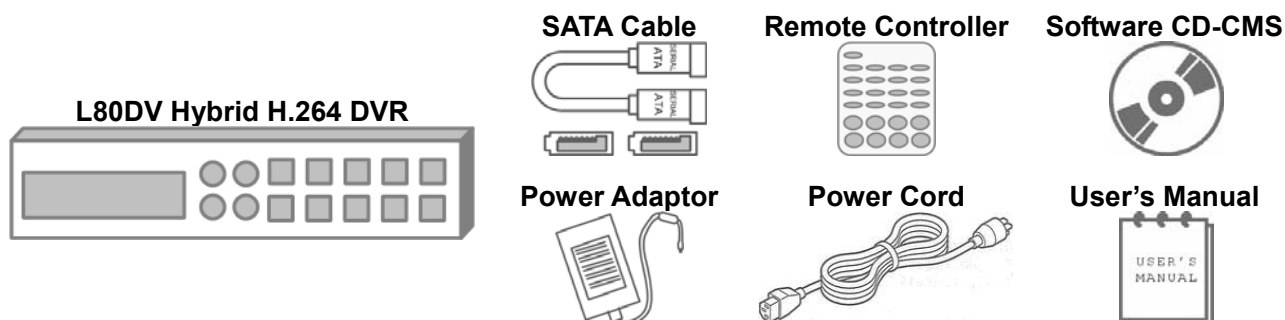


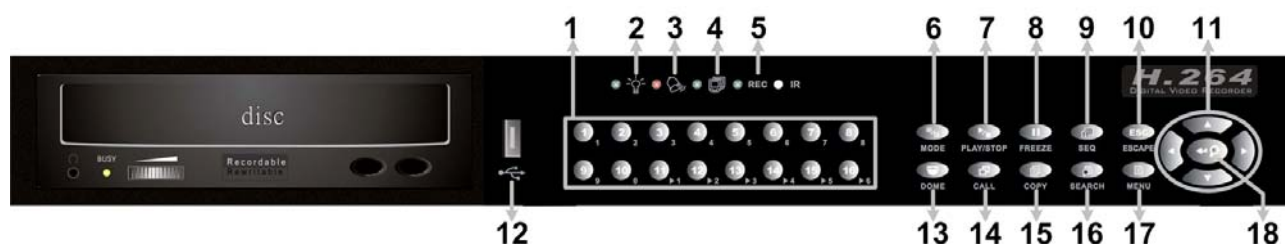
L80DV Hybrid H.264 DVR Setup Guide

Package Content

Inspect the packaging carton. Make sure the **L80DV Hybrid H.264 DVR** is properly delivered. Remove all items from the box and make sure the box contains the following items.



