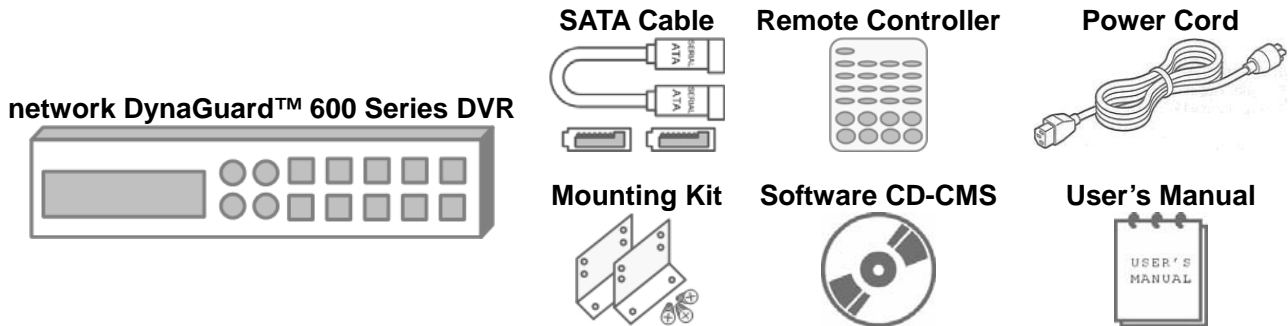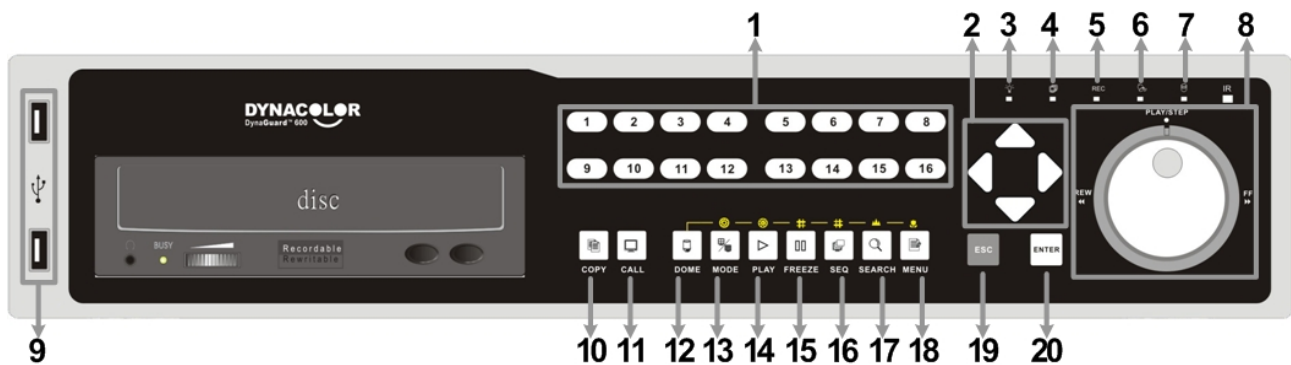# network DynaGuard™ 600 Series DVR
Setup Guide

Package Content

Inspect the packaging carton. Make sure the **network DynaGuard™ 600 Series DVR** is properly delivered. Remove all items from the box and make sure the box contains the following items.


network DynaGuard™ 600 Series DVR

SATA Cable

Remote Controller

Power Cord

Mounting Kit

Software CD-CMS

User's Manual

Front Panel

1	**Channels**	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 hint screen; 11~16 is for quick access of preset points 1~6.
2	**Direction Keys**	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	**Power LED**	It lights up when power source is connected.
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	**Alarm LED**	It lights up when an alarm is triggered.
7	**HDD LED**	It lights up when data is processed to or from the connected HDD(s).
8	**Shuttle/ Jog**	This is used to control playback operations.
9	**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.
10	**COPY**	This key is used for marking time in quick video export function.

