Vesta Series

Smart Anytime, Safe Anywhere

VST-1818 IP Camera IP Installation Guide

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1. Introduction

The VST-1818 IP Camera provides a quick and accurate surveillance solution to protect your surroundings. You can watch these live-stream videos through MJPG or H264 formats via Local Area Network, or online remotely using port forwarding, or via the Climax Home Portal™ Server for you to easily keep track of the safety of your homes or businesses.

VST-1818 IP Camera can be further integrated into your current Climax Security Control Panels to form a complete security system, and capture video when an alarm is activated.

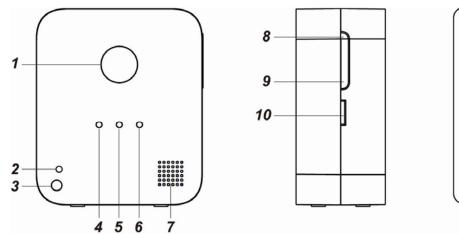
1.1. Function Overview

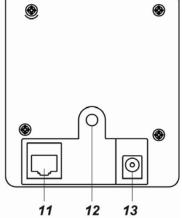
The VST-1818 IP Camera includes a variety of functions that can be adjusted to suit different necessities. Below is an overview of the functions of the IP Camera:

- Live-feed video streams in MJPG format or High Definition H.264 format. Please see *5. IP Camera, 5.1. Preview in H264 Format* and *5.2. Preview in Motion JPEG*.
- Alarm-triggered video recording that includes Pre-alarm recording to see how alarm was triggered. Please see *5. IP Camera, 5.8. Alarm Setting*.
- 24-hour HD video recording. Please see 8. Network Video Recorder.
- Remote access/control on Climax Home Portal Server on a web-enabled device. Please see *9. Remote Access to the IP Camera, 9.1. Home Portal Server*.
- Remote video using Port Forwarding. Please see 9. Remote Access to the IP Camera, 9.3. Port Forwarding.
- Surveillance when complementing with Control Panels. Please see 10. Connecting to the Climax Control Panels, 10.2. Surveillance and Setting.
- Remote access/control complementing with Control Panels on Climax Home Portal Server on a web-enabled device. Please see 10. Connecting to the Climax Control Panels, 10.4. Home Portal Server.

2. Application Overview

2.1. Identifying the Parts





- 1. IP Camera Lens
- 2. Microphone
- 3. Optical Sensor
- 4. Power LED (Green)

On: powered
Off: unpowered

5. Warning LED (Red)

Flashes for 2-3 seconds: Activating WPS protocol

Flashes 3 times: WPS pairing successful

Flashes twice: The IP Camera is ready to enter or exit privacy mode

On: The IP Camera is in privacy mode

6. Internet-Connection LED (Blue)

On: connected to internet (wired or wireless)

Off: disconnected from internet

Flashes for 5 minutes: The IP Camera is in learning mode Flashes quickly: The IP Camera is streaming or recording.

7. Speaker

8. WPS Button

9. Privacy Button

Press and hold for 2 seconds until warning LED flashes twice and release to enter/exit privacy mode

Press and hold for 10 seconds to enter learning mode

Press and hold for 6 seconds to exit learning mode.

10. Micro-SD slot

11. Ethernet Cable Port

12. DC Jack (5V DC, 2A input)

13. Camera Stand Mounting Hole

2.2. Package Content

The VST-1818 IP Camera is packed in a white box that includes:

- An Ethernet cable
- A power supply (5V DC 2A adapter)
- An IP Camera Stand
- Installer CD

2.3. The Power Supply

An AC power adapter is required to connect to a wall outlet. Be sure only to use an adapter with the appropriate AC voltage rating to prevent component damage. A 5V DC output and 2A adapter is generally used to power the IP Camera.

2.4. System Requirements

The system requires a TCP/IP network environment.

To install the CD Wizard, your computer must have:

- Microsoft Windows 98, ME, NT4.0, 2000, XP, Vista, 7 or 8 operating system. A Mac or Linux based machine is also compatible.
- DirectX 9.0 or later Internet Explorer 6.x or later
- CD-ROM drive
- Pentium III CPU 500 MHz or higher, or equivalent AMD
- 128 MB RAM
- Graphics card: 32 MB RAM

3. Getting Started

Read this section of the manual to learn how to set up your VST-1818 IP Camera and program system settings over the Web page.

With a valid internet connection, this system can bring you the freedom to access and control your IP Camera anywhere and anytime in the world.

3.1. Hardware Installation

Step 1. Remove any plastic cover and prepare the enclosed adapter and Ethernet cables.

With Wired Connection:

- **Step 2.** Find a suitable location to mount the IP Camera.
- **Step 3.** Plug in the enclosed Ethernet cable.

<NOTE>

If the IP Camera is to complement with a Control Panel, connect the IP Camera and the Control Panel to the same router to learn the IP Camera into the Control Panel. Please refer to 10. Connecting to the Climax Control Panels if you wish to increase the functionality of the IP Camera.

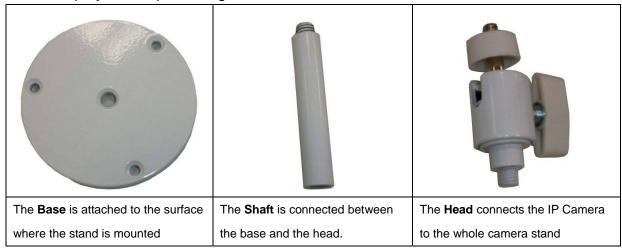
Step 4. Plug in the adapter.

With Wi-Fi (Wireless) Connection:

Please refer to the *6. Network Setting. 6.2. Wireless* on how to connect to the Wi-Fi Network.

Using a Camera Stand

Below displays the 3 part design of the camera stand:



Below outlines the steps to mount the IP Camera to a surface.

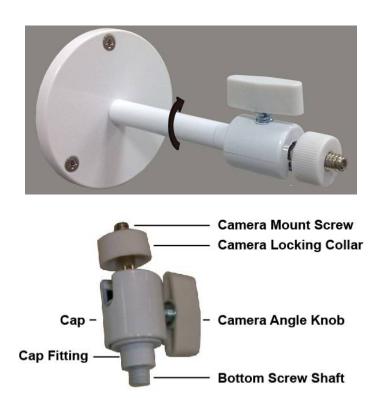
- **Step 1.** Find a surface to mount the camera stand. Locate the 3 mounting holes of the Base and use them as template, mark the surface.
- Step 2. Apply wall plugs if fixing onto plaster or brick. Screw the Base onto the surface.



Step 3. Attach the Head to the Shaft by rotating the Head clockwise onto the Shaft.



Step 4. Attach the Shaft onto the Base by rotating the Shaft clockwise onto the Base.



Step 5. Turn the Camera Angle Knob clockwise (as shown in the picture below) to tighten the Camera Mount Screw to the Cap.



Step 6. Tighten the Camera Locking Collar (rotating it clockwise as shown in the picture below).



Step 7. Turn the Camera Angle Knob counter-clockwise (as shown in the picture below) to loosen the Camera Mount Screw from the Cap.



Step 8. Screw the Camera Mount Screw into the Camera Stand Mounting Hole of the IP Camera (by turning the Camera Locking Collar counter-clockwise).

Step 9. Find a desired angle for the IP Camera and turn the Camera Angle Knob clockwise to stabilize the Camera Mount Screw.

When tightening the camera angle knob, please make sure the Cap of the Head is attached to the cap fitting without leaving any gap as shown in the picture on the left:





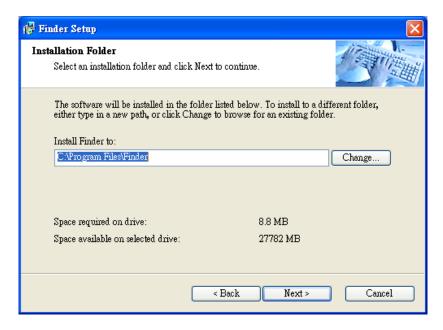
If there is a gap between the cap and the cap fitting as shown in the picture on the right, the top screw shaft cannot be stabilized and the camera angle cannot be fixed.

3.2. Software Installation

**** THIS INSTALLATION IS ONLY REQUIRED FOR FIRST TIME USER ****

The Finder software is required for your computer to identify the IP Camera on the LAN. To install the "Finder" software"

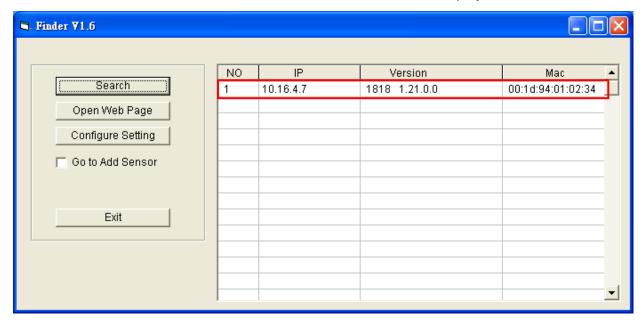
- Step 1. Insert the supplied CD-ROM into your CD-ROM drive
- **Step 2.** Find the **Finder** software in the CD-ROM.
- **Step 3.** Double click on the **Finder_v1.x** to initiate the installation.



