**S I T E S U R V E I L L A N C E**  
**C O N T R O L C E N T E R A P P L I C A T I O N S**



**Remote DVR**  
*Full control of local DVR settings*



**Remote Desktop**  
*Remote access to local DVR desktop*



**Digital Matrix**  
*Video display, recording and playback from different groups of cameras*



**Remote ViewLog**  
*Playback of recorded videos from local GV-Systems*



**I/O Central Panel**  
*Group, manage and trigger related I/O devices*



**IP Matrix**  
*TV Wall control with up to 36 Matrix views and 3,840 cameras*

**I T M A I N T E N A N C E**

# Control Center

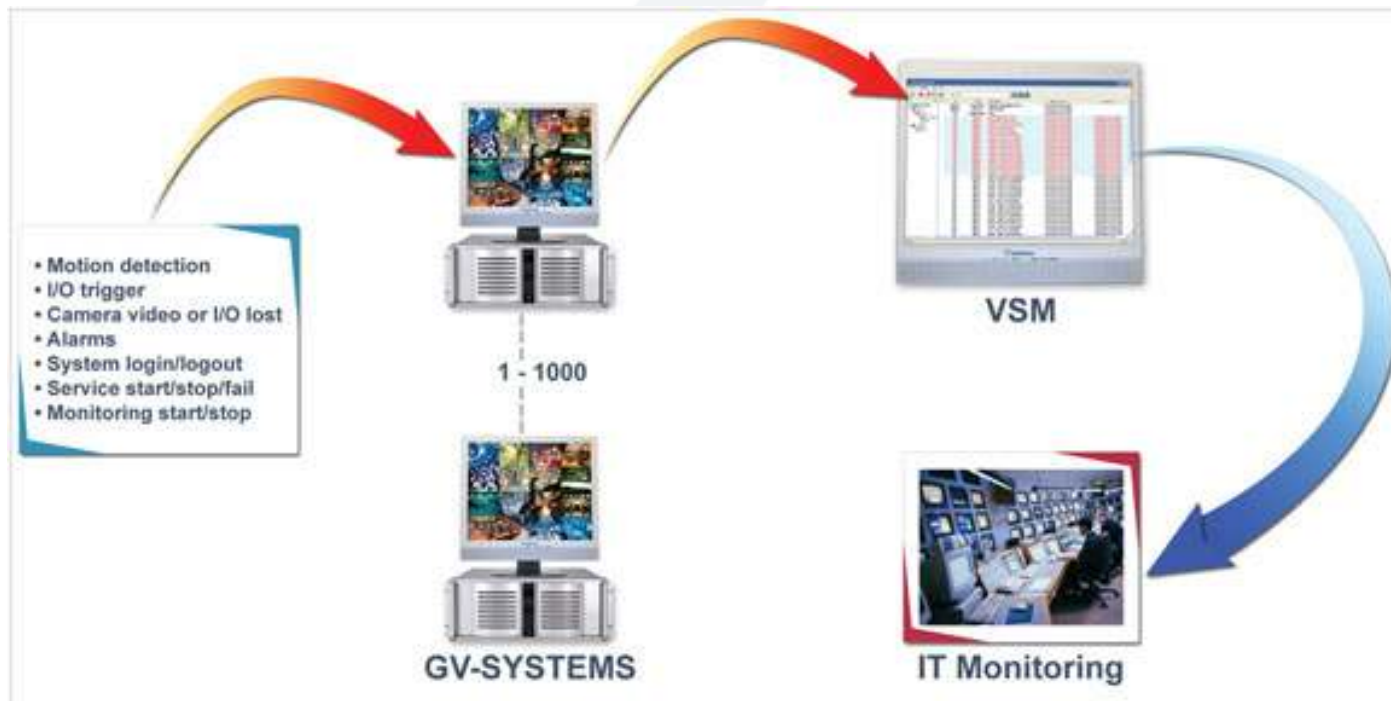


