

AVerMedia®

Remote iMatrix User Manual



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MANUAL CONVENTIONS

The following conventions are used throughout this manual.



The caution symbol is intended to alert the user of the importance of the particular installation and operating instructions. Failure to comply may damage the system.



The information symbol is intended to provide additional information for the purpose of clarification.

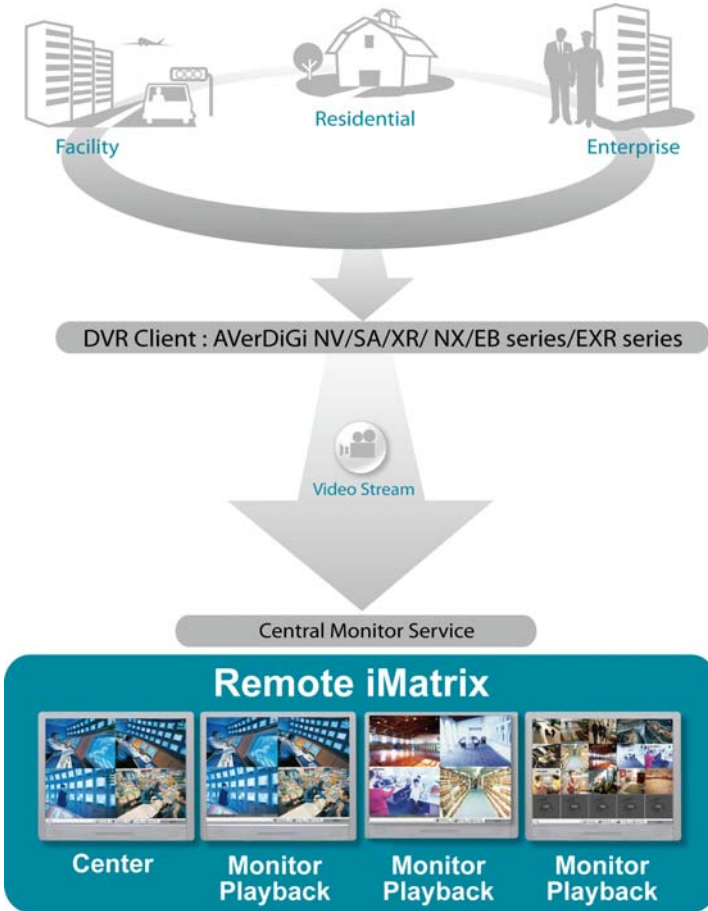
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Chapter 1 Introduction

The AVerMedia® iMatrix is a monitoring system that enables user to monitor DVR servers through an internet connection. iMatrix can monitor and playback the video of remote DVR servers.

i iMatrix playback doesn't support on EB series.



The iMatrix program supports Single, Dual, Triple and Four monitor displays. Please refer to the following chapter to setup multiple monitors.

1.1 Dual Monitors Setting

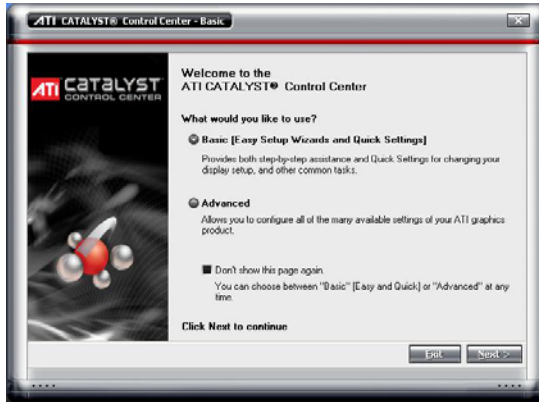
Video configuration is different for each different VGA chipsets. Please follow the steps below to setup the dual monitors display.

