Granvista Plus Series

H.264 2-Megapixel Network Camera GVP-201 / GVP-201W

User's Manual



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Notices

This user manual is intended for administrators and users of the GVP-201/GVP-201W Network Camera, including instructions for using and managing the camera on your network. The use of surveillance devices may be prohibited by law in your country. It is the user's responsibility to ensure that the operation of such devices is legal before installing this unit for its intended use.

Before the Network Camera is installed, all the safety and operating instructions should be carefully read and followed to avoid damage due to faulty assembly and installation. This also ensures the product is used properly as intended.

Heed all warnings

- Do not drop or strike this equipment Sensitive electronics inside the camera are vulnerable to excessive strike.
- Do not install the equipment near any flames or heat sources Excessive heat could damage this equipment.
- Do not cover cloth or to install this equipment in poorly ventilated places. Overheating could damage this equipment.
- Do not expose this equipment to rain or moisture. Do not touch the power connection with wet hands

Risk of short circuit, electric shock or fire

- Do not damage the power cord or leave it under pressure Risk of fire or shock circuit
- To reduce the risk of electric shock, do not remove the Cover (or Back). No user-serviceable parts inside. Misusage, improper, and negligence could damage this equipment. Need to refer servicing to qualified service personnel.
- Do not continue to operate if it appears to be faulted.

If the unit ceases functioning, contact qualified service personnel for help.

- Any works related to detailed service or repair of this product should be made by qualified personnel only.
- We strongly recommend to use the metal mounting stand, and to screw the bracket/spacer tight for optimal heat dissipation.



Introduction

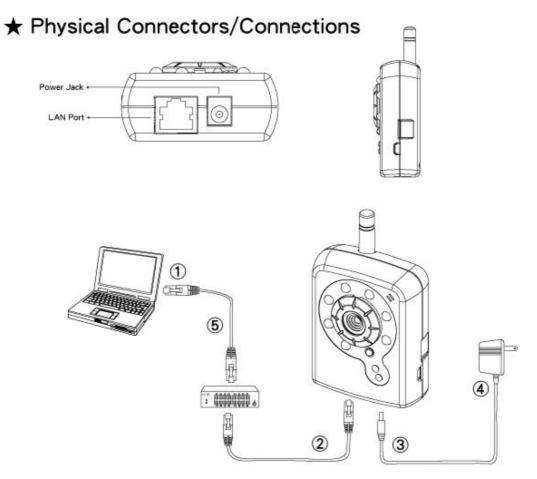
Both GVP-201 and GVP-201W are of compact and high resolution (1600x1200) Network Cameras featured with superior H.264-AVC performance and multiple functions. They are perfect for indoor applications such as factories, retailer stores, residence, restaurants, hotels, schools and pre-schools, caring centers, etc.

GVP-201's H.264-AVC video compression has significantly lowered down the requirements for bandwidth and storage size without compromising image quality. Motion JPEG and multiple independent video streaming are also supported for even better flexibility.

The camera offers wired Ethernet connection to the network and optional wireless connectivity (IEEE802.11b/g) for flexible installations. It includes 7 IR LEDs for illuminating the scene automatically or when requested by the user. Further functions include two-way audio with integrated high-sensitivity microphone and audio output, Micro SD card support and digital PTZ (4X) to focus any location you would like to highlight in the image.

Installation

1. Hardware Connection



- 1) Prepare a PC with Ethernet link to the network
- 2 Connect LAN Port (RJ45) of the camera to a Network Switch/Hub.
- ③ Connect power jack.
- ④ Ensure the power adapter specification matches the power system Connect the adapter to the outlet.
- (5) Check LED status. (Power/Network)

2. Software Installation

The following software is necessary for the proper display and use of the camera from the Web site. The software will be taken from the Software Package CD.

IP Installer

The IP Installer is used to locate and configure Network Cameras and video servers on the LAN. This utility is useful for conveniently configuring the network settings of the device, or for finding a device once the network settings have been modified.

To install the IP Installer, from the Software Package CD UI, select IPInstaller, and then follow the on screen instructions.

<u>VLC</u>

Though not necessary, this can be used for viewing the streaming without a Web browser. Besides, the VLC may be helpful in reviewing the recorded video files in the Micro SD card. Please refer to the appendix II & III for more details on how to install and use the VLC program.

Network Configuration

IPInstaller is a utility that provides an easier, more efficient way to configure the IP address and network settings of the devices. It even provides a convenient way to set the network settings for multiple devices simultaneously using the batch setting function. Moreover, IP Installer can save the network settings for all devices as a backup and restore them when necessary. IPInstaller is able to help non-professional users to quickly setup their network cameras to work in a professional manner.

Preparation before IP Assignment

- 1. Always consult your network administrator before assigning an IP address to your server in order to avoid using a previously assigned IP address.
- 2. Ensure the device is powered on and correctly connected to the network. This network can be simply a hub, PC and the network camera; and the network camera may directly connect to the PC too.
- 3. MAC Address: Each device has a unique Ethernet address (MAC address) shown on the label of the device as the serial number (S/N) with 12 digits (e.g. 000429-XXXXX).



4. Although the IPInstaller is able to find and configure any Network Cameras in the LAN except those that are behind a router, it is a good idea to set the host PC to the same subnet. In order to connect to the Web-based user interface of the camera, the host PC must be in the same subnet. For more information

about subnets, please consult your network administrator.

Using IPInstaller to Assign an IP Address to GVP-201 / GVP-201W

1. Once IP Installer has been successfully installed on the PC, double click the IPInstaller icon on the desktop, or select it from Start > Programs > IP Installer > Launch IP Installer.

IPInstaller	Q IPInstaller5.0.0

2. Click the "Device Search" tool bar and search the device in the LAN.

QI	PInstaller V5.0.0)		-		Cli	ck her	~		_ 🗆 ×
				Devi	ce Search		ckner	e		
	Model Name	IP Address	MACAddress	Firmware	SubnetMask	Gateway	DNS1	DNS2	DNS3	Http Port
► 1	GVP-201	192.168.1.008	00-04-29-09-7a-01	2.0.7_428_longvast	255.255.255.0	192.168.1.1	168.95.1.1	168.95.1.1	168.95.1.1	80
Tet	al 1 Devices									
101	al 1 Devices									

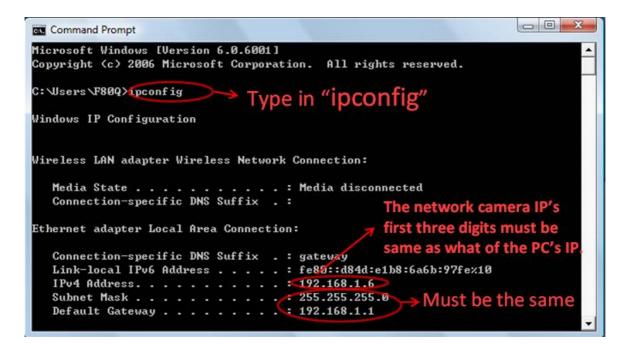
Please note that he firewalls of your Windows or Anti-virus software might block IPInstaller from searching the cameras. In this case you would need to unblock IPInstaller software from the firewalls, or to manually make this IPInstaller software an exception to the firewalls.

- 3. From the list, select the device with the MAC Address that corresponds to the device which is to be configured. The MAC Address is identical to the unit's S/N (Serial Number).
- 4. Select the "Single Device Setting" item to open the Property Page for the selected device.

				Devi	ce Search					
	Model Name	IP Address	MACAddress	Firmware	SubnetMask	Gateway	DNS1	DNS2	DNS3	Http Port
1	GVP-201	192.168.1.008	00-04-29-09-7a-01	Device Sear	ch	192.168.1.1	168.95.1.1	168.95.1.1	168.95.1.1	80
				Batch Device	e Setting					
				Single Devic	e Setting					
				Open web						
				Language						

5. After filling in the properties, click [Set] button to complete the configuration settings in the remote device.

)evice Setting	00-04-29-07-27-01	Set
MACAddress	00-04-29-07-27-01	
Firmware	2.0.8_588_gvp	Cancel
roperty		
IP Address	192.168.1.188	
SubnetMask	255.255.255.0	
Gateway	192.168.1.1	
Http Port	92	
DNS1	168.95.1.1	
DNS2	61 . 31 . 1 . 1	
DNS3	61 . 31 . 233 . 1	
Certification		
🔲 Use Custor	n	
Username	admin	
Password	*****	



Example about how to know the user's PC and network information from command prompt. Simply type in "**ipconfig**" in the Command Prompt screen, press Enter, and you will see the related information which shows you the PC's IP, Subnet Mask, Default Gateway, etc.

The first three digits of the network camera's IP must be same as the first three digits of the PC's IP address. In the above example the PC's IP address is 192.168.1.6., and we have set the camera's IP to be 192.168.1.188..

Open the Web-based UI of the Selected camera

- 1. To access the Web-based user interface of the selected unit by selecting "Open web" from the slide-bar.
- 2. If the device has been configured correctly, the default Web browser, the Internet Explorer, will open to the home page of the selected device.
- 3. If you find your browser is opened and automatically connected to the camera Home Page, it means you've assigned an IP Address to the unit successfully. Now you can close the IP Installer and start to use your camera.
- 4. Usually the users no longer need to run the IPInstaller software again after configuring the cameras correctly.

QIPInsta	aller V5.0.0									_ 🗆 🗙
				Devi	ce Search					
Mod	del Name	IP Address	MACAddress	Firmware	SubnetMask	Gateway	DNS1	DNS2	DNS3	Http Port
▶ 1 GVP	~201	192.168.1.008	Device Search	2.0.7 478 longvast	255,255,255,0	192.168.1.1	168.95.1.1	168.95.1.1	168.95.1.1	80
			Batch Device S Single Device S							
			Open web							
			Language	•						
Total 1	Devices									

Verify and Complete the Installation from Your Browser

If not able to get the ActiveX downloaded properly, user must temporarily lower the security settings to perform a one-time-only installation of the ActiveX component onto the workstation, as described below:

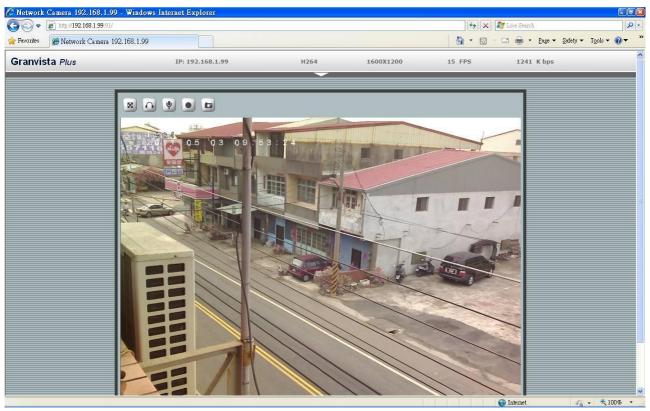
- From the Tools menu, select [Internet Options] -> [Security] -> [Custom Level]
- Set the security level to Low and click [OK].
- Depends on different versions of browser software used, the users may have to set the individual ActiveX settings from "Disable" to "Prompt" or "Enable" if necessary for completing the ActiveX program downloads.
- Restore the security level after the ActiveX installation.

Do you v	vant to run this ActiveX control?		
Nan	ne: PControl ActiveX Control		
Publish	er: Longvast International Co., Lt	d.	
		Run	Don't Run
۲	This ActiveX control was previou: another program, or when Windo trust the publisher and the webs	ows was installed. You sh	ould only run it if you

Using the Web UI

Start your Web browser and enter the URL or IP address in the Address field. The Home page of the

camera is now displayed.



