DVG-1100
DVG-1100W

1 Channel MPEG-4
Video Server / Encoder
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On-line Technical Support
For technical support and service, please visit our support website at: http://www.advantech.com/support

Product Home Page Link

Product Manual & Firmware & Utility Download Page Link
## Revision History

<table>
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<th>Date</th>
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<td>1.0</td>
<td>Initial Draft</td>
<td>2007/05/20</td>
<td>Vincent Shih</td>
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<td>1.1</td>
<td>Add I/O Interface</td>
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Safety Instructions

1. Read these safety instructions carefully.
2. Keep this user manual for later reference.
3. Disconnect this equipment from AC outlet before cleaning. Do not use liquid or spray detergents for cleaning.
4. For pluggable equipment, the power outlet shall be installed near the equipment and shall be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
7. Do not leave this equipment in an environment unconditioned where the storage temperature under 0°C (32°F) or above 40°C (104°F), it may damage the equipment.
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Place the power cord such a way that people can not step on it. Do not place anything over the power cord. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for long time, disconnect it from the power source to avoid being damaged by transient over-voltage.
12. Never pour any liquid into ventilation openings. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If any of the following situations arises, get the equipment checked by service personnel:
   a. The power cord or plug is damaged.
   b. Liquid has penetrated into the equipment.
   c. The equipment has been exposed to moisture.
   d. The equipment does not work well or you cannot get it to work according to user manual.
   e. The equipment has been dropped and damaged.
   f. The equipment has obvious signs of breakage.
15. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
   (1) this device may not cause harmful interference, and
   (2) this device must accept any interference received, including interference that may cause undesired operation.

16. **CAUTION:** Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges.

17. **CAUTION:** Any unverified component could cause unexpected damage. To ensure the correct installation, please always use the components (ex. screws) provided with the accessory box.
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1. Requirement

- 1 Channel MPEG-4 Video Server / Encoder × 1 (included)
- Power Adaptor (DC 12V/1A) × 1 (not include)
- Installation CD & operation manual × 1 (included)
- Network cable × 1 (not included)
- Video cable BNC Connector × 1 (not included)
- Analog Camera × 1 (not included)
- Network Connection (ex ADSL/Cable Modem) × 1 (not included)
- One fixed IP or floating IP × 1 (not included)
- HUB or Router × 1 (not included)

Please prepare these items if you use wireless function.

(1) Mini-PCI 802.11b/g Wireless Card × 1 (optional)
(2) AP (access point) × 1 (not included)
2. Overview

Outlook

Top View

Bottom View
3. Block Diagram

Application Diagram
4. Installation & Settings

System requirement:
OS: Windows 2000 or Windows XP
Communication: TCP/IP
Interface: 10/100M base LAN
Web Browser: Microsoft Internet Explorer

4.1. Power Connection
Please use DC12V /1A power adapter with Video Server, system need 20~25 seconds to finish boot-up process

4.2. Video Input and video out connector
There are two BNC connectors at real panel of video server.
Video input: connector to CCTV camera or any video source, for example DVD player.
Video output (video Loop): for duplicate input signal to another device. i.e. DVR, VCR.

4.3. Install utility software on client PC
Open CD-ROM Folder from my computer. Find “VideoServer_Utility.exe” and double-click to install utility program for DVG video server.

✧ DVG_Finder is a utility to search installed Video Server. Please make sure Client PC and Video Server was connected via network HUB or Switch. Another method is connecting Client PC directly to Video Server via Ethernet cable.
4.4. Network Connection

In the Local LAN environment, connect the client PC and Video Server to a network switch/hub via network cable.

4.5. Setting IP of video server by DVG_Finder

Open DVG_Finder from start menu under advantech folder. Clicking the [Search] button, DVG_Finder will search all installed Video Server in the same network subnet and list their device name, IP Address and MAC Address in the windows.

User must manual configure IP address of video server via DVG_Finder at first time. Default IP Address of Video Server is 192.168.1.126. User can change to DHCP model after connect to video server. IP address of Client PC must in the same network subnet otherwise client PC can not connect to video server.
4.6. How to change IP address of video server

Select one IP address which was searched, and click [UpdateIP].

