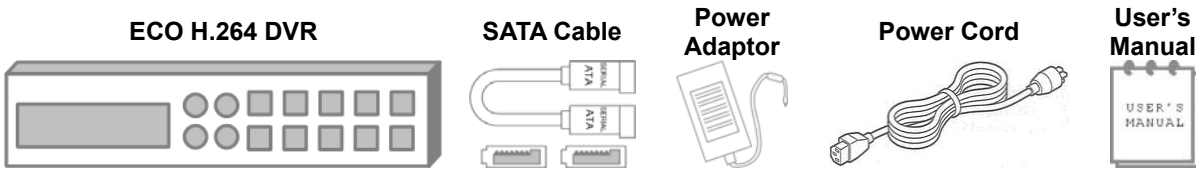


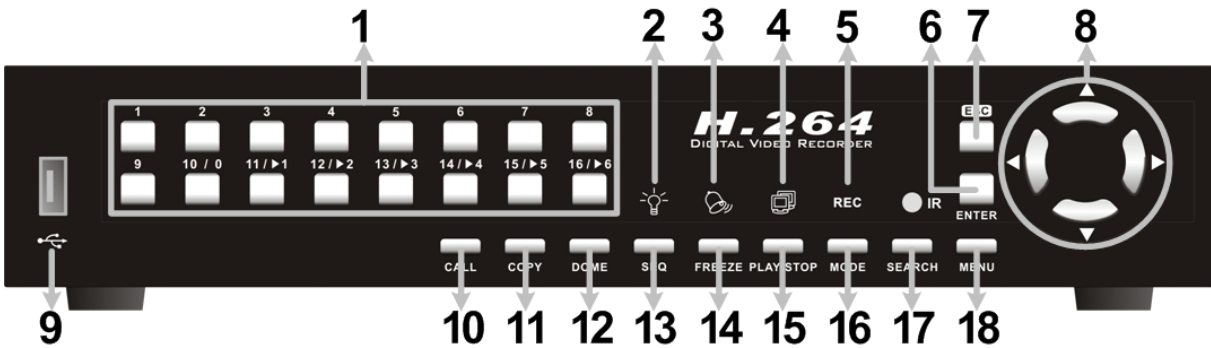
# ECO H.264 DVR Setup Guide

## Package Content

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



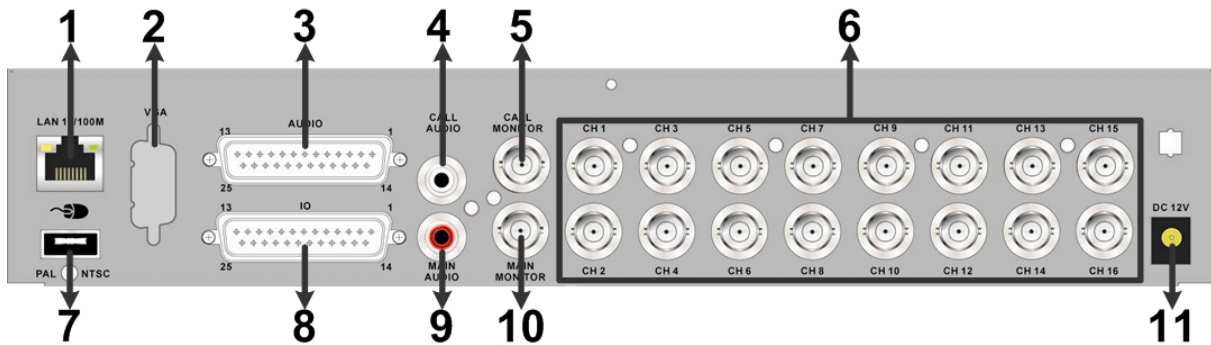
## Front Panel



1	<b>Channels</b>	<ol style="list-style-type: none"> <li>In Live and Playback modes, press any key to view the corresponding video in full-screen.</li> <li>In input interface, 1~10 can be used for direct input of numbers 0~9.</li> <li>In Dome Camera Control mode, 1 is for entering the Set/ Go preset menu; 2 is for hiding or displaying the hint screen; 11~16 is for quick access of preset points 1~6.</li> </ol>
2	<b>Power LED</b>	It lights up when power source is connected.
3	<b>Alarm LED</b>	It lights up when an alarm is triggered.
4	<b>Network LED</b>	It lights up when network is connected. In addition, it blinks when data is being transmitted via the network.
5	<b>Record LED</b>	It blinks when videos are being recorded.
6	<b>ENTER</b>	<ol style="list-style-type: none"> <li>In OSD menu or selection interface, press these key to make the selection or save settings.</li> <li>In live full-screen viewing mode, press this key to view a 2× zoom image; press it again to return.</li> </ol>
7	<b>ESC</b>	Press this key to cancel or exit from certain control mode.
8	<b>Direction Keys</b>	<ol style="list-style-type: none"> <li>In Zoom mode, these keys function as normal direction keys.</li> <li>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.</li> </ol>

