

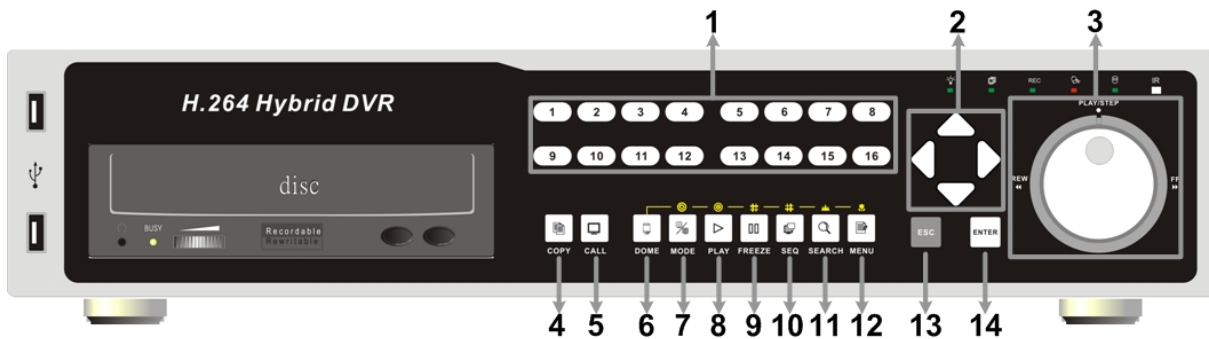
Professional H.264 DVR Setup Guide

Package Content

Inspect the packaging carton. Make sure your **Professional H.264 DVR** is properly delivered. Remove all items from the box and make sure the box contains the following items.

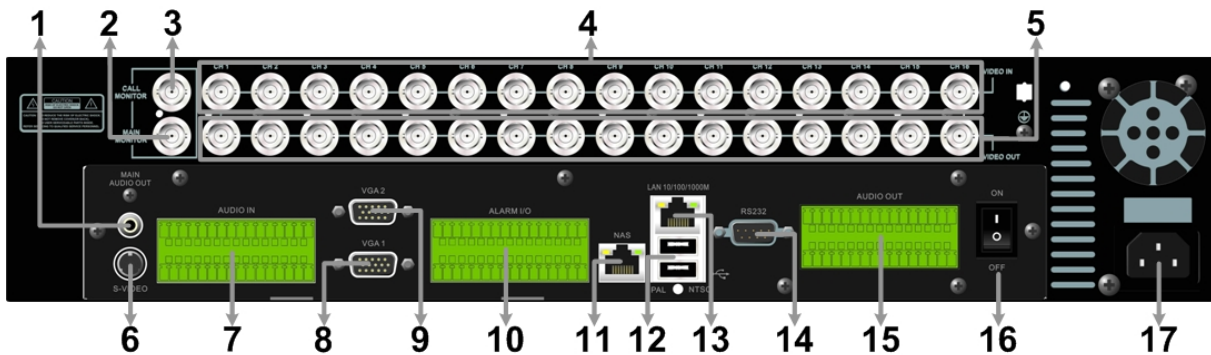


Front Panel



1	Channels	<ol style="list-style-type: none"> 1. In Live and Playback modes, press any key to view the corresponding video in full-screen. 2. In input interface, 1~10 can be used for direct input of numbers 0~9. 3. In Dome Camera Control mode, 1 is for entering the Set/ Go preset menu; 2 is for hiding or displaying the dome setting parameters; 11~16 is for quick access of preset points 1~6.
2	Direction Keys	<ol style="list-style-type: none"> 1. In Zoom mode, these keys function as normal direction keys. 2. In the OSD setup menu, the direction keys are used to move the cursor to previous or next fields. To change the value in the selected field, press UP / DOWN keys.
3	Shuttle/ Jog	This is used to control playback operations.
4	COPY	This key is used for marking time in ezBurn™ function.
5	CALL	Press this key to control call monitor or 2nd main monitor.
6	DOME	Press this key to enter Dome Camera Control mode.
7	MODE	Press this key to view in full-screen or multiple window modes.
8	PLAY/STOP	Press once to start the playback of recorded video. Press again to exit.
9	FREEZE	Press this key to freeze the current viewing screen.
10	SEQ	Press this key to start automatic sequence display of cameras.
11	SEARCH	Press this key to search recorded video by date/time or event.
12	MENU	Press this key to enter the OSD setup menu.
13	ESC	Press this key to cancel or exit from certain control mode.
14	ENTER	<ol style="list-style-type: none"> 1. In OSD menu or selection interface, press these key to make the selection or save settings. 2. In live full-screen viewing mode, press this key to view a 2× zoom image; press it again to return.

