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JVS-D7216 Standalone DVR Instructions

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JVS-D7216 Standalone DVR Instructions

1. Introduction

1.1 Product Description

This standalone DVR uses an embedded processor and OS with advance network capabilities. This standalone DVR serves as a digital video and audio recorder, plus digital video and audio server functions. It can work individually or with other equipments to form a network. This DVR is perfect for small to medium business or residential applications.

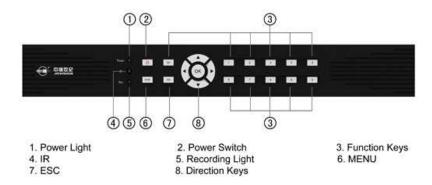
1.2 Features

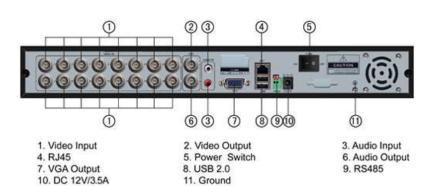
- User friendly Linux operating system.
- D1 previewing resolution and CIF compression resolution.
- Supports 4/8/16 channel video and 2 channel audio.
- Support snapshot during previewing and playback.
- H. 264 compression standard and adjustable compression quality.
- Supports adjustment of video quality.
- Supports five monitor resolutions.
- Supports Privacy Area Functions.
- Supports PTZ controls.
- Supports alarm input and output.
- Supports software updates.
- Supports both static and dynamic IPs, PPPoE and remote link statistics.
- Support Mobile Monitoring and PTZ controls from remote PC or Andriod/iPhone.
- Supports system log and Admin rights.
- Preview, PTZ control, playback and download remotely.

1.4 Specifications

Model	JVS-D7216	JVS-D7216
os	Embedded Linux	Embedded Linux
Video Standard	PAL / NTSC	PAL / NTSC
Compression	H.264	H.264
Standard		
Recording Type	Manual, Scheduled, Alarm, Motion Detection	Manual, Scheduled, Alarm, Motion Detection
Searching records	Time, Event, Channel, System Log	Time, Event, Channel, System Log
Backup Type	Network Backup, USB Backup, SATA	Network Backup, USB Backup, SATA
	Backup	Backup
Video Input	4 Channels BNC	8 Channels BNC
Video Output	1 Channel BNC and 1 Channel VGA	1 Channel BNC and 1 Channel VGA
Audio Input	4 Channel BNC	8 Channel BNC
Audio Output	1 Channel BNC	1 Channel BNC
Previewing	D1: 702x576 PAL 702x480 NTSC	D1: 702x576 PAL 702x480 NTSC
Resolution		
Playback	CIF: 352x288 PAL 352x240 NTSC	CIF: 352x288 PAL 352x240 NTSC
Resolution		
Motion Detection	Up to 4 independent detection area in each	Up to 4 independent detection area in each
	channel, Multi-level sensitiviity.	channel, Multi-level sensitiviity.
Layout	1 and 4 Screens	1, 4 and 8 Screens
Total Frame Rate	100 fps (PAL), 120 fps (NTSC)	200 fps (PAL), 240 fps (NTSC)
Saving Records	Local HDD and Remote Network	Local HDD and Remote Network
Local Playback	1 Channel or 4 Channels Playback	1 Channel or 4 Channels Playback
Alarm Input	Up to 32 Input	Up to 32 Input
Alarm Output	No Limit	No Limit
PTZ Control	RS485	RS485
HDD Port	2 SATA ports, Up to 2TB per one	2 SATA ports, Up to 2TB per one
Network Port	RJ45 10M/100M Adjustment Port	RJ45 10M/100M Adjustment Port
USB Port	2 USB	2 USB
Power	12V 5A	12V 5A
Size	340mm*332mm*56mm	340mm*332mm*56mm

2. Panel Instruction





3 Installation Instructions

Before installation, make sure your internet connection and power cable is plugged into the unit.

If you plan to use the DVR to record locally, an installed HDD is necessary. It is necessary to format the HDD. Menu \rightarrow System Settings \rightarrow HDD \rightarrow Format.

4. Mouse Instruction

A mouse can be used on either USB port.