How to make the Mozilla Firefox properly work with the cameras?

Please note that in addition to Microsoft Internet Explorer, Mozilla Firefox browser is also compatible for viewing the screens from Granvista Plus network cameras.

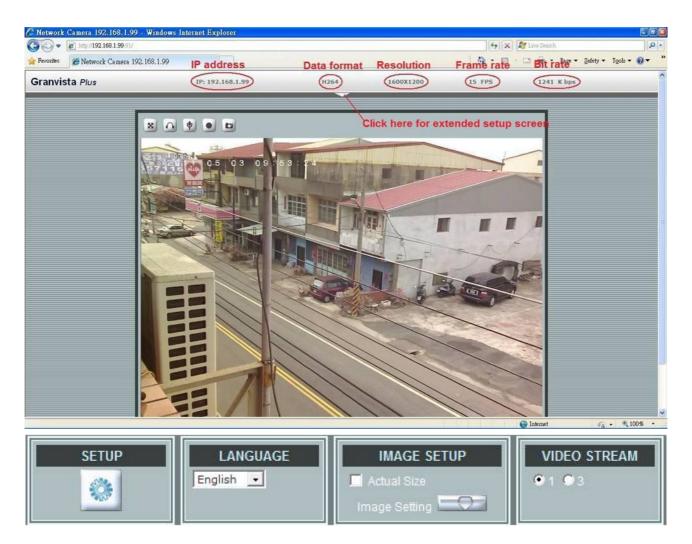
Similar to Internet Explorer which needs to download the needed ActiveX programs, the Firefox browser will guide the users to download and install the VLC program for the needed plug-in the first time when it connects to the network cameras, so that it can work properly.

In the process of installing the VLC program, please be sure to check the "Mozilla plugin" option, so that Firefox may work properly with the network cameras.

The VLC program is a very handy shareware that the users will find it helpful when they want to replay the ".mp4" video clips recorded by the cameras. Actually the users may use its streaming function for viewing the camera's rea-ltime screen directly too. Please refer to the "Video/Advanced" introduction for more details.

VLC media player Choose Components Choose which features of VL	C media player 1.1.7 you want to install.	A
Check the components you v install. Click Next to continue	vant to install and uncheck the components you d	lon't want to
Select the type of install:	Full	~
Or, select the optional components you wish to install:	Media Player (required) Start Menu Shortcut Desktop Shortcut	
L	Mozilla plugin ActiveX plugin Discs Playback	~
Space required: 78.7MB	The VLC ActiveX plugin	
deoLAN VLC media player		
	< <u>B</u> ack <u>N</u> ext >	Cancel

1. Live View



Button	Description
SETUP	Click for more general/advanced camera settings
LANGUAGE English	Select languages among English, traditional Chinese and simplified Chinese
IMAGE SETUP Actual Size Image Setting	Check actual size to view the actual size (resolution) of the image Image Setting: To adjust the brightness, hue and saturation
VIDEO STREAM ⊙ 1 ⊙ 2 ⊙ 3	Choose among the 3 streams for viewing. Due to bandwidth constraints the users may want to choose its 2nd or 3rd video streams which are 640x480 and 320x240 respectively. The 2nd stream supports digital PTZ function which users should find it helpful.



Button	Description
8	Full screen
	Listen the audio input from site
Ŷ	Talk function. An external speaker need to connect to its audio jack for audio output
	Record instant live video
	Snapshot the image

Further configurations and options; a prominent button in between is used to expand the further operations.

IP: 192.168.1.13	H264	1600X1200	15 FPS
	\odot		

IP: 192.168.1.13 H264 1600X1200 18 FPS

Click on the indicated prominent, and more operational options shows up.

2. Video

General

General		Advanced				
Video General Setting						
🗹 Enable Stream 1						
🗹 Enable Stream 2						
Enabled Digital PT2	!					
🗹 Enable Stream 3						
OSD Setting						
🗹 Enable						
🗹 Camera Name:	CH1	(20 character max)				
🗹 Date/Time						

Video General Setting: Check each box to enable needed streams (max 3) for live viewing

Note: Digital PTZ is only available with stream 2. Please select the required video streams only, so that the system can be running at best performance.

OSD Setting: Enable OSD (Over-Screen-Display) to display camera name or date/time on the image, the camera name must be a continual string, for instance "LivingRoom". This OSD setting may be set from the NVR too if any Granvista Plus series NVR has linked to this network camera.

<u>Advanced</u>

Gen	eral		Advanced	
Stream 1 Setting				
RTSP Path:	v00	Image Format:	H.264 💌	
Resolution:	1600 × 1200 💌	GOP:	15 (2~32)	
Video Mode:	VBR 💌	Frame Rates:	15 (5~ <mark>15</mark> FPS	5)
Quality Level:	Best 💌			
Stream 2 Setting				
RTSP Path:	v01	Image Format:	H.264 💌	
Resolution:	640 × 480 💌	GOP:	30 (2~32)	
Video Mode:	CBR 💌	Frame Rates:	15 (5~ <mark>15</mark> FPs	5)
Target Bit Rates:	1000 (64~6000 P	(Ь)		
Stream 3 Setting				
RTSP Path:	v02	Image Format:	H.264 💌	
Resolution:	320×240	GOPI	30	
Video Mode:	CBR	Frame Rates:	15 (5~ <mark>15</mark> FPS	5)
Quality Level:	Best			

RTSP Path -

The RTSP(Real Time Streaming Protocol)Path is the stream ID used for RTSP client's streaming connection, such as VLC player. The default values are **v00**, **v01** and **v02** for the three streams respectively. The string can be any combination of number or capital/small letters. It can not be empty however.

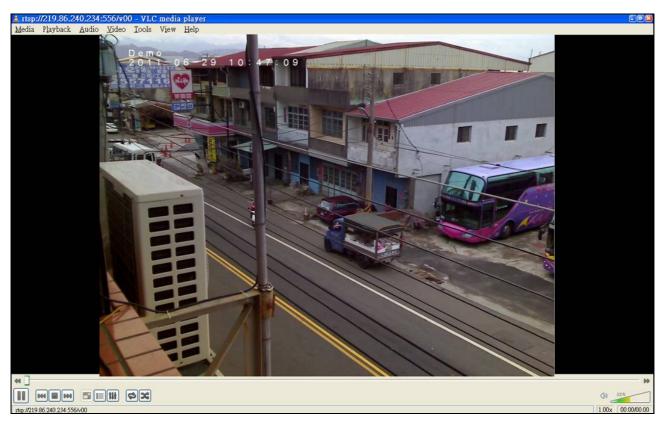
Following is a setting example of RTSP steaming by using VLC program. (The users may access this setup screen from VLC program's Media/Streaming.../Network).

Open Media			C
🗎 File 🛛 💮 Disc	<u>N</u> etwork	E Capture <u>D</u> evice	
Network Protocol			
Please enter a network	«URL:		
rtsp://192.168.1.99:5	56/v00		
http://www.example stp://@.1234 mms://mms.example stsp://server.example http://www.youtube	es.com/stream.asx e.org:8080/test.sdp	x	
Show <u>m</u> ore options			

Note: the "port number" of 556 in the example is its RSTP port number which the user has defined for this camera (default value is 554). This port number must be routed in the network router properly if the user likes to receive the video streaming from the web. In other words, if the user likes to use the external web address of https://219.86.240.234:556/v00 in stead of the LAN address of https://192.168.1.99:556/v00.

Virtual Server						
Setting up	Virtual Servers allows remote u	users to access services su	ch as Web or FTP	on the LAN via public I	^o Addresses.	
No.	Private IP	Private Port	Туре	Public Port	Comment	Enabled
1.	192.168.1.99	91	Both Y	91	GVP-201	V
2. <	192.168.1.99	556	Both 💌	556	GVP-201	V

The above is a setup screen example of an Internet broadband router. In this example the port 90 is for WWW, and the port 556 is for RTSP. These two port numbers must be same as what configured in the camera's Network/Advanced settings.



Note: the users may right-click and choose VLC program's "Full Screen" mode too.

Resolution -

The resolution here describes an image size counted by width and height, e.g. 640x480, referring to **pixel resolution**. The 1st stream can be set from more options of resolution; 1600x1200 (2 megapixels), 1280x720(HD), 800x600(SVGA), 640x480(VGA), 320x240(QVGA). While Stream2 has the options of VGA and QVGA, stream3 is in a fixed resolution, the QVGA. The users need to decide which resolution and frame rate options to be selected according to the requirements and practical constraints from the bandwidth and storage available.

Video Mode -

This option allows the selection of two bit-rate modes, the Constant Bit Rate (CBR) or Variable Bit Rate (VBR). CBR refers to the setting of a fixed **Target Bit Rate** (configuration in the range of 64Kbps to 6Mbps) that would apply in the case of limited bandwidth or/and storage requirement. While CBR concerns a fixed data rate transmitting, the video quality setting is of high priority for VBR mode selected. VBR therefore is configured with the **Quality Level** (Standard, Good, Best). In general, CBR predicts the provided condition; if image activity requires higher bit rates than configured, the frame rate and quality would be affected as not likely to increase bandwidth (bit rate). In spite of the required recording storage estimation, VBR is by way of compensation that adjustable bit rate fits the actual image activity.

Image Format -

H.264 and MJPEG are available for image format selection. The term, "image format", is referring to compression / encoding technique. The selection of image format decides the performance of bandwidth and

storage requirement. In the request of same video quality, H.264 contributes to less bandwidth and storage requirement, which is much more efficient than MJPEG. Therefore it is usually a better selection to select H.264 format if there is no particular reason for MJPEG.

GOP -

In MPEG4/H.264 video coding, GOP (group of pictures) describes how the different types of frames are arranged. The frame types implemented here are I-frame (full image information) and **P**-frame (motion-compensated difference information). This setting configures the **GOP length** which is the number of frames before next I-frame appears. Having more I-frames usually increases the stream size, and therefore more bandwidth and storage are required.

Frame Rates -

The Frame Rates defines the number of frames that will be displayed per second. The frame rate setting can affect the target bit rate (bandwidth requirement) and storage requirement.

Note:

While multiple streaming is possible, each stream has its limitation and dependency to other stream. See "Video Stream Specification".

3. Camera

<u>General</u>



none and an an	
Save Path:	
D:\temp\	
File Name:	
video	
	Browse
Web Snapshot Image Setting	
Save Path:	
D:\temp\	
File Name:	
snap	
	Browse
Default	Save

Camera General Setting:

Brightness: the luminance of image view

Hue: refer to pure a pure color, or described by its name, such as red, green or blue.

Saturation: intensity of a specific color

The 3 correlates are referring image appearance in terms of color/vision. These are adjustable from this page.

Rotation 180 degree: rotate the image, so it looks up-side down. This can be applied when camera unit must be mounted up-side down.

Image Mirror Horizontal: to select for horizontally flipped image if necessary.

Audio Setting:

Enable this option, so the video stream will be transferring together with the audio data. There are two types of formats of AAC and G711. AAC takes less bandwidth, while its quality is fairly good already, but the users may still want to choose G711 if they want even better audio quality, and if there is no bandwidth and storage size concern.

AAC format must be selected if the users want audio to be recorded together with the video in Schedule or snapped web recording.

In case there is a Granvista Plus series NVR (network video recorder) available in the network for recording, the NVR will set G711 as its audio default.

Web Record/Snapshot Setting:

Web Record / Snapshot: define the locations where snapshot images and video clips will be stored. The file name is referring to the prefix of the file name of each snapshot image or video clip generated. These two settings' are saved in the Web Browser such as Internet Explorer, thus the settings will be reset if you reset the Web Browser software. Users may find it an easy cure to set it up in Windows's Safe Mode when they encounter problem with Vista platform which is stricter and more complicated in security settings than other platforms.

As to the "Web Recording Setting", if you have chosen D:\TEMP as the path and "video" as the file name prefix then the generated files will be saved into the D:\TEMP directory, and their file names will be in the format of "video" plus time tags, such as "video_20110102_121313_770". The "Web Snapshot Image Setting" is configured in the same way.

Default:

Set [camera general setting] and [audio setting] back to default

Note: As mentioned above, this Default command will not change the configuration of [Web Record Setting] and [web Snapshot Image Setting]

Save:

Save the changes which have been made

<u>Advanced</u>

General			Adva	nced	
Camera Advanced Setting:					
Camera Advanced Setting: White balance:	Auto				
White balance:	Auto	Free 60 Hz	I		
White balance: Exposure:	Auto	-free 60 Hz	I		
12	Auto Flicker	-free 60 Hz	Image: Second		
White balance: Exposure: Max Exposure Time:	Auto Flicker	-free 60 Hz			
White balance: Exposure: Max Exposure Time: Max Gain Control:	Auto Flicker 1/15	-free 60 Hz 🕯 s dB			

White balance: Adjustment to compensate for different environments in terms of light source.

Exposure: Anti-flicker setting for image sensor to fit the frequency of light (power) source. For instance, the power frequency is 50Hz for most European countries, while 60Hz is typically for US. This setting is therefore regionally different. **Note: Default setting is 50Hz**

Max Exposure Time: Referring to the shutter speed. It is recommended to set to slower shutter speed such as 1/15 second in case dark environment with IR illumination is inevitable.

Max Gain Control: The amplification factor for the incoming light. Similar to the photographic theories, in

case of environment of dim light, increase it for optimal result if necessary. On the contrary, turn it down for environments of stronger light if necessary.

Illuminator LEDs: The default is automatically switched according to site illumination. LED will turn on when there is light deficiency.

Status LED: Turn on/off the camera status LED. You may want to purposely turn it off if you do not want people to tell whether it is operational or not.

Back Light Compensation: Option for automatically making compensation for back light.

4. Event

Event handling describes the configurations of events and the corresponding actions. To have an insight into this function, a common example can be storing the captured images or video clips to Micro SD card (up to 32GB in storage size), a remote disk in LAN (SAMBA), FTP server or Email account (images only), when there is an Event (motion or periodic triggering).

Event Server		Motion Detection			Event Configuration		
Event Serve	er List						
Name	Protocol	Network Ad	ldress Uploa	d Path	User Name		
FTPServer	FTP	192.168.1.	10		ipcam		
AddFTP	Remove]					

Event Server

The "Event Server List" lists the configured server(s) that will act as a remote storage or a destination for handling the triggered events. Up to 10 FTP servers can be added in the list.

FTP Server		
Name:	NewFTPServer	
Network Address:		
Upload Path:		
Port:	21	
Login Information		
User Name:	Guest	
Password:		

Click on the [Add FTP] to expand FTP server setting

FTP Server:

- > Name: Give a name for the FTP server.
- Network Address: Input the network address of the FTP server, which can be located in LAN or external web, for instance "192.168.1.100" or "219.86.240.234" respectively. Please note that such WEB IP such as "219.86.240.234" can be applicable only when the network is connected to Internet, and it is properly configured in the broadband router.
- Upload Path: Choose the desired upload path for events. If not specifically defined, it will be the default folder configured in the FTP system.
- > Port: Input the port number of the FTP server, typically 21.

Remarks: FTP is quite a convenient web application, and it is quite easy to use. Attached below is an example of FTP screen indicates that a Network Camera keeps on talking to the FTP server. In this example the FTP server address can be set as either 192.168.1.3 (LAN) or 219.86.240.234 (WEB) from near end.

Z FileZilla server				
<u>Eile Server Edit 2</u>				
🗲 🔒 🕵 🕰 💡 🛛 /C/ C/ 🎫 -				
FileZilla Server version 0.9.4d beta				1
Copyright 2001 by Tim Kosse (Tim.Kosse@gmx.de)				
Connecting to server				
Connected, waiting for authentication				
Logged on				
(000003) 2011/1/11 下午 15:08:32 - (not logged in) (219.86.240.234)> 4:	21 Login time exceeded. Closing control connection.			
(000003) 2011/1/11 下午 15:08:32 - (not logged in) (219.86.240.234)> d:	sconnected.			
(000004) 2011/1/11 下午 15:08:56 - (not logged in) (219.86.240.234)> C	onnected, sending welcome message			
(000004) 2011/1/11 下午 15:08:56 - (not logged in) (219.86.240.234)> 2:	20-FileZilla Server version 0.9.4d beta			
(000004) 2011/1/11 下午 15:08:56 - (not logged in) (219.86.240.234)> 2	20-written by Tim Kosse (Tim.Kosse@gmx.de)			
(000004) 2011/1/11 下午 15:08:56 - (not logged in) (219.86.240.234)> 2	20 Please visit http://sourceforge.net/projects/filezilla/			
(000004) 2011/1/11 下午 15:08:57 - (not logged in) (219.86.240.234)> U	SER home-1			
(000004) 2011/1/11 下午 15:08:57 - (not logged in) (219.86.240.234)> 3.	31 Password required for home-1			
(000004) 2011/1/11 下午 15:08:58 - (not logged in) (219.86.240.234)> Pa	***********			
(000004) 2011/1/11 下午 15:08:58 - (not logged in) (219.86.240.234)> 5.	O Login or password incorrect!			
(000004) 2011/1/11 下午 15:09:12 - (not logged in) (219.86.240.234)> T	YPE I			
(000004) 2011/1/11 下午 15:09:12 - (not logged in) (219.86.240.234)> 5.	30 Please log in with USER and PASS first.			
ID / Account IP	Transfer	Progress	Speed	
->•000004 (not logged in) 219.86.240.234				-
Ready	37 bytes rec	eived 0 B/s 315 byt	es sent 0 B/s	@ @

Login Information:

> Username / Password: Input the username and password of the FTP

Event 9	5erver	Motion D	Detection	Eve	nt Configurat	ion
Event Serv	ver List					
Name	Proto	col Network A	ddress Uplo	ad Path V	ser Name	
FTPServer	FTP	192.168.1	.10	iı	ocam	
AddFTP (Note: The m FTP Serve Name: Name:	aximum numbe e r	ve er of event servers i FTPSer 192.16	ver			
(Note: The m FTP Serve Name:	aximum numbe e r dress:	er of event servers i FTPSer	ver			
(Note: The m FTP Serve Name: Network Ad	aximum numbe e r dress:	er of event servers i FTPSer	ver			
(Note: The m FTP Serve Name: Network Ad Upload Pat	aximum numbe e r dress: h:	er of event servers i FTPSer 192.16	ver			
(Note: The m FTP Serve Name: Network Ad Upload Pat Port:	aximum numbe er dress: h: prmation	er of event servers i FTPSer 192.16	ver			

Click [Remove] to delete selected event servers

Please refer to Appendix-I for more information on FPT applications.

Motion Detection

A snapshot image shows the whole view of the camera covered. To select a motion detection area, click directly on the image, and then change the size and position by dragging and drawing. Up to 10 motion areas (configurations) can be added in the list. Each detection area can be set with its own sensitivity value.

Live View	Video	Camera	Event	Schedule	Network	System	Customize
Eve	nt Server		Motion De	etection		vent Configuratio	n
Motion	Detection L	itat		terresh	ing in		
seat		ane					
bAA	Del						

Trigger Level :	 ↓ 19
Sensitivity :	
	(Sensitivity value:0~100[low~High])
Color:	# FF0000
View All Windows	
O View Selected Window	

Event Configuration

LYCIIC	Server		Motion D	etection	Ever	nt Configurat	ion
Event Re	cord File						
File Format	t: 💿 JPI	ед 🔘 н2	64				
Event Ty	pe List						
Name		Status	Enable	Trigger	Actions		
image-tr:	igg	Inactive	Yes	Motion Det.	Du		

The Event Configuration is to assign the actions responding to the specified events (Trigger Conditions).

The table lists the configured events. Click on "**Add...**" or choose an event from the list to extend the panel for detail configurations. "**Remove**" is to delete a selected event.

A total of up to 10 event settings with different combinations of motion detections, or automatic triggering based on every period of time can be configured into the system.

Live View Video	Camera	Event	Schedule	Network	System	Customize
Event Serve	a	Motion D	etection	Eve	nt Configurat	ion
			Select	JPEG	for ph	noto
Event Record I	File	-	images		an and the second	1.25
File Format:	JPEG 🔘 H2	64	video c	a sheet		
Event Type Lis	t			in pro-		
Name	Status	Enable	Trigger	Actions	8	
image H264	Active Active	Yes Yes	Motion Det. Motion Det.	Du Du		
Add Rer (Note: The maxii Fu=FTP Upload, Tn=TCP Notificatio Event Type Se Name:	move mum number Eu=Email Uplo	of events is	for ne:	um tir xt trigg	ne allo gering	wed
Set min time be Respond to Trig	ger	_	:00 (n	nax 23:59:5	9)	
Alwaye	Enable. Disable					
Trigger by		J-Th	ne event	s can	be	
When Tric Motio	on Detection) co	nfigured	to be	e trigge	ered by
Upload Ima		m	otion de	tectior	n, or	
Send Email	Notification		Itomatic		1.1	ased
			<mark>r every p</mark> _{Save}	and the second se	1 1000	

Trigger types (conditions)

Motion Detection: The configured detection area(s) for motion events.

Name:	MotionDetection
Set min time between triggers:	00:00:00 (pex 23:59:59)
Respond to Trigger Always Never Trigger by In Window Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never Never	The time lapse of periodic triggering can be one minute up to 23:59:59.
When Triggered Upload Images Select Upload type: Send Email Notification be set out ultaneously.	Save

When triggering action activated

Store image to FTP (Remote), Email or SD card (Local)

Time Lapse of Events

Events may come frequently, for instance, a moving object may keep triggering in a detection area, and false alarms may therefore occur. The "**minimum time between triggers**" setting is then for this case. System waits for the given time before the next trigger taken.

Period: To be triggered every preset period of time. The time lapse of periodic triggering can be one minute up to 23:59:59.

Name:	The time lapse of
Respond to Trigger	periodic triggering ca
Always	be one minute up to
ONever	_23:59:59.
Trigger by Period 💉	_
Time Lapse: 00:01:00	(00:01:00 ~ 23:59:59)
When Triggered	
🗹 Upload Images	Storage medias
Select Upload type:	can flexibly be
Send Email Notification	FTP) FTP, Email or
email notification	Email Disk Disk
be set out	\bigcirc

Note: there is another manual trigger functionality available from clicking trigger button embedded on the web main page.

Grantvista Plus	IP: 192.168.1.188	H264	1600X1200	13 FPS	2339 K bps
		Click to ma	anually trigge	r an image	

H.264 mode triggered recording:

.

Not only for triggering images of jpg format, the camera allows users to trigger video clips of H.264 format with pre-defined time lengths of 15, 30 45 or 60 seconds.

This H264 video clip triggering function provides another option in addition to Schedule recording function at pre-defined data size.