1.1.1 Graphic card with ATi chipset

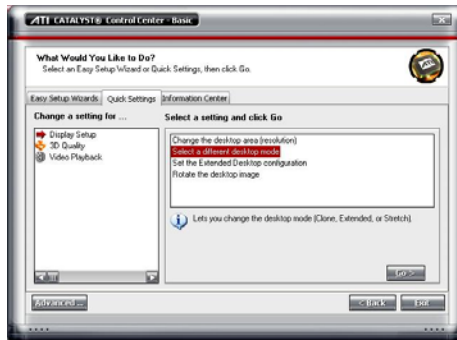
1. Enter the ATI Catalyst Control Center, user can click the short-cut or right click on the screen.



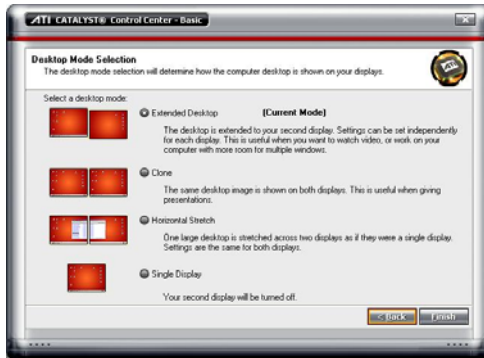
2. There are two modes to select — Basic and Advanced.



3. If user selected Basic mode, press the **Quick Settings** tab. Then select the **Select a different desktop mode** and click **Go**.



4. Select the **Extended Desktop** and then click **Finish**.



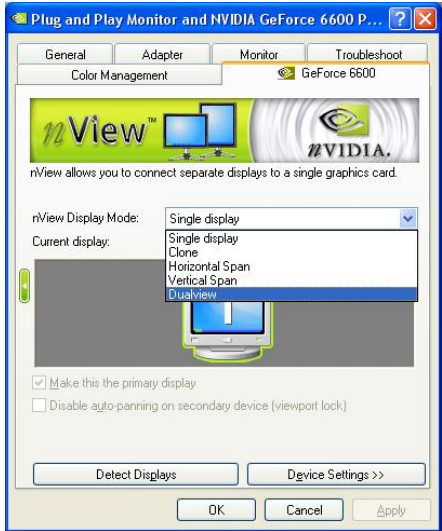
5. If user selected the Advanced mode, click the **View** button.
6. In **Display Manager**, right click on the second Display on the right side and select **Extend Main onto monitor**.



7. Adjust each monitor resolution to 1024x768 , 1280x1024 , 1920x1200, 1440x900, or 1680x1050.

1.1.2 Graphic card with NVIDIA chipset

1. Click the NVIDIA nView, and select the **Dualview** mode.
2. Adjust each monitor resolution to 1024x768 , 1280x1024 , 1920x1200, 1440x900, or 1680x1050.



3. To review if the display mode is correct, you can check the task bar. The task bar will show on the first monitor only.



Monitor 1

Monitor 2

Chapter 2 Software Installation

This chapter describes how to install the iMatrix software.



Before installing the software, make sure the Windows OS patches are up to date and the video graphic card driver is up to date.

2.1 Minimum System Requirements

First, must verify if the computer meets the minimum system requirements.

- CPU : Pentium® 4 3.0GHz or above recommended
- OS : Windows 2000 / XP Professional / Vista
- RAM : 512MB for dual display, 1GB for Quad display
- Hard disk : 120GB or higher
- Media : CD-ROM drive
- VGA : 32-bit high color SVGA graphics card with 128MB video memory and DirectDraw® / YUV Rendering Capability
- Audio : Sound card and speakers
- Internet capacity : 10/100 Base-T Ethernet card or Gigabit Ethernet

2.2 Installing the iMatrix Software in Windows 2000/XP/Vista

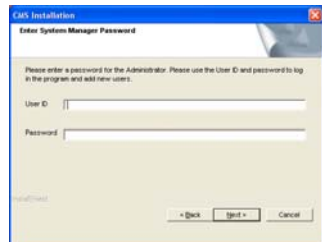
1. Place the installation CD into the CD-ROM drive then click **Install Web Tools**.