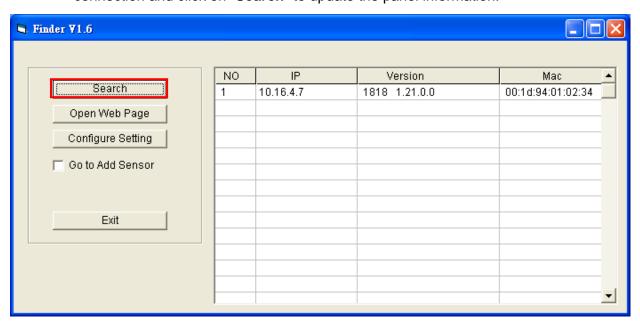
Step 4. Follow on screen instruction to complete installation



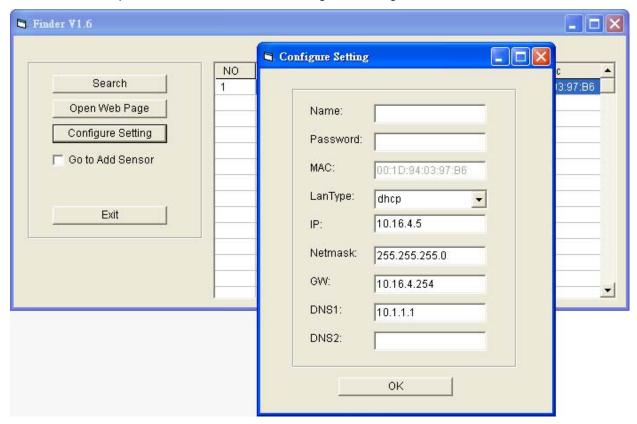
- **Step 5.** Once complete, the Finder icon will be displayed on your desktop.
- **Step 6.** Double click on the "**Finder.exe**" to start the software. Finder will automatically search for the IP Camera on LAN and display its information. If available, the camera's LAN IP address, Firmware version and MAC address will be displayed



Step 7. If the camera information is not displayed, check camera power and Ethernet connection and click on "**Search**" to update the panel information.



Step 8. (Optional)You can choose to edit the camera's network setting manually by clicking on the panel column, then click "Configure Setting"



The LanType is default to **DHCP** and does not require manual input of IP/Netmask/Gateawy/DNS setting. If you wish to configure these setting manually, change LanType to **Static**.

After finish changing network setting, enter the user name (default: admin) and password (default:admin1234) then click **OK** to confirm. The user name and password can be changed later in the camera's configuration webpage

Step 9. Click the camera information column and click on "Open Web Page", or double click

on the camera column to link to the panel configuration webpage. Your default browser will start automatically to connect to the LAN IP displayed in Finder.

3.3. Factory Reset

To reset the IP Camera back to its original settings:

- Step 1. Disconnect the AC power by unplugging the 5V DC power adapter.
- Step 2. Press and hold the Privacy Button and plug in the 5V DC power adapter.
- Step 3. Continue holding the Privacy Button for roughly 30 seconds time.
- **Step 4.** When all 3 LEDs flash 3 times simultaneously followed by complete dimming of all LEDs, let go of the "Privacy Button".
- **Step 5.** The IP Camera has reset, please wait for it to start up.

4. Connecting to Webpage

Step 1a. On the Finder application, double click on your VST-1818 IP Camera, or,

Step 1b. Open an internet browser.

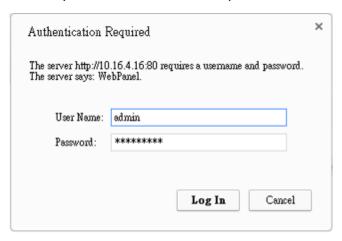
Under the Address field, enter "VST-1818's IP address" (as shown in VST-1818's Finder Details, and click on "GO".



Step 2. The "Home" page of the IP Camera will be displayed

Climax			
Home Event Log Reported Events	Welcome	to IPCAM!	
Preview in H264 Preview in MJPG	Firmware revision:	1818 1.21.0.0	
Image Tuning Motion Detection	Public IP Address:	59.124.230.221	
Time Stamp Stream Setting	Internal IP Address:	10.16.4.23	
Recorded Video	MAC Address:	00:1d:94:01:02:3	4
Network Setting System Setting Logout			
		@	32014 Climax Tech. Co., Ltd.

Step 3. Click on any of the options on the left-sided panel.



Step 2. Enter the default Username & Password and press "Log In".

Username: admin
Password: admin1234

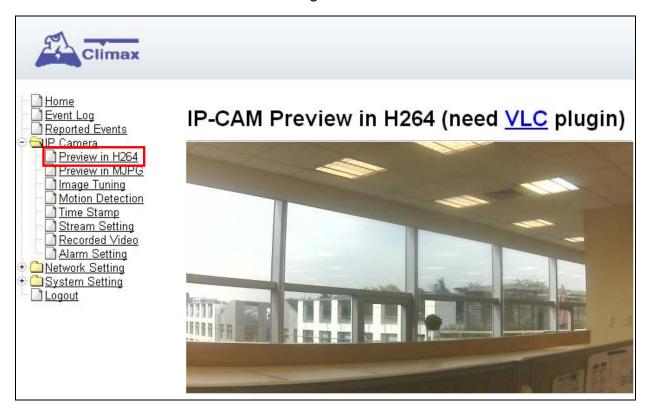
It is strongly recommended to change the Username & Password immediately in order to protect your security and privacy. Please refer to *7. System Setting, 7.1. Change Password*.

5.IP Camera

The "IP Camera" folder on the left panel includes configuration webpages for you to manage your IP Camera and view videos.

5.1. Preview in H264 Format

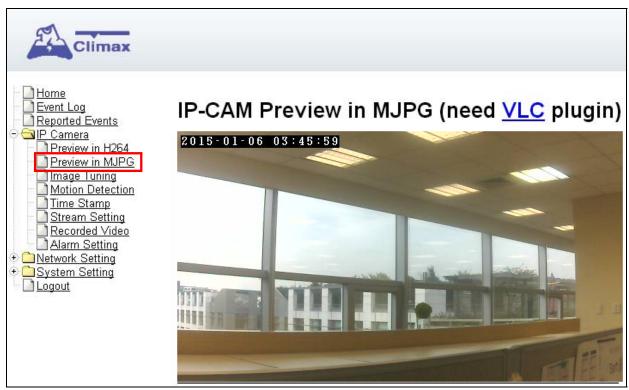
Click on "Preview in H264" to view the High Definition video in the H.264 format.



The computer requires VLC media player plugin to view video streaming. Click on the "VLC" hyperlink to enter the VLC plugin download page and download the software for free.

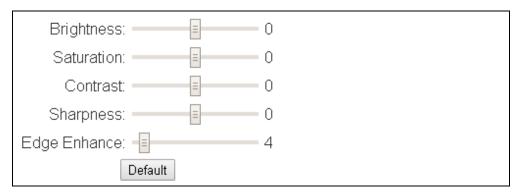
5.2. Preview in Motion JPEG

Click on "Preview in MJPG" to view the video from IP Camera in Motion JPG format.



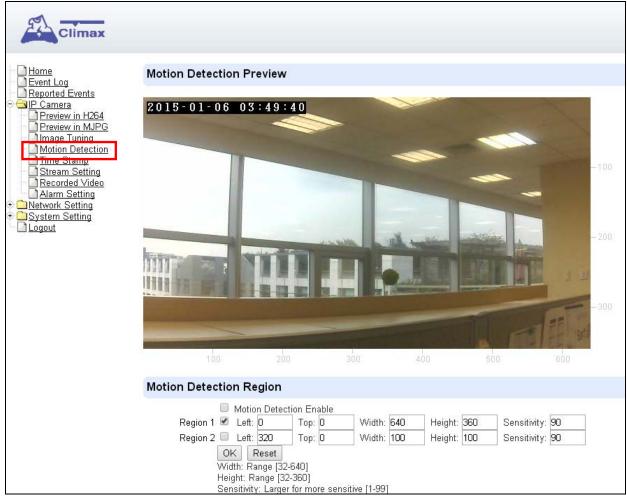
5.3. Image Tuning

Click on "**Image Tuning**" to adjust video preferences according to the below parameters:



5.4. Motion Detection

"Motion Detection" include motion detection related setting options.



- Check the box in front of "Motion Detection Enable" to determine whether the IP Camera's motion detection function should be activated.
- The IP Camera can configure up to 2 customizable regions for motion detection. To activate the motion detection region, check the box in front of "Region 1" or "Region 2".