9	<b>USB 2.0 Port</b>	The USB 2.0 port allows users to connect an external USB device to the unit, such as a USB ThumbDrive or a USB mouse.
10	<b>CALL</b>	Press this key to enter Call Monitor Control mode. <b>(8CH &amp; 16CH models only)</b>
11	<b>COPY</b>	This key is used for marking time in quick video export function.
12	<b>HOME</b>	Press this key to enter Home Camera Control mode.
13	<b>SEQ</b>	Press this key to start automatic sequence display of cameras.
14	<b>FREEZE</b>	Press this key to freeze the current viewing screen.
15	<b>PLAY/STOP</b>	Press once to start the playback of recorded video. Press again to exit.
16	<b>MODE</b>	Press this key to view in full-screen or multiple window modes.
17	<b>SEARCH</b>	Press this key to search recorded video by date/time or event.
18	<b>MENU</b>	Press this key to enter the OSD setup menu.

## Rear Panel



1	<b>LAN 10/100M (RJ-45)</b>	The DVR is capable of networking. Once the unit is connected to the LAN network, users can remotely access the DVR through the remote software on a PC.
2	<b>Main Monitor-VGA(optional)</b>	The DVR can connect to a monitor via an optional VGA connector.
3	<b>Audio In</b>	Audio In connectors are for the DVR to connect audio source devices. For 4CH models, 4 RCA Audio In connectors will be provided; whereas for 8CH and 16CH models, a D-Sub Audio In connector is provided.
4	<b>Call Monitor Audio Out</b>	Call Monitor Audio Out RCA connectors are provided for the DVR to connect audio output devices (e.g. amplified speakers). <b>(8CH &amp; 16CH models only)</b>
5	<b>Call Monitor (BNC)</b>	The call monitor is used to display full screen video of all installed cameras in sequence. The BNC Call Monitor connector allows users to connect the DVR with an optional call monitor. <b>(8CH &amp; 16CH models only)</b>
6	<b>Video In (BNC)</b>	A group of BNC connectors is provided for video input streams from installed cameras.
7	<b>USB Port</b>	This USB port allows users to connect a PS/2 mouse via a converter.
8	<b>Alarm I/O &amp; RS-485</b>	The DVR provides alarm I/O and RS485 ports that offer users the flexibility required to connect the DVR to other devices.
9	<b>Main Monitor Audio Out</b>	Main Monitor Audio Out RCA connectors are provided for the DVR to connect audio output devices (e.g. amplified speakers).
10	<b>Main Monitor-BNC</b>	The DVR can connect to a monitor via a BNC connector.
11	<b>Power Jack</b>	The DVR has a free voltage DC power connection jack. Please connect the power supply adapter shipped with the unit.

## Pin Definition of Alarm I/O & RS-485, and Audio In

### Alarm I/O & RS-485:

#### 4CH models:

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	Alarm Out Open	5	Alarm In 1	9	Alarm Out Close	13	GND
2	Alarm Out COM	6	Alarm In 2	10	GND	14	GND
3	RS485 D+	7	Alarm In 3	11	GND	15	GND
4	RS485 D-	8	Alarm In 4	12	GND		

#### 8CH & 16CH models:

Pin	Definition	Pin	Definition	Pin	Definition
1	Alarm Out Open	10	Alarm In 5	19	Alarm In 10 (16CH)
2	Alarm Out COM	11	Alarm In 6	20	Alarm In 11 (16CH)
3	RS485 D+	12	Alarm In 7	21	Alarm In 12 (16CH)
4	RS485 D-	13	Alarm In 8	22	Alarm In 13 (16CH)
5	Reserved	14	Alarm Out Close	23	Alarm In 14 (16CH)
6	Alarm In 1	15	Reserved	24	Alarm In 15 (16CH)
7	Alarm In 2	16	Reserved	25	Alarm In 16 (16CH)
8	Alarm In 3	17	Reserved		
9	Alarm In 4	18	Alarm In 9 (16CH)		

### Audio In:

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	Audio 1	8	Audio 15 (16CH)	15	Audio 4	22	GND
2	Audio 3	9	GND	16	Audio 6	23	GND
3	Audio 5	10	GND	17	Audio 8	24	GND
4	Audio 7	11	GND	18	Audio 10 (16CH)	25	Reserved
5	Audio 9 (16CH)	12	GND	19	Audio 12 (16CH)		
6	Audio 11 (16CH)	13	Reserved	20	Audio 14 (16CH)		
7	Audio 13 (16CH)	14	Audio 2	21	Audio 16 (16CH)		



## Power On the DVR

Please follow the proper power on procedures to avoid damaging the DVR.