2. Please carefully read the license agreement. Click **Yes** to accept the agreement.




3. Enter the administrator ID and password and click **Next**.



4. Select the install destination path if user wants install in different path beside default. Click **OK** and follow the on-screen instructions to complete the installation.
5. User may now run the iMatrix program. To run the application, click  on your PC desktop or click **Start > Programs > iMatrix > iMatrix**

Chapter 3 Using the iMatrix

3.1 Running the iMatrix Software

To run the application, double-click  on your PC desktop or click **Start > Programs > iMatrix > iMatrix**.

For security purposes, iMatrix requires user to enter a User ID and Password before they can be accessed. When the Authorization dialog box appears, key in your User ID and Password. (If this is the first time, enter the one you have registered when installing the software.)




3.2 Using the iMatrix Application

iMatrix can remote monitor and playback recorded video of DVR servers and receive matrix events from remote DVR servers.




- Click right mouse button and drag on screen can enlarge viewing. Click right mouse button again to back to normal view.
- Press F1 will display DVR information on upper right corner of channel screen. Press F1 again to hide.

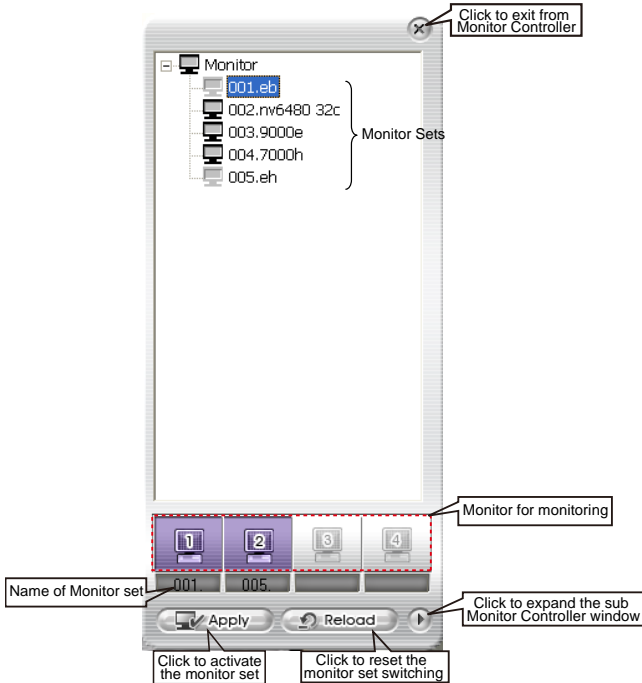
Name	Function
(1) Exit	<p>Call up the Logout dialog box.</p> <p>In the logout dialog box, you may do the following:</p>  <ul style="list-style-type: none"> - Click Exit to close the iMatrix program. Only the administrator is authorized to access this command. - Click Login to sign-in as a different user. - Click Minimize to reduce the iMatrix to taskbar button. - Click Cancel to close the Logout dialog box.
(2) Setup	<p>Configure the iMatrix settings. Only the administrator is authorized to access this command. (see also Chapter 4)</p>
(3) Monitor Controller	<p>Call out monitor set selection window to select the monitor set for monitoring (see also Chapter 3.2.1).</p>
(4) PTZ	<p>Call out PTZ control panel (see also Chapter 3.2.2)</p>
(5) Audio	<p>Enable/Disable audio play</p>
(6) DVR Name bar	<p>Display the name of monitor DVR</p>
(7) Preview icon	<p>The icon indicates the channel is in preview status.</p>

3.2.1 Using Monitor Controller

User can use Monitor Controller to switch different monitor set for monitoring and add/delete the channel in monitor set.

