

Quick Start Guide



GV-NAS System

The Vision of Security





© 2015 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.

December 2015

Contents

1. Introduction.....	1
1.1 Packing List and Package.....	2
1.2 System Requirements.....	3
1.3 Supported IP Cameras.....	4
2. Overview.....	5
2.1 Front Panel.....	5
2.2 Rear Panel.....	7
2.3 Installing the Hard Disks.....	9
3. Getting Started.....	11
3.1 Looking Up the IP Address.....	11
3.2 Accessing the GV-NAS System.....	12
3.3 The GV-NAS System Utility.....	13
3.4 Creating RAID.....	15
3.5 Default Accounts.....	18
4. The Web Interface (Desktop).....	19
5. Network Settings.....	21
6. Recording GV-IP Cameras to GV-NAS System.....	23
7. Playing Back Recordings from GV-NAS System ...	28
7.1 Playing Back on a Computer.....	28
7.2 Playing Back on a Mobile Device.....	31
8. Firmware Upgrade.....	36

1. Introduction

Welcome to the *GV-NAS System Quick Start Guide*. In the following sections, you will learn about the basic installations and configurations. For more details, see *GV-NAS System User's Manual*.

1.1 Packing List and Package

You can choose to purchase a GV-NAS System package or a bundled package which also includes 4 GV-Target IP Camera of your choice and a GV-PoE switch.

Package Options:

- Single Package
- Bundled Package

GV-NAS System Single Package

- GV-NAS System
- 1 M network cable
- DC 12V, 5A power adapter
- Power cord
- Software CD
- GV-NAS System Quick Start Guide

Bundled Package for GV-NAS2008

- GV-NAS System Package x 1
- Target IP Camera x 4
- GV-POE400 x 1

Note: For the Target IP Camera, select any 4 models from GV-EBL1100 / 2100, GV-EBX1100 / 2100, GV-EDR1100 / 2100, GV-EFD1100 / 2100. For more information, contact our sales representatives.

1.2 System Requirements

Tested and Suggested Web Browsers and Versions

- Internet Explorer 8 or later
- Google Chrome 33.0.1750.154
- Mozilla Firefox 28
- Safari for Windows 5.1.7
- Safari for MAC 6.0.5

Recommended Hard Disks

For system efficiency, we recommend the following enterprise level hard disk drives. Avoid using desktop level or green HDD which may affect system efficiency.

- WD RE series
- Seagate Constellation ES.3 series
- HGST Ultrastar series

Note: GV-NAS is designed for 3.5" hard drive disks (2.5" ones are not supported), each at the maximum of 4 TB.

1.3 Supported IP Cameras

GV-NAS System supports the following IP cameras.

- GV-EBL1100 / 2100 (GV-Target Series V1.02 or later)
- GV-EBX1100 / 2100 (GV-Target Series V1.02 or later)
- GV-EDR1100 / 2100 (GV-Target Series V1.02 or later)
- GV-EFD1100 / 2100 (GV-Target Series V1.02 or later)
- GV-IP Cameras (V3.00 or later)
- 3rd Party IP Cameras with NAS Recording Function (See [Supported IP Cam List](#) on our website.)

2. Overview

2.1 Front Panel



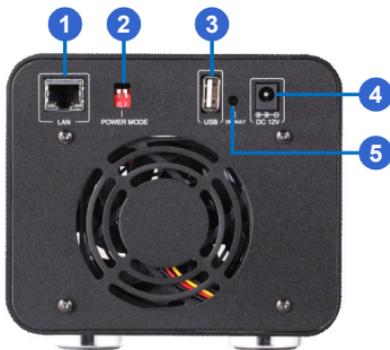
GV-NAS2008/2016



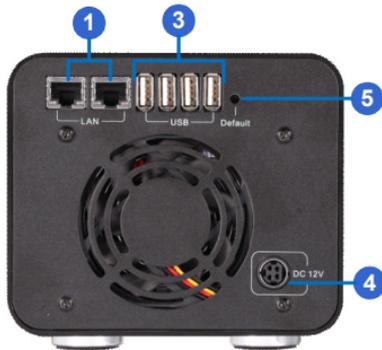
GV-NAS4008/4016

No.	Name	Description
1.	LCD Panel	Displays the device's current IP address, port setting, MAC address, motherboard temperature and CPU temperature. Press the power button to switch the displayed information.
2.	Power	Press the power button to turn the device on.
3.	Drive Bays	Load hard disk drives. The GV-NAS2008/2016 is equipped with 2 drive bays and the GV-NAS4008/4016 is equipped with 4 drive bays. The blue LED turns on when the holder is loaded with a hard disk. The red LED (GV-NAS2008/2016) or orange LED (GV-NAS4008/4016) turns on when files are being accessed or written.