When motion is detected, the "**Region 1**" or "**Region 2**" text color will turn red for approximately 3 seconds to indicate it has detected motion. The IP Camera will report the motion detection event according to Report setting and record the event i in "**Reported Event**" webpage.

After detecting and recording the event. The IP Camera enters a 1 minute "Sleep Timer". During the 1 minute period, the IP Camera will not record event for further motion detection. During the Sleep Timer, the text will turn blue for 3 seconds upon motion detection.

<NOTE>

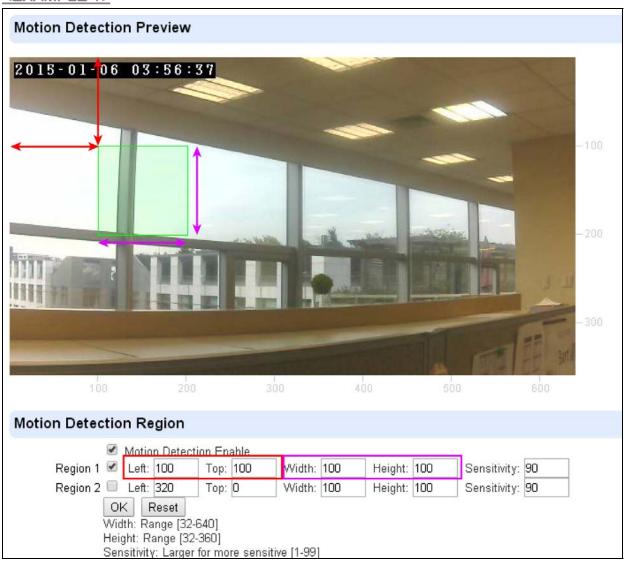
By default, "Region 1" is ticked and it detection coverage includes the whole camera view.

- If "Motion Detection Enable" is ticked but neither of "Region 1" or "Region 2" is ticked, The IP Camera will not be able to detect any movement.
- Please click the "**OK**" button for the changes to be effective.

Motion Detection Region

- You can choose the location, size and sensitivity of the motion detection region by adjusting the parameters shown. The live feed has scales on the horizontal and the vertical axis for you to refer to.
 - "Left" determines the horizontal starting point of the motion detection box. It starts from left of the screen at 0 pixels, towards the right at 640 pixels.
 - "**Top**" determines the vertical starting point of the motion detection box. It starts from top of the screen at 0 pixels, towards the bottom at 360 pixels.
 - "Width" determines the width of the box. The value of "Left" determines its starting point.
 - "Height" determines the height of the box. The value of "Top" determines its starting point.

<EXAMPLE 1>



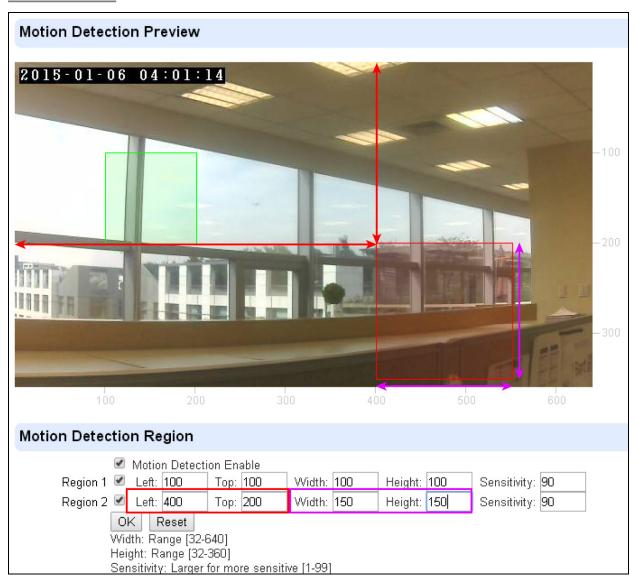
The green box below is region of motion detection according to the set parameter:

The value 100 (pixels) of "**Left**" determines the horizontal starting position of the region for detection.

The value 100 (pixels) of "**Top**" determines the vertical starting position of the region for detection.

As shown, a value of 100 (pixels) are entered for both "Width" and "Height", therefore a 100 by 100 motion detection region is determined.

<EXAMPLE 2>

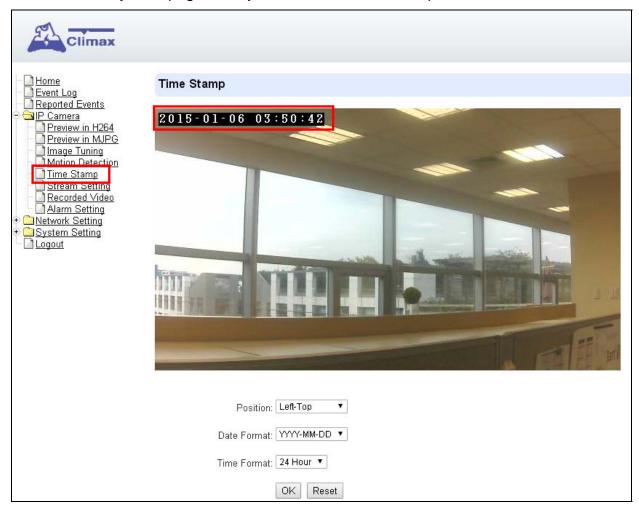


The green box below is region 1 of motion detection according to the set parameter. The red box below is region 2 of motion detection according to the set parameter. You can refer to the horizontal and the vertical scales provided on the respective bottom and right side of the live feed.

 When confirmed, press "OK" to submit your adjusted parameter. Press "Reset" to re-enter the parameters ("Reset" button resets the parameters to the previously set parameters).

5.5. Time Stamp

The "Tim Stamp" webpage is for you to edit the Time Stamp format on the video.



Position

The available options are:



Date Format

The available options are:



Time Format

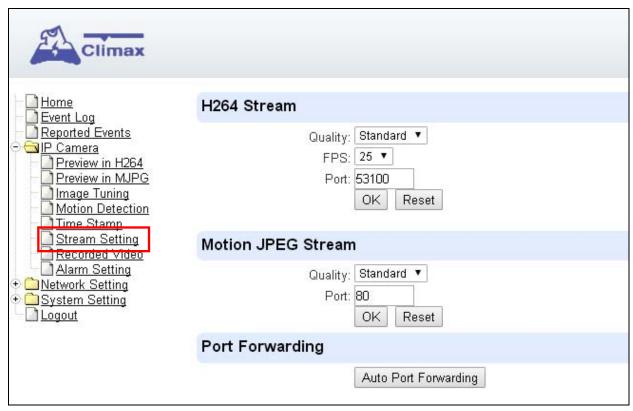
The available options are:



Press "**OK**" to submit your adjusted parameters. Press "**Reset**" to re-select the parameters.

5.6. Stream Setting

The "Stream Setting" webpage determines quality of video streaming, and the port to be used when the IP Camera is access remotely via Port Forwarding.



H264 Stream

Quality adjusts the quality of the stream.

Frames Per Second (FPS) are adjustable. Increasing FPS improves the quality of the live-stream. Click "**OK**" to confirm changes or click "**Reset**" to reset to the previously set parameters.

Port: The port for obtaining HD 1280x720 resolution H264 video stream.

Motion JPEG Stream

Quality adjusts the quality of the stream.

Port: The port for obtaining 640x360 resolution MJPG video stream.

Auto Port Forwarding

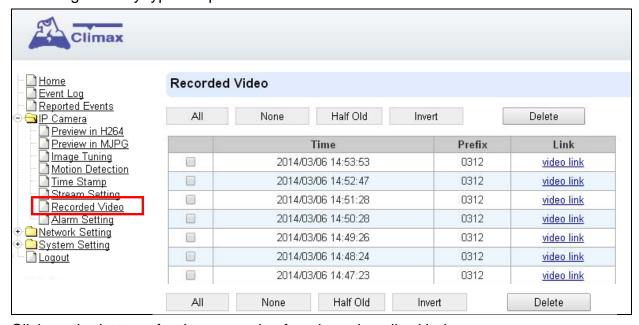
This function is reserved for Home Portal Server use only.

5.7. Recorded Files

This menu displays all the recorded files.

The IP Camera can use two types of memory: a MicroSD card or the RAM of the IP Camera.

If a MicroSD card is not inserted, the IP Camera will utilize its RAM memory. The recorded videos will therefore be cleared if the IP Camera is powered down. Switching memory types require a restart of the IP Camera.



Click on the buttons for the respective functions described below:

- All: to select all the recorded videos.
- None: to cancel selecting the recorded videos.
- Half Old: to select the older half the recorded videos.
- Invert: to invert the current selection. E.g. if "All" was selected, clicking "Invert" will clear all selections.
- Delete: to delete the currently selected (ticked) video.
- Video link: to download or play the video.

5.8. Alarm Setting

This menu displays the video recording options.



Video Upload Settings

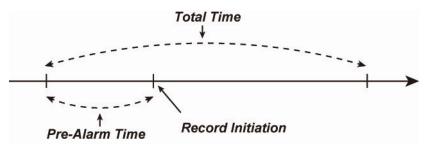
Motion Detection Upload: If checked, the videos recorded from Motion Detection trigger will be uploaded.