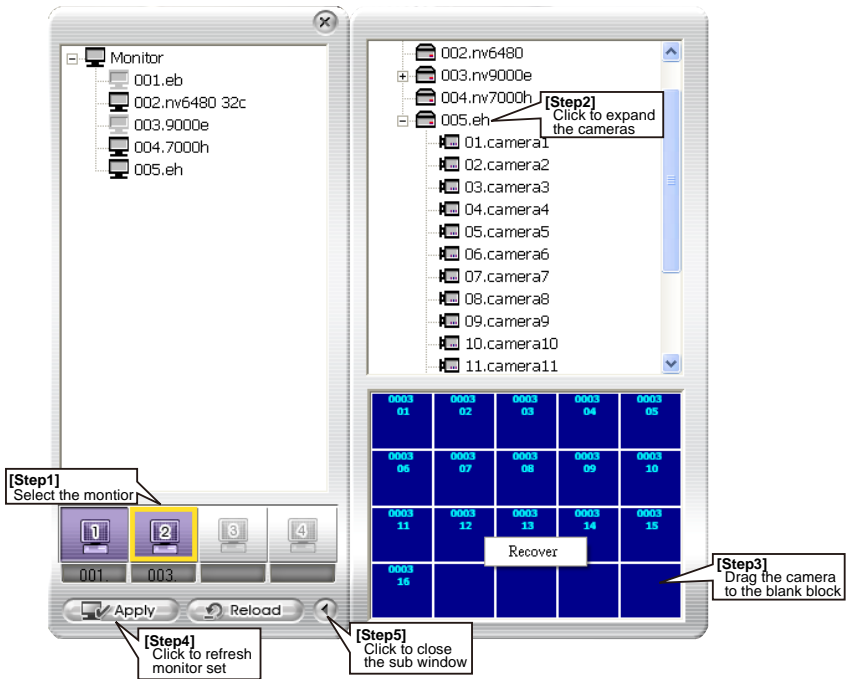
- i** User needs to create monitor set in order to using Monitor Controller. To create monitor set, please go to Setup > Camera (see also [Chapter 4.3 Camera setup](#))

1. Click 
2. The Monitor Controller window will show up as below shown:



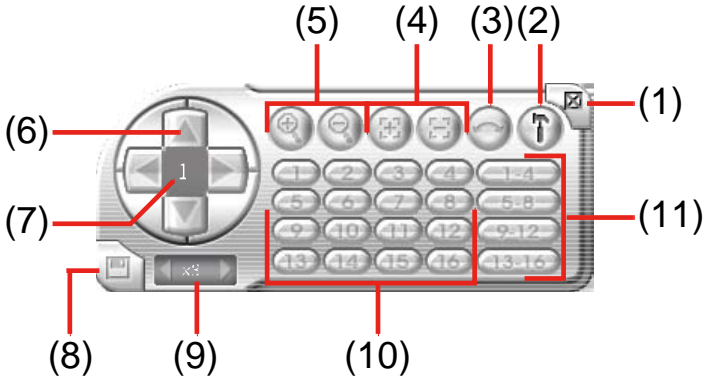
- i**
- Right-click on monitor set and select **Recover** to un-select the monitor set.
 - The monitor set is gray that indicates the monitor set is selected and been monitored
 - The monitor 1 ~ 4 are purple that indicate the monitor is monitoring.
 - Right-click on monitor and select the **Recover** to reset the monitor.

3. Drag the monitor set from monitor list to the monitor (1 ~ 4) and click **Apply** to activate it. To reset the monitoring group, click **Reload**.
4. To configure monitor set, click arrow button to expand the sub Monitor Controller window.
5. Select the monitor. The DVR servers are included in the monitor set will list on sub Monitor Controller window. The lower part of window display all monitored channels in the monitor set.
6. To add new channels, click the DVR server to un-fold the available cameras. Drag the camera to the blank channel block that has no channel number and name display.
7. Click **Apply** to refresh the monitor set.
8. To delete channels from monitor set, right-click on channel and select **Recover**.
9. Click arrow button to close the sub window.



