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Introductions:

Thank you for purchasing our DVR system. This operation manual is to introduce how to set DVR system and explain each function of DVR system for you to use the system effectively and stably.

Operators should go through this manual thoroughly before you install/utilize this DVR system. You can get this manual from your dealer or contact us directly.

Note: Please set the resolution of monitor as 1024*768 pixels before using this system.

System features:

- Hardware support H.264 compression, low HDD cost
- Web access through LAN or WAN.
- Real time full-motion video-capture & display (Up to 64 channel video input)
- Real time high-speed recording: Up to 30 frames/sec per channel
- Synchronous audio recording (optional)
- Motion detection (Whole area or up to 12 detection zones per channel)
- Normal recording (continuous) and event recording (Motion detection or external sensor)
- Electron Map pop-up when alarm happens
- System operating and alarm logging
- Alarm-before recording
- Remote recording
- Sending alarm message automatically.
- Sending alarm image to email box as attachment automatically
- Matrix display and group display
- Duplex mode (Recording while playback)
- Network support (Remote access via LAN, Ethernet, PSTN, ISDN, ADSL)
- P/T/Z/F & speed demo control on keyboard
- Search/playback by date/time directory (random-access)
- Backup & burn CD directly
- Remote talking between server and client or server and server

Important Information:

For optimal performance of your system, it is important to follow these recommendations.

1. We recommend that you divide your hard disk into two partitions (E.g. C and D:) at least. The first partition for installing Windows OS and system software, the other for storing record files.

2. Please use appropriate motherboard and display card. Contact your
dealers or our support engineers if you have questions.

**Recommended System Requirements**

- **Chipset:** Intel 845PE, 865PE, 875PE, 915P, 945P
- **Motherboard:** Intel: D915/945PCY, D865PERL
  - Asus: P4P800SE, P5P800 MSI: 865PE Neo2-F, 915/925/945;
  - Gigabit: GA-865GME, GA-945PL-G etc
- **Video Card:** ATI Radeon 9250 128MB ATI Radeon 9550 128MB nVidia GeForce 6200 128MB nVidia GeForce 6600 128MB, ATI X500, X550, X700 etc;
- **Processor:** Intel Pentium 4 2.4GHz or better
- **Memory:** 512MB minimum
Chapter 1 Start up and Main Interface

1.1 Start up

1). Before you run DVR server, please check all connectors are firmly connected.
2). By default, DVR Server application will run and initialize cards automatically (the time is determined by the number of channel, about 4-10s). Otherwise, you should double-click shortcut icon [DVR Server] to start it. The main interface is as follow:

![Figure 1](image)

1.2 Main Interface

1.2.1 Show tips

1. when the mouse moves close or stops above a button, a text tip will be shown to interpret the function of it immediately.
2. Zoom in/out video image: Double-click left button of mouse on a camera window to zoom in/out video image (or press \textit{F11} on the keyboard).

3. System will detect the card and select the total number automatically, and the corresponding number buttons will be displayed dynamically.

4. Recording status:
   a. This icon means the system is recording normally.
   b. This icon means the system is recording manually.
   c. This icon means the system is recording in motion detection.
   d. This icon means the system is recording in sensor detection.

\subsection*{1.2.2 Screen menu}

\subsubsection*{1. Full screen}

Right-click image area, it will popup a menu, select “full screen”, change display mode to full screen (or press \textit{F12} on the keyboard).

\subsubsection*{2. Instant playback}

Press TAB key or Page UP (select next camera window) or Page Down (select previous camera window) key on keyboard to select one live camera window, then right-click to show shortcut menu and select “Instant playback” (Figure1—2). After that, choose a time from the submenu (Figure1—3), and then system will play back video data of current window in current window according to your selection (E.g.: you select 1min, system will play back previous 1 minute video data of current window in current window). Also, you can play back video data of one current live window in a window that is not used by any cameras (always black background with no “Video Loss” information): Select a window, and then right-click mouse to show shortcut menu and select “Instant playback” (Figure1—2). Finally, choose a time and the camera you want to playback (Figure1—4), and then system will play back video data in current window according to your selection.

The window that is playing back video data will indicate a yellow border to be different from the live windows.
In the course of the instant playback, you can press Space key to switch the play/pause status or direction key → and ← to play next and previous frame. If you want to stop the instant playback, right-click in the playback window, and select End playback (Figure 1—5).

3. Alarm popup

Press TAB key or Page UP (select next camera window) or Page Down (select previous camera window) key on keyboard to select one live camera window, then right-click to show shortcut menu and select “Start alarm popup” after you set “Alarm camera popup interval” in system setup, otherwise, it can’t be selected with gray. After that when there is a motion detection alarm (set in PTZ & Linkage setup and Motion detection setup) or a alarm triggered by sensor alarm (set in Sensor setup), system will display alarm camera in sequence. When you want to end this function, you can right-click mouse and select “pause alarm popup” to end it.
4. Change record disk

From the information display panel you can see the current record disk, and when you click the panel it will show the available disk to record with its free space. Also you can change the record disk by checking the disk directly. The system will check the disk per 10s, and it is recommended that you change the record disk to local disk when system is writing data into mobile disk before you remove the mobile disk.

![Figure1— 7](image)

When the capacity of HDD is not enough or there has some mistakes while recording, system will popup information to inform the failure of recording and the corresponding camera will stop to record.

1.2.3 Interface description

1. Partition mode

Press button to set the window’s partition mode of the main screen. There are many types partition; the available partition is determined by the total channels of card, you can select the suitable partition according to the number of video inputs, the partition number which is bigger than total channel is not available with gray.
2. Videos-play-in-sequence mode switch

   Press button to switch between playing several videos in one window in sequence and Not.

3. Emergency record button

   Press button to trigger recording of all cameras for 30 seconds even if they have been set to record by any other modes. This function is useful to deal with emergency where quick response is required.

4. Image capture

   Press button to save a still image of a selected camera on local hard disk for reviewing or print.

5. Manual record switch

   Press button to record manually and press it again to stop manual record for selected camera.
6. Information display panel

![Figure1— 9](image)

This panel shows day of the week, current date, current time, total free hard disk space, current record disk and description of selected camera.

7. Local setup submenu

Press ![button](image) button to enter Local setup submenu.

8. Local playback submenu

Press ![button](image) button to enter Local playback submenu to search local video/audio data.

9. Remote chatting

Press ![button](image) button to connect a remote Client or Server for a live chatting through IP network, but first, you should be sure you have installed audio card and Microphone in local PC.

