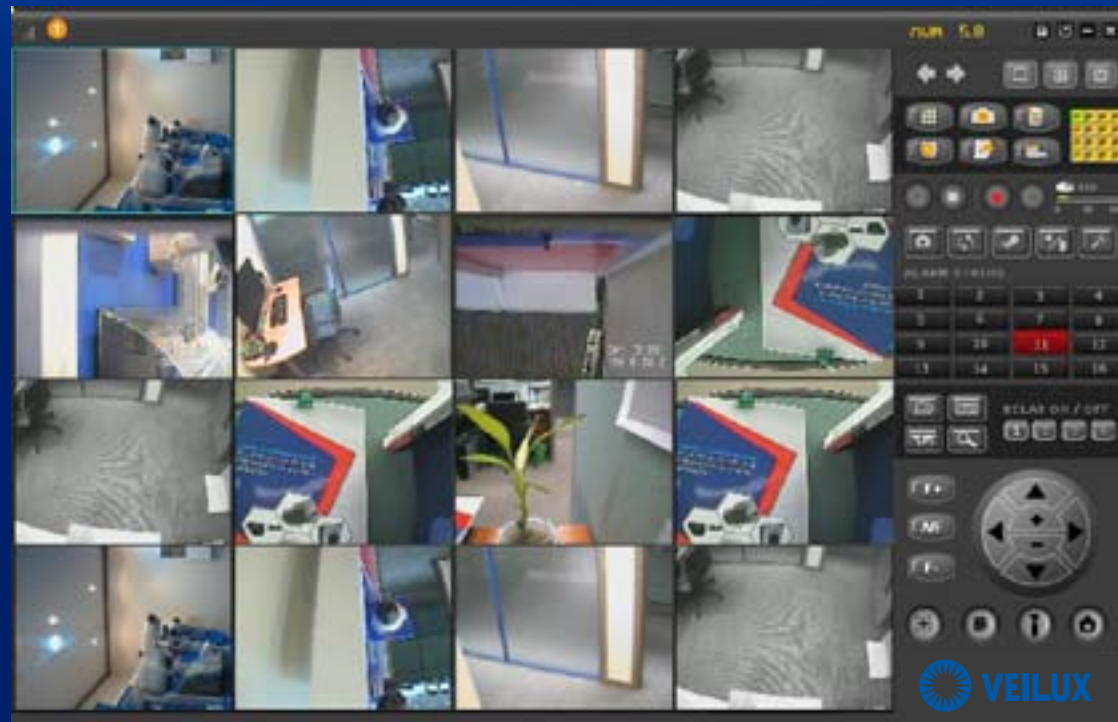


NVXR-64

User's Guide



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Appendices

- A . USB Web Keyboard System Controller





Important Notice – Must be Read Before Going Ahead.

- **Dedicated HDD is needed for the recording of the video data.**
 - Add HDD solely for recording the data or make a partition on the HDD
 - The HDD or the partition for the recording should not contain data other than the data recorded by NVXR-64.
- **Avoid following conditions to prevent System Crash or Reboot**
 - Automatic Windows Upgrade Setting
 - If you specify the time for the **automatic upgrade** of your windows operating system, the automatic upgrade can cause **reboot or system halt**.
 - Automatic upgrade of the windows operating system is not recommended.
 - Multi monitor device driver for the **NVIDIA video chip** set can cause **reboot or system halt**. We do not recommend to use video cards using NVIDIA chip sets.

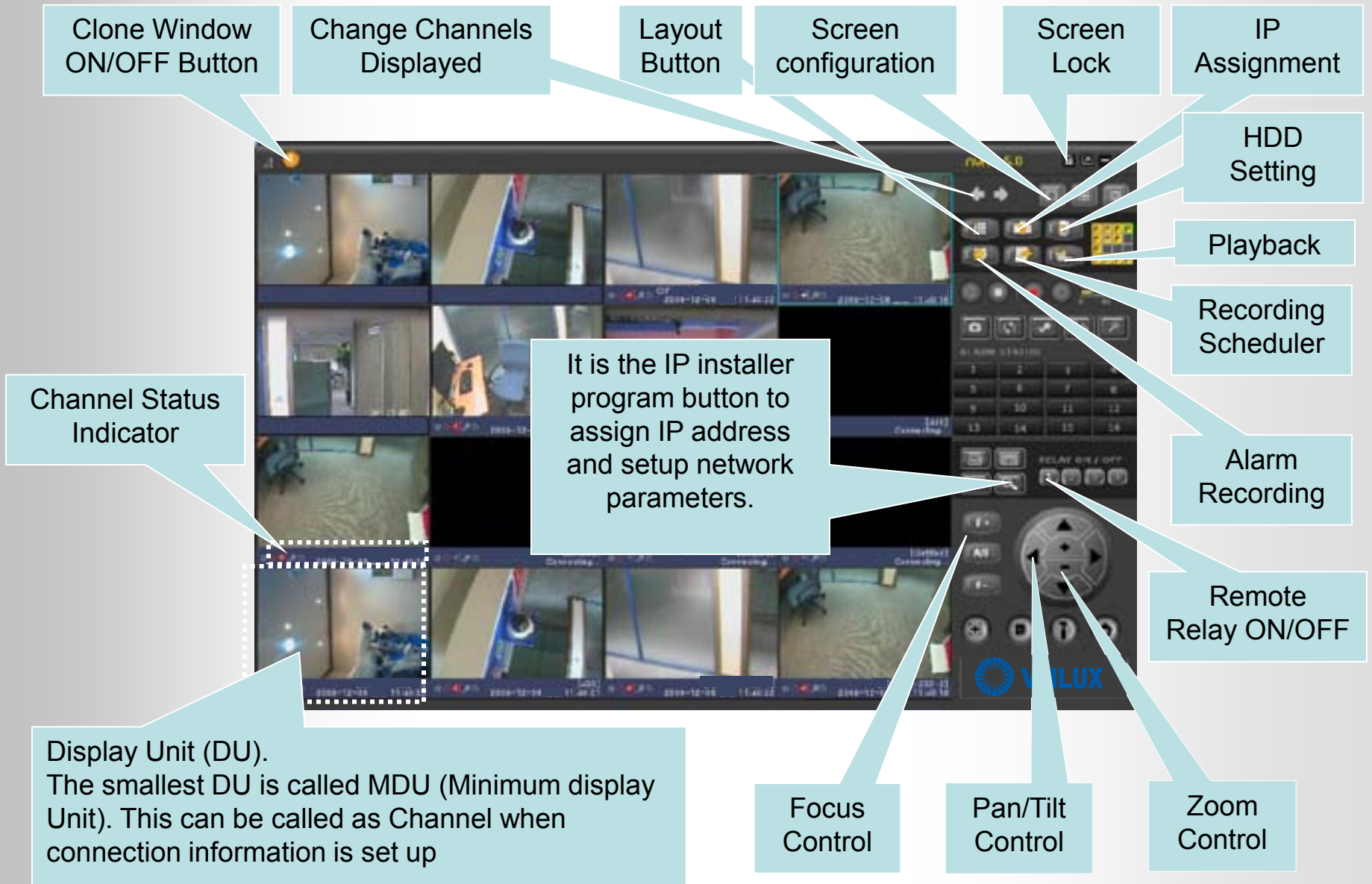
1.1. Introduction – Important Notice

- Time reference of NVXR-64
 - NVXR-64 includes the features that need time reference. NVXR-64 refers to the time set on the PC for the operation. It is very important to keep the clock of the PC precise.
 - The time which is displayed beneath each screen in white color for real time connection is the time information sent from the network camera or video server.
- Do not change the parameters related with network configuration while the NVXR-64 has a video connection with corresponding device.
- Do not run application programs other than NVXR-64 on the same PC. This can cause instability and performance degradation of the NVXR-64.

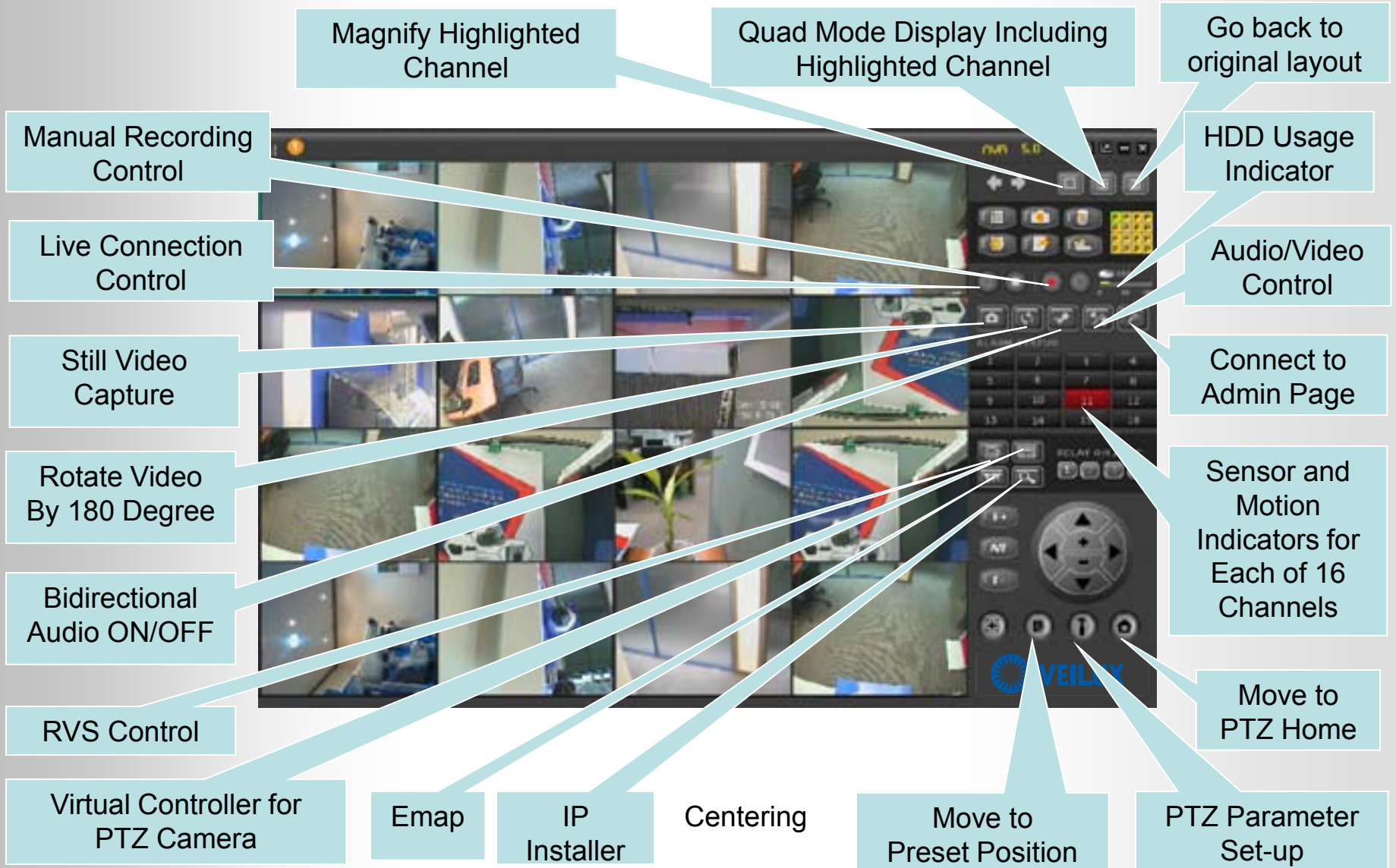
2. Installation of NVXR-64

- Install “**NVXR-64**” S/W from the CD.
- Program installation will continue automatically and after the installation a launcher icon  and  will be created on your desktop.
 
- To play the recorded video file in Event Log Window, “icfPlayer” program will be installed automatically upon the installation of NVXR-64.
- For the sake of stability and improved performance, NVXR-64 is designed to use dedicated HDDs for recording the AV data. Never use the HDD assigned for recording the AV data in NVXR-64 to save other files or programs.

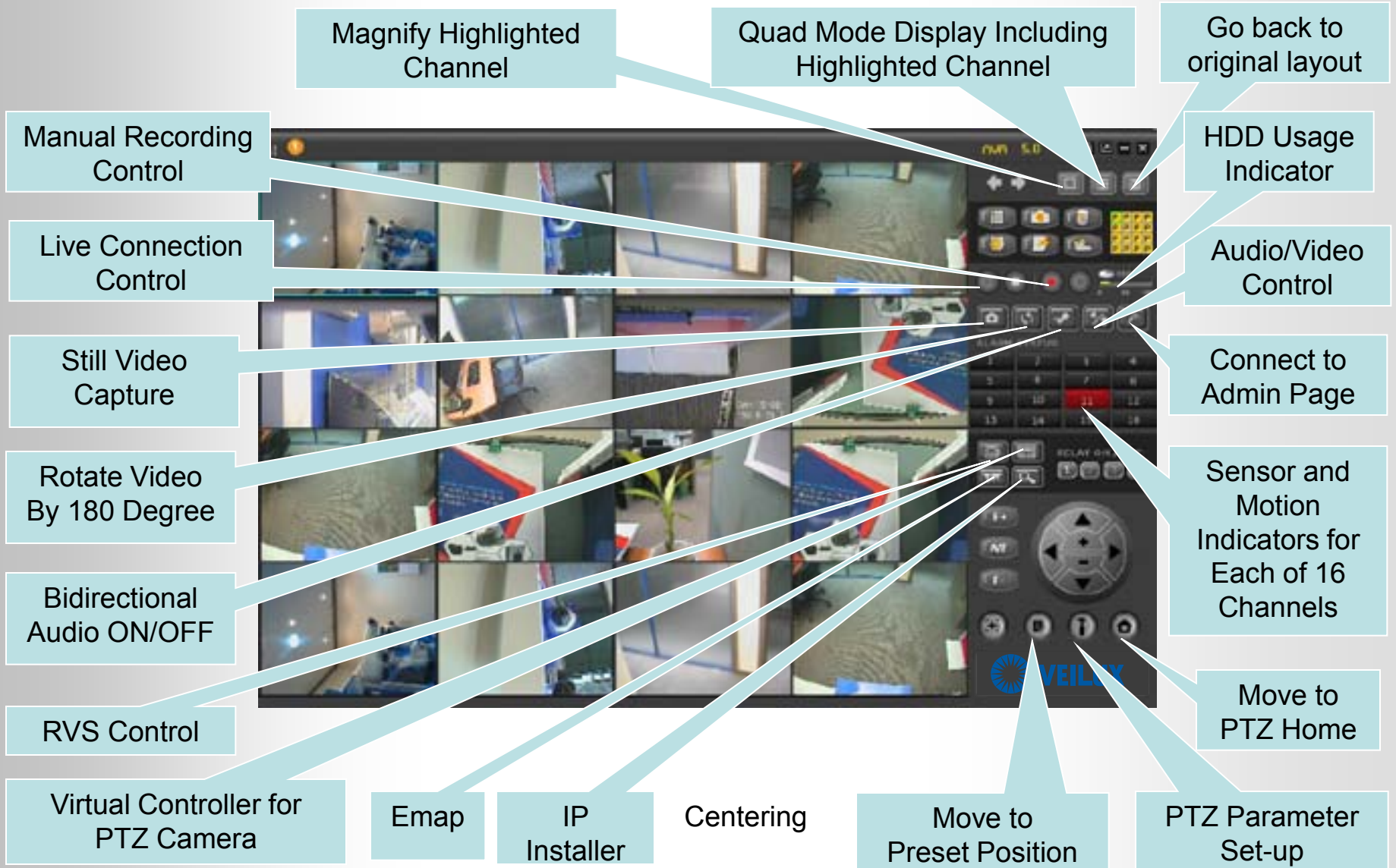
3.1. Screen – Functional Buttons and Indicators



3.1. Screen – Functional Buttons and Indicators




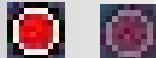














3.1. Screen – Functional Buttons and Indicators



3.2. Screen – Video Display Window

- Video display window is an area that displays video sent from the locations being monitored. The window can be divided into 16 sub-screens called Display Unit (DU). Each DU has video display area and status indicator area.
- **Channel Status Indicator**

	Indicates the presence of recording schedule. YES (), NO ()
	Recording in progress ()/ Recording stopped()
	Indicates whether audio is enabled () or Not ().
	Indicates whether bidirectional audio is enabled () or Not ().
	Indicates the presence of new event() or no new event ()
	Indicates number of connected users








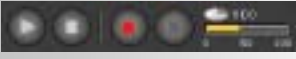









- **Messages**
 - When there is no live connection, the message area indicates whether connection information is programmed or not (Assigned/Not Assigned).
 - When the channel is in live connection, the message area displays time and channel description. The time displayed in the message area is the time set on the device sending the video. Remember that this time can be different from the time set on the PC.
 - The size of the video is displayed in QCIF to UXGA.

3.3. Screen - Quick Control Pop-Up Menu



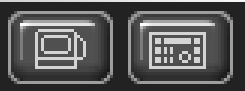













- Locate the cursor on each DU and press right mouse button to enable pop-up menu.
- Simple controls indicated on the right can be initiated for each channel.
- Move the cursor to desired operation and press left mouse button to start the operation.

Play(P)
Stop(S)
Camera Assignment(A)
Camera Admin
Start Recording
Stop Recording
Digital P I Z
View Original Size
View FullScreenSize
Video Cropping ▶
RVS Control
System Controller
PTZ Control ▶
Show Information ▶
Display ▶
UI-Lock






3.4. Summary of Buttons

		Magnify the highlighted channel to occupy entire display area.
		Display the highlighted channel and the following 3 channels in 2x2 mode.
		Return to original screen layout.
		Display former 1 or 4 channels in the display area following the settings of the display.
		Display next 1 or 4 channels in the display area following the settings of the display.
		Connect (and view) or disconnect to the entire channels which are configured.
		Start or stop recording of A/V data from all connected channels.
		Show the percentage of the HDD usage.
		Capture a still video of the highlighted channel.
		Flip the video of the highlighted channel.
		Enable/Disable bidirectional audio communication for the highlighted channel.
		A control window for the audio and video adjustment is launched.
		Connect to the admin page of the highlighted channel.

