



**NAPCO**<sup>®</sup>

333 Bayview Avenue  
Amityville, New York 11701  
For Sales and Repairs, (800) 645-9445  
For Technical Service, (800) 645-9440  
Publicly traded on NASDAQ Symbol: NSSC

© NAPCO 2009

# NAPCO iSeeVideo ISEE-IVR-250 Internet Video Recorder Installation Guide

WI1851 11/09

## iSeeVideo<sup>™</sup>

**ISEE-VCMPT**  
Pan / Tilt IP Camera

**ISEE-VCAM1**



**ISEE-SCHGW**



**ISEE-IVR-250**  
Internet Video Recorder

Designed exclusively for use with NAPCO iSeeVideo VideoAlert.net Server



COMPATIBLE



# ISEE-IVR SPECIFICATIONS

## RECORDING

Video Channels .....	Up to 6 cameras / devices or 120 frames/second max at 640 x 480 resolution (or 720x480 with SCHGW)
Capacity .....	Up to 30 days with max of 6 cameras (Variable frame rate ~20fps) Max recorded days may vary depending on video activity.
Recording Mode .....	Continuous
File Format .....	MPEG-4
Internet .....	Recording is maintained even if Internet connection is not available. If the local network is available, system will continue to store video.

## PLAYBACK

Method .....	Playback and other functions are available through the NAPCO iSeeVideo web portal.
Playback Mode.....	PLAY, PAUSE, FWD, REW, STOP
Video Search.....	Search by date, time or alarm events
Video Clip Export.....	Recorded files can be downloaded to the client's PC from the webpage.

## LIVE VIEW

Video Compression .....	MPEG-4
Resolution .....	Resolution is the same as the configured resolution of the cameras
Frame Rate .....	Up to 30 fps x camera
PT Support .....	Control camera through webpage

## NETWORK

Protocols.....	TCP/IP, SMTP, HTTP, DHCP, NTP, RTSP/RTP
IP Configuration.....	DHCP Client, Static IP
Plug and Play .....	Yes (featuring NAPCO proprietary firewall crossing in/outbound)

## SOFTWARE

Operating System.....	Embedded Linux
Client Support.....	Any browser and any operating system though NAPCO iSeeVideo Portal
Security.....	Username and Password SSL Authentication

## HARDWARE

CPU .....	Marvell 88F5182, 500MHz
Flash.....	16 MB
SDRAM.....	64 MB
HDD Interface.....	Support two 3.5" STAT-II drives (ships with pre-installed 250GB HD)
LAN .....	Marvell 88E1118, GIGA PHYRG-MII, 10/100/1000 BaseT, Auto-MDIX
LED indicators .....	Ready/Status, Ethernet, Disk Act, Disk Full, Disk 1, Disk 2, USB 1, USB 2
Connector .....	Ethernet RJ-45, 2xUSB, DC Power, Reset, Power Switch
Power Adapter.....	12V/5A, 100~240 VAC
Certification.....	CE/FCC
Dimension.....	190mm (W) x 180mm (H) x 95mm (L) (7.5" x 7.1" x 3.75")

## ORDERING INFORMATION

ISEE-IVR-250 .....	Internet Video Recorder
ISEE-VCAM1 .....	Fixed IP Camera
ISEE-VCMP1 .....	Pan Tilt IP Camera
ISEE-SCHGW .....	Single Channel IP Gateway

## Table of Contents

Specifications .....	2
System Overview .....	3
Installing, Activating and Configuring the ISEE-IVR .....	4
Overview of a Typical ISEE-IVR Installation.....	4
Install and Wire the ISEE-IVR.....	5
Adding an ISEE-IVR to an Existing Account .....	6
ISEE-IVR Configuration .....	8
Viewing ISEE-IVR Videos .....	9
Frequently Asked Questions.....	10
Troubleshooting .....	11
NAPCO Limited Warranty.....	12



**Napco Security Technologies, Inc.**  
 333 Bayview Avenue, Amityville, New York 11701  
 For Sales and Repair, call toll free: (800) 645-9445

**For direct line to Technical Service,  
 call toll free: (800) 645-9440**

**Internet: <http://www.napcosecurity.com>**

Windows®, and the Windows logo are registered trademarks of Microsoft Corporation  
 Apple® and the Apple logo are registered trademarks of Apple Computer, Inc.  
 Linux® is a trademark of Linus Torvalds. The Linux penguin logo was created by [Larry Ewing](http://www.linux.org).

