

PowerView 6000

Digital Surveillance System

User Manual

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Product Warranty (2 years)

Advantech warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by Advantech, or which have been subject to misuse, abuse, accident or improper installation. Advantech assumes no liability under the terms of this warranty as a consequence of such events.

Because of Advantech's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced at no charge during the warranty period. For out-of-warranty repairs, you will be billed according to the cost of replacement materials, service time and freight. Please consult your dealer for more details.

If you think you have a defective product, follow these steps:

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any on-screen messages you get when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.
3. If your product is diagnosed as defective, obtain an RMA (return merchandise authorization) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a fully-completed Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

Declaration of Conformity

CE

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from Advantech. Please contact your local supplier for ordering information.

CE

This product has passed the CE test for environmental specifications. Test conditions for passing included the equipment being operated within an industrial enclosure. In order to protect the product from being damaged by ESD (Electrostatic Discharge) and EMI leakage, we strongly recommend the use of CE-compliant industrial enclosure products.

FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution! *There is a danger of a new battery exploding if it is incorrectly installed. Do not attempt to recharge, force open, or heat the battery.*



Replace the battery only with the same or equivalent type recommended by the manufacturer.

Discard used batteries according to the manufacturer's instructions.

Achtung! *Discard used batteries according to the manufacturer's instructions.*

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

FM

This equipment has passed the FM certification. According to the National Fire Protection Association, work sites are classified into different classes, divisions and groups, based on hazard considerations. This equipment is compliant with the specifications of Class I, Division 2, Groups A, B, C and D indoor hazards.

Technical Support and Assistance

1. Visit the Advantech web site at **www.advantech.com/support** where you can find the latest information about the product.
2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:
 - Product name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem
 - The exact wording of any error messages

Document Feedback

To assist us in making improvements to this manual, we would welcome comments and constructive criticism. Please send all such - in writing to: support@advantech.com

Safety Instructions

1. Read these safety instructions carefully.
2. Keep this User Manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must 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 may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
12. Never pour any liquid into an opening. This may 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 one of the following situations arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment does not work well, or you cannot get it to work according to the user's manual.

- The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.
15. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE MAY GO BELOW -20° C (-4° F) OR ABOVE 60° C (140° F). THIS COULD DAMAGE THE EQUIPMENT. THE EQUIPMENT SHOULD BE IN A CONTROLLED ENVIRONMENT.
 16. CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER, DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70 dB (A).

DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

Wichtige Sicherheitshinweise

1. Bitte lesen Sie sich diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie keine Flüssig- oder Aerosolreiniger. Am besten dient ein angefeuchtetes Tuch zur Reinigung.
4. Die Netzanschlusssteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Verletzungen hervorrufen.
7. Die Belüftungsöffnungen dienen zur Luftzirkulation, die das Gerät vor Überhitzung schützt. Sorgen Sie dafür, dass diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim Anschluss an das Stromnetz die Anschlusswerte.
9. Verlegen Sie die Netzanschlussleitung so, dass niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
10. Alle Hinweise und Warnungen, die sich an den Geräten befinden, sind zu beachten.
11. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
12. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.
13. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
14. Wenn folgende Situationen auftreten, ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
 - Netzkabel oder Netzstecker sind beschädigt.
 - Flüssigkeit ist in das Gerät eingedrungen.
 - Das Gerät war Feuchtigkeit ausgesetzt.
 - Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.

- Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
 - Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
15. VORSICHT: Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlene-männlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.
 16. ACHTUNG: Es besteht die Explosionsgefahr, falls die Batterie auf nicht fach-männische Weise gewechselt wird. Verfangen Sie die Batterie nur gleicher oder entsprechender Type, wie vom Hersteller empfohlen. Entsorgen Sie Batterien nach Anweisung des Herstellers.

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70dB(A) oder weniger.

Haftungsausschluss: Die Bedienungsanleitungen wurden entsprechend der IEC-704-1 erstellt. Advantech lehnt jegliche Verantwortung für die Richtigkeit der in diesem Zusammenhang getätigten Aussagen ab.

Safety Precaution - Static Electricity

Follow these simple precautions to protect yourself from harm and the products from damage.

1. To avoid electrical shock, always disconnect the power from your PC chassis before you work on it. Don't touch any components on the CPU card or other cards while the PC is on.
2. Disconnect power before making any configuration changes. The sudden rush of power as you connect a jumper or install a card may damage sensitive electronic components.

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Overview

This chapter gives an overview of the PV-6000.

Sections include:

- Features
- Function Introduction
- Packing List
- System Requirements
- System Installation

Chapter 1 Overview

PowerView 6000's professionally designed user interface helps you to use all functions easily. This makes PowerView the most professional digital surveillance solution on the security market.



Figure 1.1: Main Screen

1.1 Features

- Prompt system, recording, event, alarm, network connection, and backup status etc.
- Flexible and multiple recording modes enable you to set configuration and do multi-scheduled recording of each camera and sensor.
- Quick Search: Playback with visual file search by time or event. There is also a smart search function.
- The eMap function allows you to control the cameras and sensors through eMap, and link to other surveillance systems.
- Event action plan: Set digital outputs, take photos, execute certain programs etc., when motion is detected, a sensor is triggered or a signal breaks etc.
- Event log function: View the event log by event category and save or print the event list.
- Various Backup functions that can burn a backup file onto auto run CD/DVDs or other storage devices.
- Powerful remote control with Power Center central monitoring system and IE browser.

1.2 Function Introduction

1.2.1 Main Program

The main functions of the PowerView 6000 program include Search and Playback, Configuration, Manual Backup, Cameras and PTZ control, eMap, and Event log. Descriptions are as follows:



Search and Playback

PowerView 6000 supports three kinds of easy to use search modes that playback by time, event, and smart search. The event list can be saved, printed, and exported as a text file.



Configuration

This shows systems, users, sensors, motion detection, and network items in a tree structure.



Manual Backup

This enables the user to backup certain recordings. The schedule, camera, reserved storage space and file path can be set. Multiple storage devices are supported. An auto run CD/DVD can be burnt directly.



Cameras and PTZ Control

This enables configuration of pan, tilt, zoom, hue, brightness, contrast, and saturation of each camera. Function keys are assigned to special functions of speed domes. In addition, you can apply the default setting to specific cameras.



eMap

This enables the hierarchy of the eMap to be defined and the positions of the cameras and DIO on the eMap to be changed. The eMap function enables you to control cameras and DIO using the eMap. Event triggers link to digital surveillance systems on the eMap.



Event Log

Event log viewer shows all event triggers and system status items, including local and remote login/logout, signal loss, connection status etc. These can be saved or printed as a text file.

1.2.2 IE Remote Control

The PowerView 6000 IE Remote Control function provides not only remote viewing but also remote playback, remote setting, remote recording, camera setting, eMap and event log functions etc.



1.2.3 Remote Control Power Center

Power Center is the remote control system that helps you easily connect and monitor the local DVR from the remote client in real-time. Power Center enables you to connect up to 24 DVRs from different IP addresses simultaneously. The dual monitor design helps you view real-time video; monitor system and event status; and control DIO via the eMap function.



1.3 Packing List

The PowerView DVR series includes complete product categories from the PV-600 entry-level model to the high-end PV-2000 series. The PV-2000 series is a H.264 hardware data compression model. Every product kit can support up to 16 video inputs. Software compression models support up to 24 ports, and hardware compression models can support up to 32 ports. In addition to the recording function, all kits are equipped with internet remote control, IE browser, PTZ control, alarm notification, and back-up functions.

1.3.1 Digital Surveillance Kits (Software Compression)

| Part Number | PV-600 | PV-800 | PV-650 | PV-850 | PV-1000 |
|---|---|---|---|---|---|
| Capture Card |  |  |  |  |  |
| Video and Audio Cable Line or Extension Cards | X |  x3 |  |  |  x3 x2 |
| Watchdog Line |  |  |  |  |  |
| Installation CD | ✓ | ✓ | ✓ | ✓ | ✓ |
| User Manual | ✓ | ✓ | ✓ | ✓ | ✓ |
| Video Input | 4 | 16 | 4/8/12/16 | 4/8/12/16 | 16 |
| Audio Input | N | N | 1 | 4 | 16 |
| Resolution | 320 x 240 / 640 x 240 / 640 x 480 | | | | |
| Max Card Stack | 4 cards | 2 cards up to 16 CH | 4 cards | 2 cards up to 24 CH | 1 cards |
| Display Rate NTSC/PAL fps | 30/25 | 120/100 | 30/25 | 120/100 | 480/400 |
| Recording Rate NTSC/PAL fps | 30/25 | 30/25 | 30/25 | 30/25 | CIF: 480 2CIF: 240 4CIF: 120 |
| Max Record Rate NTSC/PAL fps | 120/100 | 240/200 | 120/100 | 240/200 | 480/400 |
| Optional DI/DO | 4/4 | 4/4 | 8/6 | 16/12 | 16/16 |

1.3.2 Digital Surveillance Kits (Hardware Compression)

| Part number | PV-2000 | PV-2100 | PV-2200 |
|------------------------------|---|---|---|
| Capture Card |  |  |  |
| Video and Audio Cable Line |  |  |  |
| Internal Audio Cable |  |  |  |
| Internal Connection Cable |  |  |  |
| Watchdog Line | X | X | X |
| Installation CD | ✓ | ✓ | ✓ |
| User Manual | ✓ | ✓ | ✓ |
| Video Input | 4 | 8 | 16 |
| Audio Input | 4 | 8 | 16 |
| Resolution | CIF, 2CIF and 4CIF (half video CH) | | CIF, 2CIF |
| Max Card Stock | 8 cards up to 32 CH | 4 cards up to 32 CH | 2 cards up to 32 CH |
| Display Rate NTSC/PAL fps | 120/100 | 240/200 | 480/400 |
| Recording Rate NTSC/PAL fps | 120/100 | 240/200 | 480/400 |
| Max Record Rate NTSC/PAL fps | 960/800 | 960/800 | 960/800 |
| Optional DI/DO | 16/16 | 16/16 | 16/16 |

1.3.3 PVS-640 Series Digital Surveillance Systems



| Part Number | PVS-640- | | | | | |
|-----------------------------------|--|-------------|---|--------------------|--------------------|-----------------------|
| | SB16 | SB24 | SR16 | HB16 | HB32 | HC32 |
| Compression | Software (MJPEG, MPEG-4) | | | Hardware (H.264) | | |
| Packing List | 19" 4U Industrial Chassis 19"x 7"x 18.9"(W x H x D) Utility CD x 1 User Manual x 1 Power Line x 1 | | | | | |
| Video Input | 16 | 24 | 16 | 16 | 32 | 32 |
| Audio Input | 1 | 1 | 16 | 16 | 32 | 32 |
| Resolution | CIF/Half D1/D1 | | CIF/Half D1/D1 | CIF/ Half D1 | CIF/ Half D1 | CIF/ Half D1/D1 |
| Display Rate PAL/NTSC | 100/ 120 | 150/ 180 | 400/480 | 400/ 480 | 800/ 960 | 800/ 960 |
| Record Rate (PAL/NTSC) | 100/ 120 | 150/ 180 | CIF: 400/480 2CIF: 200/ 240 4CIF: 100/120 | 400/ 480 | 800/ 960 | 800/ 960 |
| Video out | VGA/DVI/ S-video | | | | | |
| Motherboard | Industrial CPU board/ Intel 865 chip or above | | | | | |
| CPU | P4 3.0 GHZ, FSB 800 MHZ | | | | | |
| RAM | 512 MB RAM | | | | | |
| VGA | On-board VGA | | | | | |
| OS | Win XP Embedded OS Licence | | | | | |
| DOM | 512 MB (Disk on Module) | | | | | |
| Power Supply | 400 W | | | | | |
| Hard Disk | HDD bay: 3.5" x 1, 5.25" x 3 (HDD option) | | | | | |
| Looping | 16 CH looping out (Option) | | | | | |
| CDRW | Option | | | | | |
| Optional DI/DO | 16/16 | | | | | |

1.4 System Requirements

Note: *Please follow our recommended system requirements for assembly, such as using an Intel chipset motherboard and VGA card that supports DirectX 9 (VMR9). We don't recommend on-board VGA.*

| | | |
|---------------------|---|--|
| Part number | PV-600, PV-650, PV-800, PV-850, PV-1000, PV-2000, PV-2100 (below 16 Channels) | PV-600, PV-650, PV-800, PV-850, PV-2000, PV-2100 (16 channels or above) |
| CPU | Intel P4 2.8 GHz or above | Intel P4 2.8 GHz or above |
| Motherboard | Intel 845 or 865 chipset | Intel 845 or 865 chipset |
| VGA | Geforce FX-5200 128 MB or Radeon 9200 128 MB or above (Supports DirectX 9) | ATI 9200 128 MB or above (Supports DirectX 9) |
| RAM | 256 MB or above | 256 MB or above |
| Network Card | Ethernet Card | |
| DirectX | DirectX 9.0 Installation CD enclosed | |
| HDD | General recording quality is 7 kbs. If you connect 4 cameras and record 4 fps for 24 hours a day, it will take 9.3 GB HDD space. An 80 GB HDD for long term recording is recommended. | |
| OS | Windows XP, Windows 2000, Windows XP Embedded | |
| Power Supply | One HDD | 250 W |
| | Two to Three HDD | 300 W |
| | Three to Four HDD | 350 W |
| | Four to Five HDD | 400 W |
| | Five to six or above | 460 W |

1.5 System Installation

1.5.1 Quick installation guide

1. **Capture card setup**

Please refer to the Hardware installation user manual.

2. **DirectX 9.0 Installation**

Press [DirectX 9 Setup] to install DirectX. This program has to be installed on the local and remote computers.

3. **Capture Card Driver Installation**

After logging on to Windows, the system will search for the driver. Put the CD into the CD-ROM drive and select [Specify a location], press [Browse] to search for the driver files on the CD, then start to install the driver.

4. **PowerView 6000 Main Program Installation**

The following picture will appear when the CD is put into the CD-ROM drive. You can install programs from here.



5. **Reboot computer**

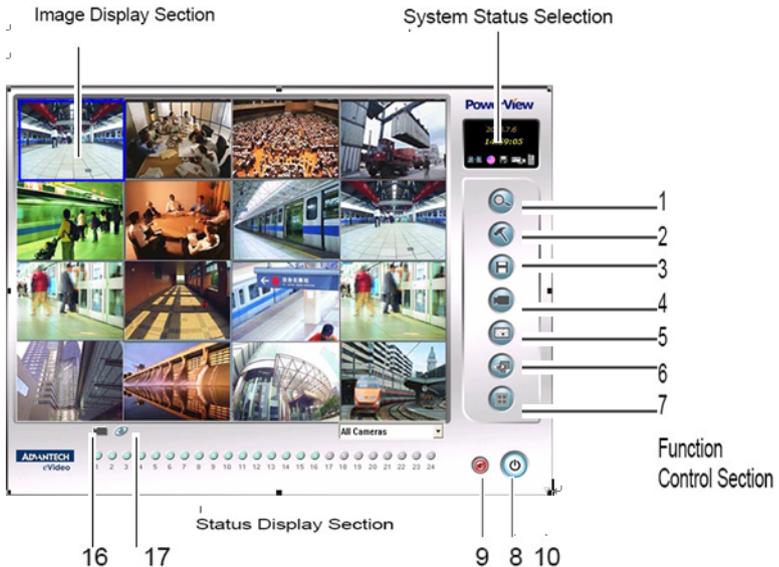
CHAPTER 2

Recording (Main Screen)

This chapter describes how to record video.

Chapter 2 Recording (Main Screen)

This screen is the main screen that appears after the start-up process. Users can enter this screen after finishing the login procedure. The system defaults to recording mode. The screen consists of three sections: the system status section, image display section and function control section.



- Note:**
- The default username and password is “admin” and “1234”.
 - Go to “Configuration”, “system setup”, “Auto DVR Login” to invoke the auto log in function. The system will enter the PowerView main screen automatically after start up without making a log entry.
 - Camera feeds can be arranged for preview, but will go back to the default arrangement after exiting the preview screen or logging out of the DVR.

Operation: Hold the left mouse button and drag the camera feed to where you want it to be shown.