3.4. Summary of Buttons

		<p>On/Off the relay of the highlighted channel. In the text area name of the relay is shown.</p>
		<p>If the highlighted channel is Network DVR with HDD, a new window for the control of the HDD is launched.</p>
		<p>Virtual controller for controlling PTZ camera is launched. This is applicable only for corresponding device.</p>
		<p>When this button is activated, the camera center is moved to the point where the mouse click is made.</p>
		<p>Displays preset positions. If one of the list is selected, the camera moves to selected preset position.</p>
		<p>A new control window for setting various PTZ parameters is launched.</p>
		<p>Move the camera to home position.</p>
 <p>* These controls are available when the channel is equipped with proper PTZ features.</p>		<p>Move the camera to UP/DOWN/LEFT/RIGHT.</p>
		<p>Zoom In or Zoom Out.</p>
		<p>Move the focus to near position.</p>
		<p>Automatic focus adjustment</p>
		<p>Move the focus to far position.</p>

3.4. Summary of Buttons

		Screen Lock. When the screen is locked all the controls except for the display will be locked. Enter the ID and password to unlock the screen.
		Enlarge the screen to fill the monitor.
		Minimize
		Terminate the program. ID and password are required to terminate the program.

4. First Connection to Live Video

1 Install NVXR-64 and connect your PC to the network.

2 Set-up IP information for the connection

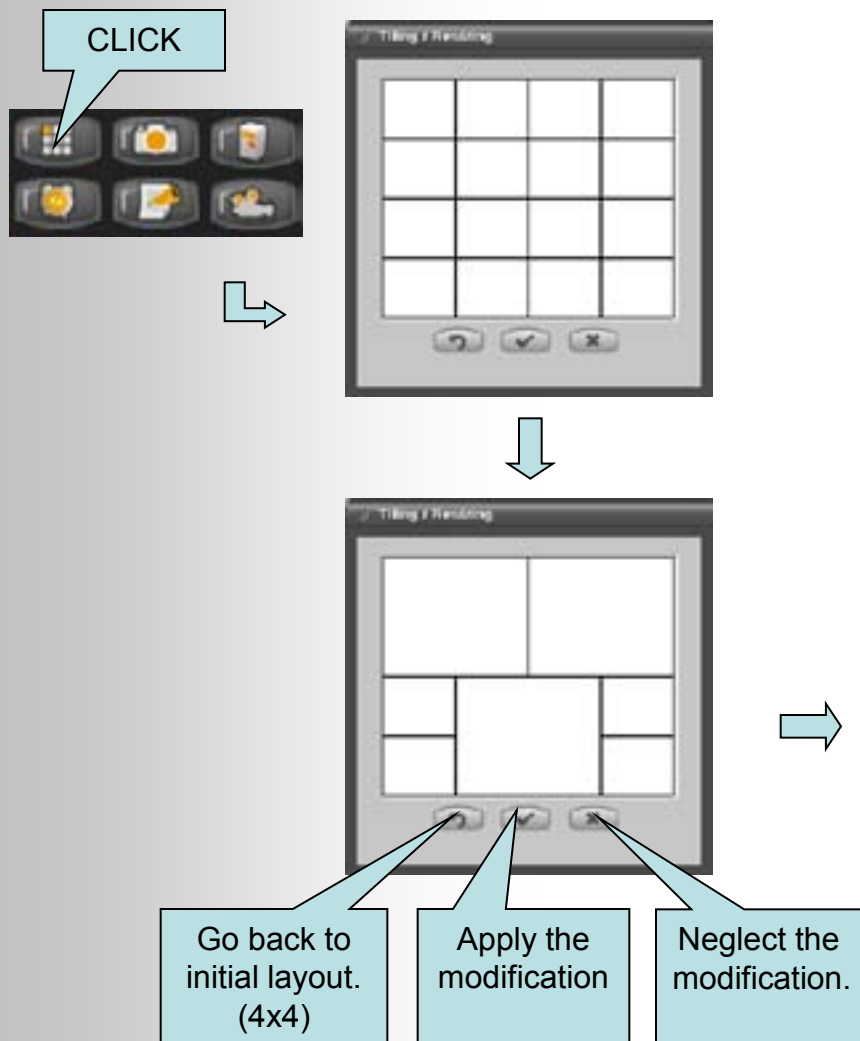
3 Click on Play Button.

4 Example of live connection.

5 Refer to the remaining part of the manual for further information.



5.1. Detailed Description - Screen Layout



Combine adjacent MDUs from 4 x 4 screen to create larger Display Area (DU). Click on the corresponding MDU and move the cursor in diagonal direction while the mouse button is pressed. Release the mouse button when desired number of MDUs are merged to create a new Display Unit (DU).

Example of a screen having 7 DUs.



5.1. Detailed Description - Screen Layout

Assigning sequence numbers to the DUs.

To assign set up parameters to the DUs for the new layout, each DU is assigned with a number following the rule below.

DU at the top of the leftmost location has number 1. Number is increased as we move to the right and to the bottom. Reference position for the location is the top-left corner of each DU.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

1		2	3
		4	5
6	7	8	9
10	11	12	13

1	2	3	4
5	6		
7			
8			

1		2	
3	4	5	
6	7		

1	2	3	4
5	6		7
8			9
10	11	12	13

1		2	
3	4	5	6
7	8	9	10

5.2. Detailed Description – IP Set Up

Input parameters needed for the connection.

CLICK

Find Active Address Group

Create a new Address Group

Delete selected Address Group

Save selected Address Group

Open Stored Address Group

Multi-channel product set up button

Address Group (Address group in Green color is the selected address group)

Screen within an Address Group

Address Group which are not in use presently.

IP Address (In case of using web port other than 80, insert web port as "[IP address :PORT NUM.]".)

Channel Number for multi channel device

User ID

Password

RTSP Port number

#	Description	Address	Ch#	User ID	Password	Port
1		210.104.239.123	1	root	*****	8082
2	430	210.104.239.123	1	root	*****	8084
3		210.104.239.123	1	root	*****	8086
4		210.104.239.123	1	root	*****	8082
5		210.104.239.123	1	root	*****	8094
6		210.104.239.123	1	root	*****	8096
7		210.104.239.123	1	root	*****	8098
8	430	172.16.42.43	1	root	***	554
9		210.104.239.123	1	root	****	8094
10		172.16.42.22	1	root	****	554
11		172.16.42.22	1	root	****	554
12		172.16.42.22	1	root	****	554
13		210.104.239.123	1	root	****	8082
14	430	210.104.239.123	1	root	****	8084
15		210.104.239.123	1	root	****	8086
16		210.104.239.123	1	root	****	8082

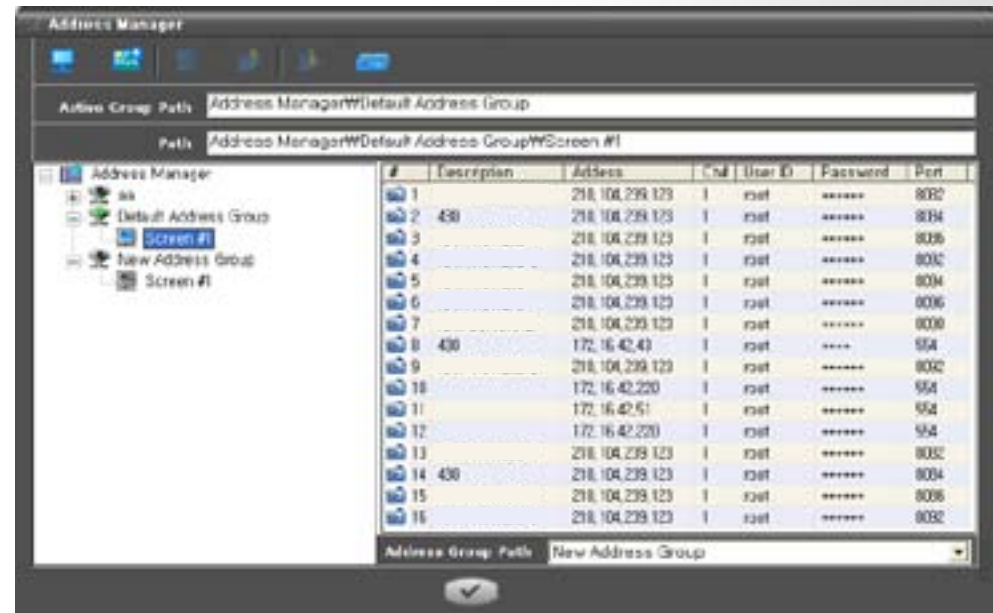
! IP can be replaced with host name when the device is registered with the DDNS server.

!! Input RTSP port number when port forwarding is enabled using IP sharing device

5.2.1. Detailed Description – IP Set Up – Selecting Address Group for the Connection

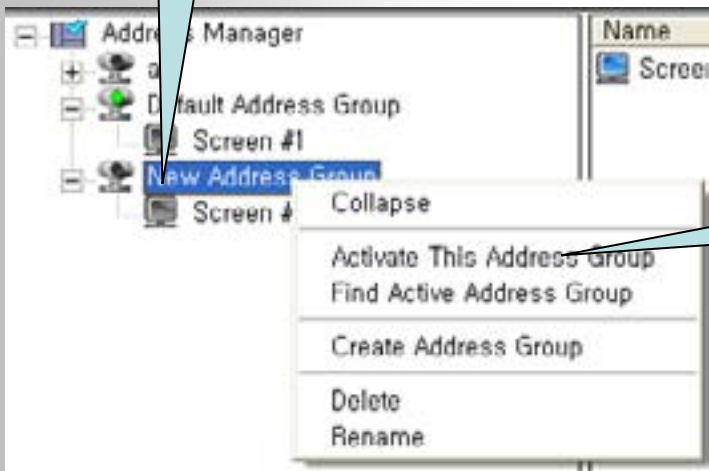
1

Locate the cursor on top of the corresponding Address Group and press right mouse button.



2

Select "Activate This Address Group" from the Pop-up menu.



3

Go back to the main screen. Stop all connection and connect again.

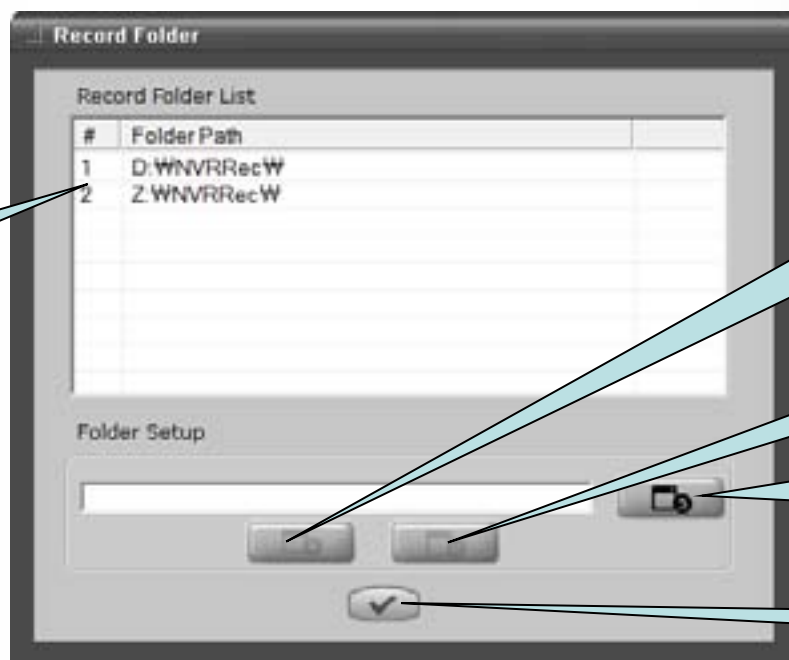
5.3. Detailed Description - Hard Disk Configuration

CLICK



- Assign or de-assign HDD to store video.
- When assigned HDDs are full, NVXR-64 system will overwrite from oldest data.

Show the list of the HDDs



Register the recording HDD.

Erase registered recording HDD.

Search for or create a recording folder.

Finish the configuration

! 1 HDD is equivalent to one folder. And the total capacity of the HDD is assigned as the size of folder.

!! Never use the HDD assigned for recording the AV data in NVXR-64 to store other files.

!!! Do not use the HDD having OS as the HDD for recording.

5.4. Detailed Description - Alarm Recording

- Selectively enable "Recording on Alarm" by each channel.

The screenshot shows the "Alarm Setting" screen. At the top left, there is a grid of six icons, with a callout "CLICK" pointing to one of them. Below this is a large L-shaped arrow pointing to the main screen. The main screen has a "Duration" field with a value of "1" and the unit "minute(s)". Below that is an "Alarm Sound" dropdown menu showing "WProgram Files\W". To the right of the dropdown is a red circular icon with a white alarm bell. Below the dropdown are two checkboxes: "Use Alarm Sound" (unchecked) and "Sound Off When Click" (checked). At the bottom of the screen are two buttons: a checkmark button and an 'X' button. A callout "CLICK" points to the red alarm bell icon. A callout "Set the duration for alarm recording." points to the "Duration" field. A callout "Assign sound for notifying alarm." points to the "Alarm Sound" dropdown. A callout "Check at this box to turn off the alarm sound upon click on the screen of corresponding channel." points to the "Sound Off When Click" checkbox. A callout "Apply the change and go back to the previous menu" points to the checkmark button. A callout "Neglect the change and go back to the previous menu." points to the 'X' button. A callout "Click on each of 16 rectangles to control recording on alarm. Enabled channel is marked as 'R'." points to a 4x4 grid of 16 pink rectangles, each containing the letter "R". Callouts "Ch 1" and "Ch 16" point to the top-left and bottom-right rectangles of this grid, respectively. A callout "Screen 1" points to the entire grid of rectangles.

•Click on each of 16 rectangles to control recording on alarm.
•Enabled channel is marked as "R".

Set the duration for alarm recording.

Assign sound for notifying alarm.

CLICK

CLICK

Ch 1

Ch 16

Screen 1

Duration 1 minute(s)

Alarm Sound WProgram Files\W

Use Alarm Sound

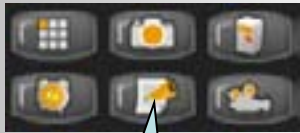
Sound Off When Click

Apply the change and go back to the previous menu

Neglect the change and go back to the previous menu.

Check at this box to turn off the alarm sound upon click on the screen of corresponding channel.

5.5. Detailed Description – Recording Schedule



CLICK

- Set recording schedule for each channel in 1 hour resolution.

- Click on corresponding time to control recording.
- Selected time zone is indicated as a box having different background color.

- Erase the programmed schedule.
- You must select channels before erasing the schedule.

- Click on the desired screen.
- Selected screen is shown in yellow color.

- Place the cursor on top of a time slot. The tool tip will show the channels having schedules on the time slot.

- Select desired channel.
- You can select multiple channels.
- Only the schedules entered after the channel selection are applied.

- Apply the change and return to the previous menu.

- Neglect the change and return to the previous menu.



- The selection is applied for single channel.
- The selection is applied for multiple channels.
- The selection is applied for all channels.

Caution :

- For addition or changing of the schedule, make sure to select channels before the operation. Only the changes made after the channel selection are applied.

5.6.1. Detailed Description - Playback Screen

The screenshot displays the 'PLAYBACK' interface. The main area shows a 4x4 grid of video feeds. The top two rows contain active video feeds from various camera angles, each with an IP address (IP: 210.104.236.123) and a time display (Time: 00:00:00:00 00:00:00). The bottom two rows of the grid are currently black, indicating no video data is being displayed for those channels.

The right-hand control panel includes the following elements:

- Device selection: D:\VRRec and D:\VVFRec.
- Time selection: Year 2008, Month 12.
- Calendar: A monthly calendar grid with dates from 1 to 31.
- Record Type Legend: Manual (blue), Schedule (green), Motion (orange), Sensor (red).
- Screen Selection: Buttons for Screen1 through Screen4.
- Filtering: Dropdowns for 'All Page', 'All Channel', and 'All Data'.
- Checkboxes: All, Multiple, Original.
- Records Table:

Type	Start	Ch	IP	Desc
<input checked="" type="checkbox"/>	19:47:22	1	210.1...	CarVe...
<input checked="" type="checkbox"/>	19:47:22	2	210.1...	CarVe...
<input checked="" type="checkbox"/>	19:47:22	3	210.1...	CarVe...
<input checked="" type="checkbox"/>	19:47:22	4	210.1...	CarVe...
<input checked="" type="checkbox"/>	19:47:22	5	210.1...	CarVe...
<input checked="" type="checkbox"/>	19:47:22	6	210.1...	CarVe...
<input checked="" type="checkbox"/>	19:47:22	7	210.1...	CarServ...

Below the table, there are checkboxes for 'Manual', 'Schedule', 'Motion', and 'Sensor'. A 'Total records: 7' indicator is present. At the bottom of the control panel are playback navigation buttons: Stop, Previous, Play/Pause, Next, and Refresh.

5.7. Detailed Description – Live Connection and Recording

Click for live connection to all channels. Connection information are programmed through IP assignment.

Click to disconnect entire live connection.

Click to record video and audio from all live connection.

Click to stop all the recording.

