

# **Combo Digital Video Recorder Quick Start Guide**

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## **Welcome**

Thank you for purchasing our combo DVR!

This quick start guide will help you become familiar with our combo DVR in a very short time.

Here you can find hardware installation, cable connection information and general operations such as system setup, record, search, backup, alarm setup, PTZ operation, also here you can find web operation instruction.

Before installation and operation, please read the following safeguard and warning carefully!

# Important Safeguards and Warnings

## 1 . Electrical safety

All installation and operation here should conform to your local electrical safety codes.  
We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

## 2 . Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

## 3 . Installation

Keep upwards. Handle with care.  
Do not apply power to the combo DVR before completing installation.  
Do not place objects on the combo DVR

## 4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.  
We are not liable for any problems caused by unauthorized modifications or attempted repair.

## 5 . Environment

This series product working temperature ranges from 0°C to 40°C.  
The combo DVR should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.  
Please unplug the power cable in case there is strong wind or lightning.

## 6. Accessories

Be sure to use all the accessories recommended by manufacturer.  
Before installation, please open the package and check all the components are included.  
Contact your local retailer ASAP if something is broken in your package.

## 7. About the LCD

During the installation, do not push or squeeze the LCD or its rim; it may result in LCD damage.  
During the operation or storage, please avoid the hard object to scuff the screen.  
Please keep the LCD clean. Use the soft cloth to clean regularly. Do not use gasoline, alcohol or other chemical reagent to clean the screen.  
Do not allow the LCD video standstill for a long time; it may result in permanent damage.

## 7. Lithium battery

Improper battery use may result in fire, explosion, or personal injury!  
When replace the battery, please make sure you are using the same model!

# 1 Hardware Installation and Connection

**Note:** All the installation and operations here should conform to your local electric safety rules.

## 1.1 Check Unpacked Combo DVR

When you receive the combo DVR from the forwarding agent, please check whether there is any visible damage. The protective materials used for the package of the combo DVR can protect most accidental clashes during transportation. Then you can open the box to check the accessories.

Please check the items in accordance with the list on the warranty card (Remote control is optional). Finally you can remove the protective film of the combo DVR.

### **Note**

Remote control is not a standard accessory and it is not included in the accessory bag.

## 1.2 About Front Panel and Rear Panel

For detail information of the function keys in the front panel and the ports in the rear panel, please refer to the appendix for detail information.

The model in the front panel is very important; please check according to your purchase order.

The label in the rear panel is very important too. Usually we need you to represent the serial number when we provide the service after sales.

## 1.3 Device Installation

The series product supports two installation modes: desktop/ wall-mount. The default installation is the desktop type. Please refer to the following figure. See Figure 1-1.

Please purchase the wall mount accessories for wall mount type installation.

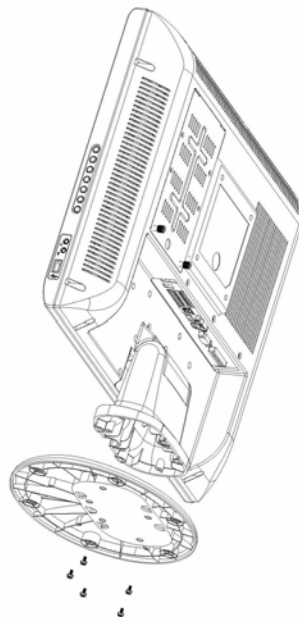


Figure 1-1

## 1.4 HDD Installation

This series combo DVR has only one SATA HDD. Please use HDD of 7200rpm or higher. You can refer to the Appendix in the user's manual for recommended HDD brand. You can select the capacity as your requirement.

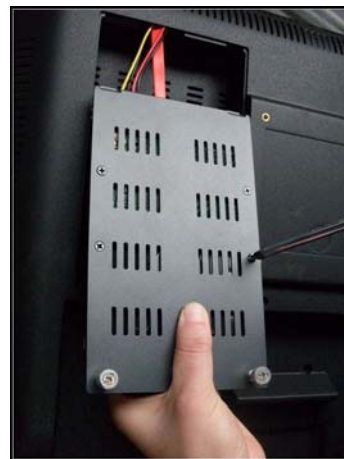
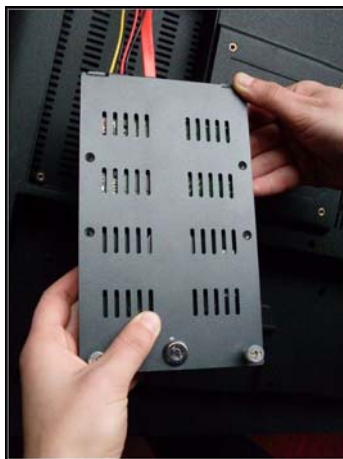
Please follow the instructions below to install the HDD.



