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# **Stand alone Multi- channel Digital Video Recorder**

## **User Instruction Manual**

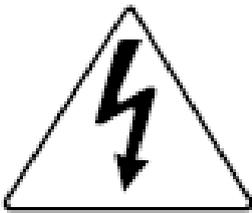
VERSION 1.0

Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.

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## Warning

- This apparatus must be earthed.
- Apparatus shall be connected to a mains socket outlet with a protective earthing connection.
- The mains plug or an appliance coupler shall remain readily operable.
- To prevent fire or electric shock hazard, do not expose this apparatus to rain or moisture.
- The apparatus should not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, should be placed on the apparatus.
- All work related to the installation of this product should be made by qualified service personnel or system installers.
- The connections should comply with local electrical code.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## Important Notice: (for U.S. files only)

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material – special handling may apply.

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- (2) Personal injury or any damage caused by inappropriate use or negligent operation of the user;
- (3) Unauthorized disassemble, repair or modification of the product by the user;
- (4) Any problem, consequential inconvenience, or loss or damage, arising out of the system combined by the devices of third party.
- (5) Any claim or action for damages, brought by any person or organization begin a photogenic subject, due to violation of privacy with the result of that surveillance-camera’s picture, including saved data, for some reason, becomes public or is used for the purpose other than surveillance.

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## INSTALLATION & SAFEGUARDS

Please read these instructions before operating the unit.

### **Installation.**

Refer all work related to the installation of this product to qualified service personnel or system installers.

Avoid the following locations for installation.

- \* Places exposed to direct water, moisture, or sunlight directly
- \* Places subject to having strong vibration or impact
- \* Near magnetic field sources such as a television or speakers, magnet, etc.
- \* Steamy and oily places such as kitchens
- \* Places which are not level
- \* Place where condensation forms easily, where temperature changes greatly.
- \* Place the DVR in a well-ventilated place and do not place heat-generating objects on the unit.

### **Built-in hard disk drive**

Hard disk drive is vulnerable to vibration. Handle it with care.

Performance and lifetime of hard disk drive is easily affected by heat (used at high temperature) characteristically. It is recommended to use this unit at temperatures between 20°C-30°C {68°F-86°F}.

It is possible to damage it if it is moved while its motor is still running. Do not move it just after turning its power on or off (for around 30 seconds).

A lifetime of hard disk drive is limited by use.

It is recommended to replace it after around 18000 hours of operation to prevent data loss from disk failures.

Write error may occur frequently after around 20000 hours of operation and the head and motor deterioration may occur and will reach their lifetime after 30000 hours of operation when it has been used at the recommended ambient temperature (approx. 25°C {77°F}).

When hard disk drive trouble occurs, replace it immediately. Consult your dealer for servicing.

When replacing the hard disk drives, take notice of the following.

- Protect the hard disk drives from static electricity.
- Do not keep them upright.
- Do not use an electric screwdriver to fix them.

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(Tightening torque: Approx. 0.49 N·m {5 Kgf·cm})

- Avoid rapid changes of the temperature/humidity to prevent condensation.

(Acceptable change: within 15°C/h {59°F/h})

### **Before You Start.**

1. Do not attempt to open or remove the covers. This may expose you to dangerous voltage or other hazards.
2. Installation should be performed by a qualified service person only.
3. This unit should be operated only from the type of power source indicated on the manufacturer's label.

### **Special Note.**

If you need to change the TIME/DATE always clear the Hard Drive. If you don't follow this step first, it may cause erratic behaviour of the DVR and possible loss of recordings.

1. It is recommended to use the same manufacturer when installing Hard Drives.
2. When backing up data, if there is any other data in USB disk, please save it, otherwise the original documents will be deleted when video records backup.

### **Note:**

**If DVR is accessed through router, all of the protocol TCP and UDP should be opened in router setup. It can avoid video loss phenomenon when remote access.**

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## Important safety instructions

- Read and keep these instructions.
- Heed all warning.
- Do not connect this unit to an outlet to which appliances with high power consumption such as an air conditioning or a copy machine is already being connected.
- Do not use this apparatus near water.
- To reduce the risk of electric shock, do not remove cover (or back).
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time.  
Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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## **Chapter I      Introduction**

Thank you for choosing our stand alone Digital Video Recorder System.