2.2 Rear Panel



GV-NAS2008



GV-NAS2016



GV-NAS4008



GV-NAS4016

No.	Name	Description
1.	Gigabit LAN	Connects to 10/100/1000 Mbps Ethernet.
2.	Power Mode	Sets the system status (on or off) when power resumes after a power failure. Press Switch 1 up to have the system turned on when power resumes; press Switch 1 down for the system to remain off when power resumes. Switch 2 is not functional.
3.	USB Port	Connects to external USB storages or USB printers.
4.	DC 12V Port	Connects to power.
5.	Default	Press for 10 seconds to reset the device to default settings. The device will restart while loading default settings.

2.3 Installing the Hard Disks

The GV-NAS System's disk drives are hot-swappable. You can install or replace hard drives while the system is running. Follow the steps below to install a hard disk.

1. Press and pull out the disk holder. For NAS4008/4016, the top of the disks should face the right.



Two-Bay GV-NAS System



Four-Bay GV-NAS System

2. Remove the clips on both sides.



- Put the hard drive into the disk holder. Your hard disk should fit perfectly with the connector pins facing the back.



- Re-install the clips to secure the disk to the holder. Press the middle of the clip first and then the sides.



- Follow step 1 to re-install the disk holder.

3. Getting Started

3.1 Looking Up the IP Address

By default, the IP address of GV-NAS System is assigned by the DHCP server when the system is connected under a LAN environment. To find the IP address:

- look up from the system's LCD panel, or
- browse for the device using the GV-NAS System Utility included in the software CD

3.2 Accessing the GV-NAS System

1. Find the system's IP address from the LCD panel or using the GV-NAS System Utility. For details, see *The GV-NAS System Utility* in the following section.
2. Type the IP address into your Web browser and press **Enter**. This page appears.



3. Type the user name, password and the verification code to log in. The default user name and password are both **admin**.

Note: If the GV-NAS System is installed behind a firewall or router, you may need to open these default ports: HTTP port 80, FTP port 21, Ajaxplorer port 8090, Web Server port 8060, Cloud Printing Service port 9100 and E-mail notification port 465 (for example: Google's SMTP).

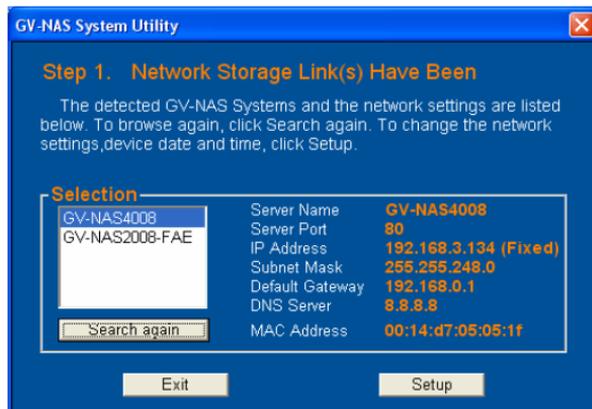
3.3 The GV-NAS System Utility

You can also use the utility software included on the software CD to find the IP address.

1. Execute **GV-NAS System Utility.exe**. This dialog box appears.



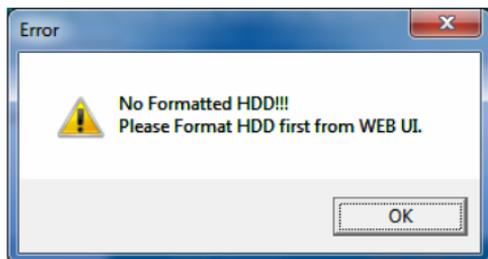
2. Click **Search** to start searching the GV-NAS System under the same LAN. This dialog box appears, showing the device found and its network settings (IP address).