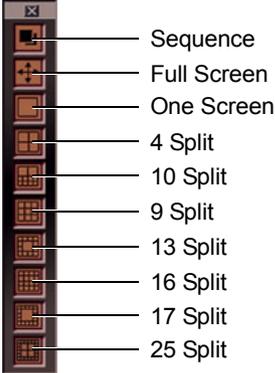
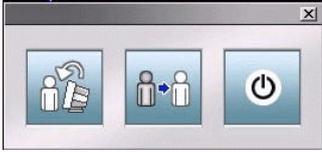


2.1 Function Introduction

2.1.1 Function Control Section

The buttons in this section provide access to all functions of Power View DVR.

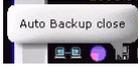
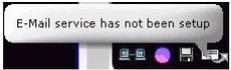
| Item | Icon | Function | Description |
|------|---|----------------------|--|
| 1 |  | Search and Playback | This plays back recorded data. The user can search by time period, event or Smart Search. Search results can be saved or printed. |
| 2 |  | Configuration | This shows systems, users, sensors, motion detection, and network items in a tree structure. |
| 3 |  | Manual Backup | This enables the user to backup certain recordings. The schedule, camera, reserved storage space, file path and file format can be set. Multiple storage devices are supported. An auto run CD/DVD can be burnt directly. |
| 4 |  | Camera Configuration | This enables configuration of pan, tilt, zoom, hue, brightness, contrast, and saturation of each camera. Function keys are assigned to special functions of speed domes. In addition, you can apply the default setting to specific cameras. |
| 5 |  | eMap | This enables the hierarchy of the eMap to be defined and the positions of the cameras and DIO on the eMap to be changed. The eMap function enables you to control cameras and DIO using the eMap. Event triggers link to digital surveillance systems on the eMap. |
| 6 |  | Event Log | The event log viewer shows items such as system status, system log in/out information, camera status and connection status (with the Power Center Central Monitoring System). The event list can be saved to a file or printed out. |

| Item | Icon | Function | Description |
|------|---|-------------------------|--|
| 7 |  | Screen Layout Selection | <p>Clicking this button shows the screen split layout window. This window is dockable. A camera caption and the system time will be displayed on the top of each division screen. Refer to the "Configuration", "Camera Setup" table to edit the caption or change the font and color. Double-clicking on an image enlarges it to the full screen. Double-clicking on the single screen restores the previous screen layout.</p>  |
| 8 |  | Exit | <p>Temporarily log off, switch users or exit the system.</p>  |
| 9 |  | Audio | <p>Enable or disable audio by clicking this button. Event warning sounds are also disabled by click this button.</p> |
| 10 |  | Minimize PowerView | <p>PowerView main screen can be minimized by clicking this button.</p> |

2.1.2 System Status Displaying Section

There are two sub-sections for displaying system status information. The first one will show system date/time, remote connection status, disk space, backup status, and email/telephone/SMS transmission status. Operational hints are shown when the user puts the mouse pointer over an icon. Icons are grayed out if the function hasn't started up.

The second sub-section shows camera status or event list information. Users can toggle between them by clicking the "Camera" or "View log" icon.

| Item | Icon | Function | Description |
|------|---|----------------------------|---|
| 11 |  | Remote connection status |  <p>Indicates remote connection status when the mouse pointer is moved over this icon.</p> |
| 12 |  | Disk Space |  <p>When the mouse pointer is moved over this icon, the free space, percentage of free space, and camera ID are shown for each HDD</p> |
| 13 |  | Backup Status |  <p>If the auto backup option is enabled, display backup status information will be shown when the mouse pointer is moved onto this icon</p> |
| 14 |  | Email Notification |  <p>When the cursor is over this icon, indicate the email notification when the cursor is mouse pointer over this icon.</p> |
| 15 |  | SMS and Phone Notification | <p>If the auto SMS/phone notification option is enabled, SMS/phone notification information is shown when the mouse pointer is moved over this icon.</p> |

| Item | Icon | Function | Description |
|------|---|---------------|---|
| 16 |  | Camera Status | <p>Lamp indicators are used to display cameras status. Blue means normal, red means event trigger,  means no signal and gray means this camera is not supported by the capture card.</p>  |
| 17 |  | View Log | <p>When an event is triggered, the color of this icon will change from blue to red. The last 100 events are displayed in the event list window. These include system log in/out information, motion detection, sensor, DO alarm, video lost system events.</p>  |
| 18 |  | Snapshot | <p>When the mouse pointer is moved over the upper left corner of each division screen, the snapshot icon will appear. Click it to snapshot the image. The location of the snapshot data can be changed in the Configuration, System Setup, Storage Setup menu. The default path is C:\PV6\Bin\Snap-shot.</p> |

Search and Playback

This chapter describes search and playback.

Sections include:

- Search by Time
- Search by Event
- Smart Search

Chapter 3 Search and Playback



Click  to start the search function. PowerView 6000 provides three search modes:

- **Search by Time:** This search mode enables the user to replay video by selecting the date and time segment from the calendar and time slider bar.
- **Search by Event:** This enables search by triggered events, time, event category, camera ID and sensor ID.
- **Smart Search:** This function allows you to search recorded images that have variation in a user defined area. Users can also narrow the search by specifying cameras and time periods.

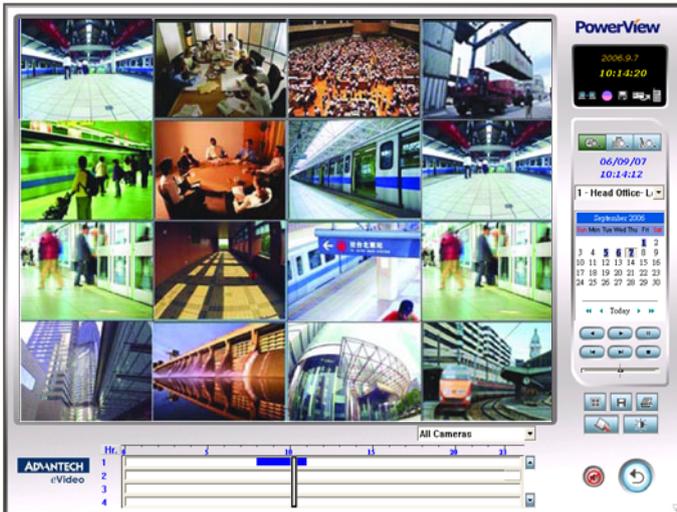
Search results can be saved, printed. The user can adjust video configuration and use integrated bookmark functions.



The default search mode is time period search.



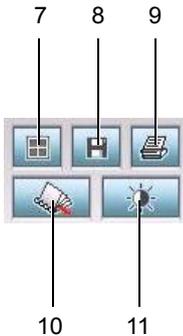
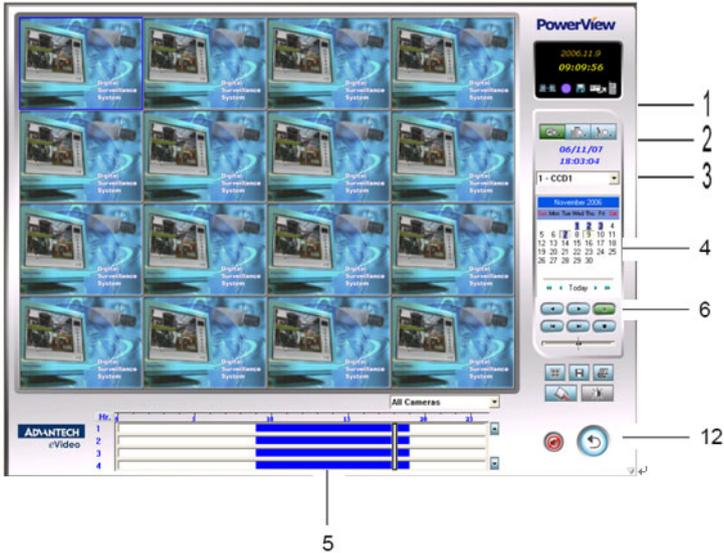
Click the other buttons to change to another search mode.

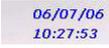
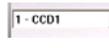
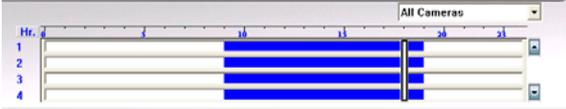


3.1 Search by Time

3.1.1 Function Introduction

Click  to start the search function. The system defaults to “Search by time”  mode.

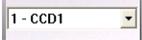


| Item | Icon | Function and Description |
|------|---|---|
| 1 |  | Search mode  Search by time  Search by event  Smart search |
| 2 |  | Time indicator Time stamp of the recorded image. |
| 3 |  | Camera selection Camera selection list |
| 4 |  | Calendar menu Calendar selection list. The date will be indigo color if the data has been recorded on that day. |
| 5 |  | Time segment selection menu Time segment data is updated for each selected calendar day. Click the top-left item to change between searching by hours or minutes. Drag the slider bar to the time segment you want to playback and then select the camera with the up and down buttons. When the time segment display is blue, it means there is recorded data. If the time segment is red, it means events have been triggered but no recording data is available. If the time segment is green, it means events have been triggered, but they have been mis-recorded.  |
| 6 |  | Playback speed selection buttons  Play button  Pause button  Play backward button  Stop button  next frame  previous frame  Speed adjustment slider-bar 1/16X, 1/8X, 1/4X, 1/2, 2X, 4X, 8X, 16X |

| | | |
|--------------------------|--|---|
| <p>Item 7</p> | <p>Icon</p>  | <p>Function and Description</p> <p>Screen split layout This dockable window allows the user to choose how camera feeds are arranged on the screen.</p>  |
| <p>8</p> | <p>Icon</p>  | <p>Save as Save the image as a BMP or JPG file. Before saving, the user can adjust brightness and contrast and put a camera ID and time stamp on the image. The text format can also be changed.</p>  <p>The user can select the time period and save the recorded data in avi format. Users can also burn the .avi file onto a CD-ROM or DVD-ROM.</p> |

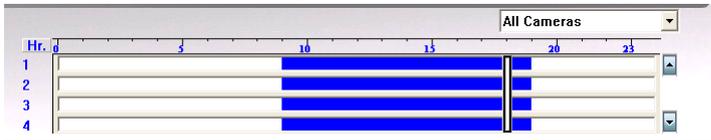
| | | |
|-----------------------------|--|--|
| <p>Item</p> <p>9</p> | <p>Icon</p>  | <p>Function and Description</p> <p>Print Prints out a recorded image. Before printing, the user can adjust brightness, contrast, font display and print format. You must record images first before the print function is accessible.</p>  |
| <p>10</p> |  | <p>Bookmark User can add a selected time segment link to the bookmark list and play the recorded data in the selection list.</p>  <p>Add, remove and go to time segment link selection list buttons</p> |
| <p>11</p> |  | <p>Color configuration The user can adjust hue, contrast, brightness and saturation for recorded video or select defaults for each camera.</p>  |
| <p>12</p> |  | <p>Return Exit the search screen and return to the main screen.</p> |

3.1.2 Operation Steps

1. Choose a camera ID from camera list. 
2. Select a search date from the calendar. The date is shown in indigo if there is recorded data for that day.



3. Drag the time slider bar to whenever you want to start searching. The blue segment on the scroll bar means there is recorded data in that time segment. A red segment means events have been triggered but no data was recorded. A green segment indicates a mix of normal and event triggered recording status. The time unit for the scroll bar can be switched between hours and minutes.



4. Click  to start to playback record video. Please refer to the function description section for a detailed explanation of each button.
5. Click the appropriate button to save, print out, configure color, bookmark or select the screen layout. Please refer to the function description section for a detailed explanation of each button.

3.2 Search by Event

3.2.1 Function Introduction

Click  to enter the main screen of the search screen, and then click  to invoke the event search function.

| Item | Icon | Function and Brief Description |
|------|---|--|
| 1 |  | Event Search Criteria Menu Search recorded data by event occurrence period, event type and camera ID. The event types include motion detection, sensor alarm and video loss. |
| 2 |  | Playback Buttons Please refer to item 6 of the function description in Search by Time. |
| 3 |  | Other function Menu Please refer to the function description in Search by Time. |
| 4 |  | Event List The search results are listed in the Event List Window. The items in this window include event time, event type, device and event description. |

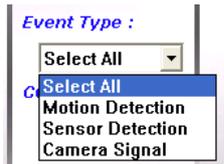
| # | Event Time | Event Type | Event Status | Device | Event Description |
|---|---------------------|---------------|--------------------|--------|-------------------|
| 1 | 2006-11-01 18:34:19 | Sensor Det... | Sensor triggered | 1 | Sensor1 - Sen... |
| 2 | 2006-11-01 18:34:21 | Camera Sig... | Camera Single Lost | 2 | CCD2 - Camera... |
| 3 | 2006-11-01 18:34:21 | Camera Sig... | Camera Single Lost | 4 | CCD4 - Camera... |
| 4 | 2006-11-01 18:34:21 | Camera Sig... | Camera Single Lost | 6 | CCD6 - Camera... |
| 5 | 2006-11-01 18:34:21 | Camera Sig... | Camera Single Lost | 2 | CCD2 - Camera... |

3.2.2 Operation

1. Click  to enter the main screen of the search screen, and then click  to invoke the event search function.
2. Define the search period.



3. Define the event type. The selection includes: motion detection, sensor alarm, video loss or all of them.



4. Click  to start searching. The search result will be listed in the event list window.

| # | Event Time | Event Type | Event Status | Device | Eye |
|----|---------------------|---------------|--------------------|--------|------------------|
| 12 | 2006-10-24 14:35:08 | Camera Sig... | Camera Single Lost | 13 | CCD13 - Cam... |
| 13 | 2006-10-24 15:03:05 | Sensor Det... | Sensor triggered | 1 | Sensor1 - Sen... |
| 14 | 2006-10-24 16:22:13 | Camera Sig... | Camera Single Lost | 7 | CCD7 - Camer... |
| 15 | 2006-10-24 16:22:13 | Camera Sig... | Camera Single Lost | 5 | CCD5 - Camer... |
| 16 | 2006-10-24 16:22:13 | Camera Sta... | Camera Single Lost | 9 | CCD9 - Camer... |

5. If there is recorded data for an event, there will be a button beside the event entry. Double-click the event to start playback of the recorded video. Playback function buttons enable the user to adjust speed and direction during playback.



Note

Before searching by motion detection or sensor triggered events, if you want to playback a video file, you should go to "Configuration", "event action plan" to increase event sources and also enable recorded video files.

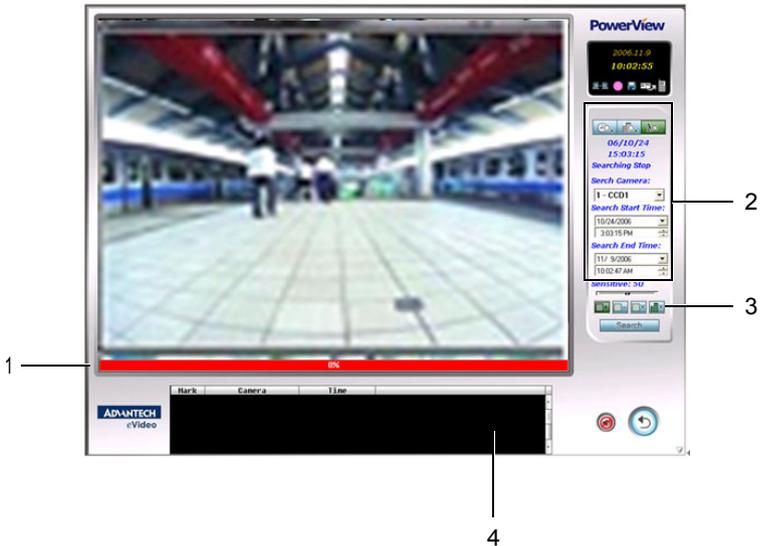
3.3 Smart Search

Smart Search allows you to search archives for incidents. You can mark a grid or area of video where the incident occurred, then perform a Smart Search and anything that happened in that area will show up without having to view hours of footage.

3.3.1 Function Introduction

Click  to go to the main screen of the search function, and then click  to invoke the smart search function.

After defining the comparison zone, variation sensitivity, camera ID and time period, the user can invoke the smart search function. Search results will be listed in the windows below.