The interface of DVR is similar to Windows. Left-click means selected or OK, and right-click means cancel or exit.

While previewing images, double left-click mouse to single-channel preview and double left-click again to return to multi-channel preview.

When menu is shown on screen, right-click or click means close the menu window or exit.

5. Menu Structure

The menu includes check box, select box, edit box and buttons.

- (1) Check box:"√"stands for valid and"□"stands for invalid.
- (2) Select box: Left-click mouse.
- (3) Edit box: Enter objective content in edit boxes.
- a. Change input content by left-clicking "123,".
- (4) Buttons

JVS-D7216 DVR O/S Instructions

3.1 Previewing

The previewing interface will be shown after starting system. recording. this channel is set alarm, but is not triggered. the alarm is triggered. client-end is linking this channel.

3.2 User Login

After starting system, right-click to log in.



The default Username is "abc" and Password is "123". It is recommended to change your username and password in User under System. Please make sure your "Local User" and "Net User" are the same.

If you forget your username and password you can send the S/N code and user information to Email Support to get a temporary password.

3.4 Main Function

After login, right-click to enter the Main Menu.

System: System settings
PTZ Control: Control PTZ
Record: Record manually

Playback: Playback recording files

Network: Network settings

Snapshot: Snapshot while previewing and playback

Set Video: Adjust video images quality



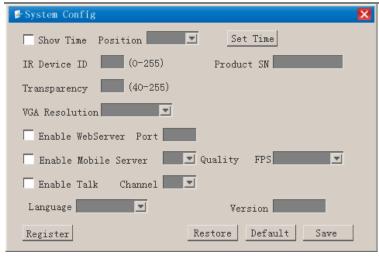
3.5 System

System includes System Settings, Channel Settings, User Management, HDD Management, System Log, Software Update, Snapshot Management and Alarm.



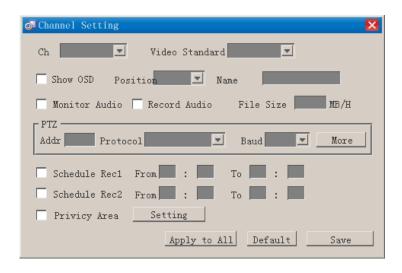
3.5.1 System Settings

- Check "Show Time", the time can be shown on screen. Time can be shown on top or bottom. Click "Save" to become effective.
- IR Device ID is the code for remote control. Only when the IR Device ID and remote control use the same code will the remote function with the unit. Click "Save".
- Transparency: The smaller the value, more transparent. Click "Save" to become effective.

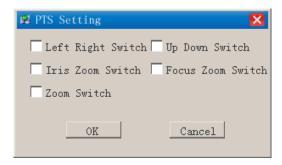


- VGA Resolution includes 800*600, 1024*768, 1280* 1024, 1280*768 and 1440*900.
- Enabling WebServer allows the user to view remotely. Default port is 80, user can use IP address to view remotely. If user changes other port, for example 88, user must add port number after IP address, for example http://192.168.8.245:88. The detail IE surveillance instruction is according to 4.2 IE. Click "Save" to become effective.
- Enable Mobile Server allows the user to view remotely from a mobile phone. Image quality and FPS can be adjusted according to bandwidth of phone internet. Image quality includes high, middle and low. FPS includes 30, 15, 8, 4 and 2. Click "Save" to become effective.
- Enable Talk to let user allow any one channel to talk with client-end software. Click "Save" to become effective.
- Language includes Chinese and English currently. More languages will be added. Click "Save" to become
 effective.
- Restore: Restore the whole system to be default settings.
- Default: Restore the current page to be default settings.