10. System log

Press ![button](image) button to view all actions of recording as well as operations. System log keeps a record of system events such as program startup and shutdown, changing camera setup and all operator or system daily activities according to time and date. Users can look log by date and system parameters. System parameter includes operations, system prompts, alarms and other activities.
11. E-map

Press 🌍 button to set E-map.
Click SETUP icon and then click the right arrow on the map, the picture on the right of the map will appear. You can add or delete sensors and cameras that pointed by the arrow or change the digital map.

If it is set to appear automatically, when the sensor is triggered, the map will appear automatically and the sensor being triggered will be marked. For triggered camera, user can double-click it to view its video.
12. System lock

Press  button to prevent unauthorized user to operate system by locking keyboard and mouse. Press button again, the dialog box will be displayed. Input your User ID and password then press OK.

Figure 12

Default User ID is “admin”, no password.
Note: If the DVR system is not configured as User Manage Mode, the lock button will be unusable and allow any client’s access (even in client program, user name and password will be useless).

13. Minimize button

Press  button to minimize the main window (or press WIN + Z on keyboard).

14. Exit program

Press  button to exit program. After clicking this button, a dialog will display. Click “OK” to quit DVR system.

Figure 13
1.2.4 System Menu

<table>
<thead>
<tr>
<th>Burn backup data CD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burn DVD disc</td>
</tr>
<tr>
<td>Write to working log</td>
</tr>
<tr>
<td>Open explorer</td>
</tr>
<tr>
<td>Playback to TV monitor</td>
</tr>
<tr>
<td>DVR board work mode setup</td>
</tr>
<tr>
<td>Keyboard shortcuts setup</td>
</tr>
</tbody>
</table>

1. Burn backup data CD

Select this function to burn video data to CD, it is same to burn CD function in Local Playback.

2. Burn DVD disc

Burn DVD disc by invoking other professional burning software.

3. Write working log

This is useful to record events that occur during the operator’s shift.

4. Open Explorer

When keyboard is locked, Users can operate window resource via explorer.

5. DVR board work mode setup

Each DVR system supports maximum 8 PCs 400XHC (total channel equal to 48) series board, so user can setup its work mode via this GUI.
For 4004HC, 4008HC, 4016HC etc board model, you can setup its work mode. The new DVR board work mode will take effect after restarting DVR Server software.

6. Play back to TV wall

In DVR system, the recording data can be transmitted to TV monitor via Matrix card.

When system run “Playback to TV monitor” process, The Matrix card will output recording data. If this process does not run, matrix decode card will output real time
video according to your matrix board setup. In this process, you can play back record file by date and camera, and the record file will be played automatically by turn.

7. Keyboard shortcuts setup

If you don’t want to use certain shortcut keys, you can disable the shortcut functions and save the setup.

![Keyboard Shortcuts Setup](image)

Figure1— 16

1.2.5 Motion detection area & Cover setup

Press button to set the built-in motion detection.

By default, the entire screen is set as motion detection area where is indicated with green border around the image. To mask a specific area, you can click the DELETE button to cancel the full screen detection border; then left-click and drag a rectangle. A
green rectangle will mark the area of it. Also, you can set any other areas. Any activities in the motion detection areas will trigger recording, depending on the reaction mode; and alarms may be generated along with electronic map icons flashing in alert mode. Click the TEST mode icon to test the sensitivity of motion detection. The sensitivity can be adjusted by dragging the slider bar below the motion detection window. Notice: motion sensitivity value will decide the veracity of smart search.

![Figure1— 17](image)

1. Add mask / Delete mask

Press \[ADD MASK\] button to add mask. If there are some areas that you don’t want to show, you can draw those areas with mouse till they change to be black. You can set several cover areas. Press this button again to finish setup

Press \[DEL MASK\] button to delete all cover areas.

1.2.6 Network panel

On this panel, the network configuration of the system is displayed.
1.2.7 PTZ Control panel

In DVR system, it has three ways to operate PTZ:

a. Panel operate (Figure 1-12);

b. Operate in video area directly (Figure 1-14);

c. Keyboard operate (Figure A-1)
1. Relay (On/Off)

   Control the PTZ cameras internal relay (relay1) or the decoder’s relay (relay 1).
   Used to turn on a light or control an access gate.

2. Wiper (On/Off)

   If using the PTZ cameras corresponding wiper control relay, this toggles the
   relay/wiper on and off

3. Zoom + / Zoom –

   Controls the zoom function of the PTZ camera.

4. Focus + / Focus –

   Overrides the auto-focus setting of the PTZ camera, adjust focus the image.

5. Iris + / Iris –

   Overrides the PTZ cameras auto-iris and brighten or darken the image.
   Pressing this button initiates the connected PTZ camera to do an automatic tour of 360, but for speeddome, many PTZ factory forbid this command.
   By pressing and holding these buttons, the PTZ camera is moved up, down, right and left as well as other directions.

6. Speed Demo

   Press button and the following picture will appear (in the bottom of main window):
   There are 16 preset points for the speed domes on the left and the numeric panel on the right (user can setup max 64 preset, only 16 preset is eyeable).
7. Setup steps

First, move speed domes to desired position, then, input the address in address space (take 3 as an example here). Finally, press the SET button. After that the point for 3 will be bright. You can set others in the same way.

8. Delete preset position

Click ‘-’ button and select preset position number you want to delete from numeric panel then click SET button.

9. Execute preset position

If preset number is less than 16, you can execute it directly by clicking the number button in PRESET ZONE.

If preset number is more than 17, you can execute it by clicking number button then click GO.

10. Cruise all preset position automatically

Start cruise: In numerical panel click symbol “-” and number (the interval time of two preset positions), then click GO. Ex, “-5”, mean all preset cruise according to 5 sec interval, click “F5” in keyboard has same effect with this;

Stop cruise: In preset zone, click any preset position, and then click GO.
11. Control PTZ via video window

On the Image 3, each rectangle area is the effective area of every action. Arrow denotes the direction of the action. Pressing and dragging the mouse to the corresponding area can control the PTZ.
1.2.8 Color and Audio adjustment

![Figure 1](image)

1. Press the first button and drag to adjust the brightness of the image that you selected, and you can resume its default value by pressing [ ].
2. Press the second button and drag it to adjust the contrast of the image that you selected, and you can resume its default value by pressing [ ].
3. Press the third button and drag it to adjust the hue of the image that you selected, and you can resume its default value by pressing [ ].
4. Press the fourth button and drag it to adjust the saturation of the image that you selected, and you can resume its default value by pressing [ ].
5. Press the fifth button to switch sound of the audio that related to the image you selected, and drag it to adjust the volume, and you can resume its default value by pressing [ ].