1. Insert the key to the hole and then press. Turn the clockwise 90 degrees to open the lock.

2. Loose the two screws of the HDD cover.

3. Remove the HDD cover from the rear panel.



4. Connect the HDD cable and power cable.

5. Place the HDD cover to the HDD in accordance with the four holes.

6. Use the screws to fix the HDD on the cover.



7. Place the HDD with the HDD cover back to the slot. And then fix the two screws firmly.



8. Insert the key to the hole and then press. Turn the counter clockwise 90 degrees to secure the lock.

After completing HDD installation, please check connection of data ribbon and power cord.

## 1.5 Front Panel and Side Panel

The front panel is shown as in Figure 1-2.

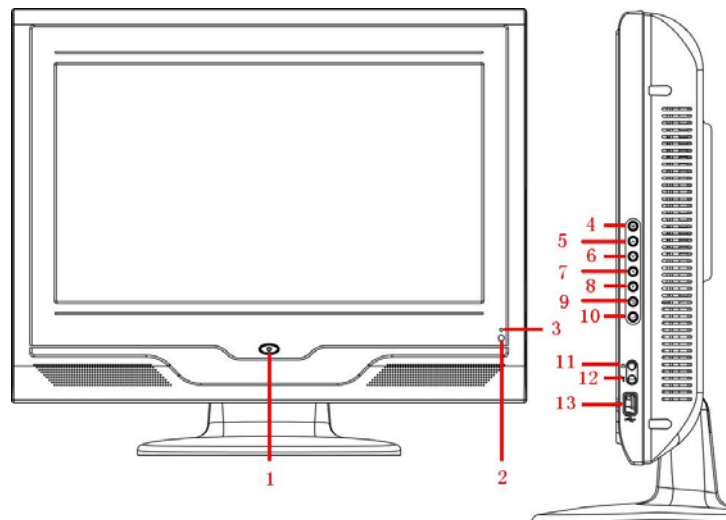


Figure 1-2

Please refer to the following sheet for front panel button information.

SN	Function
1	When the device is off, press it for a long time to boot up the device. When the device is on press it for a long time to shut down the device. When the device is off, press it for a short time to close the screen.
2	Power indication light
3	Remote control signal receiver window. It is to receive the signal from the remote control.
4	Mode button. It is to switch between the PC input signal and the main board signal.



5	Switch the current activated control. Go upward.
	Modify setup, such as increase the number.
	Auxiliary function such as control and switch the PTZ menu.
6	Switch the current activated control. Go downward.
	Modify setup, such as decrease the number.
	Auxiliary function such as control and switch the PTZ menu.
7	Switch the current activated control. Go left.
	It is to adjust the playback control bar when playback.
8	Switch the current activated control. Go right.
	It is to adjust the playback control bar when playback.
9	Go back to the previous menu or cancel current selection.
	Go back to real-time monitor status in playback mode.
10	Confirm current operation.
	Go to the default button
	Go to the menu.
11	Bidirectional talk output
12	Bidirectional talk input
13	USB port

## 1.6 Rear Panel

The rear panel is shown as below. See Figure 1-3.

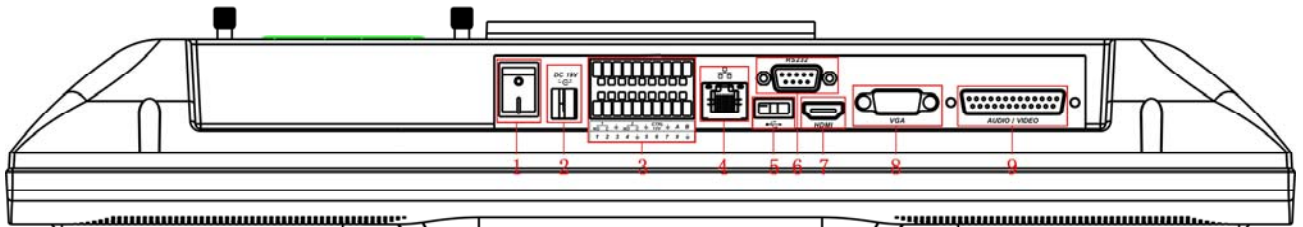


Figure 1-3

Please refer to the following sheet for detailed information.

SN	Function
1	Power button
2	Power input port
3	Alarm input/alarm output/RS485 port
4	Network port
5	USB port
6	RS232 port
7	HDMI port
8	PC input
9	Video CVBS input, audio CVBS input, video CVBS output, audio CVBS output.

When connect the Ethernet port, please use straight cable to connect the PC and use the crossover cable to connect to the switcher or router.

## 1.7 Connection Sample

Please refer to Figure 1-4 for connection sample.