# Overview of the iSeeVideo VideoAlert.net System

The **NAPCO iSeeVideo VideoAlert.net** system allows remote video internet monitoring of residential and light commercial properties. Its unique subscription-based account system provides the opportunity to realize recurring revenue from typical CCTV video installations.

The **ISEE-IVR** is an Internet Video Recorder module that, in conjunction with an iSeeVideo camera system, records all video from up to a maximum of six cameras per account and stores this video for retrieval and viewing by the subscriber. This video is stored at the highest resolution available from the camera (640x480 from the ISEE-VCMP1 and VCAM1 and 704x480 from the ISEE-SCHGW) at a frame rate of up to 20 frames per second. The ISEE-IVR is capable of storing the video from 4 cameras / devices at 20 frames per second for up to 30 days. For a maximum of 6 cameras, the frame rate will be reduced dynamically to a slightly lower frame rate. In cases where there is little activity, the maximum storage may actually be increased due to the use of MPEG4 compression.

The ISEE-IVR is connected within the network on which the cameras reside (plugged into the subscriber's router or optional G-Box), and does not utilize any Internet bandwidth while collecting video from the cameras. Even if the Internet connection is lost, the ISEE-IVR will continue recording video from the cameras and devices, which can be viewed when the internet connection is re-established.

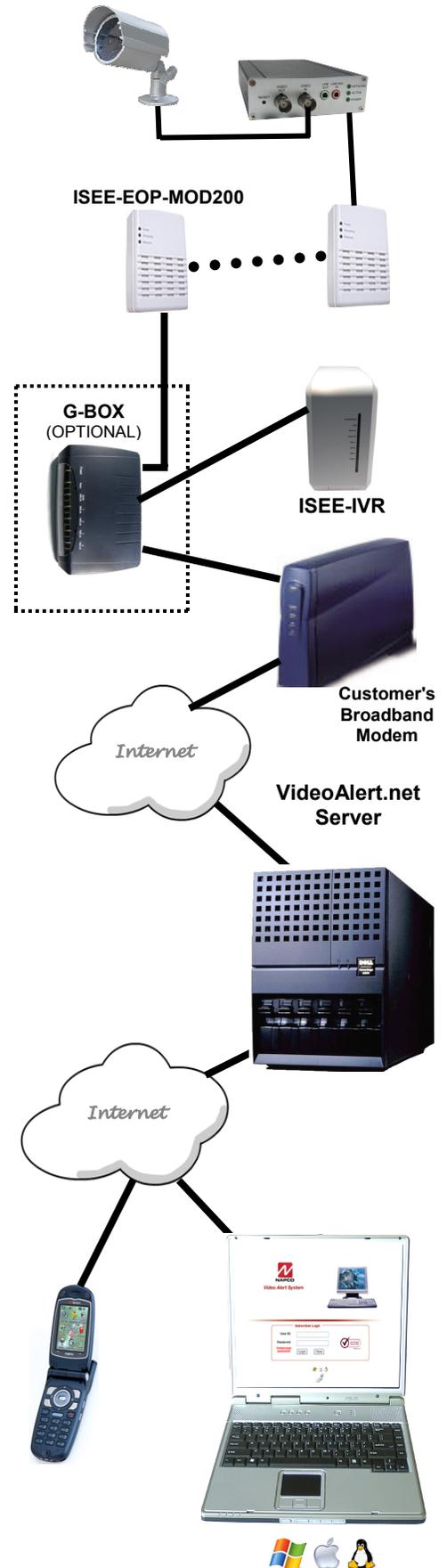
Although the ISEE-IVR provides local storage, the video can only be accessed, viewed or downloaded through the iSeeVideo internet portal. The ISEE-IVR module provides no local viewing capabilities. The ISEE-IVR converts the one-time sale of the traditional DVR system into a billable, recurring service. The Dealer has full administrative control of the account and can turn off the subscriber access if necessary, as in the case of a lease non-renewal.

## Compatible Devices:

The **ISEE-VCAM1** is a high-precision IP video camera that provides video images with a maximum of 640 x 480 lines of resolution that can be viewed through the Remote Internet Video server on virtually any computer in the world at up to 25 fps. The ISEE-VCAM1 provides pixel-based motion detection that, when activated, will prompt the transmission of video clips to the Remote Internet Video server. The ISEE-VCAM1 provides (at no additional service charge) dynamic IP support through a DNS server - every time the broadband modem's IP address changes, it checks in with its DNS server to ensure that the DHCP IP address is always kept current.