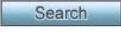
3.3.2 Function Description

| Item | Icon | Function and Description |
|------|--|---|
| 1 |  | <p>Sensitivity Variation Indicator During smart search, this icon will indicate the recorded video sensitivity variation as a percentage of the assigned search zone.</p> |
| 2 |  | <p>Search Criteria Menu Users can assign a camera ID, search period and sensitivity variation threshold for the smart search. The threshold can be adjusted with the slider.</p> |
| 3 |  | <p>Video Search Area Selection Menu</p> <ul style="list-style-type: none">  Add search area  Delete assigned search area  Clear all search areas  Clear event list |
| 4 |  | <p>Smart Search Event List Window This window will list the result of search clips.</p>  |

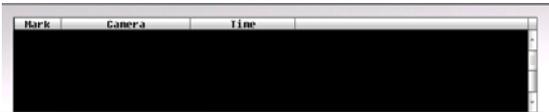
3.3.3 Operation

1. Click  to go to the main screen of the search function, and then click  to invoke the smart search function.
2. Select the camera ID.
3. Define the search period.
4. Click  to add one search area by dragging the mouse pointer to define the search area. Click  to delete a search area or click  to delete all search areas.

Note *If you are using the Smart Search function for the first time, click the “Search” button before selecting a search area.*

5. Adjust the slider to set the variation sensitivity for the search. The range is from 0 to 100.
6. After setting all conditions, click  to start the search. The search result will be shown in the event list windows.

Click  to clear the event list in this window.



Configuration

This chapter describes PV-6000 configuration.

Sections include:

- System Setup
- System setup function description
- Video Setup – Video Number
- Sensor Setup – Sensor #
- DO Setup – DO Output #
- Group Setup
- Group Sequence Setup
- Event Action Setup
- Network Setup
- Device Setup
- Other Tools

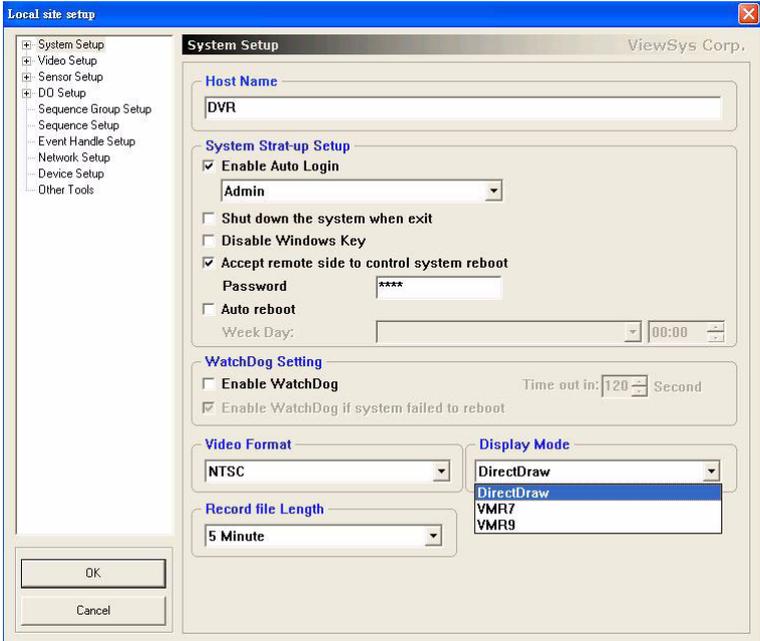
Chapter 4 Configuration



Press  to invoke the configuration menu. Use the configuration menu to handle systems, cameras, sensors, digital outputs (DO), groups, group sequences, event action plans, networks, devices and other tools.

The configuration menu is organized as in a tree. Click each node to expand the tree to see more functions. Remember to click “OK” to save the configuration after completing configuration or press “Cancel” to cancel any modification.

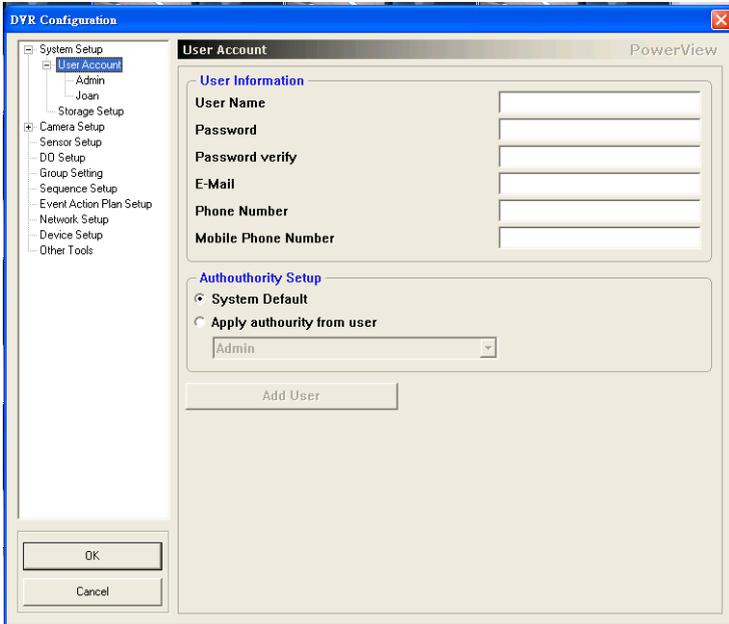
4.1 System Setup



4.2 System setup function description

| Function | Description |
|---|--|
| Host Name | Assign a DVR name. The DVR name is for identification on a network |
| Enable Auto Login | Enable this function to make the DVR use predefined user credentials to login automatically when the DVR is powered on. |
| Shut Down the System when Exit | Enable this function to auto shut down the system when the user exits the DVR application. |
| Disable Windows Key | Prevent users from switching between DVR applications and windows. Alt-Tab, Alt-F4, left and right windows keys, Ctrl-Alt-Del, and the PowerView minimize button are restricted. |
| Accept Remote Side to Control System Reboot | Enable this function to allow remote reboot of the DVR. |
| Auto Reboot | Allow the DVR to auto reboot periodically at preset times. |
| Watchdog Setting | |
| Enable Watchdog | If the DVR crashes, the DVR will be automatically rebooted. The capture card's watchdog output must be connected to the motherboard reset. |
| Enable watchdog if system failed to reboot | The DVR will reboot itself if the DVR doesn't respond to a turn off command. |
| Video Format | |
| Video Format | Set the video format: NTSC or PAL |
| Record File Length | |
| Record File Length | Set the time segment of each normal recording file. |
| Display Mode | Selectable display mode: DirectDraw, VMR7 or VMR9 |

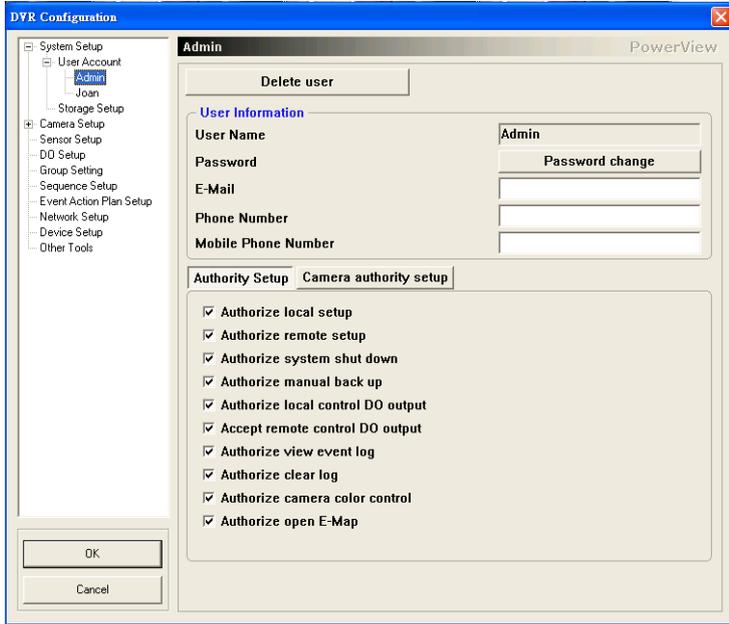
4.2.1 User Account Setup



4.2.2 User account function description

| Function | Description |
|---|--|
| User Information | Enter user name, password, email, phone, and cell phone number. Press “Add User”, and then press “OK” to complete setup. |
| System Default or Apply Authority from User | The system defaults to enabling all privileges. Alternatively, Apply Authority from User applies all authority settings from another user. |

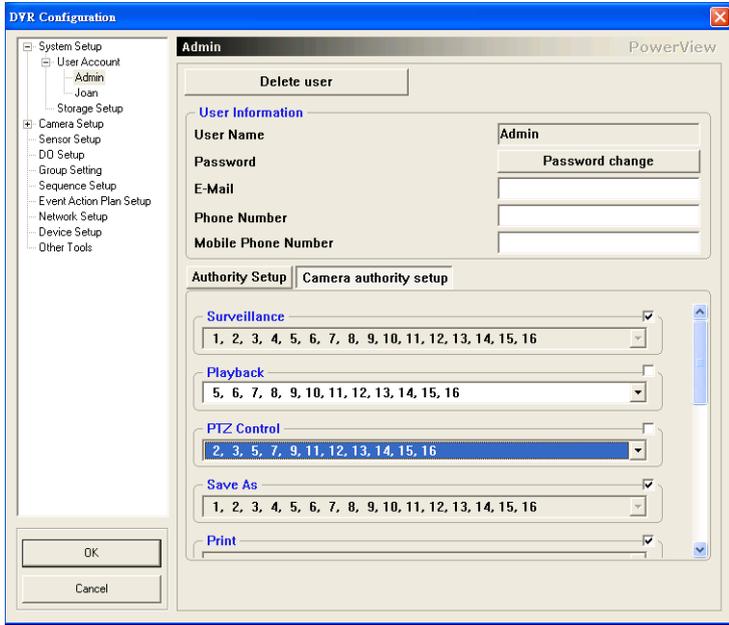
User Authority Setup



User authority setup function description

| Function | Description |
|---------------------------------|---|
| Accept Local Setup | Access right for user to do local DVR configuration |
| Accept Remote Setup | Access right for user to do remote Configuration through remote software (Power Center) or IE browser. |
| Accept System Shut Down | Allow user to shut down DVR |
| Accept manual Backup | Allow user to operate manual backup function |
| Accept Local Control DO Output | Allow user to control DO on/off through the local site eMap |
| Accept Remote Control DO Output | Allow user to remote control DO on/off on using eMap |
| Accept Event Log | Allow user to operate Event log function |
| Accept Clear Log | Allow user to clear all log list and event recording files |
| Accept Video Color Control | Allow user to adjust video color configuration in main program via the camera configuration and PTZ control menu. |
| Accept Open eMap | Allow user to view eMap on the local DVR |

Video Authority Setup

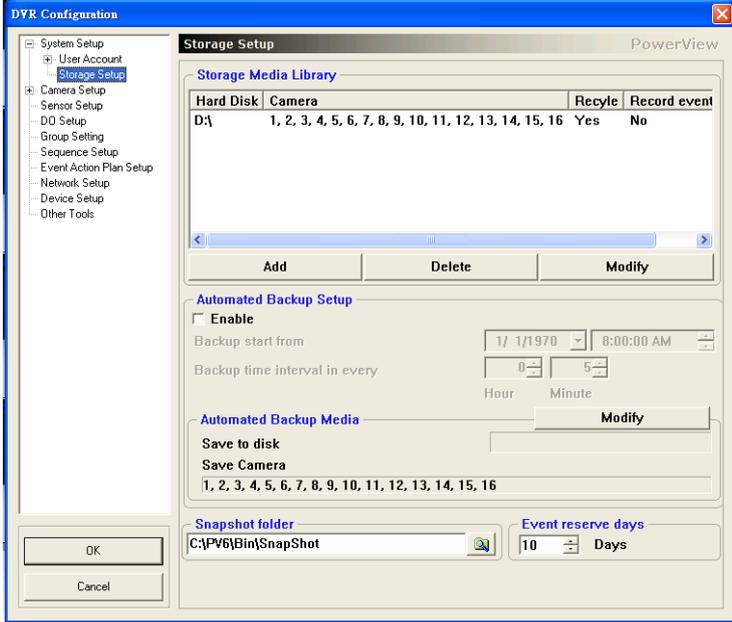


Video authority setup description

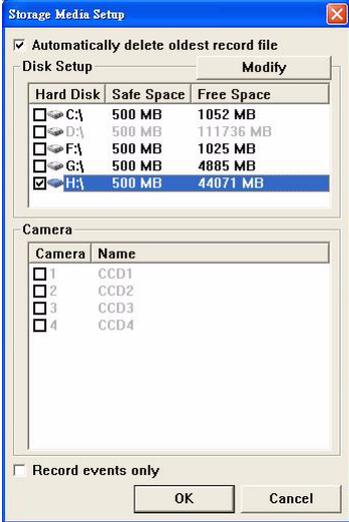
| Function | Description |
|--------------|--|
| Surveillance | Access right for user to monitor selected cameras (Video screen will display the default background image if user has no rights to monitor) |
| Playback | Access right for user to playback selected cameras (Video screen will display the default background image if user has no rights to monitor) |
| PTZ Control | Access right for user to control PTZ devices (The PTZ function keys will be disabled if user has no authority to control the camera) |
| Save As | Access right for user to save images or video files in playback mode. (The Save As button will be disabled if user has no rights to control this camera) |
| Print | Access right for user to print the image in Playback mode (The Print button will be disabled if user has no rights to control this camera) |
| Remote View | Access right user to monitor the cameras images from the remote site. |

| Function | | Description |
|-----------------|-----------------------|--|
| | Limit Connection Time | Limit the remote users' connection time. When the time limit is reached, the remote user is disconnected. This function enables other users to have a chance to connect. |
| | Schedule | Limits access of remote users to this schedule. |
| Remote Playback | | Access rights for remote playback of selected cameras |
| | Limit Connection Time | Limit the remote users' connection time. When the time limit is reached, the remote user is disconnected. This function enables other users to have a chance to connect. |
| | Schedule | Limits access of remote users to this schedule. |
| Remote PTZ | | Access right for remote user to control PTZ. The PTZ function keys will be disabled if the user has no authority to control the camera. |
| Remote Save As | | Access right for remote user to save image or video files in playback mode. The Save As button will be disabled if the user has no rights to control this camera. |
| Remote Print | | Access right for remote user to print out the playback image(s). The Print button will be disabled if the user has no rights to control this camera. |

4.2.3 Storage Setup

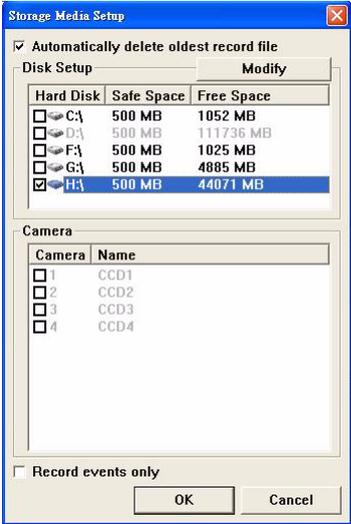


4.2.4 Storage Setup Function Description

| Function | Description |
|-----------------------|---|
| Storage Media Library | Setup storage for path, cameras, safe space and record conditions. |
| Add | Add a new storage space and define conditions |
| Delete | Delete a storage space |
| Modify | Modify the conditions of storage space. |
| Storage Media Setup | Click "Add", and "Modify" button to assign storage conditions. |
| |  |
| Disk Setup | Auto-detect the available hard disks and list them in the storage setup menu. |

| Function | Description |
|---|--|
| Automatically Delete Oldest Record File | Oldest recorded file will be overwritten when the remaining hard disk space is smaller than the safe space. |
| Modify | Click "Modify" to revise safe space and cameras. |
| Hard disk | Click to pick up hard disks |
| Safe space | The safe space must be 500 MB or above |
| Free space | The system will detect and show the free space of each hard disk. |
| Camera | Select a single camera to record from |
| Select all | Select all cameras |
| Delete all | Delete all chosen cameras |
| Record Events Only | Only available for recording events. Clicking the "record events only" button will save event files to a selected partition; otherwise, recorded event files will be saved on each camera's storage partition. |