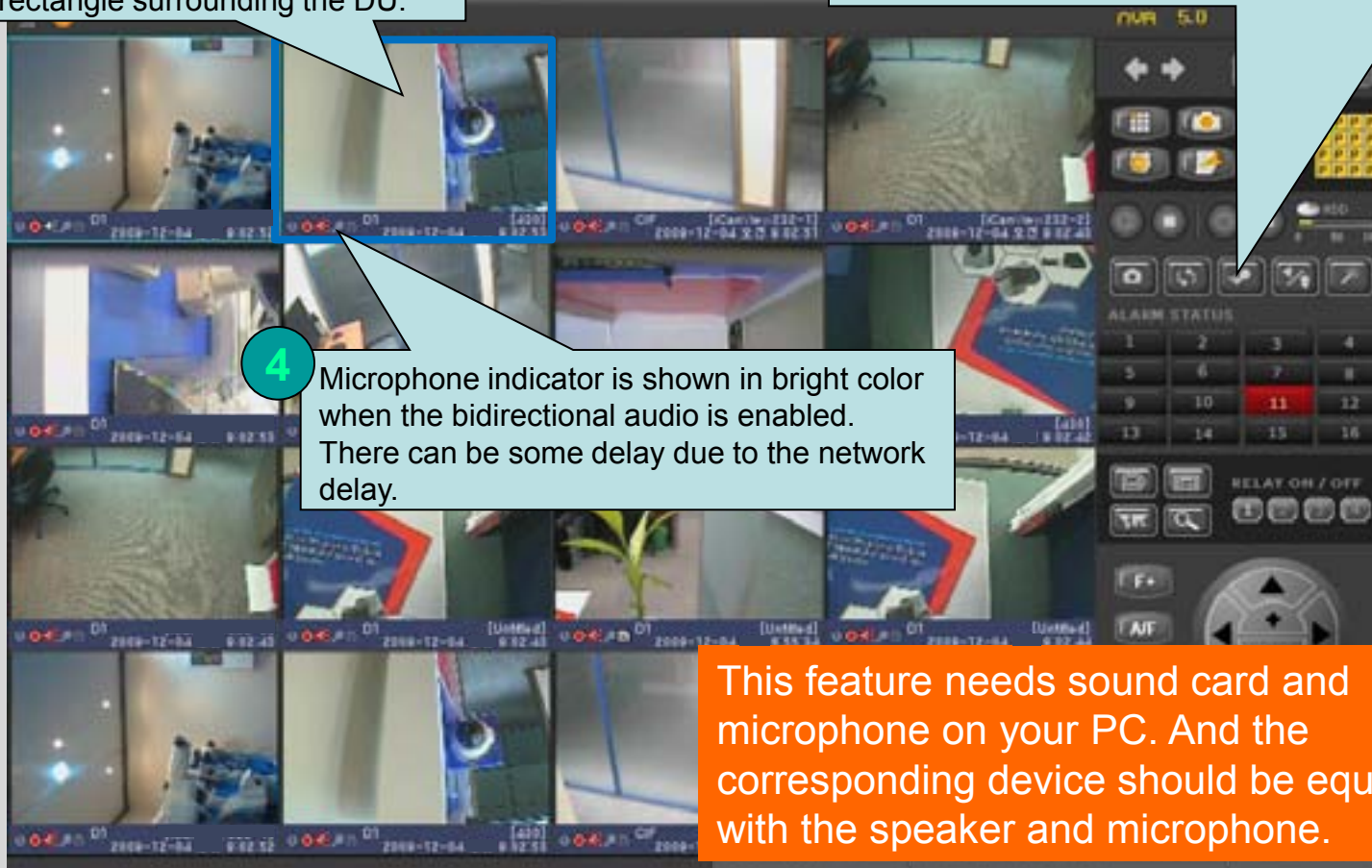


5.8. Detailed Description – Bidirectional Audio

- A feature enabling bidirectional audio communication with corresponding device.

- 1 Locate the cursor on the corresponding channel and click.
- 2 Activated channel is indicated by a blue rectangle surrounding the DU.

- 3 Click to activate bidirectional audio communication. This feature toggles through On/Off every time the button is clicked.



5.10. Detailed Description – Rotating the Video

1

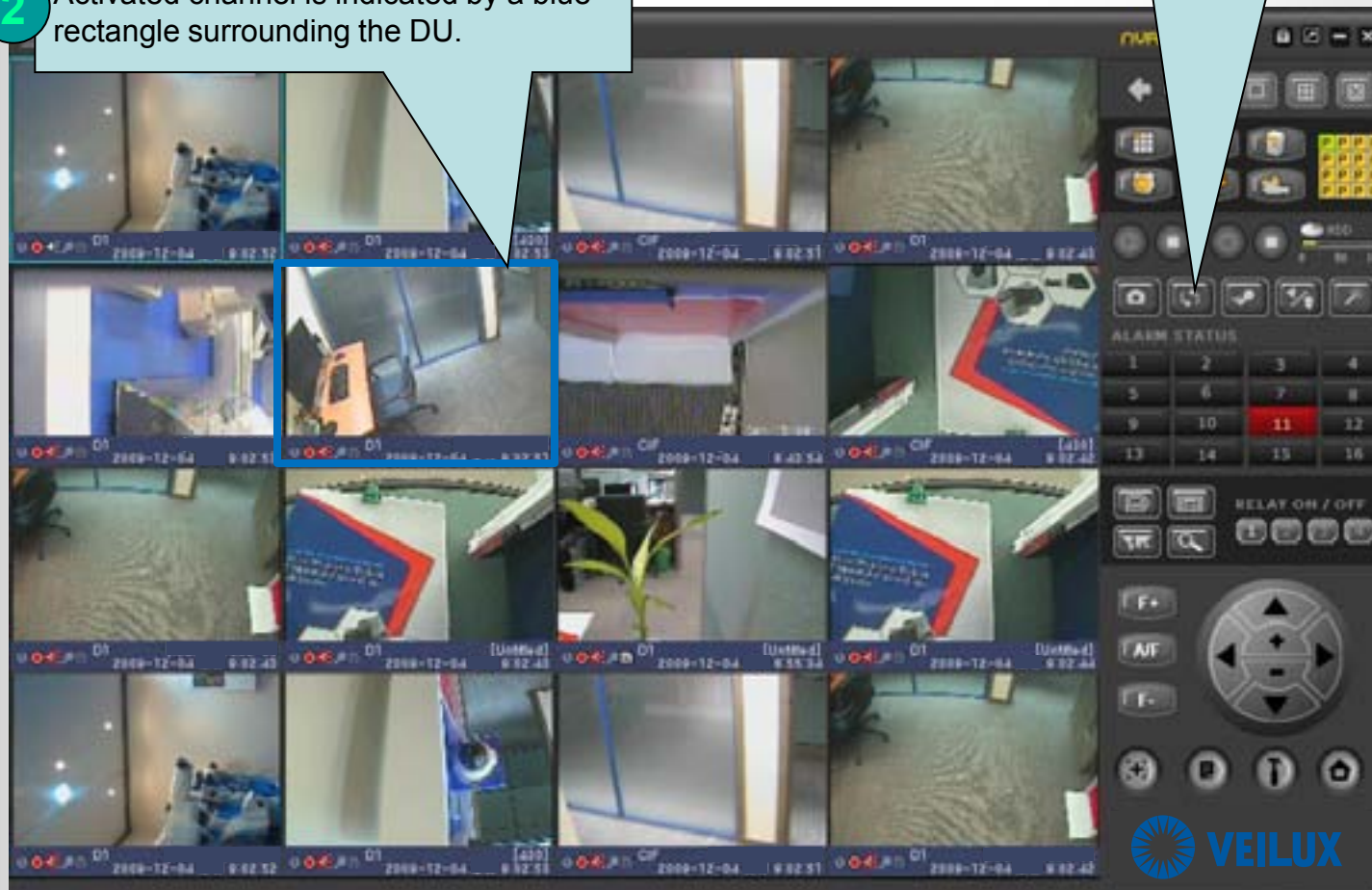
Locate the cursor on the corresponding channel and click.

2

Activated channel is indicated by a blue rectangle surrounding the DU.

3

Click to rotate the video by 180 degree.



5.11. Detailed Description – Remote Management

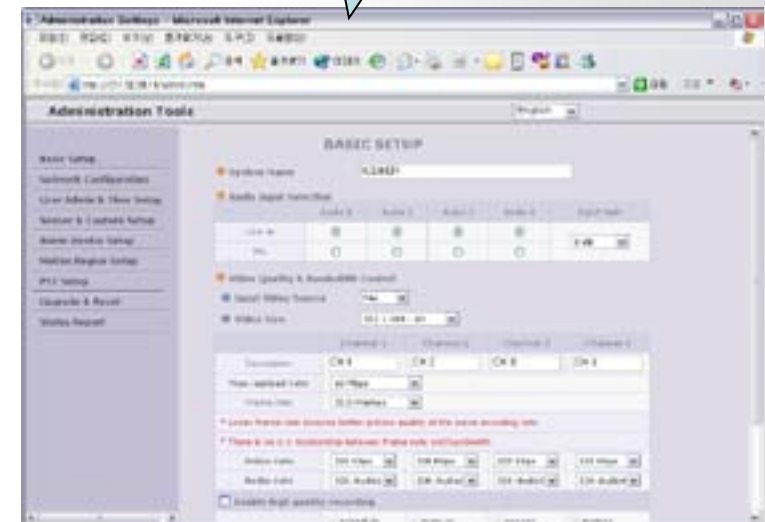
- A feature to manage the corresponding device over the network.

1 Locate the cursor on the corresponding channel and click.

2 Activated channel is indicated by a blue rectangle surrounding the DU.

3 Click to connect to the admin page of the corresponding device.

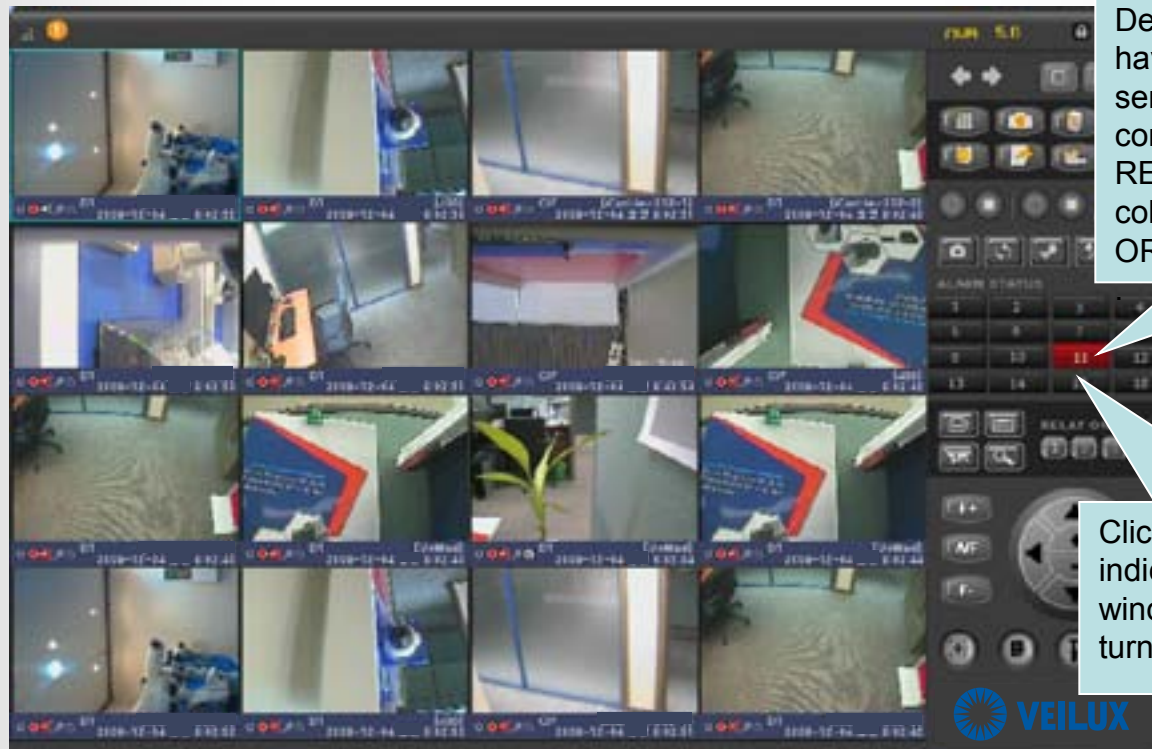
4 You are connected to the admin page through the web browser. You need the user ID and password of the administrator.



Refer to the manual of each device for the details of the administration page.

5.12. Detailed Description – Sensor and Motion Alarm Indication

- If connected device generates alarm by sensor or motion detection, the alarm condition is transmitted to the NVXR-64 and state is shown on alarm status panel.



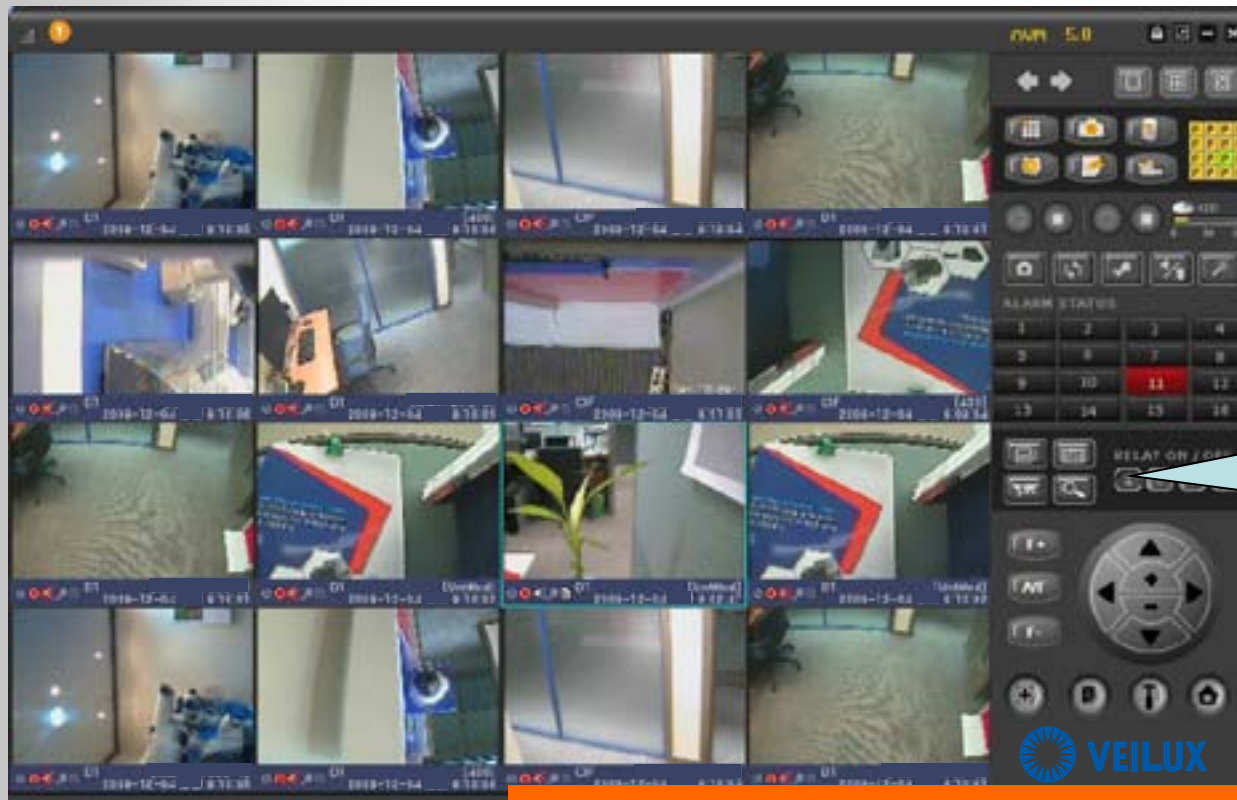
Device for each channel can have up to 4 sensors. When sensor is activated, corresponding lamp will be lit in RED for the first 2 minutes. The color will be changed into ORANGE after 2 minutes.

Click on the highlighted indicator to show Event Log window. The indicator will be turned off.

Refer to the manual of the corresponding device for alarm condition set up. Time duration of blinking is same as the alarm recording time duration.

5.13. Detailed Description – Remote Relay On/Off

- A feature for On/Off control of the relay remotely.



Up to 2 relays can be controlled remotely. Click for On/Off control of the relay.

- Refer to the manual of the corresponding device for setting up the relay.
- Regardless of the control, the status of relay can go back to the former status depending on the set-up of the relay. For example when relay is programmed for generating alarm signal, the status will change spontaneously upon alarm condition.
- There can be delay caused by the network.

5.14. Detailed Description – Video and Audio Adjustment

1
Click to launch Video/Audio adjustment bar.

Contrast control

Brightness control

Volume control

Check to mute the audio.