The **ISEE-VCMP1** is a digital IP camera that provides remote viewing with Pan-Tilt control over the Internet using any PC, from anywhere in the world. Using MPEG4 compression, it provides video images with a maximum of 640 x 480 lines of resolution that can be viewed through the Remote Internet Video server at up to 30 frames per second.

The iSeeVideo **ISEE-SCHGW** is a Single Channel Video Gateway that converts any analog CCTV camera into internet ready IP camera. Using MPEG4 compression, it provides video images with a maximum of 704 x 480 lines of resolution that can be viewed through the iSeeVideo VideoAlert server on virtually any computer in the world at up to 30 frames per second. The Gateway provides an input trigger that when activated, will prompt the transmission of video clips to the VideoAlert.net server. It also has a local video output that provides a local video signal for connection to a monitor or for local distribution using a video modulator.



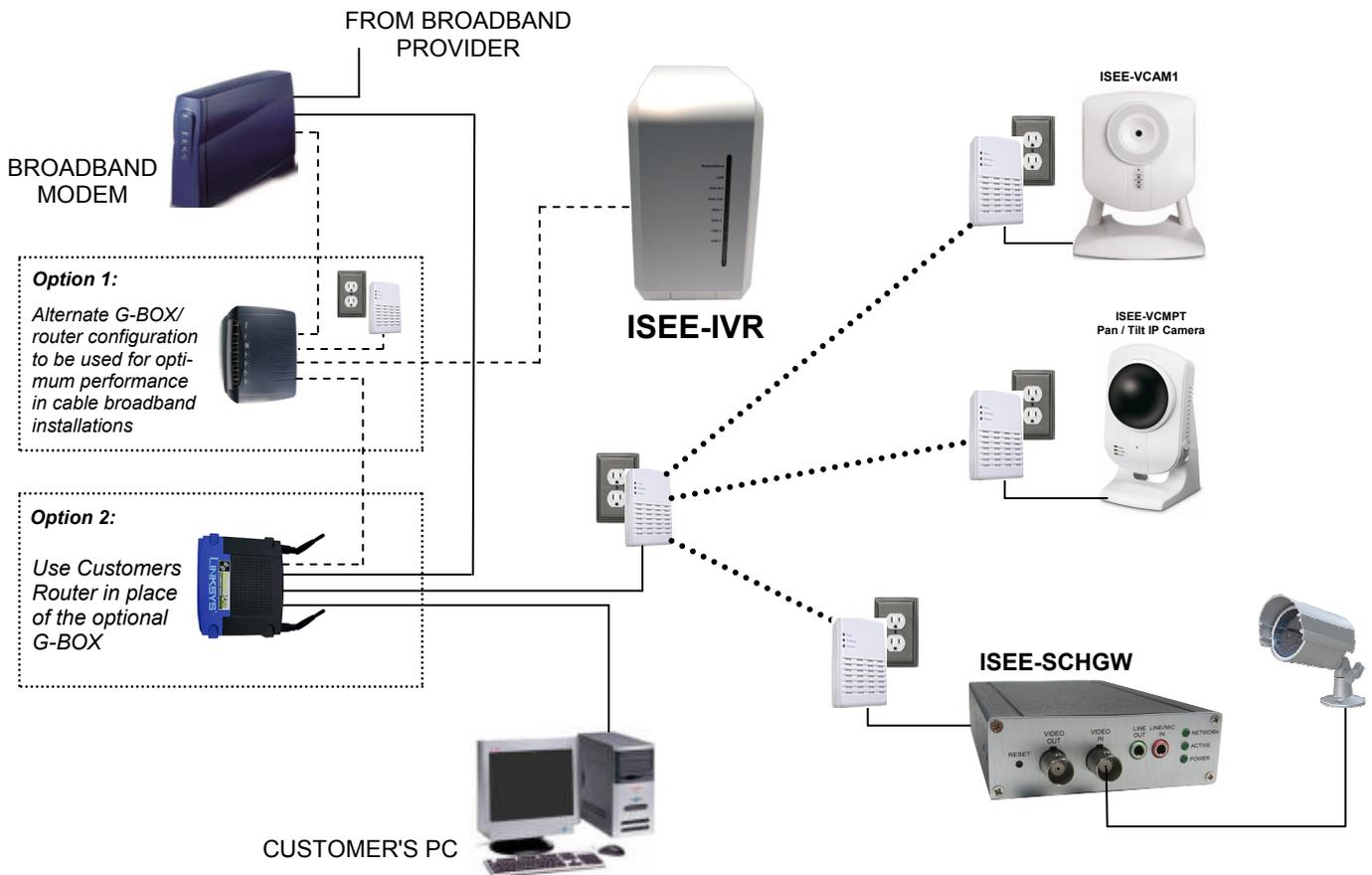