Please pay attention to these instructions before using the DVR.

The manual explains the operation modes and performance criteria of our stand alone H264 DVR.

Please read the manual carefully before using the DVR, and install the system according to the instructions.

Mainframe software is subject to renewal without prior notice.

<b>I type</b>	<b>4/16 channel model for synchronize video and audio</b>
<b>II type</b>	<b>4/8 video channel and 1 audio channel input model</b>
<b>III type</b>	<b>ATM special model</b>

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## Product Introduction

### 1. Compress

- Support PAL/NTSC video format, 25FPS (PAL), 30 FPS (NTSC), H.264; Support both variable bitrate and variable frame rate.
- Support dual stream, video config setting.
- Support motion detection, video shelter area.
- Support OSD, date and time display.

### 2. Record

- Support record period, record quality setting; Support pre-record function.
- Support SATA port.
- I type 4 channel model and III type model Support 4CH playback synchronously for CIF resolution; I type 16 channel model and II type 8 channel model support 1CH playback for CIF resolution.
- Support FAT32 files system.
- Support backup the recorded files. Support USB memory, USB HDD.
- Support cycle or none cycle record.

### 3. Control

- Support exception alarm, motion detection alarm, external alarm, etc.
- Support user authority setting, the authority distribute to each channel respectively.

### 4. Network

- Support TCP/IP protocol, DHCP, PPPoE, DDNS.
- Support E-Mail.
- Support embedded WEB preview and IE browse.
- Support remote parameters setup.
- Support network port control, realize PC remote operate.
- Alarm information can be sent to remote center.
- Network control PTZ.
- Network download and playback the recorded files in DVR.
- Remote upgrade the firmware.
- Support log.

- 
- Set username, password and authority remotely.

## Chapter II System Installation

### Section 1 Operating Environment

The following operating environment for this DVR must be adhered to:

**DVR Operating Environment**

Items	Instructions
Electromagnetism	DVR' complies with National Electromagnetism Radiation Standards.
Temperature	-10°C to 55°C
Humidity	10 % to 95 %
Power Supply	AC100-240V 50/60Hz

Please pay particular attention to the following:

- Keep away from heat sources and high temperatures and avoid direct sunlight.
- Do not leave in humid places and never touch with wet hands.
- Never spill liquids of any kind on the unit.
- The unit is only to be opened by qualified persons.
- Do not place other equipment on the DVR.

### Section 2 HDD Installation

Installation of Hard Drive.

1. Remove DVR Lid.

I type 4 channel model and II type model should be removed as fig.1.

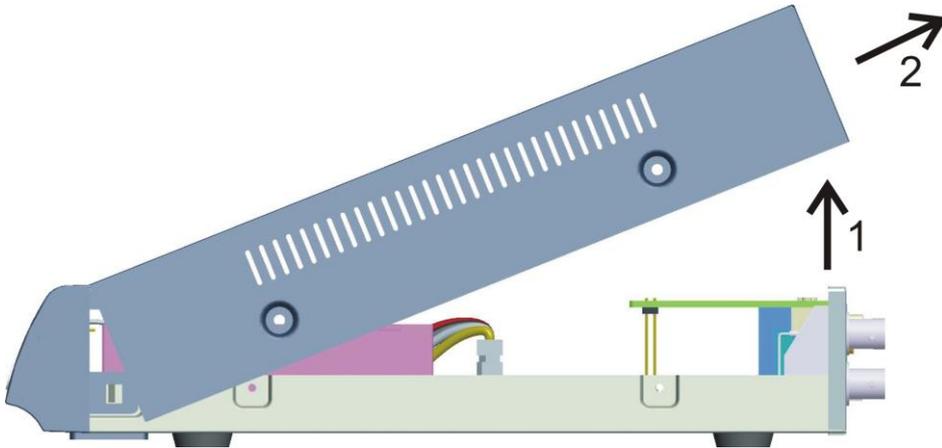


Fig. 1

I type 16 channel model and III type model should be removed as fig.2.