Mute

Mix

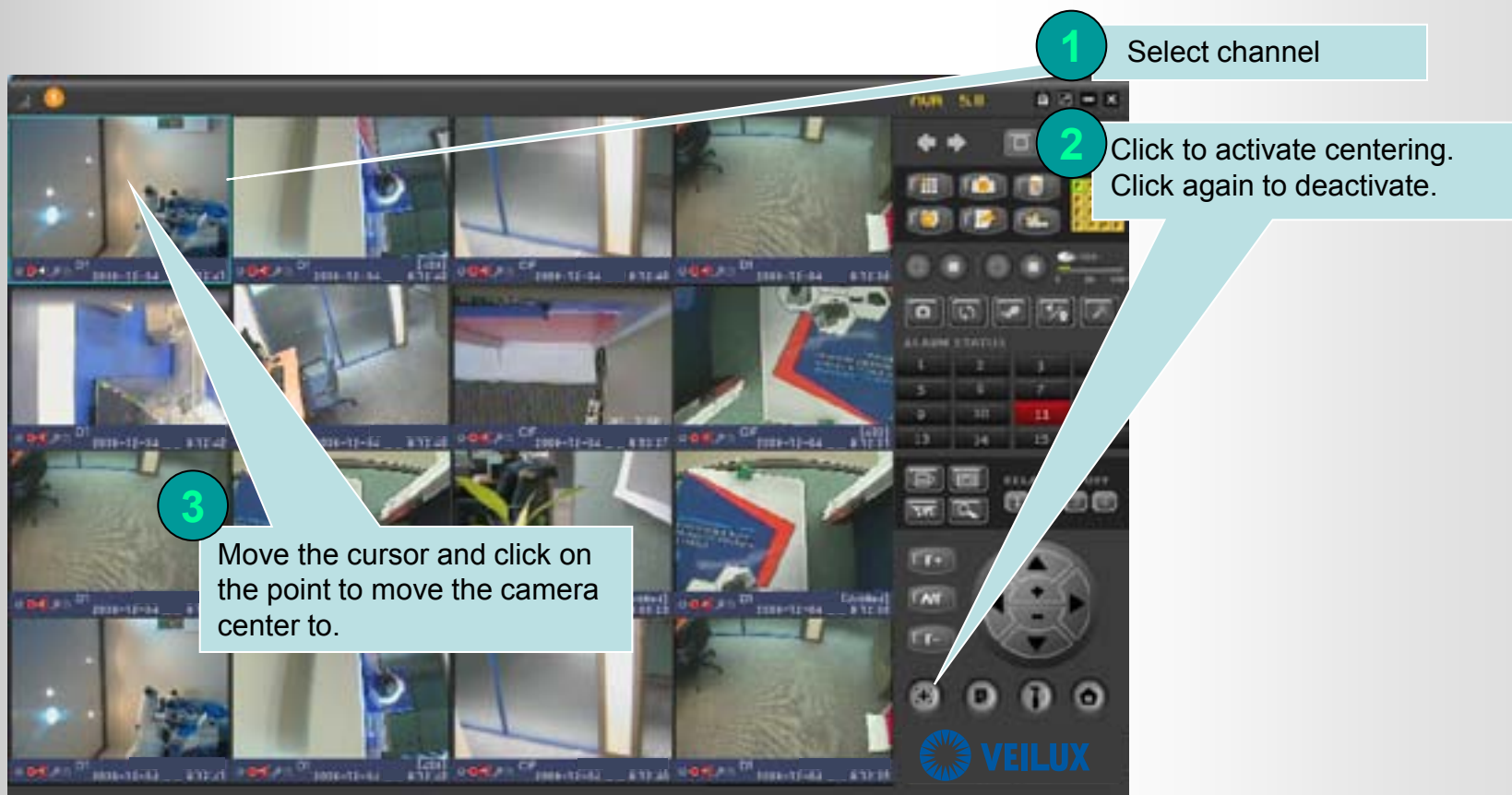
Check to mix the sounds from all live channels.

The image shows a software interface for video management. On the left, there is a grid of 16 camera feeds. To the right of the grid is a control panel with various icons and a directional pad. A yellow arrow points from this control panel to a detailed view of the 'Video/Audio adjustment bar' on the right. This bar contains three sliders for 'Contrast control', 'Brightness control', and 'Volume control'. Below the sliders are two checkboxes: 'Mute' and 'Mix'. A callout box points to the 'Mute' checkbox with the text 'Check to mute the audio.' Another callout box points to the 'Mix' checkbox with the text 'Check to mix the sounds from all live channels.' A callout box points to the top of the adjustment bar with the text 'Click to launch Video/Audio adjustment bar.' and a circled number '1'. A callout box points to the 'Contrast control' slider with the text 'Contrast control'. A callout box points to the 'Brightness control' slider with the text 'Brightness control'. A callout box points to the 'Volume control' slider with the text 'Volume control'.

Audio will be available only when the corresponding device is programmed to enable the audio.
Refer to the manual of the corresponding device.

5.15.1. Detailed Description – PTZ and Camera Control - Centering

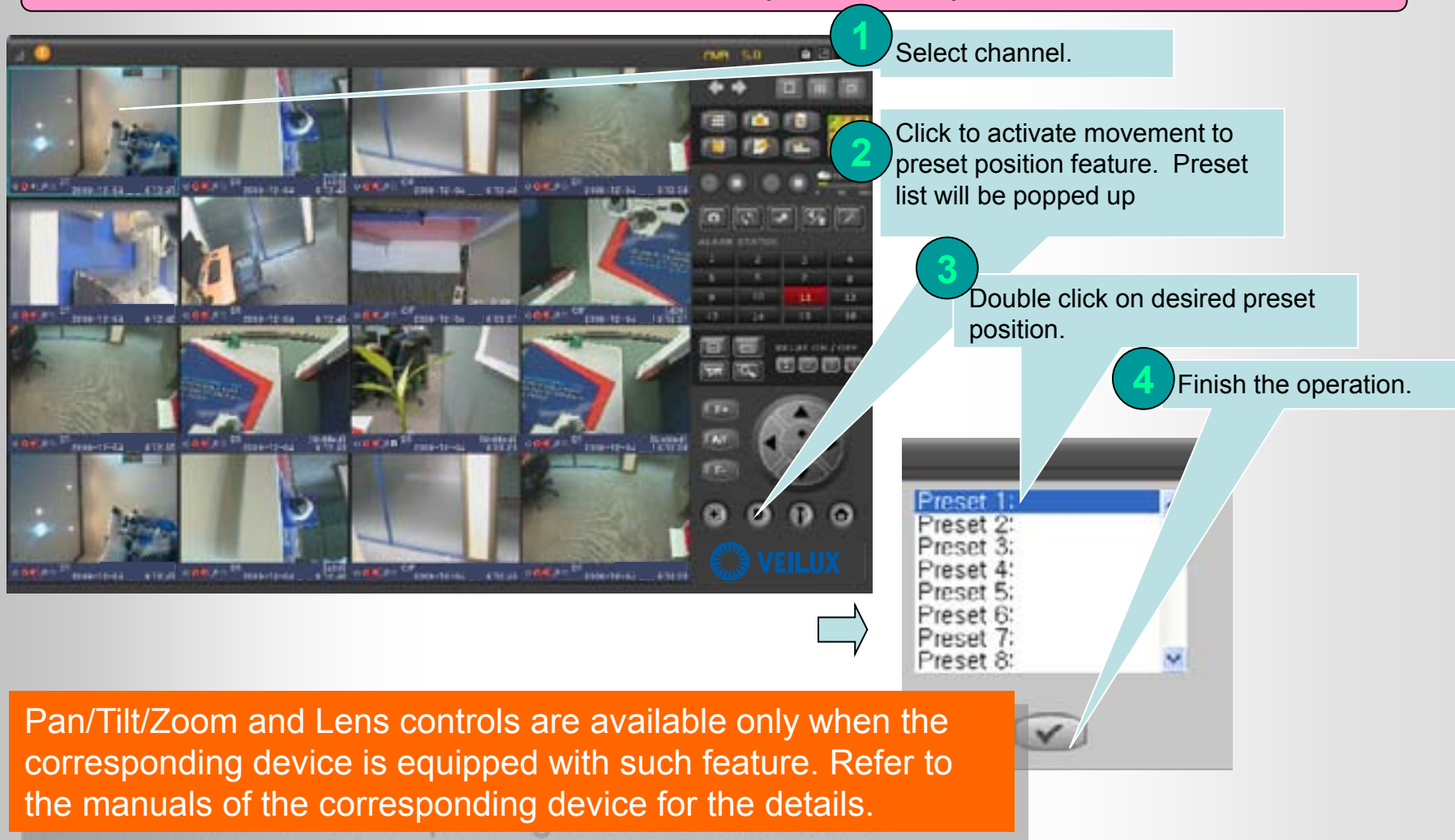
- A feature to move the center of the camera to the point of cursor.



Pan/Tilt/Zoom and Lens controls are available only when the corresponding device is equipped with such feature. Refer to the manuals of the corresponding device for the details.

5.15.2. Detailed Description – PTZ and Camera Control – Move to Preset Position

- A feature to move the center of the camera to pre-defined position.



1 Select channel.

2 Click to activate movement to preset position feature. Preset list will be popped up

3 Double click on desired preset position.

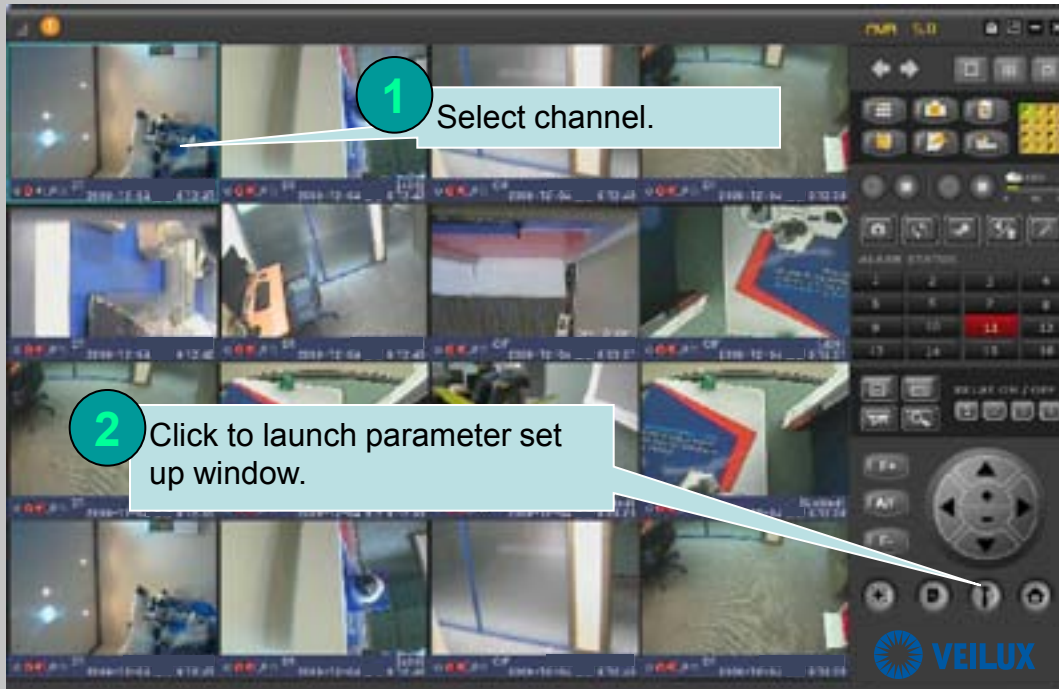
4 Finish the operation.

Preset 1:
Preset 2:
Preset 3:
Preset 4:
Preset 5:
Preset 6:
Preset 7:
Preset 8:

Pan/Tilt/Zoom and Lens controls are available only when the corresponding device is equipped with such feature. Refer to the manuals of the corresponding device for the details.

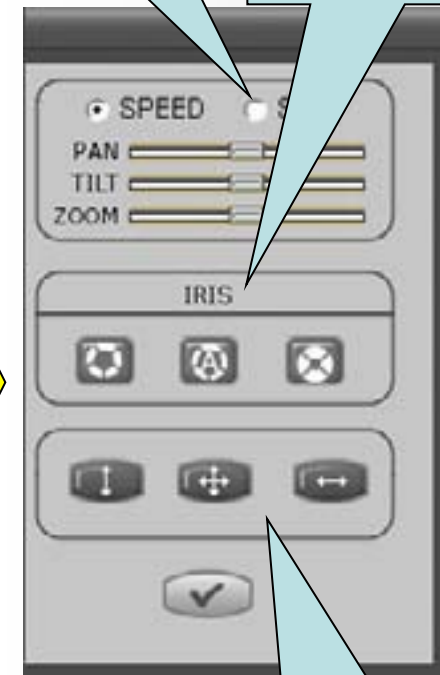
5.15.3. Detailed Description – PTZ and Camera Control - Parameter Set Up

- A feature to set up parameters for PTZ and Lens control.



Adjust speed or step of PTZ.

IRIS control. Press each button for the control. Wider, auto, narrower from the left.



Enable the Pan/tilt device to continuously scan through the set up region.

Pan/Tilt/Zoom and Lens controls are available only when the corresponding device is equipped with such feature. Refer to the manuals of the corresponding device for the details.

5.15.4. Detailed Description – PTZ and Camera Control –PTZ and Lenz Control

- A feature to control the PTZ and Lenz manually for the selected channel.

1 Select channel.

Move the camera to the direction indicated by the arrow head.

Zoom In

Zoom Out

Focus to farther position

Auto focus.

Focus to closer position.

Activate PTZ device to go back to home position.

Pan/Tilt/Zoom and Lens controls are available only when the corresponding device is equipped with such feature. Refer to the manuals of the corresponding device for the details.

5.16. Detailed Description – Video Crop

- Applicable to H.264 products.

1 Select the region to crop

Click

Dragging

2 A new video window is popped up to display cropped region.

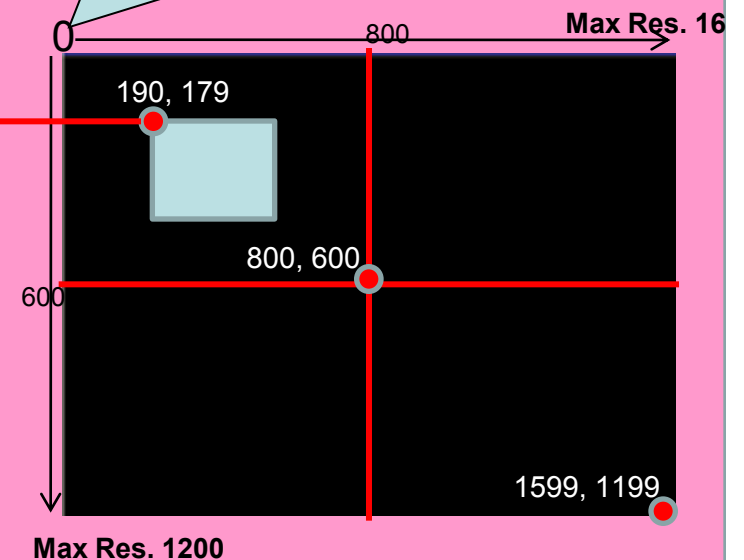
Size of the cropped region

Upper left corner of the crop region

Cropped video is available from channel 3 of the corresponding product. (Refer to "Basic Setup" from the corresponding product's manual.)

Coordinate values in case of UXGA size video:
Upper left corner : (0,0)
Lower right corner : (1599,1199)

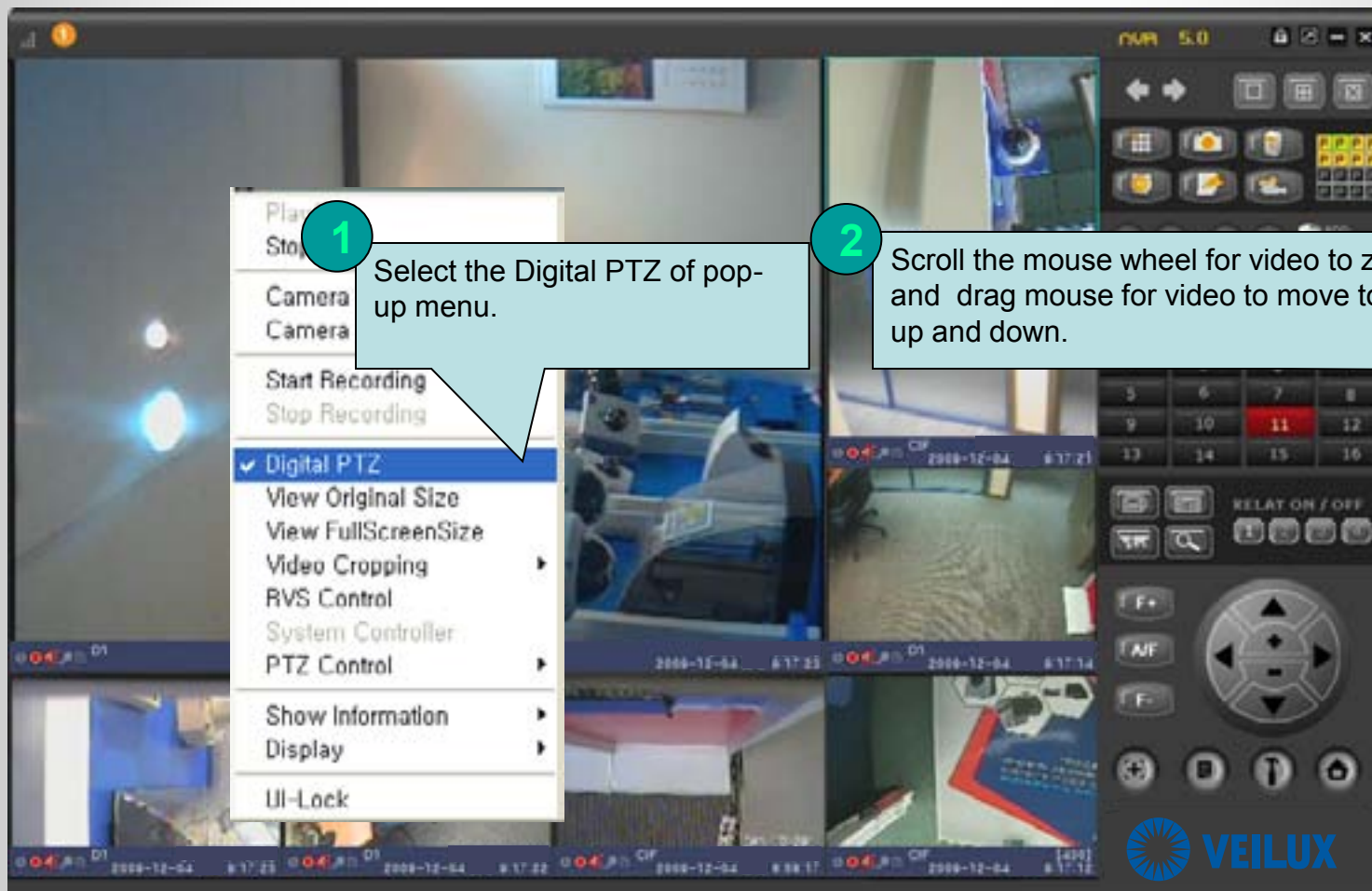
362- (190, 179) (256X192)



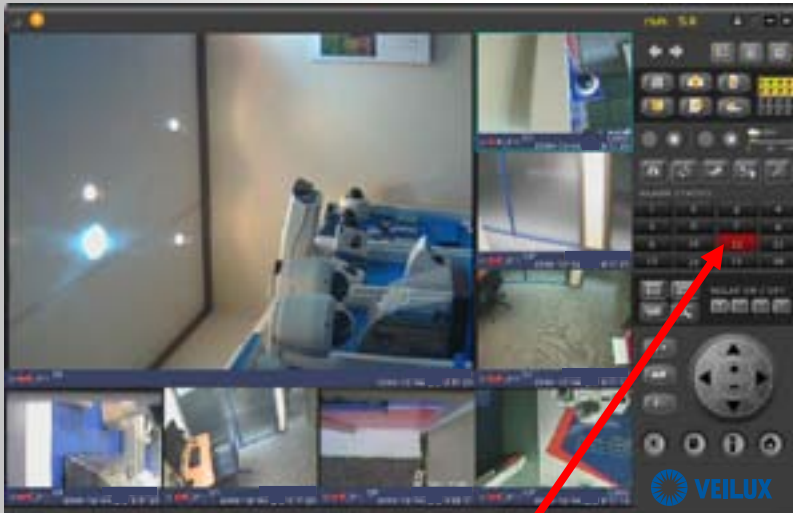
It is up to 800x600 to resolution of video crop.