1.2.9 Matrix & display

This panel includes matrix group and display Group. Each group includes 16 numeric buttons; each button denotes one type of matrix or display. This will describe in System setup.
1.2.10 DI/DO Control

1. DI control

Press number button to check sensor all time forcibly even though user didn’t set check sensor in sensor setup. The channel of DI and DO is determined by the setup of DI/DO device you set in System setup. The status of DI have three types:

3. Input channel 3 doesn’t check sensor forcibly.

2. Input channel 2 checks sensor forcibly.

1. Input channel 1 has an alarm inputting

When there has no alarm yet, user can press number button to check sensor forcibly. Press the button again to stop to check all time, then system check sensor according to Sensor setup. When there has an alarm, the corresponding button will show the alarm with green.
2. DO control

Press number to open/close alarm device relay switch manually. The status of DO have two types:

2. Output channel 2 is close.

1. Output channel 1 is open.

When there has no alarms triggered out, user can press the number button to output alarm forcibly and the button will show it with green, press it again the output will be closed.

When there has alarms triggered out, the corresponding button will show it with green and user can't press it to be closed forcibly.
Chapter 2 Local setup

The DVR System Configuration and Setup includes 7 types configuration setup:

- **System setup**
- **Camera setup**
- **Sensor setup**
- **PTZ & linkage setup**
- **Email setup**
- **Matrix & display setup**
- **User setup**

2.1 System setup

*Figure 2—1*
2.1.1 System setup

- **Number of Channels**: Display the total number of channel.
- **Sensor Input(DI)**: Display the number of sensors (DI).
- **Sensor output(DO)**: Display the number of alarms (DO).
- **Audio Monitoring**: Select real time monitoring audio or not.
- **Use E-Map**: Select use Electron Map or not.
- **Camera sequencing interval**: Set auto-split changing interval time.
- **DI/DO Port**: Select sensor/alarm driver connecting port, it must be different from PTZ Port. If you do not use alarming input, you can close this function.
- **System Keystroke**: System keystroke. When it is in use, functions of some system keys will be disabled (Ctrl+Alt+del included).
- **Save Log for() Days**: Log save days (max 100 days).
- **When disk is full**: Select record mode when there is not enough HDD free space. If select "Overwrite data", DVR system will delete the recorded data of the oldest day automatically to free HDD space for new record. If select "Stop recording" DVR system will stop recording and give a warning message (Notice: each disk will reserve 1000M space).
- **Recording Disk**: Select the first disk from which the DVR saves data. The previous disks of this one will not be used to record and it will not be checked by the system. When the capacity of HDD is not enough or there has some mistakes while recording, the system will popup information to inform the failure of recording and the corresponding camera will stop to record.
- **Alarm camera popup interval**: Set the interval of alarm camera, if you select "—", you can't select function "Start alarm popup".
- **DI/DO Device**: Select receive alarm device type. Our DVR system support 4 different alarm devices: NV7608, NV7609, NV7616, NV7616B etc; when you change the type of alarm device, you should reboot the system to update the device information in DI/DO control panel.
- **Date Format**: Select date display way. It decides the date display way of DVR system, it includes the information panel on the main screen and the date panel of the playback window and OSD date in video.
- **Alarm Beep**: Select disable or enable from drop-down list. If select "enable", when there is an alarm, system will make beep voice.
- **Time Format**: Select time mode.
- **Default Camera type**: Set the default mode of video from PAL and NTSC, it is available when the input video is lost and for the decode to playback local video to TV Wall.
2.1.2 Network setup

【Remote Connection】 Select using network or not. If select “disable”, it will not permit any client connect this DVR system;
【Remote Port】 Select remote connecting port.
【Remote buffer Priority】 There are three items selected. "smooth" demands the system have large buffer. "realtime" demand there have enough bandwidth. Otherwise, the data off and on when it is sent from the network.
【Automatic Alarm Notification client IP】 Assign a network client to receive alarm message when there is an alarm. The alarm channel image will auto display in the client software. But user must sure client has run in the pc own this ip address, or else, DVR server will take many resource due to connect continuously.
【Alarm Send Port】 This is the alarm message connecting port. Even client program listen port;
【Web Server Port】 The IE client connecting port. Default is 80 for http access; but for some windows xp version, XP shield 80 port; in this time, user should modify this port to other port, such as 1280, after modify this, user must restarting DVR server, then user can access DVR server via IE Client like this: http://IP: 1280 (IP can be a static IP or dynamic domain name).
【Use DNS】 Select use DNS or not, support dynamic IP.
【Local Host Name】 Input the name description for DNS Server identification.
【DNS Server IP】 DNS server host IP.
【DNS Connection Port】 DNS server host port , it provide to connect DNS software.
【Interval Connection Time】 Interval time connect DNS automatically.
【Permit Max Connect Video Num】 The maximum number of video that permit to the client to connect the DVR server. The number can select according to the network bandwidth. The maximum is 256. such as, one DVR server own 2Mbit network bandwidth, if all video channel compress base on CIF resolution, max data bitrate is 500Kbit, to assure to get better video effect, we can setup permit max connect video num to 4;

*Note: Alarm auto connection to IP is used to input alarm automatically. When sensor, normal or motion record is set to input and there is IP address, the system will check if the client has connected with this system. If there is no connection, the system will try to connect with it through Port 5300(preset). While it cannot be connected, the system will keep trying till the connection is OK. So please ensure that your client’s program is in use, Port 5300 is listening and the network is in good condition. If not so, the system will not be stable.

DNS server work mode:
If require, please get DNS server software to developer.
1. If your DVR is dynamic IP, you should configure your DVR system as follow:

<table>
<thead>
<tr>
<th>Use DNS</th>
<th>Local Host Name</th>
<th>DNS Server IP</th>
<th>Connect Port</th>
<th>Connect Interval Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable</td>
<td>DVR office</td>
<td>192.168.0.21</td>
<td>7100</td>
<td>60 sec</td>
</tr>
</tbody>
</table>

2. DNS server will get domain name and the current IP of your DVR, client program can connect DVR server with this domain name.
3. Clients get current IP of DVR through DNS server according to its domain.

4. Clients visit DVR through the IP that get from DNS server.

2.1.3 Boot setup

- **Exit to Windows**  User can exit program and back to windows desktop.
- **Exit and Shutdown** User can exit program and shut down the computer.
- **Auto Shut Down** Time shutdown the computer if set auto-shutdown time.
- **Auto Reboot Date(Mon-Sun)** Select auto restart days.
- **Reboot at**  Set auto-restart time.

2.2 Camera setup

![Camera Setup](image)

**Figure 2— 5**

2.2.1 Camera setup

- **Selected Camera** To set the parameters for a camera, select the camera from the drop-down list.
【Camera Description】Input the description for easy identification.