3. If your device does not show up, click **Search again** to browse again.
4. To configure the GV-NAS System's network settings, device date and time, click **Setup** and type the password.



Note: This setup will take you through the basic configurations of the device without an Internet browser. Be advised the system must have at least one formatted volume in order to proceed or this window will appear:



3.4 Creating RAID

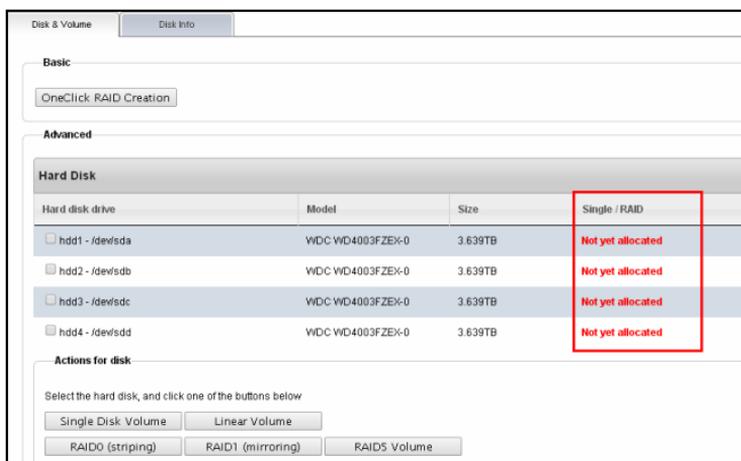
GV-NAS System supports single disk formatting, linear (JBOD), RAID 0, RAID 1 and RAID 5 setup. Follow the steps below to format or create RAID to your disk drives.

Note: RAID 5 is only supported by GV-NAS4016.

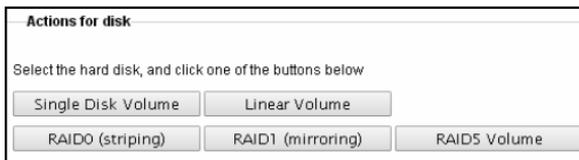
1. Upon entering the user interface, you are prompted to format the inserted hard disks. The applications (except the Disk & RAID Management) are only accessible with at least one formatted disk.



- Click **OK** on the warning message. This window appears. The Single / RAID column indicates the status of the mounted disks. In this case, they have not been formatted yet.

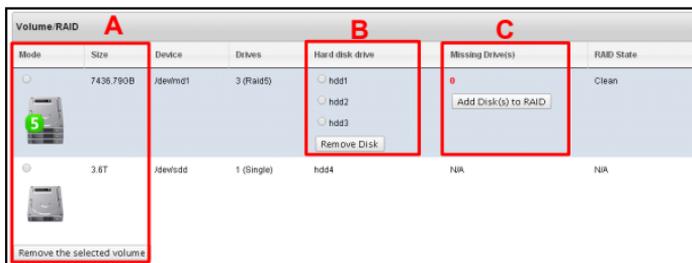


- To create RAID, you have two options:
 - Automatic setup:** RAID is created based on the number of inserted disks. A single disk will be formatted individually; two disks will be formatted to RAID 1; three disks or more will be formatted to RAID 5. Click **One Click RAID Creation** to start this setup.
 - Manual setup:** Manually select the hard disk drives and then click **Single Disk Volume**, **Linear Volume**, **RAID 0**, **RAID 1** or **RAID 5**.



For details on requirement and effects of each format type, see 2.4 *Creating RAID*, *GV-NAS System User's Manual* on the software CD.

- The formatting starts immediately and the system reboots when the formatting is completed.
- Optionally configure the disks from the Disk & RAID Management window.



- To remove a formatted volume, select a volume from the Mode column and click **Remove the selected volume**.
- To remove a disk from a RAID group, select a disk from the Hard Disk Drive column and click **Remove Disk**.
- To add another disk to a RAID group, click **Add Disk(s) to RAID**.

IMPORTANT:

- Depending on the size of the hard disks, GV-NAS System may take varying amount of time to establish and rebuild RAID.
 - Make sure the power supply is stable during the formatting. Power failure during formatting may cause permanent damage to the system, rendering the device unusable.
-

3.5 Default Accounts

By default, there are three types of accounts: the administrator, web master and camera user accounts.