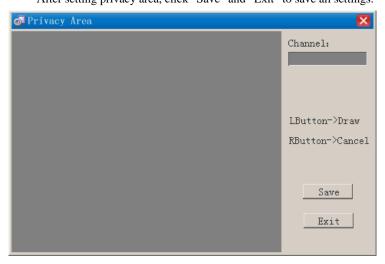
3.5.2 Channel Settings



- Choose different channel and set video standard (PAL/NTSC) according to the standard of cameras. Click "Apply
 to All" to ensure changes effect all channels. "Save" to become effective.
- Click "Show OSD" to manage if the OSD is shown at the top or bottom. Click "Save" to become effective.
- Monitor Audio means enable audio while previewing. Click "Save" to become effective.
- Record Audio enables audio while recording and playing back. Click "Save" to become effective.
- File size can be adjusted between 100 MB/H and 500 MB/H. Click "Save" to become effective.
- PTZ settings include Address, Protocol and Baud rate. Click "Save" to become effective. More → PTZ order exchange, as follows:



- Schedule Record can be used to choose two scheduled times to record every day. Click "Save" to become effective.
- Privacy Area setting is as follows:
 Left-click the mouse to choose privacy area. Right-click to cancel the privacy area. Up tp 4 areas can be assigned.
 After setting privacy area, click "Save" and "Exit" to save all settings.



3.5.3. User Management

Users include Local Users and Network Users. Login Users mean the users who can control the host-end and Network Users means the users who can control and view remotely.

- Click "Add" in User Management page to add new users
 - Input new user name
 - Input the password of new user

Set the rights of new user

Check privileges of new user

Click Add to save the settings of new user

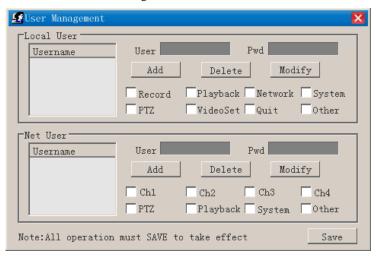
Modify User

Left click the target user and change the information of the target user. Click "Modify" to save all changes.

Note: Only administrators can edit the rights of other users.

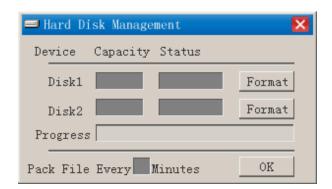
Delete User

Left click the target user and click "Delete" to delete the user.



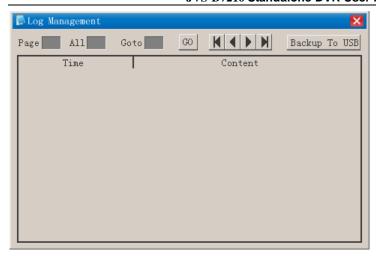
3.5.4 HDD Management

HDD information includes Device, Capacity and Status. If status is normal, you can record and capture snapshots..
 If status is unformatted, you will need to format HDD.



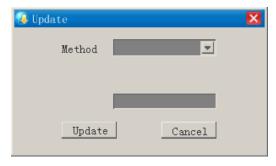
• File Packed Time can be set between 5 and 99 minutes. If 60 minutes is set, the time period of every recording file is 60 minutes.

3.5.5 System Log



- System log can be recorded page by page. Page means current page. All means the total pages of system log. If you want to check any page, enter the page number into the Goto box. If you mean the first page, previous, next and the end page.
- System log can be backed up to USB Device. Notice: USB device needs to be FAT32 form.

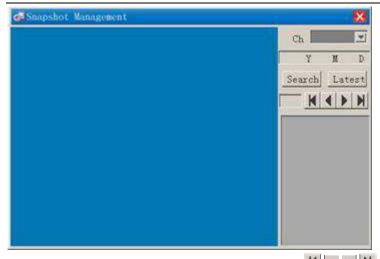
3.5.6 Software Update



Notice: During update, do not stop power.

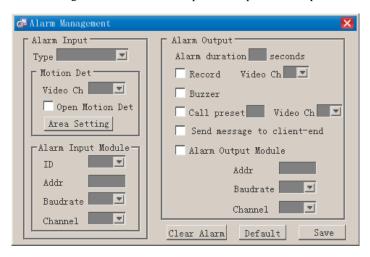
- USB: Copy the newest software into a FAT32 form USB device, insert the USB device and click "Update".
- FTP: Copy the newest software into the root menu of FTP server, input the IP address of FTP server and click "Update". Notice: The FTP must support public user.
- Website: Choose website and click "Update". This method is suggested.