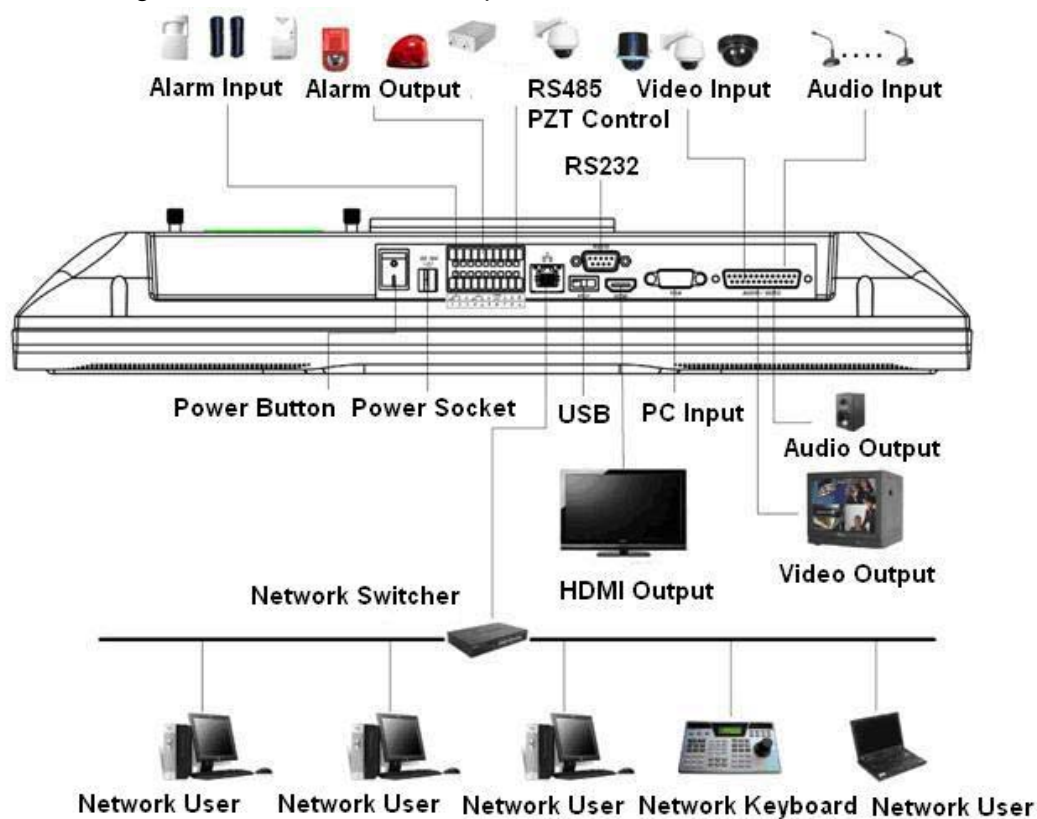


Figure 1-4

## 1.8 Alarm Input and Output Connection

There are two alarm input types for you to select: normal open (NO) and normal close (NC).

### 1.8.1 Alarm Input and Output Details

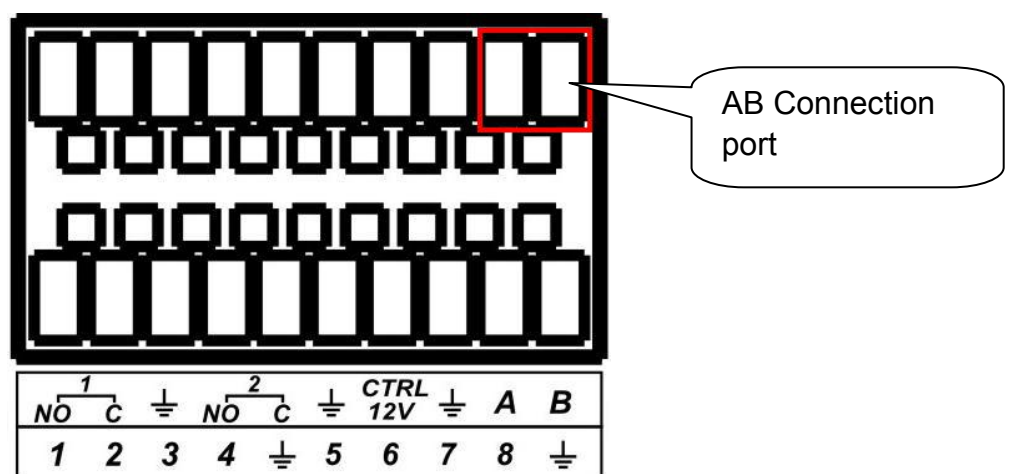



Figure 1-5

You can refer to the following sheet and Figure 1-6 for alarm input and output information.

Parameter	Grounding Alarm
	Ground line
Alarm Input	1, 2, ..., 8. It becomes valid in low voltage.
1-NO C, 2-NO C,	Two NO activation outputs.
CTRL 12V	It is to control the power output You need to close the device power to cancel the alarm.
A/B	485 communication port. They are used to control devices such as PTZ. Please parallel connect 120Ω between A/B cables if there are too many PTZ decoders.

### 1.8.2 Alarm Input Port

Please refer to the following sheet for more information.