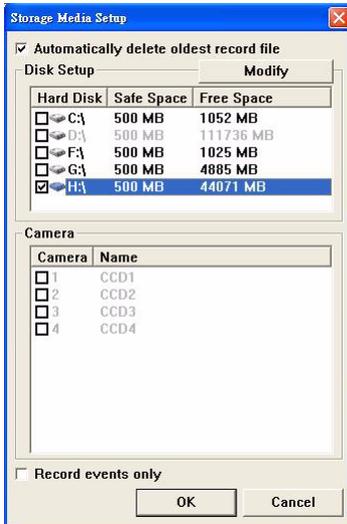
4.2.5 Automatic (Scheduled) Backup Media

| Function | Description |
|----------|--|
| Modify | <p>Click the "Modify" button to assign a scheduled backup media.</p>  <p>Refer to storage media setup.</p> |

| Function | Description |
|--------------------|---|
| Snapshot Folder | Set the snapshot storage path. The snapshot camera icon will be displayed when the cursor is moved over the top left of the camera's feed. The snapshot will be saved in the chosen path. |
| Event Reserve Days | All events, including motion detection, sensor and system login/logout will be kept in the DVR system for the given number of days. |

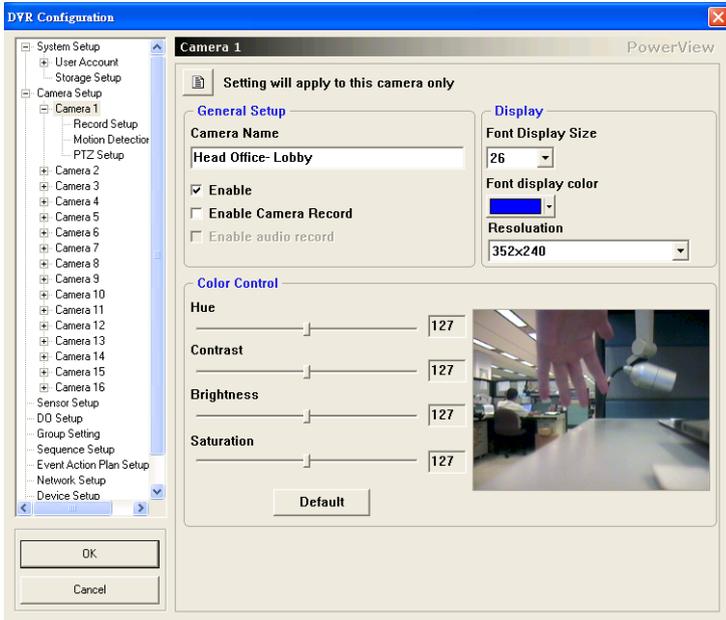
Scheduled Backup Function Operation

1. Go to Configuration, Storage Setup
2. Click Modify to assign hard disks and cameras.



3. Enable “Automatically delete oldest record file” to do a cyclic backup or click the “Modify” button to change the amount of safe space. At least 500 MB of free space is reserved on each hard disk to ensure DVR recording file safety.
4. Press OK to confirm the storage media setup.
5. Click to Enable backup function.
6. Assign Backup Start time: only available the first time backup is used. Subsequent backups will start at the same time.
7. Select a backup time interval.

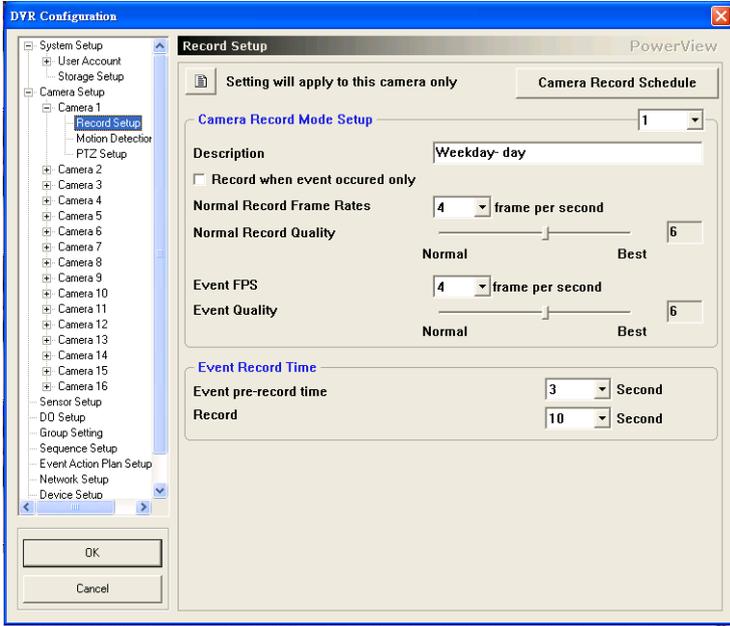
4.3 Video Setup – Video Number



4.3.1 Video Setup Function Description

| Function | Description |
|---------------------------------------|---|
| Setting Will Apply to This Video Only | Press this button to change a single camera's settings or apply settings to others cameras. If you want to apply settings to others cameras, please click this button before modification. Camera configuration will be revised only for the modified items. The other configuration items remain the same. Some functions which cannot be applied to other cameras will be disabled |
| General Setup | |
| Camera Name | Assign a new camera name |
| Enable | Enable or disable camera surveillance. The system will not record video and audio files if you disable this function. |
| Enable Video Record | Enable or disable video recording. If you disable this selection, the camera will not record in any situation. |
| Enable Audio Record | Enable or disable audio recording. Only available when the capture card supports audio recording. |
| Display | |
| Font Display Size | Adjustable font display size |
| Font Display Color | Adjustable font display color |
| Resolution | Adjustable resolution of each chipset. The higher the resolution, the better image quality. For example, PV-600 only has one video chip but supports 4 video channels, so if you adjust the resolution of camera 1, the resolution of camera 2, camera 3, and camera 4 will be changed simultaneously. |
| Color Regulation | |
| Hue/Contrast/Brightness/Saturation | Adjustable Hue, Contrast, Brightness and Saturation for record. The range is from 0 to 255. The default setting is 127. |

4.3.2 Camera Setup – Camera # – Record Setup



4.3.3 Record Setup Function Description

| Function | Description |
|--|---|
| Setting Will Apply to This Video Only | Press this button to change between applying settings to a single or camera or all cameras. You have to switch to “apply to others cameras setting” mode before modification. |
| Video Recording Schedule | Assign a recording schedule from a week view (week-day schedule) or month view (day schedule). Default setting is weekday schedule in the first recording mode. |
| Video Record Mode Setup - (Seven Different Setting Modes) | |
| Description | Rename the recording mode. This makes it easy for the user to recognize a video record schedule. |
| Record When Event Occurred Only | Only record when a motion detect or sensor is triggered. |
| Normal record FPS | Normal recording frames per second (1 to 30 fps). More frames per second results in smoother in video playback with more storage used. |
| Normal Quality | Normal recording quality (1 to 10 degrees). A higher number results in better video quality |

| Function | Description |
|--------------------------|--|
| Event FPS | The number of frames per second (1 to 30 fps) that are recorded when an event is triggered. A higher number results in smoother video playback. This is only available when an event is triggered. |
| Event Quality | Event recording quality (1 to 10 degrees). The higher the number, the better the picture quality. |
| Event Record Time | |
| Event Pre-Record Time | Keep this number of seconds of video before the event is triggered. Recording quality and frame rate depends on the event FPS setting. |
| Record | Keep this number of seconds of video after the event is triggered. Recording quality and frame rate depends on the event FPS setting. |

Camera Record Schedule setup

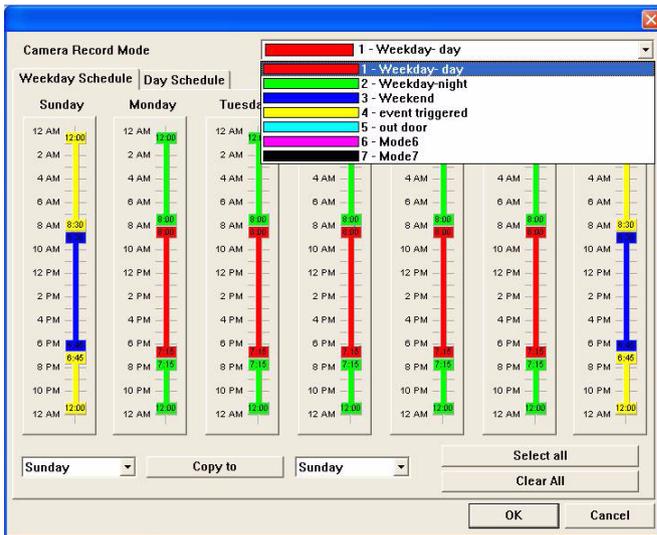
The screenshot shows the 'Camera Record Mode' window. It features a legend with seven modes: 1 - Weekday-day (red), 2 - Weekday-night (green), 3 - Weekend (blue), 4 - event triggered (yellow), 5 - out door (cyan), 6 - Mode6 (magenta), and 7 - Mode7 (black). The main area displays a grid for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. Each day's column shows a 24-hour timeline from 12 AM to 12 AM. Colored bars indicate recording periods: red for weekdays, green for weekday nights, blue for weekends, and yellow for event-triggered recordings. Specific times are labeled on the bars, such as 8:30, 8:45, and 12:00. At the bottom, there are controls for selecting a day (currently 'Sunday'), a 'Copy to' button, another day selector, and 'Select all', 'Clear All', 'OK', and 'Cancel' buttons.

Recording Mode - (Seven Recording Modes) Function Description

| Function | Description |
|-------------------------|--|
| Weekday Schedule | |
| Video Recording Mode | Up to 7 recording modes are available for scheduling. Each camera can have its own recording mode. If you want to apply the recording modes to other cameras, you should select "apply to others cameras" before recording mode setup. |
| Sunday to Saturday | Assign recording modes to weekdays. Each color represents a different mode. Each time segment is 15 minutes. |
| Select All | Choose a recording mode, and then copy it to all other days. |
| Clear All | Clear all schedule settings. |
| Day Schedule | |
| Day Schedule | The user may set a unique daily schedule. The priority of the day schedule is higher than the weekday schedule. All outdated schedule settings will be deleted. |

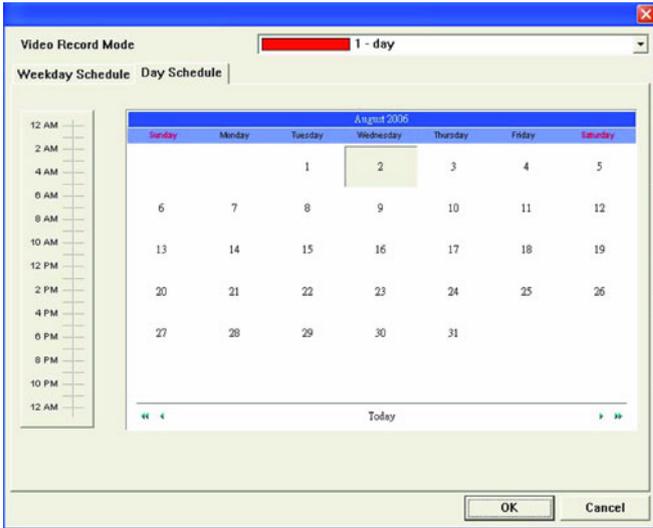
Operation

1. Choose a recording mode. (The recording mode can be renamed in Camera Setup, Record setup, Description)

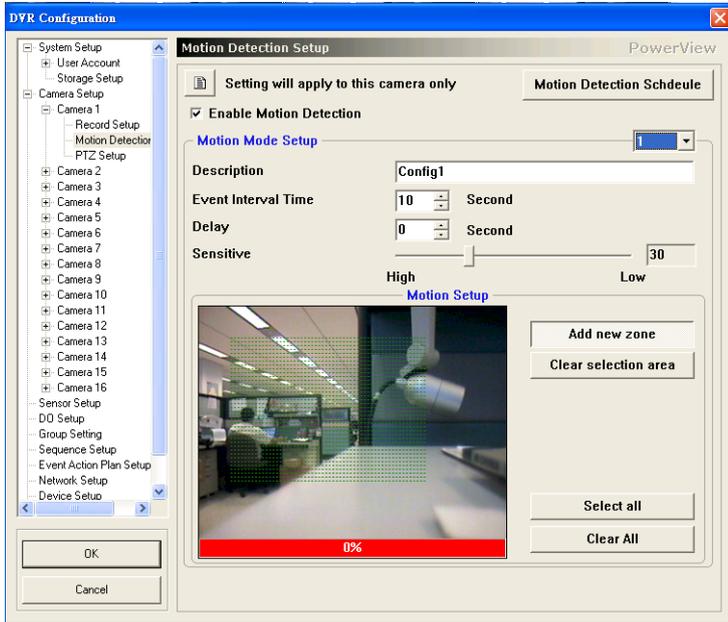


2. Click and hold the left mouse button to drag and draw time segments on each weekday. To remove the schedule, left click the

- mouse button and draw the schedule bar out of the recording segment.
3. Press the “Select All” or “Clear All” button to select or remove all recording schedules. To duplicate the schedule, simply select the day you want to duplicate, and then press the “Copy to” button.
 4. Day Schedule allows the user to set a unique daily recording schedule. Simply click the date on the calendar and schedule the time segment beside it.

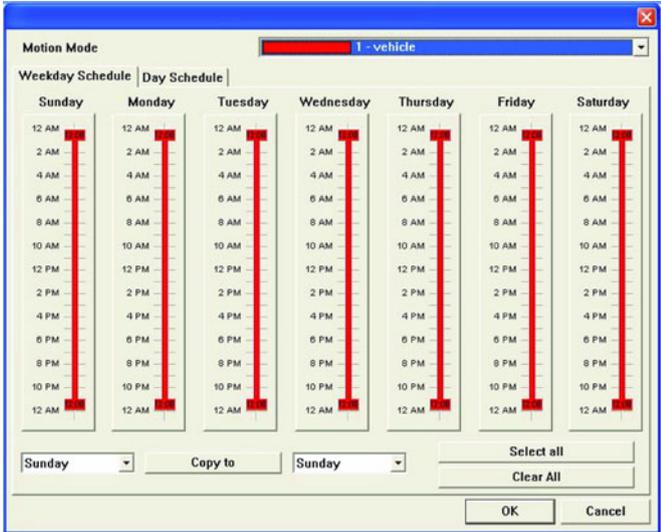


4.3.4 Video Setup – Video # - Motion Detect Setup



4.3.5 Motion Detect Setup

| Function | Description |
|--|---|
| Setting Will Apply to This Video Only | Press this button to change between applying settings to a single or camera or all cameras. You have to switch to "apply to others cameras setting" mode before modification. |
| Enable Motion Detect | Enable or disable motion detection. |
| Motion Detect Schedule | Define times when motion detection is active. |
| Motion Mode Setup - (Seven Different Modes) | |
| Description | Assign a description for a motion detection event. This makes it easy for users to recognize the schedules. |
| Event Interval Time | Assign an event interval time between two event triggers. The next similar event will be triggered again after a given period of time. |
| Delay | The alarm will be triggered after motion detection is triggered continuously for the given number of seconds. |
| Sensitive | Adjust motion detection sensitivity. The lower the number, the higher the sensitivity. |
| Motion detect Setup | |
| Add New Area | Add grid areas for motion detection (Detection areas are unlimited). |
| Clear Selection Area | Clear the selected motion detection area. |
| Select All | Select all areas for motion detection. |
| Clear All | Clear all detected areas. |



Motion Mode - (Seven Motion Modes)

| | |
|-------------------|---|
| Weekday Schedule | |
| Sunday – Saturday | Assign recording modes to weekdays. Each color represents a different mode. Each time segment is 15 minutes. |
| Day Schedule | |
| Day Schedule | The user may set a unique daily schedule. The priority of the day schedule is higher than the weekday schedule. All outdated schedule settings will be deleted. |