It will show the picture as bellow, you can change IP ADDRESS you need, Netmask, Gateway, and enter login IE User Name, Password, click OK button to change IP.

4.7. How to change device name of video server

Select one IP address which was searched, and click [UpdateName]:

It will show the picture as bellow, you can change IPCAM name, and enter login IE User Name, Password, click “OK” the setup completes.
4.8. **How to change port number of video server**

Select one IP address which was searched, and click [UpdatePort]:

It will show the picture as bellow, you can change port you need, and enter login IE User Name and Password, click “OK” the setup completes.

![Update Port](image)

4.9. **How to reset IP address of video server**

Select one IP address which was searched, and click [Default]:

It will show the picture as bellow, and enter login IE User Name and Password, click OK.

The IP Address of Video Server will change to 192.168.1.126 as default.

![Reset Default](image)
4.10. Internet connection

Reference for Intranet and Internet connection methods:

Internet refers to Public IP Address, while Intranet refers to Private IP Address.

Private IP Address ranges:

- Class A  10.0.0.0  through  10.255.255.255
- Class B  172.16.0.0  through  172.31.255.255
- Class C  192.168.0.0  through  192.168.255.255

Intranet: To have a successful connection, Video Server and the client computer should be in the same networking environment, and their Private IP Address should be on the same Subnet. It is shown in the picture below.
Internet

**Method ONE**: Video Server connects to Internet via router. At this moment, Video Server’s setting is Private IP Address. To properly connect to Internet, the client should go through with router’s forward rules. It is shown in the picture below. Please refer to router’s user manual for Port forwarding/Virtual Server configuration.

**Method TWO**: Video Server connects to Internet directly. If it is a fixed IP, you have to type the IP Address provided by your ISP. If it is a floating IP, you have to type the account and password provided by the ISP to dial-up (PPPoE).
4.11. Web Browser Settings (download ActiveX Component)

Video Sever will download ActiveX Component from video server automatically when you first time login built-in web server. Internet explorer will show message that request download ActiveX control “IMMP4.cab”. Please click “Install ActiveX control”

Step 1:

Step 2: IE will pop-up a windows. Please click [Install]
4.12. Uninstall ActiveX Component

User can uninstall Web ActiveX component manually. Open \"C:\WINDOWS\Downloaded Program Files\folder. Right click on [IMMP4Control Control] select “Remove” to uninstall OCX.

Or from Internet explorer menu [Tools] → General → Setting → View Files

4.13. UPnP Service

The UPnP functionality is enabled for you to find the location of the Video Server rapidly. To install the UPnP service on your computer, open the Control Panel from the Start Menu and select Add/Remove Programs. Select Add/Remove Windows Components and open the Networking Services section. Click Details and then select UPnP as the service to add.
5. Connect to Video server by browser

After searching IP address step, you can double click [Name] on DVG_Finder window to open IE windows. Or you can open Internet explorer manually and enter IP address to connect Video Server.

Internet Explorer will pop-up windows and ask your User name and Password.

The default user name is “admin”, and you don’t have to enter the password.

Click OK. The camera’s Live View page is now displayed in your web browser:
The Homepage of Video Server in Internet Explorer interface as show in picture:

![Video Server Interface](image)

Function introduce as bellow:

(1) Play remote video • Stop play video • REC_AV, REC_AVI → Record AV or AVI format video clip
(2) Snapshot→Take a single picture of video
(3) View Size
(4) PTZ Control : you can control the way • zoom and focal length
(5) PTZ Preset point setup
(6) Video Control : Brightness • Contrast • Saturation
(7) Setup Function:
   There are three main function option manual, Basic Configuration • Advance Configuration • REC View after clicking Setup button.
(8) Language: Chinese • English interface
(9) Frame Rate and Bit Rate of current steaming video

For Internet explorer 7.0, user must enable [Allow status bar updates via script].

IE7 Menu → Tools → Internet Options → Security tab → Custom level → Scripting section → Allow status bar updates via script → Enable

※ For more detail information in Play • REC function, please refer to Live View introduction.
6. IE Setup function interpretation

6.1. Basic Configuration

6.1.1. Status

Click Setup button into Basic configuration function, Status shows System Information, Firmware current version, MAC Address, Camera information, Total live view users, Wireless status, OCX information:

**System Information:**

1. **Firmware Current Version**: It shows firmware version you are using and the version date.

**Network Status**:

1. **Ethernet MAC Address**: It shows the device’s current MAC Address.
2. **LAN IP Address**: It shows the device’s IP address.
3. **LAN Netmask Address**: It shows the device’s Netmask address.
4. **LAN Gateway Address**: It shows the device’s Gateway address.
5. **DHCP State**: It shows the DHCP Client status of device.
**Camera Information**:

<1> Camera Type: It shows the connected camera's video signal type. (NTSC or PAL)

<2> Total live-view users: It shows the number of concurrently connected users session, which excludes those who only operate on the screen without played video image.

**Wireless Status**:

<1> Wireless Connection: It shows status of wireless card. UP means you installed wireless card, DOWN means you don’t install wireless card.

<2> Channel: The channel used over wireless LAN

<3> Signal Level: The signal strength (0-100%), the higher the number, the stronger the signal.

<4> TX Rate: The transmission speed of current wireless LAN connection.

**OCX Information**:

<1> OCX Current Version: It shows current version of OCX.

<2> OCX Path: It shows the path of OCX.

**Noted**:

「Return」: It will return to Homepage of Video Server when you click Return button anywhere.
6.1.2. Video & Audio Settings

**Video Stream:**

1. **CBR**: Constant Bit Rate, Configure video stream bit rate as 128kbps, 256kbps, 384 kbps, 512 kbps, 1M kbps, 1.5M kbps, 2M kbps, 3M kbps. Default: Disable

2. **Resolution**: Change the resolution of streaming video, there are D1, Field, CIF, QCIF four kinds of resolution for your choice. Default: CIF

3. **Limit frame rate to**: Adjusts the amount of the frame per second allowable (the more the frames are transmitted, the smoother the video will be). When PAL signal, you can select 1, 2, 5, 10, 20, 25. When NTSC signal, you can select 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 24, 30. Default: 10

**Snap Shot:**

1. **Path & File Name**: Save the path and file name when you take a snapshot.
   
   Default: c:\image (It means save file at C:\, file name will be “image+ take snapshot time + jpg”)

2. **Time Label**: Turn on/Turn off time label (Yes / No). Default: Off

**OSD:**

1. **OSD Text**: Enters the text in the text box to be displayed on the video image. (only 32 bytes).


**REC:**

1. **REC File**: File path to save record file. Default: C:\rec. (It means save file at C:\, file name will be
“rec+ take snapshot time +.AV”).

<2> REC Duration time: Setup REC duration time. (0-infinity) seconds. Default 0 means REC continually.

Note: The AV file maximum capacity is 1G, when bigger than 1G, system will save to the other one file automatically.

<3> REC Time Label: Turn on/ Turn off REC time label.

<4> REC File Time Label: Turn on/ Turn off REC file time label when replay REC.

Note: The file must be already saved REC file.

Audio setting:

<1> Audio Volume: Adjust audio volume, the volume range 1~10. Default: 1.


<3> PC Audio Enabled: Choose the volume from PC audio. Default: Enable.

Note: When Server side audio is disable, PC will no Audio stream from Video Server.

6.1.3. Networking

IP Address Configuration:

There are 2 methods to set up IP Address. One is obtaining IP address settings automatically (DHCP), and the other is assigning IP address manually. If your network supports DHCP, click the button of View to obtain the IP address automatically from the DHCP server.

DNS Configuration:

It allows you to set up DNS Server manually.

When using DHCP mode, you can also choose DNS Server it provides.

HTTP:

Sets up the Port to be transmitted the streaming data from the Video Server.

Note: the default HTTP port number is port 80.
### 6.1.4. Wireless Settings

#### Basic Configuration:

1. **Operation Mode**: Two modes, Infra (Infrastructure Mode) and Ad-Hoc Mode. If you are just operating with AP, please select Infra mode, if it is a point-to-point transmission, please select Ad-Hoc mode. **Default: Infra.**

2. **Wireless Type**: Two modes, 802.11b/g mixed mode, and 802.11b mode. **Default: 802.11b/g mixed mode.**

3. **Country Region**: Selects the country region that wireless card you are using. The default is FCC. Its specification should be consistent with your Mini PCI wireless card's setting. Please refer to the instruction on the rear for relevant information.

4. **Channel**: You are allowed to select different channel (1~11) to reduce noise. **Default is 10.**

5. **TX Rate**: Sets up the transmission speed, Auto, 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54Mbps. **Default is auto.**

6. **SSID**: The SSID you enter should be consistent with AP's SSID. **The default is ipcam_wlan.**

7. **Ad-Hoc Mode**: Set up the transmission mode of Ad-Hoc, 802.11b and 802.11g. **Default: 802.11b**

8. **B/G Protect**: If your network environment have 802.11b and also have 802.11g, suggesting you start that protection. It will increase 802.11b and 802.11g data collision probability, but the transmission capability will also reduce, because there are too many information frames to being delivered. Auto: Open or close protection mode.
automatically according to the network condition. On : Turn on the protection.
Off : Turn off the protection.

<9> TX Preamble : Define CRC block length in the Ad Hoc mode. There are three kinds of select mode :
   Auto · Long and Short, select "Auto" to indicate the wireless network card will
distinguish automatically.

<10> TX Burst : Whether select the higher transport quantity or not.

<11> Turbo Rate : Can increase to the 108M, but essential is all Ralink wireless network card.

<12> Short Slot : Increase the online velocity, but the transmission speed will reduce.

Security Settings :

<1> Authorization Type : Two authorization types can select. Open System or Shared Key mode.

<2> Encryption Type : None or WEP.

<3> Default Key ID : 64Bit and 128Bit. There are 4 sets of Default ID, but only one of them works. You
   have to choose the right Default Key ID (please refer to your AP setting). It will verify if the Default
   Key ID’s WEP Key ID is correct.

<4> WEP Key ID 1~4 : From the drop-down list, select the ID is HEX format or ASCII format. The
   number of character depends on the number of WEP key bit settings. For Hex format, the
   characters allowed for input are from 0 – F. If you are using 128 bit WEP, 26 Hex characters are
   needed; while 10 Hex characters are needed for 64 bit WEP. On the other hand, if ASCII format is
   used for character input, 5 ASCII characters are needed for 64 bit WEP, and 13 ASCII characters
   are needed for 128 bit WEP.
6.1.5. PPPoE

Configuration:

<1> Enable PPPoE: Enables or disable this function.

<2> User Name: Enter the account provided by ISP.

<3> Password: Enter the password provided by ISP.

<4> MTU: Maximum Transmission Unit.

<5> Email Notification when IP is changed: Enables or disable this function.

   (Make sure you have configure E-mail setting in advance)

Status:

Click Refresh, you can see the IP Address provided by the ISP on the Status Bar.

6.1.6. DDNS
Dynamic DNS:
To use DDNS service, be sure to go to the web site of DynDNS (www.dyndns.org) and PeanutHull, and register for a dynamic domain name, which can be used to access it over Internet. Free of charge. Or you can’t use the service. For more information, please go their web sites.

<1> Chose Server: Choose the desired DDNS Server. Free DDNS service provided by DynDNS and PeanutHull.

<2> DNS Account: It is an account provided by DDNS Server service. For example, myname.dyndns.org is the Host Name applied by your DNS, and this is your Host Name.

<3> User Name: Enter the applied user name

<4> Password: Enter the password of the user name.

<5> Manual Update: Click this button, you are allowed to inform the DDNS Server manually of your new IP address.

6.1.7. DATE & TIME

Current Server Time: Shows the current date and time stored in Video Server.

Time Zone: Select your time zone from the drop-down list.

Time Mode: Obtain the time information from an NTP server. Specify the NTP server’s IP address or host name. System will automatically sync time server every 10 minutes.

Update Server Time: Set the time from the clock on your client computer. It also allows you to manually set the time and date.
6.1.8. Log

Log Information: Shows log system time · connection history · IP status information.
PS. Log information will be erased after system reboot.

6.2. Advance Configuration

6.2.1. MAINTENANCE

Maintain Server:

<1> Restart: To restart video server, all setting won’t change.

<2> Restore: Reset all parameters, except IP parameters, to the original factory settings.

<3> Default: Restore all settings as default.

Upgrade Server(Firmware):
Click Browser, select firmware (*.img file) and click upgrade. The firmware will be updated accordingly. Finally click Restore to ensure upgrade completely.
6.2.2. ADMINISTRATOR

User List: Add/Remove user account.

Add New User:
User Name: Enter A-Z or a-z, only use English and number to make up user name, and user name has to less than 14 characters.
Password: Key in password.
Confirm Password: Key in password again.
User group: Choose new user be Administrator level or User level. User level only can view live video stream, he can not change any parameter which saved in Video Server.
Save: Press “save” button, the user that succeeds to add will display in the table.
Remove: Click Remove to cancel user name at user list.
Note: 「admin」account can't delete.

Anonymous User Setting: Yes or No. Enable anonymous viewer login. (No user name or password required.) **Default: No.**

**Maximum number of simultaneous viewers limit**: Enter maximum number of simultaneous viewers. **(Maximum value: 20).**

**Display Name**: Allows to change Video Server’s name according to your requirement or preference. Camera name can be seen by using DVG_Finder utility.

### 6.2.3. CHANGE PASSWORD

![Change Password Interface](image)

**Management**: This function allows you to change the password of the user name that you login with.

### 6.2.4. SMTP

![SMTP Interface](image)
To set up mail server, please use the mail server provided by your ISP.

**SMTP (E-mail) Settings**:
- **Mail server**: Set up the major mail server.
- **From E-Mail address**: Set up the Sender's E-mail account.
- **Authentication · User Name · Password**: If the mail servers require authentication, please check Yes here, and enter User name and Password in the field provided.
- **Send a test e-mail with SMTP server1**: Enter E-mail address you want to send and click Test button for testing.

### 6.2.5. FTP

**FTP Settings** : REC file can update to FTP Server.
- **FTP Server**: Enter IP address of FTP server.
- **User Name**: Please key in the account name that you apply for.
- **Password**: Please key in the password that you apply for.
- **FTP Command Port**: Set up FTP Command port, **Default: 21**.
- **Path & File Name**: It is the path and the file name of your uploaded file.
  
  Ex. ./DVG-1100
6.2.6. PTZ

Select PTZ Protocol: Pelco-P or Pelco-D. Default: Pelco-P.

Select PTZ Baudrate: Select PTZ Baudrate (bit/s).
There are 9600bit/s, 4800bit/s, 2400bit/s, 1200bit/s. Default: 9600bit/s.

Set PTZ Address: Type your PTZ Device address ID. RS-485 device ID. Default: 0

Set pan direction: Set up moves perpendicular direction. Default: Down.
6.2.7. ALARM EVENT

- **Embedded Motion Detection Setting**
  - **Set Motion Detect Region**: Set up motion detection region. Click "Begin ", choose range 0~15 and click "Edit Region ", and then you can drag-drop a square region on video. If want to cancel the region, please click "Remove Region ". And Click "End Edit "to stop the event.
  - **Sensitivity**: The value is smaller, the sensitivity is higher.
  - **Motion Detection enabled**: Enable or disable motion detection.

- **Embedded Motion Detection Event**: Send E-mail with a JPEG or upload to FTP with *.AV file.

- **I/O & Alarm Setting**: Set up the I/O input port and relay-output status.
  - **Isolated Input**: Can set up alarm level and alarm event.
    - **<1> Alarm Level**: Have three kinds of type: low alarm, high alarm and no alarm.
      - When the GPIO normal input is a high level, then select " low level ";
      - When the GPIO normal input is a low level, then select " high level ". **Default: No alarm.**
    - **<2> Alarm Event**: When GPIO alarm was triggered, it can select corresponded alarm event:
      - Send E-mail with a JPEG picture
      - Upload .AV file to FTP Server.
  - **Output Relay Control**: There are three dry contact output of relay-output.
    - NO and COM: two pins will normally “OPEN”, when control signal level = low.
    - NC and COM: two pins will normally “CLOSE”, when control signal level = low.
    - When user set control signal level to “High”, the status will reversed.
I/O Port Pin Define:

- **RS485 B / D+**
- **RS485 A / D-**
- **Ground**
- **Input (DV 5V or Ground)**
- **Ground**
- **Normal Open**
- **Common Pin**
- **Normal Close**
6.2.8. Special Setting

Video Advance Setting:
Compression: Set video compression

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<th>Compression</th>
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<th>14</th>
<th>20</th>
<th>26</th>
<th>31</th>
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<tr>
<td>Bit rate</td>
<td>170~850 kbps</td>
<td>120~500 kbps</td>
<td>110~360 kbps</td>
<td>110~330 kbps</td>
<td>110~270 kbps</td>
</tr>
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P/I Ratio(P frame; I frame): Can change the ratio of the P frame and I frame (When I frame ratio more higher, the streaming video quantity more clear but opposite data will also become more bigger).

CMOS frequence: Select the frequency, 50 Hz or 60 Hz of the CMOS usage. Default: 50 Hz

RGB: When the performance of display card is worse, it can't display steaming video properly. It can select use RGB format to display. Default: No

Cut Pixel: Some camera resolutions couldn't attain 720*576, because the both sides of the video have a black side. It can conceal this black side with this set up. Under the different resolution, the set up needs to cut off the picture element of the black side.

To AVI: AV file convert to .AVI file.

After convert .AV to .AVI format, user must have Mpeg-4 video codec to playback the recorder video via Windows Media player. Please find free codec under [codec] folder from our utility CD and install it before playback video.

Or user can download free codec from internet.

http://free-codecs.com/
6.3. REC View

This function can playback video files which were recorded previously. Click “Browse” button can select files to play. (*.av). Click "Play" button to start playback the recorded video. Click "Stop" button to Stop. If want to pause video then click “Pause” button.

Above " <<1 · <<2 · <<4 · <<16 · <<32 · 32>> · 16>> · 8>> · 4>> · 2>> · 1>> “ button can control playback streaming video forward or rewind by 1, 2, 4, 8, 16 and 32 multiples.

Click the " Snapshot " button will save image from playback video.
7. 16 Channel Surveillance Software

7.1. Introduction

PowerView-NVR/DVG_Recorder series is multi channel recording software for DVG-1100 video server. Any PC running with PowerView-NVR/DVG_Recorder will turn into professional DVR platform which can connect up to 16 channel video server and recording real-time audio/video stream into hard driver.

7.2. Installation “VideoServer_Utility.exe”

Open CD-ROM Folder from my computer. Find “VideoServer_Utility.exe” and double-click to install utility program for DVG video server.

- **DVG_Finder** is a utility to search installed Video Server. Please make sure Client PC and Video Server was connected via network HUB or Switch. Another method is connecting Client PC directly to Video Server via Ethernet Lan cable.

- **DVG_Recorder** is utility to save audio/video data into hard disk.

Execute DVG_Recorder from star menu. Windows system firewall will show alarm when execute DVG_Recorder utility at first time. Please select “Unblock” and continue.
7.3. Main Window

7.4. Configure storage path of video
Click [Setup] at main menu and system setup window will show up. Under Server page, user can configure four storage path where to save audio/video from video server.

7.5. Configure & Connect to video server

Step 1: Right-click on video window and then pop-up menu will show up.
Step 2: Click [Setup] → [Source/Connection Setup] → Configure window show up.
Step 3: Configure setting for each video window. There are 16 tabs [View1 ~ View16].
   a. Remote Server Name/ID: IP address of remote video server
   b. Port Number: 80 [default]
   c. User Name: admin
   d. Password: xxxxx
   e. Target Device Type: [1 Channel Video Server]
   f. Frame Rate: 30 [Max]
   g. Stream buffer time: default value is 1.5 sec for buffer; user can change to 0 sec for better response time.
   h. Check [Auto Reconnect after abnormal connection broken]

Click [Yes] to save the change and back to main window.

Step 4: Right-click on video window and select [Connect]. System will start connecting the remote video server.

7.6. Record audio/video

Right-click menu → [Local Record Control] → [Local Start to Record] or [Local Record Audio]
7.7. Playback video

Step 1: Click [Play] at main menu, Video player window will show up.
Step 2: Right side of the window show the 16 video windows.
   Click one of the windows will show the recorded clip list at left side of the window.
Step 3: Select recorded video clip from left side of the window. Move mouse to playback control button and click [►] to playback the video clip.
Step 4: Double-click on video window can enlarge the playback window.
7.8. Modify, Repair or Remove

Run “VideoServer_Utility.exe” from CD-ROM. System will show following window once you have installed videoserver_utility.

7.9. Save exist configuration file before upgrade utility

User can save exist configuration file of DVG_Recorder before proceed remove or upgrade utility. Please find “Config.ini” under installed folder and save to another folder before Remove or Repair videoserver_utility.
8. Specification

- **System**
  32-bit RISC CPU / Embedded OS
  Hardware ASIC MPEG-4 Encoder
  Max. frame rate: NTSC 30 fps @ D1 723 x 480
  Max. frame rate: PAL, 25 fps @ D1 720 x 576
  MPEG-4 simple profile / ISO/IEC 14496 compression
  Support JPEG format snapshot
  OSD (Text over Video)
  Adjustable MPEG-4 compressor P/I ratio
  Resolution: D1 / Half-D1 / CIF / QCIF
  Built-in 2D de-interlacing / scaling

- **Audio**
  Internal microphone & 3.5 mm audio Line-In (mono)
  Audio compression / ADPCM 40 kbps

- **Surveillance & Alarm**
  Video loss detection
  Multi-region motion detection (15 Regions)
  Selectable alarm trigger action
  E-mail attachment with snapshot
  FTP upload pre/post alarm video clip (2Mbit buffer)
  Web UI for live/audio/video monitor & Record
  On-Line firmware upgrade

- **Software**
  Two level user management (admin / guest)
  DVG Finder utility for device IP search
  16-channel surveillance software
  Browser: Internet Explorer 5.0 or above
  RJ-45 10/100 Mbps Ethernet, auto-sensed
  Protocols: ARP, TCP, UDP, IP, HTTP, SMTP, FTP, DHCP
  Client, NTP, DNS, uPnP, PPPoE, TFTP
  Support Dial-up ADSL with PPPoE
  Two sets free DDNS server option
  Two sets DNS server setting
  Two sets SMTP server setting
  Time zone setting / NTP server
  Adjustable transmission bit rate (CBR or VBR)
  Support UPnP Protocol for easy device discovery
  Max. 15 user concurrent access

- **Network**
  Wireless LAN (optional) Standard: Mini-PCI 802.11 b/g
  I/O Interface
  1 x BNC video input / video loop connector
  1 x Half-duplex RS-485 port
  3 x Digital isolated input (5Vcc max.)
  1 x Relay output (1A 240Vac / 30Vac /2A 125Vac)
  Power / LED
  DC 12V / 1A
  Power LED (orange)
  Ethernet status: Link / Active (green)
  PTZ Control Protocol
  Pelco-P / Pelco-D
  Operating Temperature
  Standard 0 - 50°C
  Phoenix -20 - 70°C
  Dimension (H x W x D)
  92.3 x 11.4 x 45 mm (3.64” x 4.49” x 1.77”)
  Weight
  680g
  Certification
  CE/FC Class B , UL
  Installation
  DIN-Rail Kit
  Wall-mount kit