Back Panel



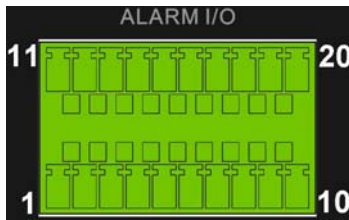
1	Main Monitor Audio Out	A RCA connector is provided to output audio associated with the main monitor.
2	Main Monitor (BNC)	A BNC connector is provided for connecting to a main monitor.
3	Call Monitor (BNC)	A BNC connector is provided for connecting to a call monitor.
4	Video In (BNC)	A group of BNC connectors is offered for video input streams from installed cameras. The number of connectors equals to the number of channels.
5	Video Out (BNC)	The same amount of BNC connectors underneath Video IN (BNC) is offered for looping out the video input.
6	Main Monitor (S-Video)	An S-Video connector is provided for connecting to a main monitor.
7	Audio In	The DVR provides audio in connectors (a terminal block) for each channel to connect its individual audio source device.
8	Main Monitor 1 (VGA)	Two VGA output connectors are offered for connecting to VGA main monitors 1 & 2 respectively. The source image is the same as BNC & S-Video connectors.
9	Main Monitor 2 (VGA)	
10	Alarm I/O & RS-485	The DVR provides alarm I/O and RS-485 ports that offer users the flexibility required to connect the unit to other devices.
11	NAS Device	The NAS connector allows users to connect to a Network-Attached Storage (NAS) device to expand HDD capacity of the DVR.
12	USB 2.0 Ports (x2)	Two USB 2.0 ports are located on the rear panel for users to connect external USB devices to the unit, such as ThumbDrive® or a USB mouse.
13	LAN 10/100/1000M (RJ-45)	The DVR is capable of networking and it allows the videos to be viewed over the LAN network or the Internet by using the Internet Explorer.
14	RS232	The DVR provides a RS232 communication port for sending and receiving signals.
15	Audio Out (Optional)	Optional Audio Out connectors can be installed for each channel to connect its individual audio output device.
16	Power Switch	Use this switch to power on / off the DVR.
17	Power Jack	Connect the power supply cord shipped with the DVR. Use of other power supply cords may cause overloading.



NOTE: The BNC and VGA monitor cannot coexist at the same time under normal condition. Switching off VGA1 connector will allow BNC and VGA monitor to be shown simultaneously. Refer to the OSD Setup Manual for detail settings.

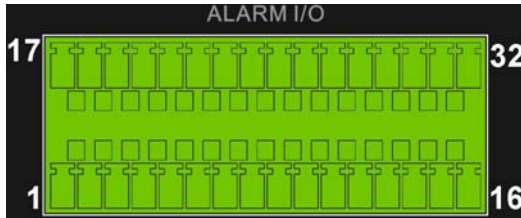
Pin Definition of Alarm I/O & RS-485

4ch-Model / 8ch-Model:



Pin	Definition	Pin	Definition	Pin	Definition
1	RS485 D+	8	Normal Close B	15	Alarm In 5 (8ch model)
2	RS485 D-	9	Common Node B	16	Alarm In 6 (8ch model)
3	Ground	10	Normal Open B	17	Alarm In 7 (8ch model)
4	Normal Close A	11	Alarm In 1	18	Alarm In 8 (8ch model)
5	Common Node A	12	Alarm In 2	19	N/A
6	Normal Open A	13	Alarm In 3	20	N/A
7	Ground	14	Alarm In 4		