【Camera Type】Select camera type from drop-down list. Users can choose any of the type from PAL and NTSC.

【Camera】Enable or disable selected camera. Video loss detection will sound if a camera is not physically connected while enabled.

【Remote Frame Rate(fps)】Set the frame rate of the client.

【Bit Rate】Set record mode. Variable Bit Rate (VBR) or Constant Bit Rate (CBR) Recording.

- **VBR** allows each frame to be recorded at the bit rate to go up or down, depending on the image complexity, activity and color.
- **CBR** allows each frame to be recorded at fixed rate, irrespective of scene activity. In many cases, this limits detail (resolution). The benefit of CBR is its ability to accurately estimate the total video storage time.

【Frame Rate(fps)】Sets the recording rate for selected camera. For Frames per Second (fps), The frame rate should be from 1 to 30 fps. While image size is set "704*576(12fps)", the frame rate should be set around 1 to 15 frame.

【Remote Image size】Select image resolution to be transmitted to the client. When you set the 【Image Size】as 4CIF(704*576), this configuration is not available, program will select it as CIF automatically because DVR board does not support dual stream when it records with 4CIF resolution.

【Image Quality】Sets the quality of the image to be recorded. Select from poorest, Poor, Medium, Very good and Best.

Click this button, you can make advanced setup for video quality, you can setup I B P frame and Max. bit rate.

![Video Quality Set](image)

**Figure 2— 6**

(Note: If you don’t familiar with those features, we advise you don’t setup them)

Recommend setup:

For CIF:

<table>
<thead>
<tr>
<th>Image</th>
<th>I frame</th>
<th>P frame</th>
<th>B frame</th>
<th>Max bps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>12</td>
<td>12</td>
<td>17</td>
<td>900000</td>
</tr>
<tr>
<td>Good</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>750000</td>
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<td>--------</td>
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<td>Medium</td>
<td>18</td>
<td>18</td>
<td>23</td>
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</tr>
<tr>
<td>Lowest</td>
<td>24</td>
<td>24</td>
<td>29</td>
<td>300000</td>
</tr>
</tbody>
</table>

For DCIF:
\[ \text{Maxbps} = \left( \frac{\text{Maxbps}}{3} \right) \times 5 \]
Note: \( \text{Maxbps} \) is the CIF’s value with the same configuration (I P B)

For D1:
\[ \text{Maxbps} = \left( \frac{\text{Maxbps}}{3} \right) \times 8 \]
Note: \( \text{Maxbps} \) is the CIF’s value with the same configuration (I P B)

【Alarm Realtime】Select enable or disable. If select “enable”, when alarm occurred, the camera will record with all frame rate (25fps or 30fps), even though “frame rate” has been set other value (eg. 5fps).

【Remote Quality】Set the quality of image of the client side to be recorded from Poorest, Poor, Medium, Very good and Best.

Click this button, users can make advanced setup for video quality of client end, also can setup I B P frame and Max. bit rate, and adjust Max bit rate according to the network bandwidth.

Notes:
1. If less than 64 cameras are in use, many of them can’t provide pictures sometimes and an alarm will appear (beep to tell you some video information is missing). Set the camera with no picture disabled and the alarm will disappear. When you want to use them later, set as enabled again.
2. The unit of the swap file should be MB. The range is 2 to 50.
3. Set the position and contrast of the date shown on the screen. Sometimes the date cannot be clearly seen for its color is similar with the background. You can change its position or color when this happens.
4. Image size is the format used when recording. Remote image size is the format used when these images are transmitted to client sides.
5. Remote Frame Rate, Remote image size and Remote Quality are the parameters of the client side. ①When the server’s image size is set as “704*576(12fps)”, these three items are no effect, the client’s parameters will be same as server. ②When the server’s resolution is set as others (except “704*576(12fps)”), if Remote image size is set as “with record”, Remote frame rate(fps) and Remote Quality are no effect, the client’s parameters will be same as server.
6. Variable digital rate table

<table>
<thead>
<tr>
<th>Image quality</th>
<th>record environment</th>
<th>occupied disk space (/com/hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest</td>
<td>low action indoor</td>
<td>about 45mb</td>
</tr>
<tr>
<td></td>
<td>high action road</td>
<td>about 95mb</td>
</tr>
</tbody>
</table>
medium  |  low action indoor         |  about 70mb  
|       |  high action road         |  about 180mb  
| best  |  low action indoor        |  about 160mb  
|       |  high action road         |  about 320mb  

*Note: Invariable digital rate can not improve image quality but it is helpful for counting disk space. Variable digital rate recording is recommended.

【Image Size】Set the resolution for local record. There is an item "704*576(12fps)", each channel can be set "704*576", but not real time, system will select frame rate automatically around to 12-15fps. To get best effect, you should set the resolution of local record according to your CPU configuration. There is a referenced configuration sample as below:

Computer configuration:
- **CPU**: Intel Pentium 4 2.4GHz
- **Motherboard**: ECS 848P-A
- **Graphic Card**: ATI 9550 128MB,
- **Memory**: 512MB
- **HDD**: 120G(IDE)

**Recommended resolution configuration for different channels:**

<table>
<thead>
<tr>
<th>DVR Board Channels</th>
<th>Recommended Resolution</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>CIF</td>
<td>Continuous recording is not recommended</td>
</tr>
<tr>
<td>48</td>
<td>CIF</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>DCIF</td>
<td>CIF</td>
</tr>
<tr>
<td>32</td>
<td>DCIF</td>
<td>DCIF</td>
</tr>
<tr>
<td>24</td>
<td>DCIF</td>
<td>DCIF</td>
</tr>
<tr>
<td>Less or Equal to16</td>
<td>4CIF</td>
<td>CIF</td>
</tr>
</tbody>
</table>

【OSD Contrast】【OSD Pos】Set OSD displaying brightness & position. An "auto" item in OSD Contrast's drop-down list will make OSD suit the background's color automatically.

【Masking Bitmap File】Watermark function, the logo picture must be edited ad 128*128 pixels file size and saved as bmp format.
【Record Days】 This section allows users to determine how long the record data of each camera should be kept by the system. The maximum duration for on-line storage is 120 days. Users can select exact number of days, or can select “auto” mode. If select “auto”, system will auto-delete the recorded data of the earliest days when there is no enough space.