11	CALL	Press this key to control call monitor or 2nd main monitor.
12	DOME	Press this key to enter Dome Camera Control mode.
13	MODE	Press this key to view in full-screen or multiple window modes.
14	PLAY/STOP	Press once to start the playback of recorded video. Press again to exit.
15	FREEZE	Press this key to freeze the current viewing screen.
16	SEQ	Press this key to start automatic sequence display of cameras.
17	SEARCH	Press this key to search recorded video by date/time or event.
18	MENU	Press this key to enter the OSD setup menu.
19	ESC	Press this key to cancel or exit from certain control mode.
20	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
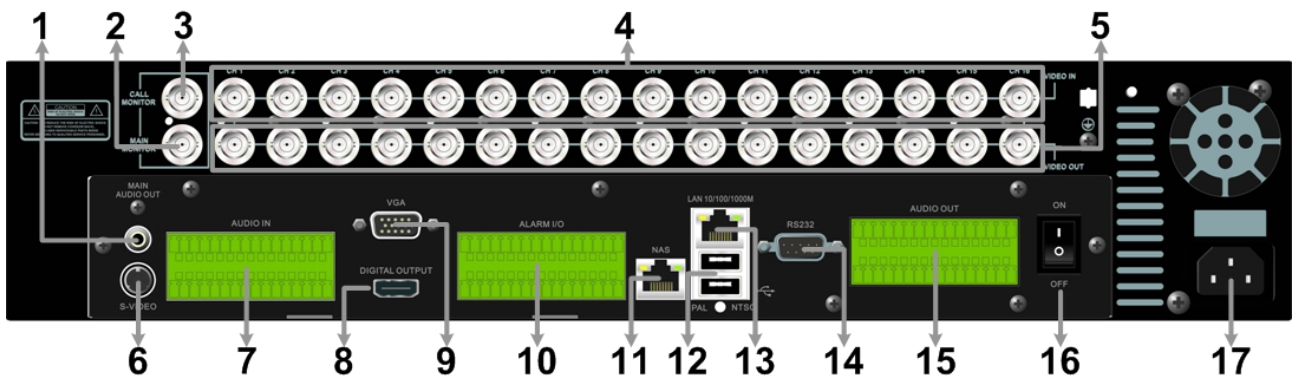
| 1	Main Monitor Audio Out	A RCA connector is provided to output audio associated with the main monitor.
2	Main Monitor (BNC)	A BNC connector is provided for connecting to a main monitor.
3	Call Monitor (BNC)	A BNC connector is provided for connecting to a call monitor.
4	Video In (BNC)	A group of BNC 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 (Digital Output)	A digital output connector is provided for connection to a displaying device that transfers data digitally to show the best video quality.
9	Main Monitor (VGA)	A VGA output connector is offered for connecting to a VGA main monitor.
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 (×2)	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: Refer to User's Manual **Appendix E: Simultaneous Output Options** for detailed information about monitor functionality.
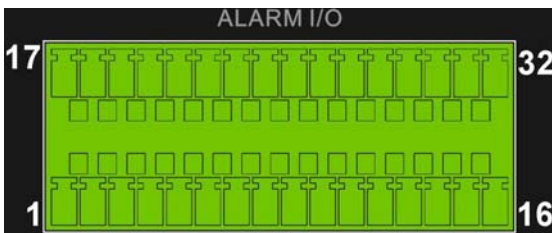
Pin Definition of Alarm I/O & RS-485

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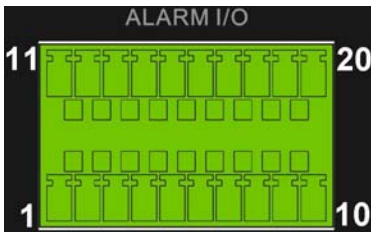
Pin	Definition	Pin	Definition	Pin	Definition
1	RS485 D+	8	Normal Close B	15	Alarm In 5 (8ch model)
2	RS485 D−	9	Common Node B	16	Alarm In 6 (8ch model)
3	Ground	10	Normal Open B	17	Alarm In 7 (8ch model)
4	Normal Close A	11	Alarm In 1	18	Alarm In 8 (8ch model)
5	Common Node A	12	Alarm In 2	19	N/A
6	Normal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

4ch-Model:

8ch-Model:

16ch-Model:
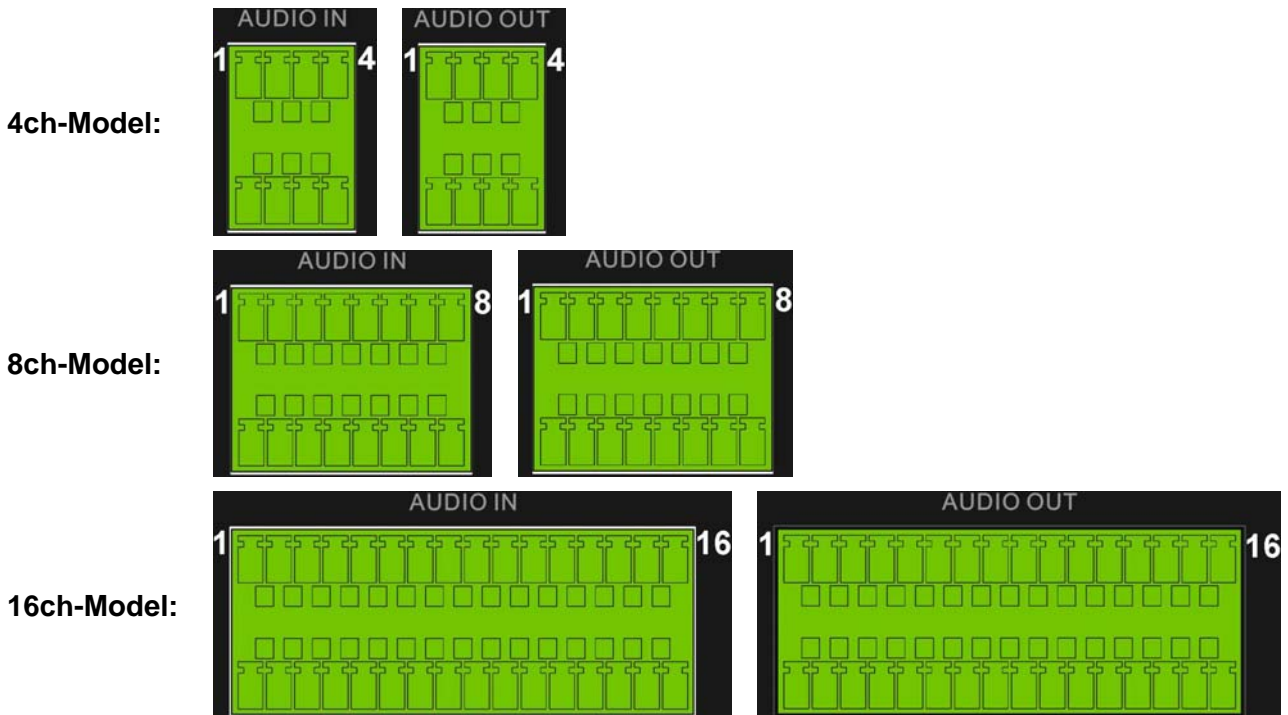
Power On the DVR

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 plugging in the power cord to the DVR. The acceptable power input is between AC110V ~ AC240V.
- Press the power switch on the rear panel to power on the DVR.

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.
- Press **FREEZE** button to pausethe current viewing image.

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 Dyna**Remote™**, the remote software.

Enter OSD Main Menu:

- Press **MENU** to enter the OSD main menu.
- Select the administrator account "**admin**" to login. Enter the preset password "**1234**".
- 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. Refer to the User's Manual for advanced setup of Time Sync function.

- 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 when users 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 the **network DynaGuard™ 600 Series 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 the network application, and enter <**LAN Setup**>.
- For DHCP users, 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 users, set the DHCP to <**OFF**>. IP address, Netmask, Gateway and DNS settings must be set. 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.
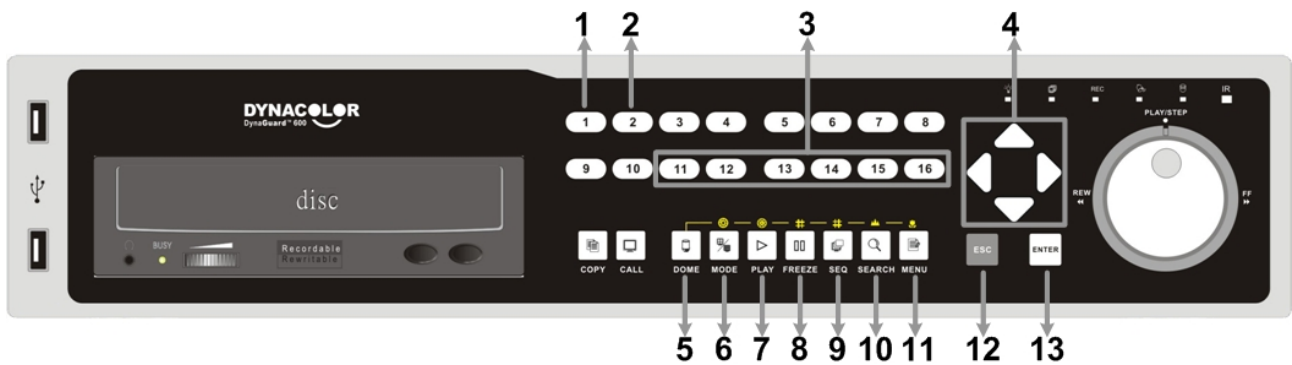
Dome Camera Control

