Important Notice

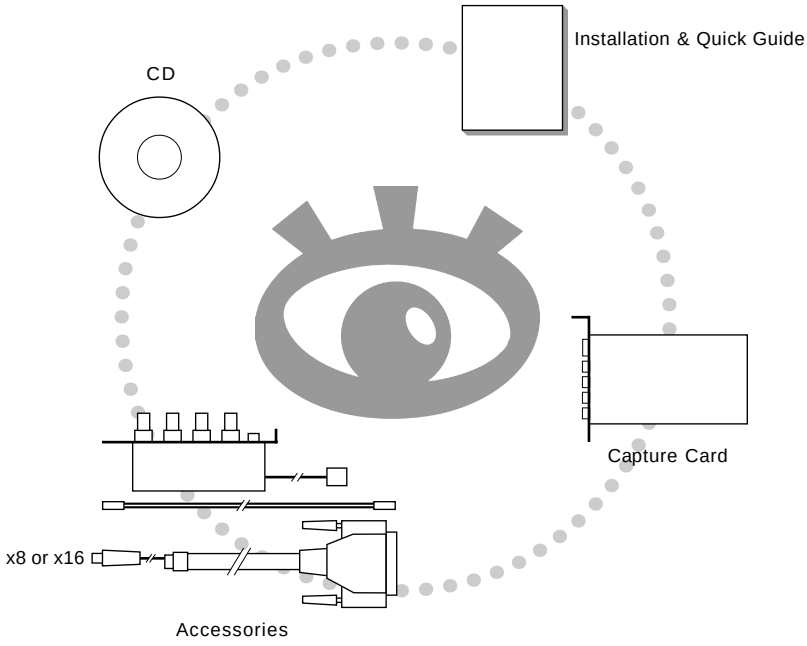
The Windows system partition, normally the “C:\” partition, is recommended to be at least 20 Giga bytes free and only for MS Windows system and DVR program. Record storages should be at other partitions, rather than the Windows system partition, to keep Windows and DVR system running efficient and stable.

Table of Contents

Package Contents

Please examine the package contents and contact your distributor if any item is missing or damaged. Please check the chart below to know what should be included in a particular product model package.

Product Model	Product CD	Installation & Quick Guide	Capture Card Model	Watchdog Cable	Video Port Bracket	16 Video Ports Connector	8 Video Ports Connector
2404S	●	●	H1004S	●	-	-	-
2416SG	●	●	H4016SG	●	-	●	-
2416SB	●	●	H4016SB	●	● (x3)	-	-
2408DG	●	●	H4008DG	●	-	-	●
2408DB	●	●	H4008DB	●	● (x1)	-	-
2404Q	●	●	H4004Q	●	-	-	-
2408QB-64	●	●	H8008QB-64	●	● (x1)	-	-
2408QB-120	●	●	H8008QB-120	●	● (x1)	-	-
2408QB-240	●	●	H8008QB-240	●	● (x1)	-	-
2416DG	●	●	H8016DG	●	-	●	-
2416DB	●	●	H8016DB	●	● (x3)	-	-



Attention: Product warranty will be void if seal or label on the capture card or USB hardware key is removed or damaged.

Capture Card Models

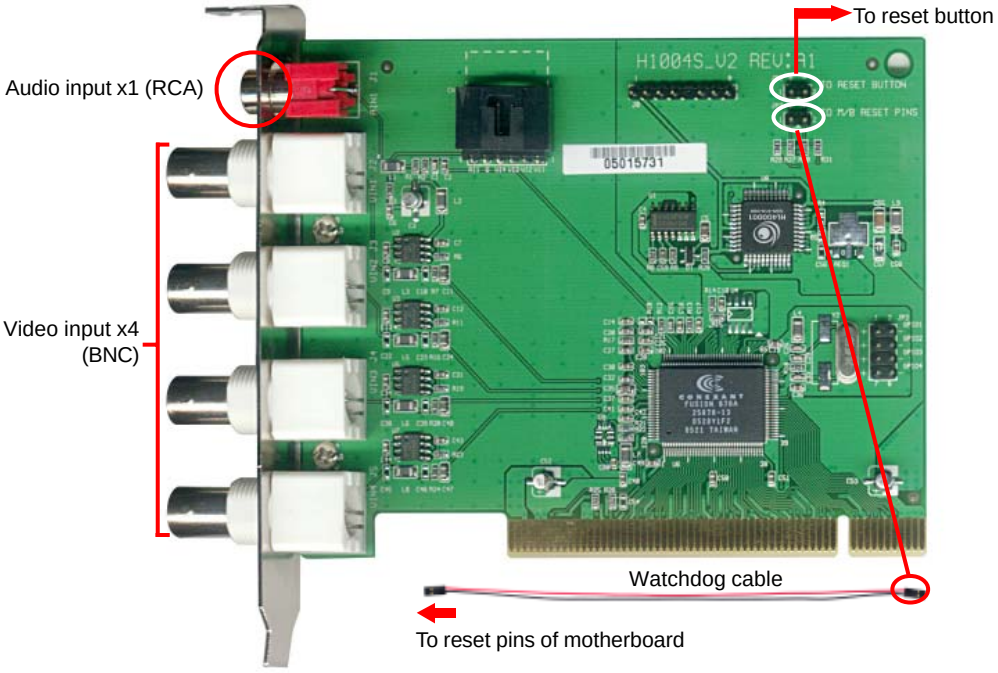
H1004S Video Capture Card

Accessories

Watchdog cable	x 1

Specifications

Video inputs (BNC)	x 4
Audio inputs (RCA)	x 1
Watchdog	x 1
Maximum total recording rate	30 fps
Maximum total display rate	30 fps



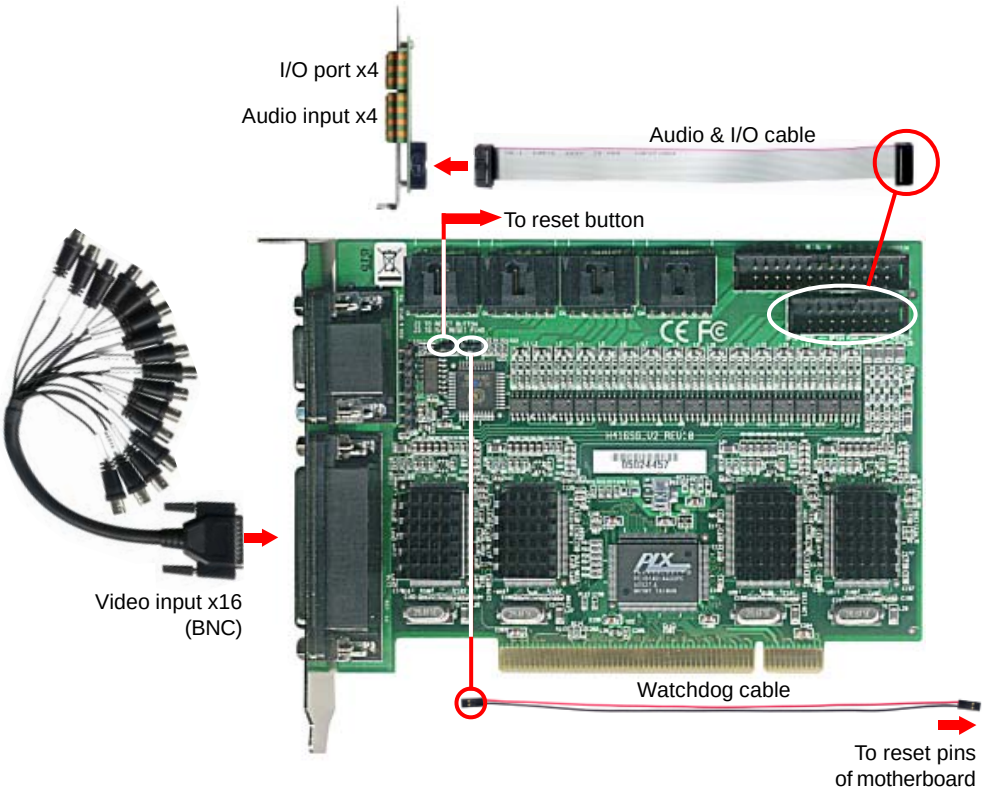
H4016SG Video Capture Card

Accessories

Watchdog cable	x 1
Video input connector	x 1
Audio & I/O cable (optional)	x 1
Audio & I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 16
Audio inputs (line, optional)	x 4
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	120 fps
Maximum total display rate	120 fps



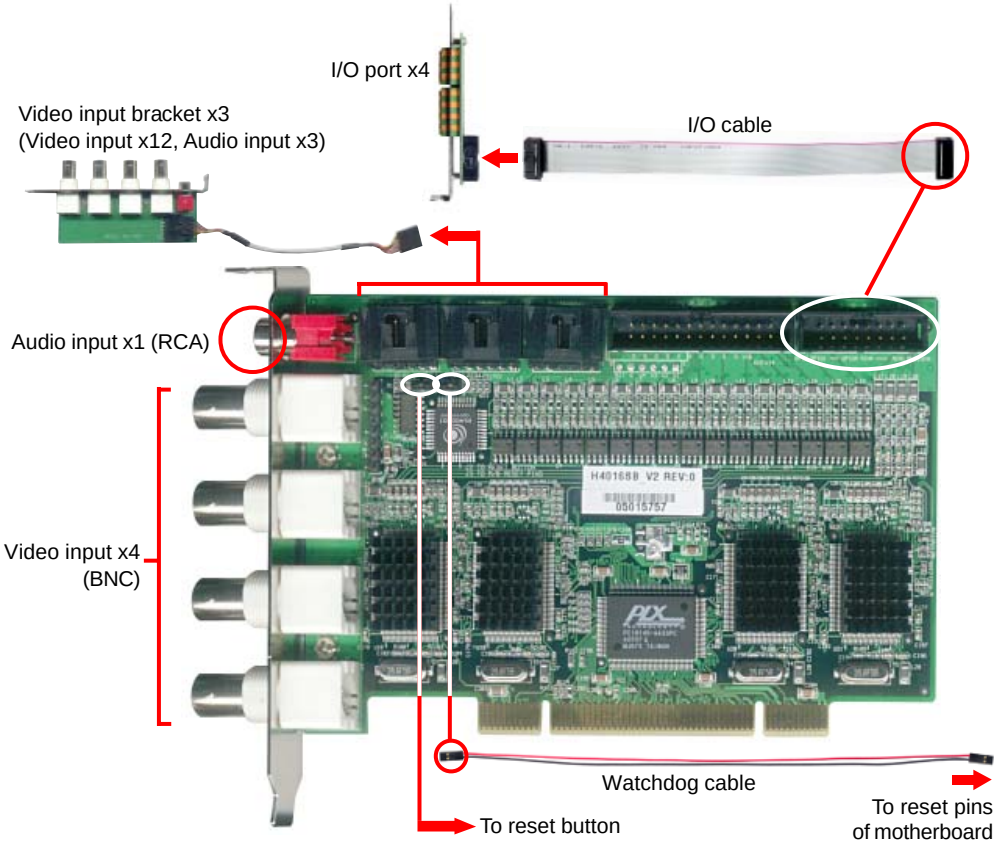
H4016SB Video Capture Card

Accessories

Watchdog cable	x 1
Video input bracket	x 3
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 16
Audio inputs (RCA)	x 4
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	120 fps
Maximum total display rate	120 fps



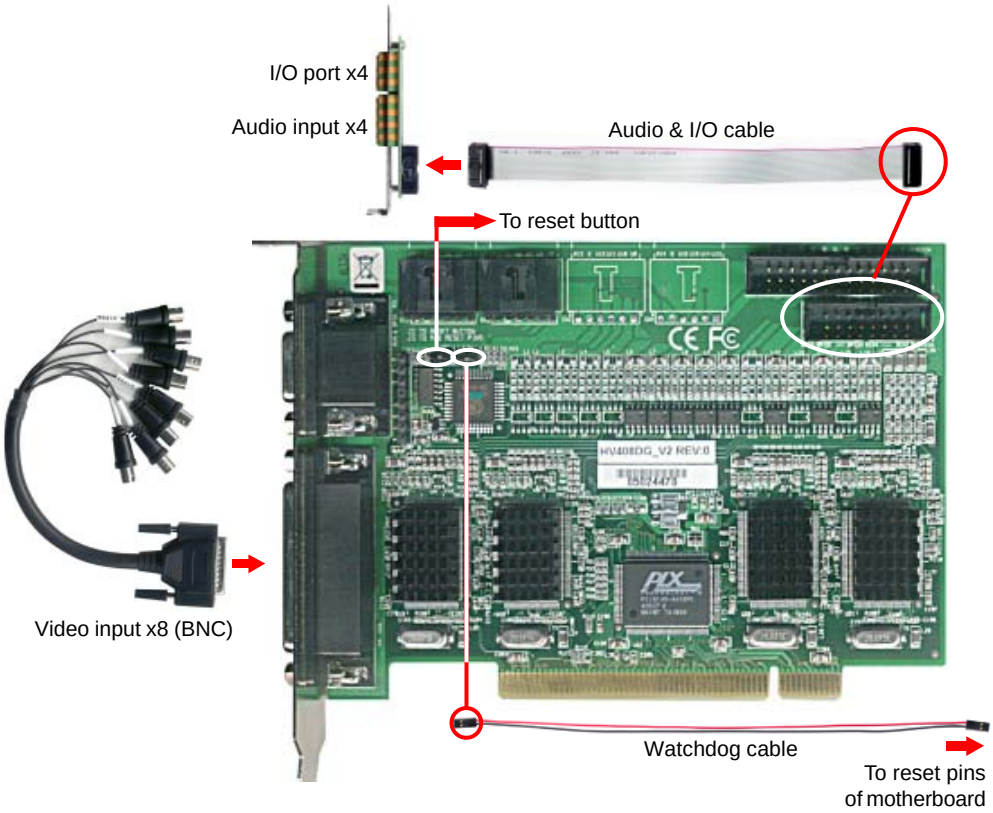
H4008DG Video Capture Card

Accessories

Watchdog cable	x 1
Video input connector	x 1
Audio & I/O cable (optional)	x 1
Audio & I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 8
Audio inputs (line, optional)	x 4
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	120 fps
Maximum total display rate	120 fps