Right-click on channel block and select **Recover** to delete the channel form monitor set.

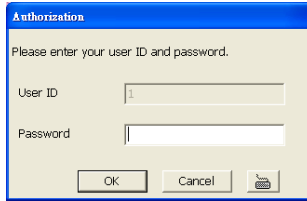
3.2.2 Familiarizing the Buttons in PTZ Camera Controller



Name	Function
(1) Close	Exit PTZ camera controller.
(2) Setup	Select PTZ cameras.
(3) AutoPan	Operate the PTZ cameras automatically based on the selected camera group preset position number.
(4) Focus +/-	Adjust the focus manually to produce clear image.
(5) Zoom +/-	Zoom in and out the image.
(6) Direction buttons	Adjust and position the focal point of the PTZ camera.
(7) Camera ID pane	Display the PTZ camera number that is being operated.
(8) Save Camera preset position	Save the PTZ camera preset position number. Select the camera and click the preset position number and save it.
(9) Camera lens speed controller	Adjust the moving speed of the PTZ camera lens.
(10) Camera preset position number	Move the PTZ camera to the preset point.
(11) Group AutoPan	Select to automatically operate PTZ camera in group.

Chapter 4 Customizing the iMatrix System

In the iMatrix application, click the  button to customize the iMatrix system. In the Authorization dialog box, enter the administrator User ID and Password.



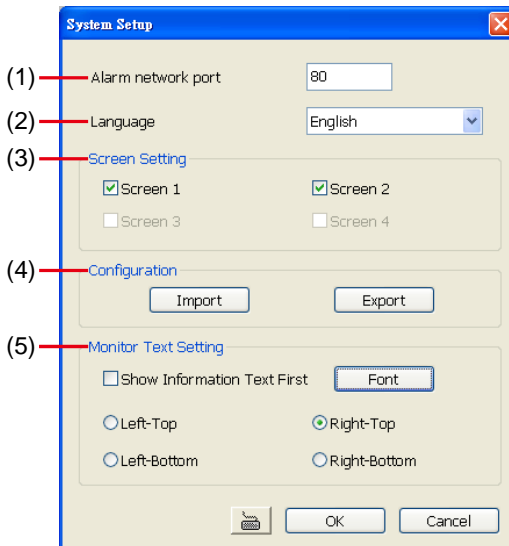
The Authorization dialog box has a blue title bar with the text "Authorization". Below the title bar, it says "Please enter your user ID and password." There are two input fields: "User ID" and "Password". At the bottom, there are three buttons: "OK", "Cancel", and a help icon.

When the iMatrix configuration setup selection appears, select and click the buttons you want to change the setting.



4.1 System Setting

In the System Setting dialog box, click **OK** to accept and start to reload the new setting, and **Cancel** to exit without saving.



The System Setup dialog box has a blue title bar with the text "System Setup" and a close button. It contains several sections:

- (1) Alarm network port: A text box containing "80".
- (2) Language: A dropdown menu showing "English".
- (3) Screen Setting: A group box containing four checkboxes: "Screen 1" (checked), "Screen 2" (checked), "Screen 3" (unchecked), and "Screen 4" (unchecked).
- (4) Configuration: A group box containing two buttons: "Import" and "Export".
- (5) Monitor Text Setting: A group box containing a checkbox "Show Information Text First" (unchecked), a "Font" button, and four radio buttons: "Left-Top", "Right-Top" (selected), "Left-Bottom", and "Right-Bottom".

At the bottom, there are three buttons: a help icon, "OK", and "Cancel".

(1) Alarm Network Port

Select a port for receiving alarm video from DVR server. Any network service port can be assigned as long as the port doesn't conflict with current network service.

(2) Language

Customize the system to display the tool tips and dialogs based on the selected language. By default the set language is in English.