Dome Camera Connection & Settings:

- See section <u>Pin Definition of Alarm I/O & RS-485</u> 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.
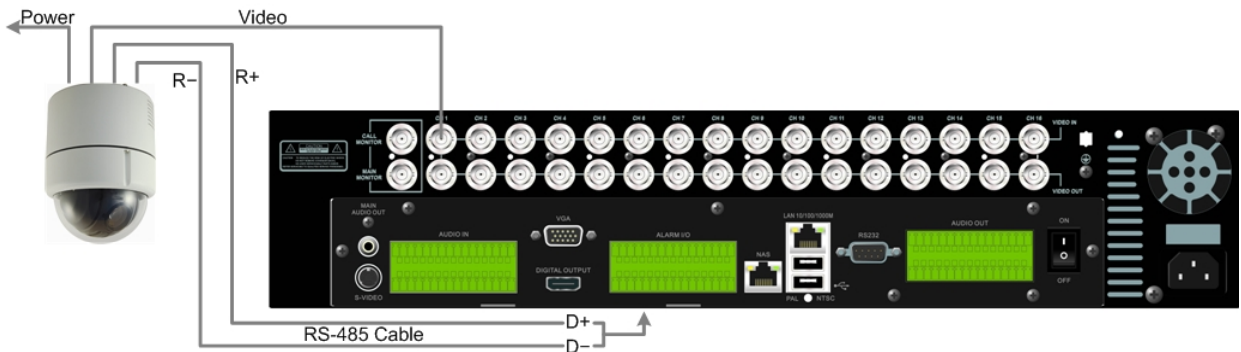
- To set up dome camera's protocol and ID, press **MENU** to access the OSD main menu, and select <**Camera Setup**>. Then select <**Dome Protocol**> and choose the corresponding protocol. Next select <**Dome ID**> and choose a preferred ID number. Note that the ID number must match the ID address defined 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**	Enter Dome Camera Control Mode	**9**	Focus Near	**13**	Enter / Auto
2	Toggle Hint Screen	**6**	Iris Open	**10**	Zoom Out		
3	Go Presets 1~6	**7**	Iris Close	**11**	Zoom In		
4	Pan / Tilt	**8**	Focus Far	**12**	ESC		

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 and press **ENTER** to select any date shown in bold and underlined font. The bar below the calendar will change according to the recorded data of the selected date.
- Then select preferred time from the time bar. 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.
- The <**From**> and <**End**> buttons allows users to playback video from the beginning or end of the database.
- Note that the time blocks highlighted in red represent events occurred.
- Select <Begin Playback> and press ENTER to start playing back selected video.

Smart Search:

- Press **SEARCH** to enter the Search menu.
- Move the cursor to <**Smart Search**> and press **ENTER**. The Smart Search menu will show up.
- Specify the From/End time to search for recorded video within the period.
- Choose a channel for smart search and setup the monitoring area.
- Specify detection sensitivity and threshold according to environment and required application.
- Specify the time interval to separate the time period into segments.
- When the criteria are all set, select <**Smart Search List**> and press **ENTER** to start the smart search.
- When the Smart Search List is displayed, use Direction keys to scan through the list.
- Press ENTER to playback any desired item, or press ESC to exit the list.

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.
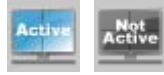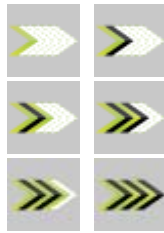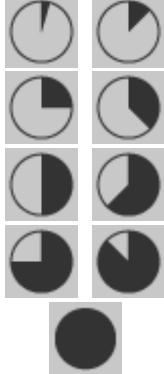
Playback Controls:

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 1×, 2×, 4×, 8×, 16×, or 32×.
RIGHT	The button is used to play the recorded video fast forward. Press the button repeatedly to increase the speed of forward playback by 1×, 2×, 4×, 8×, 16×, or 32×.
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.

DVR Status Bar Icons

Icons that will be displayed in the status bar are listed in the following table with their descriptions.