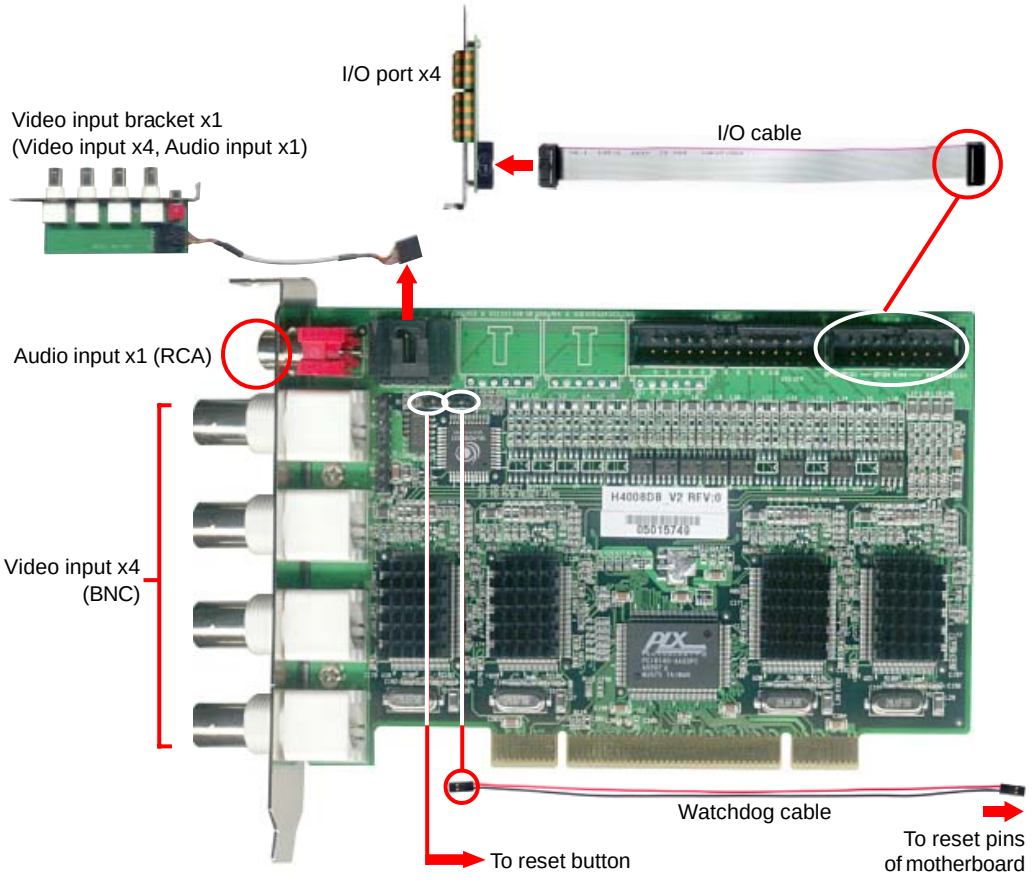
H4008DB Video Capture Card

Accessories

Watchdog cable	x 1
Video input connector	x 1
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 8
Audio inputs (RCA)	x 2
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	120 fps
Maximum total display rate	120 fps



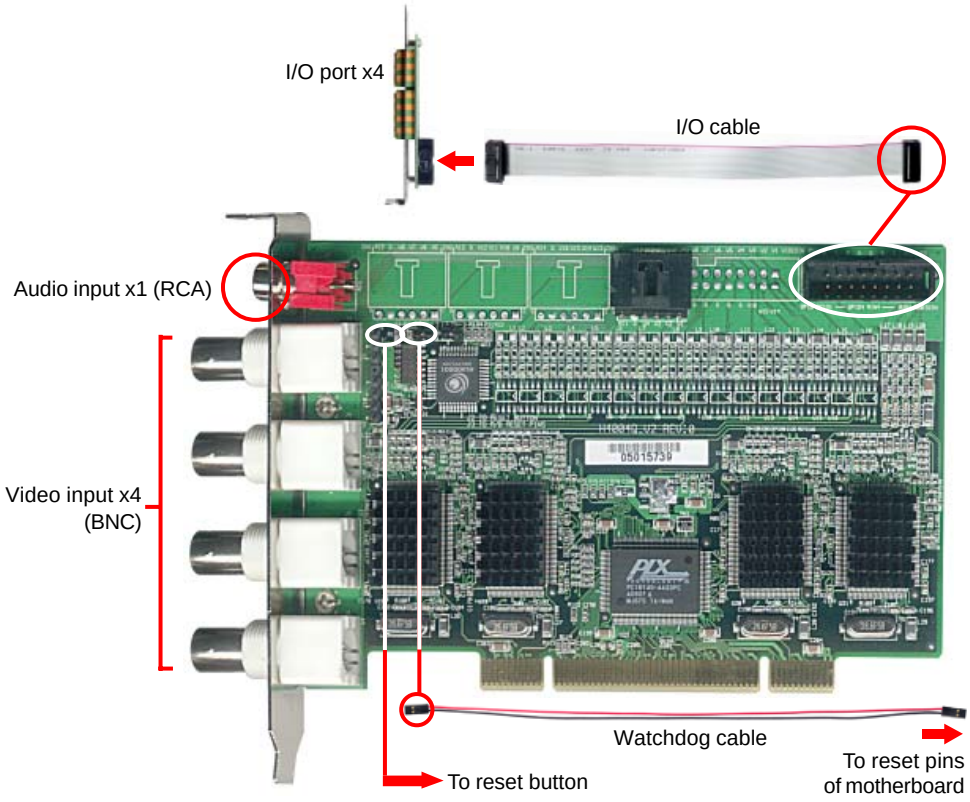
H4004Q Video Capture Card

Accessories

Watchdog cable	x 1
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 4
Audio inputs (RCA)	x 1
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	120 fps
Maximum total display rate	120 fps



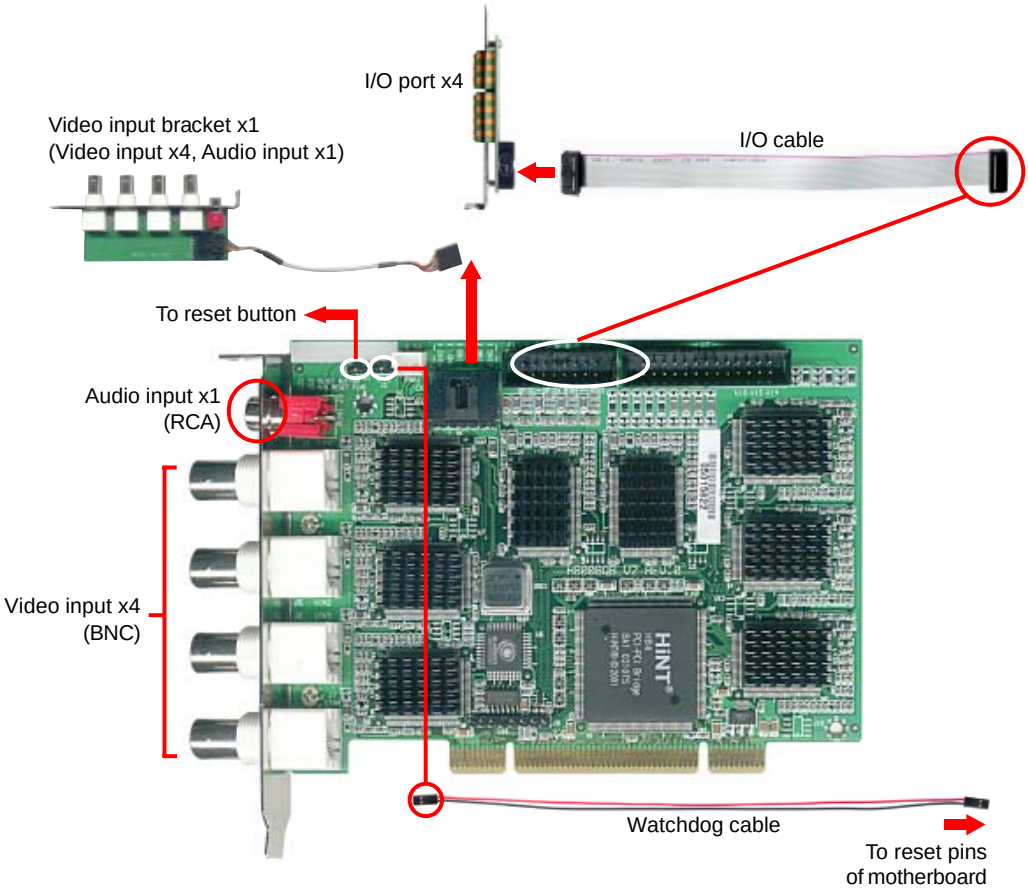
H8008QB-64 Video Capture Card

Accessories

Watchdog cable	x 1
Video input bracket	x 1
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 8
Audio inputs (RCA)	x 2
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	64 fps(NTSC) 50 fps (PAL)
Maximum total display rate	240 fps(NTSC) 200 fps (PAL)



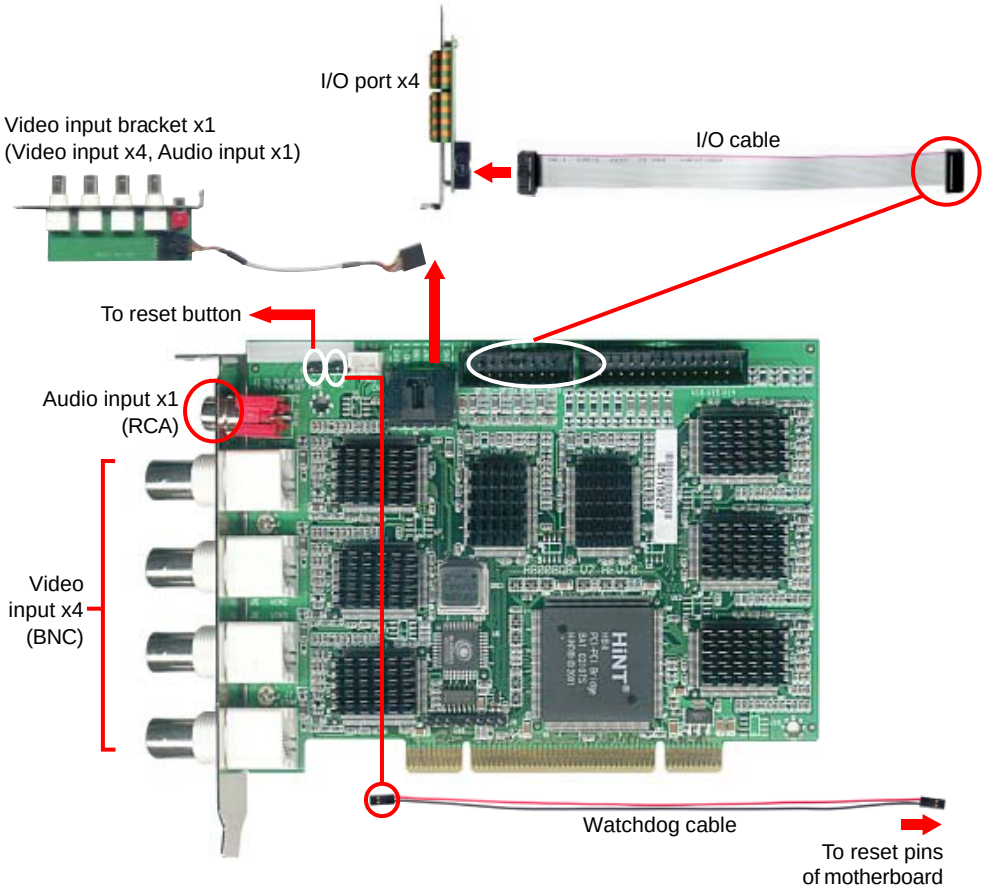
H8008QB-120 Video Capture Card

Accessories

Watchdog cable	x 1
Video input bracket	x 1
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 8
Audio inputs (RCA)	x 2
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	120 fps(NTSC) 100 fps (PAL)
Maximum total display rate	240 fps(NTSC) 200 fps (PAL)