- Normal open or Normal close type
- Please parallel connect COM end and GND end of the alarm detector (Provide external power to the alarm detector).
- Please parallel connect the Ground of the combo DVR and the ground of the alarm detector.
- Please connect the NC port of the alarm sensor to the combo DVR alarm input(ALARM)
- Use the same ground with that of combo DVR if you use external power to the alarm device.

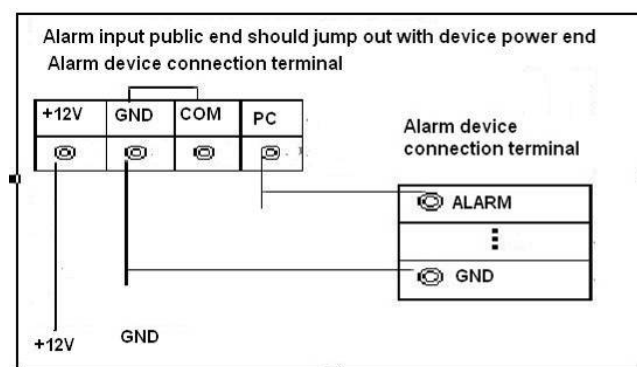


Figure 1-6

### 1.8.3 Alarm Output Port

- 3 ways relay alarm output (NO contact). Provide external power to external alarm device.
- To avoid overloading, please read relay parameters sheet in the *User's Manual* carefully.
- RS485 A/B cable is for the A/B cable of the PTZ decoder.

## 2 Overview of Navigation and Controls

Before operation, please make sure you have properly installed HDDs and all the cable connections.

### 2.1 Login, Logout & Main Menu

#### 2.1.1 Login


After system booted up, default video display is in multiple-window mode.

Click Enter or left click mouse, you can see the login interface. See Figure 2-1.

System consists of four accounts:

- **Username:** admin. **Password:** admin. (administrator, local and network)
- **Username:** 888888. **Password:** 888888. (administrator, local only)
- **Username:** 666666. **Passwords:** 666666 (Lower authority user who can only monitor, playback, backup and etc.)
- Username: default. Password: default (hidden user)

You can use USB mouse, front panel, remote control (not included in the accessory bag) or

keyboard to input. About input method: Click  to switch between numeral, English character (small/capitalized) and denotation.

#### **Note:**

**For security reason, please modify password after you first login.**

Within 30 minutes, three times login failure will result in system alarm and five times login failure will result in account lock!



Figure 2-1

#### 2.1.2 Main Menu

After you logged in, the system main menu is shown as below. See Figure 2-2.

There are total six icons: search, information, setting, backup, advanced and shutdown.

You can move the cursor to highlight the icon, and then double click mouse to enter the sub-menu.

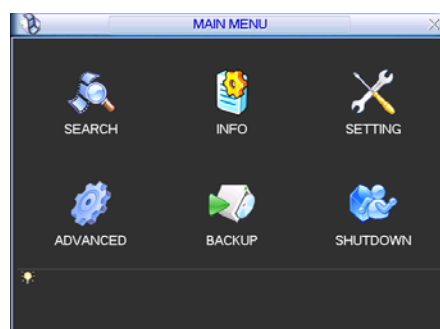


Figure 2-2

### 2.1.3 Logout

There are two ways for you to log out.

The first one is from menu option:

In the main menu, click shutdown button, you can see an interface is shown as below. See Figure 2-3.

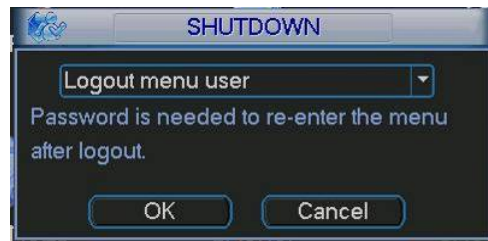


Figure 2-3

There are several options for you. See Figure 2-4.

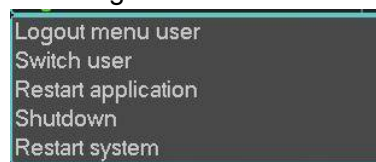


Figure 2-4

The other ways is to press power button on the front panel for at least 3 seconds, system will stop all operations. Then you can click the power button in the front panel to turn off the combo DVR.

Please note, before you replace the HDD, do remember shutting down the device and unplug the power cable.

### 2.1.4 Auto Resume after Power Failure

The system can automatically backup video and resume previous working status after power failure.

## 2.2 Live Viewing

After you logged in, the system is in live viewing mode by default. You can see system date, time and channel name. If you want to change system date and time, you can refer to general settings (Main Menu->Setting->General). If you want to modify the channel name, please refer to the display settings (Main Menu->Setting->Display)

1		Recording status	3		Video loss
2		Motion detection	4		Camera lock

## 2.3 Schedule


### Note:

You need to have proper rights to implement the following operations. Please make sure the HDDs have been properly installed.