- Connect all necessary components, e.g. monitor and cameras, before power on the DVR.
- Check the type of power source before connecting the power adaptor to the DVR. The acceptable power input is between AC110V ~ AC240V.

### Select Viewing Mode:

- Press **MODE** repeatedly to select the wanted display mode. The available viewing modes are full-screen, 2×2, 3×3, and 4×4 split-window.
- Press **FREEZE** to pause the current viewing image.
- Refer to the following for a brief description of some icons that will be shown on the monitor.

Icon	Description	Position	Icon	Description	Position
	Playback Mode	Lower-left corner		Key Locked	Center-bottom
N	Not Logged-in	Upper-right corner	1~8	User's Authority Level	Upper-right corner

## Basic Setup

Enter the OSD main menu and setup some basic configuration of the DVR. The basic configuration can be set via either the DVR or **DVRRemote**, the remote software.

### Enter OSD Main Menu:

- Press **MENU** to enter the OSD main menu.
- Enter username and password. The default username and password is **admin** and **1234**.
- Press **MENU** again to quickly input the default username "**admin**".
- It is strongly suggested to change the password to prevent unauthorized access.

### Date / Time Setting:

Follow steps below to setup date/time before the recording starts.

- Select **<Date/Time>** in System Setup 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.

### Language Setting:

If users wish to change language of the DVR system, follow the steps below.

- Select **<Language>** in System Setup menu and press **ENTER**.
- Press the **UP/DOWN** keys to select the desired language.

## Network Setup

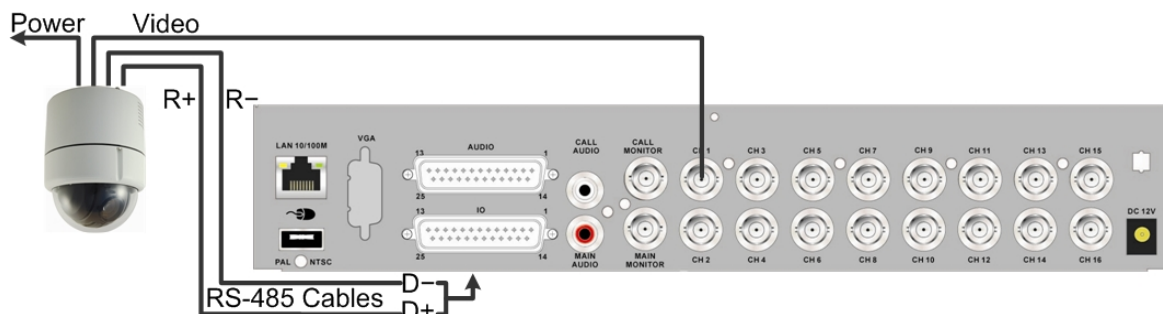
Configure the LAN setup for the DVR to properly function with Ethernet connection.

- From OSD main menu, select **<System Setup>** → **<Network Setup>**, set the **<LAN Select>** item to **<LAN>** or **<PPPoE>** according to the 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>**. Enter an IP address, Netmask, Gateway, and DNS settings. Please obtain the information from the 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.

## Dome Camera Control

### Dome Camera Connection & Settings:

- See section Pin Definition of Alarm I/O & RS-485, and Audio In 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 **<DSCP>**, **<AD422>**, **<Pelco D>**, **<Pelco P>**, **<Fastrax 2>**, **<JVC>**, **<Panasonic\_C>**, and **<Panasonic\_N>**. The default is **<None>**. 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 RS-485 settings are 9600 Baud, 8 Data Bits, 1 Stop Bit and No Parity.

### Control Buttons in Dome Camera Control Mode:



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

## Basic Playback Operation

### Search By Time:

- Press **SEARCH** to enter the Search menu.
- Move the cursor to “From” and press **ENTER** will start playing recorded video from the specified “From” time.
- Move the cursor to “End” and press **ENTER** will start playing recorded video from the specified “End” time.
- Move the cursor to “Select” and press **LEFT/RIGHT** to choose date/ time. Press **ENTER** and adjust the values by **UP/DOWN** keys. Press **ENTER** again to confirm or press **ESC** to abort.
- Move the cursor to <**Begin Playback**> and press **ENTER** to start playing back recorded video of the selected time. Press **PLAY/STOP** again to return to live video.