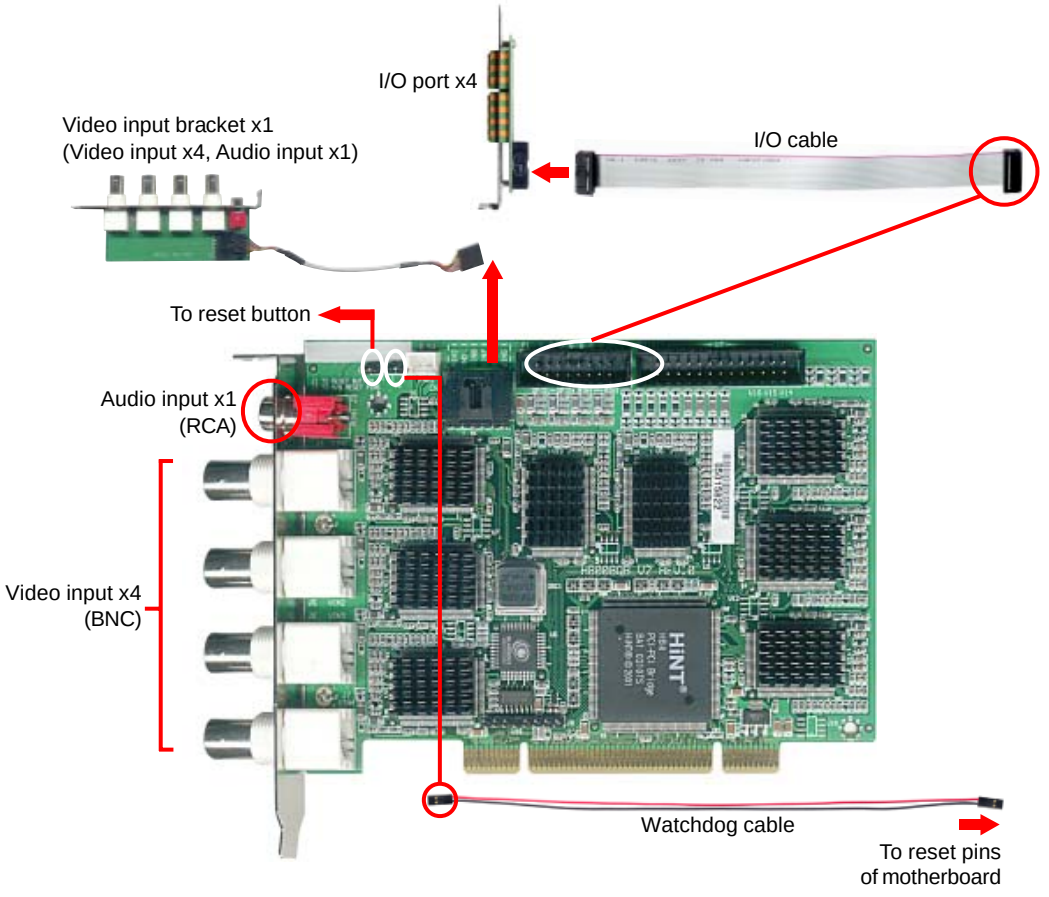
H8008QB-240 Video Capture Card

Accessories

Watchdog cable	x 1
Video input bracket	x 1
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 8
Audio inputs (RCA)	x 2
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	240 fps(NTSC) 200 fps (PAL)
Maximum total display rate	240 fps(NTSC) 200 fps (PAL)



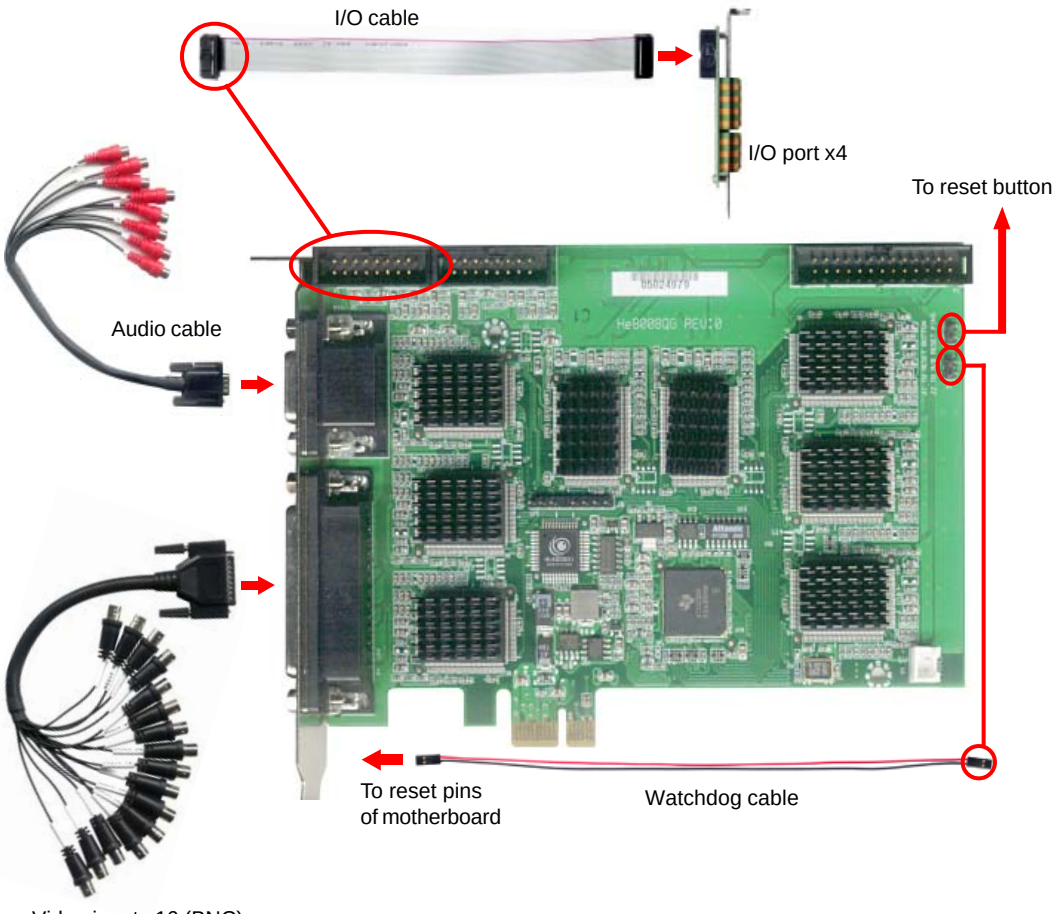
H8016DG Video Capture Card

Accessories

Watchdog cable	x 1
Video input connector	x 1
Audio cable (optional)	x 1
I/O connector/cable (optional)	x 1

Specifications

Video inputs (BNC)	x 16
Audio inputs (optional)	x 1
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	150 fps
Maximum total display rate	150 fps



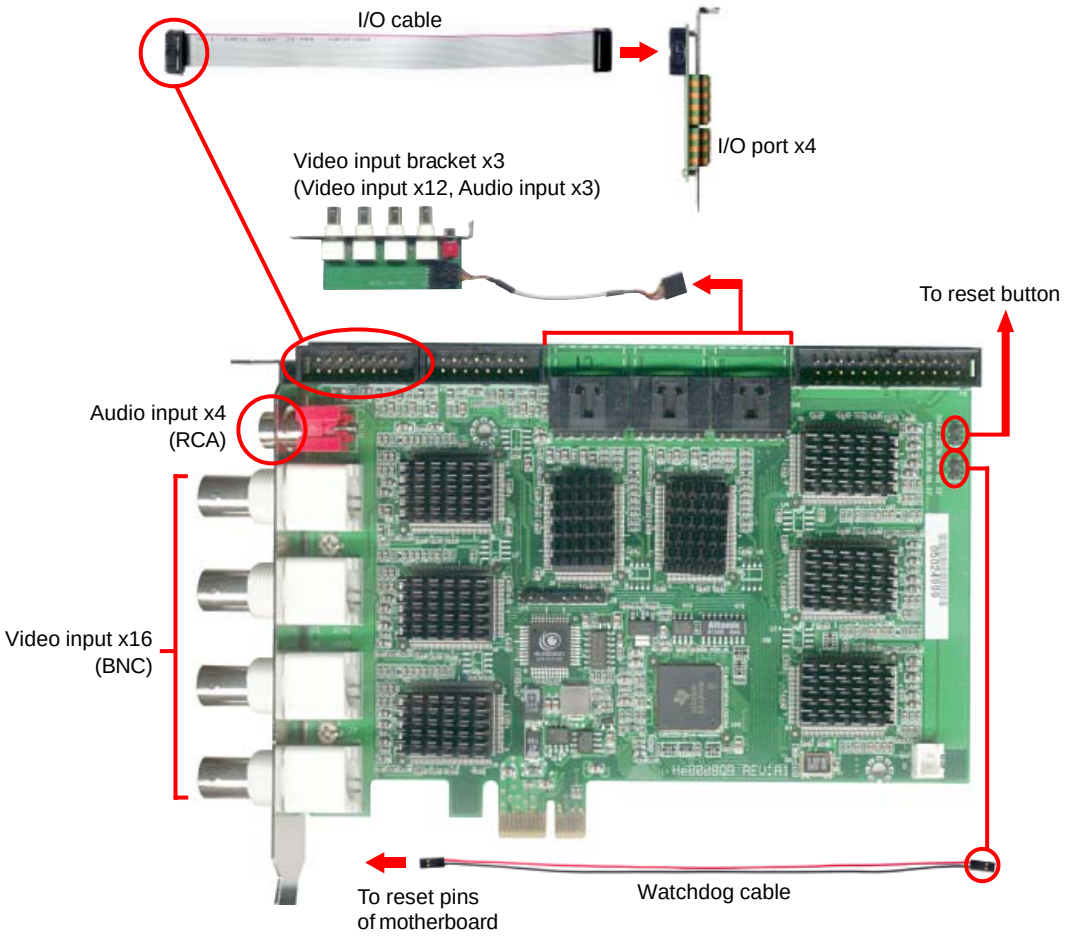
H8016DB Video Capture Card

Accessories

Watchdog cable	x 1
Video input connector	x 3
I/O cable (optional)	x 1
I/O connector (optional)	x 1

Specifications

Video inputs (BNC)	x 16
Audio inputs (RCA)	x 4
I/O ports (line, optional)	x 4
Watchdog	x 1
Maximum total recording rate	150 fps
Maximum total display rate	150 fps

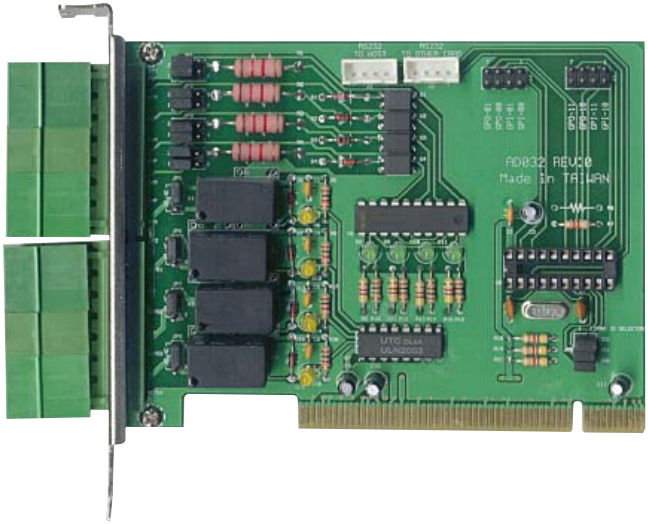


Accessories

IOC-0404P I/O Card

Specifications

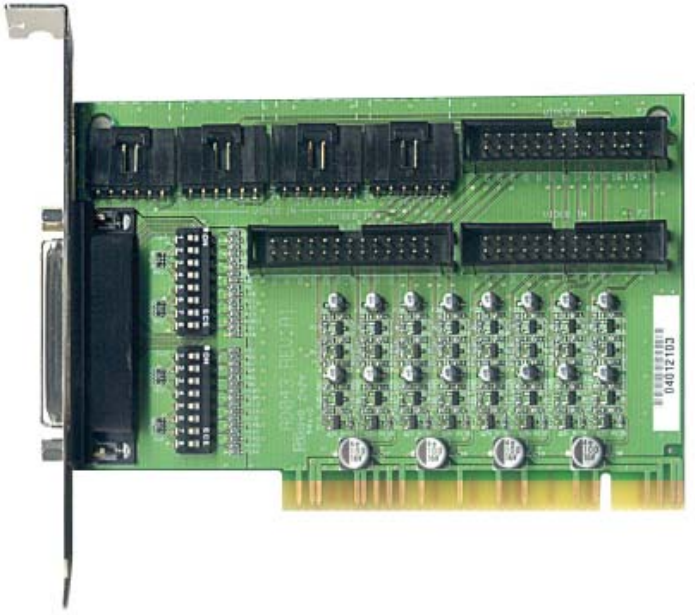
Description	32 bits PCI card with 4 digital inputs and 4 relay outputs
System	32 bits 5V PCI card
Dimension	93 mm X 120 mm
Digital input	
Channel	4
Input voltage	Dry Contact Logic level 0: Close to GND Logic level 1: Open Optical Isolation: 24VDC Dry Contact & Optical Isolation Selectable
Power consumption	200 mW each channel
Relay output	
Channel	4-channel/relay output with Form C
Contact rating	AC 125 V @ 0.6 A; 250 V @ 0.3 A DC 30 V @ 1 A; 110 V @ 0.6 A NO & NC selectable by jumper