Default ID	Default Password	Purpose
admin	admin	For GV-NAS system management and configuration of all user accounts
webmaster	webmaster	For Web Server management
"Cam01" up to "Cam16"	12345678	For accessing the home folder through FTP and Ajaxplorer

Note:

1. By default, GV-NAS2008/4008 contains 8 camera folders ("Cam01" to "Cam08") and GV-NAS2016/4016 contains 16 camera folders ("Cam01" to "Cam16").
 2. The webmaster account is only created after you enable the Web Server function. For details, see *4.7 Web Server, GV-NAS System User's Manual*.
-

4. The Web Interface (Desktop)

The desktop contains access (icons) to many applications and management tools. For details on these applications, see *System Administration*, Chapter 3, *GV-NAS System User's Manual* on the software CD.



You can keep multiple windows open at the same time. To minimize all the windows, click the **Show Desktop** button on the bottom-left corner of the desktop:



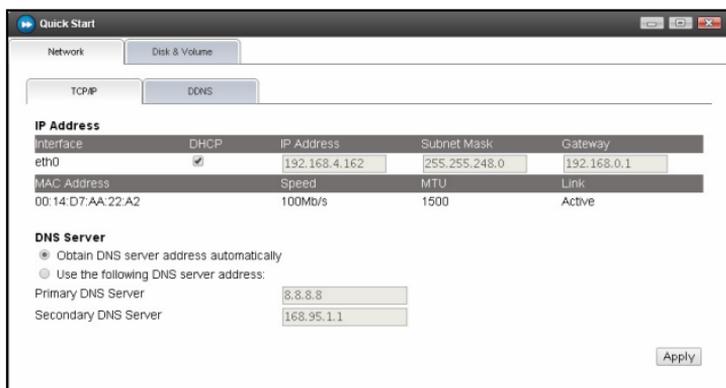
To power off, reboot or log out of the system, click the home icon  on the top-left corner of the desktop and select from the drop-down list. Click the home icon again to close the list.



5. Network Settings

By default, GV-NAS System is randomly assigned with an IP address by the DHCP server when it is connected to the network. However, if the server does not support DHCP, GV-NAS System will be assigned with the IP address **http://192.168.0.200**. In this case, change this default IP address to avoid IP conflict with other GV-IP Devices.

1. From the desktop, click **Quick Start**. By default, DHCP is enabled and the assigned IP address is shown.



2. To change to a fixed IP address, unselect **DHCP**, configure the **IP Address, Subnet Mask** and **Gateway**.

Note: Make sure the IP address does not conflict with other devices in a LAN environment.

3. Under Use the following DNS server address, configure the **Primary DNS Server** and **Secondary DNS Server** addresses.
4. Click **Apply** to save the settings.

6. Recording GV-IP Cameras to GV-NAS System

By default, GV-NAS system contains a shared folder **IP_Camera**, 8 user accounts **Cam01** to **Cam08** for GV-NAS2008 / 4008, and 16 user accounts **Cam01** to **Cam16** for GV-NAS2016 / 4016. For better account management and easier data retrieval on NAS system, assign each GV-IP Camera to a different user account and designate their recordings to the **IP_Camera** shared folder.

1. From the GV-IP Camera's Web interface, select **Management** and then **Storage Settings**. This page appears.



2. Optionally configure the Recycle and Keep Days settings. The files recorded to the GV-NAS System will be stored based on these criteria. For details, see *GV-IPCAM H.264 User's Manual* on the Software CD.

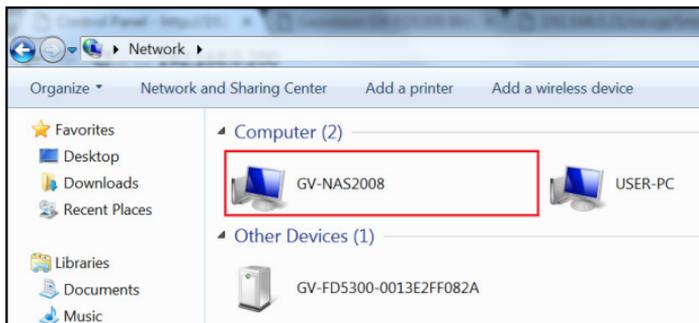
3. Assign a storage location under the GV-NAS System.