5.17. Detailed Description – Digital PTZ

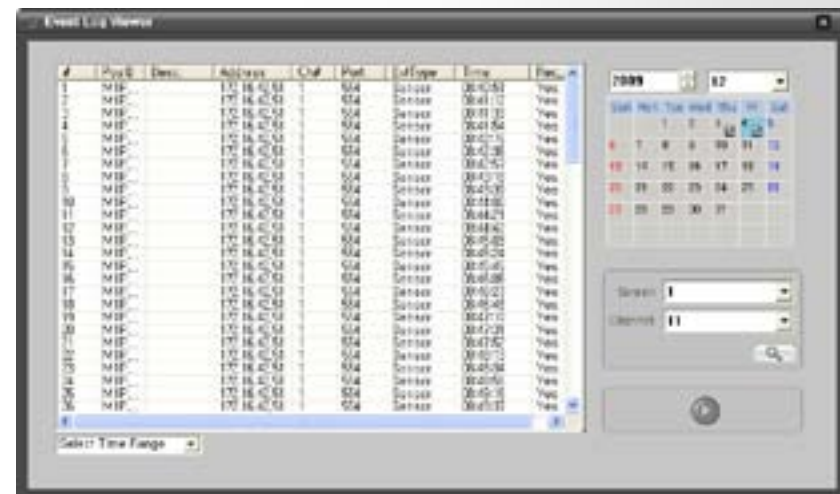
- Digital PTZ is feature that moves for video to left, right, up and down or zoom in/out by mouse control.



6. Event Log Management



Event Log Window



#	Msg. C.	Event	Address	Chan	Port	Camera	Event	Time
1	MIP		172.16.0.53	1	804	Camera	00:00:00	Yes
2	MIP		172.16.0.53	1	804	Camera	00:01:00	Yes
3	MIP		172.16.0.53	1	804	Camera	00:02:00	Yes
4	MIP		172.16.0.53	1	804	Camera	00:03:00	Yes
5	MIP		172.16.0.53	1	804	Camera	00:04:00	Yes
6	MIP		172.16.0.53	1	804	Camera	00:05:00	Yes
7	MIP		172.16.0.53	1	804	Camera	00:06:00	Yes
8	MIP		172.16.0.53	1	804	Camera	00:07:00	Yes
9	MIP		172.16.0.53	1	804	Camera	00:08:00	Yes
10	MIP		172.16.0.53	1	804	Camera	00:09:00	Yes
11	MIP		172.16.0.53	1	804	Camera	00:10:00	Yes
12	MIP		172.16.0.53	1	804	Camera	00:11:00	Yes
13	MIP		172.16.0.53	1	804	Camera	00:12:00	Yes
14	MIP		172.16.0.53	1	804	Camera	00:13:00	Yes
15	MIP		172.16.0.53	1	804	Camera	00:14:00	Yes
16	MIP		172.16.0.53	1	804	Camera	00:15:00	Yes
17	MIP		172.16.0.53	1	804	Camera	00:16:00	Yes
18	MIP		172.16.0.53	1	804	Camera	00:17:00	Yes
19	MIP		172.16.0.53	1	804	Camera	00:18:00	Yes
20	MIP		172.16.0.53	1	804	Camera	00:19:00	Yes
21	MIP		172.16.0.53	1	804	Camera	00:20:00	Yes
22	MIP		172.16.0.53	1	804	Camera	00:21:00	Yes
23	MIP		172.16.0.53	1	804	Camera	00:22:00	Yes
24	MIP		172.16.0.53	1	804	Camera	00:23:00	Yes
25	MIP		172.16.0.53	1	804	Camera	00:24:00	Yes
26	MIP		172.16.0.53	1	804	Camera	00:25:00	Yes
27	MIP		172.16.0.53	1	804	Camera	00:26:00	Yes
28	MIP		172.16.0.53	1	804	Camera	00:27:00	Yes
29	MIP		172.16.0.53	1	804	Camera	00:28:00	Yes
30	MIP		172.16.0.53	1	804	Camera	00:29:00	Yes
31	MIP		172.16.0.53	1	804	Camera	00:30:00	Yes

Event indicator is highlighted upon event (Sensor, Motion, No Video, and Video Recovered, DVR Sensor.) Click on the highlighted indicator to show Event Log Window.

6.1. Even Log Window

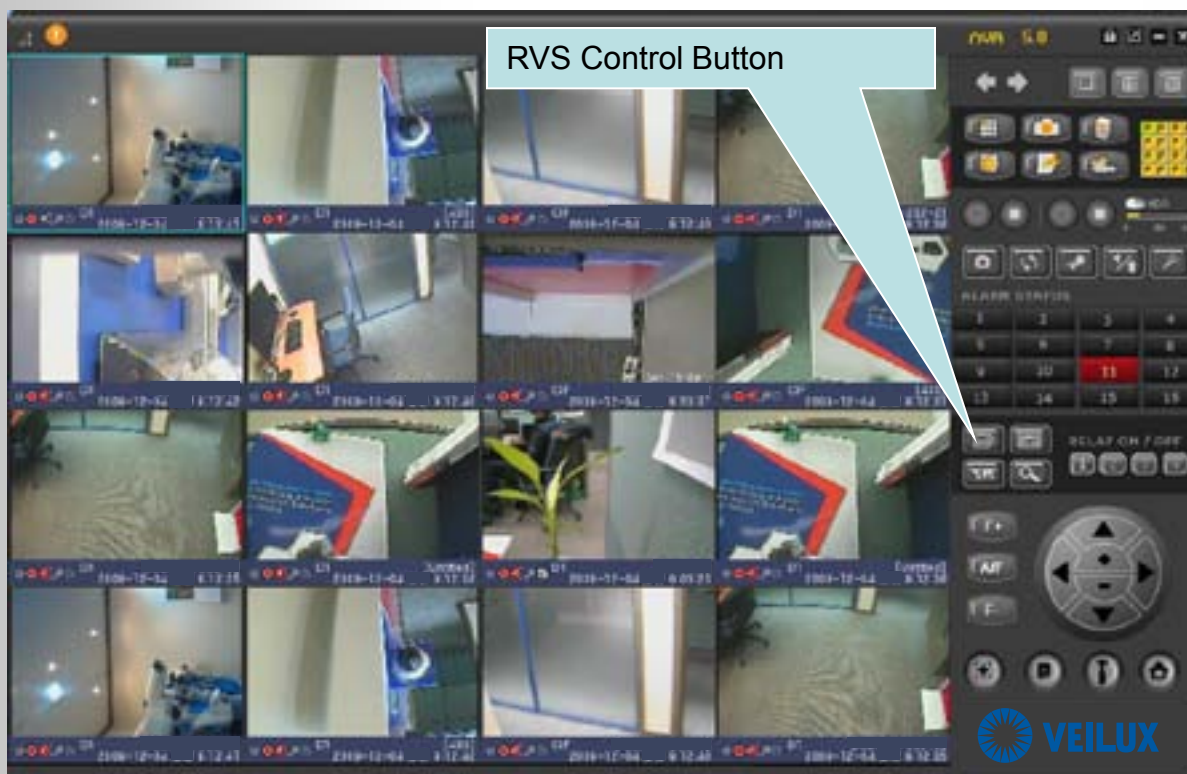
The screenshot shows the 'Event Log Viewer' window. It features a table of event logs, a calendar for the year 2009, and control fields for 'Screen' and 'Channel'. Callouts provide detailed explanations for each element.

PosID	Desc.	Address	Ch#	Port	EvType	Time	Rec.
1	MIP...	172.16.42.51	1	554	Sensor	08:40:51	Yes
2	MIP...	172.16.42.51	1	554	Sensor	08:41:12	Yes
3	MIP...	172.16.42.51	1	554	Sensor	08:41:33	Yes
4	MIP...	172.16.42.51	1	554	Sensor	08:41:54	Yes
5	MIP...	172.16.42.51	1	554	Sensor	08:42:15	Yes
6	MIP...	172.16.42.51	1	554	Sens	08:42:36	Yes
7	MIP...	172.16.42.51	1	554	Sensor	08:42:57	Yes
8	MIP...	172.16.42.51	1	554	Sensor	08:43:18	Yes
9	MIP...	172.16.42.51	1	554	Sensor	08:43:39	Yes
10	MIP...	172.16.42.51	1	554	Sensor	08:44:00	Yes
11	MIP...	172.16.42.51	1	554	Sensor	08:44:21	Yes
12	MIP...	172.16.42.51	1	554	Sensor	08:44:42	Yes
13	MIP...	172.16.42.51	1	554	Sensor	08:45:03	Yes
14	MIP...	172.16.42.51	1	554	Sensor	08:45:24	Yes
15	MIP...	172.16.42.51	1	554	Sensor	08:45:45	Yes
16	MIP...	172.16.42.51	1	554	Sensor	08:46:06	Yes
17	MIP...	172.16.42.51	1	554	Sensor	08:46:27	Yes
18	MIP...	172.16.42.51	1	554	Sensor	08:46:48	Yes
19	MIP...	172.16.42.51	1	554	Sensor	08:47:09	Yes
20	MIP...	172.16.42.51	1	554	Sensor	08:47:30	Yes
21	MIP...	172.16.42.51	1	554	Sensor	08:47:51	Yes
22	MIP...	172.16.42.51	1	554	Sensor	08:48:12	Yes
23	MIP...	172.16.42.51	1	554	Sensor	08:48:33	Yes
24	MIP...	172.16.42.51	1	554	Sensor	08:48:54	Yes
25	MIP...	172.16.42.51	1	554	Sensor	08:49:15	Yes
26	MIP...	172.16.42.51	1	554	Sensor	08:49:36	Yes
27	MIP...	172.16.42.51	1	554	Sensor	08:49:57	Yes
28	MIP...	172.16.42.51	1	554	Sensor	08:50:18	Yes
29	MIP...	172.16.42.51	1	554	Sensor	08:50:39	Yes
30	MIP...	172.16.42.51	1	554	Sensor	08:51:00	Yes

Callouts and their descriptions:

- RTSP port which was set during IP assignment.** (Points to Port column)
- Event type Motion, Sensor-1,2,3,4, No Video, Video Recovery** (Points to EvType column)
- Highlighted when there is event log on the date.** (Points to the calendar)
- Position of video channel at NVXR-64 screen** (Points to Ch# column)
- Description which was set during IP assignment.** (Points to Desc. column)
- IP Address which was set during IP assignment** (Points to Address column)
- Time of the event** (Points to Time column)
- "Yes" means that there is recorded video file for the event. Double click to view recorded video** (Points to Rec. column)
- Designate the video channel for retrieving the event log. Enter screen and channel numbers in the corresponding fields.** (Points to Screen and Channel dropdowns)
- Play the recorded file with the *icf* player program.** (Points to a play button icon)
- Start searching of event log for the specified video channel** (Points to a search button icon)

7. Remote Video Storage (RVS) Management



RVS Control window for IP product.



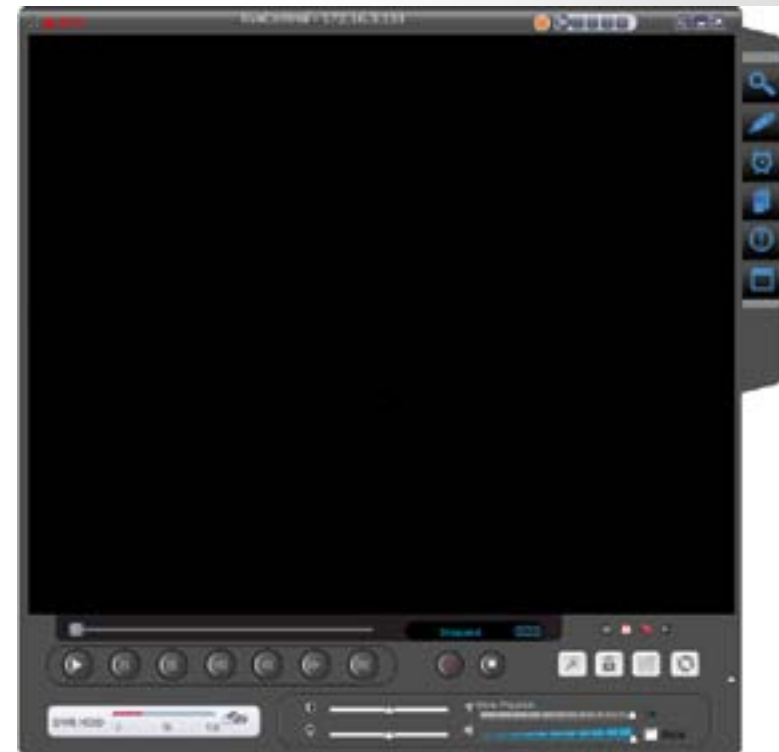
Remote Playback Window for DVR product.

- Target Application
 - Management of video storage in IP Camera and Video Server.
 - Remote playback of recorded video in DVR products.

7.1. RVS Control of IP Camera, Video Server

1 Select channel.

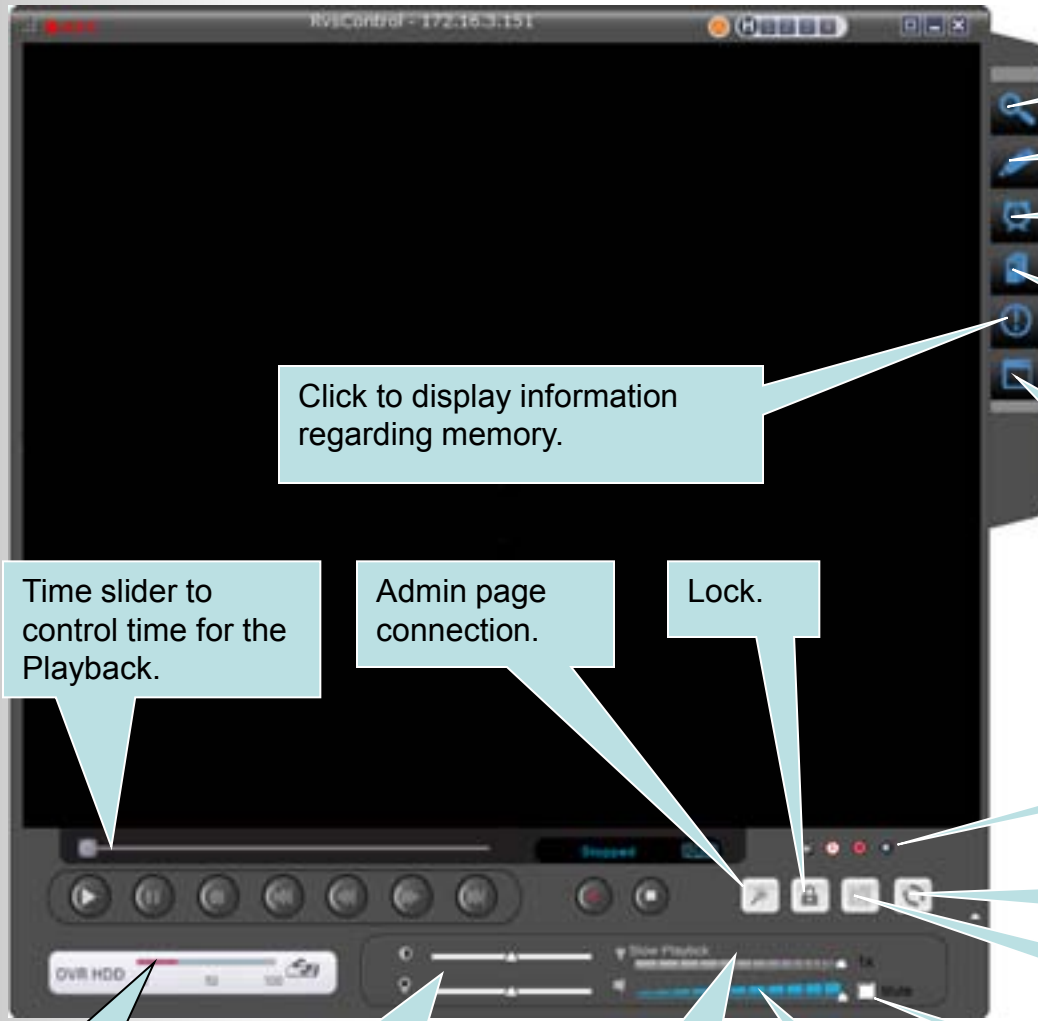
2 Initiate RVS Control Window.



RVS Control Window

This feature is targeted to control IP Camera and Video Server having its own flash memory.

7.1.1. RVS Control – Control Window



Click to launch search window.