(3) Screen Setting

Enable/disable monitor for monitoring. Only the monitors that connect with iMatrix system are available for enable/disable.

(4) Configuration

Import / Export the iMatrix system configuration

(5) Monitor Text Setting

Enable/disable the camera information display and display position on the monitor screen.

Show Information Text First: Enable/disable the DVR information display on monitor screen. Click **Font** to select the text font and colour.

4.2 DVR Setup

Add the DVR servers for monitoring.



iMatrix only supports 16 DVR servers

4.2.1 To Add and Remove DVR Server

1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **DVR**.
4. In the DVR Setup section, click **Add** to insert, **Delete** to remove and **Edit** to modify DVR server setting.

DVR	Name	IP/Domain Name	Port	User	Status
1	90	192.168.153.90	5550	1	NV

5. To continue adding a DVR, in the text box, enter the name, IP/Domain, Login User, Password, Confirm Password of the remote DVR server.
6. Select the **Video Quality** for video display on the iMatrix system monitor screen. When the video quality is high, user can enable **Show POS message** box and the POS message will also display on the iMatrix system monitor screen.

Name

IP/Domain Name

Port

Login User

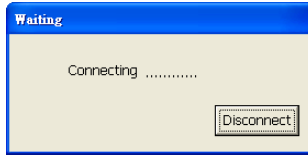
Password

Confirm Password

Video Quality ?

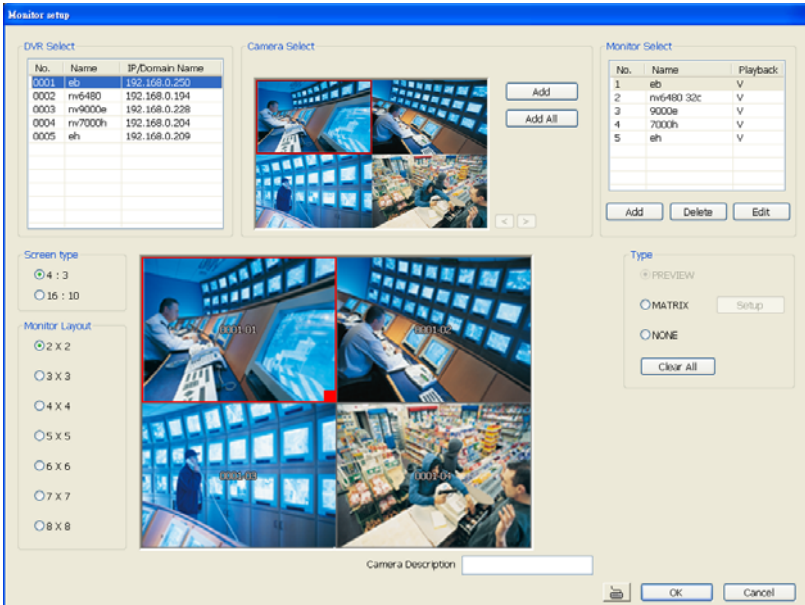
Show POS message

7. Click **OK** to accept the new setting and **Cancel** to exit without saving the new setting.
8. And then, the iMatrix system will try to connect with DVR server. If the connecting time takes too long, user can click **Disconnect** button to cancel the connect action.

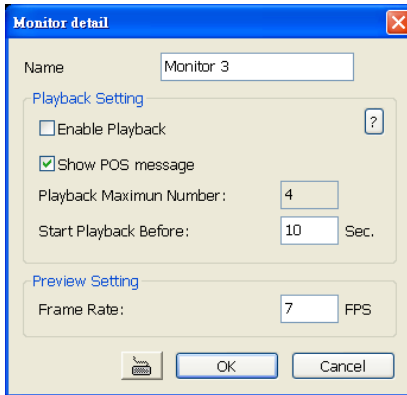


4.3 Camera Setup

Select the camera from different DVR servers in order to monitor in one group. The selected cameras will be played on **Monitor** screen (see [Chapter 3.2](#)).