*NOTE: If there is no enough space of HDD, system will delete the record data according to the length of saving time of each camera. Eg: there are four cameras, the 1st camera save 2 days, the 2nd camera save 5 days, the 3rd camera save 10 days, and the 4th camera we will set “auto” mode. If there are enough space, the 4th camera’s record data will save in HDD, while there are no enough space, system will delete data automatically. If the 4th camera’s record data has been saved more than 10days, system will delete the 4th camera’s data, if the 4th camera’s record data has been saved less than 10 days, but the 3rd camera’s data is more than 10 days, system will delete the 3rd camera’s data. So, even if you set the 3rd camera’s record data saving 10 days, the data which is saved less than 10 days become possible. System will delete the record data from the earliest date.

【Copy Setup to】 Set other cameras with the same setup.

2.2.2 Group setup

Note: If you set a camera into several groups, only the last setup is available.

【Selected Group】 Select group number.

【Swap File】 Set recorded video file size saved in HDD. For easy backup, don’t set too large file size. Up to 512M can be set, but 30M is recommended.

【Selected Cameras】 Select the camera that have the same work mode with group.

【Pre-Event Record】 Select the start time of record when there is an alarm. When DVR system is in Motion Detect mode or Sensor Detect mode, it can record video before the alarm is trigged.

【Post Record Time】 Select the end time of record when there is an alarm. When the system is in Motion Detect mode or Sensor Detect mode, it can record video after the alarm end.

【Record Audio】 Selects whether program record audio data.

Schedule Setup (Example for the following figure)
Tips: One block of pane means half an hour. Firstly click record mode icon, then click schedule diagram, hold down the mouse and move it to select large area (Drag & Drop).

1. Normal Record (Green): DVR System is always recording video. (e.g. Sun. Fri. Sat.)
2. Motion Detect (Blue): DVR System begins to record video only when it detect moving object. (e.g. Mon.) Click "Motion Detect" icon, then select your schedule time by drag & drop. For example, the above picture means: on Monday it is motion detect record, on Sunday it is normal record, but on TUE, WED and THU from 3:30 to 11:00 it is sensor record, from 14:00 to 22:30 it changes to both motion detect record mode and sensor detect record mode, other time is normal record.
3. Sensor Record (red): DVR System begins to record video only when there is a sensor alarm. (3:30 to 11:00 in Tue. Wed. Thu.)

Note: The time setup must be correspond with Check Alarm setups in SENEOR SETUP, otherwise it can not work properly.
4. Motion or Sensor Record (yellow): Combine with above 2 and 3 function.
5. Not Record (gray): DVR System does not record video.
2.3 Sensor setup

【Select Sensor】 Select the camera from the drop-down list in order to set the parameters for a sensor.

【Sensor】 Select this sensor port to use or not.

【Sensor Position】 Enter the description for easy identification.

【Activate PTZ Preset】 Select linkage of Speed Dome preset number. Speed Dome will move to this preset number automatically when there is an alarm. (Speed Dome installation needed).

【Play Alarm sound】 Select a sound of .wav for a sensor, if there is an alarm, the sound file will play.

【Link to PTZ】 Select camera that is related to this sensor alarm.

2.3.2 Group setup

Sensor group setup is very similar to the group setup of camera recording.
【Selected Group】Select group number.
【Sensor Type】Select NC or NO alarm type.
【Alarm Write log】Select write alarm log or not.
【Alarm Action After It Times-Out】Select system alarm linkage mode when an alarm stops. "Stop Immediately" means the system stop alarm immediately after the alarm driver stops an alarm. "Do Not Stop" means the system don’t stop alarm after the alarm driver stops an alarm. "Wait" means the system will stop alarm at your setting time after the alarm driver stops an alarm.
【Sensor input】Add sensor to selected group.
【Start recording cameras】Set cameras that to be corresponding to this sensor group. They will start recording and connect remote network client automatically when there is an alarm.
【Trigger Output Relays】Add alarm devices (alarm out port) to this group such as siren, light. All connecting devices will send alarm message when there is an alarm.

Schedule Setup (Example for below figure)

![Check Sensor vs Not Check](image)

1. Check Alarm (Red): DVR System responds with sensor during this time. (00:30 to 12:00 from Sun. to Sat.)
2. Not Check (gray): DVR System doesn’t respond with sensor in this time.

Note: If you set a camera in several groups, only the last setup is available.

---

*Figure2— 9*
2.4 PTZ & Linkage setup

![Figure 2— 10]

2.4.1 PTZ protocol setup

- **[Selected Camera]** Select the camera from the drop-down list to be set the parameters.
- **[PTZ Port]** Select PTZ connecting port, when you do not use PTZ port, please choose “------”.
- **[PTZ Protocol]** Selects the PTZ protocol for the PTZ camera.
- **[PTZ Address]** Set the camera ID number of the PTZ camera being controlled.

Note: The PTZ camera has a dipswitch to set the PTZ address. The PTZ camera ID number must be matched with the number of this dipswitch.

- **[PTZ Baudrate]** Select PTZ Baud rate for the PTZ camera.
- **[PTZ Position]** Select the installation mode of the PTZ according to its installation mode. A setup designed to aid in the control of a PTZ camera, it allows the PTZ camera to be installed “upside down”, requiring that the resulting video image be flipped or inverted, thereby the control which is synchronized with the camera direction works.

**Notes:**
1. PTZ position will influence PTZ control. E.g.: if you set it as obverse and press left, then it will turn left. If you set it as inverse and press left, then it will turn right.

2. If there is (H) after the PTZ protocol, it has the high speed of Preset function. If there is no (H), it only has ordinary functions.

3. The PTZ address will be sent as a message option. Take care that some address begin from 0, that is to say, when the address number is 1, the real address is 0. So we must set it according to their relations.

2.4.2 Motion detection relay & remote client alert

【DO Port】【DO Port Name】DO com description is irrelevant with linkage. If alarm input is in use and there is an alarm in this camera, the alarm will send to the client automatically, same as that of sensors. But the client only connects to the cameras with alarms.

【Camera alarm detected In】Selects camera from dropdown list.

【Send Alarm to client】Selects sending alarm to network client and sending e-mail to specified user or not.

【Motion Alarm Sound】Selects a " .wav " sound File for a motion alarm. If there is a motion alarm, the sound file will be played. Also, you can test it by pressing Test button.

【Video Loss Alarm Sound】Selects a " .wav " sound File for a video loss alarm. If there is an video loss alarm, the sound file will be played. Also, you can test it by pressing Test button.

【Trigger DO Output】Selects which DO ports respond with above alarm camera.

All connecting devices will send alarm message when there is a Motion Detect.