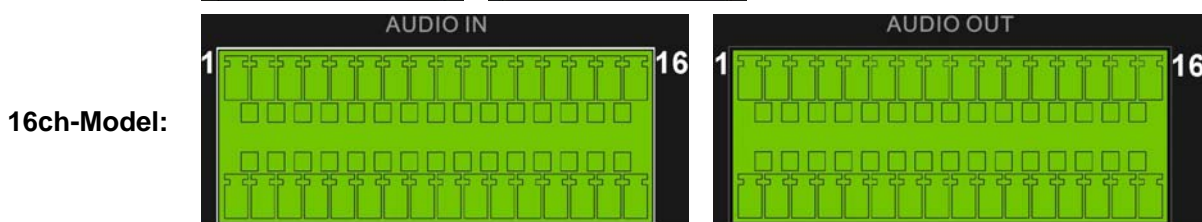
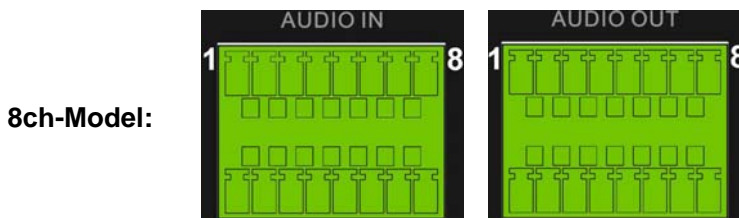
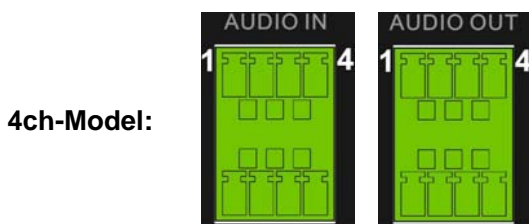
16ch-Model:



Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	RS485 D+	9	Common Node B	17	Alarm In 1	25	Alarm In 9
2	RS485 D-	10	Normal Open B	18	Alarm In 2	26	Alarm In 10
3	Ground	11	Ground	19	Alarm In 3	27	Alarm In 11
4	Normal Close A	12	Normal Close C	20	Alarm In 4	28	Alarm In 12
5	Common Node A	13	Common Node C	21	Alarm In 5	29	Alarm In 13
6	Normal Open A	14	Normal Open C	22	Alarm In 6	30	Alarm In 14
7	Ground	15	Ground	23	Alarm In 7	31	Alarm In 15
8	Normal Close B	16	Ground	24	Alarm In 8	32	Alarm In 16

Pin Definition of Audio In / Audio Out

For terminal blocks of Audio In and Audio Out, shown as below pictures, pins on the upper row are Audio In / Audio Out connectors for all channels, in sequential order from left to right. All other pins on the bottom row are for ground connection.



Basic Setup

Follow the description to set up the configuration of date/time, recording, and viewing mode of the DVR. All configurations can be set via either the DVR or **DVRRemote**, the remote software.

Enter OSD Setup menu:

- Press **MENU** to enter the OSD main menu.
- Enter username and password. The default username and password are **admin / 1234**.
- It is strongly suggested to change the passwords to prevent unauthorized access.

Date / Time Setting:

The user can choose to either enter the Date/Time manually or use the Time Sync function to sync the time with the time server periodically.

To setup the Date/Time manually>>

- Select **<Date/Time>** in System Setup menu to enter the Date/Time menu.
- Select the date and time using **LEFT/RIGHT** keys; then adjust the value using **UP/DOWN** keys.
- The new date and time settings take effect after the changes are confirmed.

To setup the Date/Time using the Time Sync function>>

- Select **<Date/Time>** in System Setup menu to enter the Date/Time menu.
- Select **<Time Zone>** to enter the time zone. To find out your local time zone, please visit www.greenwichmeantime.com
- After entering the time zone, the **<Network Time Protocol Setup>** option will appear. Select the **<Network Time Protocol Setup>** to set the time server.
- The default time server is time.nist.gov, but the user can change it to other time servers when desired. A list of IP addresses of the time servers is listed below.

129.6.15.28	129.6.15.29	132.163.4.101
132.163.4.102	132.163.4.103	128.138.140.44
192.43.244.18	131.107.1.10	69.25.96.13
206.246.118.250	208.184.49.9	64.125.78.85
207.200.81.113	64.236.96.53	68.216.79.113

- After the time server is set, select **<Manually Time Sync>** to sync the time.
- The time sync can also be updated periodically. Select **<Automatically Time Sync>**, and the time will be automatically synced once an hour.



NOTE: The **<Time Zone>** must be set to your local time zone or the **<Network Time Protocol Setup>** will not be accessible.

To Define Recording Settings:

- Select **<Record Setup>** from the OSD main menu.
- Select **<ezRecord>** as **Preset Configuration** option, and select wanted number of recording day in **ezRecord Setup**; other setting will be automatic arranged by the unit.
- Consider your own needs and select a **Preset Configuration** setting from **<Best Quality>**, **<Standard>**, and **<Extended Record>**. Detailed information refers to **Professional H.264 DVR User's Manual, Preset Record Configuration**.
- Adjust the Recording schedule, Pre-alarm, Circular and Audio parameters.
- When the settings are completed, press **ENTER** to confirm and save the settings; or **ESC** to abort.