After the system booted up, it is in default 24-hour regular mode. You can set record type and time in schedule interface.

In the main menu, from Setting to Schedule, you can go to schedule menu. See Figure 2-5. There are total six periods.

- Channel: Please select the channel number first. You can select “all” if you want to set for the whole channels.
- Week day: There are eight options: ranges from Saturday to Sunday and all.
- Pre-record: System can pre-record the video before the event occurs into the file. The value ranges from 1 to 30 seconds depending on the bit stream.
- Snapshot: You can enable this function to snapshot image when alarm occurs.
- Record types: There are three types: regular, motion detection (MD) and Alarm.

Please highlight icon  to select the corresponding function. After completing all the setups please click save button, system goes back to the previous menu.

At the bottom of the menu, there are color bars for your reference. Green color stands for regular recording, yellow color stands for motion detection and red color stands for alarm recording.

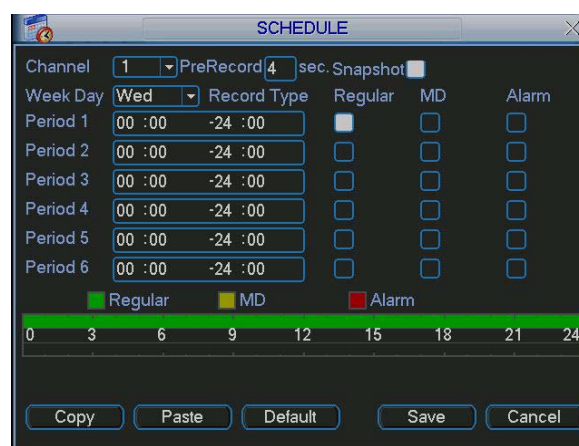


Figure 2-5

## 2.4 Manual Record

### Note:

Please make sure you have the record operation right and you have properly installed the formatted HDD.

You can right click mouse or in the main menu, from Advanced->Manual Record to go to record interface.

There are three statuses: schedule/manual/stop. Highlight icon “○” to select corresponding channel. See Figure 2-6.

- Manual: The highest priority. After manual setup, all selected channels will begin ordinary recording.
- Schedule: Channel records as you have set in recording setup (Main Menu->Setting->Schedule)
- Stop: All channels stop recording.



Figure 2-6

## 2.5 Encode

Encode interface is shown as in Figure 2-7.

- Channel: Select the channel you want.
- Compression: System supports H.264.
- Resolution: System supports various resolutions, you can select from the dropdown list. For this model, main stream supports D1/CIF/QCIF. Please note the resolution may vary due to different channels. The extra stream supports QCIF only.
- Frame rate: It ranges from 1f/s to 25f/s in NTSC mode and 1f/s to 30f/s in PAL mode.

### Note:

For the 8-ch series combo DVR, you can refer to the following information. (For the 16-ch series combo DVR, you can also refer to the following information to set the 1-8 channels and the 9-16 channels separately.):

- ✧ If the 1-channel resolution is D1 and the frame rate is more than 6f/s, then the rest seven channels (the second channel to the eighth channel) resolution shall be CIF or QCIF.
- ✧ If the 1-channel resolution is D1 and the frame rate is or less than 6f/s, then the rest seven channels (the second channel to the eighth channel) resolution shall be D1/CIF/QCIF. Right now in D1 resolution, the max frame rate is 6f/s.
- Bit rate type: system supports two types: CBR and VBR. In VBR mode, you can set video quality.
- Quality: There are six levels ranging from 1 to 6. The sixth level has the highest image quality.
- Video/audio: you can enable or disable the video/audio. Please note the video is enabled for main stream by default. For extra stream, please enable video first and then enable audio.
- Snapshot: Click snapshot button, you can see it contains the four items: mode/image size/image quality/snapshot frequency. Please refer to chapter 2.3.3 for detail information.

Please highlight icon  to select the corresponding function.

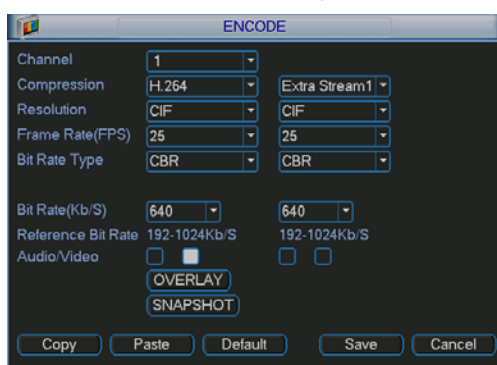


Figure 2-7



## 2.5.1 Snapshot

### 2.5.1.1 Schedule Snapshot

In Encode interface, click snapshot button to input snapshot mode, size, quality and frequency.

In General interface please input upload interval.

In Schedule interface, please enable snapshot function.

Please refer to the following figure for detail information. See Figure 2-8.