Fig. 2

2. Remove HDD mounting bracket.
3. Fit HDD onto bracket using supplied mounting screws.
4. Replace HDD mounting bracket.
5. Connect the ATX power cable to the power connection on the HDD. Pay attention to the correct orientation.
6. Plug HDD cable into SATA port on HDD.
7. Plug HDD cable into SATA port on the main board.

After installed, I type 4 channel model and II type model should be as fig.3:



Fig. 3

After installed, III type model should be as fig.4:



Fig. 4

After installed, I type 16 channel model should be as fig.5:



Fig. 5

8. Replace the top of the DVR enclosure. Note: Please fix the screws at the back side of DVR before the flank side while assembling the lid.

**NOTE:** Please format the hard disk before record.

## Section 3 Back panel

### Back panel of I type 4 channel model

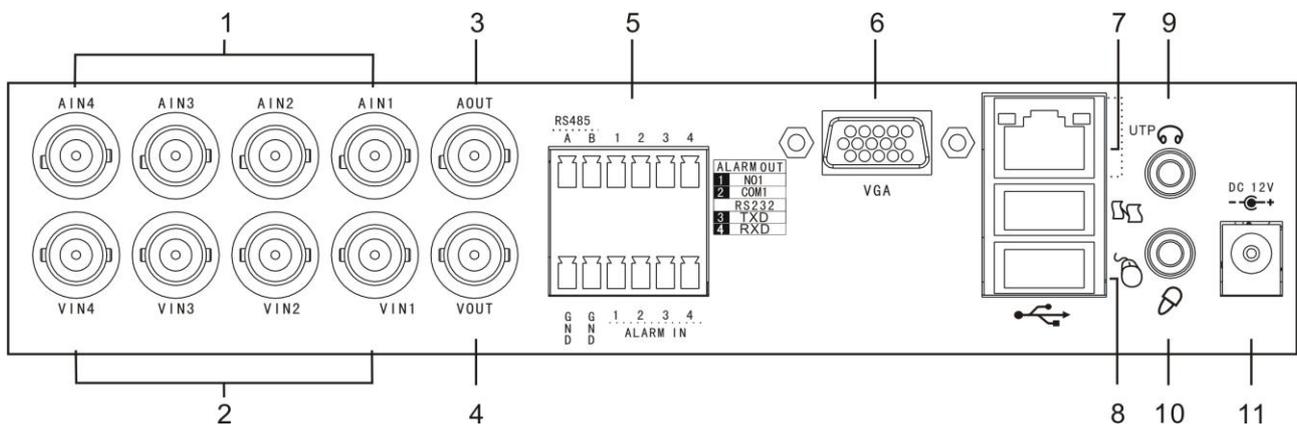


Fig. 6

No.	Interface	Connection Description
1	(A IN) Audio input	connect simulate audio input device, standard BNC interface
2	(V IN) Video input	connect simulate video input device, standard BNC interface
3	(A OUT) Audio output	connect audio output device, standard BNC interface Active device is requested while exporting audio
4	(V OUT) Video output	connect monitor, local video signal output
5	RS485 port	connect RS485 device, details refer to “Section 5 PTZ (pan, tilt and

		zoom) control connection”
	Alarm input	connect alarm input device(4CH, details refer to “Section 4 External alarm in/out connection”)
	Alarm output	connect alarm output device (1CH , details refer to “Section 4 External alarm in/out connection”)
6	VGA interface	connect VGA display device, such as PC VGA display
7	RJ45 interface(UTP)	connect network
8	USB interface	connect USB device. Up-side link is USB2.0 which adapt to USB storage device. Down-side link is USB1.1 which adapt to USB mouse.
9	intercom output	audio output while connecting with DVR_WEB, this port will occupy the signal from “A OUT”, they are alternatively taken.
10	intercom input	audio input while connecting with DVR_WEB, this port will occupy the signal from “A IN 1”, they are alternatively taken.
11	power supply(DC 12V)	12V volts D.C. input

- Note: 1. Active device is requested while using intercom function and output audio.**  
**2. For this model, the audio output ports are the same ports for the intercom.**