To Select Viewing Mode:

- Press **MODE** button repeatedly to select the wanted display mode. The available viewing modes are full-screen, 2×2, 3×3, and 4×4 split-window.

Network Setup

Using LAN / Cable Modem:

Configure the LAN setup when you plan to use a LAN, WAN, or Internet connection without a dialup modem. It requires an Ethernet connection to a network. The default ID of your **Professional H.264 DVR** must be changed to avoid network conflicts.

- From OSD main menu, select **<System Setup>** → **<Network Setup>**, set the **<LAN Select>** item to **<LAN>** or **<PPPoE>** according to your network application, and enter **<LAN Setup>**.
- For DHCP user, set the DHCP to **<ON>**. The IP address, Netmask, Gateway and DNS settings are retrieved from network servers. DHCP is dynamic that the settings change from time to time.
- For Non-DHCP user, set the DHCP to **<OFF>**. You must enter an IP address, Netmask, Gateway and DNS settings. Please obtain the information from your network service provider.
- To change the IP address, Netmask, Gateway and DNS value, press **UP/DOWN** keys to move the cursor to the item. Use **LEFT/RIGHT** keys to access each section of the value and press **ENTER**, then change the value using **UP/DOWN** keys.
- PPPoE users must set the **<PPPoE Account>**, **<PPPoE Password>** and **<PPPoE Max Idle>** as well.
- When the settings are complete, press **ENTER** to confirm and save the settings; or **ESC** to abort.

Connecting Remote PC with the DVR via Modem:

DVR Configuration>>

- Connect a USB modem to the USB socket and connect a working phone line to the modem.
- From OSD main menu, select **<System Setup>** → **<Network Setup>** → **<Modem Setup>** → **<Dial-in Setup>** to set up the Dial-In settings, including Dial-in Account, Password, Server and Client IP, etc.

PC Configuration>>

- On your PC, click **<Start>** → **<My Network Places>** → **<View Network Connections>** → **<Create New Connection>** → **<Connect to the Internet>** → **<Set up my connection manually>** → **<Connect using dial-up modem>** to connect to the DVR through phone line.
- Give a name to the connection. Enter the phone number of the modem connected to the DVR.
- Enter the Dial-in Account and Password that are specified in local DVR. Click **<Finish>** to establish the connection.

Establishing Dial-up Modem Connection from the DVR for Remote Notification:

DVR Configuration>>

- Connect a USB modem to the USB socket and connect a working phone line to the modem.
- From OSD main menu, select **<System Setup>** → **<Network Setup>** → **<Modem Setup>** → **<Dial-out Setup>** to set up the Dial-out settings, including Dial-out IP, Phone Number, Dial-out Account, etc.

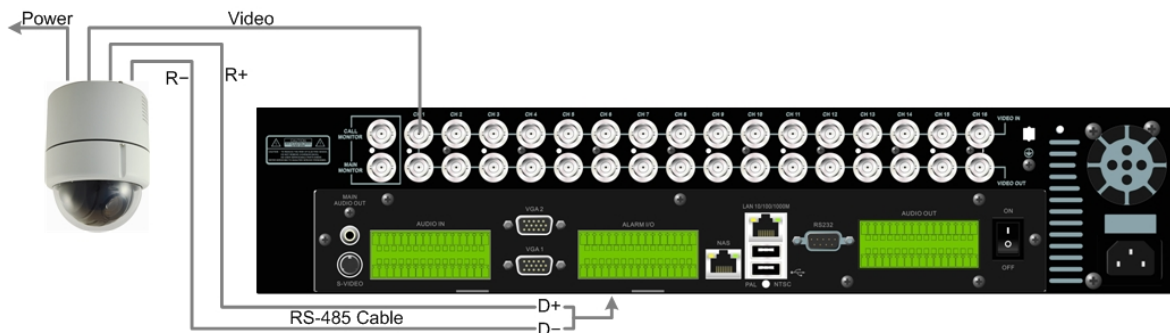
PC Configuration>>

- On your PC, click **<Start>** → **<My Network Places>** → **<View Network Connections>** → **<Create New Connection>** → **<Set up an advance connection>** → **<Accept incoming connections>** to accept connection from the DVR.
- Select a modem, then choose **<Do not allow virtual private connections>** as VPN setting.
- Edit User Permissions list to set allowable users, or add a new user as set in the DVR.
- Edit TCP/IP properties to assign TCP/IP address, either assign a fixed IP or choose DHCP auto assignment. Click **<Finish>** to complete the process.