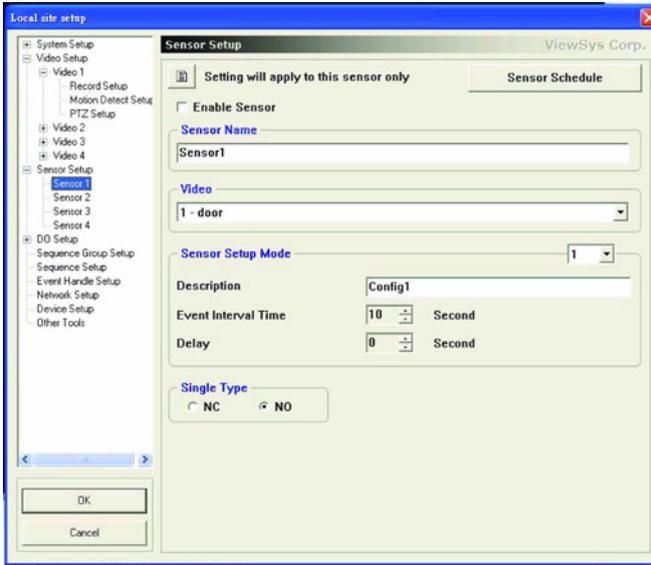
4.3.6 Video Setup – Video # - PTZ Setup



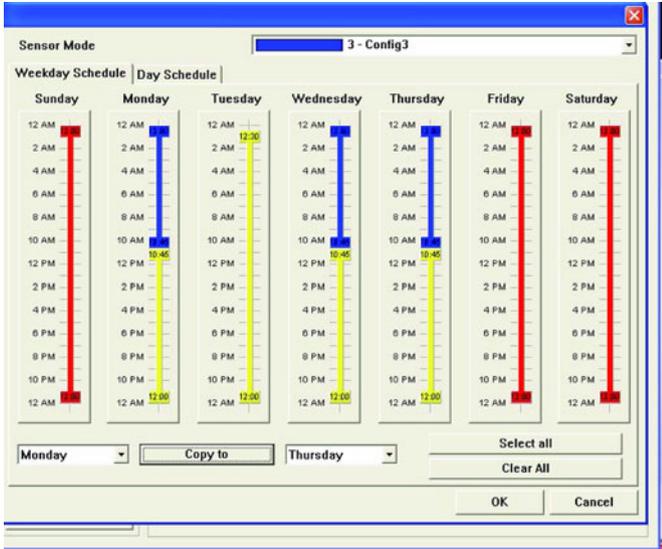
PTZ Setup

| | |
|--------------------|---|
| PTZ Device | This enables assignment of different PTZ devices to each camera. A drop-down list is available for the user to select the proper PTZ device. |
| PTZ Device ID | This enables assignment of a PTZ device ID to a camera. |
| PTZ Home Position | Set the PTZ home position. When an event is triggered, PTZ will rotate to a preset position and go back to the home position when the even is over. |
| Image Display Area | The images are displayed at the preset positions defined here. |

4.4 Sensor Setup – Sensor

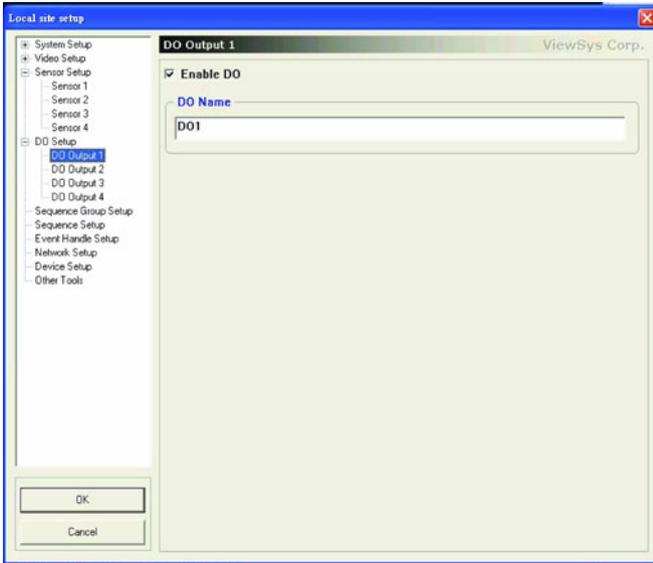


| Sensor Setup | |
|---|---|
| Setting Will Apply to This Sensor Only | Press this button to change between applying settings to a single or camera or all cameras. You have to switch to “apply to others cameras setting” mode before modification. |
| Enable Sensor | Active sensor |
| Sensor Name | Assign a name for this sensor |
| Camera | Start recording when a sensor is triggered. Each camera has it's own recording quality and frame rate. |
| Sensor Setup Mode - (seven sensor setup modes) | |
| Description | Assign a description for the sensor to make it easy to recognize in the scheduling screens. |
| Event Interval Time | Assign the event interval time between two events triggered. The next similar event will be triggered again after the given period of time. |
| Delay | The sensor will be triggered after motion detection is triggered continuously for number of seconds. |
| Single Type | Assign a sensor type: Normally Closed or Normally Open. |



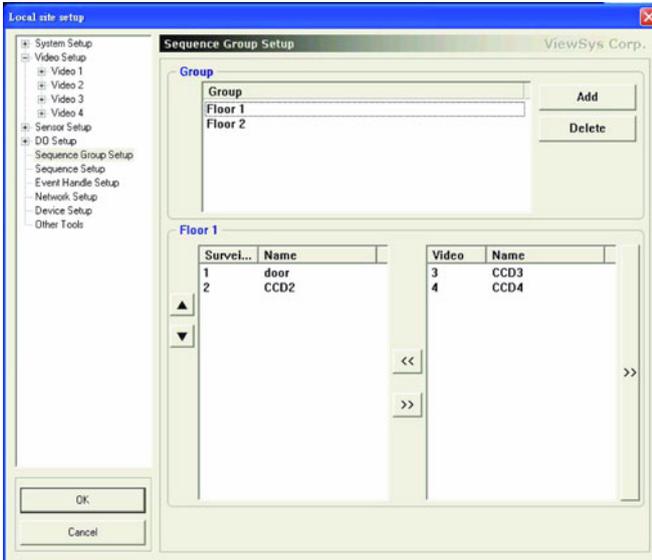
| Sensor Schedule - (Seven Sensor Modes) | |
|---|--|
| Weekday Schedule | |
| Sunday – Saturday | Assign recording modes to weekdays. Each color represents a different mode. Each time segment is 15 minutes. |
| Day Schedule | |
| Day Schedule | Assign a unique daily schedule. The priority of the day schedule is higher than the weekday schedule. |

4.5 DO Setup – DO Output



| DO Output Setup | |
|-----------------|--|
| Enable DO | Enable the digital output function. This enables you to control DOs by clicking on the eMap. |
| DO Name | This enables a digital output name to be assigned. |

4.6 Group Setup



Group Setup (Selectable Group display at the Main Screen)

| Group | |
|----------------|---|
| Add | Add a new group |
| Delete | Delete a group |
| Rename | Double click left mouse button to rename the group. |
| Content | |
| Left Window | The left window shows the current group of chosen camera(s). Click the ▲ or ▼ button to rearrange the camera order. |
| Right Window | The right window shows the cameras that may be added to currently selected group. Click << or >> to add or remove camera(s) from the group. |

1. Select Configuration, Group Setup to invoke the menu.



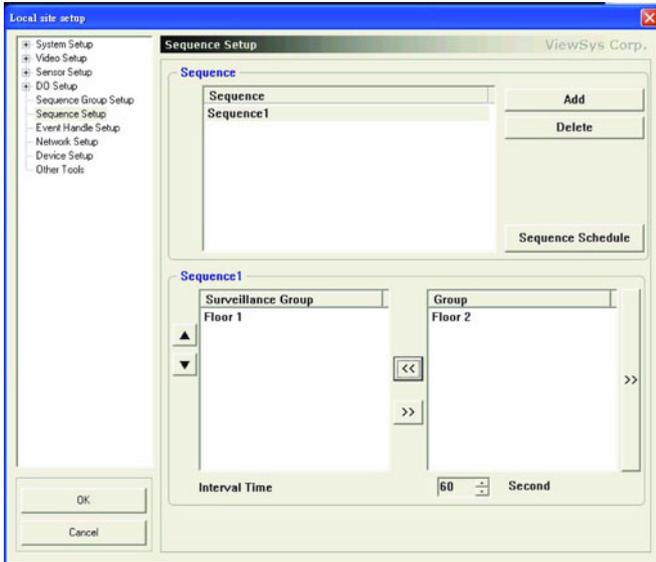
2. Press “Add” to create a new group.
3. Left double-click the group name to rename the group.
4. Select cameras from the right windows and then press << to add cameras to the left windows. Press >> to remove cameras from the group.

After setup is complete, the camera group can be selected on the main screen.



4.7 Group Sequence Setup

Assign the sequence time and cameras in each group. After setting is completed, cameras feed in main screen will display group sequence when select the screen sequence mode in screen layout button or select group name directly to switch the camera feeds.



| Group Sequence Setup | |
|----------------------|--|
| Function | Description |
| Add | Adds a new sequence. |
| Delete | Deletes the sequence. |
| Rename | Renames the sequence. Click the left mouse button to rename the group. |
| Sequence Schedule | Up to a maximum of 7 sequence models for schedule sequencing are available. |
| Surveillance Group | |
| Right Window | You may display the configured Group with the right button. You may click on the << button to add a new group, or the >> button to delete a group. |
| Left Window | Displays the selected group. Drag the left side up ▲ or down ▼ to rearrange the order of the cameras. |
| Interval Time | Set the group sequence time interval |

1. Configuration, Group Sequence Setup, click the “Add” button.
2. Rename Sequence: click twice on the sequence name to rename it.
3. Group sequence setting: to choose a group in the right bottom window, press << to add the group to the surveillance group. Press >> button to remove a group from the surveillance group. Press “OK” to confirm the setting.
4. After setup is completed, click  the *screen layout* button on the main screen and choose a sequence button to arrange the display mosaic and the sequence of display jumping.



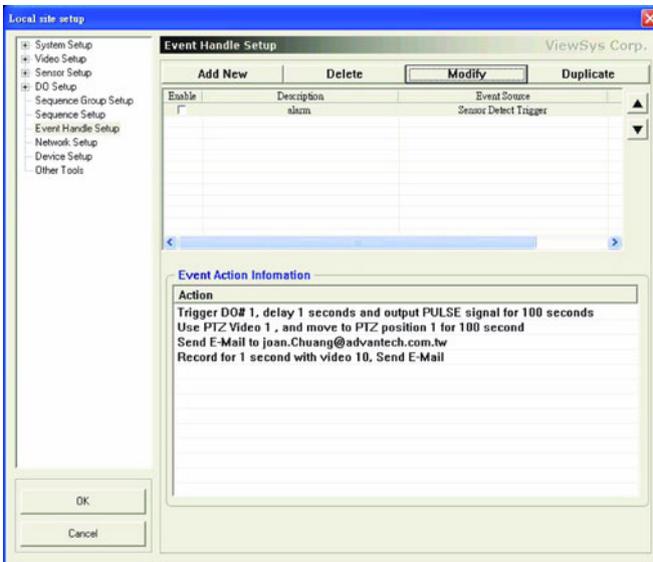
4.8 Event Action Setup

You may configure flexible *event actions* with multiple actions per event source.

Event sources include: motion detected, sensor triggered, video signal lost, login failed, system abnormality and backup disk full.

Event actions include: DO output, PTZ control, e-mail notification, SMS notification, video file record, snapshot, phone/mobile voice notification, warning sound playback, video group playback and execute chosen programs.

4.8.1 Function Description



| Event Action Setup | |
|--------------------------|--|
| Function | Description |
| Add | Adds a new event |
| Delete | Deletes a chosen event |
| Modify | Modifies the event action settings |
| Duplicate | Duplicates a chosen event |
| UP / DOWN Buttons | To rearrange the event actions priority, click the up  or down  button. If events are triggered at the same time, the top one will have a higher priority for execution. |
| Event Action Information | |
| Action | Displays any information about the action corresponding to a particular event. |

Event Action Plan



Add New

Description

Event Source

Source Type
Motion Detection

Source Status
Motion Detect Trigger

Camera
1 - CCD1

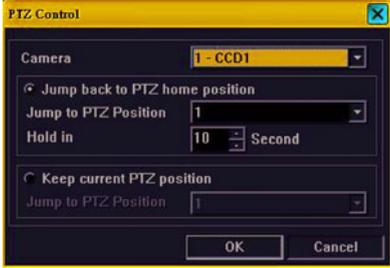
Action warning interval time
0 Second

Action Select

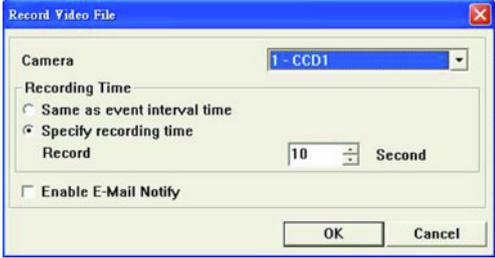
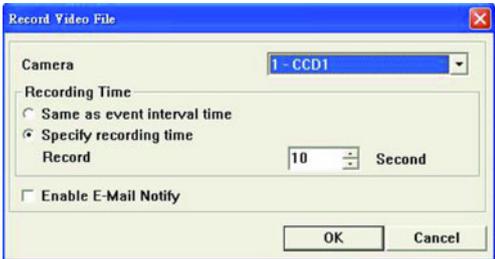
- DO Output Setup
- PTZ Control Setup
- Send E-Mail Setup
- SMS Notify Setup
- Http Notify Setup
- Record Video File Setup
- SnapShot Setup
- Phone Notify Setup
- Play warning sound Setup
- Play Group Sequence Setup
- Execute File Setup

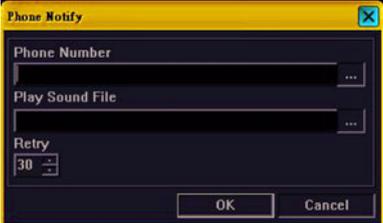
Event Schedule OK Cancel

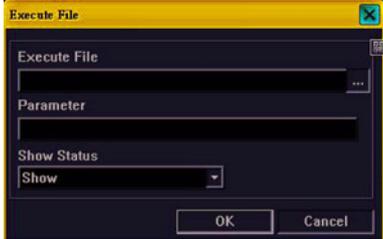
| Event Action plan- Add New and Modify Pages | |
|--|---|
| Description | Assign description for event |
| Event Source | Choose event source by drop down list. |
| Source Type | Motion detection, Sensor detection, Camera signal, Log status, System event, Backup status and Recording status. |
| Source Status | Select the corresponding of the source type. |
| Video | When the event source is <i>motion detection</i> or <i>video signal lost</i> , the user must select the corresponding camera. To select another corresponding camera for the same event source, please add a new event again. |
| Action Warning Interval Time | Assign the interval of event warning to prevent multiplex warnings for the same event frequently. |
| <p>Event action select:</p> <p>Each event source only can be selected once for one kind of actions. So if the same event has to trigger the different cameras/DO of the same action, user has to add a new event with different camera/DO.</p> | |
| DO Output | <p>Send a signal to DO. Enable this function to invoke DO setup menu.</p>  |
| | |
| Output ID | Choose the DO model from the drop down list. |
| Single Type | Set the single type (Pulse, On, Off) |
| Delay | Assign the delay time after event triggered. |
| Hold in | If single type is Pulse, have to set # of seconds |

| | | |
|--------------------|---|---|
| <p>PTZ Control</p> | <p>Enable PTZ control item to invoke this setup menu. Assign PTZ to display pre-set position image when event is triggered.</p>  | |
| | <p>camera</p> | <p>Choose PTZ camera for event handling. User has to do PTZ setup in camera configuration before assign this function.</p> |
| | <p>Jump back to PTZ home position</p> | <p>PTZ camera will turn to pre-set PTZ position for # of seconds, and then turn back to default position</p> |
| | <p>Keep current PTZ position</p> | <p>When event is triggered, the PTZ camera will turn to the pre-set PTZ position and hold this pre-set position.</p> |
| <p>Send E-Mail</p> | <p>Send email when event is triggered</p>  | |
| | <p>E-Mail</p> | <p>Click "Display User" button to assign a user who has to be notified. (Need to assign the user's e-mail address in "User account setup" of System setup before setup.</p> |
| | <p>Subject</p> | <p>Assign an subject for the event</p> |
| | <p>Content</p> | <p>Assign the content for event.</p> |

| | | |
|---------------------|---|--|
| SMS Notify | Send SMS notification to a mobile phone. | |
| |  | |
| | Phone Number | Auto-dial when event is triggered. Use semicolon ";" to separate different phone numbers. To dial external line, use comma ",", to separate it. For example: 87920547;0,0932023421 |
| Content | Assign the content of SMS | |
| Http Notify | Assign Http to send warning message | |
| |  | |
| | URL | URL for sending messages |
| | Retry | Numbers of retrial times when notification message sending is failed |
| Dump Error Response | Write error message to a file | |