# Control Center Digital Matrix

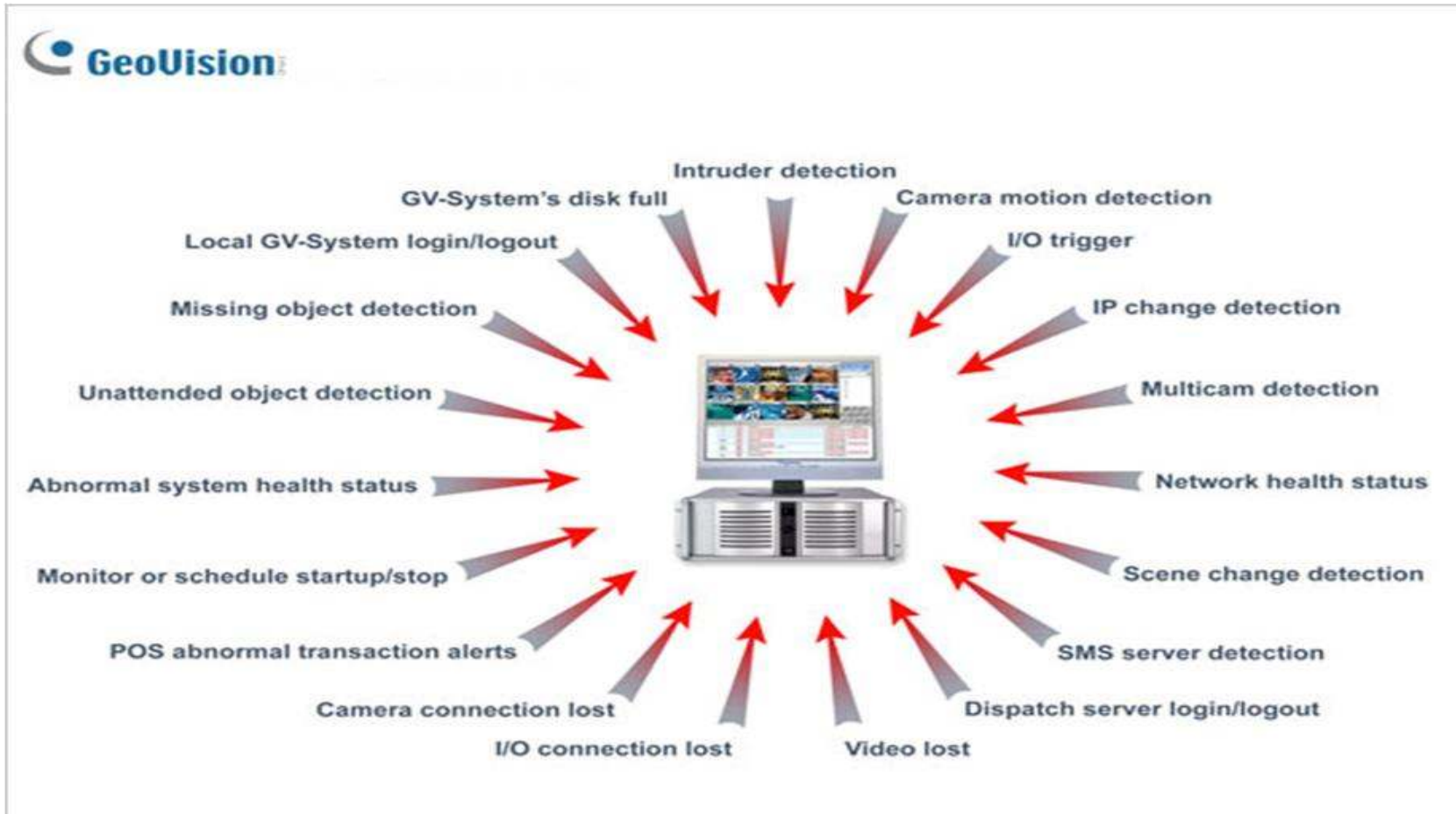


# Vital Sign Monitor

- IT Manager
- DVR Maintenance



# Vital Sign Monitor



## ■ For Retail

- Lower inventory and cash shrinkage
- Enhance loss prevention

## ■ For ATM

- prevent ATM fraud
- provide visual evidence for law enforcement

## ■ Feature Highlight

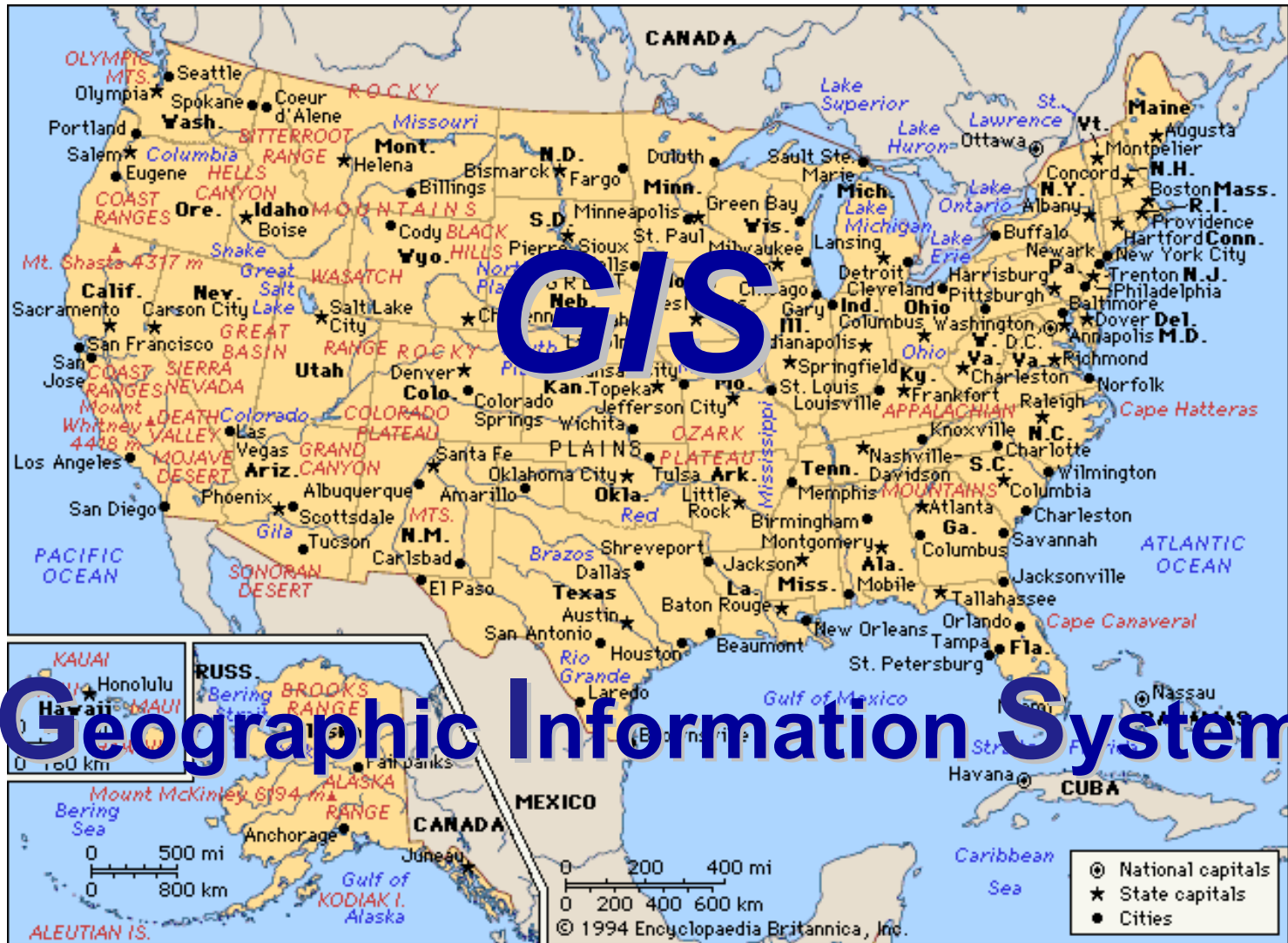
- POS Live view remotely
- Easy Video Playback with each Transaction
- Highlight Keywords
- Abnormal Transaction Alerts





# POS Keywords Highlight

The screenshot displays a software interface for a Point of Sale (POS) system. On the left, a video window titled "Play" shows a timestamp of 11:52:32 and a list of items with prices: DM (1,00), Ice Cream (5,00), Chocolate (2,60), Jelly (1,20), ITEM VOID, and Ice Cream (5,00). The bottom left of the video window shows the date 4/27/07, time 11:52:32.875, and "POS Live View". On the right, a log window shows a timestamp of 16:21 on 05/05/04. The log content is identical to the video window's list. A red text overlay at the bottom right of the screenshot reads "system log as well!". The interface includes various control icons at the bottom, such as play, stop, camera, and window management buttons.

system log as well !