Schedule Setup (Example for below figure)

1. Motion & Video Loss (Red): DVR System responds with Motion Detection and Video Loss alarm in specified time.

2. Motion Alarm (Blue): DVR System only responds with Motion Detection alarm in specified time.

3. Video Loss (Yellow): DVR System only responds with Video Loss alarm in specified time.

4. Not Check (gray): DVR System doesn't respond with any alarms in specified time.

Note:
Check Alarm Setup (including Motion & Video Loss, Motion Alarm and Video Loss) does not take affection to Motion Detect Record. It is only alarm setup. It takes affection to motion detect alarm out and motion detect alarm to network.

2.5 E-mail setup

Note: Before you set the E-mail setup, you should pay attention to several points as below:

1. The alarm to trigger E-mail sending includes two types: Camera-related alarms (Motion detection alarm & Video loss alarm) and Sensor-related alarms.

2. For Camera-related alarms, you should set Motion detection area & Cover setup and to check alarm in Motion detection relay & remote client alert. For Sensor-related alarms, you should set to check sensor and select cameras to be triggered in Sensor setup.

3. When you enable system capture image as attachment of E-mail, the system will capture a still picture of camera for Camera-related alarms or related camera for Sensor-related alarms to be sent as a attachment with E-mail.

Figure2——12
2.5.1 SMTP setup

【SMPT Server】SMTP server address, eg: mail.hikvision.com,
【SMPT Port】SMTP listen TCP’s port for connect request.
【Auth.Type】Login mailbox, operator will select SMTP authentic type. Or can select “simple login”.
【Login User ID】Mailbox’s ID.
【Login Pass】Mailbox’s password.
After user setup finished, can press “send & test” to check your input’s validity.

2.5.2 E-Mail setup

【Send To】Address of receiver.
【Copy To】Set address of receiver to whom system sends E-mail.
【Sender Email】Operator’s email address.
【Email Title】Email send title.
【Email Screenshot As Attachment】When there is alarm, the system will grab picture, operator can select whether send the picture as attachment .
【Send Notification from Cameras(Screenshot From Alarm Camera)】Operator can select which cameras alarm send email.
【Send Notification from Sensors(Screenshot From Linked Camera)】Operator can select which sensors alarm send email.
*NOTE: If send the grab picture as the attachment, you should check alarm of the camera or the sensor, and set “alarm send to network” to be enabled.
2.6 Digital matrix setup

【Matrix Group】 System operator can organize into groups to matrix video out, each group has different display mode. There are 16 groups in common.

【Video Out Port】 Matrix video out channel ,the number of channels is decided by Matrix Decoder Board.

【Video Out Standard】 Matrix video out standard, there are PAL and NTSC.

【Video View Mode】 Video out display mode, there are 1split, 2split, 4split, 9split, 13split, and 16 split.

【Video Window】【Display Video Camera in window】 After selecting video split mode, there will have corresponding display video window, select one camera or more cameras show in the window.

*Note: one camera is only showed in one window once.

【Video Switch Interval(sec)】 Time Interval that each window shows cameras circularly when there have more than one camera in one window.
2.6.2 Display setup

【Display Group】 System operator can organize groups to display video out, each group has different display mode. There are 16 groups in common.

【Video View Mode】 Video out display mode, the split mode is the same as main window’s display split mode. There are 1, 4, 9, 12, 16, 20, 25, 28, 33, 36, 40, 49, 64 partition.

【Video Window】 【Display Camera in the window】 After selecting video split mode, there will have corresponding display video window, select one camera show in a window.

* Note: One camera is only showed in one window once, but each camera can display any window discretionarily. E.g.: The 1st camera has been displayed in window1, and the 2nd camera has been displayed in window2. When change the 1st camera to be displayed in window2, the 2nd camera will be exchanged in window 1 automatically.

2.7 User setup

2.7.1 User information

【Use Password】 Check to enable User Manage mode and activate the lock
button in main window. Only authorized user can log into Hikvision System at User Manage Mode.

- **User Name** Input new User ID in this box when add a new user to system.
- **Arht. Level** Select user type. Only Administrator can enter User Manage Window and have the power of user management.
- **Password** Set new user or selected user’s password.
- **Password Confirm** Confirm password again.
- **Note** Input your description of this user.

- **New User** Press button to edit the user you want to add in the **User Name** blank. Input User Name, Note Name, Password, and Confirm Password. Select Manage Right (Administrator or Operator), and then click Add User to save.

- **Add User** Maximum quantity is 16 users in one system. Click icon to add new user you edited to user list.

- **Modify User** Select user from user list, then click button to modify user.

- **Delete User** Select user from user list, then click button to delete User.

### 2.7.2 User right setup

- **Watch Camera** By default, every user is granted access to view live images. To deny access, click on a camera button and the blue button changes to gray.

- **Search Camera** Rights to view recorded video for each camera. In default, every user is granted access to recorded video for all cameras. Granted rights are outlined in blue, denied access displays in gray, the same as Watch Camera.

- **Audio monitor right** Rights to check audio for each sensor. In default, every user is granted to check audio for all sensors. Granted rights are outlined in blue, denied access displays in gray, the same as Watch Camera.

- **Operation Right** Select operational tasks, granting or denying rights. Operational tasks are normally reserved for administrative, privileged accounts. Operators are rarely granted rights to adjust camera color, exit program, explore files or operate PTZ controls.
【Setup Right】
Select setup rights to grant or deny user privileges.

```
<table>
<thead>
<tr>
<th>Setup Right</th>
<th>System Setup</th>
<th>Camera Setup</th>
<th>Sensor Setup</th>
<th>Linkage &amp; PTZ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Email Setup</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

*Figure 2—15*

*Figure 2—16*
Chapter 3 Local playback

3.1 Main interface

In main window click button to enter playback mode.

![Figure 3-1](image).

3.2 Select playback channel

Directly click the number button in the right-up screen corner. DVR system will play back recorded data from the beginning of today.

Blue channel number means that channel has recorded data. Click channel number to select search camera.

Tips: Right click the picture to perform digital zoom function.

Select one window (the 1st one is default), click the channel number and the playing will begin. Different color will show information of all camera. You can see all kinds of record, their time and length according to the color. You can choose to play some record data by clicking its time.
3.3 Play file and related operations

Press this button to set partition mode of Window, i there are 1, 4, 9and 16 splits. To reduce the load of CPU and get best effect, you should select the partition mode according to the record channels amount and resolution. There is a referenced configuration sample as below:

**Computer configuration:**
- **CPU:** Intel Pentium 4 2.4GHz
- **Motherboard:** ECS 848P-A
- **Graphic Card:** ATI 9550 128MB
- **Memory:** 512MB
- **HDD:** 120G(IDE)

**Recommended channel configuration for playback:**

<table>
<thead>
<tr>
<th>DVR Board Channels</th>
<th>Record Resolution</th>
<th>Recommended Playback Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>CIF</td>
<td>4</td>
</tr>
<tr>
<td>48</td>
<td>CIF</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>DCIF</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CIF</td>
<td>4</td>
</tr>
<tr>
<td>32</td>
<td>DCIF</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CIF</td>
<td>9</td>
</tr>
</tbody>
</table>
Press this button to open all playback windows in turns according to the order of the cameras.

Press this button to close all playback windows.

Previous / Next frame: press this two buttons to look the previous or next frame.

Reverse play: press this button continuously to play video reversely, the speed is determined by the following playing speed adjustment bar.

Play/Pause: This button will alternate between Play and Pause. When it is playing, it will show and press it to stop, and then the button will show .

When you select reverse playing, it will show to play by pressing it.

Stop: press this button to stop playing.

First frame of that day, Previous minute, Next minute and Last frame of that day.

Image zooms out. Press this button, single click the left mouse button on an image, quarter of the image will be enlarge. Single click right mouse button on the image again, it will resume the normal.

Adjust the voice: drag the bar to adjust the voice and click the left button to clear the voice.

Adjust playing speed: drag the bar to adjust the playing speed and click the left button to resume normal playing speed.

*Note: It is not suggested that multi-channel (more than 10 channels) record or playback coinstantaneous unless your PC has a advanced configuration, because the data throughput of HDD is huge in that case. Multi-channel search in client and server are the same except their paths. In client, they are in local; in remote search, it searches among the record data in server in the local network.
3.4 Capture picture

Click capture button to capture a display picture. When one is captured, there will display a dialog interference asking you to input a file name. After you press confirmation, you will be asked to input the path.
*Note: the size of the image is that of the playing window.

3.5 Create clip file

Click button , there are three items to be selected as below.

3.5.1 Create file clip

Press to create file clip.
【File list】 Select a file and double-click it (Figure3— 4), this file will be played. Information of the playing file. Including begin time, end time, file size, resolution, frame rate etc.

【Play control button】 User can press and drag slider on button to control the player time.

【Select Camera】 Change a channel conveniently.

【Save path】 Select save path of clip file.

【Beginning and stop position setup】 Press to set the beginning position and end position of the file, the file attribute on the left will show the size of the file.

【Save file】 Press to ensure the beginning and end of the file, click it to save the file.

【Voice control】 Click to control voice, press it to clear voice.
3.5.2 Backup by time:

【Backup Path】Select path for the backup file, User can backup record file to CD.
【Backup Camera】Select the backup camera. User can select more than one camera once,
【Select begin time】【Select end time】Select the backup files' begin time and end time.
【Unite File】select unite file enable or disable. if select disable, the record file will not unite. If select enable, all record files will be united. and you can set the Max. value of the united file.
【Backup File Max Value】Max. value of the united file. If the file’s value big than this value, it will be splited. you can check the file’s value use button it’s value will be showed in
【Backup Date Size】Show the size of the backup file. If user backup record file to CD directly, the date size should not more than 650M.

NOTE: If user backup record file to CD directly, the system disk volume’s(C volume in general) free space should not less than twice of the backup date size. Because system volume will be used buffer area when burn CD. For example, if the backup date size is 450M, so, the system volume’s free space should more than 900M.
The process of burn CD:
1. Select the backup path is CD-ROM, select the camera and time.
2. Check the backup file value.
3. Backup the file to the temporary file in the last volume if there have enough free space, otherwise, write backup file to the last second volume.
4. Write backup file to buffer.
5. Write CD.

**Figure 3— 7**

3.5.3 View Backup file

![Figure 3](image)

- **【Save Path】** Select path of the backup file.
- **【Select channel】** Select channel.
- Select one from File List and double click it, this file will be played. The united file is named by "date + begin time" and "date + end time".
- Capture a picture.
- Burn CD
Figure 3—9

Area ①: File directory.
Area ②: File list.
Area ③: The File directory and list of will be burned to CD.
Icon ④: Create a new directory in area ③.

- **Add All**: Add all the file from area ② to area ③.
- **Add File**: Add selected file from area ② to area ③.
- **Del File**: Delete selected file from area ③.

【Burn CD drive】 Select CD-ROM driver.
【Volume label】 Set the CD’s label.
【Total file size】 Show the size of all files will be burned to CD.
【Burn CD】 When you finish your setup, click this button will write file to CD.
3.6 Search captured picture

Click [ ] to enter the search window:
a. Directory list.

b. File list.

c. Name and path of current picture. If you want to save the reworked picture in another file, you can change its name and path here, with bmp and jpg as suffix. Then click the button.

d. Save the reworked picture.

e. Function buttons of picture disposal.

f. When the result of disposal is not good click it to the default.

g. Print picture, when the image is wider than 400 pels, it will be printed smaller. On the other hand, it will be printed bigger.

h. When it’s bright, with the mouse moving, part of the picture will be enlarged.

i. Delete current file or delete all files.

3.7 Fast search

Click this button to show the date (Figure3—12):

The blue dates contain recorded data. The green date is the current date. The gray dates signify no data. Only those blue ones can be selected and when they are selected the camera window will appear automatically to show which cameras has record data.

Click or to change month and year of search data.
3.8 Camera status

Click button to show the cameras state. If the number is bright, it means there has record data in this channel.

1. Synchronic play

Click button to synchronize all playback channels time.

2. Smart search

(1) Function introduction:

This function allows users to draw a zone on a video image and do a search for any motions, missing objects, or unattended object events occurred in that zone. It can help you find recorded video you are interested.