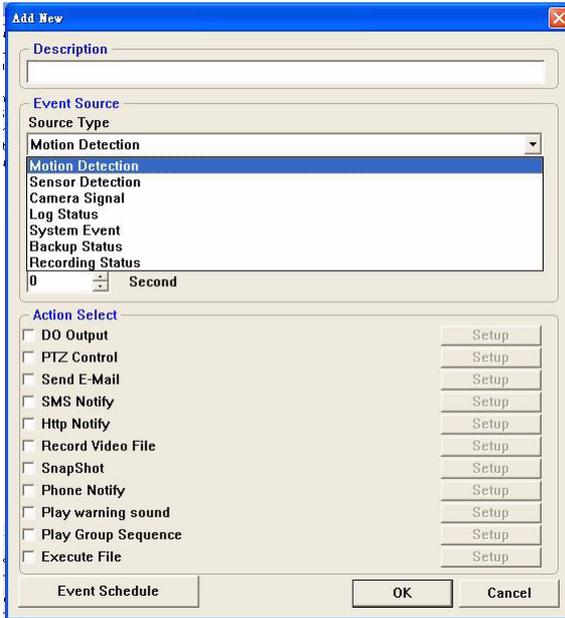
| | | | | | | | | | | | | | |
|-------------------------------|--|--------|--------------------------------|----------------|--|-----------------------------|--|-------------------------------|---|----------------------------|---|----------------------------|--------------------------------------|
| Record Video File | <p>Record to video files</p>  <table border="1"> <tr> <td>Camera</td> <td>Choose a camera to record</td> </tr> <tr> <td colspan="2">Recording Time</td> </tr> <tr> <td>Same as event interval time</td> <td>Recording time the same as event interval time</td> </tr> <tr> <td>Specify recording time record</td> <td>Assign numbers of recording time when event triggered</td> </tr> <tr> <td>Enable E-Mail Notification</td> <td>Send e-mail with the attached record file when recording is completed</td> </tr> </table> | Camera | Choose a camera to record | Recording Time | | Same as event interval time | Recording time the same as event interval time | Specify recording time record | Assign numbers of recording time when event triggered | Enable E-Mail Notification | Send e-mail with the attached record file when recording is completed | | |
| Camera | Choose a camera to record | | | | | | | | | | | | |
| Recording Time | | | | | | | | | | | | | |
| Same as event interval time | Recording time the same as event interval time | | | | | | | | | | | | |
| Specify recording time record | Assign numbers of recording time when event triggered | | | | | | | | | | | | |
| Enable E-Mail Notification | Send e-mail with the attached record file when recording is completed | | | | | | | | | | | | |
| SnapShot |  <table border="1"> <tr> <td>Camera</td> <td>Select a camera to do snapshot</td> </tr> <tr> <td colspan="2">Display OSD</td> </tr> <tr> <td>Camera Name</td> <td>Display camera ID name in the image</td> </tr> <tr> <td>Date and Time</td> <td>Display date and time in the image</td> </tr> <tr> <td>Event Description</td> <td>Display the event source description</td> </tr> <tr> <td>Enable E-Mail Notification</td> <td>Send an e-mail with a snapshot image</td> </tr> </table> | Camera | Select a camera to do snapshot | Display OSD | | Camera Name | Display camera ID name in the image | Date and Time | Display date and time in the image | Event Description | Display the event source description | Enable E-Mail Notification | Send an e-mail with a snapshot image |
| Camera | Select a camera to do snapshot | | | | | | | | | | | | |
| Display OSD | | | | | | | | | | | | | |
| Camera Name | Display camera ID name in the image | | | | | | | | | | | | |
| Date and Time | Display date and time in the image | | | | | | | | | | | | |
| Event Description | Display the event source description | | | | | | | | | | | | |
| Enable E-Mail Notification | Send an e-mail with a snapshot image | | | | | | | | | | | | |

| | | |
|---------------------------|---|---|
| <p>Phone Notify</p> | <p>Assign the information for phone notification. User has to press # sign in order to hear the wav file. If there is more than one user in the calling list, the priority will be based on "Phone Number" listing.</p>  | |
| | <p>Phone Number</p> | <p>Use “;” semicolon to separate each phone number and “,” comma to distinguish external or district number. For example: 0,0932023421</p> |
| | <p>Play Sound File</p> | <p>The wav sound format must be 8KHz, 16Bits and Mono</p> |
| | <p>Retry</p> | <p>Assign retrial times for phone notification when dialing failed. If the phone had been picked up but no pressing # sign, system will regard as dialing failed.</p> |
| <p>Play Warning Sound</p> | <p>Playing warning sound by using mother board default sound or chosen sound.</p>  | |
| | <p>Play Sound File</p> | <p>Choose a wav file to play</p> |
| | <p>Hold Playing</p> | <p>Enable this function to hold playing the same wav file or disable hold playing function and assign number of seconds for playing wav sound.</p> |
| | <p>Interval</p> | <p>Replay the wav file after number of seconds later (Note: some wav sounds only have one or two seconds, so user can set interval time to replay it)</p> |

| | | |
|---|---|---|
| <p>Play Group Sequence</p> | <p>Choose to play group video sequence or a video when event is triggered</p> | |
|  | | |
| <p>Group Name</p> | | <p>Choose a group to be displayed</p> |
| <p>Camera</p> | | <p>Choose a camera be displayed</p> |
| <p>Hold In</p> | | <p>Assign continues time for group sequence our camera display.</p> |
| <p>Execute File</p> | <p>Execute a third party .exe file when event is triggered</p> | |
|  | | |
| <p>Execute File</p> | | <p>Assign an .exe file for event action when event triggered.</p> |
| <p>Parameter</p> | | <p>Assign the parameter to the third party .exe file</p> |
| <p>Show Status</p> | | <p>To hide or display the execute file status</p> |
| <p>Event Schedule</p> | | |
| <p>Event Schedule</p> | <p>Assign schedule to active event actions.</p> | |

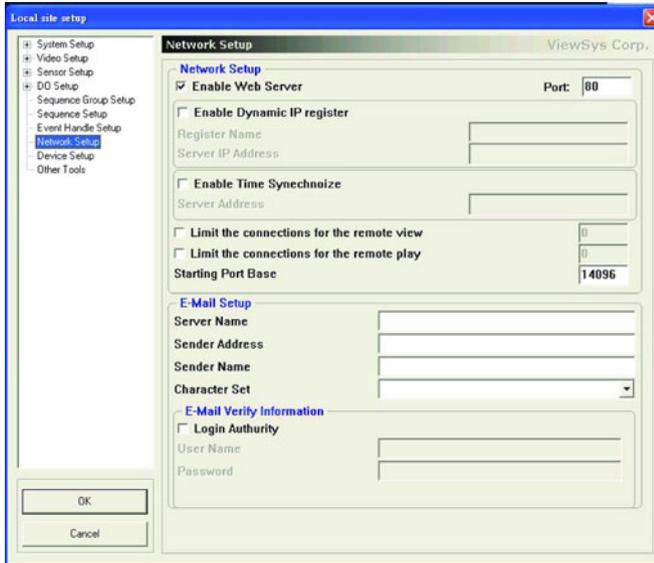
4.8.2 Operation

1. Click “Add New” button to create a new event action.
2. Assign the description of the event.



3. Define the condition of event source: Select event type and event status. Define action warning interval time. If event source is motion detection or video signal, you have to assign a camera ID. If event source is sensor detection, you have to assign a sensor ID.
4. Select the event action. Support multi selection.
5. Click to invoke the event actions setup window. After setup, also can click “Setup” button to modify the settings
6. Assign the event schedule
7. Click “OK” to confirm setup

4.9 Network Setup

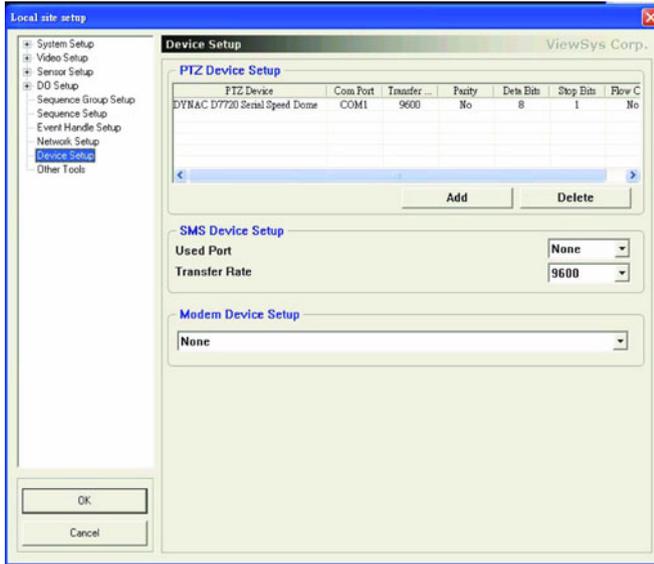


| Network Setup | |
|---|--|
| Function | Description |
| Enable Web Server | Need to enable this item for remote AP and IE to connect DVR |
| Port | The default http port is 80 |
| Enable Dynamic IP Register | If DVR use dynamic IP, by enabling Dynamic IP Register function, DHCP IP Provider Server will provides current DVR IP address to remote computer |
| Register Name | Assign a DVR ID to register to DVR IP provider. Each DVR should Assign different ID. |
| Server IP Address | Assign Server IP address. It could be an IP or http address |
| Enable Time Synchroni- zation | Synchronize all DVRs' time |
| Server Address | Assign the reference DVR IP address for time synchroniza- tion |
| Limit the Connections for the remote view | Limit the number of remote view users |
| Limit the Connections for the Remote Play- back | Limit user numbers for remote playback |

| | |
|---|--|
| Starting Port Base | Default port number is 14096, other required port numbers will be based on 14096 and plus 1 after another. |
| E-Mail Setup (setup email account when event triggered) | |
| Server Name | Set mail server SMTP name |
| Sender Address | Assign Sender's email address |
| Sender Name | Assign sender's name |
| Character Set | Select drop down list to choose e-mail character |
| Login Authority | Assign the user name and password to mail server for login. |

4.10 Device Setup

4.10.1 Function Description



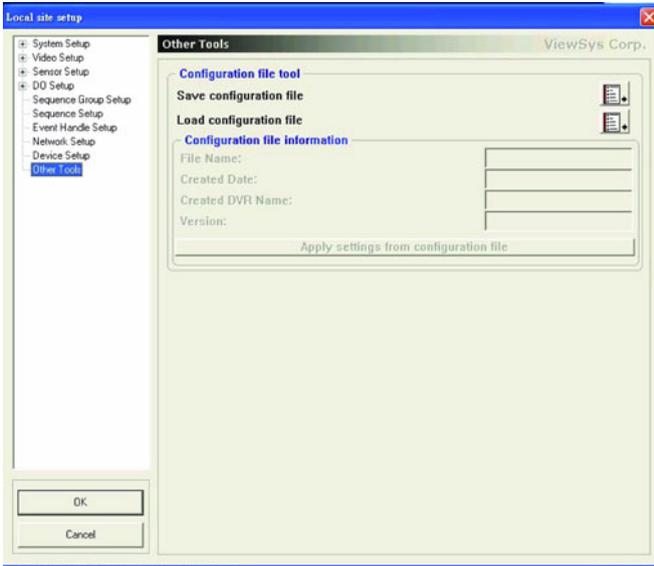
| Device Setup | |
|--|---|
| PTZ Device Setup | |
| Function | Description |
| Add | Add a new PTZ device. Click drop down list of each field for detail setup |
| Delete | Delete PTZ device |
| SMS Device Setup (Optional GSM modem such as WAVECOM M1206) | |
| Used Port | Set SMS COM port |
| Transfer Rate | Drop down list for the transfer speed selection |
| Modem Device Setup (If modem card and software are proper installed, PowerView will display this modem model number automatically when user login. Use drop down list for selection) | |

4.10.2 Modem Card Installation Procedure

1. Plug the modem card on mother board
2. Do not use the default driver of the windows automatically given, please reinstall driver from modem CD pack.
3. After installation, go to other Setup in Configuration and choose modem type.

- Note:**
- *User must install modem card because motherboard does not support this function.*
 - *Please install original driver that modem card CD pack enclosed.*
 - *Please use modem with ES or Motorola chipset on board*
 - *DVR will dial for after 10 seconds event triggered, and it takes 5 seconds for dialing. The total dialing time is about 15 seconds. It means user will receive a phone call after 10 seconds motion detect triggered*
 - *After the phone makes contact, user will hear the NotifyMenu.wav voice. Press any buttons on phone to hear the selected wav file.(able to record a wav file by yourself)*
 - *The content of NotifyMenu wav file is Power-View DVR system pre-set alarm message. User has to press any button to hear selected wav file, or press # sign button to cancel the alarm.*
 - *NotifyMenu will play twice, and voice playing time is about 8 seconds per time. If user picks up the phone after ringing 16 seconds, he will not hear any warning message.*
 - *The DVR system will only redial the given pre-set phone number of times if nobody picks up the phone or press the # sign. (Set the redial times in Event action plan in configuration)*

4.11 Other Tools



| Other Tools | |
|---|--|
| Function | Description |
| Save Configuration File | User can save the DVR configuration for backup or provide configuration to other DVRs for copy. |
| Load Configuration File | If previous configuration is saved, user may choose it in here form storage path. |
| Configuration File Information (This column will show the related configuration information here) | |
| File Name | The name of load configuration file |
| Created Date | The file created date |
| Created DVR Name | DVR name which the configuration file created from Based on DVR name, user may trace and find out where the config file is from |
| Vision | The software version, in case to make sure the compatibility |

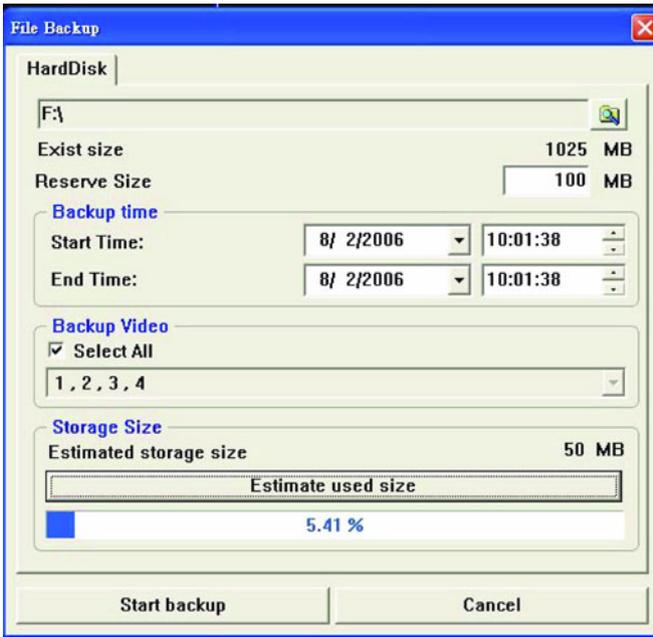
Manual Backup

This chapter describes manual backup.

Chapter 5 Manual Backup

The backup function explained in this section is called a manual backup. Through this function, users can backup image files to a external USD hard drive or burn to a CD-ROM or DVD-ROM directly by selecting each camera and the time period of record data. (For burning CD-ROM or DVD-ROM, Nero 5.5 or above should be installed.)