# INSTALLING, ACTIVATING AND CONFIGURING THE ISEE-IVR

The installation and activation of the VideoAlert system has been designed to be "plug and play", requiring no special training or tools and no knowledge of TCP/IP or networking for typical installations. The primary installation steps depicted below are covered in detail on the following pages:

- 1 Install and wire the ISEE-IVR**
- 2 Add the ISEE-IVR to the VideoAlert account**
- 3 Configure the ISEE-IVR**

## OVERVIEW OF TYPICAL ISEE-IVR INSTALLATION

(Power connections not shown)



# 1 INSTALL AND WIRE THE ISEE-IVR

## Descriptions of Connections and Indicators

### POWER BUTTON

After connecting the 12VDC power adapter, press to turn on the ISEE-IVR.

### POWER IN

Connect only to supplied 12VDC power adapter. Transformer Input: 120VAC, 60Hz; Output: 12VDC rated at 5A (positive [+] center terminal polarity).

### RESET BUTTON

Use a toothpick or other non-metal pointed object to press this recess button.

### USB SOCKETS

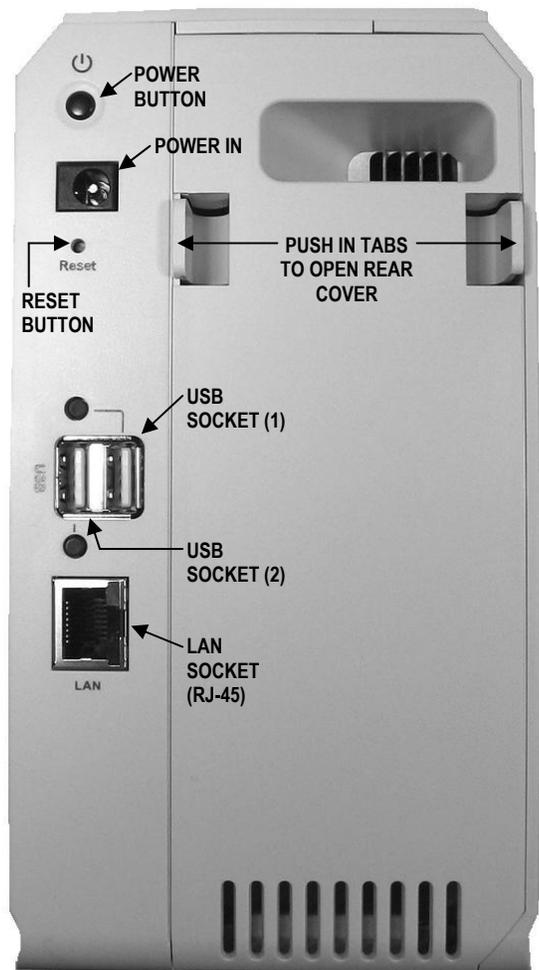
(Reserved for future use).

### LAN SOCKET

Connect CAT5 cable from broadband modem or network to RJ-45 terminal.



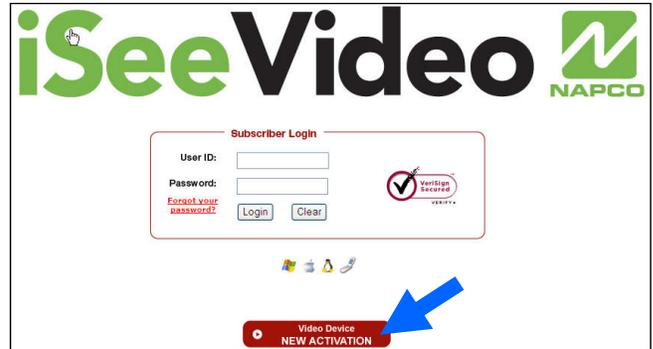
Simply connect the ISEE-IVR LAN socket to an open port on the subscriber's router or optional G-BOX.