Click to launch record scheduling window.

Click to launch alarm recording control window.

Click to launch flash memory set up window.

Click to display information regarding memory.

Click to use Web Hard feature.

Time slider to control time for the Playback.

Admin page connection.

Lock.

Status indication ICON

Rotate the video

Still Image Capture

Memory usage indicator

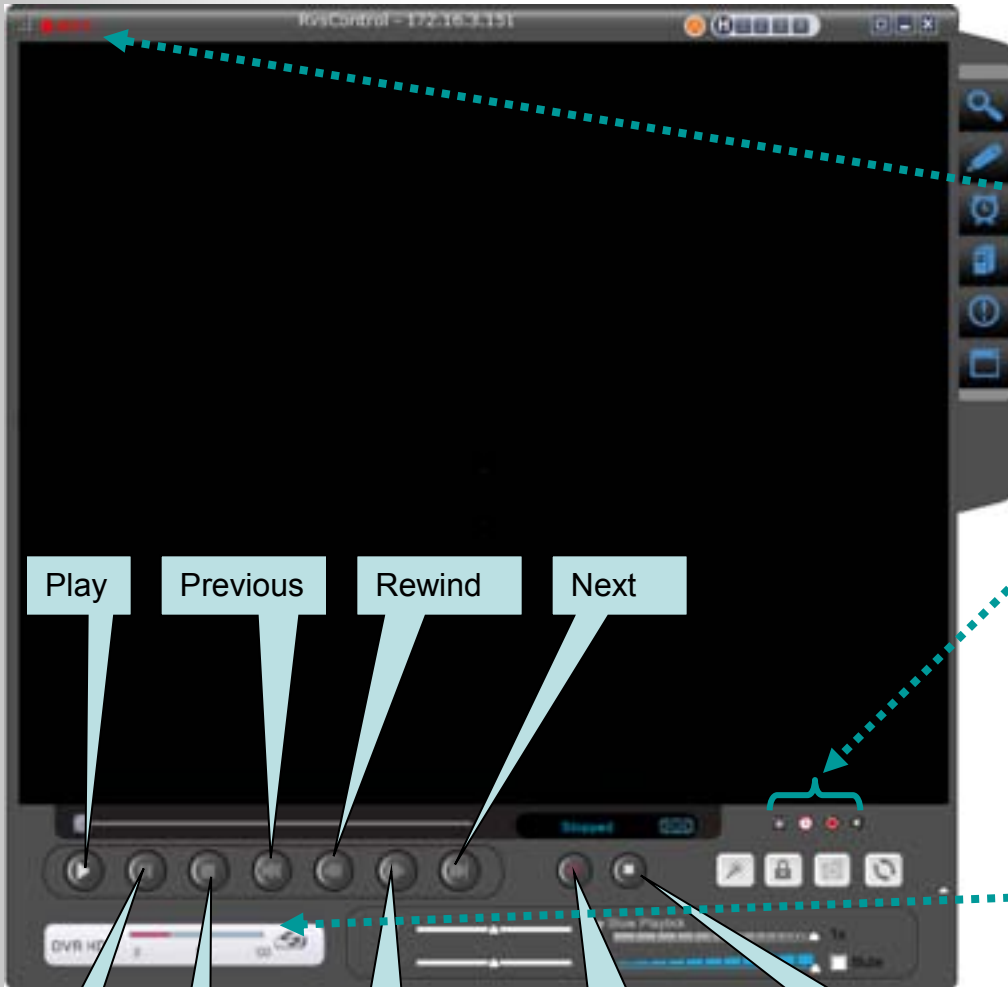
Contrast and brightness control

Playback Speed Control












Volume control

Audio mute

7.1.1. RVS Control – Control Window



Status Indicator

	OFF	ON
In Record		 Blinks while recording.
Alarm Recording	 Alarm recording enabled.	 Alarm recording in progress. (Blinking)
Schedule Recording	 Recording Schedule present.	 Scheduled recording in progress (Blinking)
Recording	 No Recording	 Recording in progress.
Sound	 No audio	 Audio present.
HDD Overwrite	 Overwrite Disabled	 Overwrite Enabled

7.1.2. RVS Control – Search/Playback

1 Click

2 Year

3 Month

4 Click to select date.

Each box representing the date has small indicators indicating the types of video files recorded on the day.

Move to arbitrary time while in playback by moving this time slider.

Type	Start	End	Elapse
<input type="checkbox"/>	16:39:30	16:39:34	0:00:04
<input checked="" type="checkbox"/>	16:32:44	16:39:26	0:06:42

5 Check at the box to select the video file for playback or download.

Search filter. Search is made only for the files matching the condition.

6 Click to playback selected video file.

Click to control Playback like a VCR.

7.1.3. RVS Control – Download

1 Select video file from the search list.

Time	Start	End	Elapsed
<input type="checkbox"/>	13:14:10	13:16:13	0:02:03
<input checked="" type="checkbox"/>	13:13:59	13:14:13	0:00:14
<input type="checkbox"/>	13:13:27	13:14:00	0:00:33
<input type="checkbox"/>	13:12:48	13:13:30	0:00:42

2 Select the folder to store the downloaded file.

Download Path

1971-01-01 1971-01-01

09:00:00 09:00:00

AM ICF

3 Set the boundary for the download.

4 Move this slider to set starting time.

5 Move this slider to set finishing time.

Time and size of the data are shown.

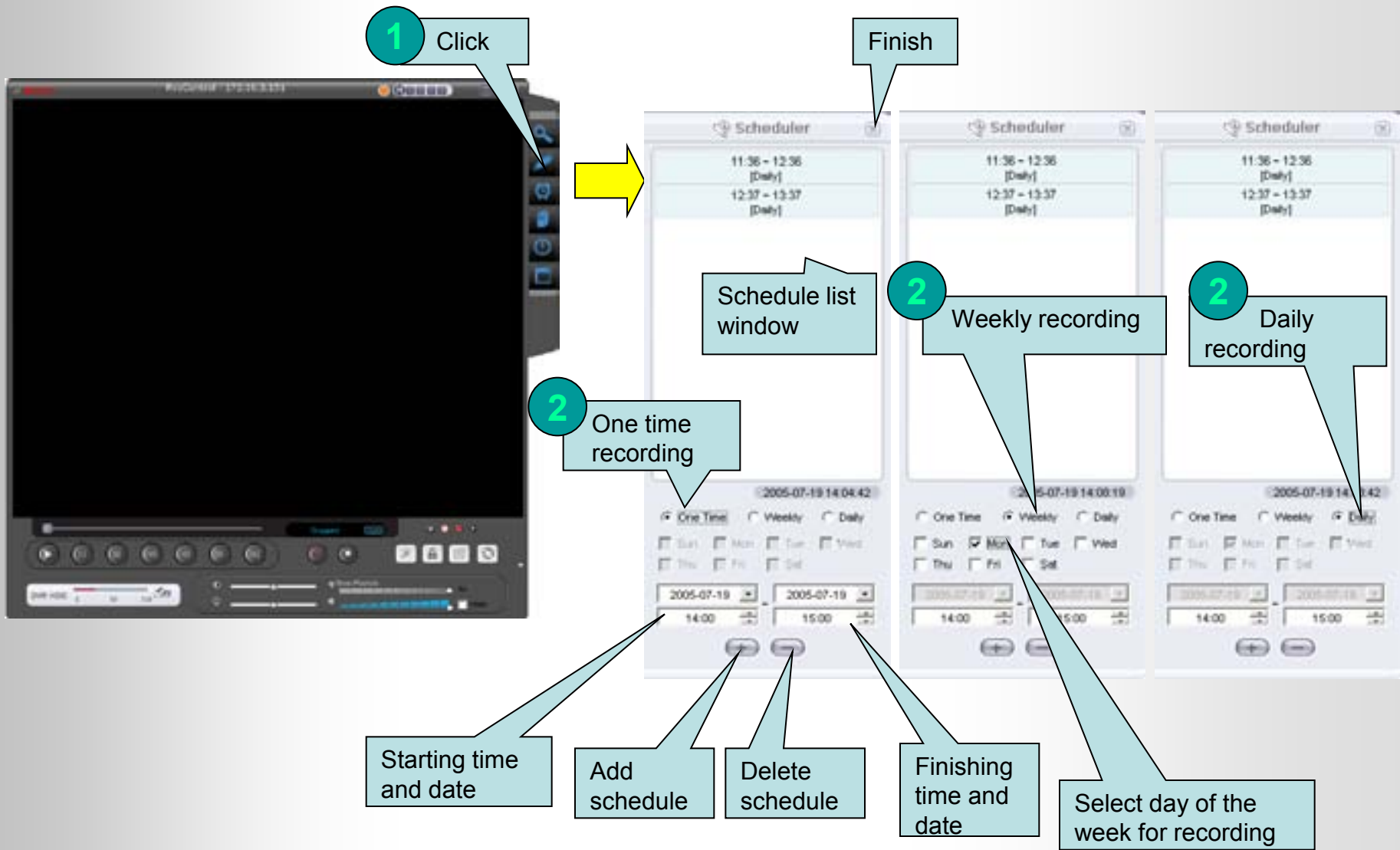
6 Click to start download.

7 Progress bar for the download.

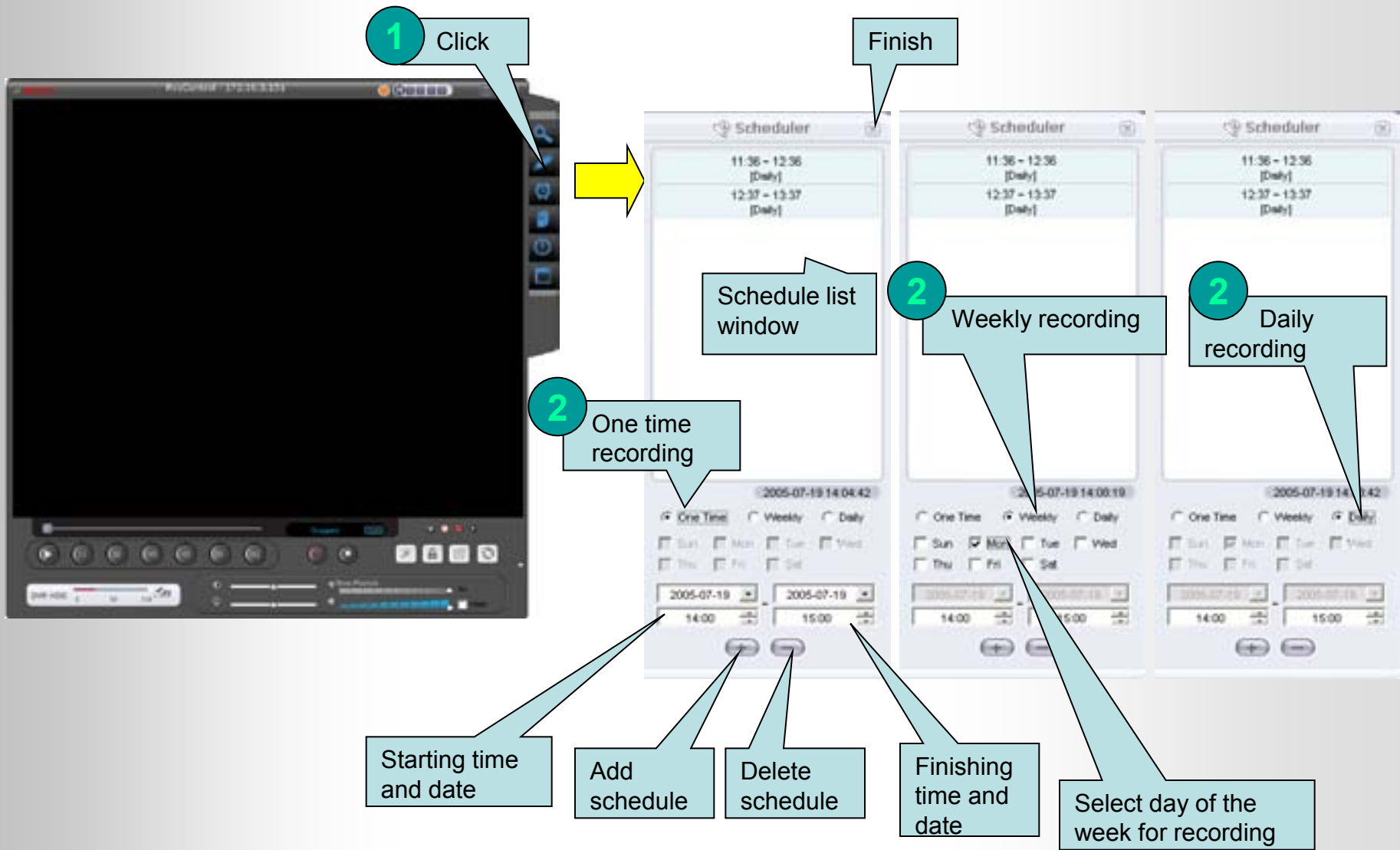
Downloading...

20050719_130045-20050719_130511_1-4.avi 33.8 MB (12.4%)