### Back panel of II type model

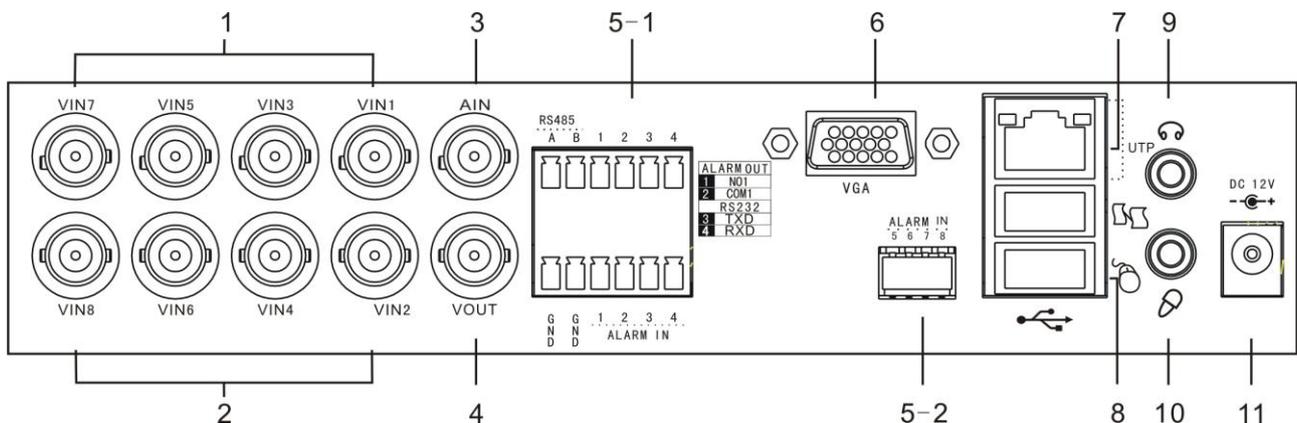


Fig. 7

No.	Interface	Connection Description
1-2	(V IN)Video input	connect simulate video input device, standard BNC interface
3	(A IN) Audio input	connect simulate audio input device, standard BNC interface
4	(V OUT) Video output	connect monitor, local video signal output
5-1	RS485 port	connect RS485 device, details refer to “Section 5 PTZ (pan, tilt and zoom) control connection”
	Alarm input	connect alarm input device (4CH, details refer to “Section 4 External alarm in/out connection”)
	Alarm output	connect alarm output device (1CH , details refer to “Section 4 External alarm in/out connection”)
5-2	4 CH alarm input	connect alarm input device(4CH, details refer to “Section 4 External alarm in/out connection”)

6	VGA interface	connect VGA display device, such as PC VGA display
7	RJ45 interface(UTP)	connect network
8	USB interface	connect USB device. Up-side link is USB2.0 which adapt to USB storage device. Down-side link is USB1.1 which adapt to USB mouse.
9	intercom output	audio output while connecting with DVR_WEB
10	intercom input	audio input while connecting with DVR_WEB
11	power supply(DC 12V)	12V volts D.C. input