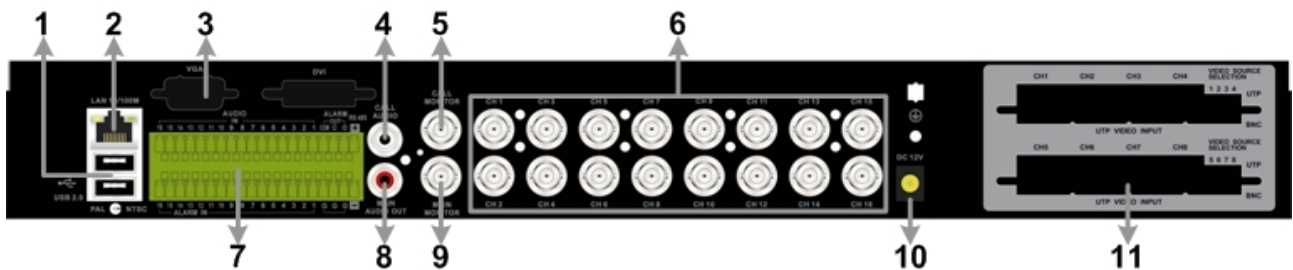
Front Panel



1	Channels	<ol style="list-style-type: none"> In Live and Playback modes, press any key to view the corresponding video in full-screen. In input interface, 1~10 can be used for direct input of numbers 0~9. 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	Power LED	It lights up when power source is connected.
3	Alarm LED	It lights up when an alarm is triggered.
4	Network LED	It lights up when network is connected. In addition, it blinks when data is being transmitted via the network.
5	Record LED	It blinks when videos are being recorded.
6	MODE	Press this key to view in full-screen or multiple window modes.
7	PLAY/STOP	Press once to start the playback of recorded video. Press again to exit.
8	FREEZE	Press this key to freeze the current viewing screen.
9	SEQ	Press this key to start automatic sequence display of cameras.
10	ESC	Press this key to cancel or exit from certain control mode.
11	Direction Keys	<ol style="list-style-type: none"> In Zoom mode, these keys function as normal direction keys. 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.
12	USB 2.0 Port	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.

13	DOME	Press this key to enter Dome Camera Control mode.
14	CALL	Press this key to control call monitor.
15	COPY	This key is used for marking time in quick video export function.
16	SEARCH	Press this key to search recorded video by date/time or event.
17	MENU	Press this key to enter the OSD setup menu.
18	ENTER	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.

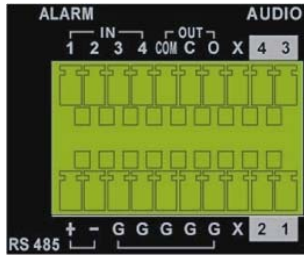
Rear Panel



1	USB 2.0 Ports	The USB 2.0 ports allow users to connect external USB devices to the unit, such as a USB ThumbDrive or a USB mouse.
2	LAN 10/100M (RJ-45)	The DVR is capable of networking. Once the unit is connected to the LAN network, users can remotely access the unit through the remote software on a PC.
3	Main Monitor-VGA(optional)	The DVR can connect to a monitor via an optional VGA connector.
4,8	Audio Out – Main & Call	Main & Call Audio Out RCA connectors are provided for connecting the DVR to audio output devices (e.g. amplified speakers). “Main” will output audio from the main monitor, whereas “Call” will output audio from the call monitor.
5	Main Monitor (BNC)	A BNC output connector is offered for connecting to a main monitor. The main monitor displays live image and playback recorded video in either full-screen or split-window format.
6	Video Input (BNC)	A group of BNC connectors is provided for video input streams from installed cameras. The number of connectors is equal to the number of channels.
7	Alarm I/O, RS-485, & Audio In	Terminal block connectors are provided to offer users the flexibility to connect the DVR to Alarm I/O, RS-485, and Audio In devices. Refer to the next page for pin definition of each model.
9	Call Monitor (BNC)	The call monitor is used to display full screen video of all installed cameras in sequence. The BNC Call Monitor connector allows the user to connect the DVR to a call monitor.
10	Power Jack (DC 12V)	The DVR has a free voltage DC power connection jack. Please connect the power supply adapter shipped with the unit.
11	UTP Input (Optional)	The UTP Input offers additional connectivity using the Unshielded Twisted Pair wiring. UTP cable is one of the most common medium in telecommunication industry.

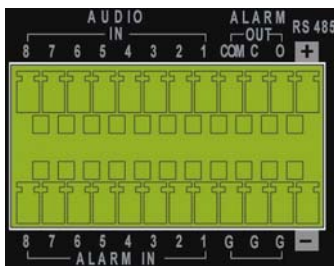
Pin Definition of Alarm I/O, RS-485, & Audio In

4ch-Model:



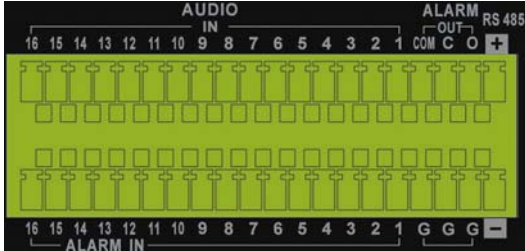
Pin	Definition	Pin	Definition	Pin	Definition
1	Alarm In 1	8	X	15	Ground
2	Alarm In 2	9	Audio In 4	16	Ground
3	Alarm In 3	10	Audio In 3	17	Ground
4	Alarm In 4	11	RS485 D+	18	X
5	Alarm Out COM	12	RS485 D-	19	Audio In 2
6	Alarm Out Close	13	Ground	20	Audio In 1
7	Alarm Out Open	14	Ground		

8ch-Model:



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

16ch-Model:



Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	Audio In 16	11	Audio In 6	21	Alarm In 16	31	Alarm In 6
2	Audio In 15	12	Audio In 5	22	Alarm In 15	32	Alarm In 5
3	Audio In 14	13	Audio In 4	23	Alarm In 14	33	Alarm In 4
4	Audio In 13	14	Audio In 3	24	Alarm In 13	34	Alarm In 3
5	Audio In 12	15	Audio In 2	25	Alarm In 12	35	Alarm In 2
6	Audio In 11	16	Audio In 1	26	Alarm In 11	36	Alarm In 1
7	Audio In 10	17	Alarm Out COM	27	Alarm In 10	37	Ground
8	Audio In 9	18	Alarm Out Close	28	Alarm In 9	38	Ground
9	Audio In 8	19	Alarm Out Open	29	Alarm In 8	39	Ground
10	Audio In 7	20	RS485 D+	30	Alarm In 7	40	RS485 D-

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

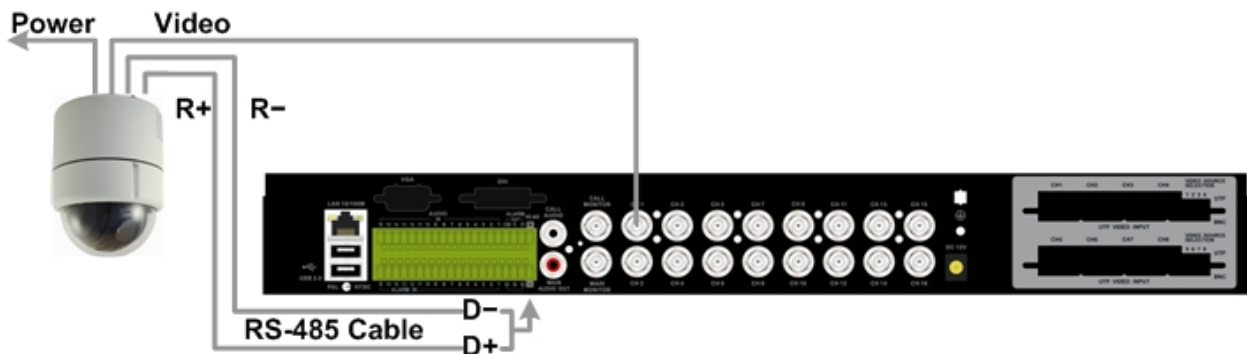
Configure the LAN setup for the DVR to properly function with Ethernet connection.

- 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

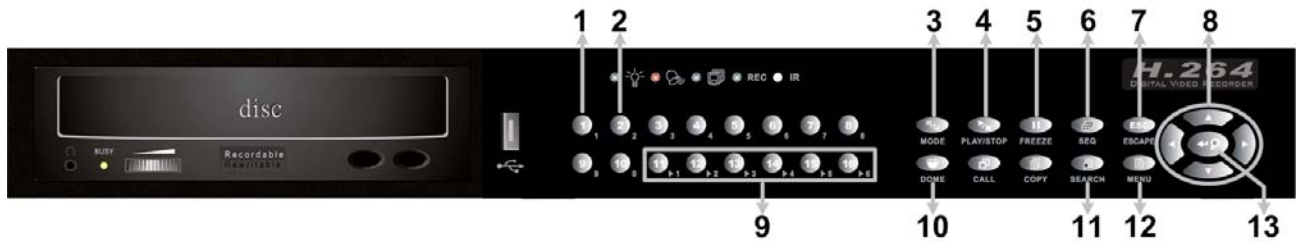
Dome Camera Connection & Settings:

- See section [Pin Definition of Alarm I/O, RS-485, & 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>**. Then select **<Dome Protocol>** and choose the corresponding protocol. Next select **<Dome ID>** and choose a preferred ID number. Note that the 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	Focus Far	9	Go Presets 1~6	13	Enter / Auto
2	Toggle Hint Screen	6	Focus Near	10	Enter Dome Camera Control Mode		
3	Iris Open	7	ESC	11	Zoom Out		
4	Iris Close	8	Pan / Tilt	12	Zoom In		

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:

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 back video.
Play/Stop	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 **L80DV Hybrid 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 **L80DV Hybrid 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	Bandwidth– Normal/Dual Stream
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>**.

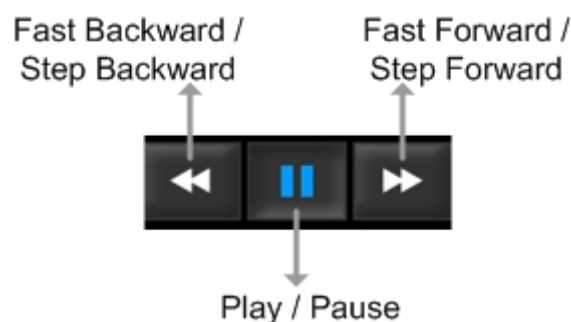


NOTE: The *.avi files for each channel are stored separately. Therefore the video can be played back in single channel, full screen mode only.

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

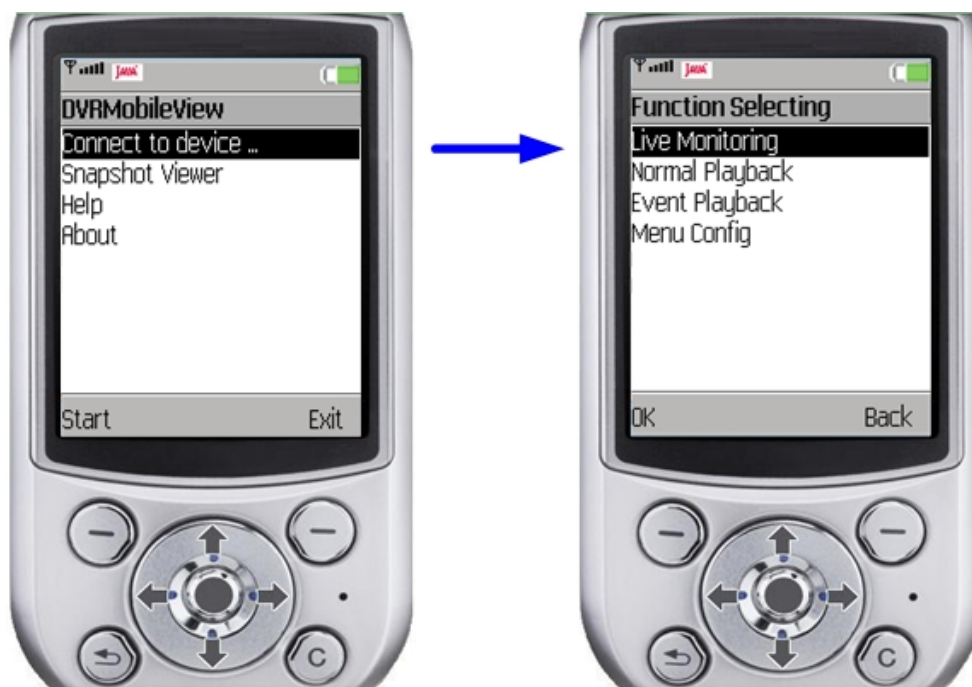
Mobile View software allows users to timely monitor via a mobile device with internet connection. Refer to below for brief introductions of installation (JAVA mobile devices) and basic operations.

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.