Video Record Length settings

Total Time: The total time length of each recorded video (Default: 30 seconds). **Pre-Alarm Time**: The time length of the video which will be recorded prior to the initiation of video recording (Default 10 seconds).

<EXAMPLE>

When Total Time is set to **30** seconds, and Pre-Alarm Time is set to **10** seconds, the IP Camera will keep a continuous last 10-second buffer video storage. When the IP Camera receives command to record a video (motion detection/alarm trigger from panel/request from panel), the IP Camera will record another 20-second video. The final 30-second video will include 10-second before record initiation, and 20-second after initiation.



Recycle Recorded Video

When this option is enabled, IP camera will automatically delete the oldest videos to clear space on the MicroSD card or the RAM of the IP Camera.

When there is not enough memory left (in the MicroSD card or RAM), the IP camera will start deleting old videos to retain more space.

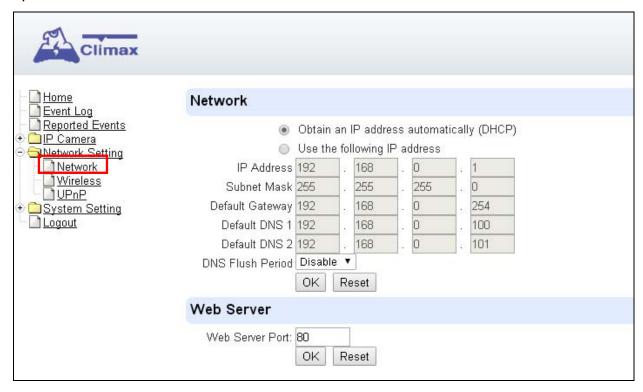
- Press "OK" to submit the updated programmed parameters. Or press "Reset" to re-enter ("Reset" button resets the parameters to the previously set parameters).
- An error message will appear on top of the page if the parameters are not logically set (e.g. Pre-alarm Time: 20 seconds, Total Time: 10 seconds), as exemplified below:

Parameter value out of range: 'PreAlarm': 1 ~ 9

6. Network Setting

6.1. Network

The following is displayed when you click on "**Network**" under the "**Network Setting**" option:



• Obtain an IP address automatically (DHCP)

If <u>DHCP</u> is selected, the Network will obtain an IP address automatically with a valid Network DHCP Server. Therefore, manual settings are not required.

This is only to be chosen if your Network environment supports DHCP. It will automatically generate all information.

Use following IP address

You can also enter the Network information manually for <u>IP Address</u>, <u>Subnet Mask</u>, <u>Default Gateway</u>, <u>Default DNS 1</u> and <u>Default DNS 2</u>.

Please make sure that you have obtained all required values according to your Network environment. Please contact your network administrator and/or internet service provider for more information.

DNS Flush Period

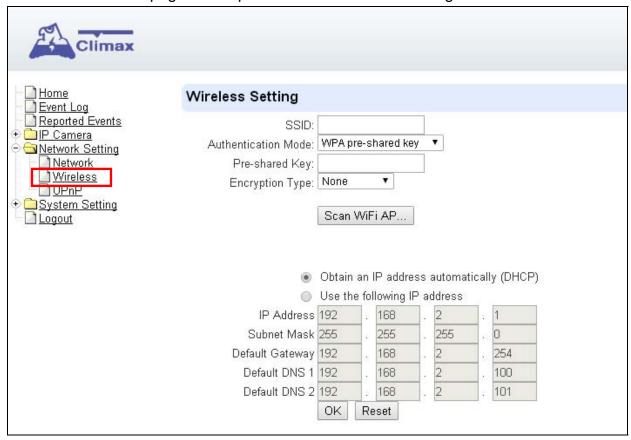
You can set the system to clear current DNS resolution records for all entered URL settings (Reporting, Upload, XMPP...etc.) after a set time period. The system will then resolve the Domain Name again and acquire new IP address for the URL settings. This function is disabled by default.

Web Server

Set the port used to access the IP Camera's webpage. The IP Camera will reset upon changing the web server port. After reset is complete, the IP Camera will switch to using the new port number when opening its webpage.

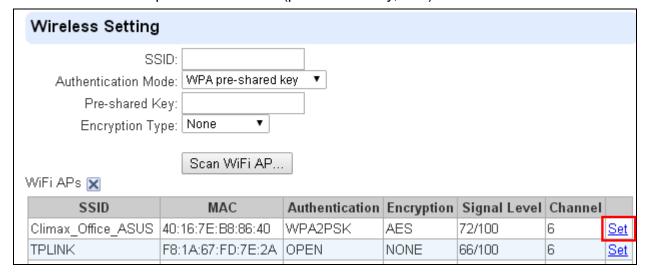
6.2. Wireless (WiFi models only)

Use "Wireless" webpage to setup the IP Camera's WiFi setting



There are 3 ways you can connect to the wireless network.

1. Search for WiFi AP: Click "**Scan WiFi AP**" to search for available wireless network Select the available Wireless APs from the list by clicking "**Set**" after AP info column and enter the required information (pre-shared key, etc.) and click the "**OK**" button.



- 2. Enter the Wireless information manually and click "**OK**" to connect.
- 3. WPS protocol: Use the WPS protocol to connect it to the Wi-Fi network. Locate the WPS button on your VST-1818 IP Camera and your wireless router. Press and hold the WPS button of the IP Camera for 2-3 seconds and when the Blue

LED flashes, let go of the button. The Red LED will flash for 1-2 seconds. Press and hold the WPS button of the router's WPS protocol according to the router's instruction to start pairing.

When WPS pairing is successful, the Red LED of IP Camera will flash 3 times.

<NOTE>

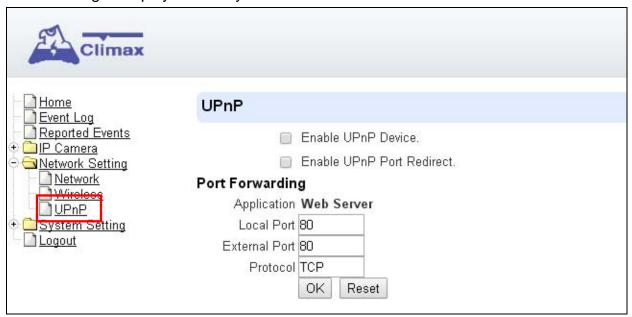
After wireless information are successfully entered or when WPS pairing has succeeded, please reboot the system and ONLY choose one type of connection (either wired or wireless) at a time.

For wireless connection, please remove the network cable and the power cable. Reconnect the power cable only and wait for it to start up.

If you wish to restore wired connection, please unplug the power cable, connect the network cable and reconnect the power cable.

6.3. UPnP

The following is displayed when you click on "UPnP"



UPnP stands for Universal Plug and Play, which opens network architecture that leverages TCP/IP and the web technologies to enable seamless proximity networking in addition to control and data transfer among networked devices at home, office or public spaces. You can configure this setting to allow for Port Forwarding connection to the IP camera.

• Enable UPnP Device:

When enabled, you will be able to see this device via any UPnP discovery tool

Enable UPnP Port Redirect:

The device will try to find an UPnP-supported router and set up the port to redirect to the router.

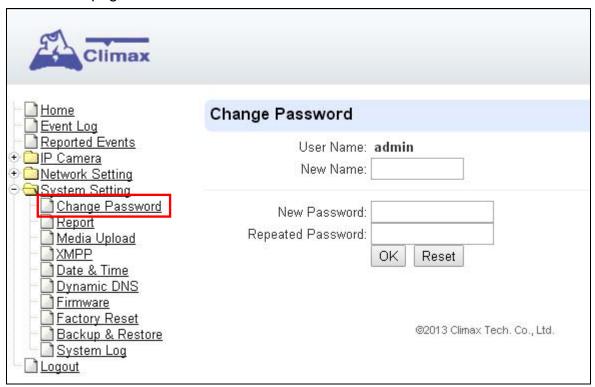
Port Forwarding:

- 1. Local Port
- 2. External Port
- 3. Protocol

7. System Setting

7.1. Change Password

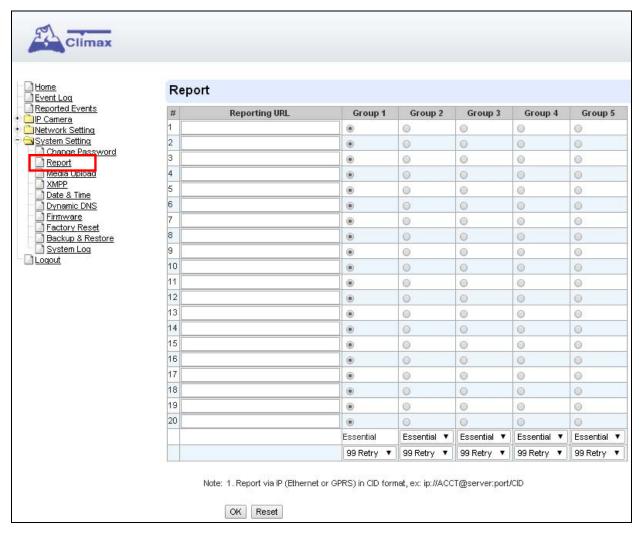
Edit the username and password used to log into IP Camera webpage under "Change Password" page.