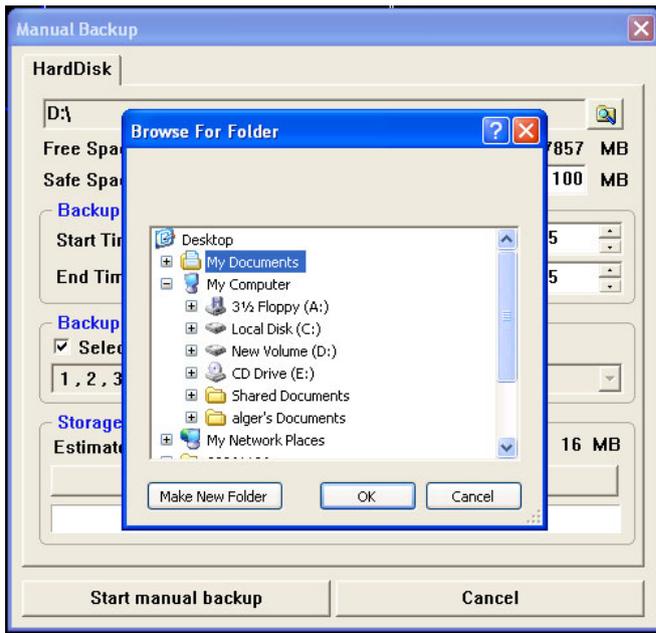
5.1 Function Introduction



| Manual Backup | |
|--------------------------|--|
| Function | Description |
| Storage Device | |
| Storage Space | Assign the path and disk space for storage device. |
| Free Space | System will detect automatically and show available space for backup. |
| Safe Space | Default is 500MB |
| Backup time | Select start and end time for back up. |
| Backup Cameras | Select each camera or all cameras for back up |
| Estimated Storage Space | The system will automatically calculate the storage space required for backing up the required record data. Click "Estimate the Size Used" button, and the system will show the required disk space in terms of a percentage. If the available space is not enough, the system will prompt a message for the user. |
| CD/ DVR burning function | Assigns the path for CD-RW or DVD-RW to write the backup (Nero 5.5 or above should be installed before using this function). |

5.2 Operation

1. Click  button to set the path of storage device for backup.



Note: Please reserve 500MB safety space for this HDD to avoid a Windows system error.

2. Define start and end time for the back up
3. Select a camera ID for back up. User can select each camera or select all.
4. Click “Start Backup” to start backup process.
5. Backup process complete.
6. CD/DVR burning Backup:
Choose the CR-ROM/DVR-ROM tab and click the “Start Backup” button to start the backup process.

- Note:**
- *Nero 5.5 or above version should be installed before using this function.*
 - *For CD-ROM backup, the backup image file is built in with auto-play function. The user can insert the backup CD-ROM into any CD-ROM drive and play the backup file automatically. No media playing software tool need to be installed previously.*
 - *The storage space for an empty CD-ROM is about 700MB. Please check the file size required for backing up data before starting the backup process.*

Camera Configuration

This chapter describes camera configuration.

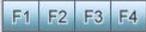
Chapter 6 Camera Configuration

The camera configuration screen provides functions for video adjustment, PTZ control and preset point assignments (for the camera with a PTZ drive unit or an all in one speed dome) for each camera.

6.1 Function Introduction



6.1.1 Function Description

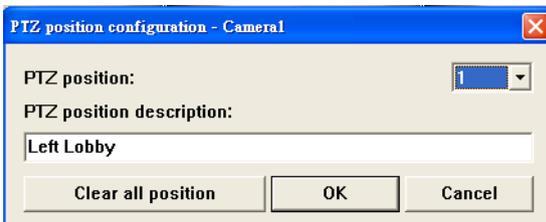
| Item | Function | Description |
|------|-------------------------------|--|
| 1 | Video Adjustment | Adjust hue/contrast/brightness/saturation configuration for each camera. Users can also choose the system default setting by clicking the “Default” button. |
| 2 | Cameras Zoom Adjustment | <p>Zoom: Change the camera (lens) zoom setting by the click [+]/[–] buttons.</p> <p>Focus: Change the camera (lens) focus setting by the click [+]/[–] buttons. Click [AUTO] button to invoke the “auto-focus” function.</p> <p>Speed: Drag the slider-bar to change “Pan/Tilt” speed.</p> |
| 3 | Pre-Position Setting | The user can use PTZ control to set the preset and use the “GOTO” button to view the image from a preset point. |
| 4 | Function Key Define |  <p>For some all-in-one functional Domes, four function keys are reserved for the user to define special functions provided by these cameras.</p> <p>NOTE: These special functions must be listed in the communication protocol for these all-in-one functional Domes for the functions to be effective.</p> |
| 5 | Camera Orientation Adjustment | Eight direction control buttons are used to adjust the orientation of the dome camera. Click on each button to change the camera to point in the desired direction. Click it again to stop the movement. Clicking the “AUTO” button will cause the camera to rotate automatically. Click the button again to stop the movement. |
| 6 | Screen split layout | Click these buttons to activate the multiple split-screen mosaic configuration. |

6.2 Operation

Click  button in the Main Screen to enter the “Camera Configuration Screen.”

6.2.1 PTZ Pre-position Setting

1. Use the direction control buttons to adjust the direction and view of the camera which is desired for establishing the preset position.
2. Click  to activate the PTZ pre-position configuration.



3. Select the preset position ID and enter a description for this position. Then click the “OK” button to finish the setting.
4. Click  to view the image from the preset position.



eMap Function

This chapter describes the eMap function.

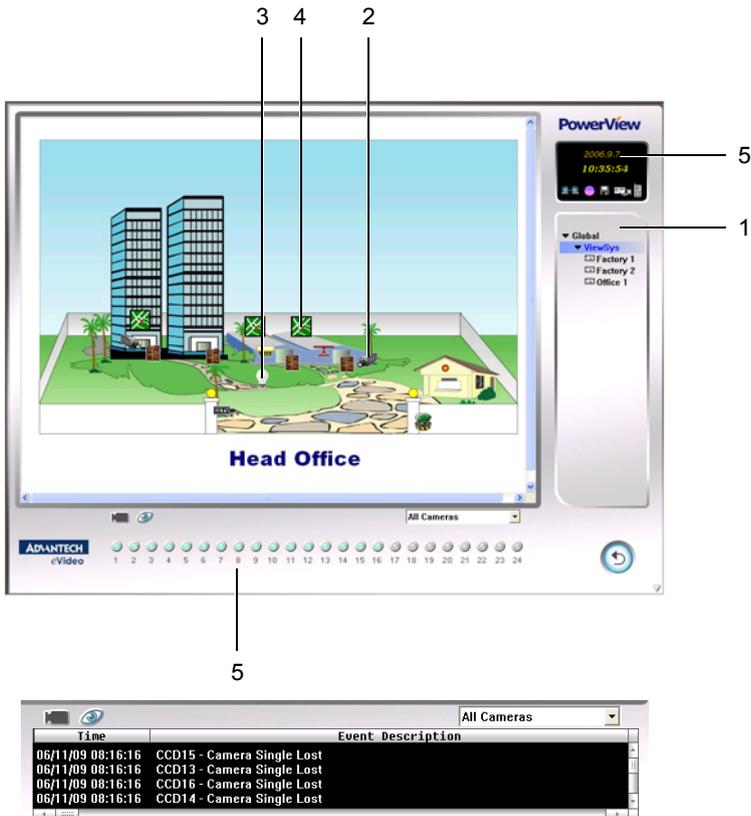
Chapter 7 eMap Function



Press eMap button to invoke this menu.

7.1 Function Introduction

The *eMap* is an editing program that defines the functional hierarchy and operation of the system. The *eMap* function accesses controls cameras and digital input / output (DIO). It permits easy editing and modification of camera positions and the DIO. Event triggers in the environment are automatically linked to the digital surveillance system in *eMap*.



| Item | Function | Description |
|------|---|---|
| 1 | eMap selection menu | This menu accesses the selectable eMap level, and enables the editing program to adjust the hierarchy of eMaps. |
| 2 | Camera monitoring | To view live video, left-click twice on the mouse while the cursor is on a camera icon. |
| 3 | DI / DO | When an event is triggered, DIO icons notify the user by displaying movement graphically on the eMap. The system will switch to the DIO triggered eMap page. The mouse cursor can be moved to a DO icon and to turn it on or turn it off. |
| 4 | eMap link  | Click  icon to link and view the next eMap layer. |
| 5 | Status display section | Display the client site status or an event list. |

7.2 eMap edition

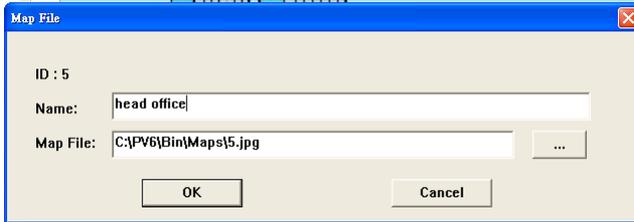
7.2.1 Operation

1. Execute *MapEditor.exe* (under *C:\PowerView\Bin*) to enter *eMap MapEditor Mode*.



2. Create a new file: Click  to create a new file.

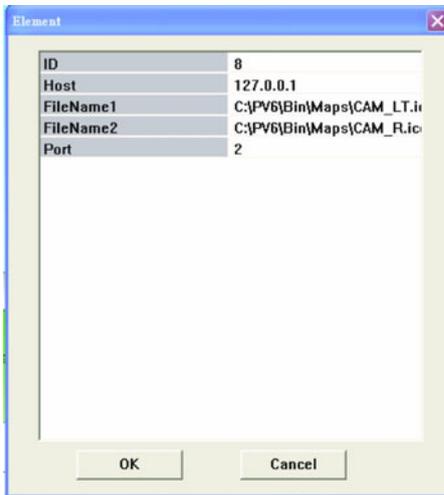
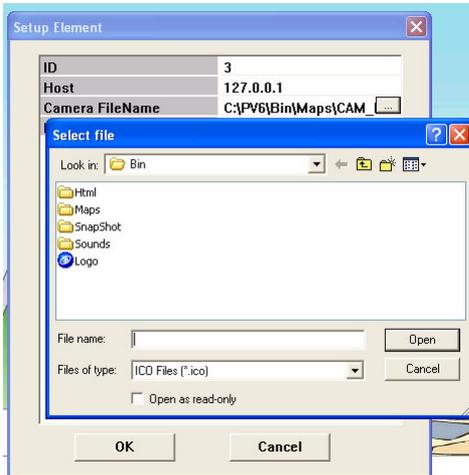
3. Create a new map: Click  to create a new map. Select a Map picture file and enter a new map name.



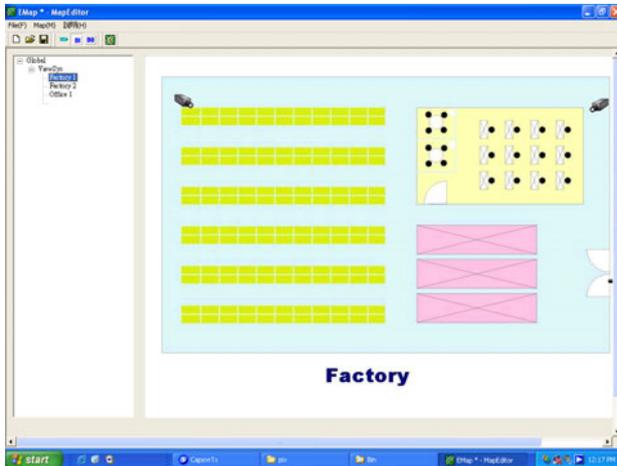
4. To edit hierarchy eMaps: move the mouse to the tree hierarchy layer which you want to create, and click  button to create a new eMap layer. You may drag  to any locations on eMap. For eMap operation, you can click  button to hyper link to the next eMap layer.



5. Cameras editor: Click  button to start the camera editor. After clicking the camera button, a window will pop-up. Input camera ID, Host IP address, select camera direction icon and port number of the camera and then press “OK” to complete camera setting.



6. Edit DI/DO: Click **DI** or **DO** to open the file for editing. After clicking DIO button, a window will pop-up. Input the DIO ID, Host IP, port number and browse to select the DIO condition icon on *FileName1* and *FileName2*, and then press *OK* to complete the new setting. For example: *Filename1*: Select the icon: *fire shower_off.ico* and that icon condition is “off”. *Filename2*: Select the icon for *fire shower_on.ico* and that icon condition is “on”.



7. After finished the edits, press the  button to save the eMap file.

Event Log

This chapter describes the event log.

Chapter 8 Event Log



Press *Event log* button to invoke this menu.

8.1 Function Introduction

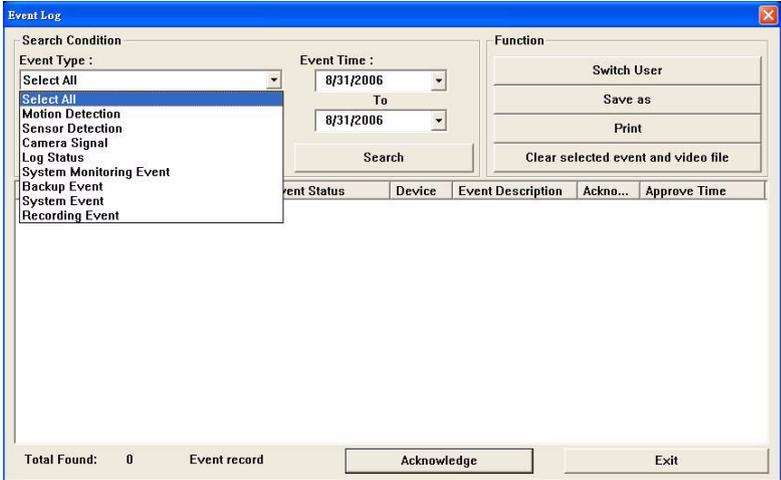
The *Event log viewer* contains all the event triggers and system events, including system and remote login/logout, signal loss, triggered sensors, motion detection, all connection status, etc. It is possible to save an event list as an Excel or an Html file, or print out the event file and acknowledge the event list.

| Event Time | Event Type | Event Status | Device | Event Description | Ackno... | Approve Time |
|---------------------|---------------|---------------------|----------|---------------------|----------|------------------|
| 2006-08-30 10:31:41 | Log Status | Login | | User Admin login... | Admin | 2006-08-31 10:20 |
| 2006-08-30 10:31:46 | Camera Signal | Camera Single L... | Camer... | CCD2 - Camera S... | Admin | 2006-08-31 10:20 |
| 2006-08-30 10:31:47 | Camera Signal | Camera Single L... | Camer... | CCD3 - Camera S... | Admin | 2006-08-31 10:20 |
| 2006-08-30 10:31:47 | Camera Signal | Camera Single L... | Camer... | CCD4 - Camera S... | Admin | 2006-08-31 10:20 |
| 2006-08-30 10:31:47 | Camera Signal | Camera Single L... | Camer... | CCD1 - Camera S... | | |
| 2006-08-30 10:32:17 | System Event | Setup Change | | User Admin chan... | | |
| 2006-08-30 10:32:26 | Log Status | Logout | | Admin logout | | |
| 2006-08-30 10:32:26 | System Event | Exit application | | Exit application | | |
| 2006-08-30 10:36:09 | System Event | Application Startup | | Application Startup | | |
| 2006-08-30 10:36:09 | Log Status | Login | | User Admin login... | | |
| 2006-08-30 10:36:10 | Camera Signal | Camera Single L... | Camer... | CCD2 - Camera S... | | |
| 2006-08-30 10:36:11 | Camera Signal | Camera Single L... | Camer... | CCD3 - Camera S... | | |
| 2006-08-30 10:36:11 | Camera Signal | Camera Single L... | Camer... | CCD4 - Camera S... | | |
| 2006-08-30 10:36:11 | Camera Signal | Camera Single L... | Camer... | CCD1 - Camera S... | | |

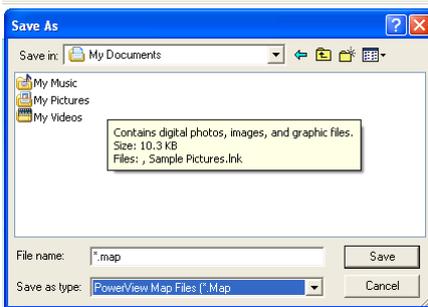
8.2 Operation

8.2.1 Event Search

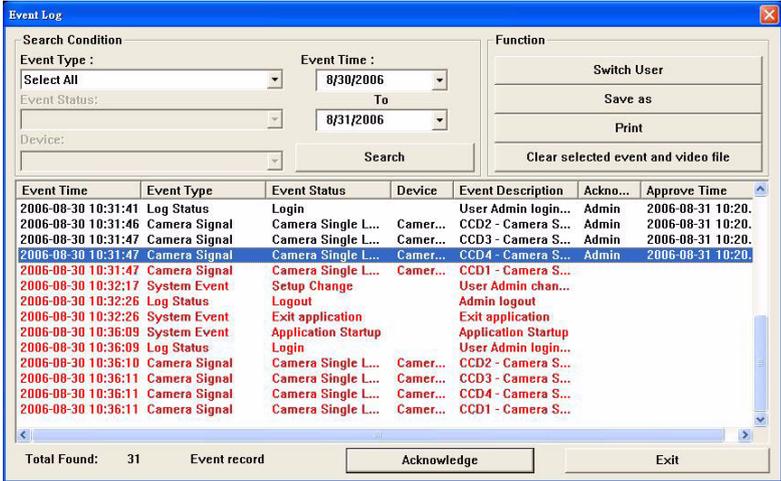
1. Define the event time searching.
2. Select each event type or all event types and then press the “Search” button to start to search.