Dome Camera Control

Dome Camera Connection & Settings:

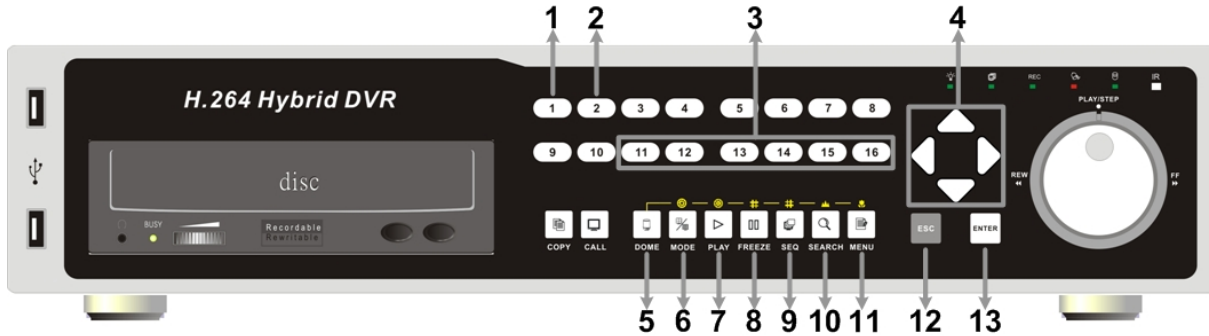
- See section Pin Definition of Alarm I/O & RS-485 for RS-485 port pin definition.
- Refer to the following figure. Connect the R+, R- terminals on the dome camera to the D+, D- terminals on the RS-485 port by RS-485 cable respectively.



- To set up dome camera's protocol and ID, press **MENU** to access the OSD main menu, and select **<Camera Setup>**. The available protocols include **<DynaColor>**, **<Pelco D>**, **<Pelco P>**, **<AD422>**, **<Fastrax 2>**, **<JVC>**, **<Panasonic_C>**, **<Panasonic_N>** and **<None>** (default). Note that ID number must match the ID address defined by the dome camera.

- To configure the RS-485 parameters, select **<System Setup>** from OSD main menu, and then select **<RS485 Setup>**. The default **Professional H.264 DVR** RS-485 settings are 9600 Baud, 8 Data Bits, 1 Stop Bit and No Parity.

Control Buttons of Dome Camera Control:



1	Set / Go Preset	6	Iris Open	11	Zoom In
2	Toggle Hint Screen	7	Iris Close	12	ESC
3	Go Presets 1~6	8	Focus Far	13	Enter / Auto
4	Pan / Tilt	9	Focus Near		
5	Enter Dome Camera Control Mode	10	Zoom Out		

Basic Playback Operation

Searching Recorded Video by Time:

- Press **SEARCH** button to enter the Search menu.
- Move the cursor to “From Time” and press **ENTER** will start playing recorded video from the specified “From Time”.
- Move the cursor to “End Time” and press **ENTER** will start playing recorded video from the specified “End Time”.
- Use Direction keys to move the cursor for setting the Start Time; adjusting the date and time values by **UP/DOWN** keys. Press **ENTER** to confirm or **ESC** to abort.
- Move the cursor to **<Begin Playback>** and press **ENTER** to start playing back the selected video. Either press **PLAY/STOP** again or **ESC** to return to live video.



NOTE: If there is no available recorded video that matches your specified time and date, the unit starts to playback from the next available video.

Searching Recorded Video by Event:

- Press **SEARCH** button to enter the Search menu.
- To search event video that was recorded on a specific camera, use **LEFT/RIGHT** keys to move the cursor and press **ENTER** to select or de-select a channel.
- Move the cursor to **<Event List>** and press **ENTER** to list the event video of the selected channels.

- The list displays each event by date, time, triggered camera and alarm type. The latest recorded event video will be listed on the top. To exit the event list, press **ESC**.
- Use **UP/DOWN** keys to scroll through the Event List. Press **ENTER** to play back the selected event record.



NOTE: The event list displays only the first 1024 events; as some events are deleted, others are displayed.