1. Click **Setup**.
2. In the Authorization dialog box, enter the administrator User ID and Password.
3. Click **Camera**.
4. Click **Add** to create a monitor set. The monitor set can be added up to 1000 monitor set. Click **OK** to save the setting.
 - **Name:** Enter a name for the monitor set (12 characters only).
 - **Playback Setting**
 - **Enable Playback:** Enable/disable to allow playback on monitor screen.
 - **Show POS message:** Enable/disable display POS information on monitor screen.
 - **Start Playback Before:** Enter the time (sec.) when start playback will start from the present time backward the time user has setup.
 - **Preview Setting**
 - **Frame Rate:** User can set the camera transmitting **Frame Rate** for preview, but the real transmitting frame rate depends on camera setting.



5. After the Monitor set has been created, select the DVR server. And then the camera channels of the DVR server will display on the **Camera Select** window. User can combines different cameras from different DVR servers as a monitor set. And all camera channels can be selected by different Monitor set raptly. Click < and > to go back previous and go to next camera screen.
6. User can depend on the monitor size to select the screen type – **4:3** (regular screen monitor) or **16:10** (width screen monitor). The 4:3 and 16:10 screen type support different monitor layout.
7. Select the camera that user wants to add, and then click **Add** button. To add all the cameras, click **Add All**. The selected camera channel will be added to **Monitor Layout** window. User can add up to 64 cameras in 4:3 screen type and 80 cameras in 16:10 screen type. To remove the camera from the **Monitor Layout** window, select the camera and right-click to select **Recover**. To delete all cameras, click **Clear All** button. User can enter a description for a channel. Click a camera in **Monitor Layout** window and enter the description in **Camera Description**. The camera description will display on the channel of the monitor screen.

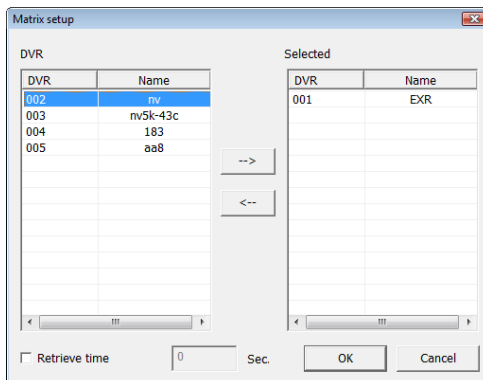


User can drag the camera channel to Monitor Layout window without using **Add** button.

8. In Monitor Layout window, user also can set the channel to receive the alarm events from DVR server.
 - **Matrix:** set the selected channel to receive and display the alarm event from selected DVR servers. Click **Setup** to select the DVR servers. Enable the **Retrieve time** to set a period time (0 ~ 255 sec) for alarm event to display. If the retrieve time doesn't enable, the alarm event will display on screen until next alarm event come in.





On the DVR site, user need to enable and configure the matrix to send iMatrix (please refer to **Alarm Setting** of NV/SA/NX user's manual).



9. Click **OK** to save the setup. To exit without saving, click **Cancel**.
10. To delete the monitor set, select the monitor set in **Monitor Select** windows and click **Delete** button.
11. To modify the monitor set, select the monitor set in **Monitor Select** windows and click **Edit** button.
12. To viewer different monitor set, click **Monitor Controller** from iMatrix main UI and drag the monitor set to the monitor and press **Apply** button.
13. Also, user can call up the PTZ camera control panel by click **PTZ** button and select the PTZ camera to operate. The PTZ icon will be available when there are PTZ cameras in Monitor set.



- Click right mouse button and drag on screen can enlarge viewing. Click right mouse button again to back to normal view.
- Press F1 will display DVR information on upper right corner of channel screen. Press F1 again to hide.
- Click on channel to view in full screen. Press **Esc** to back to multiple channel screens.
- The  icon indicates the channel is in preview status.
- The  icon indicates the channel is in playback status.