3.5.7 Picture Management

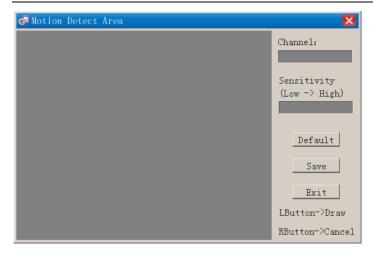


3.5.8 Alarm Management

Alarm management includes alarm input and output. Alarm input includes Motion Detection and Alarm Input Module.



Motion Detection: Choose channel and Enable Motion Detection.

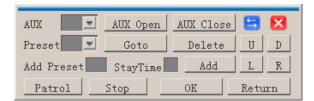


Alarm output actions include recording, buzzer, calling presets, sending message to client-end. The time of the alarm can be set between 1 and 999 seconds. Alarm Output Module settings include address, baud rate and channel No.

3.6 PTZ Control

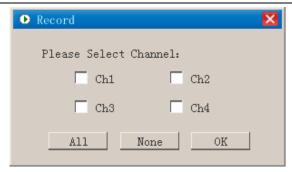


The main functions of "PTZ" includes: Direction control A/T/A/D, Iris control, Focus control, Zoom control and PTZ speed. Adjusts the location of control panel.



Other functions (Click "More"): Preset and auxiliary functions of camera (Wiper and Lights).

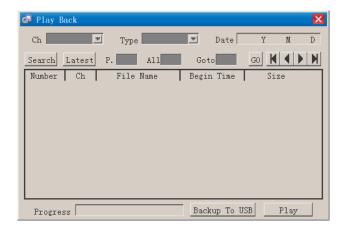
3.7 Record



All / None: Start recording all channels / Stop recording all channels.

Notice: Before recording, make sure that HDD has been formatted. **E** means recording.

3.8 Playback



Click "Playback" and the recording file list will be shown. Choose Channel, recording type and date to search the recording files. The search results will be shown page by page. If I mean the first page, previous page, next page and the end page.

Backup to USB Device: Choose the target recording files and click "Backup to USB Device". *Notice: Make sure the USB Device is at least 2.0 speed and formatted in FAT32 and contains enough free space..*

Play recording file: Choose the recording file and click "Play".

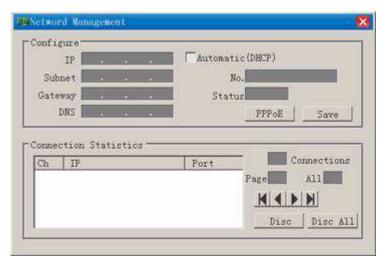


Playback Tools Bar: The playback tool bar is shown at the bottom of interface. Right-click to show/hide the playback tool bar.

Play: Play ▶
Pause: Pause | I



3.9 Network Settings



Static:

Users can input IP, Subnet code, gateway and DNS directly. Click "Save" to become effective.

• DHCP:

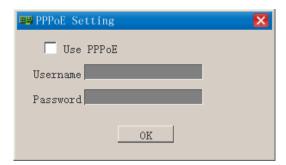
Enable DHCP to get a dynamic IP. The network configure information can be shown in configure boxes.

• No. and Status:

Normally, the No. box shows No. and Status shows Normal. If the No. box shows A0, it means DVR does not get No., and users need to System Setting Page to register the DVR online and restart DVR.

• PPPoE:

Click "PPPoE" to set Username and Password of ADSL.



3.10 Snapshot

Choose the target channel and right click to show the Main Menu. Click "Snapshot" to capture picture. The system will show "Channel # snapshot successfully" to note snapshot was taken.

3.11 Set Video

Choose the target channel and right click to show the Main Menu. Click "Set Video" to adjust the image effect.



Use <u>I</u> and <u>I</u> to adjust the relative parameters. Click <u>I</u> to move the location of Video Setting box.

3.12 Shutdown

Right-click to show the Main Menu. Click Shutdown.



- Logout: Unit will continue to record while logged out.
- Shutdown: Turns the DVR unit off.
- Restart: Restarts Unit.

Client-end Software Instruction

1. Introduction to JDCS

JDCS is remote viewing software "Client End" installed on your PC to access remotely.