Item	Icon	Description	Item	Icon	Description
1		Main Monitor	14		Quick Export
2		Call Monitor	15		Stamp A
3		Monitor Active/Inactive	16		Stamp B
4		Sequence	17		Lock
5		Record	18		Disk Error
6		Event Record	19		Disk Full
7		Freeze @ Live Mode	20		Disk Overheat
8		Dome Camera Control	21		No Disk
9		Zoom	22		Disk Almost Full
10		Forward Playback Speed: 1x, 2x, 4x, 8x, 16x, 32x	23		HDD Usage
11		Pause @ Playback mode	24		Guest
12		Backward Playback Speed: 1x, 2x, 4x, 8x, 16x, 32x	25		User's Authority Level
13		End of Video			

Connect the DVR via the Remote Software

Setup Requirements:

- Make sure the PC is connected to the Internet.
- Obtain IP address of the **network DynaGuard™ 600 Series 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 **network DynaGuard™ 600 Series DVR** in the address bar.
- The ActiveX controls and plug-ins dialog will show up twice for confirmation; click <**YES**> to accept ActiveX plug-ins. Dyna**Remote™** 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, take port 81 for example, users should enter the IP address as "192.68.80.6:81".

- Version verification starts automatically to verify whether Dyna**Remote™** 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 is **admin** and **1234**.

The following picture shows the display window of the Dyna**Remote™**:
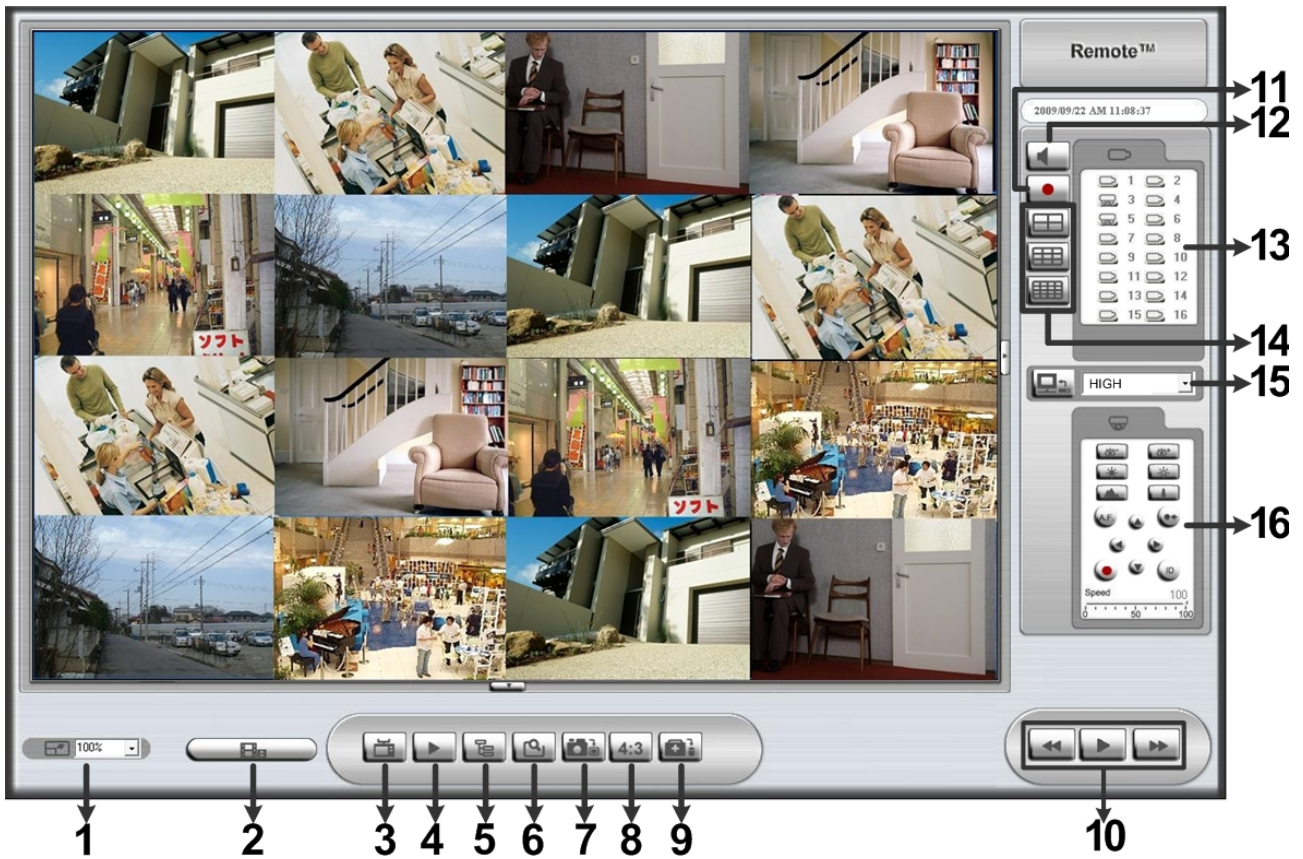
Refer to the table below for brief description of functional items:

Item	Description	Item	Description
1	Select Picture Size	9	HDD Health Status
2	Download DVRPlayer	10	Playback Control
3	View Live Camera	11	Instant Recording
4	Playback Video	12	Audio On/Off
5	Setup Menu	13	Select Camera
6	Search Event List	14	Display Mode
7	Capture Snapshot	15	Bandwidth – Normal/Dual Stream
8	4:3 Viewing Aspect	16	Dome Camera Control Panel

For more information on Dyna**Remote™**, see User's Manual.

11

DynaRemote™ 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. Users 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.

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:

Fast Backward / Step Backward   Fast Forward / Step Forward

Play / Pause
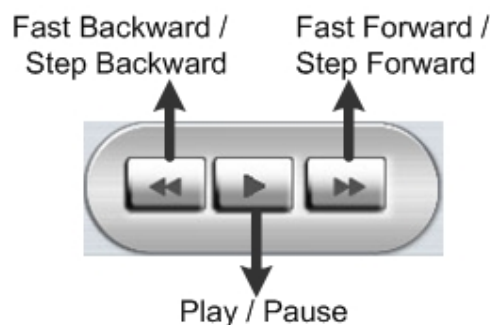
Mobile View Software

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.
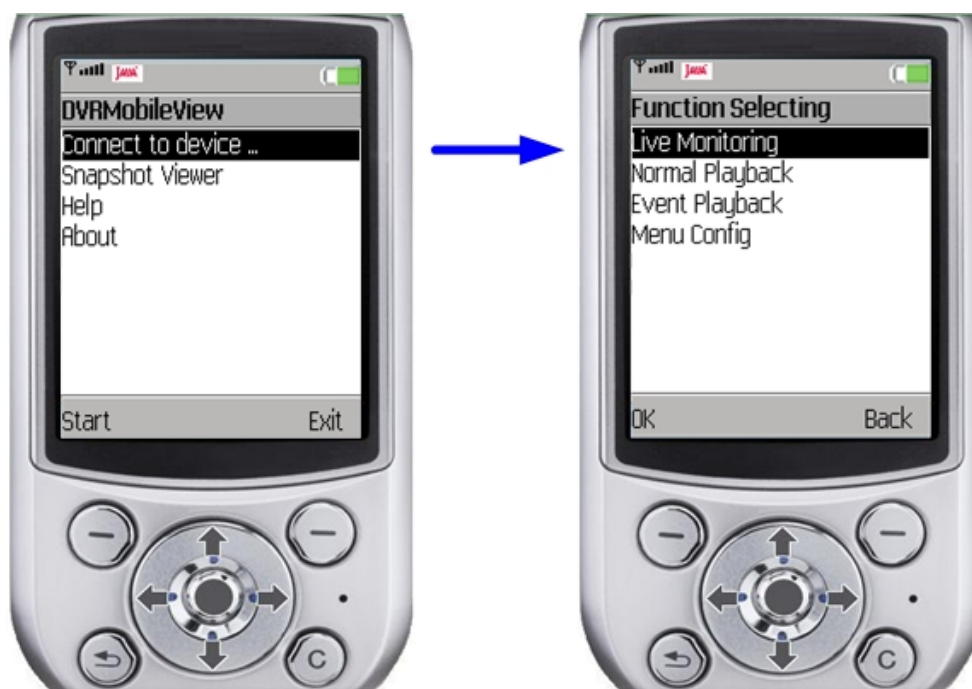
- Access <Connect to device> and users can create bookmarks for DVRs or IP cameras via entering **hostname/IP address**, **port**, **username**, and **password** of the devices.
- If a DVR is connected, the available functions will be listed as shown above on the right. Users can select <Live Monitoring> 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 were saved to the database of the mobile devices.

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