Please note that the video clips generated may be sent to SD card, FTP or Email, but due to actual constraints from the availability of the needed network resources and its bandwidth, the FTP and Email options may not work as expected

Event Serv	er	Motion D	etection	Ever	nt Configurat	ion
			/		-	
Event Record	File					
File Format: 🔘) JPEG 💿 H2	:64				
Event Type Li	st					
Name	Status	Enable	Trigger	Actions		
triggered-r	. Inactive	Yes	Motion Det.	Du		
	move					
Add Re						

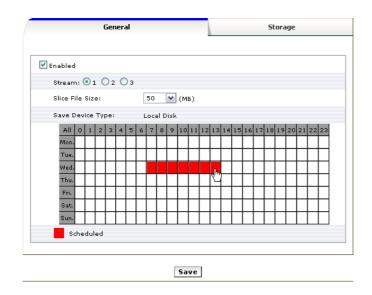
Name:	triggered-record	ling
Set min time between triggers:	00:00:05	(max 23:59:59)
Respond to Trigger		
Always		
O Never		
Trigger by Motion Detection 💌		
In Window motiondetection	*	
When Triggered		
🗹 Upload Images		
Select Upload type:	Disk 💌	
Base File Name:	image	
Recording Length:	15 💌 second(s)
Send Email Notification	15 30 45	
	60	

5. Schedule

GVP-201/GVP-201W series models are equipped with a card slot for Micro-SD/SDHC storage. This storage is applied for local video and image recording. The recording function can be launched according to scheduled time frames. The SD card also records the JPEG images responding to an event. The size of Micro SD card can be up to **32GB**, preferably be at least **Class-4 or even faster grades**.

General

Define the day (specified by days of a week) and time (specified by each single hour) for that the video, or even the audio, will be recorded during the scheduled period. User can select which video stream should be recorded, and the size of each sliced file. When the check box is ticked, recording process starts at the scheduled hours (red blocks).



Storage

Display the storage information, includes disk size info, type and status. The warning message (red text) shows when recording is in process; SD card should not be removed during the recording process.

Gene	ral		St	orage	
Disk Status					
Model Name:	/dev/mmcblk0p1				
Total Size:	1929024 KB				
Used Size:	1788864 KB				
Free Size:	140160 KB				
Disk Type:	SD				
Disk Status:	recording				
Refresh	Browse	Remove	Event Image		

The "**Browse**" button allows viewing the list of recorded files. The web page will then be redirect to the root path of the SD storage (if one is inserted). The list includes couple of folders, the **event_images** which contains all the still images captured by any event trigger, and **folders specified by date** where the recorded video files are located.

💽 🗢 🙋 http://192.168.1	1.100.78/			✓ + ₁
le <u>E</u> dit <u>V</u> iew Favo	rites <u>T</u> ools <u>H</u> elp			
Favorites 🛛 😸 🕶 🏉 Net v	vork Camera 1 × 🔧 Googl	le		🔂 • 6
ndex of /SD)/			
Name	Last modified	Size	Description	
Name Parent Directory	Last modified	Size	Description	
	Last modified 16-Jun-2011 14:55	<u>Size</u> 8K	Description	
Parent Directory			Description	
Parent Directory	 16-Jun-2011 14:55	8K	Description	

Mbedthis Appweb 2.4.2 at Port 78

The recorded video files are named in date_time format, and the extension file name is ".mp4". The recorded files can be re-played with VLC or other application programs. Please note that AAC audio format needs to be selected if audio needs to be recorded into the files as well, and the recorded files will be in MP4 format. If the users have selected G711 as the audio format, video won't be recorded into the files to save the file spaces, and the recorded files will have the extension file name of H264. The Granvista Plus series NVRs all have much storage spaces which are able to record superior audio into the files thus the NVR will set G711 audio format as default.

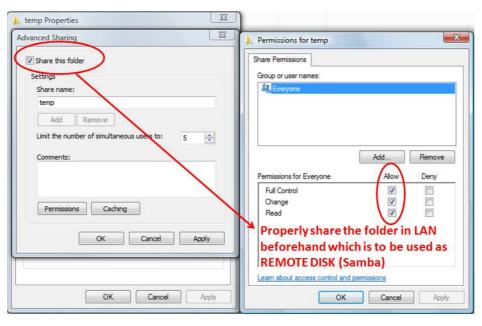
The files generated from the recording process are handled on "first-in-first-out" basis. In other words, the oldest folders/files will be deleted when there is not enough space for the new data.

The recorded files may also be recorded into the remote-disk in LAN (Samba) instead of SD card. Please refer to following setup screens with setup tips for more details.

General				S	torage
Loca	l Disk Setting			Remote Disk S	
Disk State	15		CIICK	for remo	ote disk
Total Size:			154313	76 KB	
Used Size:			15280664 KB		
Free Size:			150712 KB		
Disk Type:			SD		
Disk Status	:		normal		
Ref	resh Bro	wse	Remove I	Event Image	s
Local Disk	Setting				
Mount					Save
Type:	FAT3	2			Format

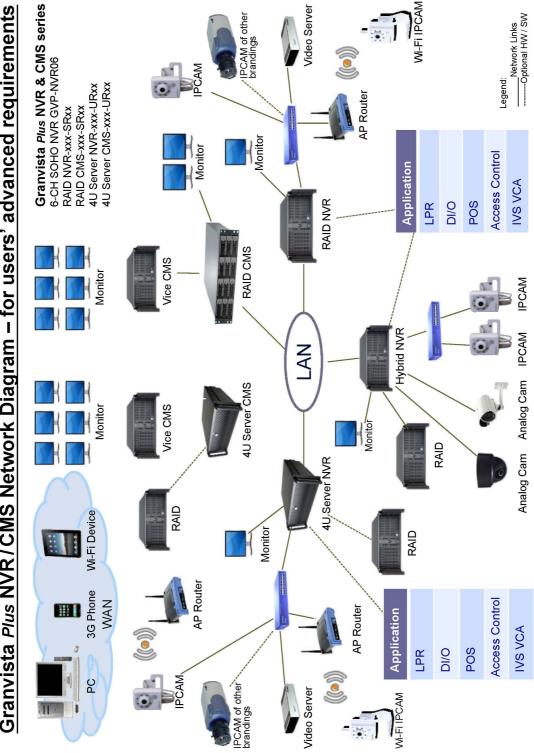
	Ger	neral		51	orage	
<u>_</u>	Local Disl	< Setting	7-	Remote Disk	Setting	
	Disk Status					
	Total Size:	0 KB				
	Used Size:	0 KB				
	Free Size:	0 КВ				
	Disk Type:	SMBFS				
	Disk Status:	normal				
		R	efresh			
	Remote Disk S	etting				
	Enabled		SI	ABFS: 1	or Win	dows
	Action:	Mount 💌		S: for		
	Type:	SMBFS V	5		пал	
	Remote Disk Pa	th: 192.168.1.3	/temp			
	User Name:	battleship	→ U:	ser ID ar	nd pass	word c
	Password:			is PC of		
				92.168.1	1.3"	

Please note that the remote disk to be utilized in the LAN PC needs to be shared properly beforehand.



Depends on different resolutions, frame rate, data formats and time frames are configured, a Micro SD of 32GB is able to handle several days of data storage already, and the storage space from Remote-Disk has provided another alternative too. Apparently the camera's recording functionality with Micro SD card or Remote-Disk is able to satisfy users' basic data storage requirements already. Besides, the free-bundled GVD software is also a good option to use for video recording purpose under minimized budget, if the users happen to have spare PCs with relevant hardware compatibility (the PC's screen resolution and CPU performance must be above a decent level to make this NVR software running at optimal performance). In addition, the users may also take advantages of our Linux-based Granvista Plus NVR for even more advanced and professional applications. Up to 64 connections, or even more, are able to be built into the Granvista Plus series NVRs. Please refer to our web site, or contact us for more details. Attached below is a sample of our SOHO model NVR which may support up to 6 connections.





Granvista Plus NVR/CMS Network Diagram – for users' advanced requirements

2011 V1.1

6. Network

Network Camera acts as one of the network devices. It therefore allows its "**IP**" to be assigned, so certain network functionalities can be implementable within this device. This section describes these configurations. Fundamentally, for instance, the IP assignment of the device can be done via **DHCP server**, **manually fixed IP option** or **PPPoE** to obtain IP from service provider.

General

Device IP configuration, includes DHCP, Static IP setting and PPPoE. "Enable ARP/Ping" enable device to accept ARP or ping packets from the network. Disable this option may provide extra security from intentional ping.

Gene	eral	Advanced	SMTP(E-Mail)	DDNS	Wireless	
Орн	CP Service					
1012200	itic IP Addri	2551				
IP Address:		192,168	8.1.188			
Net	tmask:	255.255	5.255.0			
Gat	teway:	192,168	8.1.1			
DN	S 1:	168.95.	1.1			
DN	S 2:	61.31.1	1			
Oppi	PoE:					
Use	er Name:	usernar	me			
Pa	ssword:		*****			
(No	ote : Please	: make sure 'Em	ail Setting' has been set!)	l		
🗹 En a	able ARP/Pi	ng				

Advanced

Enable or configure other network functions.

Gene	ral	Advanced		SMTP(E-Mail)	DC	ONS	Wireless
NTP Co	nfiguratio	DN					
Ооь	tain NTP s	erver address	; via DHC	р			
🕑 Us	e the follo	wing NTP serv	er addre:	SSI			
Net	twork addr	ess: [t	ime.stdti	me.gov.tw]
		(host nam	ie or IP address)			
HTTP S	etting						
НТТР І	Port:		92	(0 ~ 65535, Defa	ult : 80)		
RTSP Se	etting						
RTSP I	Port:		557	(0 ~ 65535, Defa	ult : 554)		
Bonjou	r Setting						
💌 En	able Bonjo	our					
UPnP N	otificatio	n					
🗹 En	able UPnP	1					
NAT Tra	aversal S	etting					
En En	able NAT 1	Traversal					

NTP: Configure a NTP (Network Time Protocol) server, so that the device system date and time can be synchronized with a specified Time Server. This configuration is provided for one of the potions of system date/time adjustment. If the camera is located in an isolated LAN, in other words it does not have access to web, the user may set the IP of the PC in LAN as its NTP setting, so that the camera's time will be synchronized with the PC.

HTTP: set the HTTP port that will be applied for Web UI access. The default port number of HTTP is "80", but it can be of other figures.

RTSP: set the RTSP (Video) port for video data transmission. The default port number of RTSP is "554", but it can be of other figures.

Bonjour: Enable Bonjour service, so that the device can be discovered with "Bonjour" service applied. **UPnP:** Enable UPnP, so that the device can be discovered in an UPnP Compliant Network.



NAT Traversal: Enable NAT traversal, so that client from Internet can have access to the devices behind the Router. If user would like to access the Network Camera from Web externally, be sure to also include the RTSP port by duplicating the same IP.

In the following example this Network Camera's LAN IP is of 192.168.1.2., thus the user should type in the full address of <u>http://192.168.1.2:80</u> (as port 80 is WWW's default port number thus ":80" can be omitted) in the address field of Internet Explorer to access this network camera. If the user wants to access it from web externally, he would have to properly setup its HTTP port (in this case "80", or other port number), and the RTSP port (in this case "554", or other port number)) in the NAT setting of the router beforehand, and then he may access it with the web address (in this example it is <u>http://219.86.240.234:80</u> to access it from anywhere of the world via Internet) if the router has connected to Internet.

	A	SUS RX308	1				
	Name ASUS RX3081						
Wizard	Virtual Server					11.40	
System Status						BRANCS.	
🗀 System	Setting up V	/irtual Servers allows remote	users to access services su	ch as Web or FTP	on the LAN via public II	P Addresses.	
🗀 WAN	No.	Private IP	Private Port	Туре	Public Port	Comment	Enabled
🗀 LAN	1.	192.168.1.101	81	Both •	81	F1	
🔁 NAT	2.	192.168.1.102	82	Both -	82	Kitchen	N N
Virtual Server	3.	192.168.1.103	83	Both -	83	F3-1	v 1
Special Application	4.	192.168.1.104	84	Both -	84	F3-1	v.
Port Mapping	5.	192.168.1.107	86	Both -	86	TEST	
-Marcella Alg	6.	192.168.1.2	80	Both 🔻	80	Granvista	
Firewall	7.	192.168.1.2	554	Both 🔻	554	video	1
Routing	8.	192.168.1.3	21	Both 👻	21	FTP	
🗀 UPnP	9.	192.168.1.		TCP -			
	10.	192.168.1.		TCP -			
Logout	11.	192.168.1.		TCP -			
Logon	12.	192.168.1.		TCP -			
	13	192 168 1					

Note: with UPnP enabled, the IP Sharing device (Router) capable of UPnP function will automatically be noticed with the device's NAT port.

SMTP (E-Mail)

Configure an email host in the device that will send email on behalf of the configured email account in a circumstance like sending an email notice to a specified mail address (Event Configuration), or to send the triggered image. The email settings will be basically same as what used in your email software.

Sender: Complete the Mail Server, Server Port, Authentication information (if required) and the sender's email address.

Receiver: The receiver email address

Following screen shows an example of setting an email account. The users may need to refer to the ISP for more details on the email configuration. In this example the <u>ipcam@longvast.com</u> Email account will be used to send triggered images or notifications to the <u>info@longvast.com</u> account.

Gene	eral	Advance	d	SMTP(E-Mail)	DDN	s w	ireless
SMTP (email) Se	tting					
Mail Se	erver:		mail.longva:	st.com	Refer	to the IS	P to
-		((host name	or IP address)		sure it is	
Server	Port:			.65535]	prope	rly confi	gurec
- Au	thentication	.					
υ	ser Name:	1	ipcam@long	vast.com	Emai	accour	nt
P	assword:	Ç		\sum	🕇 and p	asswor	d
From (Email Addr	ress):	ipcam@long	vast.com	Recir	oient's e	mail
Send e	email to:		info@longva	st.com	acco		

If the setting is successful, click on "Test" button, and then an acknowledgement email with "Email Test OK" message should be received by the recipient immediately. Following is an example of such acknowledgement email after clicking "Test" button.

Compose Addresses Folders C	Dptions Search Help	
Message List Unread Delete	Previo	ous <u>Next</u>
Subject:	Email Test	
From:	ipcam@longvast.com	
Date:	Sun, May 8, 2011 9:32 pm	
To:	info@longvast.com	
Priority:	Normal	
Options:	View Full Header View Printable Version Download this a	<u>is a file</u>

DDNS

Dynamic DNS configuration; the network device can be assigned and accessed with a host name instead of IP address by registering this service (Internet access required).

Host Name: Assigned name that will be used for access to the device
User Name/Password: Account authentication for logging to this service
Update Time: Periodically, the device updates its access info to sever in the configured time.
Response: the device responds the connection info.

Following illustrative contents show the users some details about applying DynDNS service. Please note that DynDNS is not the only service available in the world market for DDNS services. Besides, DynDNS provides free services, and they also provide advanced services which are non-free.

	.com		Usern.	ame	Password	Log in
	About	Services	Account	Support	News	
I'd like to Remotely access my home of Control my DVR from anywhere Get a free domain name Safeguard my email Protect and speed up my Integration Sear Free Dynamic I	ernet	An all new forr out of DynDNS Community Reputation	the NEW NS Com mat to help you get t 8. com and help other youting on Question Points and Service o on for DynDNS.com	he absolute most rs do the same. s/Answers Badges n Users	Exception of the section of	Vinden computer) (in (2 million (million (millio
Point a hostname to a dynamic • Host your own website at hou • Connect to your workstation, example dyndm » DDNS service details	or static IP addres me for free! DVR, webcam fro		• Eas • Sec	er your domain a y-to-use web inter	nd point it to an IP addr face with powerful expe ry DNS servers around t	ert tools.
Resources	Servic	es	Suppo	rt	Follow Us	
What is DNS? DNS Tools Home DNS Solutions Business DNS Solutions	Spring	nsting ynamic DNS Server VPS Registration	24/7 Pr	tus dge Base emier Support date Clients	Our News Twitter @d LinkedIn DNS Ninjas	yninc Facebook

This series network device support DynDNS (<u>www.dyndns.org</u>). This section describes how to apply this service to the Network Camera.

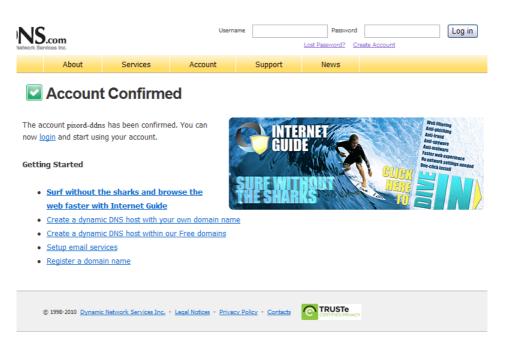
Create Account

Create an acc	count or log in to continue	
Username:		Already Registered?
Password:		Username
Confirm password:		Password
Email:		Log in
Confirm email:		Forgot your password?
Subscribe to: Security Image: Enter the numbers from	OpnDNS.com newsletter (1 or 2 per month) Dyn Inc. press releases Remove HTML formatting from email 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CERTIFIED PRIVACY
If you're having difficul	ty creating your account, for any reason, feel free to contact us.	

Input user name, password and Email that will be created as an account for logging in the service. .

The website has accepted the new account and sent email for verification.

In the received mail from DynDNS, use the link to activate. The account will then be confirmed as the web below shows.



Login and use the service

Userna	ame	Password	Log in
		Lost Password? Create Account	
int	Support	News	

In the login filed, input username and password as the new account created.

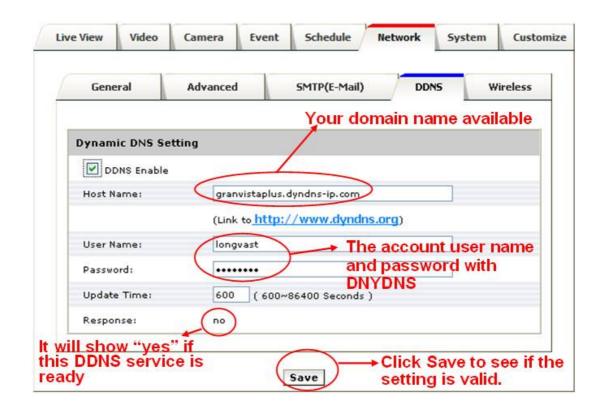
My Services	
	modify, purchase, and your services.
My Zones/Dom	ains
Add Zone/Do	main Services
My Hosts	
Add Host Ser	vices
Dynamic DNS P	ro
Internet Guide	
Spring Server \	<u>/PS</u>
MailHop Outbou	und
Network Monito	ring
SSL Certificates	2
Recursive DNS	
Support	
Premier Sup	port
Contact Supp	port
DNS Service	Level Agreement

After logged in, in the "My Services" column, click on "Add Host Services".

Fill in a host name as it will be applied to the device. The "IP Address" field can be temporally filled with any IP as it will be updated once the device has registered to the service and reported its current IP value. Click on "Add To Cart" for next stage. The Dynamic DNS host service is free. Just click on "Next". Checkout from the applying service and activate the added host name.

The information of activated host name will be arranged. Click on "Add New Host" if requiring more host names for other Network Cameras.

Apply Host Name to the Camera



In the device configuration page, Setup -> Network -> DDNS, fill in the applied host name from DynDNS website, the username / password that are for logging in this service. Enable DDNS, and then save the settings. The "Response" will show "yes" message when registering is successful.

Network Camera granvistaplus.dyndns-ip.com - Windows Internet Explorer	ow DDNS is working!
Eile Edit View Favorites Iools Help	
Prvorites Prvorites Grantvista Plus IP: granvistaplus.dyndns-ip.com	H264 1600X1200 16 FPS 1681 K bps
DDNS 2011 05 09 11:48:12	

Launch IE and type <u>http://granvistaplus.dyndns-ip.com/</u> (for instance) in the URL filed. The page should be directed to the device's live view page. Please note that the address of <u>http://granvistaplus.dyndns-ip.com/</u> is equivalent to the address of <u>http://granvistaplus.dyndns-ip.com:80/</u>, because the default WWW port number is 80.

In this example the address of <u>http://granvistaplus.dyndns-ip.com/</u> is same as <u>http://219.86.240.234/</u>. Please refer to the Network setting paragraph in this manual, the user must properly setup the HTTP and RTSP ports in both camera and broadband router's NAT virtual domain settings to make sure camera can be accessed by the address of <u>http://219.86.240.234/</u> before the <u>http://granvistaplus.dyndns-ip.com/</u> address is able to work properly.

How if the user has only one fixed web IP, for instance 219.86.240.234, while he has many network cameras to implement? Just like the user may setup the camera address of http://219.86.240.234:91/, http://219.86.240.234:91/, http://219.86.240.234:91/, http://219.86.240.234:91/, http://219.86.240.234:91/, http://219.86.240.234:91/, http://granvistaplus.dyndns-ip.com:91/ or http://granvistaplus.dyndns-ip.com:91/ or http://granvistaplus.dyndns-ip.com:92/ can be configured for other network cameras too. Following figure is an example of such DDNS application by using port number.



Wireless (GVP-201W)

Wireless network searching and device configuration page

Wireless – List of available wireless networks (Access Points); information includes SSID, Mode, Security and Signal Strength.

Wireless Setting: configurations for the camera device for its availability to connect to a wireless network. Clients available in the same network or able to connect to this network can then have an access to the camera device with wireless connection.

						1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
Gener	al	Advanced	S	MTP(E-Mail)	DDNS		Wireless
🗸 Enable	d						
Status o	of Wirele	ss Networks					
SSID		Mode	в	Security	Signal	l strenç	fth
Longvast	-		structure	WEP	-52		
Wireles	s Setting						
Wireles MAC Add			2:0E:BF:6C:9	ic.			
	ress:	00:12	2:0E:BF:6C:9	ic			
MAC Add	ress: ss:	00:12 not-co		c			
MAC Add IP Addre: Netmask	ress: ss:	00:12 not-co not-co	onnect-yet	ıc			
MAC Add	ress: ss:	00:12 not-co not-co not-co	onnect-yet				
MAC Add IP Addre: Netmask Gateway:	ress: ss: :	00:12 not-co not-co not-co	onnect-yet onnect-yet onnect-yet istructure 💌				
MAC Add IP Addre: Netmask Gateway: Mode:	ress: ss: :	00:12 not-co not-co not-co [Infra	onnect-yet onnect-yet onnect-yet estructure				
MAC Add IP Addre: Netmask Gateway: Mode: Operation	ress: ss: :	00:12 not-cc not-cc Infra Auto Defai	onnect-yet onnect-yet onnect-yet estructure				
MAC Add IP Addre: Netmask Gateway: Mode: Operation SSID: Security:	ress: ss: :	00:12 not-co not-co Infra Auto Defar	onnect-yet onnect-yet onnect-yet istructure • • ult				

Properly configure the wireless settings according to actual wireless network, click on Save, and the addressed IP will be shown as below. In this example the "192.168.1.6" IP address was decided by DHCP, while in most of the cases it will be convenient for the user to do necessary setup from the router, so that DHCP will give a fixed IP to this specific MAC address, i.e. in this example the MAC address of 00:12:0E:BF:6C:9C.

After the wireless networking has started to work (the wireless IP has been shown in this screen), the user may access the camera via both the wired or wireless IP addresses. The camera may do without the Ethernet cable right after the wireless network has started to work.

Just like the wired network, the user will need to do some appropriate NAT Virtual Server configurations in the broadband router if he wants to access the camera from web externally.

General	Advanced	SMTP(E-Mail)	DDNS	Wirele	
deneral	Harancea		DUNS		233
Enabled					
Status of Wireles	s Networks				
SSID	Mode	Security	Signal s	trength	
AndroidAP	infrastructure	WPA2-PSK	-76		
ongvast	infrastructure	WEP	-44		
∦ireless Settina					
1998-1998-1998-1998-1998-1998-1998-1998	00:12:0E:BF:6C:90	5			
MAC Address:	00:12:0E:BF:6C:90 192.168.1.16	5			
MAC Address: IP Address:		5			
MAC Address: IP Address: Netmask:	192.168.1.16	5			
MAC Address: IP Address: Netmask: Gateway:	192.168.1.16 255.255.255.0	5			
MAC Address: IP Address: Netmask: Gateway: Mode:	192.168.1.16 255.255.255.0 192.168.1.1	3			
MAC Address: IP Address: Netmask: Gateway: Mode: Operation Mode:	192.168.1.16 255.255.255.0 192.168.1.1 Infrastructure 💌	2			
MAC Address: IP Address: Netmask: Gateway: Mode: Operation Mode: SSID:	192.168.1.16 255.255.255.0 192.168.1.1 Infrastructure V	5			
Wireless Setting MAC Address: IP Address: Netmask: Gateway: Mode: Operation Mode: SSID: Security: WEP Setting	192.168.1.16 255.255.255.0 192.168.1.1 Infrastructure • Auto • Longvast	3			

Кеу Туре	ASCII 💌 (5 character max)	
	•••••	
C Key 2		
С Кеу З		
O Key 4	<u></u>	

7. System

Information

Lists of System and Network configurations

Information User D	ate & Time Server Maintenance Log Service
System	
Model:	GVP-201W
System up time:	2011-05-04 21:35:47
Firmware version:	2.0.7_440_gvp
MAC Address:	00:04:29:0d:53:01
ActiveX Control version.:	1.0.1.140
Wireless	
Status:	No connection
Ethernet	
Status:	Connected
Mode:	STATIC
IP Address:	192.168.1.188
Netmask:	255.255.255.0
Default Gateway:	192.168.1.1
PPPoE	
Status:	No connection
IP Address:	none
DNS Server	
Primary DNS IP address:	168.95.1.1
Secondary DNS IP address:	61.31.1.1
DDNS	
Status:	no

<u>User</u>

Login users for Web access and operations; authentication required. The Check box is for anonymous logging to the live view page.

Please be sure not to select the anonymous login unless convenience is more important than privacy. Logging for further configurations will still require user name and password even if anonymous login has been selected.

Information	ser Date & Time	Server Maintena	nce Log Servic
	-	h	
User Setting			
	s login (no user name o	r password required)	
	s login (no user name o	r password required)	
User List User Name	User Group		
admin	Administrator		
tinatung	Administrator		
Add Remov	/e		
User Setup			
User Name:	tinatung		
User Name:	tinatung		
User Name: Password:	tinatung		
	tinatung		
	tinatung		
Password:	tinatung		
Password:	Administrator		
Password: Confirm Password:			
Password: Confirm Password:	Administrator		
Password: Confirm Password:			
Password: Confirm Password:	 Administrator Operator 		
Password: Confirm Password:	Administrator		
Password: Confirm Password:	 Administrator Operator 		
Password: Confirm Password: User Group:	 Administrator Operator 		
Password: Confirm Password: User Group: Note:	Administrator Operator Viewer	least one character.	
Password: Confirm Password: User Group: Note:	 Administrator Operator 	: least one character.	
Password: Confirm Password: User Group: Note: 1. A user name and p	Administrator Operator Viewer		
Password: Confirm Password: User Group: Note: 1. A user name and p	Administrator Operator Viewer		
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters	Administrator Operator Viewer	es,	
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters	Administrator Operator Viewer	es,	
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters 3. The first character	Administrator Operator Viewer asssword must contain at are allowed in user name	es. -Z or a-z.	
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters 3. The first character	Administrator Operator Viewer	es. -Z or a-z.	i.
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters 3. The first character 4. Only A-Z, a-z and f	Administrator Operator Viewer Asssword must contain at are allowed in user name in user name must be A D-9 are allowed in the user	es. -Z or a-z. :er name and password	L
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters 3. The first character 4. Only A-Z, a-z and f	Administrator Operator Viewer asssword must contain at are allowed in user name	es. -Z or a-z. :er name and password	L
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters 3. The first character 4. Only A-Z, a-z and 1 5. Max eight characte	Administrator Operator Viewer assword must contain at are allowed in user name in user name must be A D-9 are allowed in the us rs are allowed in the pase	es. -Z or a-z. :er name and password	L
Password: Confirm Password: User Group: Note: 1. A user name and p 2. Max 14 characters 3. The first character 4. Only A-Z, a-z and f	Administrator Operator Viewer assword must contain at are allowed in user name in user name must be A D-9 are allowed in the us rs are allowed in the pase	es. -Z or a-z. :er name and password	L.

Save

The authorities of different levels of users are as follows:

Administrator:

Allowed to do any adjustments in camera, is the default user that this account can't be deleted.

Operator:

Allowed to view the live video and change Video & Camera settings in Setup Menu only. (Live View, Video &

Camera settings in setup menu)

Viewer:

Only permit to watch the live video, can't get into the Setup Menu. (Live View only in setup menu)

Date & Time

System date/time configuration. Options of synchronizing with PC and NTP server are provided for automatic adjustment in addition to manual setup.

Information	User Date & Time	Server Maintenance	Log Service
Current Serv	er Time		
Date:	2011-05-04 Tim	e: 21:29:52	
Set Server Ti	me		
Time Mode:			
O Synchronia	e with computer time		
Date:	2011-05-04 Tim	e: 21:30:19	
⊙ <u>Synchror</u>	nize with NTP server		
Time zone:			
GMT+08 (Bei	jing, Hong Kong, Shanghai, Tai	pei) 💌	
O Set Manua	ally		
Date:	2011-05-04 Time	e: 21:29:30	
	(ex: 2008-01-01)	(ex: 01:00:00)	

Server Maintenance

This page provides tool for system maintenance; Reboot and Load default settings, as well as functionalities of launching upgrade process, backup/restore user settings and language defines.

Information	User Date & Time	e Server Mair		Log Servic
Maintain Server				
Reboot		Load default		
Firmware Upgra	ade			
Model:	GVP-201W			
Firmware Version	2.0.7_440_	_gvp		
MAC Address:	00:04:29:0	d:53:01		
ActiveX Version:	1.0.1.140			
Specify the firm	are to upgrade:			
		Browse	U	pgrade
Backup				
Save all parame	ters and user-defined scr	ipts to a backup file.		Backup
Upload Setting				
and the second	kup file to return the unit	to a previous config	uration.	
		· · · · · · · · · · · · · · · · · · ·		
	up file to use:			
Use a saved bac	up file to use:	Browse		Upload
Use a saved bac	up file to use:			Upload
Use a saved bac Specify the back		Browse		Upload
Use a saved bac Specify the back Add Language Choose languag		Browse		Upload

Log Service

Most system operations and / or process will be kept in a log system. The link provides the review of these records.

Information	User	Date & Time	Server Maintenance	Log Service
Logs				
Logs				

8. Customize

This page provides the function of adjusting the look of live view page. There are two types of layout settings; use default look or use custom settings.

¥ideo	Camera	Event	Schedule	Network	System	Customize
iew Layou	t Setting					
Default Lo	ok		OUse Custor	n Settings		
efined Lir	ıks					
w Custom L	ink 1					
: Custom L	ink 0		URL: http://			
w Custom L	ink 2					
: Custom L	ink 1		URL: http://			
w Custom L	ink 3					
: Custom L	ink 2		URL: http://			
w Custom L	.ink 4					
: Custom L	ink 3		URL: http://			
	iew Layou Default Lo Defined Lin W Custom L Custom L Custom L Custom L Custom L Custom L Custom L	Video Camera iew Layout Setting a Default Look Defined Links ow Custom Link 1 :: Custom Link 2 :: Custom Link 1 ow Custom Link 2 :: Custom Link 3 :: Custom Link 3 :: Custom Link 3	iew Layout Setting Pefault Look Defined Links W Custom Link 1 Custom Link 2 Custom Link 2 Custom Link 3 Custom Link 4 Custom Link 4 Custom Link 3	iew Layout Setting Default Look Use Custor Defined Links W Custom Link 1 Custom Link 0 URL: http:// W Custom Link 2 Custom Link 1 URL: http:// W Custom Link 3 Custom Link 2 URL: http:// W Custom Link 4	iew Layout Setting Pefault Look Use Custom Settings Defined Links W Custom Link 1 Custom Link 0 URL: http:// W Custom Link 2 Custom Link 3 Custom Link 2 URL: http:// W Custom Link 3 URL: http://	iew Layout Setting Pefault Look Use Custom Settings Defined Links W Custom Link 1 Custom Link 0 URL: http:// W Custom Link 2 Custom Link 3 Custom Link 2 URL: http:// W Custom Link 3 Custom Link 4 Custom Link 3 URL: http://

Use Default Look: the default layout of live/configuration pages

Use Defined Links: Web link(s) will be presented on the live page when enabled. It can be a link to another Network Camera for instance, or other preferred web link.

Use Custom Settings: The modifications allowed are changes of Background / Text Color, Background picture, Title, Description, Logo and etc.

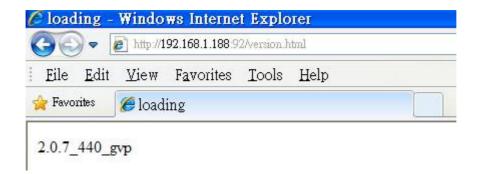
Live View Layout Se	tting
🔘 Use Default Look	Use Custom Settings
User Defined Links	
Show Custom Link	1
Name: Custom Link (URL: http://
Show Custom Link	2
Name: Custom Link 1	URL: http://
Show Custom Link	3
Name: Custom Link 2	2 URL: http://
Show Custom Link	4
Name: Custom Link 3	B URL: http://
Custom Settings	
Modify the Default Look	Ki (
Background Color:	💿 Default 🔷 Own: White 💌
Text Color:	💿 Default 🔷 Own; 🛛 Black 🔛
Background picture:	None ■ None ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
	O External: http://
Title:	⊙ None ◯ Default
	Own: Title
Description:	None ○ Default
	Own: Description
Logo Link:	⊙ None ○ Default
	Own: http://
Logo:	🔿 None 💿 Default
	O External: http://
	O Own
	Select image file to upload:
	Browse

9. FAQ

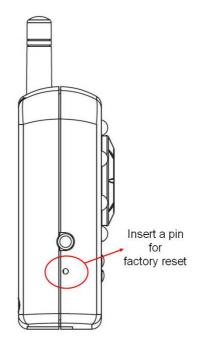
Check firmware version

The version code can be found in Setup -> System -> Information, or simply type "version.html" after the URL address, e.g. <u>http://192.168.1.188/version.html</u>. Firmware version indicates the functionalities' updates or availability in the camera system. Therefore, in the first step of troubleshooting and then reporting, it helps to locate the found issues. Newer version firmware may have corrected the current bugs.

ive View	Video	Camera	Event	Schedule	Network	System	Customiz
Inform	ation	User	Date & Tim	e Serv	er Maintenand	e Log	Service
System	ı						
Model	,		G	VP-201W			
Syster	n up time:		2	011-05-04 21	:19:33		
Firmwa	are version	a:	2	.0.7_440_gvp			
MAC A	ddress:		0	0:04:29:0d:53	:01		
Active	X Control v	ersion.:	1	.0.1.140			



Restore to Factory Default



To restore factory default, please follow the steps:

- 1. Unplug the power jack to turn off the power of the camera.
- 2. Insert a pin into the reset hole as circled with red in the below figures. Sense a button and keep it pressed.
- 3. Plug in the power jack to turn on the device, in about few seconds the status LED will be quick flashing
- 4. Release the button (remove the pin from the reset hole). The camera should now be back to factory default.

Upgrade device firmware

Firmware upgrade process should be done via the web configuration; **Setup -> Server Maintenance -> Firmware Upgrade**. Before the process, read the instructions and release notes coming with each new released version. For the steps,

- 1. Check and retrieve the latest firmware bin file.
- 2. Disconnect all other clients (e.g. streaming requests) to the device.
- 3. Stop the local (schedule) recording if it was enabled.
- 4. Go to the Firmware Upgrade page, browse and locate the downloaded firmware bin file, then click on "Upgrade" button.

irmware Upgrade		
Model:	GVP-201W	
Firmware Version:	2.0.7_440_gvp	
MAC Address:	00:04:29:0d:53:01	
ActiveX Version:.	1.0.1.140	
Specify the firmware to	upgrade:	
	Browse	Upgrade

5. The upgrade should finish in minutes, depending on file transferring status. The web will then be directed to the system writing progress. Overall upgrading process takes about 5~10 minutes. In this period, DO NOT DISCONECT the power and Ethernet connection while the upgrade is in progress, otherwise software of the unit can be damaged.

🏉 Net w	ork C	атега	192.168.	1.188 -	Window	s Internet	t Explorer
00	•] http://19	92.168.1.188 9	2/			
Eile	<u>E</u> dit	<u>V</u> iew	Favorites	Tools	Help		
🔶 Favori	ites	🏉 Netw	ork Camera	a 192.16	58.1.188		
		J pgrade recomm		top any t	innecessary	y jobs whil	e updating firmware.
Please	e be pa	atient an	d the updati	ng proce	ess may tak	e a long tir	ne.
Please	e waitir	ng about	t ten minutes	s!			
Writir	ng Prog	gress:					
						24 %	

6. The power LED (orange one) will be quick/slow flashing during the upgrading process. When it becomes again steady on, camera is ready to be accessed. Check the firmware version. If somehow system is not upgraded, redo above steps. In this case, restore factory default process may be required.

Video Streams Specification

The availabilities

- 1. Each stream can be switched to either H.264 or MJPEG mode.
- 2. Each steam can be configured to either CBR or VBR mode.
- 3. Stream1 (main stream) is available from all the resolutions listed.
- 4. The maximum resolution setting for Stream2 is 640x480.
- 5. Stream3 is fixed in 320x240.
- 6. The maximum frame rate for transferring 1600x1200 is 15fps. Others can reach up to 30fps.

	STREAM1	STREAM2	STREAM3
Encoding Mode			
H.264 / MJPEG	V	V	V
Transferring Mode			
CBR / VBR	V	V	V
Resolution @ Max. FPS			
1600x1200@15	V		
1280x720@30	V		
800x600@30	V		
640x480@30	V	V	
320x240@30	V	V	V

Dependency

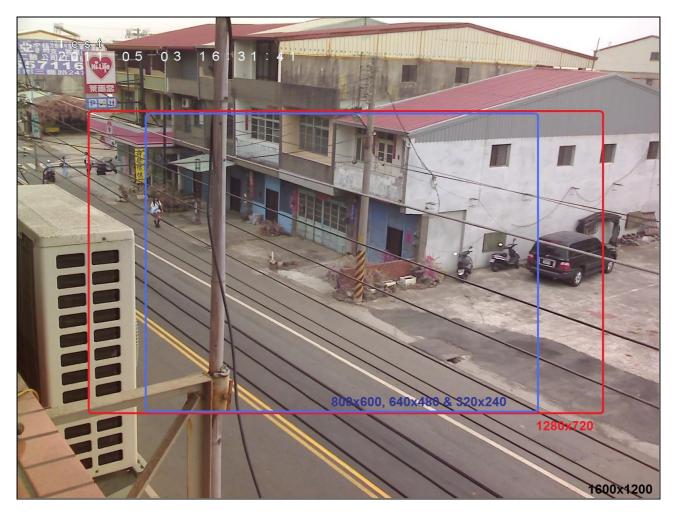
- Max. FPS dependency: when *Stream1* is set to *1600x1200*, the maximum frame rate is *15fps*.
 Accordingly, both *Stream2* and *Steram3* can be configured with the frame rate from 5 to 15 fps.
- 2. **Resolution dependency:** The maximum resolution of *Stream2* is depending on the resolution setting of *Stream1*. When Stream1 is set to 320x240, Stream 2 is limited in 320x240.
- Frame rate independent: Frame rate setting for each stream can be independent, for instance,
 Stream2 can be set 15fps and Stream3 is 30fps while Stream1 (1280x720 or below) is set to 5fps.

STREAM1	STRE	EAM2	STREAM3
SIKEAWI	640x480	320x240	320x240 (fixed)
1600x1200, 5~15 fps	5~1	5 fps	5~15 fps
1280x720, 5~30 fps			
800x600, 5~30 fps	5~30) fps	5 20 fm
640x480, 5~30 fps			5~30 fps
320x240, 5~30 fps		5~30 fps	

Note the resolution setting must follow the sequence: Stream1 \geq Stream2 \geq Stream3.

The Angle of View at different resolutions

The setting of Stream determines the angle of view, therefore the range of image view. The picture below presents the **3 ranges of view**, 1600x1200, 1280x720 & 800x600/640x460/320x240.



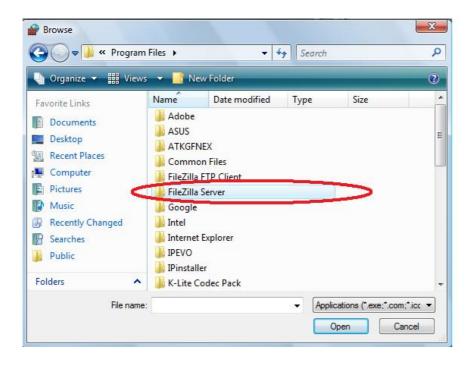
Actual Views with different resolutions

Appendix I: An example of how to set up users' own FTP servers

FTP is quite a convenient application. The users may easily set up their own FTP servers. Following is an example of using a shareware named FileZilla. Please note that this FileZilla software's copyright belongs to Tim Kosse, <u>http://filezilla-project.org/</u>, Longvast International Co., Ltd. has no business relationship with them that users should obey the related copyright laws about using this software.

1, Download the FTP server program from <u>http://filezilla-project.org/download.php?type=server</u>. If the users also like to download the FTP client software, they may refer to <u>http://filezilla-project.org/</u> for more information.

- 2. Install the FTP server program, and start the program.
- 3. The Firewall of Windows or anti-virus software will usually try to stop such FTP server application. Please make these two programs exceptions to the firewalls accordingly.



General Exceptions Arvanced	
Exceptions control how programs communicate thr	
program or port exception to allow communication	s through the firewall.
Windows Firewall is currently using settings for the	private network location.
What are the risks of unblocking a program?	
To enable an exception, select its check box:	
Brogram or port	
Program or port	
Distributed Transaction Coordinator	
File and Printer Sharing	
FileZilla server	=
FileZilla Server Interface	
Netlogon Service	
✓ Network Discovery	
Performance Logs and Alerts	
Remote Administration	
Remote Event Log Management	
Remote Scheduled Tasks Management	
Bomete Service Management	+
Add program Add port Prop	erties Delete
Votify me when Windows Firewall blocks a new	

4. Start the FTP server by clicking on the OK button. Do not change any of the original settings.

Server Address:	Port:
127.0.0.1	14147
dministration passwo	ra: this server
Always connect to	

5. The users should see following screen after clicking OK button. It indicates that this FTP server is running now.

File Serv	a Server (127.0.0.1) /er Edit ? []			
FileZilla Sen Copyright 2(Connecting	ver version 0.9.37 beta 001-2010 by Tim Kosse (tim.kosse@f	- 		
ID /	Account	IP	Transfer	
∢ Ready	Ш		0 bytes received 0 B/s	0 byte

6. Type in "ipconfig" command from the Windows's command screen.

Command Prompt	
Microsoft Windows [Version 6.0.6001] Copyright (c) 2006 Microsoft Corporation. All rights reserved.	_
C: Wsers F800 ipconfig	
Windows IP Configuration	
WINDOWS IF CONFIGURATION	
Wireless LAN adapter Wireless Network Connection:	
Media State Media disconnected Connection-specific DNS Suffix . :	
Ethernet adapter Local Area Connection:	
Connection-specific DNS Suffix . : gateway	
Link-local IPv6 Address : fe80494d:e1b8:6a6b:97fe%10	
IPv4 Address	
Default Gateway : 192.168.1.1	
Tunnel adapter Local Area Connection* 11:	
Connection-specific DNS Suffix .:	
IPv6 Address 2001:0:4137:9e76:4f4:100d:3f57	:fef9 🗾 🔽

In this command screen, the IP address indicates that the address of PC when FTP server running is of "192.168.1.6".

7. Configure the user names and passwords of the users who are allowed to login into this server.

🔁 FileZilla Server	(127.0.0.1)	
<u>File Server Edit 3</u>		
4 B Setti	ngs //// C:\ 🎛 🗸	
FileZilla Serve: User	ie ia.	
Copyright 200 Grou	^{1ps} \ losse (tim.kosse@filezilla-project.org)	
Connecting to server		
Connected, waiting for Logged on	authentication	
Possed on	X	
	Increase user	
ID / Accou	nt IP Transfer	
ID / Accou	un Ir Hauster	
<		>
Opens the users dialog	0 bytes received	
Users		
Page:	Account settings	Users
General Shared folders	Enable account	
- Speed Limits	Eassword:	
- IP Filter	Group membership:	
	Add user account	
	Please enter the name of the user account that should Max be added:	
	Con	Add Remove
	User should be member of the following group:	
	<none></none>	Rename Copy
]	Desi <u>O</u> K <u>C</u> ancel	
		1
		1.Click "Add"
		2. Type in the
ОК		user name
Cancel	You can enter some comments about the user	3. Click OK

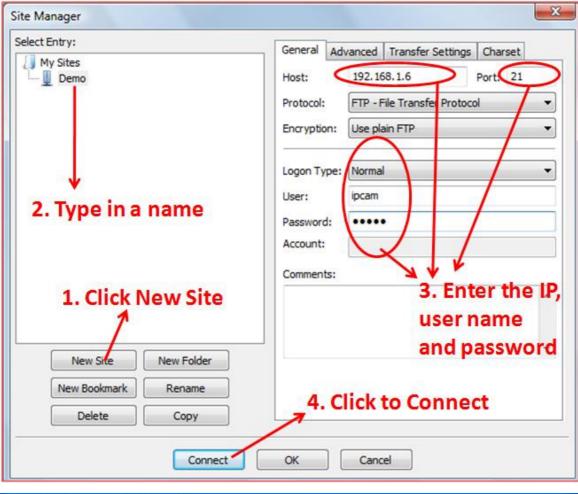
Users		
Page: General Shared folders Speed Limits IP Filter	Account settings Image: Enable account Image: Enable account	Users ipcam
OK Cancel	Connection junic per Ir.	Add Remove Rename Copy Set password

8. Set the default directory of each individual user.

	S
Shared folders Directories Aliases H D:\FTP Vrite Delete	Users
✓ Append Directories ✓ Dreate ✓ Delete ✓ List	Add Remove
A directory alias will also appear at the specified location. Aliase path. Separate multiple aliases for one directory with the pipe ch	s must contain the full local aracter ()
choose home directory	Set attributes
	Directories Aliases File H D:\FTP ✓ Head ✓ Vite ✓ Vite ✓ Delete ✓ Append Directories ✓ Vite ✓ ✓ Directories ✓ Vite ✓ Directory Vite Vite ✓ Pullete ✓ Vite ✓ Pullete ✓ Vite ✓ Pullete ✓ Vite ✓ Pullete ✓ Vite ✓ Directory Seleas home o

9. Now the FTP server should be ready to go. The users may double-check to see if everything is alright by trying to login by using any FTP client programs with the user IDs and passwords pre-configured. In the following example we use similar Filezilla FTP Client software with the user ID of "ipcam" to login.

E FileZilla				
File Edit View Transfer Server Bookmarks	Help			
Site Manager	CTRL+S			
Copy current connection to Site Manager		rd:	Por	t:
New tab	CTRL+T		10	
Close tab	CTRL+W			
Export				
Import				-
Show files currently being edited	CTRL+E			
Exit	CTRL+Q			
Computer	-	_		
Filename Filesize Filetype	Filename	Filesize	Filetype	Last m
	•	m		•
l directories	Not connec	ted.		
Server/Local file Direction Remo	ote file		Size P	riority
<				+
Queued files Failed transfers Successful trans	sfers			
Opens the Site Manager		களை பெட	ue: empty	



	192.168.1.6 - FileZilla							
a sector to a sector of the sector of the sector	ansfer <u>S</u> erver <u>B</u> ookma							
	🛱 🗶 🖬 💺 🛷 🗐 🔗	? //						
Host:	Ucername:	Pass <u>w</u> ord:		Port:	Quic	kconnect 💌		
Command: PASS *****				6. AB	11. A.			^
Response: 230 Logged or								
Status: Connected								
Status: Retrieving direc Command: PWD	tory listing	Login	success	ful!				
Response: 257 "/" is curre	ent directory.							
Status: Directory listing	Construction of the second							~
New site - ipcam@192.168	3.1.6 New site - ipcam@:	92.168.1.6	× New site - inc	am@192.16	816 X			-
				Ging 192.10	0.1.0 A			
Local site: D:\temp\			te:]/					*
E Cosana	2							
🕀 🦳 Share		ei l						
🏵 🧰 System Volu	une Information							
🕀 🗁 temp								
a 🦰 subr	<u> </u>							
Filename /	Filesize Filetype 🗹							
A video_20110405_191723_0.		Filename	A				Filesize	Filetype 📩
A video_20110406_215054_5.			img_041411_14205					VLC media . 📟
A video 20110408 132333 0.		a motion	img_041411_14320	9_947.avi			3,862,864	VLC media .
<	2	<		10				2
126 files and 2 directories. Total s	size: 1,662,603,269 bytes	74 files and	2 directories. Total si	ze: 568,543,11	3 bytes			
Server/Local file	Direction Remote file		Size	Priority	Status			
				Contraction of the second			The second s	
Queued files Failed trans	sfers Successful transfers							
	1						BEER Onema anota	
						F	Real Queue: empty	

10. Now the FTP server is ready to store the event-triggered photo images from the network cameras. Following is a screen which the users may see on the FTP server software when a network camera is transferring photo image files to the FTP server.

Z FileZilla Server (127	.0.0.1)
Eile <u>S</u> erver <u>E</u> dit ?	
🦩 🔒 🚨 🖉 💡	/c/c/ 📰 🕶
(000025)2011/5/3 上午 07:16:19 (000025)2011/5/3 上午 07:16:19 (000025)2011/5/3 上午 07:16:19 (000025)2011/5/3 上午 07:16:19 (000025)2011/5/3 上午 07:16:19 (000025)2011/5/3 上午 07:16:19 (000025)2011/5/3 上午 07:16:19	ipcam (192.168.1.99)> 200 Type set to I USER NAME ipcam (192.168.1.99)> PASV - ipcam (192.168.1.99)> 227 Entering Passive Mode (192,168,1,10,7,39) - ipcam (192.168.1.99)> STOR Intering Passive Mode (192,168,1,10,7,39) - ipcam (192.168.1.99)> STOR Interior 20110503-07_14_37-00.jpg - ipcam (192.168.1.99)> 150 Connection accepted ipcam (192.168.1.99)> 226 Transfer OK
(000026)2011/5/3 上午 07:16:20 (000026)2011/5/3 上午 07:16:20 (000026)2011/5/3 上午 07:16:20 (000026)2011/5/3 上午 07:16:20	- (not logged in) (192.168.1.99)> Connected, sending welcome message - (not logged in) (192.168.1.99)> 220-FileZilla Server version 0.9.37 beta - (not logged in) (192.168.1.99)> 220-written by Tim Kosse (Tim.Kosse@gmx.de) - (not logged in) (192.168.1.99)> 220 Please visit http://sourceforge.net/projects/filezilla/
ID / Account -C+000026 (not logged in)	192.168.1.99 From this IP
<	
Ready	1,231,386 bytes received 0 B/s 3,363 bytes sent 134 B/s

11. Please note that this FTP server may also be accessed through Internet externally. Following screen shows an example of how the user may configure his broadband router to make this FTP server accessible from web externally. In case the fixed web IP of this connection is 219.86.240.235, and then the users from outside may access this FTP server from the web address of FTP://219.86.240.235:21 now. In other words the user can access this FTP server by the IPs of both 192.168.1.6 or 219.86.240.234 from near end after the NAT Virtual Server is properly routed.

Virtual Serve	r				<u> 1</u>	
Setting	up Virtual Servers allows remote u	isers to access services suc	ch as Web or FTP	on the LAN via public IF	Addresses.	
No.	Private IP	Private Port	Туре	Public Port	Comment	Enabled
1.	192.168.1.99	91	Both 💌	91	GVP-201	V
2.	192.168.1.99	556	Both 💌	556	GVP-201	
3.	192.168.1.188	92	Both 💌	92	GVP-201W	
4.	192.168.1.188	557	Both 🛩	557	GVP-201W	
5.	192.168.1.20	80	Both ×	80	GVP-NVR06	
6.	192.168.1.6	21	Both 🛩	21	FTP server	\supset
7.	192.168.1.		TCP 🗸			
8.	192.168.1.		TCP 💌			

In terms of how to get your fixed web IP address, please refer to your Internet Service Provider for more details. Usually PPPoE is the most common protocol used for getting fixed IP, and following image shows you the setting screen of such PPPoE

	ASU	S RX3081	
Wizard System Status System System Settings Administrator Settings Firmware Upgrade Configuration Tools	tt Name ASUS RX3081	clients in your network. Cable/DSL WAN IP	ion status, firmware/hardware version, and number of connected WAN Connected 219.86.240.234
System Log WAN LAN NAT Firewall Routing UPnP		Subnet Mask Gateway Primary DNS Secondary DNS Connection Type Connection Time Connect	255.255.255.0 211.78.222.137 61.31.233.1 61.31.1.1 PPPoE 03:10:38 Disconnect
DDNS Logout		IP Address Subnet Mask DHCP Server NAT Firewall	LAN 192.168.1.1 255.255.255.0 Enabled Enabled Enabled

Appendix II: How to install the VLC program

1. Go to <u>http://www.videolan.org/vlc/</u> and download VLC program. In this page there is a donation field, and it is all up to the users whether they want to donate to this VideoLan non-profit Organization. If the uses do not want to make donation immediately, just ignore and click on the "Download VLC" icon to proceed with the download.



Note: this VLC shareware is proprietary of the VideoLAN non-profit Organization

2. Install VLC 1.1.10 step by step

cense Agreement		A
Please review the license terms beh	ore installing VLC media player 1.1.10.	-
Press Page Down to see the rest of	the agreement.	
GNU GENERAL PUBLIC Version 2, June 1991		<u>^</u>
Copyright (C) 1989, 1991 Free Sol 51 Franklin Street, Fifth Floor, Bos Everyone is permitted to copy and of this license document, but chan	ton, MA_02110-1301, USA distribute verbatim copies	
Preamble		
The licenses for most software an	e designed to take away your	~
f you accept the terms of the agre agreement to install VLC media play	ement, click I Agree to continue. You must er 1.1.10.	: accept the
	< <u>B</u> ack Next >	Cancel

Check the components you v install, Click Next to continue	vant to install and uncheck the components you d	on't want to
Select the type of install:	Full	~
Or, select the optional components you wish to install:	Media Player (required) Start Menu Shortcut Mozilla plugin ActiveX plugin Discs Playback Description	~
Space required: 80.5MB	The VLC ActiveX plugin	

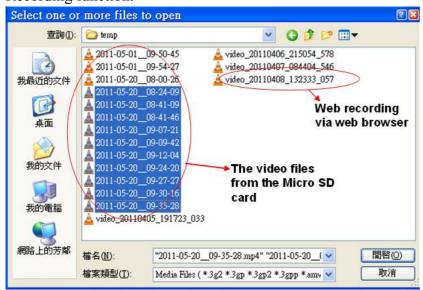
Be sure that the "Mozilla plugin" is selected if the users need to use Firefox as web browser too, in addition to Microsoft Internet Explorer.

Appendix III: How to replay the recorded video clips with VLC program

The following image is an example screen showing the video clip files which a user has collected inside a PC folder named "temp".

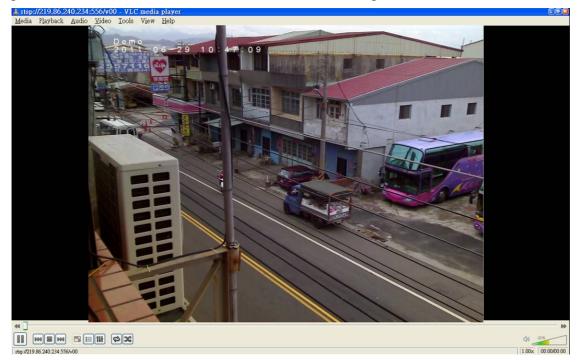
There are two types of files in this example. The files with the file format of

"YYYY-MM-DD_TT-TT-TT" format are recorded in the Micro SD card, and the ones in the format of "video_YYYYMMDD_TTTTTT_nnn" format are recorded by the web browser's Web Recording function.



Select whichever file the user want to replay. If the user has selected more than one file then the VLC will replay sequentially.

The multiple-selection is very useful, because the users may need to replay video data for a long period of time either from the SD card or Web Recording function.



Note: the users may right-click and choose "full screen" mode for full-screen display.