Double-click the desktop icon

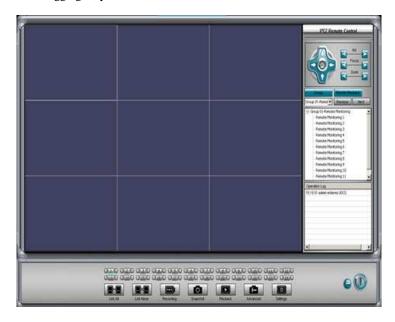
to enter the login panel. The default username is "abc" and default

password is "123".

Note: The User Name and Password should be the same as the User Name and Password in Network User of DVR Settings.



After logging in, you will enter the main interface of JDCS.



2. JDCS Interface

2.1 System Menu Panel



Link All: Click to connect the client to local cameras. (Make sure you have configured network settings)

Link None: Disconnect from local cameras.

Recording: Click this button and you can record the remote videos and save the recorded videos on client PC.

User can search and view the recorded files in Playback System. (Click " Playback " in the above figure for replay.)

Snapshot: Click to snapshot remote video. User can view the snapshot images in "Snapshot Manager".

Playback: User can replay recorded videos. For details please refer to "Playback System".

Advanced: Go to "Advanced Settings" for details.

Settings: Details will be introduced in "JDCS Settings".

2. 2 PTZ Remote Control Panel

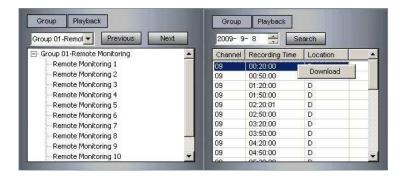
In this panel, you can remotely control your PTZ camera(s).



2.3 Remote Playback/Remote Download Panel

In JDCS, users can search and play from recorded files stored on local system.

- 1). Get access to local video channel and select this channel as the current channel.
- 2). Click "Search" in the below figure, recorded files of this channel on local PC will be listed.
- 3). Double click the listed files for playback.
- 4). Right-click and click "Download" to download recorded files stored on local PC onto client PC.



2.4 Master Recording Control

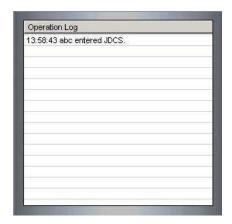
If user is set as Master Recorder in local users ("Users" >> "Client User Rights" >> " Master Recording Control"), users can also control the recording on a local PC.

Right-click in JDCS view channel, users can "Start Master Recording" or "Stop Master Recording".



2.5 Operation Log

Operation records will be displayed in this panel.



3. JDCS Settings

NOTE: The UI code stated in this manual is your CloudSEE Id number.

3.1 Video Source/Group



Group Settings

You can add one group for each local PC. You can also modify or delete the group.

Video Source

All video sources in a group are listed in the left column. Select one video source and make settings for the source.

Username and Password

Username and password are the ID by which you can get access to local PC.

Connection with Domain/IP

For remote access, you can use a domain or IP address. This connection method is suitable for access within LAN.

- 1). Uncheck "Use SECU" to activate domain/IP connection settings.
- 2). Enter domain or IP address of the local PC to access.
- 3). Input the correct Com Port. (By default, the initial communication port is 9100, and following are 9101,9102,...)
- 4). Enter SECU JDCS main interface, right click on one channel and click "Connect".

Connection with UI Code (CloudSEE)

If you want to get access to a PC DVR system out of your LAN, you can use the CloudSEE id, which avoids complex settings of port forwarding or DDNS for connection between LANs.

For detailed settings please refer to "UI Code Settings in JDCS".

Receive remote alarm signals

Check this function to enable JDCS to receive alarm signal from local system (DVR).

Decoding Card Output

Check "Decoding Card Output" to enable remote video to be displayed on TV monitors.

Functional Buttons

Add Source: Add a new video source to a group.

Delete Last: Delete the bottom video source.

Default: Restore to default settings.

Apply To All: Apply current settings to all sources.

Save: Save the configurations to video sources.

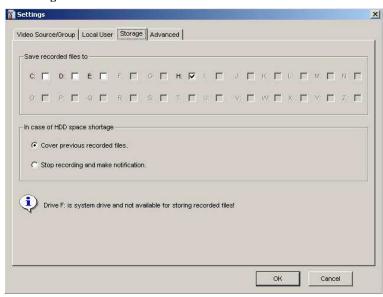
3.2 Local User

Username	Rights			
bc	Administrat	r		
Username	Add	Password Delete	Rights Modify	No User

In this tab, you can configure the client user rights.