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

### Calendar Search:

- Press **SEARCH** to enter the Search menu.
- Move the cursor to <**Calendar Search**> and press **ENTER**. A calendar will show up.
- Move the cursor to year/ month and press **ENTER**. Then press **UP/DOWN** to adjust the value and press **ENTER** again to confirm.
- Move the cursor to select any day shown in bold font, and a time ruler will be displayed.
- Press **ENTER** and an arrow will show up above the time ruler. Press **LEFT/RIGHT** to select a desired time. Alternatively, move the cursor to the time shown at the bottom. Press **ENTER** and adjust the values of hour/ minute/ second via **UP/DOWN** keys.
- Note that the time blocks highlighted in red represent events occurred.
- Move the cursor to the playback icon (▶) and press **ENTER** to start playing back the video.

### Search by Event:

- Press **SEARCH** 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:**

<b>Button</b>	<b>Description</b>
<b>LEFT</b>	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.
<b>RIGHT</b>	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.
<b>FREEZE</b>	Press <b>FREEZE</b> to pause the playback video. When the recorded video is paused, press <b>LEFT</b> / <b>RIGHT</b> to resume playback video single step reverse / forward respectively. Press <b>FREEZE</b> again to continue playing back video.
<b>Play/Stop</b>	Press to start the playback or to stop playing back video and return to live mode.

## **Connect the DVR via the Remote Software**

### **Setup Requirements:**

- Make sure the PC is connected to the Internet.
- Obtain IP address of the **ECO H.264 DVR**. To check the DVR's IP address, press **MENU** on the front panel 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 the **ECO 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 the 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, then the IP address should be entered 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 the username and password. The default usernames and passwords are **admin / 1234** and **user / 4321**.

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
1	Instant Recording	10	Search Event List
2	Smoothen the Image	11	Capture Snapshot
3	Deflicker On/Off at Playback	12	4:3 Viewing Aspect
4	Audio On/Off	13	HDD Status
5	Select Camera	14	Playback Control
6	Display Mode	15	Select Picture Size
7	View Live Camera	16	Select Bandwidth Speed
8	Playback Video	17	Download DVRPlayer
9	Setup Menu		

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



## DVRRemote Playback

### 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. The date and time can be changed either by typing desired numbers directly or using the arrow buttons.
- Click **<OK>** to start the playback, or click **<Close>** to abort.

### 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.

### Playback Local \*.avi Files:

- Start the 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>**.

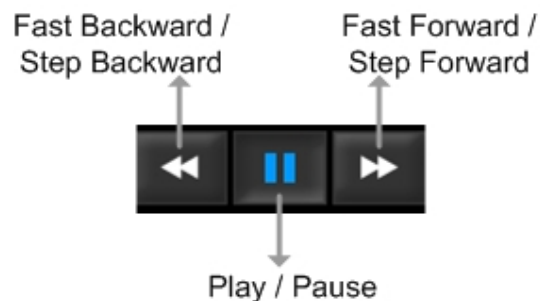


**NOTE:** The \*.avi files for each channel are stored separately. Therefore the video can be played back in single channel, full screen mode only.

### 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:



## Mobile View Software

Mobile View software allows users to timely monitor via a mobile device with internet connection. Refer to below for brief introductions of installation (JAVA mobile devices) and basic operations.

### Download and Installation:

- Access the java installation menu on a JAVA mobile device and connect the website that provides Mobile View software to directly download the software to the mobile device.
- After the download is completed, follow the instruction shown on the JAVA mobile device to installed Mobile View software.

### Basic Operation:

Locate the installed Mobile View software and launch it. The main window will be shown as below on the left.



- Access <Connect to device> and users can create bookmarks for DVRs or IP cameras via entering **hostname/IP address**, **port**, **username**, and **password** of the devices.
- If a DVR is connected, the available functions will be listed as shown above on the right. Users can select <Live Monitoring> to view the live video. <Normal Playback> and <Event Playback> allow users to playback recorded normal and event videos. <Menu Config> enables users to setup part of the DVR's configuration.
- If an IP camera is connected, live video of the IP camera will be directly shown on the screen.
- <Snapshot Viewer> is where the snapshot pictures can be viewed after they are saved to the database of the mobile devices.

Refer to Mobile View Software User's Manual for installation on Black Berry phones and detailed information of all functions.