## 2 ADDING AN ISEE-IVR TO AN EXISTING ACCOUNT

The ISEE-IVR can be added to an existing iSee-Video account through the following steps:

1. Go to the [www.videoalert.net](http://www.videoalert.net) login screen and click the **NEW ACTIVATION** button.



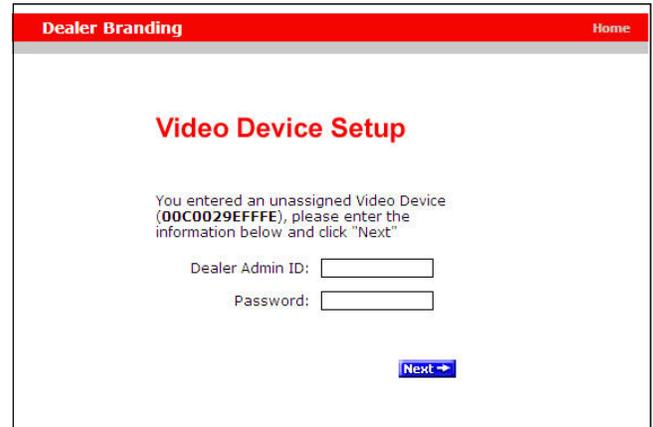
The **New Activation** screen will appear. Type the 8 character Security Code printed on the label on the back of the ISEE-IVR to be added.

SC \_ \_ \_ \_ \_

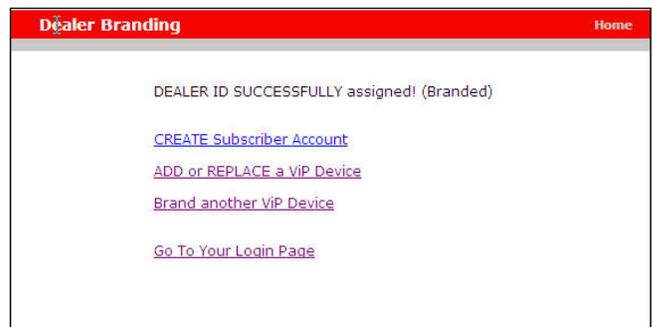
Click **Next** ►



2. The **Dealer Branding** screen will appear. Enter your company **Dealer Admin ID** and **Password** and click **Next** ►



3. After Dealer Branding is complete, click **ADD** or **REPLACE** a **VIP Device**.



4. The next screen that appears will allow the registration of the ISEE-IVR to the correct account. A pull-down list will appear, listing all accounts assigned to the Dealer Admin ID entered previously.

Select the correct account from the pull-down list by clicking it, then click **Next ►** to continue.

The screenshot shows a web interface with a red header bar containing the text "New Activation for Existing Subscriber Account (2/3)" and a "Home" link. The main content area has the heading "Add or Replace a Video Device" in red. Below this, it says "Select the Subscriber Account from the list below and Click 'Next':". There is a dropdown menu showing "NAPC144497: Napco Technologies - 333 Bayview Avenue Amityville, NY". At the bottom right, there are "Prev" and "Next" navigation buttons.

5. The following screen allows the entry of the ISEE-IVR description in the **Enter New Device Description** field.

Click the pull-down list and select **Add Device** to complete the addition of the new ISEE-IVR to the account.

**NOTE:** If replacing a VIP Device assigned to the account, select from the pull-down list the device you wish to replace.

Click **Next ►** to continue.

The screenshot shows a web interface with a red header bar containing the text "New Device Activation for Existing Subscriber Account (3/3)" and a "Home" link. The main content area has the heading "Add or Replace a Video Device" in red. Below this, it says "New Device: 00C0029EFFFF". There is a text input field for "Enter Video Device Description:" with "MY IVR" entered and "(optional)" below it. Below that, it says "Account: NAPC265332". There are two paragraphs of instructions: "To Add a new Video Device Select 'Add Device' then Click Next." and "To Replace a Video Device, Select MAC Number from List Below then Click Next." There is a dropdown menu with "Add Device" selected. At the bottom right, there are "Prev" and "Next" navigation buttons.

6. When the activation is complete, the **Subscriber Login** screen will appear, with the message "Video Device Activation completed successfully!"

The screenshot shows a web interface with the "iSee Video" logo and "NAPCO" logo at the top. A message "Video Device Activation completed successfully!" is displayed in a red oval, with a blue arrow pointing to it. Below the message is a "Subscriber Login" section with a red border. It contains a "User ID:" field, a "Password:" field, a "Forgot your password?" link, and "Login" and "Clear" buttons. To the right of the login fields is a "VeriSign Secured" logo. At the bottom of the page, there are icons for Windows, a printer, and a help icon.

### 3 ISEE-IVR CONFIGURATION

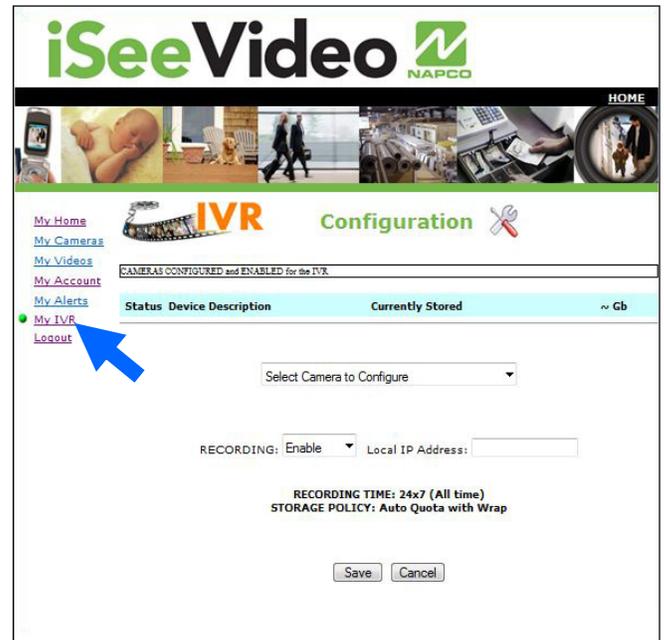
When the **ISEE-IVR** is initially powered up, it surveys the network and lists all available cameras. Through the **Configuration** menu, all cameras found in the network will be listed and may be selected for **ISEE-IVR** recording.

To configure the cameras or devices to be recorded by the **ISEE-IVR**:

1. Open the iSeeVideo account to which the **ISEE-IVR** has been added.
2. Click the **My Cameras** icon and then click the **My IVR** icon.
3. Click the icon labeled **Configuration**, and the **Configuration** screen will open after a few seconds.
4. Click the "**Select Camera to Configure**" box and a drop-down list will appear, listing all of the cameras available in the network.
5. With the camera you wish to record selected, click the **Save** button and wait until the camera is listed in **Status** screen.

Repeat the above steps for each camera you wish to link to the **ISEE-IVR**.

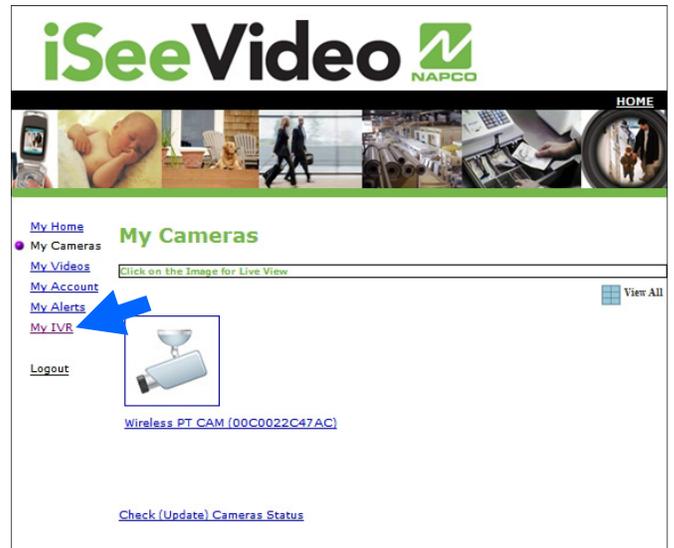
**Note:** The **Local IP Address** field displays the IP address of the camera selected in the drop-down list. This IP Address is for display only and cannot be edited.



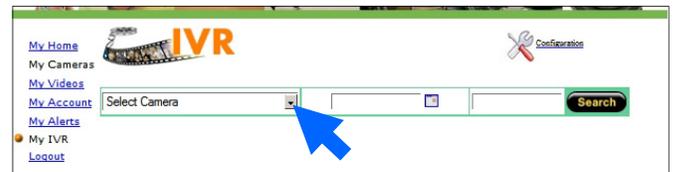
## VIEWING ISEE-IVR VIDEOS

The ISEE-IVR is accessed through the **My Cameras** screen.

1. In the **My Cameras** screen, click **My IVR** and the **IVR** screen opens.



2. In the **IVR** screen, click the pull-down menu and select the camera to view.



3. Click the calendar icon located to the right of the **Pick a Date** field, and a current calendar appears with a digital clock below. Select the time and date of the recorded video by scrolling through the hours and minutes, then clicking the day within the calendar. Click the **Search** button and the stored video will appear.



4. To the left of the video screen are the playback speed buttons:

- Play 1X
- Play 2X
- Play 4X
- Play 8X

Click a button to select the desired speed to replay the specified saved video segment.



# NAPCO iSeeVideo Frequently Asked Questions

## 1. Do I have to install any special software in order to view live video on a Mobile phone or PDA?

iSeeVideo VideoAlert.net has built-in support for WML and HTML on mobile devices. Any "data" enabled wireless device with a web browser is automatically re-directed to the proper login page. Most PDA's (i.e. Blackberry) require that JavaScript and Image display be enabled. (Many times already available as a default setting)

No additional software or applets are needed.

## 2. What separates the iSeeVideo ISEE-SCHGW from other systems on the market?

The ISEE-SCHGW is far and away the easiest to install, easiest to use and the most cost effective product of its kind in the marketplace today. It allows the installation company to economically provide high-end internet video in a residential or light commercial setting and realize recurring video from their own secure, branded web site.

## 3. How does the pixel based video motion detection work?

The video motion detector provides 4 user programmable motion detection zones, which allow specific areas to be selected for motion detection. It also has an adjustable sensitivity setting per motion zone and a programmable global arming schedule.

## 4. What does this G-BOX actually do?

The NAPCO G-BOX (Patented), is an optional Internet Video accessory that allows optimum performance on cable broadband service installations by establishing a point to point connection between the video gateway and the PC. The G-BOX, designed to be placed between the cable broadband modem and router, segments the network, *automatically detects* and properly forwards the data intended for the ISEE-SCHGW or to the customer's computer/router, as required.

## 5. Can the ISEE-SCHGW be set up as an off-premises Digital Video Recorder to record full time video?

No, the system is not set up for full time recording. It is designed to send 10 second video clips to the iSeeVideo VideoAlert.net server that are the result of triggered events that are transmitted by an event such as an alarm, the opening of a protected door, disarming of the system, etc.

## 6. I have a wireless router connected to my broadband modem. How can I keep my network settings after the G-BOX is installed?

Upon installation, the G-BOX becomes your primary router. You can connect any PC or other device to an unused G-BOX port (including your wireless router or VoIP adapter).

## 7. Do I still need a router to share my Internet connection after the ISEE-SCHGW and G-BOX are installed?

You can connect your PC or other network device to any open port on the G-BOX. You do not need to use another router unless you have a wireless router or need additional LAN port connections.

## 8. Is it necessary to keep the customers PC turned on all the time in order to view the video?

No, there is no need for a PC at the site at all; all that is required is an internet connection.

## 9. Can I view stored video clips on a cell phone?

Stored video clips can only be viewed on a personal computer. A cell phone can be used to view live video frames.

## 10. My PC is connected to the modem via a USB connection. How do I connect the G-BOX to the modem?

Modems that have a USB connection typically have an RJ-45 port, but typically only one of them is allowed to be used and grant Internet connectivity.

First connect the G-BOX to the RJ-45 socket on the modem. Connect the PC to the G-BOX using a USB to Ethernet adapter (if the PC does not have an RJ-45 network connection) and power cycle the modem, G-BOX and PC.

## 11. Where are the disks, programs or software?

No software is provided, all the required applications are web enabled via [www.VideoAlert.net](http://www.VideoAlert.net). Internet Explorer with ActiveX enabled (default security settings) is required to access the full featured *Live Viewer*.

## 12. Does the ISEE-SCHGW module support Pre and Post Alarm?

The ISEE-SCHGW transmits a 10 second video clip to the server upon trigger, with a pre-alarm (before trigger) and post-alarm (after trigger) periods that are programmable from 1 to 10 seconds.

## 13. What is the exact sequence of events that occur upon a trigger?

1. Video motion is detected or an open occurs on the trigger input of the device ISEE-SCHGW.
2. The device freezes the pre-alarm buffered video frames.
3. A connection to the iSeeVideo VideoAlert server (VideoAlert.net) is established.

4. The device sends a 10 video clip the server that includes the pre-alarm video.
5. An email is sent to the subscriber, notifying them that a "video alert" event has occurred.  
**Note:** The email recipients can be selected or de selected from the list of users by the subscriber.
6. The customer clicks the a link in the email message to view the video clip. If the customer would also like to view live video, they can simply click on the **Live Viewer** link.

**14. Do I have to install any special software on the customer's computer or cell phone so they can view video?**

No, the customer can view their video through any computer running a Windows, MAC OS (Apple) or Linux-based operating system using a standard web browser. They can also view video on any cell phone that has a built-in web browser, without the need to install any special applications.

**15. What is required at the premises in order the install as ISEE-SCHGW?**

The premises must have a broadband internet service, preferably an always-on service, such as DSL or cable modem with an active internet account.

**16. How does the customer view archived video?**

The customer can access their account from a PC at any time to view archived video. Simply go to [www.VideoAlert.net](http://www.VideoAlert.net), enter the User ID and Password to view thumbnail previews of video clips along with the by time and date created. To view any stored video, just click it. The customer also has the option of deleting each video clip, or downloading it to their local hard drive.

**17. Does the ISEE-SCHGW require a Static IP Addresses?**

The ISEE-SCHGW does not require a static IP address. It is designed to operate on a **DHCP** enabled network. When the system senses that the DHCP IP address have changed, the ISEE-SCHGW reports to a network of Dynamic Domain Name Servers (**DDNS**) and identifies itself by a unique ID to the server to update the IP address.

**Static IP Address** - An IP address whose value does not change.

**DHCP** - Dynamic Host Configuration Protocol, a protocol for assigning dynamic IP addresses to devices on a network. With dynamic addressing, a device can have a different IP address every time it connects to the network. DHCP also supports a mix of static and dynamic IP addresses.

**DDNS** – Dynamic Domain Name Server system. An Internet service that translates domain names into IP addresses. Because domain names are alphanumeric, they are easier to remember. The Internet however, is really based on IP addresses. Every time you use a domain name, therefore, a DNS service must translate the name into the corresponding IP address.

**18. Can an ISEE-SCHGW be registered to another user in cases where the User cancels or moves?**

Yes – the Dealer has complete control over the account – The Dealer can terminate one user and re-program the ISEE-SCHGW to a new user.

## **NAPCO iSeeVideo Troubleshooting**

**19. I have Cable Internet service. When I install the G-BOX, I lose my Internet connection.**

Typically, cable modems lock themselves to the MAC address of the router or PC that is connected to them. To unlock the modem and allow a new device to access the Internet, you typically need to reset the cable modem. To reset the modem, you must power it down for 15 minutes (depending on the ISP/Modem). After this, power up the G-BOX and then the gateway to allow the complete system to reinitialize.

The ISeeVideo VideoAlert Server has an overflow signal processing policy: *If more than 10 signals (videos) are received from the same IP address in any 10-minute period, the ISEE-SCHGW is temporarily disabled by the server to prevent a runaway condition.*

Approximately every 2 hours a new cycle starts, resetting any previously denied ISEE-SCHGW's.

**20. What is the G-BOX DHCP default range of IP addresses?**

The G-BOX is factory programmed to serve IP addresses in the range of 192.168.8.201, to 192.168.8.216.

# NAPCO LIMITED WARRANTY

NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for *twelve months* following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF NAPCO.

Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period.

IN NO CASE SHALL NAPCO BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

In case of defect, contact the security professional who installed and maintains your security system. In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to NAPCO. After repair or replacement, NAPCO assumes the cost of returning products under warranty. NAPCO shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. NAPCO will not be responsible for any dismantling, reassembly or reinstallation charges.

This warranty contains the entire warranty. It is the sole warranty and any prior agreements or representations, whether oral or written, are either merged herein or are expressly cancelled. NAPCO neither assumes, nor

authorizes any other person purporting to act on its behalf to modify, to change, or to assume for it, any other warranty or liability concerning its products.

In no event shall NAPCO be liable for an amount in excess of NAPCO's original selling price of the product, for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by and no obligation or liability shall arise or grow out of Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.

NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

**Warning:** Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.