You can also add new users, modify and delete users.

3.3 Storage



Save recorded files to

You can select hard drive to store recorded files.

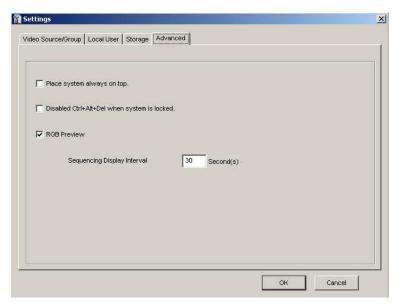
In case of HDD space shortage

If HDD is short on space, you have two options:

- 1). Cover previous recorded files.
- 2). Stop recording and make notification.

Note: System drive is not available for storage!

3.4 Advanced



Place system always on top

Check this option to make JDCS always on top.

Disable Ctrl+Alt+Del when system is locked

Disabling these hot keys will protect system from illegal operations.

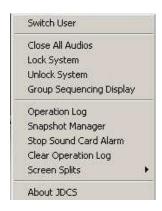
RGB Preview

This preview mode can get better remote connection over network.

Sequencing Display Interval

Window display can be viewed in turn. You can set sequencing display interval by second.

4. Advanced Settings



Switch User: Switch to user with different rights.

Close All Audios: Close audio function of all channels.

Lock System : Lock JDCS system.
Unlock System : Unlock JDCS system.

Group Sequencing Display: Sequencing display channels group by group.

Operation Log: Operation records and software information.

Snapshot Manager: Manage, retrieve and view snapshot images.

Stop Sound Card Alarm: Stop sound card alarm upon different conditions.

Clear Operation Log: Clear operation logs without deleting them.

Screen Splits: Five view layouts are available: 1 channel view, 4 channel view, 9 channel view, 16 channel view and 25

channel view

About JDCS: Software version and copyright information.

5. Playback System

JDCS has built-in access to Playback System, which can manage, retrieve and playback recorded files locally and remotely.

Click button "Playback" in JDCS, playback system will be opened.,

You can download Media Player plugin from our website to playback the recorded files.



5.1 Playback Functions



Playback control buttons:

Open: Open recorded files.

Play/Pause: Click "Play" to start playback of recorded videos, then click "Pause" to pause.

Stop

Fast: Fast Play
Slow: Slow Play

Backward: display the video backward by seconds

Forward: display the video frame by frame

Snapshot: Capture images from displaying video, the captured images can be checked in "Snapshot Manager".

Cut: When the recorded file is being replayed, you can cut the video. Click "Cut" at the expected point and click "Cut" again to stop cutting, and Save As dialog will be displayed automatically.

Play All: Select videos and playback them all simultaneously.

Play None: Stop playback all videos.

Play: Play audio of recorded videos.

5.2 Playback Status

On the right side of the JDCS main interface, you can get system status information. They are as follows:

Video Playback Information



Current Channel: Current window in playback.

Current Frames: Number of the frames in display for each packed files.

Total Frames: Recorded files are packed every 30 minutes, so the total frame refers to the size of the packed files. The value is constant. At a speed of 25fps, the total frame is 30*60*25= 45000.

Play Speed: The lowest speed is 10 percent of the normal speed and the highest is 8 times the normal speed.

Recorded File Searching Panel

Recorded video files can be searched via two modes: File List and Time List.

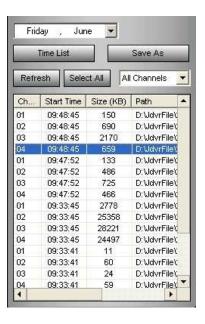
1. File List Mode

This mode is shown as the following figure.

Select date, channel and click "Refresh", and the expected recorded files will be listed in the list.

Then double click the list file(s) for playback.

You can also select a file in the list and click "Save As" to save this file to your expected path.

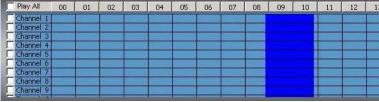


2. Time List Mode

Time List Mode is shown as figures below:

(In File List Mode, click "Time List" button to switch to Time List Mode, vice versa)





Double click on the blue area to playback recorded files.