Figure 2-8

### 2.5.1.2 Activation Snapshot

Please follow the steps listed below to enable the activation snapshot function. After you enabled this function, system can snapshot when the corresponding alarm occurred.

- In Encode interface, click snapshot button to input snapshot mode, size, quality and frequency.
- In General interface please input upload interval.
- In Detect interface please enable snapshot function for specified channels. Or in Alarm interface please enable snapshot function for specified channels.

Please refer to the following figure for detail information. See Figure 2-9.

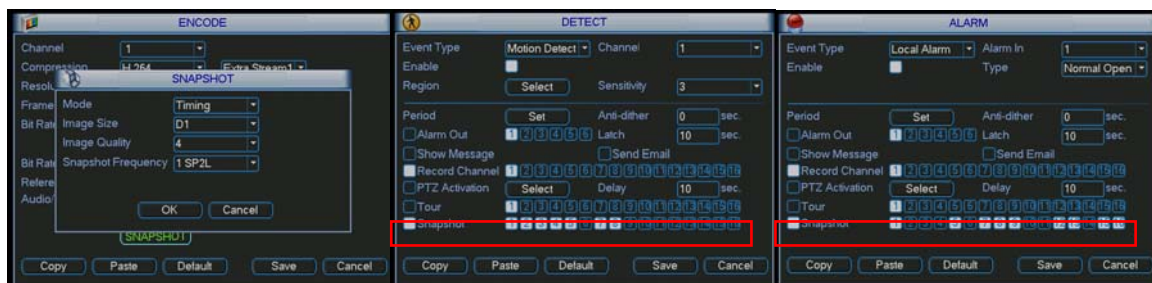


Figure 2-9

### 2.5.1.3 Priority

Please note the activation snapshot has the higher priority than schedule snapshot. If you have enabled these two types at the same time, system can activate the activation snapshot when alarm occurs, and otherwise system just operates the schedule snapshot.

## 2.5.2 Image FTP

In Network interface, you can set FTP server information. Please enable FTP function and then click save button. See Figure 2-10. Please refer to the *User's Manual* included in the resource CD for detailed information.

Please boot up corresponding FTP server.

Please enable schedule snapshot or activation snapshot (Chapter 2.3.3) and then system can upload the image file to the FTP server.



Please input the corresponding information here, if you just upload the image FTP.

Figure 2-10

## 2.6 Search and Playback

Click search button in the main menu, search interface is shown as below. See Figure 2-11.

Usually there are three file types:

- R: Regular recording file.-
- A: External alarm recording file.
- M: Motion detection recording file

Playback control bar

Select playback mode here: 4-ch or All-channel

File List

Playback Window

File Information

Set search setup here : ( Time/Channel/Type)

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

Figure 2-11

Please refer to the following sheet for more information.

Serial Number	Function
1	Play
2	Backward
3	Stop

4	Slow play
5	Fast play
6	Previous frame
7	Next frame
8	Volume
9	Previous file
10	Next channel
11	Next file
12	Previous channel
13	Search
14	Backup
15	Clip

## 2.6.1 Basic Operation

### 2.6.1.1 Playback Operation

There are various search modes: video type, channel number or time. The system can max display 128 files in one screen. You can use page up/down button to view if there are more than one page.

Select the file name and double click mouse (or click enter button), you can view file content.

### 2.6.1.2 Playback Mode

There are two playback modes: 4-ch and all-channel. In 4-ch playback mode, you can select the 1/2/3/4-ch playback according to your requirement. In all-channel mode, system can playback in full channels. Please note the 4-ch has no all-channel playback mode.

### 2.6.1.3 Accurate playback

Input time (h/m/s) in the time column and then click playback button, system can operate accurate playback.

### 2.6.1.4 Synchronized playback function when playback



During playback process, click numeral key, system can switch to the corresponding channel video of the same time.

### 2.6.1.5 Digital zoom

When the system is in full-screen playback mode, drag your mouse in the screen to select a section and then left click mouse to realize digital zoom. You can right click mouse to exit.

### 2.6.1.6 File backup and clip

System supports backup operation during search. You can draw a √ before file name (multiple choices). Then click backup button (Button 14 in Figure 2-11).

If you want to clip a period of file, please playback the original file first. Click the  (Button 15 in Figure 4-10) at the start point (that is your new file beginning point). Drag the file to the end point (that is your new file end point) and then click the  again. Click the backup button (Button 14 in Figure 4-10) to save your current new file.

### 2.6.1.7 Calendar

Click calendar icon  in Figure 2-11, system pops up a calendar for your reference.

The highlighted date means there are record files in that day. You can click blue date to view file list.

In the following interface you can see there are video files in June 13<sup>th</sup> and 14<sup>th</sup>. Double click the date to view file list.