LB-16 Video Loop Through Card

Specifications

Description	PCI card with 16CH video loop through
System	32 bits 5V PCI card
Video Input	Four center crimp terminal housing up to 16 channel video input One box header (2*13 pin) support 16 channel video input Two box header (2*13 pin) support 8 channel video input
Video Output	D-sub 25 connector support 16 channel video output
Video signal	1 Vpp, 75O switch optional
Dimension	119.88*85.09 mm



System Requirements

- Intel Pentium IV CPU or above, or compatible CPU that supports MMX technologies.
- 256 MB system RAM or above. (Suggest 512MB or above for model 2408Q, 2412Q and 2416Q)
- Any full duplex 8-bits sound card or above.
- AGP SVGA display card with DirectDraw function support (with at least 16MB on-board RAM, 1024x768 resolution, hi-color display mode or above). ATI display chip is recommended.
- Display monitor is capable to display in 1024x768 screen resolution clearly.
- Video source in NTSC or PAL video signal format.
- Available hard disk space of 40GB or above, with a speed of 7200RPM is recommended.
- 56K voice modem for event notification by phone and fax.
- Microsoft® Windows 2000 SP4, Windows XP SP1 or Windows 2003 system.
- DVR machine is usually running 24 hours a day and 7 days a week. High quality motherboard, components and peripheral are required to maintain the stability. The DVR machine hardware configuration and the environment it deployed must consider the well heat dispelling also. Over-heated component is always the major cause of machine instability.

■ One of the following devices needs to be set up for remote monitoring:

- 56K modem (For remote viewing through Internet connection or direct modem connection)
- Ethernet network card (For remote viewing through LAN or Internet.)
- ADSL modem or Cable modem (For remote viewing through Internet.)

Note:

1. A modem device can only support one functionality at one time, either event notification, connecting to Internet or waiting for direct modem connection.
2. An audio device's audio input can not be shared by voice communicatoin and video/audio recording simutaneously. If you want to enable the voice communication and a video/audio reocrding, you need to have two audio devices, one for the voice communication and another one for the video/audiuo recording. The audio device's audio output can be shared by vocie communication and video/audio playback without problem.

Capture Card Installation

Step 1: Make sure first that your computer meets the system requirements for DVR. Shutdown Windows and turn off the computer power before installing video capture cards.

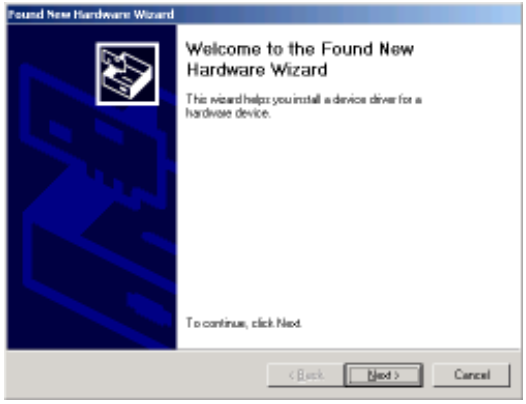
Note: If your computer has not yet installed Microsft Windows system, please install the video capture cards first before installing Microsoft Windows system.

Step 2: Insert each video capture card to a PCI slot. Make sure that the video capture card is securely installed on the PCI slot.

Step 3: Connect the cables from cameras or other video sources to the BNC ports of the video capture cards.

Step 4: Turn on the computer power and start the Windows system again. Insert the DVR software CD into your CD-ROM drive.

Step 5: Windows will automatically detect the newly installed video capture card(s). When the “Found New Hardware Wizard” dialog box appears, leave the dialog box open or click the “Cancel” button to close this dialog box.



Step 6: If there is more than one capture card installed, repeat step 5 until you have closed all “Found New Hardware Wizard” dialog boxes that appears.

Installation Panel

Install DVR server program. The server program turns your machine to a DVR system.

Install Microsoft DirectX 9.0b if your operation system is Windows 2000 and has not yet installed DirectX 9.0b or later version.

Install Record Player program to a machine other than the DVR machine to search record database.

Install DVR-Remote program to a machine other than the DVR machine. huperRemote allows live video surveillance/recording and record searching in a remote computer via Internet.

Install Remote Viewer web pages to a machine other than the DVR machine. Remote Viewer web pages allow live video surveillance/ recording in a remote computer via Internet and direct modem connection.

PDA Remote Viewer is Windows CE software that enables PDA device to watch live video and control PTZ camera.

Open the manual of detailed software operation.

Open the quick guide of capture card installation, software installation and simple software operation.

Site Server Installation

It is recommended that you install your capture cards first before installing Site Server because Site Server will automatically update the capture card drivers.

Step 1: Turn on the computer, start Windows, and insert the software CD into the CD-ROM drive.

Step 2: The installation program on the software CD will launch automatically. If the installation program does not launch properly, click the [Start] button on your Windows taskbar, and then click the [Run] command. When the [Run] dialog box opens, enter "D:\autorun.exe" and click [OK] (Where D: is the letter of your CD-ROM drive).

Step 3: Click the [Install Microsoft DirectX9.0b] button on the installer panel to install Microsoft DirectX 9.0b runtime modules if the machine installs Windows 2000 system.

Step 4: Click the [Install DVR] button on the installer panel to install the DVR Site Server.

Step 5: Please restart the Windows system after installation.

Step 6: Windows system launches Site Server automatically. If the Site Server is not launched, please select the menu command [Start/ Programs/DVR 2400/Site Server] to launch the Site Server program.

Step 7: Follow the steps below to assign a password for the “Administrator” account:

1. Click the  button to open the “Preference” dialog box.
2. Click the “User” tab to switch to the “User” settings page.
3. Select “Administrator” from the Account List.
4. Click the “Modify” button to open the”Modify User” dialog box.
5. Enter the password in the “Password” and “Confirm password” fields.
6. Click the “OK” button in the “Modify User” dialog box.
7. Click the “OK” button in the “Preference” dialog box to confirm the settings.

Step 8: Follow the steps below to assign record storages:

1. Create a "Data" folder at each hard drive where your video recordings will be stored.
2. Click  to open the “Preferences” dialog box.
3. Click the ”General” tab to switch to the ”General” settings page.
4. Click the ”Add” button to open the ”Add Storage” dialog box.
5. Click the ”Browse” button to select the ”Data” folder of a hard drive.
6. Click the ”OK” button to close the ”Add Storage” dialog box.
7. The assigned hard drive and its data folder will then be displayed under the ”Storage for surveillance video recordings” list.
8. Repeat steps 4 to 6 to add more data folders to be used for storing video recordings.
9. Click the ”OK” button in the ”Preferences” dialog box to confirm and use the modified settings.

Record Player Installation

Installing only the Record Player allows you to view video recordings without installing the Site Server program. Also, you can open a backed-up video database in a machine without installing the Site Server program.

Step 1: Turn on the computer, start Windows, and insert the software CD into the CD-ROM drive.

Step 2: The installation program on the software CD will launch automatically. If the installation program does not launch properly, click the [Start] button on your Windows taskbar, and then click the [Run] command. When the [Run] dialog box opens, enter "D:\autorun.exe" and click [OK] (Where D: is the letter of your CD-ROM drive).

Step 3: Click the "Install Record Player" button on the installation panel to install the Record Player program.

Step 4: After installing the Record Player program, you can open the Record Player program and click the "Locate" button to open a backed-up video recording database to view recorded videos.

DVR-Remote Installation

DVR-Remote System Requirement

- Intel Pentium III 500 MHz CPU or above, or compatible CPU that supports MMX technologies.
- 128 MB system RAM or above.
- Any full duplex 8-bits sound card or above.
- AGP SVGA display card with DirectDraw function support (with at least 16MB on-board RAM, 800x600 resolution or above, hi-color display mode or above).
- Display monitor is capable of clearly displaying in 800x600 screen resolution or above.
- Available hard disk space of 50MB or above.
- Microsoft® Windows 2000 or Windows XP system.
- IP network. Make sure the following ports are open:
  TCP port 445: for remote playback of recordings.
  TCP port 18082: for remote live video display.
  UDP port 18000: for remote live sound playback and voice communication.

DVR-Remote Installation

Installing the DVR Patch

If the DVR 2400 software version that is installed on the remote DVR servers is version 1.5 or older, make sure to install first the **DVR Patch** on those servers. This is necessary in order for you (and other users) to be able to use the full features of DVR-Remote.

To install the DVR Patch on a DVR server:

Step 1: On the DVR server, first close the DVR program.

Step 2: Insert the software installation CD into the CD-ROM drive on the DVR server. Click [Install Remote Viewer] on the installer panel to launch Installer.

Step 3: In the **Installer Language** dialog box, choose the language version to install, then click **OK**.

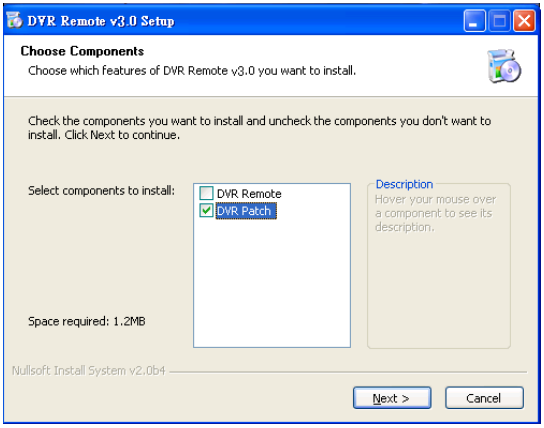
Step 4: Under **Choose Components**, keep the **DVR Patch** selected and deselect the **DVR-Remote** module.

Then, click **Next**.

Step 5: In the next dialog box, click the **Install** button.

Step 6: When installation of the DVR Patch is complete, click the **Close** button.

Step 7: Launch the DVR program.



Follow the same steps in the above procedure to install the DVR Patch to other DVR servers.

Installing DVR-Remote

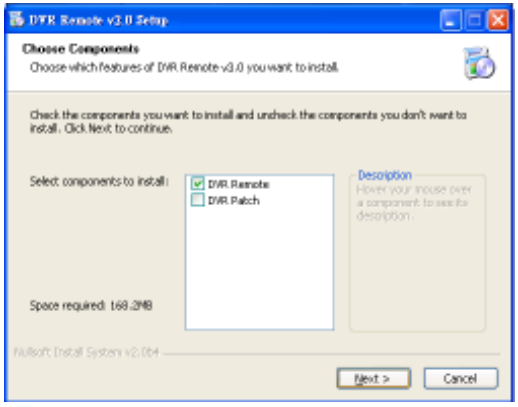
The procedure below shows how to install DVR-Remote on a client computer.

To install DVR-Remote on a client computer:

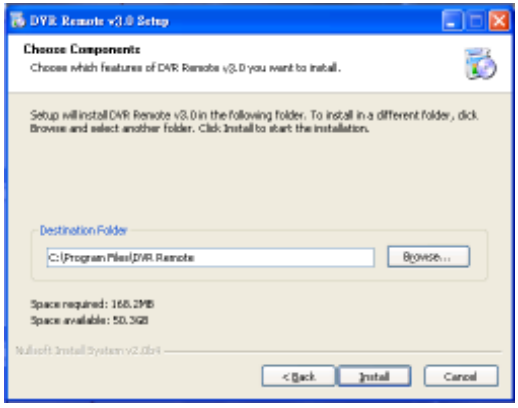
Step 1: Insert the software CD into the CD-ROM drive on the client computer. The installation screen then opens. Click **Install DVR-Remote**.