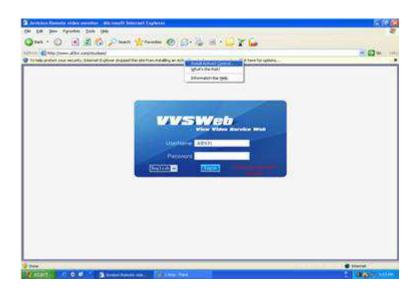
IE ActiveX

NOTE: ActiveX is not recommended for Vista or 7 users. Please use the JDCS software to view remotely.

- 1. Install IE ActiveX from website
- 2. Use IE ActiveX

1. Install IE ActiveX on website

Open IE browser



Click "Install ActiveX Control" and Install IE ActiveX.



Or click "Download Installation package" to download the IE ActiveX and install locally.

2. Use IE ActiveX

After installing IE ActiveX, you can view cameras remotely in IE browser.



Input Username and Password. By default, Username is "admin", no password. And click "login" enter IE ActiveX interface.

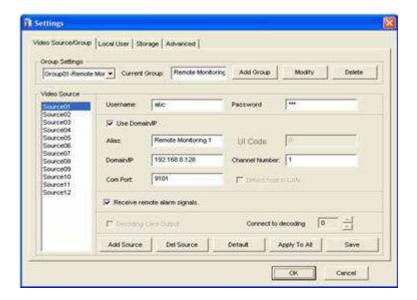
Note: The User Name and Password should be the same as the User Name and Password in Network User of DVR Settings.



Click "Link All" at the right side of the control panel to remote view the cameras.



If you want to set up more parameters, you can click "Settings" at the right side of control panel.



1. Connection with UI Code (CloudSEE)

If you want to get access to a PC DVR system out of your LAN, you can use CloudSEE ID, which avoids complex settings of port forwarding or DDNS for connection between LANs.

IE ActiveX connection is similar to JDCS connection, for details refer to " UI Code Settings in JDCS ".

After the settings are finished, right click on one IE ActiveX channel and click "Connect".

The following figure is a demo for IE Control remote viewing.

2. Connection with Domain/IP

For remote access, you can use domain or IP address. This connection method is suitable for access within LAN.

- 1). Check "Link by Domain/IP" to activate domain/IP connection settings.
- 2). Enter domain or IP address of the local PC to access.

- 3). Input correct Com Port. (By default, initial communication port is 9101, and following are 9102,9103,...), click "OK".
- 4). Right click on the IE Control channel and click "Connect".

IE ActiveX Functions



- 1. Link All: Connect all channels
- 2. Link None: Disconnect all channels
- 3. Disconnect: Disconnect single channel
- 4. Connect: Connect single channel





Group list

⊕ @ Remote Monitoring

5. PTZ control: Control the direction and actions of PTZ. Iris, Focus and Zoom:
Control the image quality of each channel

6. Record All: Record all connected channels.7. Record None: Stop recording of all the recording channels.



Snapshot Manager:
 Manage the pictures
 which were snapshoted.

9. System Logs

10. <u>Settings</u>: IE Control Settings panel is similar with that of JDCS:

Video

Source/Group, Local

<u>User, Storage and</u> Advanced.

11. Playback: Playback the recording files which locate in client-end PC

12. Remote Search: Search the recording files which locate in host-end PC

13. If you have more

than 25 channels in JDVR, for example 50 channels. You can group all channels in 2 groups (25 channels per one). In this way, the requirement of network will be reduced. It is ok if you have enough network bandwidth for 25 channels at the same time.

Layout:1 screen, 4 screens, 9 screens, 16 screens, 24 screens.

Select Group: Set groups for different host PC in connection.

Display Ratio: Original proportation or Covered window **Connect**: Connect

to the current channel in host.

Disconnect: Disconnect the channel. **Start Recording**: Start recording. **Stop Recording**: Stop recording.

Enable Audio: Enable audio monitoring of

current channel.

Disable Audio: Disable the audio monitoring.

Remote Playback

Control: Control

Playback.

About IE ActiveX:

Version information

about IE ActiveX.