3. It is possible to save or print out the event search results.



4. To acknowledge an event, the user can press the “Acknowledge” button to confirm the event record. After verifying the event log, the event list font color will change from red to black and the system will record this acknowledgement.



CHAPTER 9

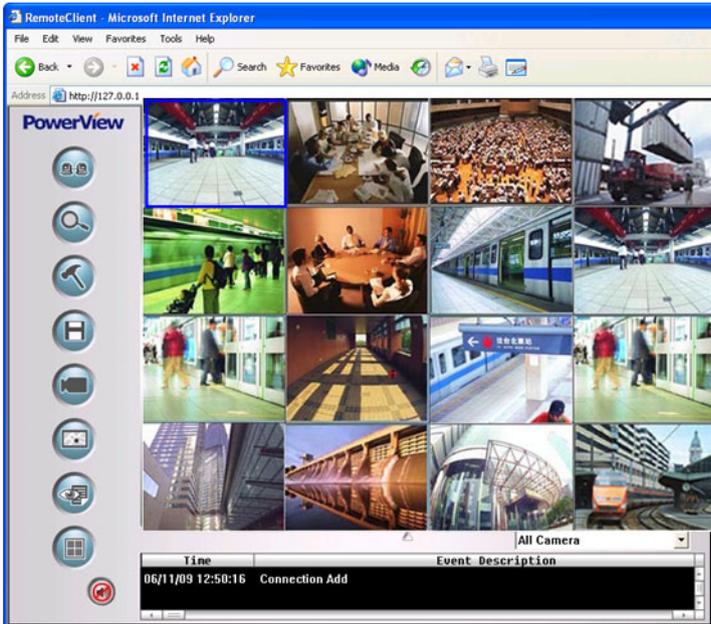
IE Remote Control

This chapter describes IE remote control.

Chapter 9 IE Remote Control

PowerView 6000 enables you to monitor local DVR by *IE browser*. The program enables real time monitoring, remote playback, remote setting, remote recording, eMap monitoring, viewing local sites and making a client event log.

9.1 Function Introduction



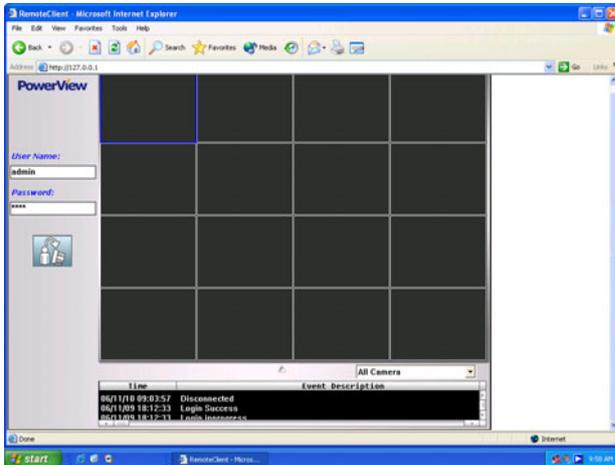
9.1.1 Introduction

| Icon | Function | Description |
|---|--------------------------|--|
|  | Remote view | Press the <i>Remote view</i> button to initiate DVR IP connections |
|  | Remote Search/Playback | <i>Remote search</i> by time and event that functions and operation are the same as the local site |
|  | Remote Configuration | The <i>Remote Configuration</i> function includes IE client setup and DVR site setup. |
|  | Record | The <i>Remote recording</i> function, enables selection of the storage path in "Configuration" → "IE client setting" → "Storage Setup". Note: Need to set to "Remote view" to connect DVR before using the "Record" function. |
|  | Remote PTZ video control | The <i>Remote control</i> PTZ and dome cameras. Operation is the same as the main program. |
|  | eMap | The <i>Remote view</i> live video by selecting eMap. Operation is the same as the main program. |
|  | Event log | The <i>Remote view</i> event log including motion detection, video signal, sensor detection and system event. Operation is the same as the main program. |
|  | Screen-split Layout | The Multiple split-screen mosaic configuration button. (Operation is the same as main program.)  |
|  | Event list spread button | Press the <i>Even list spread</i> button to open up the event list. |
|  | Audio play | Select the <i>Audio play</i> button to play audio. (Operation is the same as the main program) |

9.2 Remote Connection

9.2.1 Operation

1. Enable the Web Server function
In the *setting* function of local DVR, select *Network setting*, and enable the *Web Server* setting. Default port is 80.
 - Stop [Messenger] service: Go to [Control panel] ∇ [System management tools] ∇ [service]; stop the Messenger function to avoid receiving some useless e-mail.
 - If local DVR does not have stable IP address, please enable dynamic IP register function.
2. Before connecting, open the *IE browser*, select [tools] ∇ [Internet Option] ∇ [Security]; change the [security level for this zone] to Low and enable all the *Active X*
3. Key in the IP address of local recording server, and connect to the web page.
4. The screen below will pop up, ask you to install and run the *OCX*, press [Yes].
5. Input the username and password that is the same as the username and click  button to login.



6. After entering *IE remote control* main screen, click  remote view button to start connecting
7. Start to operate the remote control function.

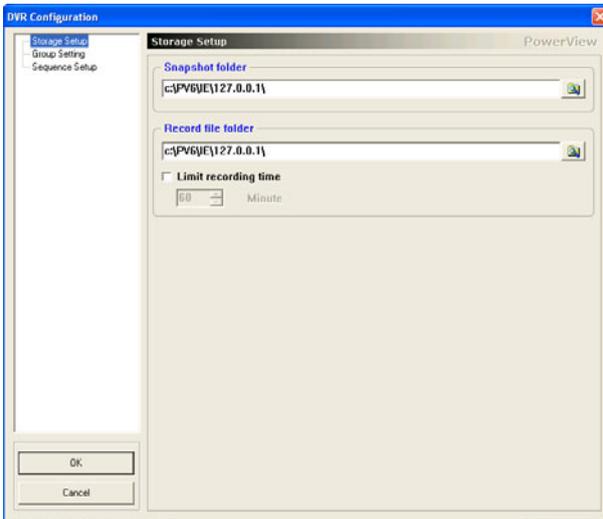
9.2.2 Remote Configuration

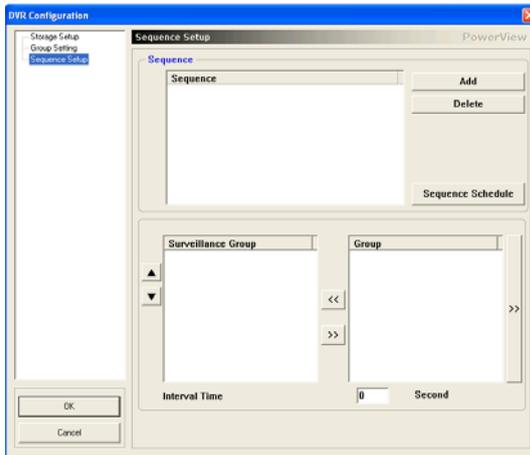
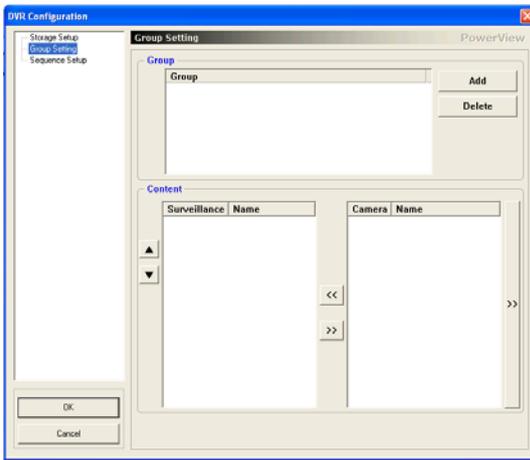
Operation:

1. Press  setting button to invoke the remote configuration menu.
2. Select *IE client* setting or *DVR site* setting. (Operator requires *Remote configuration authority*)



3. *IE client* Setup: The functions include *storage setup*, *group setup*, and *group sequence setup*.





4. Setting up the operation is the same as the DVR main program
5. The DVR site setting functions are the same as the DVR main program

Tools

This chapter describes tools.

Sections include:

- Watermark checker
- Database rebuilder
- Media player codec
- Record data player

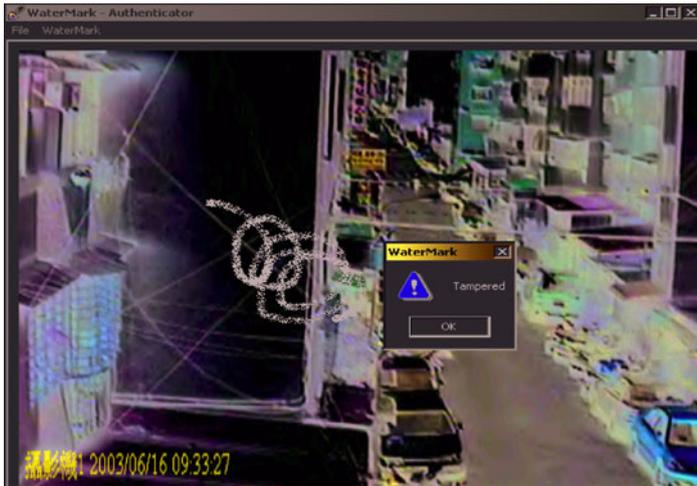
Chapter 10 Tools

There are five programs in the TOOLS, including *Watermark checker*, *Database rebuilder*, *Media player codec*, *Record data player* and *Pocket PC Mobile phone remote* program.



10.1 Watermark checker

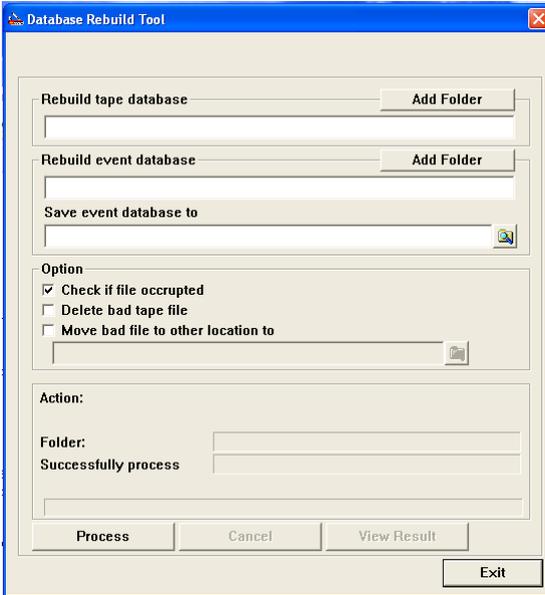
Watermark checker is an authentication program.



Open the picture (bmp) you want to authenticate, then press [watermark].
If the picture is already watermarked, it will be detected and displayed.

10.2 Database rebuilder

If a [tape] file is damaged, you can use this program to rebuild the database. If you want to copy a [tape] file to another computer to see the historical recording data, you have to rebuild the database of the [tape] file in the other computer and then playback the file using the [CapPlayer] program.



The database rebuilding program

10.3 Media player codec

The Media player codec enables software to play Mpeg4 record files on Windows Media Player after installing the Media Player Plug.

10.4 Record data player

Record data Player is the tool used by this program to playback a [tape] .avi file individually. After setting up, you can execute this program then search and view .avi files.

Troubleshooting

This appendix describes troubleshooting.

Sections include:

- Local DVR Questions
- Remote Control Questions

Appendix A Troubleshooting

A.1 Local DVR Questions

Q1: How to uninstall PowerView?

A1: Go to “Control Panel”, “Uninstall Program file” and then choose *PV6* to uninstall PowerView software. Then go to C:\ and delete *PV6*, *Tape* and *Event* folders manually.

Q2: How to remove the capture card driver?

A2: Go to “Control Panel”, “Uninstall Program file” and then choose *PV6* to uninstall the capture card driver.

Q3: Why do some ports of the main screen have no life video image?

A3:

1. Make sure all the capture card drivers are installed completed. Is there an exclamation mark or a question mark in the device manager?
2. Check that the video analog source from CCD has no problems.
3. Select “enable” the *CCD function* under *Camera Setting* in *Setup* function.
4. Check that the user has authorization to apply the *Life View* function.
5. Make sure the user has installed the VGA driver provided for VGA cards other than supported by the *Windows* default VGA driver.

Q4: Why can't I install the driver properly?

A4:

1. Change to a different PCI slot and try again.
2. Change to another capture card and try again.
3. Reinstall *Windows* and try again.

Q5: When I install PV-2000 or PV-2100 for the first time, how do I register the product?

A5: You can find a registration key for each capture card. The registration key is a set of four groups number, and it should look like 23JU-IS64-W3K3-SSSI (Upper Case sensitive.)

Q6: Can I mix different the PowerView capture card in one computer?

A6:

1. The PV-600 capture card can be installed with the PV-800 capture card.
2. The PV-650 capture card can be installed with the PV-650 capture card.
3. The PV-2000 capture card can be installed with the PV-2100 capture card.

Q7: I can burn the record data to DVD+R by using manual backup function, but why can't I read it?

A7: Please make sure your DVD-RW has support read function for DVD+R

Q8: Does *PowerView* support the *Windows 98* operating system?

A8: *PowerView* only supports *Windows XP Home* and *Windows XP Pro*

Q9: How do I upgrade to the latest version?

A9: Uninstall the current version and install the new version.

Q10: Why can't I play recorded files on other computers?

A10: Please install the codec from the *PowerView Utility CD* on that computer and then use the *Windows Media Player* to play it.

Q11: Can I play the file which is in the "tape" folder?

A11: If you want to play the recording file which is under "tape" folder, use *Video Player* to play it. Refer to the manual.

Q12: How to use "Tape Player"?

A12: When the AP starts up, choose the path of database (extension: db3) for it.

Q13: Can DBRebuilder use on all the *PowerView* series Capture card?

A13: DBRebuilder has two versions. One is for hardware compression (PV-2000, PV-2100), and another one is for software compression (PV-600, PV-800, PV-650, PV-850)

Q14: If the DVR becomes unstable after running for several months, what could it be?

A14:

1. Try to change the HD or other PC parts first, because it usually is a Hardware problem.
2. If the problem still occurs, then change the HW, and reinstall the OS first, because a virus may be causing the problem.

Q15: Can you suggest how to setup the Hard Disk partition?

A15: Please give at least 10G for *Windows OS* and *PowerView AP*. And the rest of space is for storage.

Q16: When the Windows pops up the error message: “MiniDump”, what does it mean?

A16: It usually happens if hardware or software has problem. Please check your hardware or capture card driver first. If the problem still occurs, please go to *C:\PV6\bin* to copy a file (extension is .dmz) and send it to your distributor.

Q17: Why can't I install the PV-650 or the PV-850 driver?

A17: Please install *DirectX 9.0c*.

A.2 Remote Control Questions

Q18: Why can't I connect to DVR web server function?

A18. Make sure your LAN connection has no problems; try to use the ping command to test (ping) each other's signal. If there is a router between the DVR and the remote computer, make sure the IP and port map is set correctly.

Q19: Why can I connect to the DVR web function from the remote computer, but I cannot get a remote view, a remote setup and a remote playback?

A19:

1. Make sure you have accessed using the correct username and password.
2. Check to see that the DVR OCX has been downloaded to the remote computer properly. If you have a problem with downloading ActiveX (OCX), please close the *Windows* default "Fire wall" and try again.

Q20: Why is my username and password correct, but I still can't connect to the live image?

A20: Please make sure the user has installed the VGA driver provided from a VGA card other than using the *Windows* default VGA driver.