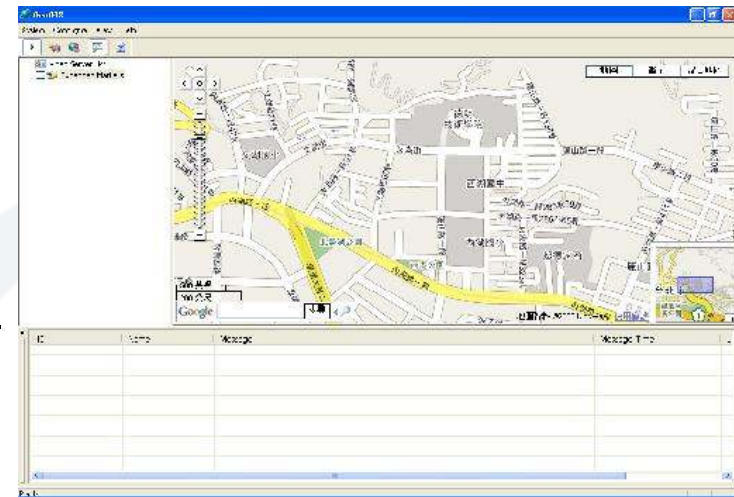
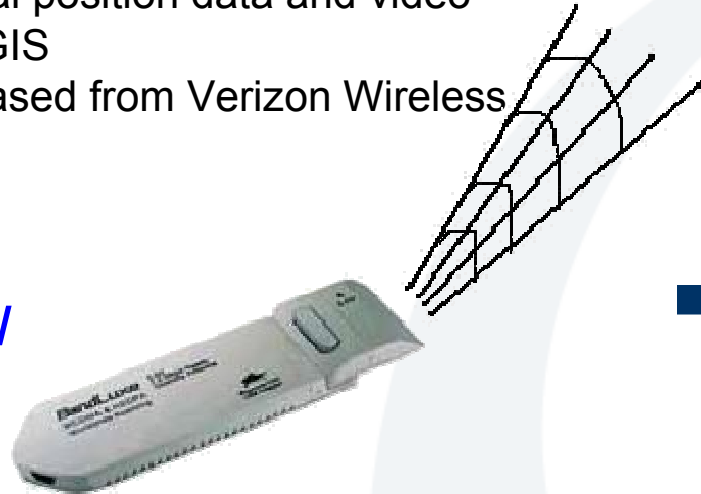
- Supports up to **500 hosts**
- **Live Video Stream** from Video Server & Compact DVR
- Vehicle **speed**, **position**, and **information** display
- Live Position from  
- **Position/ Radius** Query
- Vehicle Route Tracking
- Video Playback through remote viewlog



## ■ UMTS/3G Wireless Adapter

Transmit global position data and video streaming to GIS  
Can be purchased from Verizon Wireless (USB 727)

## ■ Video Server/ Compact DVR



## ■ GIS

Monitor and track multiple vehicles  
Live view video, speed and position

## ■ GPS Receiver

Transmit and receive global position data from satellite

# GV-LPR

Licence

Plate

Recognition



## Version 3.0 Key Features:

- Supports up to **4 motion mode lanes**, **8 I/O mode lanes**, or **8 GV-DSP lanes**
- Web-based interface for remote database management
- Alarm through **e-mail**, **SMS**, **output relay**, or **speaker**
- Maximum speed of over **125mph**
- Seamless integration with existing external database



## Applications:

- **Black list/ White list**
- **Stay Time/ Overtay Alarm**
- **Average Speed/ Over Speed Alarm**