Step 2: In the **Installer Language** dialog box, choose the language version to install, then click **OK**.

Step 3: Under **Choose Components**, select the **DVR-Remote** module then click **Next**.



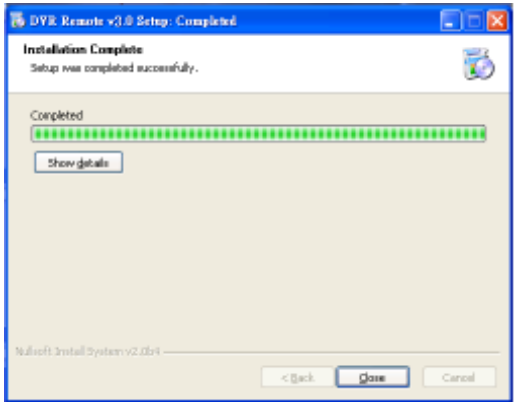
Step 4: Specify the location where to install DVR-Remote, then click the **Install** button to start the installation.



Step 5: When installation is complete, click the **Close** button.

Step 6: To run DVR-Remote, click **Start>Programs>DVR-Remote>DVR-Remote**.

Step 7: If you cannot find the program name in the Start menu, reboot your system first before you launch the program.



Remote Viewer and Remote Record Player Installation

Step 1: Turn on the computer, start Windows, and insert the software CD into the CD-ROM drive.

Step 2: The installation program on the software CD will launch automatically. If the installation program does not launch properly, click the [Start] button on your Windows taskbar, and then click the [Run] command. When the [Run] dialog box opens, enter "D:\autorun.exe" and click [OK] (Where D is the letter of your CD-ROM drive).

Step 3: Click [Install Remote Viewer] on the installer panel to install both Remote Viewer and Remote Record Player.

Step 4: After installation, you can select the menu command [Start/Programs/Remote Viewer/Remote Viewer] to open Remote Viewer. For an Internet connection, you need to type in the Site Server's IP address, user ID and password. For a direct modem connection, you need to type in the Site Server's telephone number, the modem driver at local machine, user ID and password.

Step 5: To run the Remote Record Player, you can select the menu command [Start/Programs/Remote Viewer/Remote Record Player].

PDA Remote Installation

Step 1: Turn on the computer, start Windows, and insert the software CD into the CD-ROM drive.

Step 2: The installation program on the software CD will launch automatically. If the installation program does not launch properly, click the [Start] button on your Windows taskbar, and then click the [Run] command. When the [Run] dialog box opens, enter “D:\autorun.exe” and click [OK] (Where D: is the letter of your CD-ROM drive).

Step 3: Connect your PDA device to the PC machine.

Step 4: Make sure the Microsoft ActiveSync program is installed to your PC machine. If it is not installed yet, install it.

Step 5: Click the [Install PDA Remote Viewer] button on the installer panel to install the PDA Remote program. System copy and install the PDA Remote program to your PDA device automatically.

Step 6: Select [rView] in Start menu on your PDA and run it.

PDA System Requirement

Operation System: MS Windows CE 3.0 (Pocket PC 2002 or later)
CPU: ARM series

DVR 2400 Quick Guide

The DVR 2400 Surveillance System is the perfect solution for home, office, school, factory, and general security use. By installing this software suite into a computer server unit that is connected with surveillance cameras, motion sensors, and alarm devices, you can monitor both in- and outdoor premises, and record intruder break-ins or any suspicious activities on digital video.

Site Server

Site Server allows live monitoring of up to 16 video cameras (such as CCTV and PTZ video cameras) and 16 sensor units, and provides event detection/notification capabilities. Events can either be motion detected by video cameras or by sensors. This program can be configured to automatically record detected events, trigger alarms, and/or send notifications (such as sending e-mail, dialing out to a phone, etc.). You can have the same configuration options for all camera/sensor devices or specify different settings for each device.

Record Player

Record Player allows you to play back previous recorded events. This program keeps a database of digitally recorded videos, and allows you to search for recorded events by specifying the date/time of occurrence or the type of event. Record Player can display up to 16 videos simultaneously on the program screen.

Backup Scheduler

Backup Scheduler allows you to make backups of the recorded videos. You can initiate the backup process manually, or configure this program to perform automatic backup onto the specified storage locations.

DVR-Remote

DVR-Remote is a specially designed client software that allows users to view remote video cameras and record the video and audio from these cameras to the local computer. It also allows users to download and view video recordings from remote DVR servers. Other features include scheduled recording, remote PTZ camera control, weighted bandwidth assignment (for smoother viewing of remote cameras), two-way voice communication, and remote live sound broadcast.

Remote Viewer and Remote Record Player

Remote Viewer allows live video surveillance and recording in a remote computer via a Web browser. Remote users that are granted sufficient rights will be able to monitor video cameras, control PTZ cameras, record cameras on digital video, and play back recorded footage, and talk to the DVR Site Server.

Whereas Remote Record Player allows you to download a video recording from a remote DVR server to your local computer. Specify the date and time of the video recording to download, then after downloading, you can play back the video recording using this same program.

PDA Remote

PDA Remote is a client software that can be installed and run on a PDA. It allows users to view remote video cameras and control remote PTZ cameras right on the PDA.

Site Server User Interface

1 **Split Screens:** This multi-screen display can have up to 16 split screens to show live video from different video cameras.

2 **Date and Time:** This displays the current date and time.

3 **Minimize:** Minimizes the Site Server program window onto the Windows taskbar.

4 **Status indicators:** These are the video recording (R), video source (V), and event detection (E) status indicators. If a video camera has an associated audio input device, an audio icon is displayed beside the video source.

5 Click to open the Talk dialog box where you can configure settings to enable two-way voice communication.

6 **Camera Operation Panel** (See page 27 for details).

7 **About:** Displays copyright information and lets you access the operation log.

8 **Record Player:** Launches Record Player where you can play back previously recorded events.

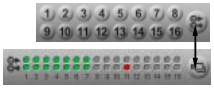
9 **Log Out:** Allows you to log off from Site Server.

10 **Preferences:** Opens the Preferences dialog box where you can set up surveillance, motion detection, and many other functions.

11 **Power:** Click the button to close the Site Server program.

12 **New Event Information:** Shows the number of new events. Click the button to display the event log. The event log lists new events in the last 24 hours.
Storage Information: Displays the amount of remaining disk space. Click the button to display the record storage information.

13 **Switch:** Click the button to change between Camera Panel and Input/Output Device Panel.



14 **Camera Panel:** Provides camera buttons that are numbered in sequence.

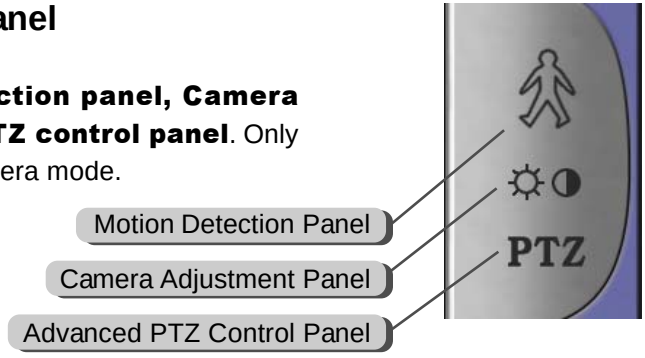
15 **Map:** Click to switch Site Server to Map mode.

16 **Split Screens:** From the left to right, a single view, 4 split screens, 9 split screens, and 16 split screens.

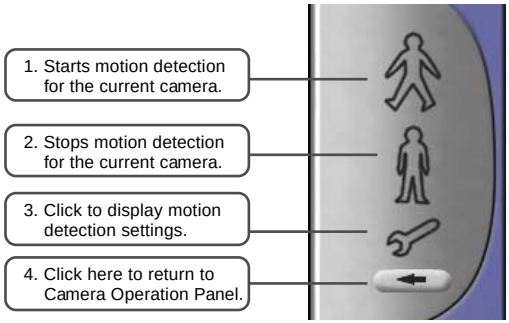
17 **Full screen:** Toggles between Full screen and Normal display mode. Move mouse across the bottom of screen to invoke the control panel in full screen display mode.

Camera Operation Panel

Includes **Motion detection panel, Camera adjustment panel** and **PTZ control panel**. Only available when in single camera mode.

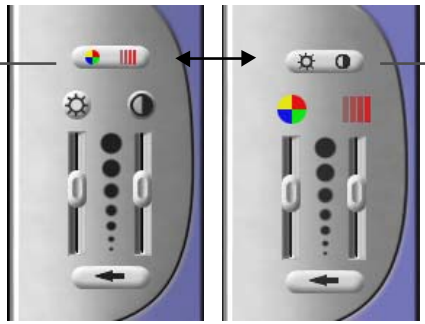


Motion Detection Panel



Camera Adjustment Panel

1. Click to switch to the Hue and Saturation Panel.
2. Click to set brightness back to the default setting. Drag the slider tab up to increase the brightness level, or down to decrease brightness.
3. Click to set contrast back to the default setting. Drag the slider tab up to increase the contrast level, or down to decrease contrast.



4. Click to switch to the Brightness and Contrast Panel.
5. Click to set hue back to the default setting. Drag the slider tab to change the hue.
6. Click to set saturation back to the default setting. Drag the slider tab up to increase the saturation level, or down to decrease saturation.

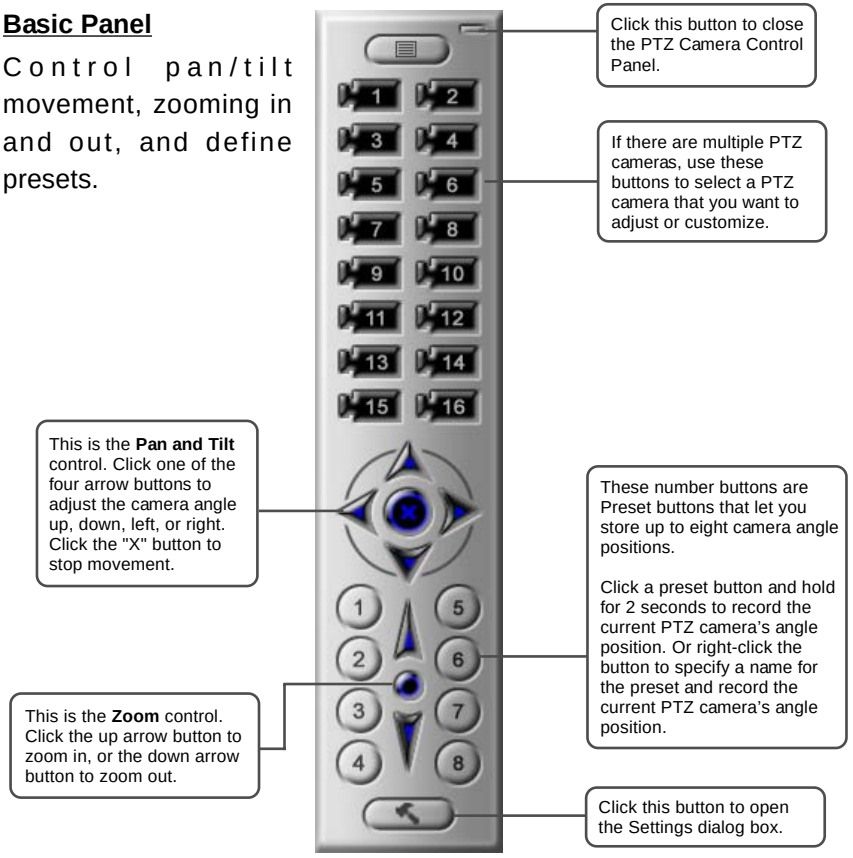
Note: Cannot adjust the hue on a PAL camera.

Advanced PTZ Control Panel

Provide pan/tilt movement, zooming, speed control, iris and focus adjustment, auto-loop, auto-pan and other control commands. You can control the PTZ camera by joystick and keyboard as well. Click to open a pop-up menu where you can switch between these four panels.

Basic Panel

Control pan/tilt movement, zooming in and out, and define presets.