Enter a new name or new password and click "**OK**" to confirm the username and password change.

7.2. Report

If the Motion Detection function is Enabled in *5.4. Motion Detection*, the IP Camera will report CID event code via IP to programmed location upon motion detection. Use the **Report** webpage to program the report destination setting.



Reporting URL

Enter URL destination(s) using the following format:

ip://Account Number@Serverlp:Port/CID

Account number must be between 4-6 digits.

Level

Select a reporting condition:

Please select "All events" for this option.

Group

Select a group for your report destination The system will make report according to the following settings:

- Group with higher priority will be reported first: Ex: Group 1 → Group 2 → Group 3....
- If reporting to the first destination in a group fails, the system will move on to the

- next report destination in the group.
- If reporting to one of the report destinations in a group is successful, the system will consider reporting to this group successful and stop reporting to rest of the destinations in the group. It will then move on to report to the next group.
- If reporting to all destinations in a group fails, the system will retry the reporting according to retry times set below. If reporting is still unsuccessful after retries, the system will move on to report the the next group according to Essential/Optional setting below.
- After completing a round of reporting (From Group 1 → Group 2 → Group 5), If there is any group set as Essential which has not received report successfully, the system will restart the reporting cycle to retry reporting until every group set as Essential is reported successfully.

Essential/Optional

Essential: the system will report to any group set as **Essential**. The system will never give up trying to report to any group set as Essential until at least one of the destinations in every Essential group successfully receives the report. Group 1 is always set as **Essential** and cannot be changed.

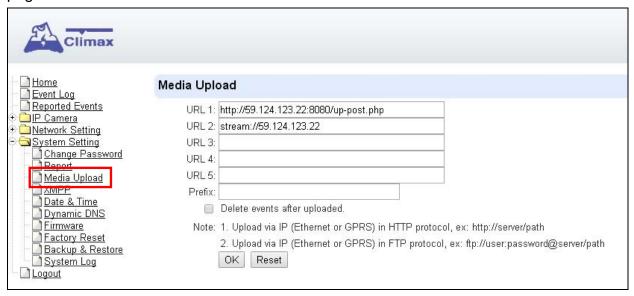
Optional: The system will only report to group set as **Optional** when reporting to its previous group fails. For example: if Group 3 is set is optional, the Control Panel will only report to Group 3 if reporting to Group 2 fails.

• 1 Retry / 3 Retry / 5 Retry / 10 Retry / 99 Retry:

If no report destination in a group could be reached, the system will retry the report according to the retry times set here.

7.3. Media Upload

Program the IP Camera's captured video upload destination under "**Media Upload**" page.

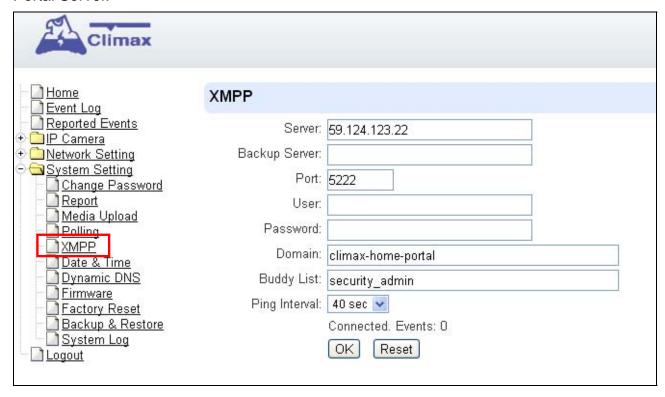


- Upload to FTP: ftp://user.password@server/path or ftps://user.password@server/path or ftps://user.password@server/path
- Upload to server: http://server/path or https://server/path or https://server/path

After registering the IP Camera in Home Portal Server, the first 2 URLs of Media Upload setting will be programmed automatically according to Home Portal Server setting. Please do not manually modify this setting. Any modifications may cause problems when operating on the Home Portal Server or when connecting to the Control Panel.

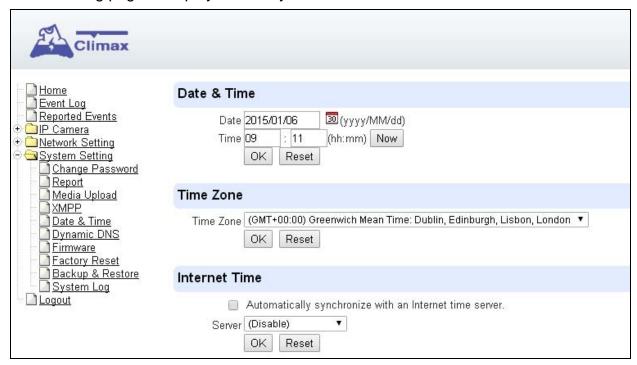
7.4. XMPP

The "**XMPP**" page allows you to connect to the Home Portal[™] Server for remote control. Please do not modify any settings or the IP Camera may lose connection with Home Portal Server.



7.5. Date & Time

The following page is displayed when you click on "Date & Time":



Under the **Date & Time** heading, you can edit time and date. As the page does not automatically refresh itself with the time, you can click on "**Now**" to refresh to your current time.

Under the **Time Zone** heading, you can choose your time zone.

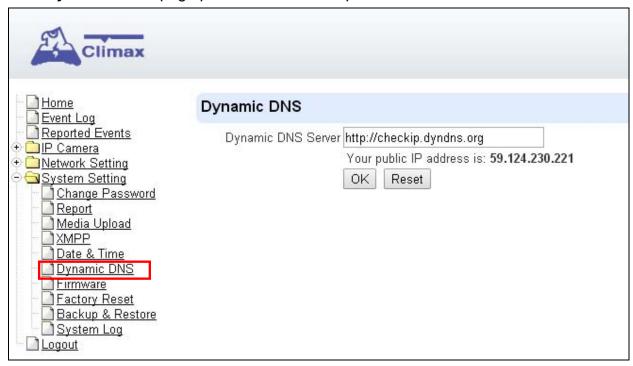
Under the **Internet Time** heading, you can tick the box "Automatically synchronize with an Internet time server" to adjust to internet time. The scroll down bar of "Server" allows you to choose from a selection of time servers.



Click on "OK" to confirm the settings.

7.6. Dynamic DNS

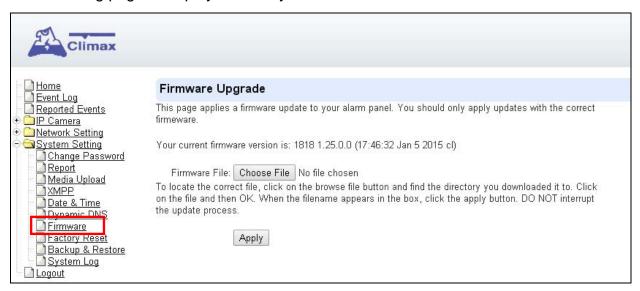
The "**Dynamic DNS**" page provides IP Camera public IP information.



- Dynamic DNS Server: Set the server used by IP Camera to acquire its public IP address.
- Public IP address: The public IP address shown is required to for remote access
 of the IP Camera via port forwarding.

7.7. Firmware

The following page is displayed when you click on "Firmware"



You can update the firmware of the IP Camera: Click the "**Choose File**" button, browse and find the correct file, and press "**Apply**" to apply the setting. Please follow the onscreen instruction to complete the update.

7.8. Factory Reset

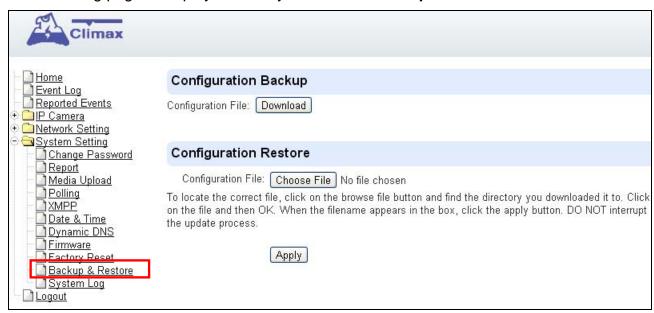
Factory Reset function will clear all IP Camera setting, event records and restore all settings to factory default.



You can choose to reset the IP camera to the factory default setting by clicking the "**Yes**" button. If you wish to keep the current network setting, you can tick the "Keep current network setting" option.