7.1.4. RVS Control – Recording Schedule

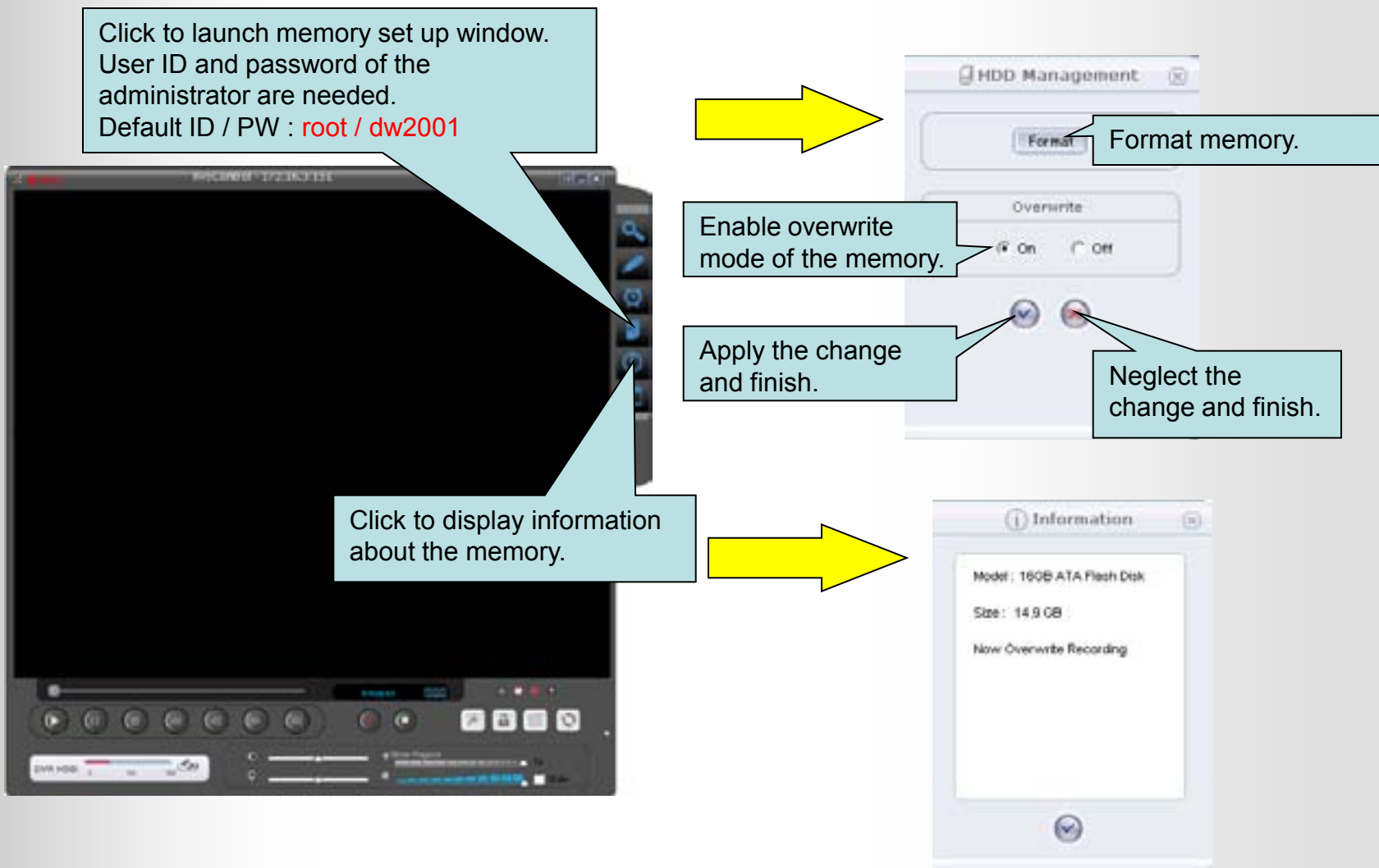


7.1.4. RVS Control – Recording Schedule



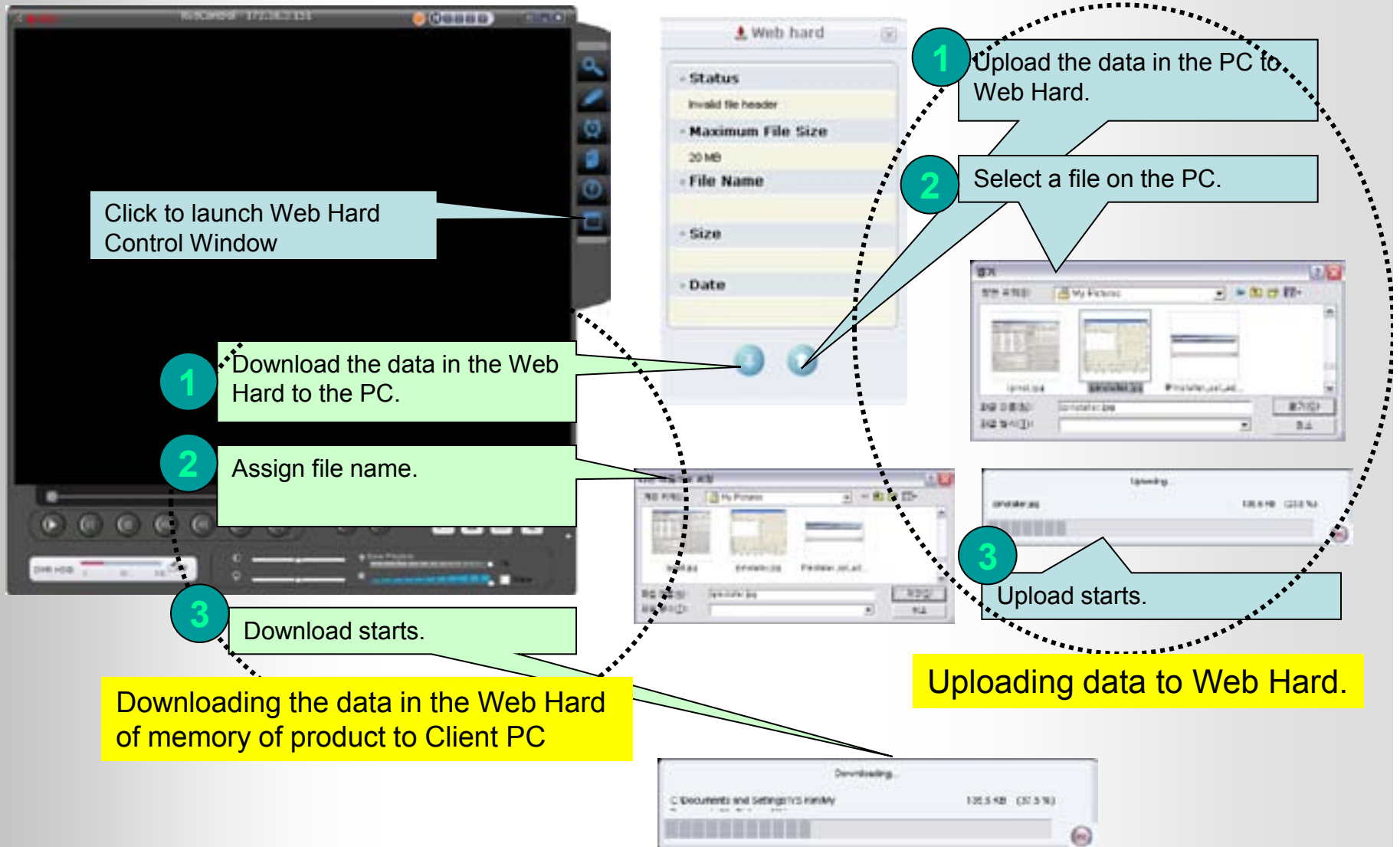
7.1.6. RVS Control – Memory Set Up and Information

- A feature to set up memory or displaying memory information of the product.



7.1.7. RVS Control – Web Hard

- A feature to use a part of the memory as storage area of user data.

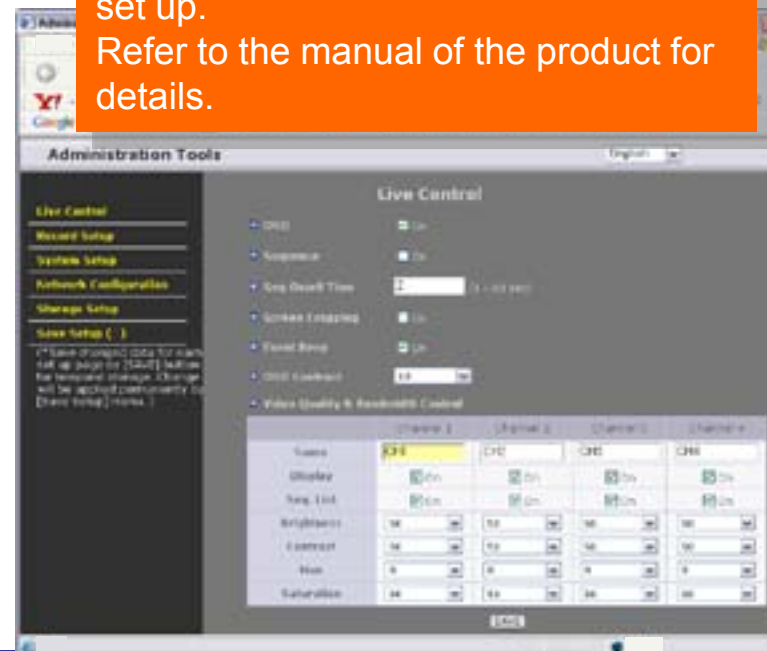


7.2.1. RVS Control for DVR – Remote Configuration



1 Select a live connected channel and click on this button to connect to the admin page.

2 Internet Explorer will be launched and you will be connect to the admin page. Valid ID and password are needed for the connection. Default ID and password are "root", "dw2001". It is highly recommended to change the ID and password after the initial set up. Refer to the manual of the product for details.



7.2.2. RVS Control for DVR – Remote Playback

- A feature for playing back the video stored on the HDD of the DVR. When RVS button is clicked, live connection will be terminated. The DVR will continue to maintain the recording status.

1

Highlight a channel and click DVR control.



The ID and password of the corresponding DVR should have been registered in the Address manager.

Search list.
Check at the box to select.
The type of the file is indicated by color and a character in the RecType.

Calendar for search date selection. Dates having recorded data are indicated by small colored square boxes.

Refresh the search list

Start recording of the video being played back on the PC HDD. Recorded video on the HDD can be played back. Refer to 5.6 for the playing back.

Stop playback or recording

Start playback

Slow down the playback speed by clicking on proper speed during playback. To return to normal speed, click on FF button

HDD set up window

7.2.3. RVS Control for DVR – Remote Playback

Still Video Capture : Highlight a channel and click on this button to capture a still video.

1 Check at the box to select.

2 Click to start playback. While playing back this button will be pause button

REW : Clicking on the button repeatedly will change the playback speed to -1, -2, -4, -8, -1..., in sequence

FF : Clicking on the button repeatedly will change the playback speed to +1, +2, +4, +8, +1..., in sequence

Check at this box before playback. Only the channel checked are played back. Use this feature when the network bandwidth is not sufficient.

Click on arbitrary position on the bar to jump to arbitrary position. Playback will restart from time which corresponds to nearest multiple of 15 seconds.

Playback speed indicator

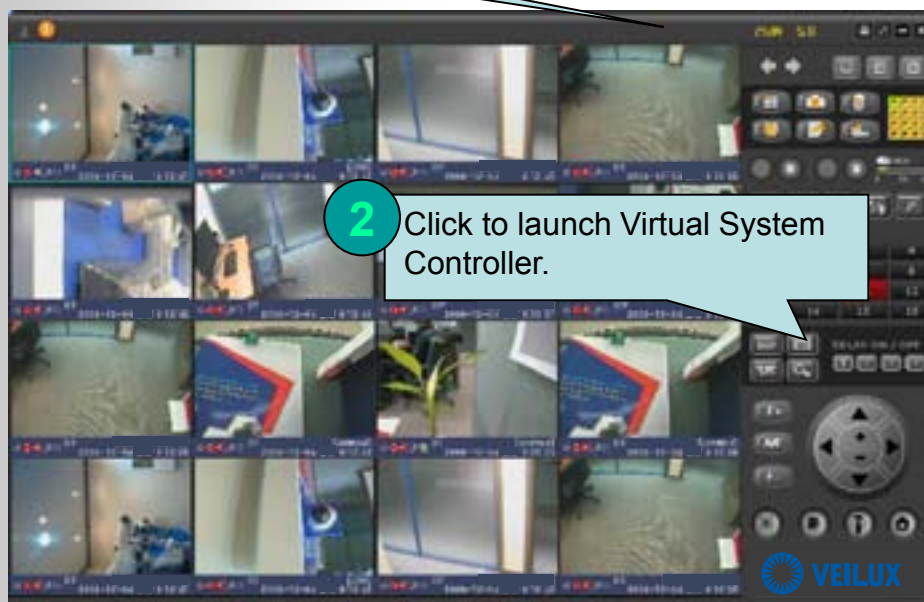
Type	Start	By	Ch
<input checked="" type="checkbox"/>	09:17:45	Manual	ALL
<input type="checkbox"/>	09:30:00	Manual	ALL
<input type="checkbox"/>	10:30:00	Manual	ALL

Slow Speed: -1/x -1/2x 1/2 1/4

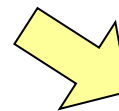
8. Virtual System Controller

- Virtual System Controller is a program module that emulate keyboard controller.

1 Select a channel



2 Click to launch Virtual System Controller.



Virtual system controller is available only when the corresponding device is equipped with such feature.

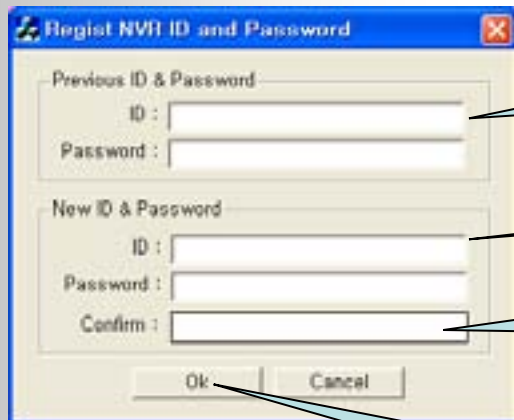
9. Screen Lock & Unlock

- The program can be terminated only after the valid ID and password are entered.



•Default value is empty. Just click on the this button to initiate the termination.

To assign new ID and password run 'program files>NVXR -64->RegistNVXR-64IDPwd''.



Existing ID and password. Skip this upon initial setting.






New ID

Enter new ID and confirm

Click OK to finish the setting.

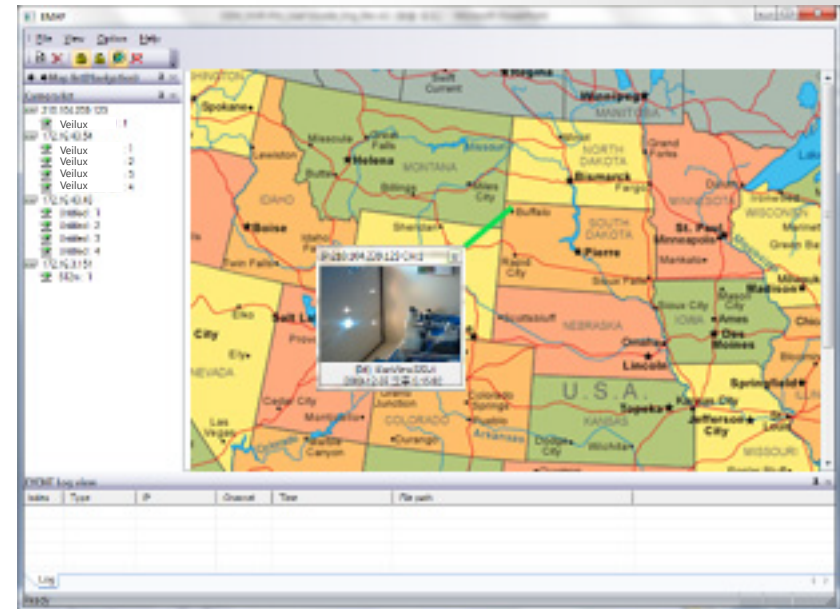
9. Screen Lock & Unlock



- Click  to lock the program. The icon will be changed to .
- When  is clicked after the program is locked, NVXR-64 will ask for ID and password to unlock the program.  The icon will be changed to  after unlock.

10. E-MAP

- E-Map is a feature to position the cameras and video from them on map images.



E-Map Controller

1 Initiate E-Map

Map Data is not provided.
Map data should be provided by the installer.

10.1. E-Map – GUI

The screenshot shows the EMAP application interface. At the top is a **Menu Bar** with options: File, Edit, View, Icon, Help. Below it is a **Tool Bar**. The main area is the **Map Window**, which displays a map of the United States with several camera locations marked by green circles. A callout box explains that a dark green circle indicates a camera not connected, and a bright green circle indicates a camera connected. A red-bordered callout box points to a **Map Icon** in the top right corner, stating it indicates another registered map and supports image preview and moving to another map. A blue-bordered callout box points to a **Map information window** on the left, which lists registered maps: Minnesota, Wisconsin, and Ohio. Another blue-bordered callout box points to a **Camera List** window on the left, which displays a list of cameras registered in the NVXR-64. At the bottom, an **Event Log Window** shows a table of events.

Index	Type	IP	Channel	Time	File
1	PLAY	172.16.76.220	1	2007-03-09 20:54:21	

Log

Ready

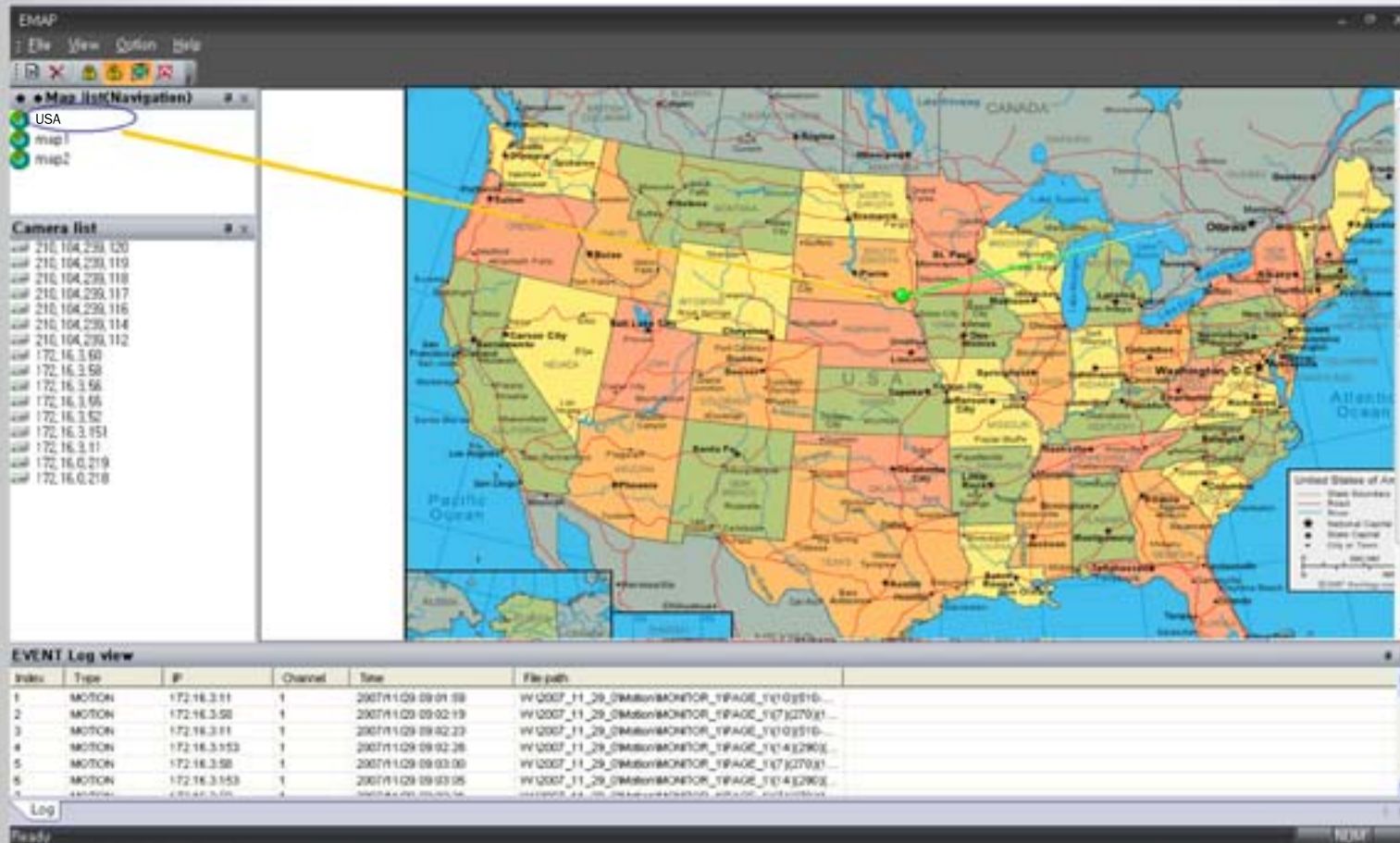
10.2. E-Map – Addition and Deletion of Map Image

The screenshot shows the E-Map software interface. The main window displays a map of the United States with two camera feeds overlaid. The top-left corner has a menu bar with 'File', 'View', 'Option', and 'Help'. Below the menu bar is a toolbar with various icons. On the left side, there are two panels: 'Map list(Navigations)' and 'Camera list'. The 'Map list' panel shows a list of maps with icons for 'map1' and 'map2'. The 'Camera list' panel shows a list of camera feeds with IP addresses and channel numbers. The main map area shows a map of the United States with two camera feeds overlaid. The top-right camera feed shows a hallway with a door, labeled 'IP: 210.104.236.112 CH:1'. The bottom-right camera feed shows a street scene, labeled 'IP: 172.16.3.11 CH:1'. At the bottom of the interface is an 'EVENT Log view' table with columns for Index, Type, IP, Channel, Time, and File path.

Index	Type	IP	Channel	Time	File path
1	NOTIFY	172.16.3.11	1	2007/11/20 09:01:50	VR0007_11_20_0delonMENTOR_1PAGE_11111510...
2	NOTIFY	172.16.3.00	1	2007/11/20 09:02:19	VR0007_11_20_0delonMENTOR_1PAGE_111127101...
3	NOTIFY	172.16.3.11	1	2007/11/20 09:02:20	VR0007_11_20_0delonMENTOR_1PAGE_11111510...
4	NOTIFY	172.16.3.153	1	2007/11/20 09:02:25	VR0007_11_20_0delonMENTOR_1PAGE_111141200...
5	NOTIFY	172.16.3.00	1	2007/11/20 09:03:00	VR0007_11_20_0delonMENTOR_1PAGE_111127101...
6	NOTIFY	172.16.3.153	1	2007/11/20 09:03:05	VR0007_11_20_0delonMENTOR_1PAGE_111141200...