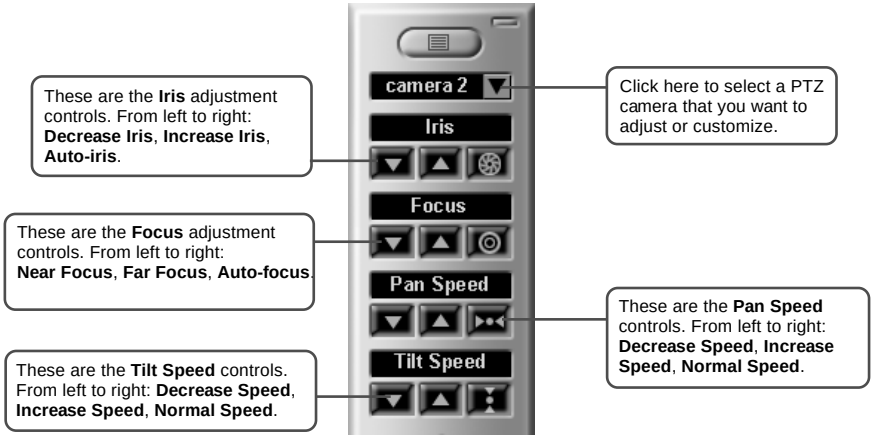


Note: To define preset on a Lilin PTZ camera, the steps are,

1. Click a preset button.
2. Move the PTZ camera to the desired angle position.
3. Click the preset button and hold for 2 seconds to record the current angle position. Or right-click to give a name and record the angle position.

Advanced Panel

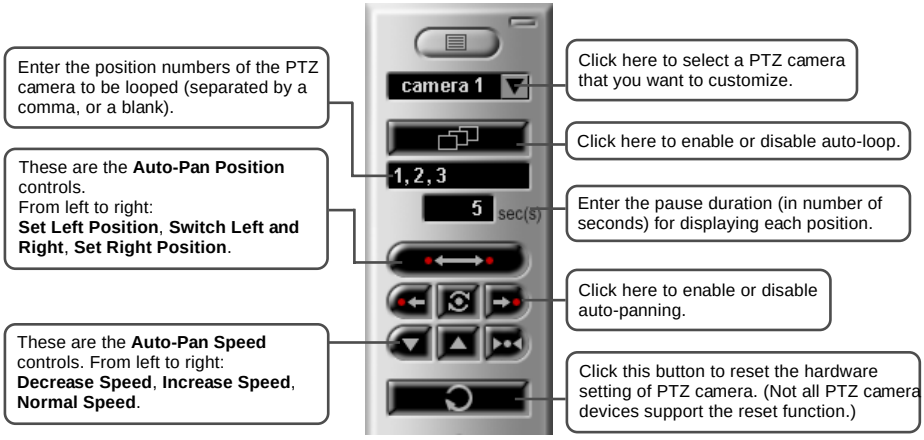
Except basic control of movement, zooming and presets, **Advanced Panel** allows to adjust iris, focus, pan speed and tilt speed.



Note: Not all PTZ cameras support the adjustment of iris and focus.

Auto Panel

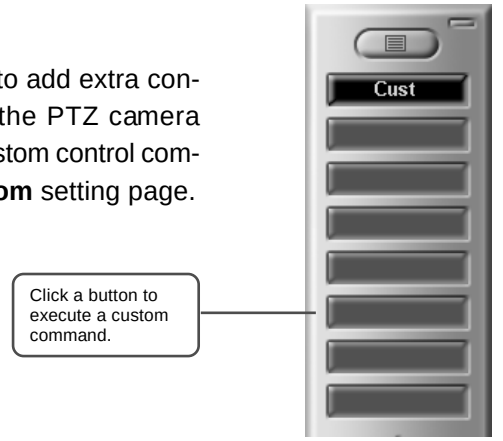
Except basic control of movement, zooming and presets, **Auto Panel** allows to define auto-loop and auto-pan movement.



Note:
1. To define the left and right position of **Auto-Pan**, you click the / button and hold for 2 seconds to record current PTZ camera's angle position. Or right-click the / button to specify a name and record current PTZ camera's angle position.
2. Auto-Pan has two navigation tours along different sides of circumference. Click the button to switch to each other.

Custom Panel

The Custom Panel allows you to add extra control commands supported by the PTZ camera protocal. You can specify the custom control command on the **Preference/Custom** setting page.



Specify PTZ camera

You can specify a PTZ camera in the **Preference/PTZ Device** setting page.

Step 1: Press button to open the **Preference/PTZ Device** setting page.

Step 2: Check the camera number that display the PTZ camera video.

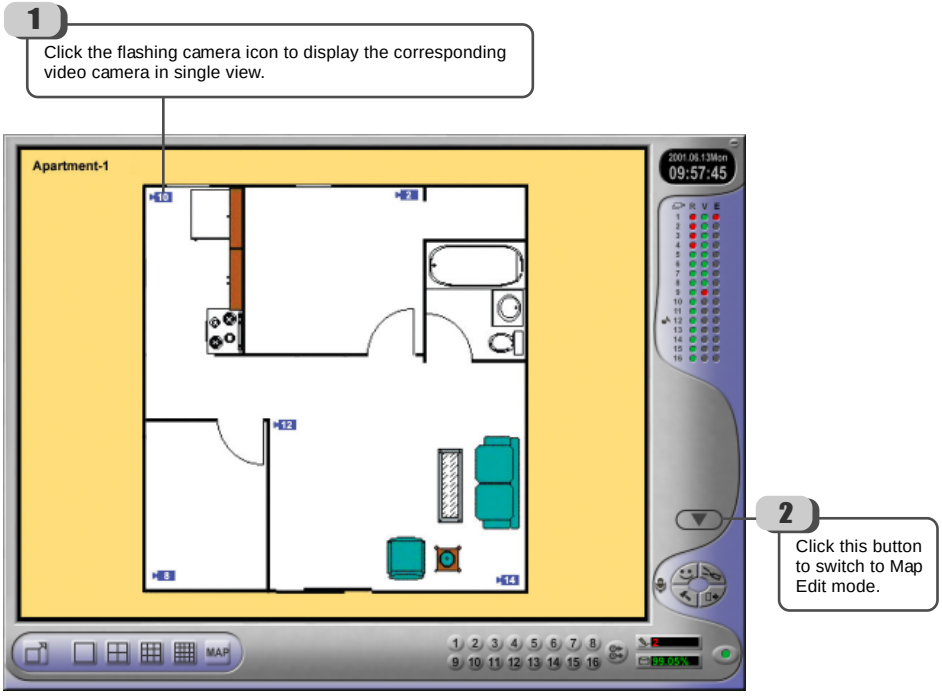
Step 3: Select the COM port number that control the PTZ camera. And then the PTZ camera device ID and the control protocal.

Step 4: Press the **OK** button to confirm the setting.

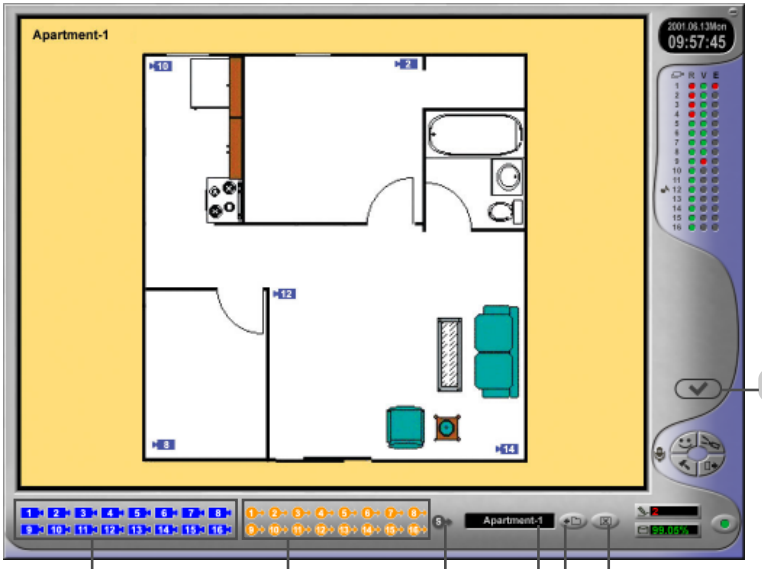
Input/Output Device Indicators

Displays the status of connected sensors, alarms and other traditional security devices. Indicators in the first row are for input devices. Indicators in the second raw are for output devices. Green light indicates that the I/O device is connected. Red light indicates that the I/O device has been triggered.

Map Mode



Create Site Map



1 There are camera icons. Drag them onto the map, and drag each of them to the installed location of each camera.

2 These are sensor icons. Drag them onto the map, and drop each of them to the installed location of each camera.

3 Click the switch button to display sensor icons or output device icons.

4 Click the button to remove all icons from the map.

5 Click the button to load the map's image file.

6 Type in a name for the map.

7 Saves the settings and returns to map mode.

Record Player - Search by Time Segments

1 **Record Type:** Choose whether to search for video recordings by time segments or by the type of events. Select [All records] to search by time segment.

2 **Camera:** From the drop-down list, choose all or a single camera where you want to retrieve records from.

3 **Information**, from let to right, are the start recording time code, the current frame's time code, the current play back speed, and the stop recording time code.

4 **Play back buttons**, from left to right are Mute, Play, Stop, Previous Frame, Next Frame, Backward, Forward, Decrease Playback Speed, Normal Playback Speed, and Increase Playback Speed.

5 Drag the slider tab forward and backward to navigate video frames.

6 **Snapshot:** Captures the current frame and lets you print the captured image or save it as an image file.
Resave: Saves a selected video segment to a AVI file or EXE file.
Zoom in/out: Click to change the display dimension of video frame between 320x240, 640x480 and full screen.

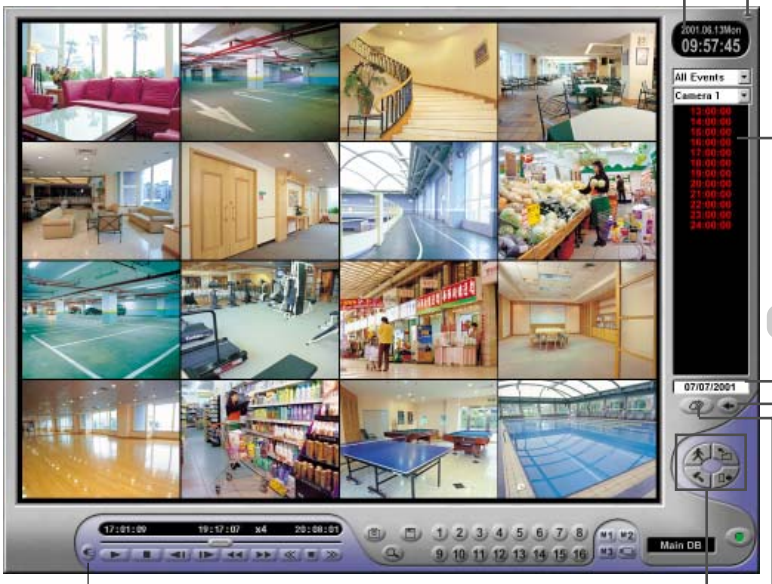
7 **Camera Selection Panel:** Click the cameras whose video recordings you want to access for the selected time segment.

8 **Memory buttons:** Click a memory button and hold for 2 seconds to record the current camera selection.
Single Camera: Click the button to allow single camera selection only.

9 **Database Name:** Displays the record database name accessed by Record Player.

10 **Power:** Click the button to close the Record Player program.

Record Player- Search by Time Segments (Continue)



11 **Date and Time:** This displays the current date and time.

12 **Minimize:** Minimizes the Record Player program window onto the Windows taskbar.

13 Select a time segment of video recordings.

14 Enter the date of recording.

15 Click to retrieve the history records of the selected date.

16 Click to display a calendar to select a date.

17

Motion Detection Setting: Click to customize the motion detection settings.

Locate Database: Click to locate the main database or a backup database.

Log Out: Click to log off from the Record Player.

Preferences: Opens the Preferences dialog box where you can customize the preferences.

18 Click to toggle between playing/ muting the audio associated with the recorded video.

Record Player - Search by Events

1 Select "All Events", "Motion", "Sensor" or "Manual" from the "Record Type" drop-down list to retrieve event records.

2 Select a camera.

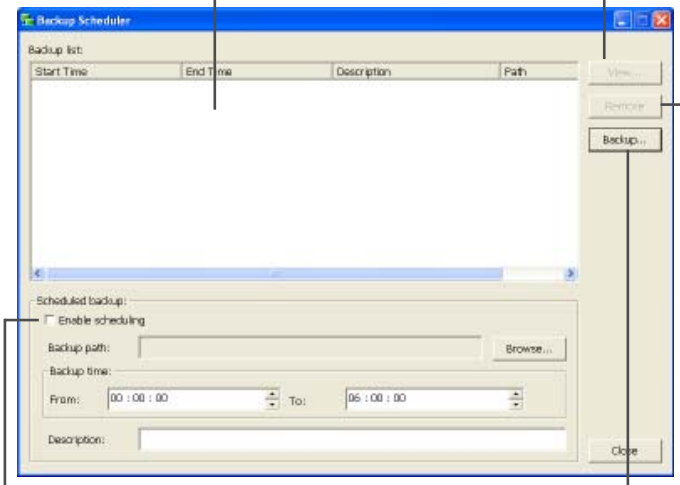
3 Lists event recordings.