7.9. Backup & Restore

The following page is displayed when you click on "Backup & Restore":

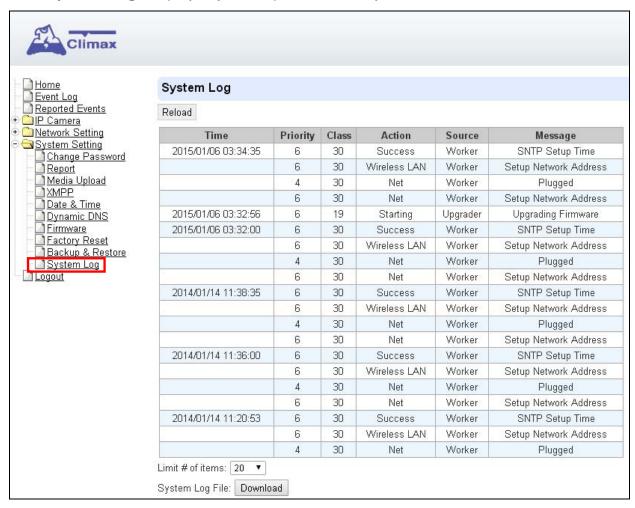


You can store the current settings by clicking on the "Download" button.

If you wish to restore the previously stored file, click on "**Choose File**", find the correct file and click on "**Apply**" to restore to the previous setting.

7.10. System Log

The "System Log" displays system operation history.

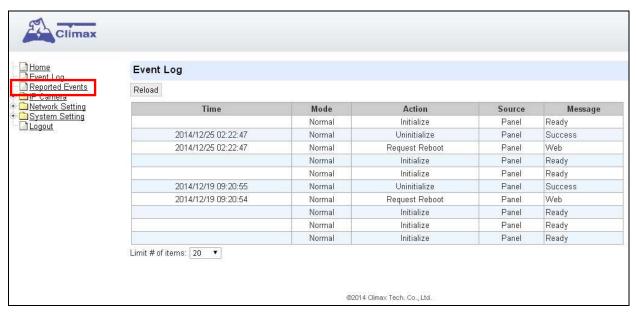


You can choose how many reported events are displayed by selecting the drop down bar near the bottom of the page, or click "**Download**" button to download detailed system log file into your computer.

8. History

8.1. Event Log

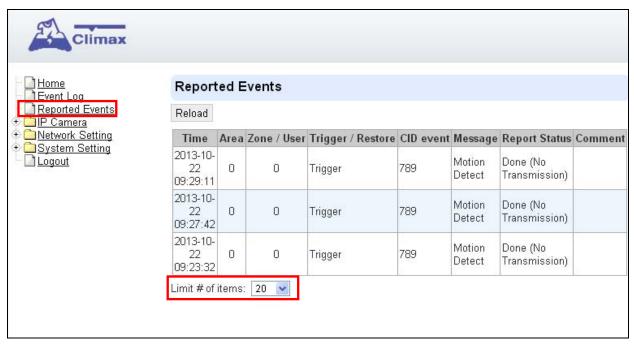
The Event Log records system events.



You can choose how many events are displayed on the page by selecting the drop down bar near the bottom of the page.

8.2. Reported Events

The Reported Event page records all events that have been reported to programmed destination.



You can choose how many reported events are displayed by selecting the drop down bar near the bottom of the page.

9. Network Video Recorder

The VST-1818 IP Camera supports Network Video Recorder software to record High Definition Video of 1280x720 resolution into your local computer drive.

The recording is indefinitely long until stopped and automatically divided into individual 1 hour video for ease of file storage and operation.

The Network Video Recorder software are included in VST-1818 installation CD as shown



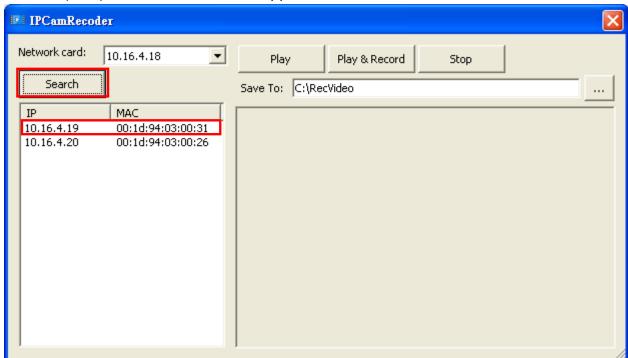
Please execute the "VLClib" file first, then the "IPCamRecoder" file.

After installation, execute the IPCamRecoder software.



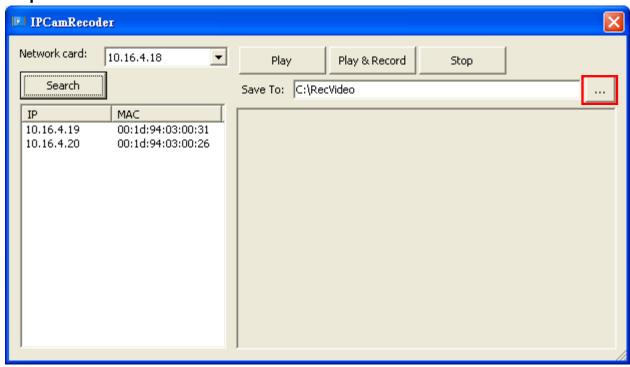
Below is a display of the IPCamRecoder window

Step 1. With the "**Search**" button, you can find the IP Camera on the local area network (LAN) much like the **Finder** application.



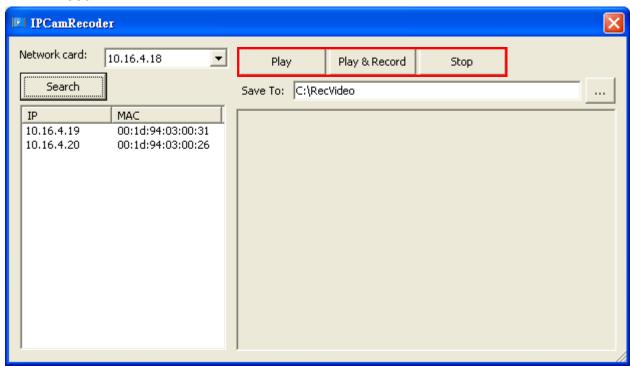
Step 2. Choose one of the IP Cameras by selecting the IP address (the proper IP address can be found on the IP Camera Homepage).

Step 3. Press the button to choose a location for the recorded file to be saved to.

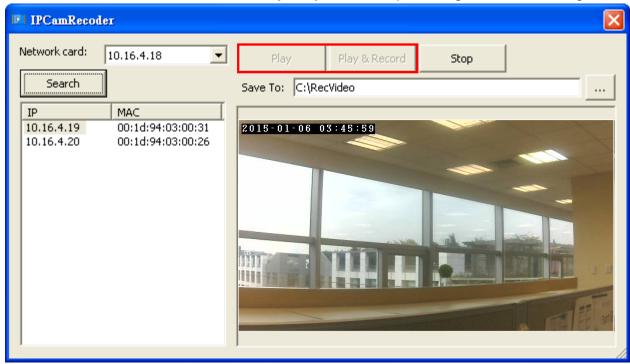


Step 4. The available options are "Play", "Play & Record" and "Stop".

- Play View the High Definition live feed on the IP Camera.
- **Play & Record** View and Record the live feed on the IP Camera. You can record videos continuously. Each video is divided into 1 hour duration unless you press "**Stop**" before the 1 hour period expires.
- **Stop** Press this button to stop viewing and/or recording the high definition live feed.



When playing and/or recording, the "Play" and "Play & Record" button will dim and are thus unable to be selected. Press "Stop" anytime to stop viewing and/or recording.



<NOTE>

The videos are directly stored into the designated location. It is advised that the videos should be checked and managed routinely to prevent overloading the storage space.

10. Remote Access to the IP Camera

There are two ways to which you can connect to the IP camera outside the premises (or outside the Local Area Network). The first is by registering the IP Camera in Climax' Home Portal Server, the other is using Port Forwarding function.

10.1. Home Portal Server

The Home Portal Server is a server established by Climax. You can learn the IP Camera into a Climax Home Security Control Panel, then register the panel in Home Portal Server to view IP Camera streaming video as part of the Home Portal Server function. Please refer to the Home Portal Server User Guide in your Control Panel's Installation CD for more information, and see 11. Connecting to Climax Control Panel.

10.2. Port Forwarding

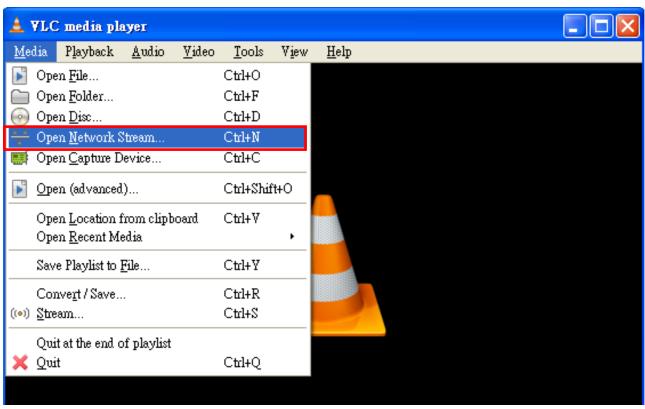
Port forwarding is the other method to view the live stream IP camera images from a remote site.