Playback Controls:

Button	Description
LEFT	The button is for rewinding the recorded video while playing back. Press the button repeatedly to increase the speed of reverse playback by 1x, 2x, 4x, 8x, 16x, or 32x.
RIGHT	The button is used to play the recorded video fast forward. Press the button repeatedly to increase the speed of forward playback by 1x, 2x, 4x, 8x, 16x, or 32x.
FREEZE	Press FREEZE to pause the playback video. When the recorded video is paused, press LEFT / RIGHT to resume playback video single step reverse / forward respectively. Press FREEZE again to continue playing video.
PLAY	Press to start the playback or to stop playing back video and return to live mode.

Using Remote Software

Setup Requirements:

- Make sure the PC is connected to the Internet.
- Obtain IP address of your **Professional H.264 DVR**. To check the DVR's IP address, press **MENU** key on the unit and select **<System Setup>** → **<Network Setup>** → **<LAN Setup>** → **<IP>** to check the IP.

Changing Internet Setting:

- Start the IE; select **<Tools>** from the main menu of the browser, then **<Internet Options>** and then click the **<Security>** tab.
- Select **<Trusted Sites>** and click **<Sites>** to specify its security setting.
- Uncheck "Require server verification (https:) for all sites in this zone". Type the IP address of the unit in field and click **<Add>** to add this website to the zone.
- In the Security Level area, click **<Custom Level>**. Under **<ActiveX controls and plug-ins>**, set all items to **<Enable>** or **<Prompt>**.
- Click **<OK>** to accept the settings and close the **<Security Settings>** screen.

Using the Remote Software:

- Start the IE and enter the IP address of your **Professional H.264 DVR** in the address bar.
- The ActiveX controls and plug-ins dialog will show twice for confirmation; click **<YES>** to accept ActiveX plug-ins. The **DVRRemote** plug-ins will be downloaded and installed on your PC automatically when the connection is successfully made.



NOTE: Do not enter any leading “0” characters in the address, for example, “192.068.080.006” should be entered “192.68.80.6”.



NOTE: If the default trigger port 80 is changed into another one, port 81 for example, you should enter the IP address as “192.68.80.6:81”.

- Version verification starts automatically to verify whether DVRRemote was installed. This process may take up to 30 seconds.
- When the software is completely downloaded and installed, the Login Screen is displayed.
- Enter username and password. The default username and password are **admin / 1234**.

The following picture shows the display window of the DVRRemote:



Refer to the table below for brief description of functional items:

Item	Description	Item	Description	Item	Description
1	Select Picture Size	6	Search Event List	11	Audio On/Off
2	Download DVRPlayer	7	Capture Snapshot	12	Select Camera
3	View Live Camera	8	4:3 Viewing Aspect	13	Select Bandwidth Speed
4	Playback Video	9	Playback Control	14	Display Mode
5	Setup Menu	10	Instant Recording	15	Dome Camera Control Panel

For more information on DVRRemote, see User's Manual.

DVRRemote Playback

To Playback Remote Video:

- Click **<Play>** on the main window toolbar, and then **<Remote Playback>** tab.
- The **<From>** and **<To>** on top of the screen display the date and time from which recorded video is available for playback.
- Choose **<Playback>** in **<Select>** field for playback recorded video.
- Select the date and time of the segment to play back from the **<Start>** field. You can change the date and time either by typing desired numbers directly or using the arrow buttons.
- Click **<OK>** to start the playback, or click **<Close>** to abort.

To Playback Local *.drv File:

- Click **<Play>** on the main window toolbar, and then **<Local Playback>** tab.
- Click **<Open>** and the file selection screen is displayed. Select the *.drv video file to playback and click **<OK>**.
- Click **<OK>** to start the playback, or click **<Cancel>** to abort.
- View the video playback using the Playback controls.
- To end the playback, click **<Live>** to return to live video.

To Playback Local *.avi Files:

- Start your windows media player or other media player from **<Start>** menu (or any other possible access).
- Select **<File>** and then **<Open>**.
- Select the wanted *.avi file, and click **<Open>**.



NOTE: The *.avi files for each channel are stored separately. Therefore the video can be played back in single channel, full screen mode only.

To Playback Event Video

- Click **SEARCH** on the main window toolbar. The Event List appears.
- Scroll through the Event List and highlight the interested events.
- Double-click on the desired event to view the event video.

Playback Controls:

