

Video Server Digital Encoder & Decoder

User Manual

model no. NE-VS201



1 Channel Network Encoder (NE-VS201) User Manual

Manual Edition 30534AA – OCTOBER 2010

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Important Safeguards

1. Read Instructions

Read all of the safety and operating instructions before using the product.

2. **Retain Instructions** Save these instructions for future reference.

3. Attachments / Accessories

Do not use attachments or accessories unless recommended by the appliance manufacturer as they may cause hazards, damage product and void warranty.

4. Installation

Do not place or mount this product in or on an unstable or improperly supported location. Improperly installed product may fall, causing serious injury to a child or adult, and damage to the product. Use only with a mounting device recommended by the manufacturer, or sold with the product. To insure proper mounting, follow the manufacturer's instructions and use only mounting accessories recommended by manufacturer.

5. Power source

This product should be operated only from the type of power source indicated on the marking label.

Precautions

Operating

- Before using, make sure power supply and others are properly connected.
- While operating, if any abnormal condition or malfunction is observed, stop using the camera immediately and then contact your local dealer.

Handling

- Do not disassemble or tamper with parts inside the camera.
- Do not drop or subject the camera to shock and vibration as this can damage camera.
- Do not block the cooling holes on the bracket. This camera has a cooling fan inside the housing. Blocking the cooling holes will cause heat to build up and cause malfunction.
- Care must be taken when you clean the clear dome cover. Scratches and dust will ruin the image quality of your camera. Do not use strong or abrasive detergents when cleaning the camera body. Use a dry cloth to clean the camera when it is dirty. In case the dirt is hard to remove, use a mild detergent and wipe the camera gently.

Installation and Storage

- Install electricity wiring carefully. Please note that input electricity to the unit is at tolerance of DC 12V 10%.
- Do not install the camera in areas of extreme temperatures in excess of the allowable range. (-50°C ~50°C / -58°F ~ 122°F)
- Avoid installing in humid or dusty places. The relative humidity must be below 90%.
- Avoid installing in places where radiation is present.
- Avoid installing in places where there are strong magnetic fields and electric signals.
- Avoid installing in places where the encoder would be subject to strong vibrations.

Regulation

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste in accordance with Directive 2002/96/EC. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By proper waste handling of this product you ensure that it has no negative consequences for the environment and human health, which could otherwise be caused if this product is thrown into the garbage bin. The recycling of materials will help to conserve natural resources.

For more details information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



Compliance is evidenced by written declaration from our suppliers, assuring that any potential trace contamination levels of restricted substances are below the maximum level set by EU Directive 2002/95/EC, or are exempted due to their application.

Warning

DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE HOUSING. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

Caution



Standard Warranty

Serurgen warrants all new products to be free from defects in workmanship and material under normal use **for a period of two years** after the date of purchase. Any defective product that falls under this warranty will, at Securgen's discretion, be repaired or replaced at no additional charge. Securgen may elect to replace defective products with new or factory reconditioned products of equal or greater value. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Exceptions to this are listed below:

- Three Years on all Digital Recorders
- Three years on all fixed cameras

All products shall be covered by a one year advance replacement warranty*.

Securgen will warrant all otherwise out of warranty replacement parts and repairs for 90 days from the date of Securgen shipment.

The above warranty is the sole warranty made by Securgen and is in lieu of all other warranties by Securgen express and implied, including without limitation the warranties of merchantability and fitness for a particular purpose. Under no circumstances will Securgen be liable for any consequential, incidental, special or exemplary damages arising out of or connected with the sale, delivery, use or performance of the product, even if Securgen is apprised of the likelihood of such damages occurring. In no event shall Securgen liability exceed the purchase price of the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state or country to country.

*Requires corresponding security deposit. Advanced Replacement limited to components only outside of the USA and Canada.

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INTRODUCTION

OVERVIEW

The VS201 one channel network encoder is designed to integrate with existing systems, or install with a new system. The encoder is capable of RS-485 control of PTZ cameras, audio transmission and has a 12vDC output to easily provide power to an analog camera. With an integrated microSD[™] slot, the encoder is capable of recording video when detecting motion, or when the onboard sensor is triggered.

Product Features

- ONVIF[™]
- H.264 and MJPEG
- D1 Real-time Resolution
- PoE
- Dual Streaming
- Looping Video Output
- PTZ control
- Motion Detection

GETTING STARTED

PACKAGE CONTENTS

Before proceeding, please check that the box contains the items listed here. If any item is missing or has defects, DO NOT install or operate the product and contact your dealer for assistance.

	O International Constitution	CALL CALL
Video Server	Screws	Plastic Anchors
		Contraction of the second seco
Quick Start Guide	CD	DC Jack Cable (300mm)

SETUP AND CABLE CONNECTION

Before installing or connecting the video server, please refer to this section.

Video Server Setup

Dimensions



Connector Definition

Front



Connector	Pin	Definition
DC 12V OUT	-	Power Output Connection
LINE OUT	-	Audio Output
MIC IN / LINE IN	-	Audio and Microphone Input
VIDEO OUT	-	Analog Video Output to Monitor
VIDEO IN	-	Analog Video Input to Video Server



Connector	Pin	Definition
NETWORK / PoE	-	RJ-45 10/100 Mbps Ethernet / PoE
DC 12V IN	-	Power Input
RS-485	1	D+
	2	D-
	3	RS-485 GND
Alarm I/O	4	IN- (GND)
	5	IN+
	6	OUT-
	7	OUT+

Video Server Cable Definition and Requirements

The Network Video Server requires a network cable to carry the video signals to the remote viewing site.

Network Cable

Network cable max length is 328 feet (100m). To avoid signal attenuation, Securgen recommends that you do not exceed 295 feet (90m). You can use Power over Ethernet (PoE) to power compatible cameras using network cables up to the max length.

Power Connection

Make sure the power cable is correctly and firmly connected to the video server.

Wire Gauge	Maximum Distance	Wire Gauge	Maximum Distance
22	27 feet	14	175 feet
20	44 feet	12	279 feet
18	69 feet	10	444 feet
16	110 feet		

Power Wire Length Specifications

Note Ensure that the power supply corresponds with the power requirements of the video server or the device may be damaged. Contact a qualified maintenance engineer with any problems.

Ethernet Cable Connection

Connect one end of the CAT 5 Ethernet cable to the RJ-45 connector of the camera and the other end of the cable to the network switch or router.

Note In some cases, you may need to use an Ethernet crossover cable when connecting the video server directly to the recorder.

Check the status of the link indicator and activity indicator LEDs. If the LEDs are unlit, check the LAN connection.



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The Orange activity light flashes to indicate network activity.

CAMERA FINDER

SECURGEN IP FINDER

Use the included IP Finder software to easily find your network device for initial setup. The Securgen IP Finder software is included on the CD with all Securgen IP devices.

Finding IP Devices

- 1. Open the Software CD on the recorder.
- 2. Click Software on the software disc menu.
- 3. Click Launch Finder Software.
- 4. Click Device Search on the Device Search window.

Device Search	- 1.0.0.27						
Search Method • Local Broadd	cast	Project Filter	_	1 device(s) fou	nd!		
C IP Relay	TCF		-	Device	Sea	rch	
Model	Proj	Name		IP	Port	Netmask	Mac
CM-814	CM-814	CM-814		10.44.44.3	80	255.0.0.0	00.D0.89.05.28:94

- 5. If a **Windows Security Alert** window opens, click **Unblock** to allow the IP utility to access your network.
- 6. Click **Device Search** again to find all connected IP devices.

Tip The default IP address of the VS201 is 192.168.0.250

- 7. Right-click the desired network device and select Browse.
- 8. Type the default username and password in the login window to access the video server using your internet browser.

Default Username and Password

The username and password are case sensitive. It is strongly recommended that the password be changed after the initial setup to prevent unauthorized access.

Username – Admin

Password – 1234

Changing the Network Type

You can change the network type from Static IP to DHCP easily from the list of connected IP devices. To change the network type to DCHP:

- 1. On the list of connected IP devices locate the desired network device and record the **MAC** address,
- 2. Right-click the network device row and select Network Setup.
- 3. Select the DCHP option on the Network Setup window and then click Apply.
- 4. Click **OK** to acknowledge the change.
- 5. After one minute, click **Device Search** to search for all connected IP devices.
- 6. Locate the network device using the **MAC** address recorded earlier and double click the network device row.
- 7. Type the **Username** and **Password** to access the network device.

SETUP & CONFIGURATION

CONNECTING TO THE NETWORK DEVICE

- 1. Locate the network device on the IP Finder list.
- 2. Double-click the network device to open the Viewer software in your web browser.
- 3. Log in to the network device with the appropriate User Name and Password.
- **Note** The default User name is Admin and the default Password is1234. The username and password are case sensitive. Securgen recommends you change the Admin password for security reasons.

Administrator/User Privileges

The Administrator account has the authority to configure the network device and authorize user access to the network device. The User accounts have access to the network device with limited authority as defined by the Administrator.

VIEWER SOFTWARE

You must install the viewer software on your PC or DVR to configure the device. The viewer software will install automatically the first time you connect to the network device. If your internet browser doesn't install the viewer software, check the security settings or ActiveX controls and plug-in settings. If your internet browser asks for permission to install the ActiveX control, you must allow the ActiveX control to continue the installation.

©securgen [.]	Home	System	Streaming	PTZ	Logout
					2010/09/23 09:51
	Video fo ×1 × Zoom	ormat Main Main Main Main Main Main Main Main	JPEG © H.264 alk 4 ko a		
	Focus MJPEG bi H.264 bitr	Auto Mai trate : middle rate : low com	nual Near compression , mi pression , high qu	Far ddle quality ality	

Viewer Tabs

Home – Monitor live video.

System – Set the host name, system time, root password, and network related settings. (Admin access only)

Streaming – Modify the video resolution and select the audio compression type.

PTZ –Control a PTZ camera and access the camera's on screen menu (if applicable).

Logout – Change user.

Home

() securgen	Home	System	Streaming	PTZ	Logout
					2010/09/23 09:51
					2010/05/20 05:51
	Video f	ormat M I/2 Full T	JPEG 🔘 H.264 alk 🔺 🗖		
	Zoom Focus	Wide Te Auto Mar	ele nual Near	Far	
	MJPEG b H.264 bit	itrate : middle rate : low com	compression , mi pression , high qu	iddle quality Iality	

Screen Size Adjustment – Click the screen size buttons to adjust image display size x1/2 and full screen.

Digital Zoom Control – In full screen mode, right-click to activate digital zoom and use the scroll wheel to zoom in/out.

Pan/Tilt Control – Move the cursor to the live video pane and drag the pointer **the** in the desired direction.

Talk – Talk allows the local site to talk to the remote site. This function is only available to Users who have been granted this privilege by the Administrator.

Snapshot – Click the button, and a JPEG snapshot will automatically be saved in the appointed place. The default location is: C:\.

Note If you are using Windows Vista or 7, you will need to change the Snapshot location. Windows UAC does not allow internet programs to write directly to C:\ for security reasons.

Zoom - Click Wide or Tele to zoom out or in.

Focus

- Auto Click Auto to enable Auto Focus mode. In Auto Focus mode, the camera will
 automatically and continuously adjust focus regardless of zoom changes or view
 changes of the camera.
- Manual Click Manual to enable the Near and Far buttons for manual focus control.

System

Note The **System** tab is only accessible by the Administrator.

System

Home	System	Streaming	PTZ	Logout
System				
Host Name	: [NE-VS201		
Time zone :	: [GMT-08:00 Pacifi	c Time (USA	& Canada) 🗸 🗸
Enable d	aylight sav	ing time		
St	art date: 🛙	an v 1st		n Start time: 00:00:00
E	ind date:];	an v 1st	- Su	n Fnd time: 00:00:00
Sync wit	h computer	r time		
	PC date: 2	010/09/23 [vv	/w/mm/dd]	
	DC times 1	0.07.50	,,,,,	
	PC time: 1	.0:37:53 [nn:n	im:ssj	
Manual				
	Date: 2	010/09/08 [yy	yy/mm/dd]	
	Time: 0	19:00:00 [hh:n	nm:ss]	
Sync wit	h NTP serv	er		
NT	P server: 1	.pool.ntp.org		[host name or IP address]
Update	interval: E	Every hour 👻		
		Save		
	Home System Host Name Time zone : Enable d tim St E Sync wit Manual Sync wit Update	Home System System Host Name : Time zone : Enable daylight sav time offset: Start date: End date: Constraints Sync with computer PC date: PC date: Constraints Date: Constrain	Home System System Host Name : NE-V5201 Time zone : GMT-08:00 Pacifi Enable daylight saving time Immediate time offset: 01:00:00 Start date: Jan → Ist End date: Jan → Ist C date: 2010/09/23 PC time: 10:37:53 [Manual Date: 2010/09/08 [yyr Time: 09:00:00 [hh:m] O Sync with NTP server: NTP server: 1.pool.ntp.org Update interval: Every hour → Save	Home System Streaming PTZ System Image: NE-V5201 Image: NE-V5201 Time zone : GMT-08:00 Pacific Time (USA) Enable daylight saving time Image: NE-V5201 time offset: 01:00:00 Start date: Jan v Ist v Su Enable daylight saving time Image: NE-V5201 Lime offset: 01:00:00 Start date: Jan v Ist v Su O Sync with computer time PC date: PC date: 2010/09/23 [yyyy/mm/dd] PC time: 10:37:53 [hh:mm:ss] Manual Date: Date: 2010/09/08 [yyyy/mm/dd] Time: 09:00:00 [hh:mm:ss] Sync with NTP server NTP server: NTP server: 1.pool.ntp.org Update interval: Every hour v Save

Host Name – The Host Name is used to identify the network device on your system. If camera based Motion Detection is enabled and is set to send alarm message by Mail/FTP, the host name entered here will display in the alarm message.

Time Zone – Select your time zone.

Sync With Computer Time – Select to synchronize the network device date and time with the connected DVR.

Manual – Set video date and time manually.

Sync with NTP server – Network Time Protocol (NTP) is an alternate way to synchronize your network device's clock with a NTP server. Specify the server you wish to synchronize in the **NTP Server** box. Then select an **Update Interval**. For more information about NTP, visit www.ntp.org.

Security

() securgen	Home	System	Streaming	PTZ	Logout
System	Security				
Security	Admin Pas	sword			
Network		Admin passw	vord •••••••	•	
DDN S	C	onfirm passw	ord ••••••	•	Save
Mail					
FTP					
Application	Add User	User na	ame		
Motion detection		User passw	vord		
Storage management		☑ I/O acces	ss 📃 Camer	a control	
Recording		🔲 Talk	📃 Listen		Add
Camera Control					
File location	Manage Us	er			
View log file		User name	e no user	▼ Delete	Edit
View user information					
View parameters					
Factory default					
Software version					
Software upgrade					
Maintenance					

Admin Password

To change the administrator password, type a new password in the Admin Password box and confirm below.

Note The maximum length of the password is 14 characters. The following characters are valid: A-Z, a-z, 0-9 and !#\$%&'-.@^_~.

Add User

The user name and passwords are limited to 16 characters. There is a maximum of twenty user accounts

- 1. Type the new User name and Password
- 2. Select the appropriate check boxes to give the user Camera Control, Talk and Listen permissions.

I/O access - Basic functions that enable users to view video when accessing to the network device.

Camera control - Allows the User to change camera parameters on the Camera tab.

Talk/Listen --Talk and Listen functions allow the user at the local site (DVR) to communicate with, the administrator at the remote site.

3. Click Add.

Delete user

- 1. Select the user name on the User Name list
- 2. Click **Delete** to remove the user.

Edit user

- 1. Select the user name on the User Name list
- 2. Click **Edit** to edit the user password and permissions.
- 3. Type a new password or the existing password in the User password box
- **Note** You must type a password in the User password box to make any changes to an account.
- **Note** For security reasons every time the user properties are opened, the access boxes are automatically unchecked. Make sure you re-check any user access options any time you edit the user properties..

Network

() securgen	Home	System	Streaming	PTZ	Logout						
System	Network										
Security	General Get IP ad	General									
Network	 Use fixed 										
DDNS	IP addre	255	192.10	58.1.105							
Mail	Subnet i	mask	255.2	55.255.0							
FTP	Default	gateway	192.10	58.1.1							
Application	Primary	DNS	192.10	58.1.1							
Motion detection	Seconda	ary DNS	0.0.0.0	0							
Storage management	🔘 Use PPPo	E									
Recording	User na	me									
Camera Control	Passwo	rd									
File location			Save	2							
View log file	Advanced Web Sei	ver port	80	_							
View user information	RTSP po	rt	554								
View parameters	MJPEG o	ver HTTP po	rt 8008								
Easters default			Save	2							
Coffeendation	UPnP Setti	ng									
Software version	🗹 Enab	le UPnP									
Software upgrade	🗖 Enab	le UPnP port	forwarding								
Maintenance	Friendly	name	NE-VS	201							
			Save	2							

You can choose to use a fixed IP address or a dynamic IP address (assigned by a DHCP server or router) for the network device.

Get IP address automatically (DHCP)

The video server comes preconfigured with a fixed IP address, selecting **Get IP address automatically** requires a router or DHCP server to assign an IP address to the network device.

Note Each network device has a unique Media Access Control (MAC) address, which can be used to identify the network device on the network. Record the MAC address of the network device, which can be found using the Securgen IP Finder application and on the label of the network device, for identification in the future.

Use fixed IP address

To set up a new static IP address:

- 1. Select the Use fixed IP address option.
- 2. Type a new IP address in the IP address box.
- 3. Type a new address in the **Default Gateway** box.
- 4. Click **Save** to confirm the new setting.

Ose fixed IP address	
IP address	10.4.4.12
Subnet mask	255.0.0.0
Default gateway	10.0.50
Primary DNS	10.0.16
Secondary DNS	0.0.0.0

When using static IP address to log in to the network device, you can access it either through Securgen IP Finder software or type the IP address directly in the Address bar of your internet browser.

General

- IP address The IP Address is necessary for network identification.
- **Subnet mask** Used to determine if the destination is in the same subnet. The default value is 255.255.255.0.
- **Default gateway** Used to forward frames to destinations on different subnets or for internet access.
- **Primary DNS** The primary domain name server that translates hostnames into IP addresses.
- Secondary DNS A secondary domain name server that backups the primary DNS.

Advanced

- Web Server port Defines the port that Internet Explorer uses to connect over the web and view video. If this port is changed then the new port must be defined when attempting to web connect (ex: if your network device's IP address is 192.168.0.100 and you change the web port to 8001, then you must type http://192.168.0.100:8001 in your browser).
- **RTSP port** The default RTSP port is 554; setting range: 1024 ~65535.
- **MJPEG over HTTP port** The default HTTP Port is 8008; setting range: 1024 ~65535.

Note The MJPEG over HTTP port must not be the same as the web server port.

DDNS

DDNS (Dynamic Domain Name Service) is a service that allows a connection to an IP address using a hostname (URL) address instead of a numeric IP address. Most Internet Service Providers use Dynamic IP Addressing that frequently changes the public IP address of your internet connection; this means when connecting to the network device over the internet you would need to know if your IP address has changed. DDNS automatically redirects traffic to your current IP address when using the hostname address.

() securgen	Home	System	Streaming	PTZ	Logout
System	DDNS				
Security	Dynamic D		ou Want To Lie		NIC Assount
Network	Use Dynam	IC DNS IT Y	ou want to Us	e rour DD	JNS Account.
DDNS	Enable D	DNS			
Mail	Provider		Dyn	NS.org(Dy	(namic) 🔻
FTP	Host na	me			
Application					
Motion detection	Usernar	ne/E-mail			
Storage management	Passwo	rd/Key			
Recording			Sa	10	
Camera Control					
File location					
View log file					
View user information					
View parameters					
Factory default					
Software version					
Software upgrade					
Maintenance					

- Enable DDNS Select the check box to enable DDNS.
- Provider Select a DDNS host from the Provider list.
- Host name Type the registered domain name in the field.
- **Username/E-mail** Type the username or e-mail required by the DDNS provider for authentication.
- **Password/Key** Type the password or key required by the DDNS provider for authentication.



The network device can send an e-mail via Simple Mail Transfer Protocol (SMTP) when motion is detected or when the sensor input is activated. SMTP is a protocol for sending e-mail messages between servers. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified and the message text is transferred. The configuration page is shown as follows:

() securgen	Home	System	Streamin	ıg	PTZ	Logout	
System	Mail						
Security	SMTP		_				
Network	1st SMTF	(mail) serve	r [
DDNS	1st SMTF	(mail) serve	r port	25			
Mail	1st SMTF	account nar	me				
FTP	1st SMTF	password					
Application	1st recip	ient email ad	dress				
Motion detection	2nd SMT	P (mail) serve	er				
Storage management	2nd SMT	P (mail) serve	er port	25			
Recording	2nd SMT	P account na	me				
Camera Control	2nd SMT	P password					
File location	2nd recip	pient email a	ddress				
View log file	Sender e	mail address	5				
View user information			ſ	Sav	e		
View parameters							
Factory default							
Software version							
Software upgrade							
Maintenance							

Two sets of SMTP accounts can be configured. Each set includes SMTP Server, Account Name, Password and E-mail Address settings. For SMTP server, contact your network service provider for more specific information.



The network device can send alarm message to a specific File Transfer Protocol (FTP) site when motion is detected or when the sensor input is activated. You can assign alarm message to up to two FTP sites.

() securgen	Home	System	Streaming	PTZ	Logout
System	FTP				
Security	FTP Puilt in F	TD conver pe	+ 21		
Network	1st FTP 4	erver	11 21		
DDNS	1st FTP s	erver port	21		
Mail	1st FTP u	iser name			
FTP	1st FTP p	assword			
Application	1st FTP r	emote folder			
Motion detection	📃 1st F	TP passive m	node		
Storage management	2nd FTP	server			
Recording	2nd FTP	server port	21		
Camera Control	2nd FTP	user name			
File location	2nd FTP	password			
View log file	2nd FTP	remote folde	r		
View user information	🔲 2nd I	-TP passive r	node	•	
View parameters			041		
Factory default					
Software version					
Software upgrade					
Maintenance					

• Enter the FTP details, which include server, server port, user name, password and remote folder, in the appropriate boxes and click **Save** when finished.

Application (Alarm Settings)

The video server is equipped with one alarm input and one alarm output to connect to an alarm system to capture alarm images and notify an Securgen recorder. Make sure the alarm connections are properly wired before configuring alarm related settings on the Application screen.

() securgen	Home	System	Streaming	PTZ	Logout
System	Application				
Security	Alarm Swit	ch			
Network	Off		On		
DDNS		al close	Normal	pen	
Mail	Alarm Outp	out			
FTP	🔘 Outpu	t high	Output lo	w	
Application	Triggered	Action			
Motion detection	Enable	alarm output			Record stream to sd card
Storage management	Send m	essage by FT	P		Send message by E-Mail
Recording	File Name	image by FIP	•	1	Opload Image by E-Mail
Camera Control	File name	: image.jpg			
File location	Add da	ate/time suffix			
View log file	C Add se	quence numb auence numb	er suffix (no ma: er suffix up to 0	kimum valu a	e) nd then start over
View user information	Overw	rite			
View parameters	Save				
Factory default					
Software version					
Software upgrade					
Maintenance					

Alarm Switch

- Alarm Switch Enable or disable the alarm function.
- Alarm Type Select an alarm type, Normally closed or Normally open, that corresponds with the alarm application.
- Alarm Output Define the alarm output signal as low (normally open) or high (normally closed).

Triggered Action

Specify alarm actions that will take place when the alarm is triggered.

• Enable Alarm Output – Select this option to activate the alarm output.

- Send Message by FTP/E-Mail Select to send an alarm message to the configured FTP and/or E-Mail when an alarm event occurs.
- Upload Image by FTP Select to assign an FTP site. When the alarm is triggered, event images will be uploaded to the configured FTP site.
- Upload Image by E-Mail Select to assign an e-mail address. When the alarm is triggered, event images will be sent to the configured e-mail address.
- **Note** Make sure SMTP or FTP configuration has been completed. See the Mail and FTP section of this manual for further details.

File Name

Enter a file name in the box, ex. image.jpg. The uploaded image's file name format can be set in this section. Please select the one that meets your requirements.

- Add date/time suffix
 File name: imageYYMMDD_HHNNSS_XX.jpg
 Y Year, M: Month, D: Day
 H: Hour, N: Minute, S: Second
 X: Sequence Number
- Add sequence number suffix (no maximum value) File name: imageXXXXXXX.jpg X: Sequence Number
- Add sequence number suffix (limited value) File Name: imageXX.jpg X: Sequence Number

The file name suffix will end at the value entered in this box. For example, if the setting is up to "10," the file name will start from 00, end at 10, and then start all over again.

• **Overwrite** - The original image on the FTP site will be overwritten by the new uploaded file with a static filename.

Motion Detection

Motion Detection allows the video server to detect motion and trigger alarms when motion in the detected area exceeds the determined sensitivity threshold value.

() securgen	Home	System	Streaming	PTZ	Z Logout
System	Motion Dete	ection			
Security	Motion Det	ection			
Network	Off	On			
DDN S	Motion Det	ection Settin	ng		
Mail	Detection le	evel [1-100]	55		
FTP	Sensitivity	level [1-100]	80		
Application	Time interv	al(sec) [0-720	10		
Motion detection	Triggered	Action			
Storage management	Enable a	larm output	low 👻		Motion Detection Windows add delete
Recording	Record s	tream to sd c	ard		
Camera Control	Unload in	mage by ETP	DYFIP		Upload image by E-Mail
File location	File Name	: image.jpg	_		Cipicau image by L-Main
View log file	Add date	/time suffix			
View user information	🔘 Add sequ	ence number	suffix (no maxim	um va	lue)
View parameters	🔘 Add sequ	ence number	suffix up to 0		and then start over
Factory default	Overwrite	•			
Software version	save				
Software upgrade					
Maintenance					

In the Motion Detection page, there is a motion detection window (red box) displayed on the Live View Pane. The Motion Detection window defines the motion detection area. To change the size of the Motion Detection window, drag the edge of the frame to resize.

You can add up to 10 motion detection windows.

- Click add under the Live View Pane to add a Motion Detection window.
- To delete a Motion Detection window, use the mouse to select the frame and click **delete**.

When motion detection is activated, the Motion pop-up window will open.



When motion is detected, the signals will be displayed on the Motion window as shown below.



Motion Detection

Turn motion detection on or off. The default setting is Off.

Motion Detection Setting

- **Sampling pixel interval [1-10]** Default value is 10, which means system will take one sampling pixel for every 10 pixels.
- **Detection level [1-100]** Default detection level is 10. This item sets the detection level for each sampling pixel; the smaller the value, the more sensitive it is.
- Sensitivity level [1-100] The default sensitivity level is 80, which means if 20% or more sampling pixels are detected as changing, the system will detect motion. The bigger the value, the more sensitive it is. As the sensitivity value is increased, the red horizontal line in the motion indication window will be lowered accordingly.

• **Time interval (sec) [0-7200]** – The default interval is 10. The value is the interval between each detected motion event.

Triggered Action

You can specify which actions the network device should take when motion is detected.

- Enable Alarm Output Select this option to activate the alarm output.
- Send Message by FTP/E-Mail Select to send an alarm message to the configured FTP and/or E-Mail when an alarm event occurs.
- Upload Image by FTP Select to assign an FTP site. When the alarm is triggered, event images will be uploaded to the configured FTP site.
- **Upload Image by E-Mail** Select to assign an e-mail address. When the alarm is triggered, event images will be sent to the configured e-mail address.
- **Note** Make sure SMTP or FTP configuration has been completed. See the Mail and FTP section of this manual for further details.

File Name

Enter a file name in the box, ex. image.jpg. The uploaded image's file name format can be set in this section. Please select the one that meets your requirements.

- Add date/time suffix
 File name: imageYYMMDD_HHNNSS_XX.jpg
 Year, M: Month, D: Day
 Hour, N: Minute, S: Second
 X: Sequence Number
- Add sequence number suffix (no maximum value)
 File name: imageXXXXXX.jpg
 X: Sequence Number
- Add sequence number suffix (limited value) File Name: imageXX.jpg X: Sequence Number

The file name suffix will end at the value entered in this box. For example, if the setting is up to "10," the file name will start from 00, end at 10, and then start all over again.

• **Overwrite** - The original image on the FTP site will be overwritten by the new uploaded file with a static filename.

Storage Management

The video server has an integrated microSD[™] card slot that can be used to record video or images. The card slot is compatible with a microSD[™] card up to 4GB (not included).

() securgen	Home	System	Streaming	PTZ	Logout		8
System	Storage Ma	nagement					
Security	Device info	ormation	an 1				
Network	Device ty	pe:	SD card			Total size:	1978572 KB
DDNS	Status:		Available			Full:	No
Mail	Device set	ting					
FTP	Format d	evice :	Format				
Application	Disk clean	up setting					
Motion detection	Enable Remov	e automatic	disk cleanup s older than:	ſ	1 day(c) –	
Storage management	Remov	ve oldest rec	ordings when	disk is:	85 % full	5/ *	
Recording	Save	1	g-	(Jo rail		
Camera Control	Recording	list					
File location	FileName	3		Si	ze		
View log file	M_20100	827_160743.a 827_160645.a	avi 1	583 KB	50		
View user information	M_20100 M_20100	907_132226. 907_133302.	avi 7 avi 7	'968 KB '406 KB			
View parameters	M_20100	907_133352.	avi 6	798 KB -	7		
Factory default	Remov	ve s	Sort do	wnload			
Software version							
Software upgrade							
Maintenance							

Device Information – Displays the storage total size and free space information of the included microSDTM card.

Device Setting – Allows you to format the microSD card.

Device Cleanup Setting – Use this feature to enable overwrite settings on the SD card. The network device can remove files from the card after they reach a certain age, or when the card is a certain percent full.

Recording List – Displays a list of files saved to the card. You can delete files from the card, or save them to your local PC.

Note If you are using Windows Vista or 7, you will need to change the Snapshot location. Windows UAC does not allow internet programs to write directly to C:\ for security reasons.

Recording

The recording schedule allows you to set up scheduled recording to the microSD[™] card.

() securgen	Home	System	Streaming	PTZ	Logout						
System	Recording										
Security	Recording	Schedule									
Network	Oisable										
DDNS	Always	Always Only during time frame Figure 10 and 1									
Mail											
FTP	Start tir	ne :	Durat	on :							
Application	Save										
Motion detection											
Storage management											
Recording											
Camera Control											
File location											
View log file											
View user information											
View parameters											
Factory default											
Software version											
Software upgrade											
Maintenance											

Recording Schedule – The video server can be set up to record continuously until the card is full (or overwrite old data, see the Storage Management section). The network device can also be set up to record only during a scheduled time. Select the days that you would like to record, then input the recording start time and the recording duration.

Camera Control

When connecting a PTZ camera to the RS-485 control, use the camera control page to set up the camera information. Enable the **PTZ Camera** control, select a **protocol** and **baud rate**. The video server is compatible with OpenEye OPTIX 1, OPTIX 3, Pelco P and Pelco D control protocols.

() securgen	Home	System	Streaming	PTZ	Logout
System	RS485 Setti	ngs			
Security	RS485 Set	tings			
Network	Protocol		ptix-3 🔻	Camera	
DDNS	Baudrate	9	600 🔻		
Mail	Cauca				
FTP	Save				
Application					
Motion detection					
Storage management					
Recording					
Camera Control					
File location					
View log file					
View user information					
View parameters					
Factory default					
Software version					
Software upgrade					
Maintenance					

File Location

The video server supports a JPEG snapshot and AVI recording function. You can specify a storage location for the saved files. The default setting is: C:\.

- **Note** If you are using Windows Vista or 7, you must change the File Location. Windows UAC does not allow internet programs to write directly to C:\ for security reasons.
- **Note** Make sure the selected file path contains valid characters such as letters and numbers.

() securgen	Home	System	Streaming	PTZ	Logout
System	File Locatio	on			
Security	Set the des	tination of s	napshot photo	os and reco	rded video files
Network	All files	s stored at:		C:\	Select
DDNS	Save				
Mail					
FTP					
Application					
Motion detection					
Storage management					
Recording					
Camera Control					
File location					
View log file					
View user information					
View parameters					
Factory default					
Software version					
Software upgrade					
Maintenance					

View Log File

Click **View Log File** to view the system log file. The content of the file provides useful information about configuration and connections.

() securgen	Home	System	Streaming	PTZ	Logout						
System	System log										
Security	(Thu (Thu	Sep 23 09:0 Sep 23 09:0	6:00 2010]N 6:01 2010]N	etwork inte etwork inte	rface initialized start rface initialized end	<u>^</u>					
Network	[Thu [Thu	Thu Sep 23 09:06:01 2010]Host IP = 10.4.5.103 Thu Sep 23 09:06:01 2010]Subnet Mask = 255.0.0.0									
DDNS	[Thu [Thu	[Thu Sep 23 09:06:01 2010]Gateway = 10.0.0.50 [Thu Sep 23 09:06:01 2010]MAC address = 00:D0:89:04:BD:AE									
Mail	[Thu	Sep 23 17:3	1:16 2010]co	onnect by A	dmin@10.1.1.105						
FTP											
Application											
Motion detection											
Storage management											
Recording											
Camera Control											
File location											
<u>View log file</u>											
View user information											
View parameters											
Factory default											
Software version											
Software upgrade											
Maintenance											

View User Information

The Administrator can view each user's login information and privileges on the View User Information page

View User Login Information

All users for the video server are listed under **User information**. The example below shows that the Admin password is 1234 and there is one user with the username User and the password 4321.

() securgen	Home	System	Streaming	PTZ	Logout
System	User inform	ation			
Security	Admi User	n:1234 :4321			*
Network					
DDNS					
Mail					
FTP					
Application					
Motion detection					
Storage management					
Recording					
Camera Control					
File location					
View log file					
View user information	4				*
View parameters		get user inforr	mation		get user privacy
Factory default		-			
Software version					
Software upgrade					
Maintenance					

View User Privilege

Select a user account from the list and click **get user privacy** to view the permissions for the user account.

View Parameters

Click View Parameters to view the system parameter settings.

() securgen	Home	System	Streaming	PTZ	Logout		
System	Parameter	list					
Security	Video	Server Initia	al Configuration	File		N	
Network	[Svst	eml					
DDNS	====	m host nam	e = <elliot></elliot>				
Mail	time	7000 - «CM	TON				
FTP	ume .	20110 - 2014					
Application	enab	le daylight s	aving = <0>				
Motion detection	dayli	daylight saving offset = <01:00:00>					
Storage management	dayli	daylight saving start month = <0>					
Recording	daylight saving start day type = <date> daylight saving start day = <1> daylight saving start time = <00:00:00> daylight saving end month = <0></date>						
Camera Control							
File location							
View log file							
View user information	4	14 - A		• •		• •	
View parameters							
Factory default							
Software version							
Software upgrade							
Maintenance							

Factory Default

Use the factory default page to reset the video server to factory default setting if necessary.

🔇 securgen	Home	System	Streaming	PTZ	Logout	
System	Factory def	ault				
Security						
Network	System will	restart and	need installer p	nanges? program to	setup network.	
DDNS						
Mail	Set Defau	ult				
FTP						
Application	Reboot the	system.				
Motion detection						
Storage management	Reboot	Reboot				
Recording						
Camera Control						
File location						
View log file						
View user information						
View parameters						
Factory default						
Software version						
Software upgrade						
Maintenance						

Set Default

Click **Set Default** to reset the network device to the factory default settings The system will restart in 30 seconds.

Note The IP address will be restored to default IP address.

Reboot

Click Reboot to restart the network device without changing the current device settings.

Software Version

The Software Version page displays the current software version.

() securgen	Home	System	Streaming	PTZ	Logout	
System	Software ve	ersion				
Security						
Network						
DDNS						
Mail						
FTP						
Application						
Motion detection	The softwa	re version is	pc20100906M	IS		
Storage management						
Recording						
Camera Control						
File location						
View log file						
View user information						
View parameters						
Factory default						
Software version						
Software upgrade						
Maintenance						

Software Upgrade

() securgen	Home	System	Streaming	PTZ	Logout				
System	Upgrade								
Security	Follow The	Follow These Steps To Do The Software Upgrade							
Network									
DDNS	Step1:	Step1:							
Mail	Uploa	d the binary	file						
FTP			Browse.						
Application	Step2:								
Motion detection	Select	binary file y	ou want to up <u>c</u>	grade					
Storage management	useria Ston2:	userland.jtts2							
Recording	Click t	Step3:							
Camera Control	Click C	Click the upgrade button to start the upgrade process							
File location	Upar	ade							
View log file	<u> </u>	opgrade							
View user information									
View parameters									
Factory default									
Software version									
Software upgrade									
Maintenance									

Upgrading the Video Server Viewer Software

- **Note** Make sure the new firmware file is available before starting a software upgrade. Do not change the file name, or the system will not be able to update to the new firmware.
- 1. Click **Browse** and find the upgrade file.
- 2. Select the file name from the list under Step 2.
- 3. Click **Upgrade**. The system will check to find the upgrade file, and then start to upload the upgrade file. The upgrade status bar will display on the page. When it reaches 100%, the upgrade process is finished.

When the upgrade process is complete the viewer will return to Home page.

- 4. Close the internet browser.
- Go to the Windows Control Panel and double-click Add or Remove Programs. Locate the Camera Viewer software on the Currently installed programs list, and click Remove to uninstall the previous software version.

6. Open the internet browser again and log in to the network device. The system will automatically download the new version of the Camera Viewer software.

Maintenance

Export the current configuration of the video server or import a configuration.

Note Do not import the configuration from a different Securgen IP device.

() securgen	Home	System	Streaming	PTZ	Logout
System	Maintenand	e			
Security	Export File	s	files	vport	
Network	Export	oringuration		pore	
DDNS	Upload File	5			
Mail	Select o	onfiguration	files		Browse Upload
FTP					
Application					
Motion detection					
Storage management					
Recording					
Camera Control					
File location					
View log file					
View user information					
View parameters					
Factory default					
Software version					
Software upgrade					
Maintenance					

Video and Audio Streaming Settings

On the Streaming tab, you can configure specific video resolution, video compression mode, video protocol, and audio transmission mode.

Video Format

Select the desired video resolution for the video server on the Video Format page. The DVR will record video based on the resolution selected here.

() securgen	Home	System	Streaming	PTZ	Logout			
Video Format	Video Forr	nat						
Video Compression	Video Res	olution :						
Video OCX Protocol		H.264 D1	(30fps) + MJF	EG D1 (30fps	s) ->			
Video Frame Skip		0 H 264 D1	(30fps) + MJF	64 D1 (30fps)			
Audio		 H.264 D1 (30fps) + H.264 D1 (30fps) H.264 D1 (30fps) + H.264 CIF (30fps) Save 						
	Note : Imag is sel Video Dein GOV Setti	e attachment acted. aterlace : a 3D Deinte Intra Field Inter Field Save ngs :	by FTP or E-m rlacing I Deinterlacing	nail will be av: g g (off)	ailable only while MJPEG streaming			
		H.264-1 GOV H.264-2 GOV Save	Length :	30				

Video Resolution – The video server provides two sets of video dual streaming formats like the following:

- H.264 D1 (30fps) + MJPEG D1 (30fps)
- H.264 D1 (30fps) + MJPEG CIF (30fps)
- **Note** When using H.264 + MJPEG, the MJPEG stream is always handled by the device as stream 1 and the H.264 stream is stream 2.

Video Deinterlace – The video server supports de-interlacing. You can choose to activate the de-interlacing function or disable the function by selecting a mode from the list as shown below:

• Inter Field Deinterlacing (off)

• Intra Field Deinterlacing

GOV Settings – Sets the Group of Video (GOV) or Group of Pictures (GOP) length for the H.264 streams. Use this to increase bandwidth if necessary.

Video Compression

Select an MJPEG/H.264 compression mode appropriate for the application. You can also select to display compression information on the Home page.

() securgen	Home	System	Streaming	PTZ	Logout			
Video Format	Video Com	pression						
Video Compression	MJPEG Cor high	MJPEG Compression setting :						
Video OCX Protocol	midd	lle compressi	on , default					
Video Frame Skip	⊚ low (compression	, high bitrate	, high quality	/			
Audio	Save							
	H.264 Con	npression set	tting :					
	🔘 high	est compress	ion , lowest o	uality				
	midd	lle compressi	on , default					
	Iow (compression	, highest qua	lity				
	🗹 Display	compression	n information	in the home	e page			
	Save							
	CBR mode	setting :						
	🔲 enat	ole H.264-1 C	BR mode					
	📃 enat	enable H.264-2 CBR mode						
	Save							

MJPEG compression settings:

- high compression, low bitrate, low quality
- middle compression, default
- low compression, high bitrate, high quality

H.264 compression settings:

Highest compression, lowest quality

- Middle compression, default
- Low compression, highest quality

Video OCX Protocol

On the Video OCX protocol page, you can select different protocols for streaming media over the network.

() securgen	Home System Streaming PTZ Logout
Video Format	Video OCX Protocol
Video Compression	Video OCX protocol setting :
Video OCX Protocol	
Video Frame Skip	© RTP over HTTP
Audio	◎ MJPEG over HTTP
	Multicast mode
	Multicast IP Address 0.0.0.0
	Multicast H.264-1 Video Port 0
	Multicast H.264-2 Video Port 0
	Multicast MJPEG Video Port 0
	Multicast Audio Port 0
	Multicast TTL 1
	Save Note: This page only applies to video streams going to a DC Viewer.

Video OCX protocol setting options include:

- RTP over UDP
- RTP over RTSP(TCP)

- RTSP over HTTP
- MJPEG over HTTP

Select a mode according to your data delivery requirements. If you are transmitting over the internet using a router and port forwarding, you will need to use RTP over RTSP (UDP). You will also need to forward the RTSP port to the network device (see the network setup page to find the RTSP port).

Multicast Mode

- 1. Enter all required data, including multicast IP address, H.264 video port, MJPEG video port, audio port and TTL into each box.
- 2. Click **Save** to confirm the setting.

Video Frame Skip

Use video frame skipping to save bandwidth if necessary.

() securgen	Home	System	Streaming	PTZ	Logout
Video Format	Video Fran	ne Skip			
Video Compression	No ski	pping, defaul	t		
Video OCX Protocol	© Frame	alviania a at 5	funne intern	_1	
Video Frame Skip	Frame	skipping ac a	iname incerna	aı	
Audio	Frame	skipping at 1	10 frame inter	nal	
	Frame	skipping at 1	15 frame inter	nal	
	Save				

MJPEG/H.264 Frame Skipping options include:

- No skipping, default
- Frame skipping at 5 frame internal
- Frame skipping at 10 frame internal
- Frame skipping at 15 frame internal

Note Higher frame skipping rate will decrease video smoothness.

Audio

The audio setting page is show as below. In the Audio page, the Administrator can select one transmission mode and audio bit rate.

() securgen	Home System Streaming PTZ Logout
Video Format	Audio
Video Compression	Transmission Mode:
Video OCX Protocol	Full-duplex (Talk and listen simultaneously) Half-duplex (Talk or listen not at the same time)
Video Frame Skip	Simplex (Talk only)
Audio	Simplex (Listen only)
	● Disable Server Gain Setting: Input gain: 3 ▼ Output gain: 3 ▼ Bit Rate: uLAW ▼ Save

Transmission Mode

- Full-duplex (Talk and Listen simultaneously) In Full-duplex mode, the local and remote sites can communicate with each other simultaneously, i.e. both sites can speak and be heard at the same time.
- Half-duplex (Talk or Listen, not at the same time) In Half-duplex mode, the local/remote site can only talk or listen to the other site at a time.
- Simplex (Talk only) In Talk only Simplex mode, the local/remote site can only talk to the other site
- Simplex (Listen only) The local/remote site can only listen to the other site.
- **Disable** Turn off the audio transmission function.

PTZ Settings



Use the PTZ tab to program a PTZ camera using the on screen menu of the camera.

OSD Menu

Click Menu to open the OSD menu of the camera, then use the arrow and enter buttons to navigate the camera menu.

Logout

Click the **Logout** tab to open the login window and log in with a different user name and password.

SPECIFICATIONS

VIDEO SERVER SPECIFICATIONS

Model	NE-VS201					
Video Input	1CH BNC					
Video Output	1CH BNC loop out					
Compression	H.264 / MJPEG					
Dual Streaming	H.264 + H.264 / H.264 + MJPEG					
Resolution	NTSC: 720 x 480 / PAL: 720 x 576					
Frame Rate	NTSC: 30IPS @ D1 / PAL: 25IPS @ D1					
Motion Detection	Yes					
Audio Inputs	1					
Audio Outputs	1					
Audio Streaming	Full-duplex, Half-duplex, Simplex					
Audio Compression	G.711 / G.726					
Alarm Input	1					
Alarm Output	1					
Network	10/100 Ethernet					
Web Connection	IE (ActiveX)					
User Accounts	20					
User Levels	Administrator or User					
	TCP/UDP/IP, HTTP, FTP, SMTP, ARP, ICMP, DHCP, Telnet,					
Connections	RTP/RTSP					
PTZ Control	RS-485					
PTZ Protocols	Pelco D, Pelco P, Optix III, Optix I					
Operational Temp	14°F ~ 122°F (-10°C ~ 50°C)					
Active/Passive Cooling	Passive Cooling					
Power Consumption	4.2W					
Rated Amperage	< 350mA					
Input Voltage	12vDC / PoE					
Weight	0.44 lbs (0.2kg)					
Dimensions	L: 5.39" (137mm) x W: 3.9" (99mm) H: 1.1" (28mm)					
Housing	White / Blue					
Voltage Out	12vDC					
Power Out	6W					
Max Current	500mA					

Recommended	Fixed Dome Cameras.
Application	Do not use to power more than one other device.

www.securgen.com 1-888-542-1103

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