10.2.1. Application needed

You will need to have a media player that supports RTSP. For the example below, we will be using the VLC media player, as it is free and supports RTSP.

10.2.2. Open Network Stream

Step 1. On VLC media player, select "**Media**" and select "**Open Network Stream**", as shown in the following:

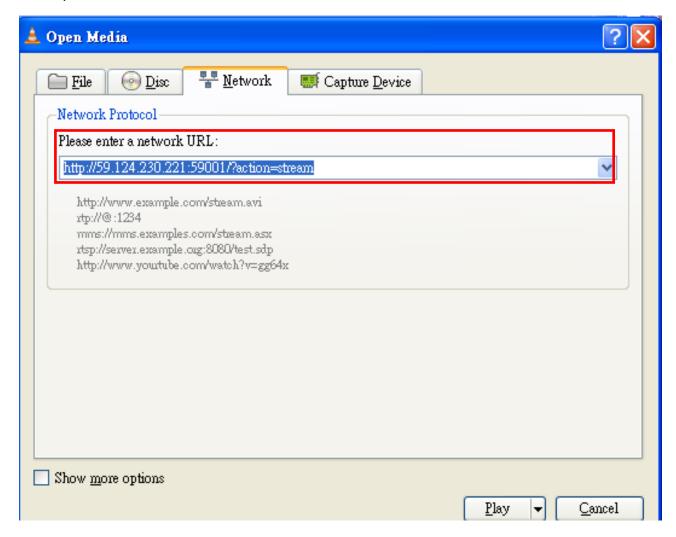


10.2.3. MJPG Stream

Step 1. Enter http://publicIPaddress:MJPGportNumber/?action=stream

For example: http://59.124.230.221:59001/?action=stream as shown in the network

URL space below:



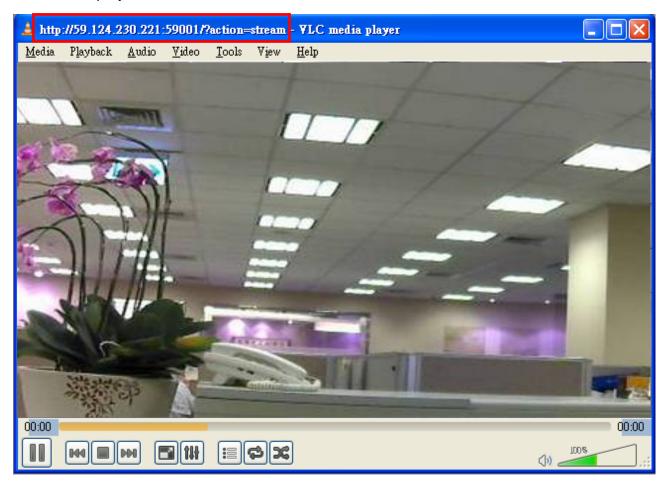
The IP entered above is the public IP obtained on the Dynamic DNS page (refer to **7**. **System Setting, 7.6. Dynamic DNS**)

The Port number above is obtained from the IP Camera Setting (Refer to Port 2 of *5. IP Camera, 5.6. Stream Setting*)

< NOTE>

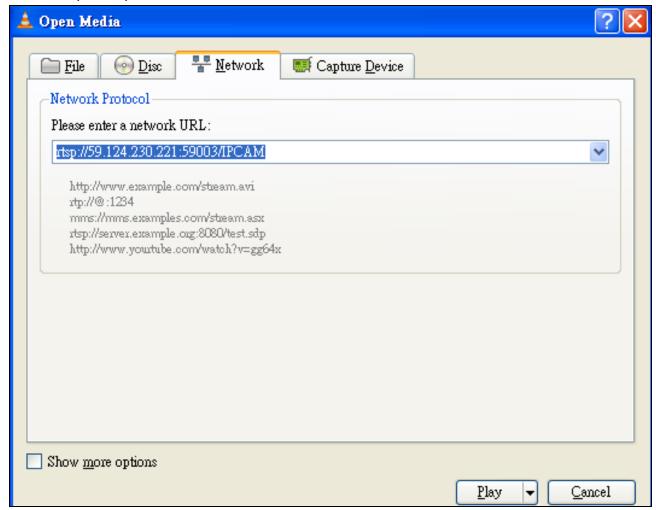
Please make sure the port used by the IP Camera is not blocked by the router.

Step 2. Click on "Play" to access the IP Camera, the VLC media player will begin to stream the video from the camera. the streaming URL will be displayed on top of the VLC media player.



10.2.4. H264 Stream

Step 1. Enter rtsp://publicIPaddress:H264PortNumber/IPCAM For example, rtsp://59.124.230.221:59003/IPCAM



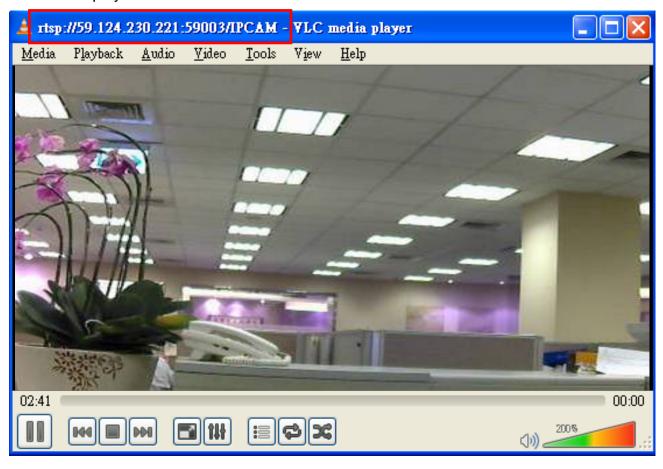
The IP entered above is the public IP obtained on the Dynamic DNS page (refer to **7**. **System Setting**, **7**.**6**. **Dynamic DNS**)

The Port number above is obtained from the IP Camera Setting (Refer to Port 1 of *5. IP Camera, 5.6. Stream Setting*)

<NOTE>

Please make sure the port used by the IP Camera is not blocked by the router.

Step 2. Click on "**Play**" to access the IP Camera, the VLC media player will begin to stream the video from the camera. the streaming URL will be displayed on top of the VLC media player.



11. Connecting to Climax Control Panels

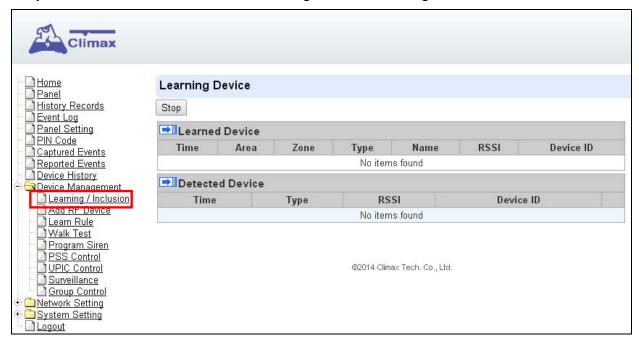
You can integrate the IP Camera into you alarm system by connecting the IP Camera to Climax Control Panels. Compatible Climax Control Panels include:

- HPGW series
- VST-2735/ VST-2752
- M-series control panels (IP compatibility required)

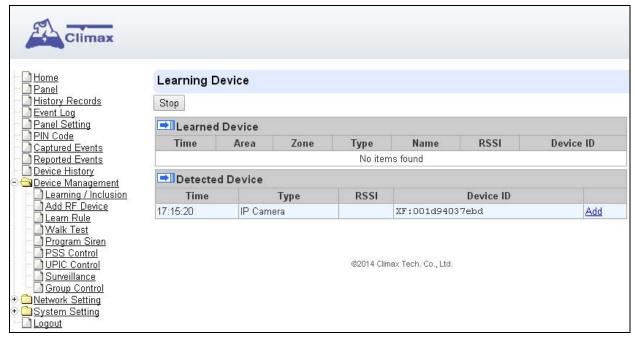
11.1. Learning the IP Camera into the Control Panels

HPGW series Control Panel

- **Step 1.** Connect VST-1818 IP Camera to the same LAN of HPGW Control Panel.
- **Step 2.** Assuming HPGW is properly installed, open its webpage.
- **Step 3.** Put the Control Panel into learning mode according to manual instruction.