Network Neighborhood Settings		
Server URL/IP Address	User Name	Password
Enable <input checked="" type="checkbox"/> \GV-NAS2008\IP_Camera <input type="button" value="Search"/>	Cam01	*****
<input type="button" value="Apply"/>		

- A. Select **Enable**.
- B. Type the URL/IP Address (or NAS Server name) in this format **\\IP address (or NAS Server Name)\IP_Camera**. As illustrated, this GV-IP Camera will be recorded to the shared folder "IP_Camera" in GV-NAS System.
- C. Type a User Name and the password. For GV-NAS2008 / 4008, the default user name is **Cam01** up to **Cam08** for each of the 8 user accounts; for GV-NAS2016 / 4016, the default user name is **Cam01** up to **Cam16** for each of the 16 user accounts. The default passwords are all **12345678**.

Tip: If you are not sure about the server and folder name, follow the steps below to browse:

1. Make sure **GV-NAS 2008** can be detected from your Windows Network.



2. Click the **Search** button to browse for the GV-NAS System. This page appears.

Samba Domain List				
Group	Domain	Username	Password	Selection
WORKGROUP	GV-NAS2008	Cam01	*****	Select

3. Type the username and password, and click **Select**. This page appears.

Folder List		
FolderName	Type	Selection
IP_Camera	Disk	<input checked="" type="radio"/>
md1-public	Disk	<input type="radio"/>
Cam01	Disk	<input type="radio"/>

ok

4. Select a folder and click **OK**.

- To record another GV-IP Camera to GV-NAS System, repeat steps 1 to 3 and select a different user account.

Network Neighborhood Settings

Server URL/IP Address: Search Password:

Enable

IMPORTANT: Since the storage limitation and recycle is applied on a user basis, it is recommended to create one user account exclusively for recording (file writing) of one GV-IP Camera to avoid uneven data recycling.

- Click **Apply**. After 10-15 seconds, **Network Neighborhood Disk information** will show the disk status of GV-NAS System, which indicates the connections are established successfully.

Disk Status

Disk Information

Disk No.	Total Size	Used Size	Free space	Utilization	Remove	Format
No HDD connected						

Partition Information

Disk No.	Partition No.	Total Size	Used Size	Free space	Utilization	Status	Other
No HDD connected							

Network Neighborhood Disk Information

Disk No.	Total Size	Used Size	Free space	Utilization
\\GV-NAS2008\IP_Camera	50.000	0.000	49.999	0%

(Unit: Gigabyte)

- From GV-IP Camera's Web interface, click **Monitoring** and select **Start** to start recording to the GV-NAS System.

To change the user name or create more users or to create more shared folders, see *4.2.1 Users* and *4.2.3 Shared Folder* respectively in *GV-NAS System User's Manual* on the software CD.

7. Playing Back Recordings from GV-NAS System

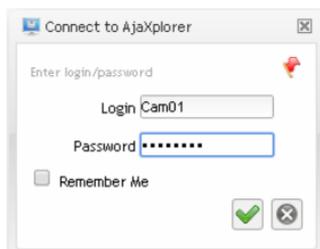
You can play back recordings saved at your GV-NAS System on a computer or on your mobile device.

7.1 Playing Back on a Computer

1. On GV-NAS System's Web interface, click **Ajaxplorer**. The Ajaxplorer dialog box appears.



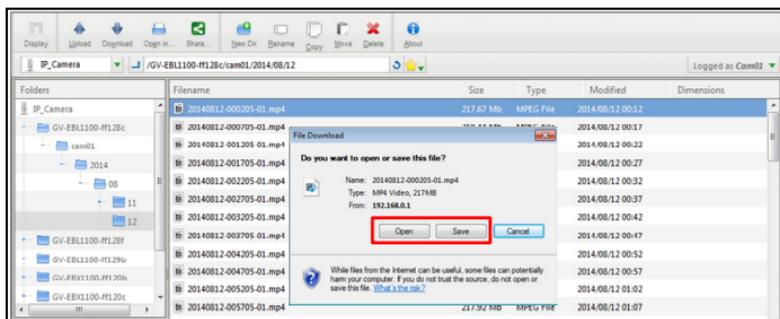
2. Click **Go to Ajaxplorer**. The Connect to Ajaxplorer page appears.