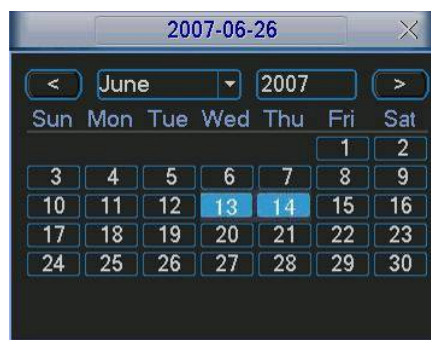


Figure 2-12

#### 2.6.1.8 Slow playback and fast playback

Please refer to the following sheet for slow play and fast playback function.

Button	Illustration	Remarks
Fast play button ►►	In playback mode, click this button to switch between various fast play modes such as fast play 1, fast play 2 and more.	Frame rate may vary due to different versions.
Slow play button ►	In playback mode, click this button to switch between various slow play modes such as slow play 1 or slow play 2.	
Play/Pause ►	In slow playback mode, click this button to switch between play/pause modes.	
Previous/next	In playback mode, you can click  ◀ and ▶  to view previous or next video in current channel.	

#### 2.6.1.9 Backward playback and frame by frame playback

Button	Illustration	Remarks
Backward play:   ◀ in playback interface.	In normal playback mode, left click backward play button◀, system begins backward playback. Double click backward play button again, system goes to pause mode.	When system is in backward play or frame by frame playback mode, you can click play button►/    to go to normal playback.
Manual playback frame by frame.	Click pause button in normal playback mode, you can use ◀  and  ▶ to view frame by frame.	

Note:

All the operations here (such as playback speed, channel, time and progress) have relationship with hardware version. Some series combo DVRs do not support some functions or playback speeds.

## 2.7 Network Setup

Here is for you to input network information. See Figure 2-13.

- IP address: Here you can input IP address.
- DHCP: It is auto search IP function. When enable DHCP function, you can not modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as 0. You need to disable DHCP function

to view current IP information. Besides, when PPPoE is operating, you can not modify IP/Subnet mask /Gateway.

- TCP port: Default value is 37777.
- UDP port: Default value is 37778.
- HTTP port: Default value is 80.
- Max connection: system support maximal 10 users. 0 means there is no connection limit.
- Transfer mode: Here you can select the priority between fluency/video qualities.
- Network download: System can process the downloaded data first if you enable this function.
- Advanced setting: Please refer to the *user's manual* included in the resource CD for detail information.

After completing all the setups please click save button, system goes back to the previous menu.

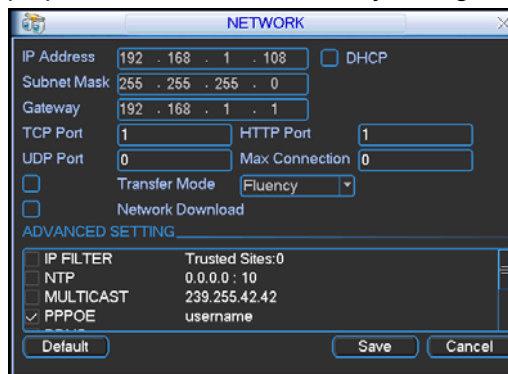


Figure 2-13

## 2.8 Pan/Tilt/Zoom

Please note:

- Slight difference may be found in the user's interface, due to various protocols.
- Please make sure the speed domes A/B cables are properly connected to the A/B ports of combo DVR.
- You have properly set PTZ information.
- Please switch camera monitor channel to current window.

### 2.8.1 PTZ Setup

The pan/tilt/zoom setup includes the following items. Please select channel first. See Figure 2-14.

- Protocol: Select corresponding PTZ protocol such as PELCOD.
- Address: Input corresponding PTZ address.
- Baud rate: Select baud rate.
- Data bit: Select data bit. Default value is 8.
- Stop bit: Select stop bit. Default value is 1.
- Parity: There are three choices: none/odd/even. Default value is none.



Figure 2-14

After completing all the setups please click save button, system goes back to the previous menu.

## 2.8.2 PTZ Operation

In one window display mode, right click mouse (click “Fn” Button in the front panel or click “Fn” key in the remote control). The interface is shown as in Figure 2-15.

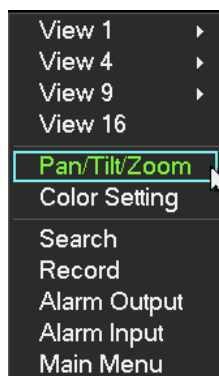


Figure 2-15

Click Pan/Tilt/Zoom, the interface is shown as below. See Figure 2-16.

Here you can set the following items:

- Step: value ranges from 1 to 8.
- Zoom
- Focus
- Iris

Click icon  and  to adjust zoom, focus and iris.



Figure 2-16

In Figure 2-16, please click direction arrows (See Figure 2-17) to adjust PTZ position. There are total 8 direction arrows. Please note if you use remote control, you can use just four directions (Up/down/left/right).

The speed value ranges from 1 to 8.