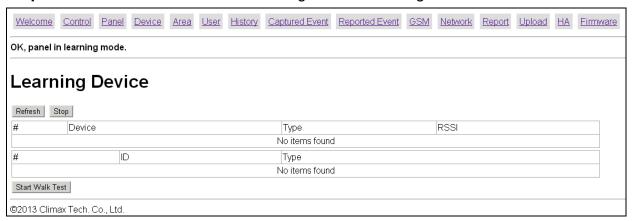
- **Step 5.** Press and hold the **Privacy Button** on the IP Camera for 10 seconds to enter learning mode. The Blue LED will start to flash.
- Step 6. If the Control Panel detects the IP Camera, please refer to the Control Panel manual on how to complete learning a device. If the IP Camera cannot be detected, make sure the IP Camera is connected to the same local area network (LAN), exit learning mode on the IP Camera (press the Privacy Button for 6 seconds) and repeat.



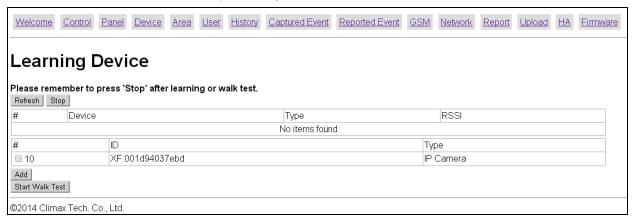
Step 7. If learning is successful, the Blue LED on the IP Camera will stop flashing and stay on.

VST-2735/2752 and M Series Control Panel

- Step 1. Connect VST-1818 IP Camera to the same LAN as the Control Panel.
- **Step 2.** Assuming the Control Panel is properly installed, open its webpage.
- **Step 3.** Put the Control Panel into learning mode according to manual instruction.



- **Step 5.** Press and hold the **Privacy Button** on the IP Camera for 10 seconds to enter the learning mode. The Blue LED will start to flash.
- **Step 6.** If the Control Panel detects the IP Camera, please refer to the Control Panel manual on how to complete learning a device. If the IP Camera cannot be detected, make sure the IP Camera is connected to the same local area network (LAN), exit learning mode on the IP Camera (press the **Privacy Button** for 6 seconds) and repeat.



Step 7. If learning is successful, the Blue LED on the IP Camera will stop flashing and stay on.

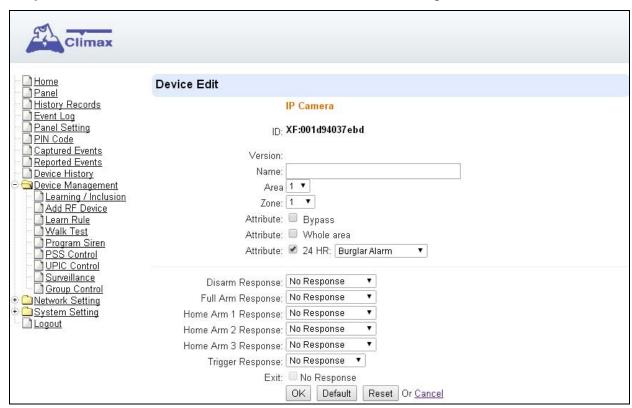
11.2. Surveillance and Setting

HPGW Series

Step 1. You can view the live stream by clicking on "Surveillance" (The small video screen is live-streaming):



Step 2. You can click on "Edit" to edit the IP Camera's setting:



Edit the name, area, zone, and select attribute settings of the IP Camera.

Whole Area:

Unselected: The IP Camera will only record video when alarm is triggered by

sensor belonging to same area as the IP Camera

<u>Selected:</u> the IP Camera will also record video when alarm is triggered by sensors belonging to different area.

- Bypass: When an IP Camera is bypassed by the panel, the Panel will not activate the IP Camera to record video when an alarm is triggered.
- No Response: If set to No Response, the IP Camera will enter Privacy Mode enter selected mode and will not provide image streaming or video recording function even when alarm is activated.
- If set to other response action such as Burglar Alarm or Start Entry, the IP Camera will provide image streaming and video recording function under selected mode.
- **Trigger Response:** The Trigger Response function is disabled for IP Camera.

VST-2735/2752 and M Series Control Panel

Step 1. You can view live-stream video through the small video window on the right.



Step 2. Clicking on "Edit" will allow you to edit settings of the IP Camera:



Attribute:

Please refer to the **Control Panel Mode and Response Table** in M-series manual for setting attributes. When an attribute's response action under certain mode is defined as "No Response", the IP Camera will enter Privacy mode during the attribute's defined "No Response" period. For other responses such as Burglar Alarm or Start Entry Time, the IP Camera will function normally.

<EXAMPLE>

If the IP Camera is set to "Perimeter" attribute, it will enter Privacy mode when the panel is under Disarm mode, and function normally under other modes.

- Bypass: When an IP Camera is bypassed by the panel, the Panel will not activate the IP Camera to record video when an alarm is triggered.
- Trigger Scene / Chime: The Trigger Scene and Chime function is disabled for IP Camera

11.3. Operation

The IP Camera will capture video in the following situation:

- 1. When the IP Camera's motion detection function is enabled, it will capture a video whenever it detects a movement.
- When an alarm is activated by the Control Panel, the IP Camera will capture a video.
- 3. When the user manually request a video through the Control Panel
 The length of captured video is determined by the IP Camera's setting. The factory
 default video length is **30** seconds, with 10 seconds of pre-alarm/activation video and 20
 seconds of post-alarm/activation video. Please refer to *5. IP Camera, 5.8. Alarm*Setting to change the default setting.

11.3.1. Video Request HPGW Series Control Panel

Under the panel's **Surveillance** webpage, you can click on "**Request Media**" to request the IP Camera to record a video.

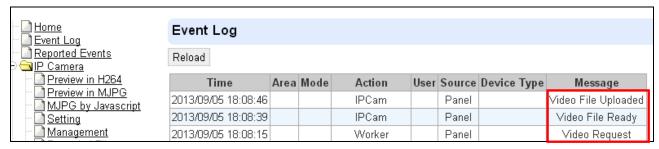


VST-2735/2752 and M Series Control Panel

Tick the box before the IP Camera then click "Request Media" to capture a video:



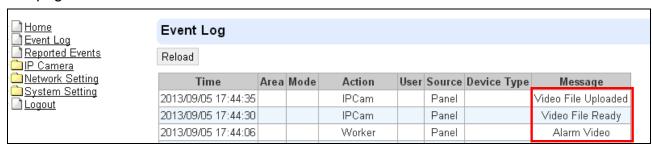
When a video is requested manually, a "Video Request" message will appear in the "Event Log" of the <u>VST-1818 IP Camera webpage</u>:



The video will be stored in the "Recorded Files" webpage.

11.3.2. Alarm Triggered Image Capture

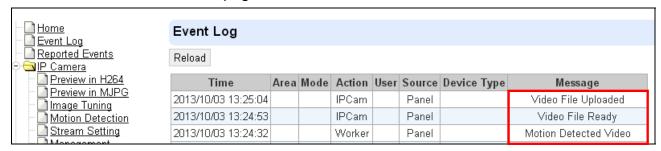
When an alarm is triggered on any Control Panel, the IP Camera will capture a video. An "Alarm Video" message will appear in the "Event Log" of the VST-1818 IP Camera webpage as shown below:



The video will be stored in the "Recorded Files" webpage.

11.3.3. Motion Detected Video

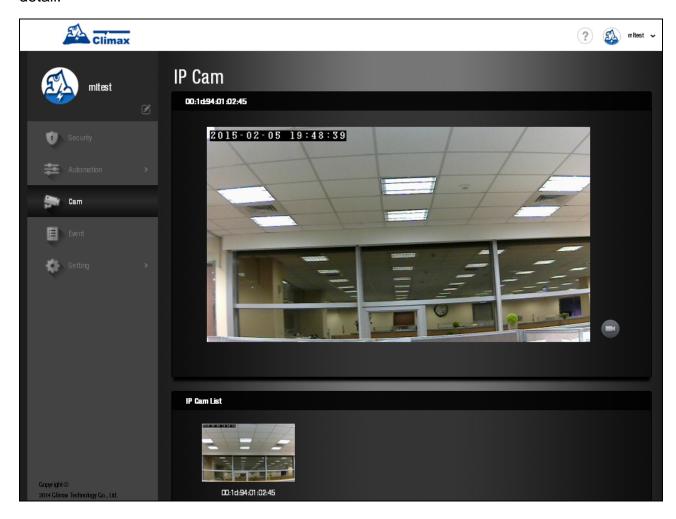
By enabling "Motion Detection Enable" and "Motion Detection Upload" (refer to *5. IP Camera, 5.4. Motion Detection*), the IP Camera will capture a video to upload upon motion detection. A "Motion Detected Video" message will appear in the "Event Log" of the VST-1818 IP Camera webpage:



The video will be stored in the "Recorded Files" webpage.

11.4. Home Portal Server

If the Control Panel is registered in the Home Portal Server and has learnt in an IP Camera, you will be able to view the streaming video by logging into the Control Panel's Home Portal Server. Please refer to the Home Portal Server operation manual for further detail.



12. Appendix

12.1. Contact ID Event Code

- 789 Region 1 Detection
 - ◆ When motion detection region 1 detects a movement.
- 788 Region 2 Detection
 - ◆ When motion detection region 2 detects a movement.

II. Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.