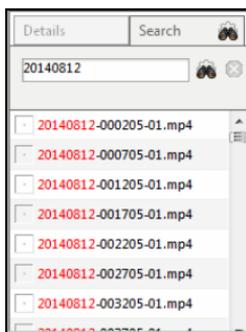
3. Type the username and password which allows access to the recordings you wish to play back. The Ajaxplorer window appears.

Note: By default, the administrator account and camera accounts all have access to the IP_Camera folder. For details, see *3.5 Default Accounts in the Quick Start Guide*.

4. Locate and click the file you wish to play back and then:
 - select **Open** to play back using the default player of your operating system or
 - select **Save** to save the file to the defined path for later playback



Tip: You can search files using key words. From the left-corner of the Ajaxplorer window, type the key words and click . For example, use the date to help you narrow down the search:



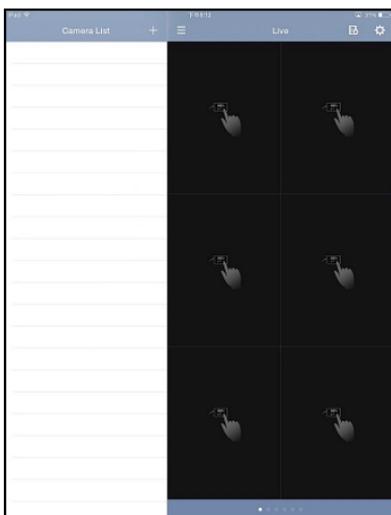
7.2 Playing Back on a Mobile Device

You can play back recordings saved at GV-NAS on your Android and iOS mobile devices using the GV-Eye application program. You can download the program from the App Store or Android Market. The following is an example using an iOS device.

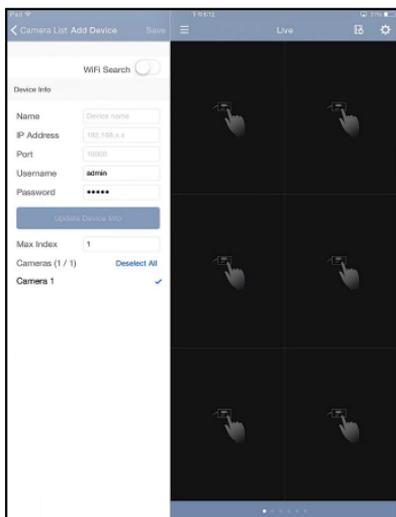
1. Download GV-Eye from the **App Store** and install the application. The GV-Eye icon appears on your desktop.