1. Move to other map : Double click on the map data.
2. Addition and deletion of map : Select a map to add or delete and choose Menu -> File -> New Map or Delete Map.
3. Map file support BMP.

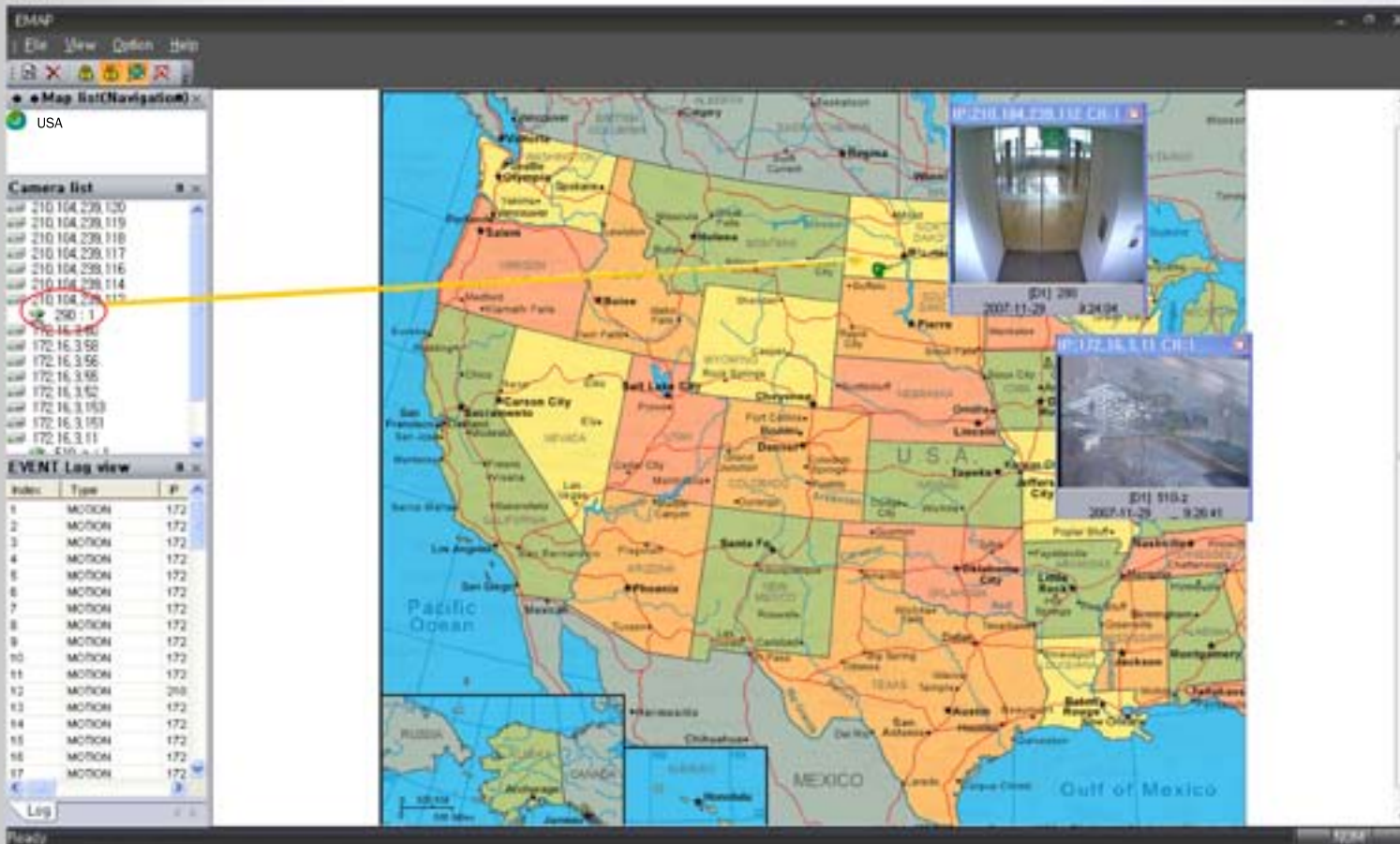
10.3. E-Map – Placing Map Icon



Multi-Map : Select a map data from the map information window and then perform Drag & Drop to place a Map Icon on the Map window.

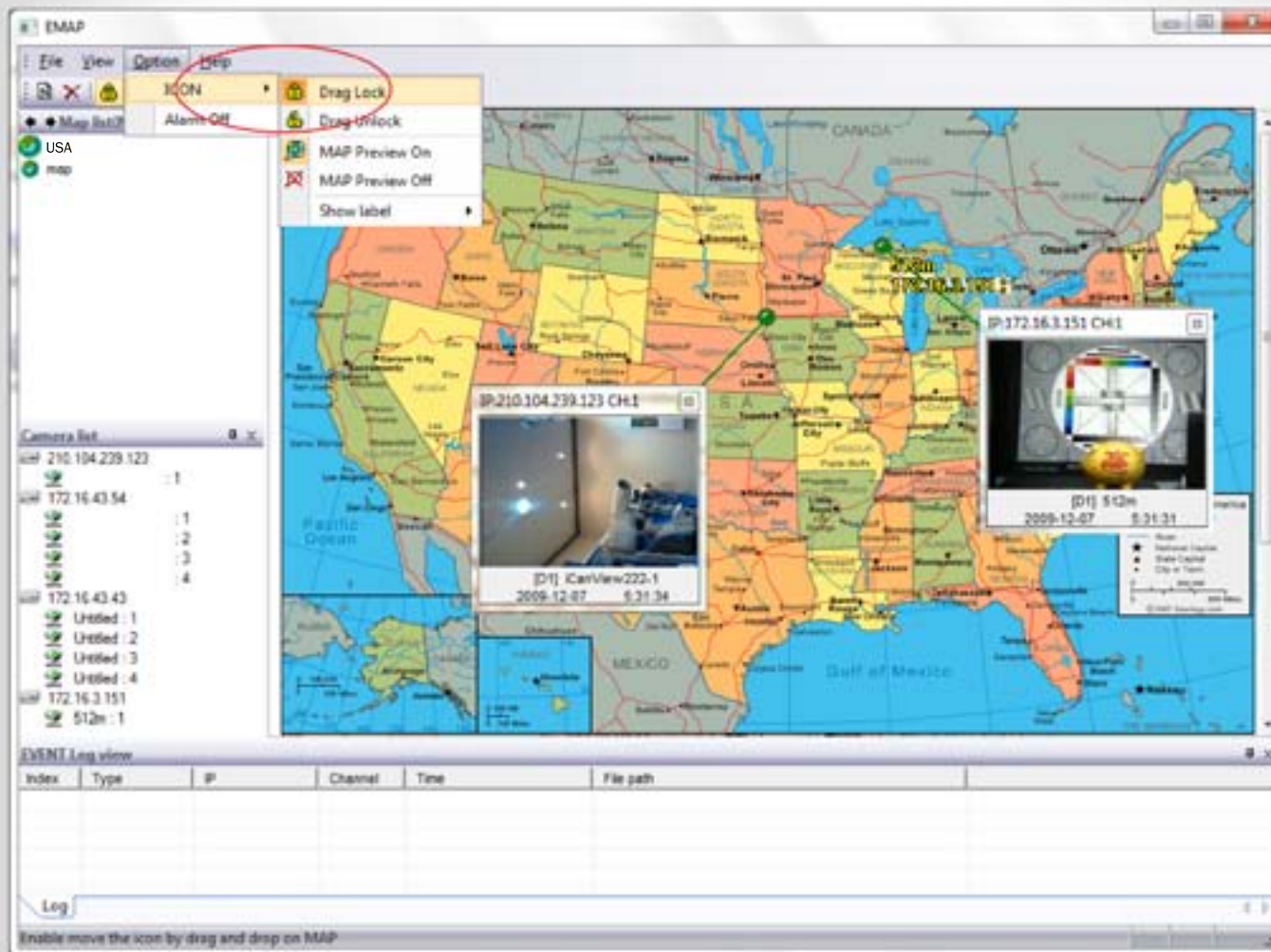
The Map Icon can be double clicked to move to the map.

10.4. E-Map – Placing Camera Icon



Select a camera data from the camera list and then perform Drag & Drop to place a camera Icon on the Map window.

10.5. E-Map – Locking/Unlocking the locations of the Icons



Select Drag Lock or Drag Unlock from Menu -> Icon to lock or unlock the location of the icons.

10.6. E-Map – Msp and Camera Status Indication

The screenshot displays the E-MAP software interface. On the left, there is a 'Map list(Navigation)' panel with 'USA', 'map1', and 'map2' listed. Below it is a 'Camera list' panel showing a list of camera addresses and their status. The main area is a map of the USA with several camera icons. A dark green circle (1) is located near Salt Lake City, and a bright green circle (2) is located near St. Paul, MN. A tooltip for camera 2 is visible, showing the address '210.104.239.112:11'. At the bottom, there is an 'EVENT Log view' table with columns for Index, Type, IP, Channel, Time, and File path.

Index	Type	IP	Channel	Time	File path
1	MOTION	172.16.3.11	1	2007/11/09 09:01:39	V:\0007_11_29_08\mon\MONITOR_1\FRAME_1(18)(9)10-
2	MOTION	172.16.3.58	1	2007/11/09 09:02:19	V:\0007_11_29_08\mon\MONITOR_1\FRAME_1(17)(27)01-
3	MOTION	172.16.3.11	1	2007/11/09 09:02:23	V:\0007_11_29_08\mon\MONITOR_1\FRAME_1(18)(9)10-
4	MOTION	172.16.3.153	1	2007/11/09 09:02:28	V:\0007_11_29_08\mon\MONITOR_1\FRAME_1(14)(29)03-
5	MOTION	172.16.3.58	1	2007/11/09 09:03:00	V:\0007_11_29_08\mon\MONITOR_1\FRAME_1(17)(27)01-
6	MOTION	172.16.3.153	1	2007/11/09 09:03:05	V:\0007_11_29_08\mon\MONITOR_1\FRAME_1(14)(29)03-

1. Camera status : Dark Green circle indicates a camera not connected. Bright green circle indicates a camera connected.
2. Information Display : Locate the cursor on top of the Icon to show the address, channel and description of the camera.

10.7. E-Map – Connection to the Camera for Live View



1. Live Pop-up : Double click the Camera Icon or select View from the pop up menu to show live streaming data from the camera.
2. Pop-up menu : Click on the right button after placing the cursor on the Camera Icon for the pop-up menu.

10.8. E-Map – Event Display

The screenshot displays the EMAP application window. The main area is a map of the United States with two green markers labeled 'Omaha' and 'Amarillo'. On the left side, there are three panels: 'Map info' showing 'USA', 'Nebraska', and 'Texas'; 'Camera list' showing 'polo.net-video.net' with channels 'CH:1' and 'CH:2', and '172.16.86.225' with channels 'CH:1', 'CH:2', and 'CH:3'; and 'EVENT Log view' which contains a table of events. The event log table is circled in blue.

Index	Type	IP	Channel	Time	File path
1	PLAY	polo.net-video.net	2	2007/08/02 17:33:30	
2	MODIFY	polo.net-video.net	2	2007/08/02 17:33:30	C:\Program Files\NetVideo\MyTV\Backup\Records\polo_n...
3	PLAY	polo.net-video.net	1	2007/08/02 17:33:38	
4	PLAY	172.16.86.225	1	2007/08/02 17:33:41	
5	STOP	172.16.86.225	1	2007/08/02 17:33:43	

The list of events are displayed in this window.

10.8. E-Map – Event Display

The screenshot displays the NVXR-64 E-Map software interface. It features a central map of the United States with various states color-coded. A green dot on the map is labeled "Missouri.net-video.net". To the left, a "Camera list" window shows the following details:

IP	Channel
172.16.86.225	CH : 1
	CH : 2
	CH : 1
	CH : 2
	CH : 3

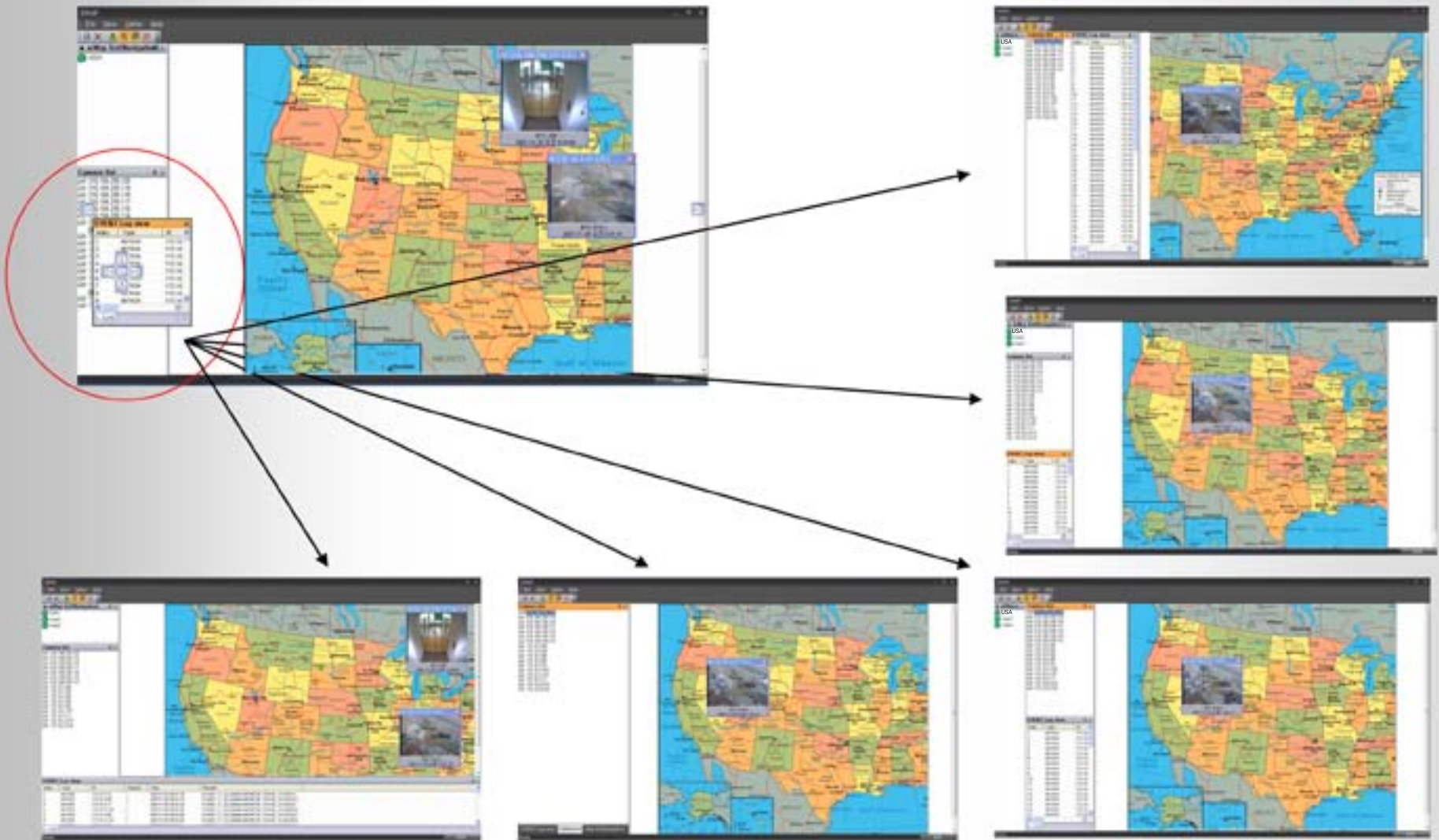
Below the camera list is an "EVENT Log view" window with the following data:

Index	Type	IP	Channel	Time	File path
1	PLAY	Missouri.net-video.net	2	2007/08/02 17:40:20	
2	SENSOR	Missouri.net-video.net	2	2007/08/02 17:20:24	C:\Program Files\Net Video\NVR\Backup\Records\ipolo_n...
3	SENSOR	Missouri.net-video.net	2	2007/08/02 17:20:53	C:\Program Files\Net Video\NVR\Backup\Records\ipolo_n...
4	SENSOR	Missouri.net-video.net	2	2007/08/02 17:20:54	C:\Program Files\Net Video\NVR\Backup\Records\ipolo_n...
5	STOP	Missouri.net-video.net	2	2007/08/02 17:20:59	

A video preview window in the top-left corner shows a live feed from a camera. A yellow arrow points from the "PLAY" event in the log to this window. A blue oval highlights the "File path" column in the event log, and a green arrow points from this oval to the video preview window.

1. Double click on the file path to playback the alarm event on a pop-up window
2. Up to 1000 events are stored and the oldest event will be removed to record new event.

10.9. E-Map – Relocating the Functional Windows



Use Drag & Drop for relocating the functional windows

Appendix A. – USB type WEB keyboard system controller.

Basic Info

- Model : WDS, 2) Protocol : PELCO D, 3) Baud rate : 2400, 4) Parity bit: NONE
- Refer to keyboard setup manual in box.
- It supports PNP(plug & play) feature

Procedure

1. Run NVXR- 64pro S/W.
2. Right click NVXR- 64pro tray icon on Windows tray.
3. Select Serial Option.
4. Pop up serial setup window



5. Check COM PORT keyboard connected and set parameters like F2.
6. Operate USB keyboard.
7. How to operation special keys.
 - Key, enters into OSD menu : push a MENU button during 2 seconds.
 - SCAN : Click #1 and then click SCAN button.
8. Others keys are the same with normal keyboard