4 Choose the number of video recordings to play back simultaneously.

5 Displays the previous set of video recordings.

6 Displays the next set of video recordings.

Backup Scheduler



1

Keeps a record of past backups. Each backup entry in the list corresponds to an actual backup database file. Each backup entry shows the date and time range of the surveillance videos that were backed up, a textual description, and the folder location where the backup database was saved.

2

Plays back the surveillance videos that are stored in a backup database. To view the backed up surveillance videos, select the appropriate entry from the Backup list and then click **View** to play back the videos in the Record Player program.

3

Deletes one or more selected entries in the Backup list. Deleting entries will also physically delete their corresponding backup database files. To select multiple entries, hold down the **Ctrl** key and click each entry you want to delete. Then, click **Remove** to delete them.

4

Allows you to manually initiate a backup when there are recorded surveillance videos in Site Server's Main database.

5

Enables the Backup Scheduler program to perform automatic backups on a daily basis. You have to specify the backup path, the backup time and the description first.

Remote Viewer

1 Displays the camera name.

2 This mark represents that the video has been recorded to a local machine.

3 Displays "REC" indicator when the camera enables its recording.

4 A "Motion" status is displayed when the remote camera has detected a motion event.

5 The numbers on buttons represent the camera numbers whose live videos are on display. Click to select a camera to control PTZ device or enable the recording.

6
1. Click one of the four arrow buttons to adjust the camera angle up, down, left or right. Click the cross button to stop the camera movement.
2. Drag the slider tab up to zoom in, or down to zoom out.
3. The number buttons are Preset buttons. Click a button to move the PTZ camera to the angle position specified by the preset buttons.

7 Click to start/stop recording.

8 Click to connect/ disconnect a remote camera.

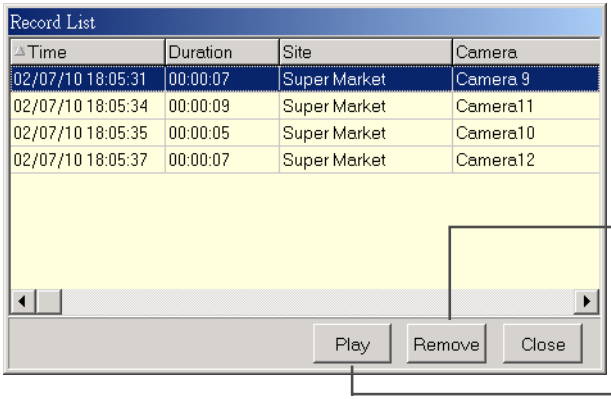
9 Click to connect to a remote DVR site.

10
Record List button: Displays the list of video recordings.
Voice button: Enables/disables voice communication to a remote DVR site.
Preferences button: Opens the Preferences dialog box.

11
1. The left side displays the current date and time of the remote camera.
2. The right side displays the average frame rate and data rate.

12
From left to right: Full Screen button, Single View button, 4 Split Screens button, 9 Split Screens button, 16 Split Screens button, Next Page button, Loop Page button, Live Sound button.

Remote Viewer Records List



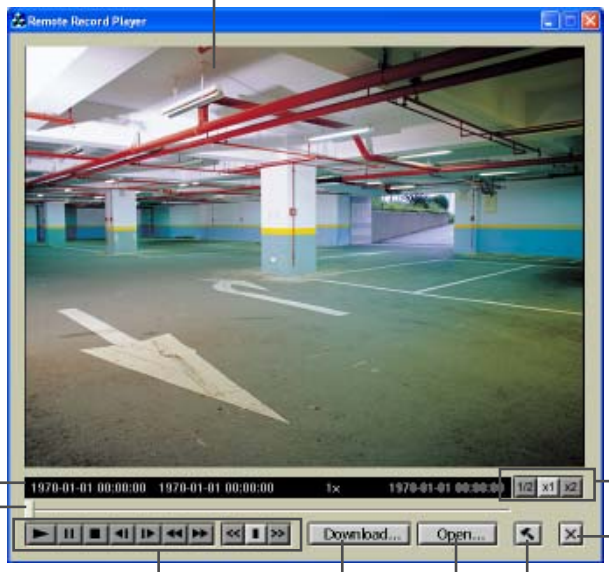
1 Click this button to remove the selected record.

2 Click this button to play the selected record.

Playback Web Page

Snapshot Web Page

Remote Record Player



1

Screen This is where the video recording is played back.

2

Information, from left to right, are the start recording time code, the current frame's time code, the current playback speed, and the stop recording time code.

3

Drag the slider tab forward and backward to navigate video frames.

4

Play back buttons, from left to right, are Play, Pause, Stop, Previous Frame, Next Frame, Backward, Forward, Decrease Playback Speed, Normal Playback Speed, and Increase Playback Speed.

5

Click to open the "Download" dialog box where you can configure settings to enable you to download video recordings from the DVR Site Server.

6

Click to open the "Open" dialog box and select the downloaded video recording file then click the "OK" button. The video recording file is displayed on the Remote Record Player screen.

7

Click to open the "Port Settings" dialog box where you can configure Remote Record Player to connect to the DVR site server.

8

Click to Close this program.

9

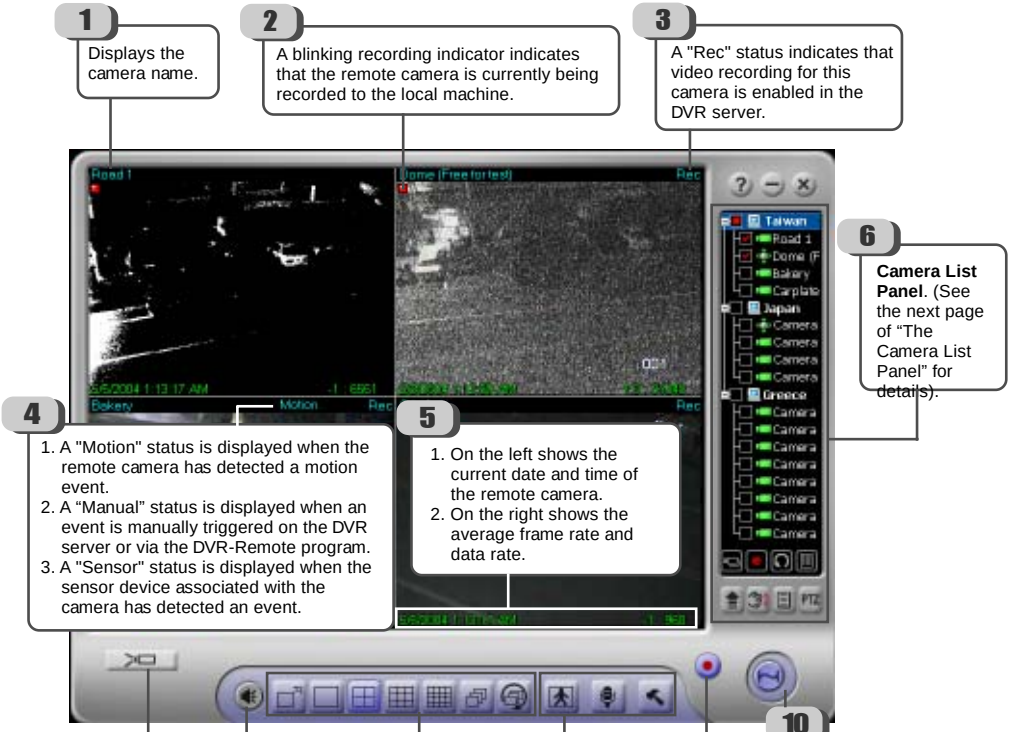
Use these buttons to choose the zoom ratio of the video being played back.

DVR-Remote Quick Guide

Using DVR-Remote

DVR-Remote provides **multiple split screens** for you to monitor remote video cameras from connected DVR sites.

The User Interface

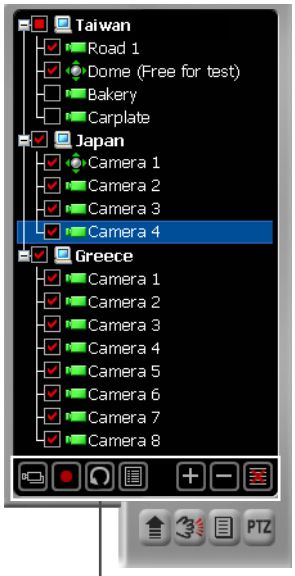


Camera List Panel

In the **Camera List Panel,** you can add several remote DVR sites that you would like to connect to. The respective cameras that are installed on each site will be listed in this panel.

Indicators

- DVR server
- Group
- CCTV camera
- PTZ camera
- Camera is selected, or all cameras in a DVR site are selected
- Only some cameras in a DVR site are selected



Remote Camera Controls

- Click to increase the display frame rate of a selected camera.
- Click to trigger a manual event to the selected remote camera.

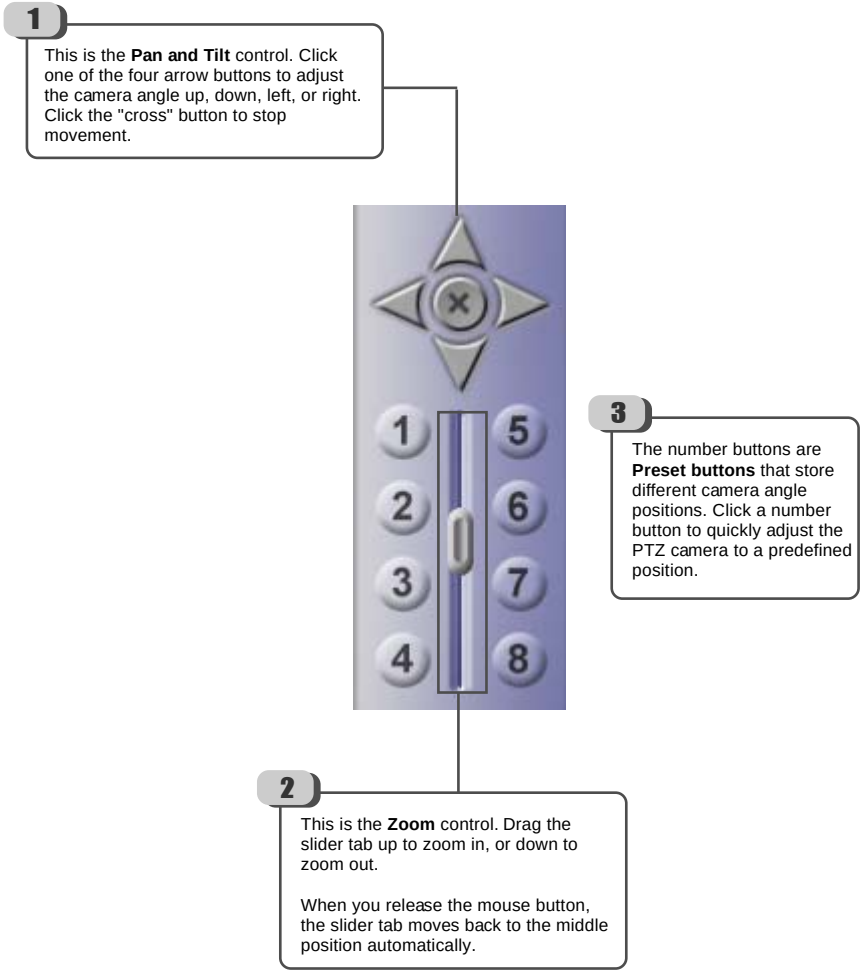
  PS. The “Manual trigger” option of the remote camera must be enabled first at the DVR site.
- Click to expand the Camera List Panel. More button controls in the Camera List Panel will then be displayed. Click again to retract the panel.
- Click to change to the PTZ Control Panel. (See the next page of “The PTZ Control Panel” for details).

Panel Controls

- Click to connect the selected remote cameras (that is, the cameras with check marks in the Camera List Panel).
- Click to start recording the selected cameras of a DVR site onto your local hard drive. Click again to stop recording.
- Click to refresh the camera list of a selected DVR site.
- Click to open the Scheduler where you can create schedules for recording surveillance video.
- Click to add a new DVR site or group to the list.
- Click to remove a DVR site or group.
- Click to clear the entire Camera List Panel.

The PTZ Control Panel

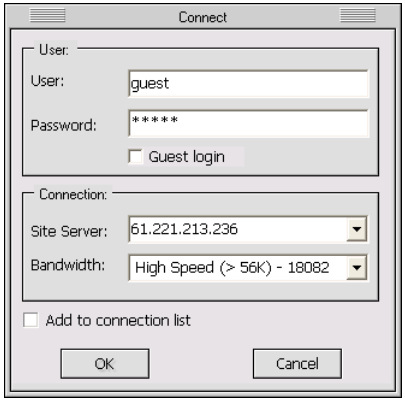
If there are PTZ cameras in any of the DVR sites, you can use the **PTZ Control Panel** to zoom in or out and pan around the monitored areas.