2. Tap the GV-Eye icon . This page appears.

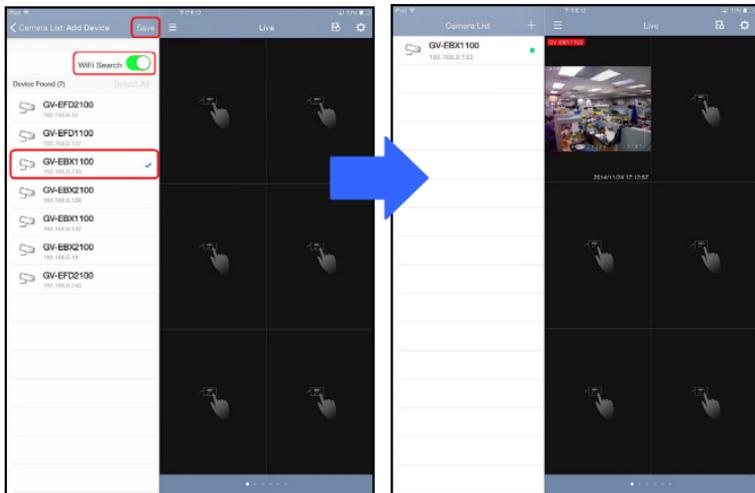


3. Tap the **Add** icon . This page appears.

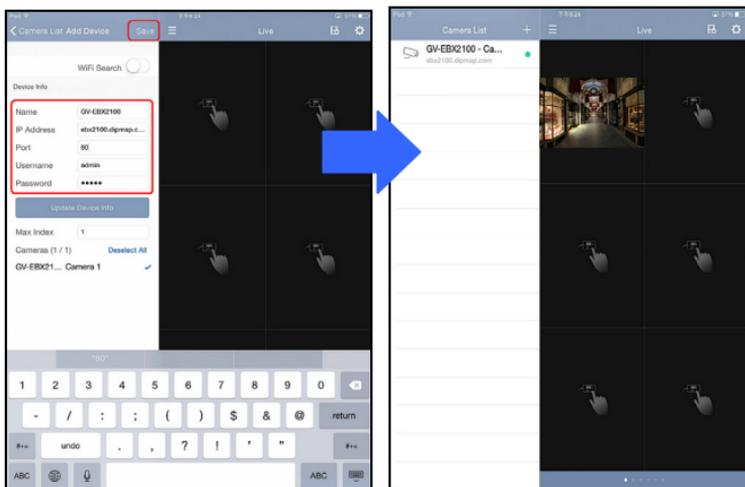


7 Playing Back From GV-NAS System

4. You can add cameras automatically or manually.
 - A. To add cameras automatically, tap the **WiFi Search** button to browse cameras under the same LAN, tap to select cameras and click **Save**. This camera is added to the Camera List.

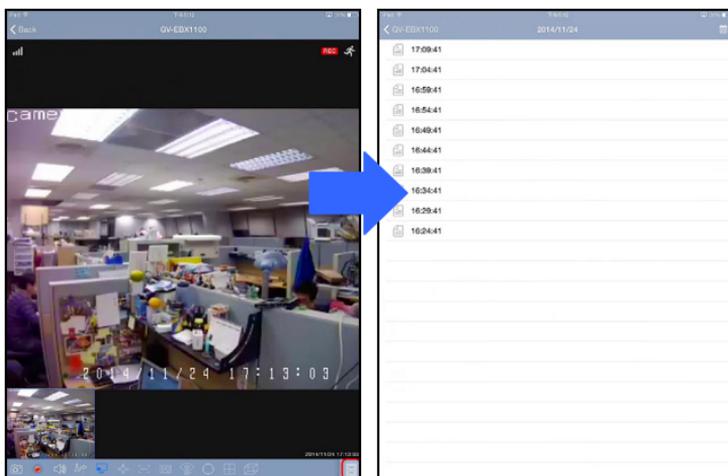


- B. To add cameras manually, type the Name, IP Address, port, username and password of the camera and then click **Save**. This camera is added to the Camera List.



7 Playing Back From GV-NAS System

5. Tap the live view to show a full-screen display and tap the **Playback** icon  on the bottom right corner. A list of recordings appears. They are arranged from new to old.



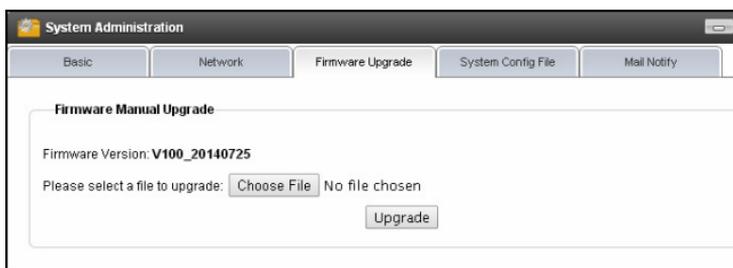
6. Tap an entry and the recording is immediately played back.



8. Firmware Upgrade

To upgrade the system firmware, follow the steps below.

1. Download the latest firmware file from the GeoVision Website http://www.geovision.com.tw/english/5_3.asp
2. Click the **System Administration** icon from the desktop and select **Firmware Upgrade**. This page appears.



3. Click **Choose File** to browse the file and then click **Upgrade**. This will take about 8 minutes. The system will reboot itself when the upgrade is completed.

IMPORTANT: Make sure the power supply is stable during the upgrade. Power failure during a firmware update may cause permanent damage to the system, rendering the device unusable.