4.4 User Setting

iMatrix supports 256 user account that includes operator and administrator account.

14. Click **Setup**.
15. In the Authorization dialog box, enter the administrator User ID and Password.
 1. Click **User**
 2. Select the Authorization Level – **Operator** or **Administrator**. User can define each operator/administrator account's authority of DVR server and Monitor set. **Only the administrator is authorized to close and customize the iMatrix system.**
 3. Enter the **Name**, **Description**, **Password**, and **Confirm password** of the account.
 4. Select the DVR servers that allow this account user to preview and playback. The DVR server with check mark means is selected.
 5. Select the Monitor set that allow this account user to view. The Monitor set with check mark means is selected.
 6. User can assign a valid date for Operator user. Select **Being Date** and **End Date** to assign a valid date for operator account. **The account only will be available during the assigned date.**
 7. Click **OK** to accept the new settings and **Cancel** to exit without saving.

The dialog box is titled "User Setting". It has two radio buttons for "Authorization Level": "Operator" (selected) and "Administrator". Below are fields for "Name", "Description", "Password", and "Confirm Password".

There are two tables for selecting allowed views:

Allowed DVR View For This User

NO.	DVR Name	Watch This DVR
1	EXR	v
2	nv	v
3	nv5k-43c	v
4	183	v
5	aa8	v

Allowed Monitor View For This User

NO.	Monitor Name	Watch This Monitor
1	Monitor 1	v
2	Monitor 2	v
3	Monitor 3	v
4	Monitor 4	v
5	Monitor 5	v
6	Monitor 6	v
7	Monitor 7	v

There is a checkbox for "Enable Valid Date Configuration". Below it are "Begin Date" and "End Date" dropdown menus, both set to "7/14/2008". At the bottom are "OK" and "Cancel" buttons.


A callout box with the text "Click to select" points to the "Watch This DVR" column in the first table.

Chapter 5 Using the Playback Function

User can playback recorded video from the remote side of the DVR server.

- i** - Playback function must be enabled. Please go to **Setup > Camera** and select the monitor set and enable the playback function (see also [Chapter 4.3 Camera setup](#))
- iMatrix playback doesn't support on EB series.








1. Double-click the preview icon of channel and the channel will start playback.

- i** The  icon indicates the channel is in playback status.



2. User can use the playback control button to operate the playback.

- i** - Click channel to switch to full screen mode for operating playback control button easily.
- iMatrix only supports 4 channel playback at the same time.

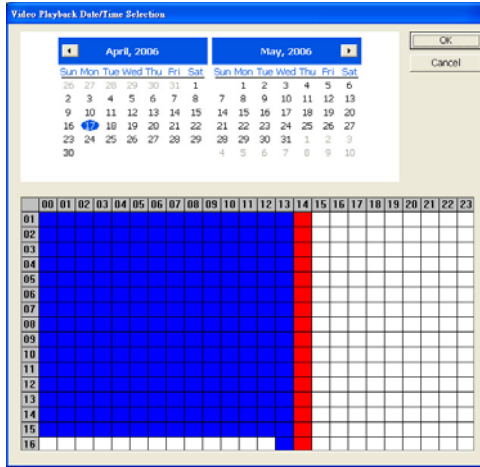
Button	Function
	Begin: Move at the beginning of video.
	Slower: Play the recorded video file at the speed of 1/2X, 1/4X, 1/8X, 1/16X, or 1/32X.
	Pause: Briefly stop playing
	Play: Play the video
	Next: Go to the next frame.
	Faster: Play the recorded video file at the speed of 2x, 4x, 8x, 16x or 32x.
	End: Go to the end of the video.

Button

Function



Select recorded vide to playback from remote DVR server hard disk. Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.



×1 10:00:01.261

Display playback speed and recoding time.