Notice: Smart Search veracity is decided by sensitivity value in Motion Setup

(2) Operation and example

Press button, then select a search area (Figure3—14), the system will play all motion occurred within this area from previous 3 seconds to next 3 seconds when the motion occurred. Pressing this button again will end smart search.
E.g.:

![Figure 3—14](image)

1. There is a telephone on the desk (Picture ①).
2. But it disappeared now (Picture ②).
3. If you want to know where the telephone is, you can select this area on the image to do a smart search when playback the video (Figure 3—15).

---

**Figure 3—15**

Note:
1. Press synchronic button while smart search is running, system will end smart search.
2. The sensitivity of the smart search is same as motion detection. If you set a high sensitivity, system will search even that there is no motion in specified area. Contrarily, if you set a low
sensitivity, it is possible that system will not search when there is some small range motion in specified area. So you should set the sensitivity according to the surroundings.

3.9 Show files

Click this button to show all the files of current cameras.

![Figure 3-16](image)

- Last frame, Start, Pause, Stop and Next frame
- First frame of that day, Last min., Next min. and Last frame of that day.
- Image zoom out. Press this button, single click the left mouse button on an image, quarter of the image will be enlarge. By thereafter, single click right mouse button on the image, it will resume the normal.
- Adjust the voice, click the button to clear the voice.
- Adjust playing speed, click the button to resume normal playing speed.

*Note:
1. It is not suggested that multi-channel (more than 10 channels) record and playback coinstantaneous unless your PC has a wonderful configuration, because the data throughput of HDD is huge. Multi-channel search in client and server are the same except their paths. In client there are local and lan search. In lan search, it searches among the record data in the local network of server.
Chapter 4 IE client

The client user can look through the video by Internet Explorer. The default web server port is 80; if change other port, user should add the port number in Client PC when visit the client video by Internet Explorer. E.g: http://192.168.0.119:1280.

4.1 Functions of IE Client

1. Video display and video storage;
2. Audio input;
3. Searching and playback video image locally or remotely;
4. Control PTZ and speed demo remotely;

4.2 Main interface

When you connect foreside server successfully, you should input valid User ID and password in left up of the interface (Figure 4-1) to acquire rights to play video and other operations.

![Figure 4-1](image-url)
4.2.1 Connection/Record status

![Figure 4-2: Connect/Record Status Icon](image)

This icon (Figure 4-2) indicates the current connection and their record status:
- Gray: Not connected;
- Navy blue: Connected with no record;
- Green: Connected with record.

You can change the record status by pressing corresponding number button or change status of all connections at the same time by pressing the button.

4.2.2 Partition mode

You can set the partition mode from the drop-list file on the right up of main interface. It has follow partition mode: 1,4,9,16 partition mode.

4.2.3 Connection operations

You can connect single or all cameras by pressing the button; and you can disconnect single or all cameras by pressing the button.

4.2.4 Quit program

Press the button to shut down the IE Client.

4.3 Local search

Press the button to enter local search (Figure 4-3):
1. Display setup and data information

In this area, you can select display partition mode, date, video channel and its video file named according to time.

2. Playing operation area

In this area, you can operate video playing:

【Video-playing time adjustment】Press and drag slider bar to adjust video-playing time

【Information display panel】Display current window name, camera name and record data information.

【Playing-control buttons】: Play, Pause, Stop.
4.4 Remote search

Most functions and operations of Remote search are same as Local search; different feature is that remote search added download feature (Figure 4—4).

![Figure 4—4](image)

When you playback, you click download button, system will save video of current channel you selected, and after save finish one file, it will popup prompt refer to the position of saving.

4.4.1 Fast download record data

In the playback mode, select one camera that has record data, open file list panel, select one record data package, and click download button, the selected data package will download fast.
NOTE:
When user use IE client to visit DVR server. If connect successfully, there will appear four partition blue window. If connect unsuccessfully, the reasons possibly are:
①. The Web server port has been used by other programs.
②. Your computer didn’t download the player plug normally. The reason may be the jurisdiction of your computer is too high, or your computer has plug filter.

4.5 PTZ control

Most functions of PTZ control are same as PTZ Control panel in PTZ Control panel.
Chapter 5 Appendixes

5.1 Appendix A: Fast key reference

Please refer to shortcuts keyboard setup

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑</td>
<td>Up</td>
</tr>
<tr>
<td>↓</td>
<td>Down</td>
</tr>
</tbody>
</table>
| ←   | Left(in the status of preview)  
     | Play last frame(in the status of instant playback) |
| →   | Right(in the status of preview)  
     | Play next frame(in the status of instant playback) |
| Home| Zoom-    |
| End | Zoom+    |
| Insert| Focus- |
| Delete| Focus+ |
| S   | Save preset |

This color key denotes PTZ control.

This color key is other function control.

Figure A—1
G. Enter

Call preset

C、—、Num0-9

Presets Control Operation

F3-F8

Tracking all presets, interval is 3-8 Sec of every preset.(F3 denotes 3sec,F4 denotes 4 sec,F8 denotes 8 Sec etc.)

Other controls:

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>System Help</td>
</tr>
<tr>
<td>Tab</td>
<td>Switch the camera channel</td>
</tr>
<tr>
<td>Page Down</td>
<td>Next screen</td>
</tr>
<tr>
<td>Page UP</td>
<td>Previous screen</td>
</tr>
<tr>
<td>F9</td>
<td>All cameras recording 30 Sec emergency</td>
</tr>
<tr>
<td>F11</td>
<td>Zoom in/out the single camera view</td>
</tr>
<tr>
<td>F12</td>
<td>Switch to Full screen mode (Equivalent to pressing space key except Instant Playback mode)</td>
</tr>
<tr>
<td>Ctrl + 0</td>
<td>Enter local playback</td>
</tr>
<tr>
<td>Ctrl + 1-9</td>
<td>Instant playback minutes</td>
</tr>
<tr>
<td>Shift + 1-8</td>
<td>Select screen partition 1,4,9,16,25,36,49,64</td>
</tr>
<tr>
<td>WIN+ Z</td>
<td>Minimize the Main System window</td>
</tr>
</tbody>
</table>

5.2 Appendix B: Audio preview

First, connect the card use the cable, as follows:
5.3 Appendix C: Update drivers of compressed card

If you first install the card or upgrade the DVR software, you should install or update the card driver. the steps as follows:
1) Find the driver folder, and run “driver Install” program.

![Image 1](image1.png)

*Figure C—1*

2) A dialog will show on the screen.

![Image 2](image2.png)

*Figure C—2*

3) Click “Install or Update Driver” button, a prompt UI will inquire you, click “yes”, the program will continue the installation.

![Image 3](image3.png)

*Figure C—3*

4) If the driver installed successfully, the program will show you a prompt, click OK, the
install driver program finished.

![Driver installed successfully!](image)

*Figure C— 4*

5.4 Appendix D: How to use “Copy File” folder.

In installation CD, there named “CopyFile”

![CopyFile directory](image)

*Figure D— 1*

If you want to replace some files in installation directory, you can copy new files into “CopyFile”, when you finished the installation, the new files will replaced the old files.

![CopyFile file list](image)

*Figure D— 2*

If you want to replace some files in other directory of installation directory, you can create the same directory in “CopyFile” folder with the installation directory.

![CopyFile file list](image)

*Figure D— 3*

Thus, when you finished the installation, the all files which in “CopyFile” will replace the old files.

**Note:** If you replace the image, the new image’s size and name should be same with old image.
5.5 Appendix F: Frequent Asked Questions

1) IE client does not visit the server.
   Possible reasons: The Web Server port was shielded or have been used by other program.

2) Install one card in a PC can run the server program, but install more cards can’t run the server program.
   Possible reasons: PC Motherboard compatibility issue, please change other brand intel chipset motherboard and display card.