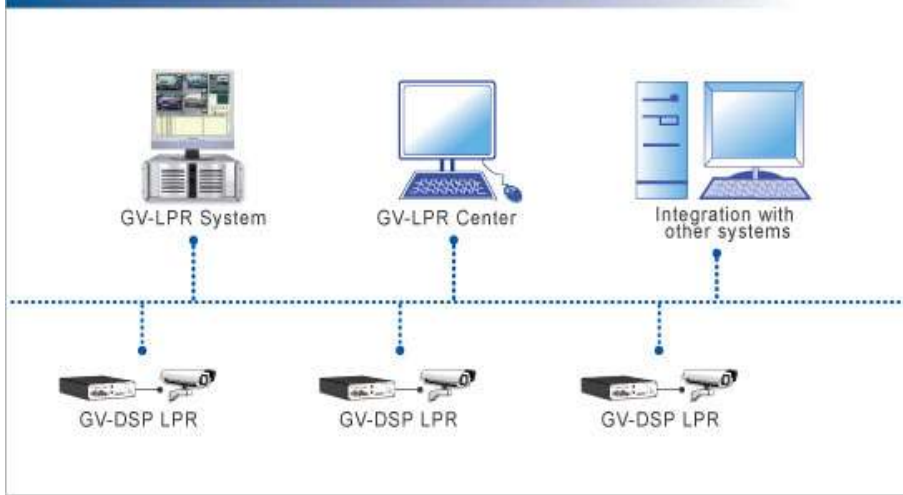


Camera	Plate ID	Time	Direction	Elapsed Time	ID	License_Plate	Name	Identity	Telephone	Address	Ticket	Memo
1	9769FN	1/25/2006 4:08:26 PM	In		100008	9769FN	Richard	Engineer	0931-374-368	Road, Nei-Hu,	223	
3	DP8412	1/25/2006 4:08:26 PM	In		100045	DP8412	Jamei	Sales	0926-199-878	Road, Nei-Hu,	516	
4	1522DL	1/25/2006 4:08:24 PM	In		100005	1522DL	Y.C.Wang	Manager	0922-775-302	Road, Nei-Hu,	220	
4	553128	1/25/2006 4:08:19 PM	In		100101	5U3128	Vincent	Manager	0912-344-541		102	
1	2B3448	1/25/2006 4:08:18 PM	In		100011	B3448	Patrick	Engineer	0958-965-590	Road, Nei-Hu,	222	
2	7B5277	1/25/2006 4:08:16 PM	In		100028	7B5277	Penny	Assistant	0939-118-113	Road, Nei-Hu,	321	
1	GV7351	1/25/2006 4:08:13 PM	In		100006	GV7351	Jacky	Engineer	0922-416-496	Road, Nei-Hu,	218	

# LPR DSP



SYSTEM DIAGRAM - GV-DSP LPR



- Linux-based solution for 1 port traffic or mobile license plate recognition

- SD card storage
- Auto offline backup to save valuable license plate data
- Web interface for setup, live viewing and firmware upgrade

- Recognition triggered by **motion detection** or **I/O device**

# LPR Cameras



- **10m, 20m, 30m\***
- Built-in powerful IR LED illuminator
- Built-in always-on fan
- Weatherproof (IP-66 standard)
- Sun-shield
- IP Megapixel LPR Camera\*

\* Coming up

Models	GV-IRCAM10	GV-IRCAM20
Distance (optimal)	7~15M	15~25M
Sensor	1/3" B/W Ex-view CCD	
Resolution	600 TVL	
Lens Focal Length	5 ~ 50 mm, 10X	10 ~ 120 mm, 12X
Construction	Robust aluminum with weatherproof sun-shield	
Protection classification	IP 66	
Environmental	Operation: -20°C ~ 50°C Storage: -30°C ~ 60°C	
Power Supply	AC24V / DC12V	
Power Consumption	15W	20W
LED Quantity	12 High efficiency reflex LED	24 High efficiency reflex LED
Illumination Range	20M (object of view reflecting IR Light)	30M (object of view reflecting IR Light)
Illumination View Angle	30°	
Illuminator Life	25,000 hrs	

**Thank You.** 😊