Figure 2-17

### 2.8.3 3D Intelligent Positioning Key

In the middle of the eight direction arrows, there is a 3D intelligent positioning key. See Figure 2-18. Please note, this function needs protocol supported and can only be operated by mouse. Click this key, system goes back to the single screen mode. Drag the mouse in the screen to adjust section size. It can realize PTZ automatically.



Figure 2-18

Here is a sheet for you reference.

Name	Function key	function	Shortcut key	Function key	function	Shortcut Key
Zoom		Near	▶		Far	▶▶
Focus		Near	◀		Far	▶▶
Iris		close	◀		Open	▶

You can click set button in Figure 2-16 (or click REC button in the front panel) to set preset, tour, and pattern.

You can click page switch button in Figure 2-16 (or click Fn button in the front panel) to call main function.

## 3 Web Client Operation

Slightly difference may be found in the interface due to different series.

### 3.1 Network Connection

Before web client operation, please check the following items:

- Network connection is right
- Combo DVR and PC network setup is right. Please refer to network setup(main menu->setting->network)
- Use order ping `***.***.***.***`(\* combo DVR IP address) to check connection is OK or not. Usually the return TTL value should be less than 255.
- System can automatically download latest web control and the new version can overwrite the previous one.
- If you want to un-install the web controls, please run `uninstall webrec2.0.bat` to auto delete the control or you can go to `C:\Program Files\webrec` to delete Single folder.

### 3.2 Login

Open IE and input combo DVR address in the address column. For example, if your combo DVR IP is 10.10.3.16, then please input `http:// 10.10.3.16` in IE address column.

System pops up warning information to ask you whether install webrec.cab control or not. Please click yes button.

If you can't download the ActiveX file, please modify your IE security setup.

After installation, the interface is shown as below. See Figure 3-1.

Please input your user name and password.

Default factory name is admin and password is admin.

**Note: For security reasons, please modify your password after you first login.**

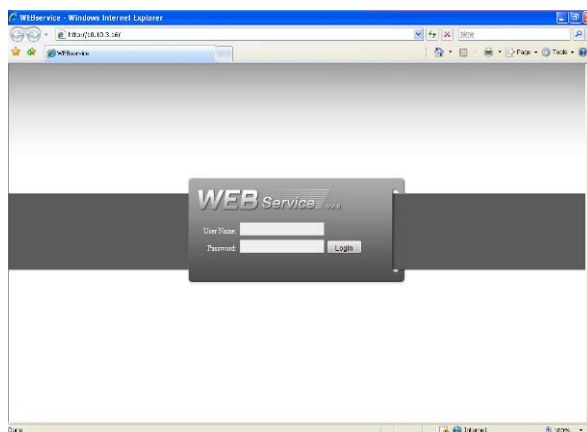


Figure 3-1

### 3.3 Main Window

After you logged in, you can see the main window. See Figure 3-2.

Click the channel name on the left side; you can view the real-time video.

For detailed operation information, please refer to the *User's Manual* included in the resources CD.

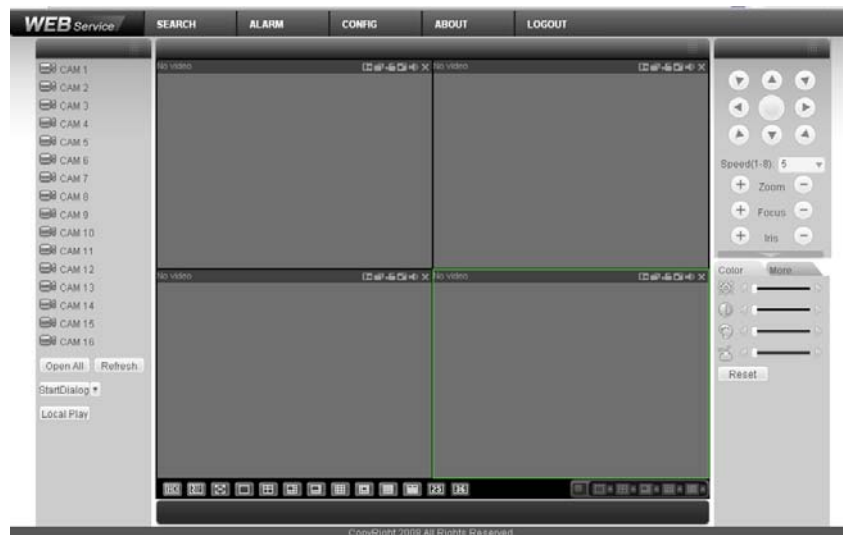


Figure 3-2

#### Note

- For detailed operation introduction, please refer to our resource CD included in your package for electronic version of the *User's Manual*.
- Slight difference may be found in user interface.
- All the designs and software here are subject to change without prior written notice.
- If there is any uncertainty or controversy, please refer to the final explanation of ours.
- Please visit our website for more information.