Connecting to Remote DVR Sites

To add and connect to a new DVR site:

Step 1: Click  to open the **Connect** dialog box.



Step 2: Enter the DVR site's URL address in the **Site Server** text box.

Step 3: Clear the **Guest login** checkbox, then type in the **User** name and **Password** to use for connecting to the DVR site.

Step 4: Select **Add to connection list** to add the DVR site to DVR-Remote's Camera List Panel, then click **OK**.

DVR-Remote will then connect to the specified DVR site and display the remote cameras.

Step 5: The DVR site will be added to the Camera List Panel. Click  to open this panel.

To see the names of the different cameras in the DVR site, click on the "+" sign.

Step 6: By default, the site is named with the site name that has been specified in the remote DVR site. To rename it, click on the text and type in the desired name.

Step 7: DVR-Remote allows you to connect to multiple DVR sites at the same time. Repeat steps 1 to 6 to add more DVR sites.

Note: Another way of adding DVR sites is to click in the Camera List Panel. The **Add Site/Group** dialog box will then be displayed where you can add a new DVR site. This dialog box also allows you to create a group name for grouping DVR sites or cameras. (See the next page of "Grouping DVR Sites or Remote Cameras" for details.)

To connect and disconnect an existing DVR site:

To connect to a DVR site, double-click its name in the Camera List Panel. Double-click the site name again to disconnect from the DVR site.

To disconnect all connected DVR sites:

Click . This closes all connections.

Grouping DVR Sites or Remote Cameras

You can create a group name to combine certain DVR sites into the same group.

If you only need to monitor certain cameras from each site, you can also create a group name to combine these cameras under the same group. This allows **DVR-Remote** to connect only to the required cameras instead of all the cameras on each site.

To create a group:

Step 1: Click ⊕ to open the **Add Site/Group** dialog box.

Step 2: Enter a group name in the **Description** text box, then click **OK**.

The new group name will be added to the first entry in the Camera List Panel.

Step 3. You can add a whole DVR site or only selected cameras into the group:

- To add a whole DVR site, first make sure that there is a check mark in its check box (which means that all cameras under this site are selected). If there is no check mark, click the check box. Then, drag and drop the DVR site into the group.
- To add only certain cam-

eras of a site to the group, first select the desired cameras. The check box on the DVR site will then be marked with a red box. Now drag and drop the DVR site into the group.

- If you want to add only a single camera from a site into the group, select that camera then drag and drop it into the group.

Step 4: Repeat step 3 to add more DVR sites or cameras into the group.

Remote Control a DVR Server

You can control a DVR server remotely to customize its setting. Only users with administrator privilege can remote control the DVR server.

Step 1: Click the  button to open the **Add Site/Group** dialog box.

Step 2: Enter the description, the Site Server IP address, and the user ID and password with administrator privilege. Click **OK** button to add to the Camera List Panel.

PS: If the description field is blank, the site name of DVR server displays instead in the **Camera List Panel**.

Step 3: Uncheck the DVR server item in the **Camera List Panel** and double-click it.

Step 4: The first split screen displays the desktop of DVR server.

Step 5: Click  button and then click  button to display whole DVR server.

Using the Remote Player

You can download video recordings from a DVR server and view them on the **Remote Player**. Surveillance video that were recorded locally on your computer hard drive can also be played in Remote Player.

In DVR-Remote, click  to change to the Remote Player screen.

The User Interface

Camera List Panel

The **Camera List Panel** lists the remote DVR sites and their respective cameras from which surveillance recordings can be downloaded.

Panel Controls

To download certain surveillance recordings for playback, first choose the desired cameras and recording times in the Camera List Panel then click this button.

Click to open a menu where you can choose the type of surveillance recordings to display in the Camera List Panel.

Click to delete selected history records from the Camera List Panel. If local history records are selected in the list, the video files will also be deleted from the hard drive.

While in the process of downloading video recordings, you can click this button to cancel the download.

Click to define the range of recording times to display in the Camera List Panel.

Click to refresh the recording time list in the Camera List Panel.

Types of History Records

Normal:
Lists the recording time of all surveillance videos recorded during the selected calendar date.

Event:
Lists the recording time of events only.

Local:
Lists the recording time of surveillance videos that were recorded and stored in the local hard drive.

Playing surveillance recordings

To play back recordings from a DVR server:

Step 1: On the top, right-hand side of the Remote Player screen, there is a **DVR Site List**. Choose a remote DVR site from which you want to download from.

Step 2: Click  then choose what type of history records to list in the Camera List Panel.

To list all history records, select  **Normal**. Otherwise, to list only the history records of events, select  **Event**.

Step 3: In the **Camera List Panel**, select one or more cameras. On each camera, click the “+” sign then select the history records that you want to download.

If you want to limit the list to a specific time interval or range, click  then specify the desired interval or range.

Step 4: To download the video recordings first to your local hard drive, click  .

If you want to directly stream the video recordings from the DVR server, go to the next step.

Step 5: Click  to play back.

To play back recordings in the local drive:

Step 1: On the top, right-hand side of the Remote Player screen, there is a **DVR Site List**. Choose a remote DVR site from which you want to download from.

Step 2: Click  then select **Local**.

Step 3: In the **Camera List Panel**, select one or more cameras. On each camera, click the “+” sign then select the recording times that you want to view.

Step 4: Click  to play back.

The Scheduler

The **Scheduler** allows you to set up specific day and time schedules for continuous recording of surveillance video from remote cameras on your local drive.

Before opening the Scheduler, you first need to connect to the DVR sites that you want to set up recording schedules for.

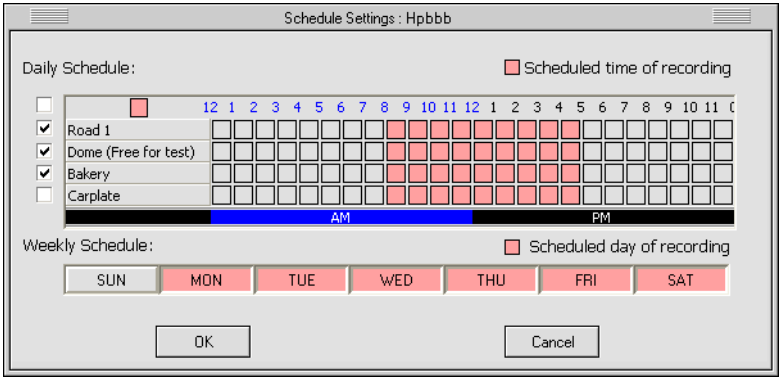
To set up a regular schedule for video recording:

Step 1. In the **DVR-Remote** program window, click  to open the **Connect** dialog box and connect to a DVR site. (See the Chapter of "Using DVR-Remote" for more details on adding and connecting to DVR sites).

Or, if you are already connected to a DVR site, click the site name in the **Camera List Panel** to select the site.

Step 2. Click  to open the **Scheduler**.

Step 3. In the **Scheduler** dialog box, the names of the remote cameras on the DVR site will be displayed. Choose the remote cameras that you want to record video from by clicking the check boxes at the left side of the camera names.



Selected cameras are indicated by a check mark on check boxes.

Step 4. The numbers that are lined up in columns represent the hours of a day. For each selected camera, choose the desired hours when you want surveillance video to be recorded by clicking the boxes underneath the hour columns.

Selected hours are indicated by color boxes. Non-selected (or deselected) hours are indicated by gray boxes.

Step 5. Next, choose the days of the week when you want surveillance video to be recorded by clicking the buttons containing the names of the days of the week.

Selected days are indicated by colored buttons. Non-selected (or deselected) days are indicated by gray boxes.

Step 6. When you have finished setting up the cameras and the time and day of recording, click **OK**.

Step 7. Repeat steps 1 to 6 to set up the recording schedule for another DVR site.

To cancel all scheduled recordings:

Click  to open the **Preferences** dialog box, click **Storage**, then click **Cancel Schedules**.

PDA Remote

1 After the connection, you can see the live video on the video screen.

2 Switch to the 4 split screens layout.

3 Switch to the single screen layout.

4 Close the program.

5 Display live video in full screen.

6 Control the PTZ camera.

7 Specify the information of remote DVR Site Server. Click the [Option] button to invoke the [Select Host] dialog box. Please enter the IP address of DVR Site Server to the [Host] field. If the DVR Site Server does not enable its access control, check the option [Anonymous]. Otherwise, enter a valid user ID and password.

8 Snap a video frame.

9 Connect / Disconnect:
Make sure first your PDA device has connected to the Internet. Presses the [Connect] button to start connect to the specified remote DVR Site Server.

10 Previous split screen.

11 Next split screen.

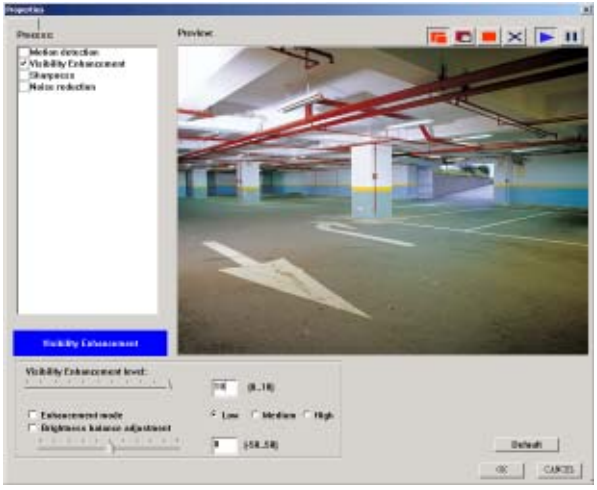
Wide Dynamic Vision

The Wide Dynamic Vision provides three extra functions to DVR 2400 surveillance system, which include visibility enhancement, sharpness adjustment and noise reduction. These features are optional to be applied on video source that are connected to the Wide Dynamic Vision card. The setting of extra functions is available in the “Motion Detection” dialog box. Open the “Motion Detection” dialog box to customize their settings.

Visibility enhancement

Select the checkbox of this item to brighten the video during nighttime when the monitored site is dark and does not have sufficient lighting.

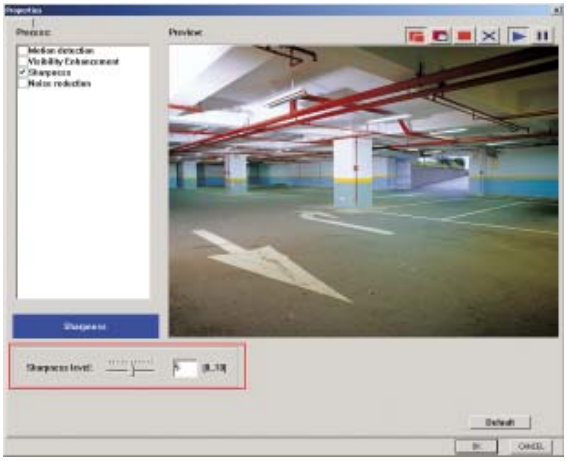
There are different situations wherein the lighting conditions may be insufficient. Follow the guidelines next page to make adjustments under different conditions.



Environmental Situations	Solution
Low lighting environment	Adjust the **Visibility enhancement level**. (Setting the value to 6 or lower is recommended).
With static light sources in low lighting environment	**Solution 1:** 1. Adjust the **Visibility enhancement level**. 2. Select the **Brightness balance adjustment** option and adjust its value. Or, If the video quality is not good enough, select the **Visibility enhancement** option and choose a level. **Solution 2:** 1. Adjust the **Visibility enhancement level.** (Setting the value to 6 or lower is recommended). 2. Mask out background light such as lamp posts or reflected light. Or, if you want to get a better result of a certain area only, mask out the unwanted areas first so that **Visibility enhancement** will only be applied to the area of interest.
With moving light Sources in low lighting environment	1. Adjust the **Visibility enhancement level**. (Setting the value to 6 or lower is recommended). 2. Select the **Brightness balance adjustment** option and choose a positive value. Or, If the video quality is not good enough, select the **Visibility enhancement** option and choose a level.
Backlighted environment	1. Adjust the **Visibility enhancement level**. (Setting the value to 6 or lower is recommended). 2. Select the **Brightness balance adjustment** option and choose a positive value.
Overexposure under lighting conditions	1. Adjust the **Visibility enhancement level**. (Setting the value to 6 or lower is recommended). 2. Select the **Brightness balance adjustment** option and choose a negative value.

Sharpness

Select the checkbox of this item to enable sharpness enhancement. This helps sharpen edges of, for instance, a blurred background (that may be due to loss of focus).



Noise Reduction

Select the checkbox of this item to enable noise reduction. This helps eliminate video noise that comes from the camera, and also reduces noise in dark scenes or nighttime environment. If you enabled **Visibility enhancement**, there may also be noise that is introduced to the video which can be minimized via noise reduction.