**Note:** Active device is requested while using intercom function and output audio.

### Back panel of I type 16 channel model

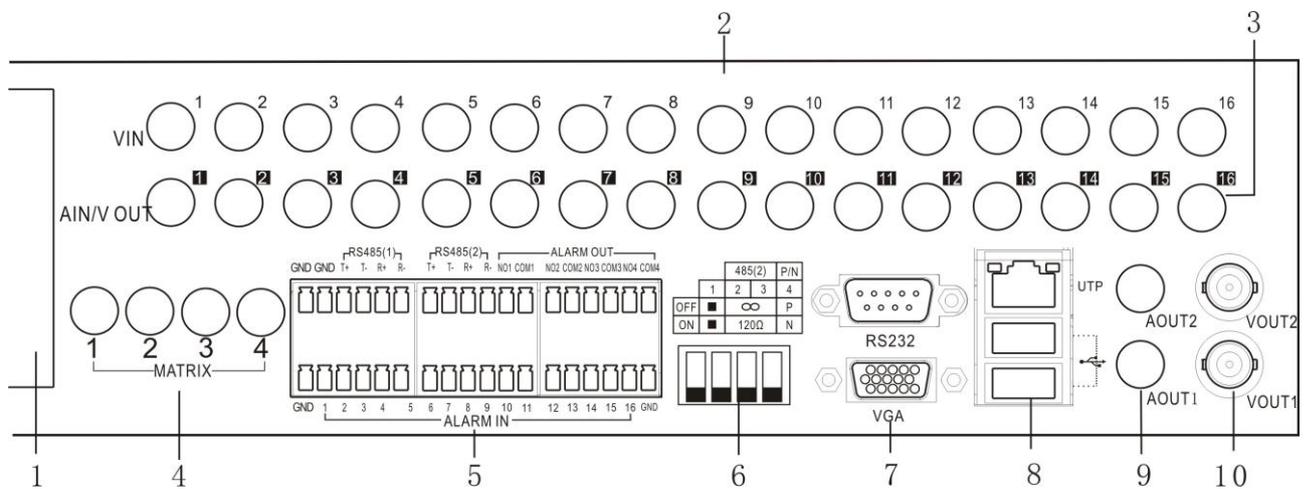


Fig. 8

No.	Interface	Connection Description
1	Power switch (AC IN)	AC100-240V power input
2	Video Input (V IN)	BNC input
3	Normal editions are for audio input	Normal edition DVR connect to audio input device, standard BNC connector.
	Loop editions are for video loop output (AIN/V OUT)	Loop out edition DVR connect to video matrix and monitor, standard BNC connector.
4	Matrix output (MATRIX)	BNC for Matrix output
5	RS485 port	connect RS485 device, details refer to “Section 5 PTZ (pan, tilt and zoom) control connection”
	Alarm input (ALARM IN)	connect alarm input device (16CH, details refer to “Section 4 External alarm in/out connection”)
	Alarm output (ALARM OUT)	connect alarm output device (4CH, details refer to “Section 4 External alarm in/out connection”)
6	4 digit code switch (MODE)	Details refer to the remark 2
7	RS-232 connector	Connect RS-232 device, modem and PC for example
	VGA connector	VGA output
8	RJ45 connector (UTP)	Network port

	USB connectors	Support USB1.1 which adapt to USB mouse. The two USB ports are alternative.
9	AOUT1/AOUT2	AOUT1 is audio output, AOUT2 port is not available (N/A)
10	Video output port (VOUT1, and VOUT2)	Connect monitor, local video output

**Remark 1**

RS-485 and alarm input port defines as follow fig:

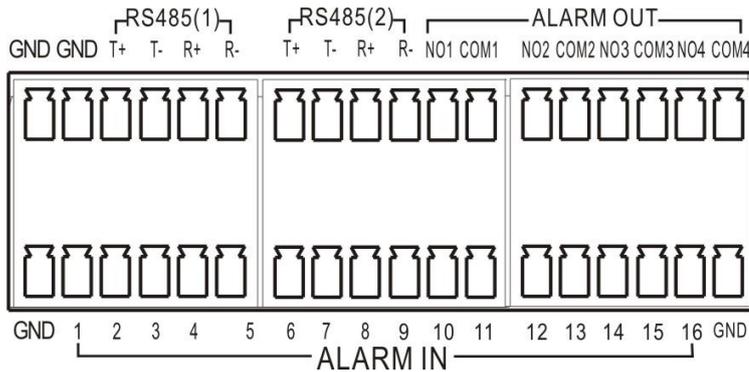


Fig. 9

- T+, T- are senders of RS485, connect to Rx+ and Rx- of PTZ or dome. Details refer to “Section 5 PTZ (pan, tilt and zoom) control connection”.

**Note: RS485 (2) is set as default, If you want to use 485 (1) port for PTZ control, please setup as following:**

**“Menu--Network--Serial Port Setup—PTZ Port: Port1”.**

- R+, R- are receivers of RS485, connect to keyboard (DK-204X keyboard for example). This DVR can only use 485(1) port for DK-204X.

**Remark 2**

4 digit code switch definition:

		485 (2)		P/N
	1	2	3	4
OFF	■	∞		P
ON	■	120Ω		N

- When the pin ”1” and ”4” are put in “OFF” position, display will be set as “PAL” format; When the pin “1” and “4” are put in “ON” position, display will be set as “NTSC” format.
- The pin “2” and “3” are the RS-485(2) terminal resistor switch. When both of them are put in “OFF” means no matching resistance while put in “ON” means matching resistance is 120Ω.

## Back panel of III type model

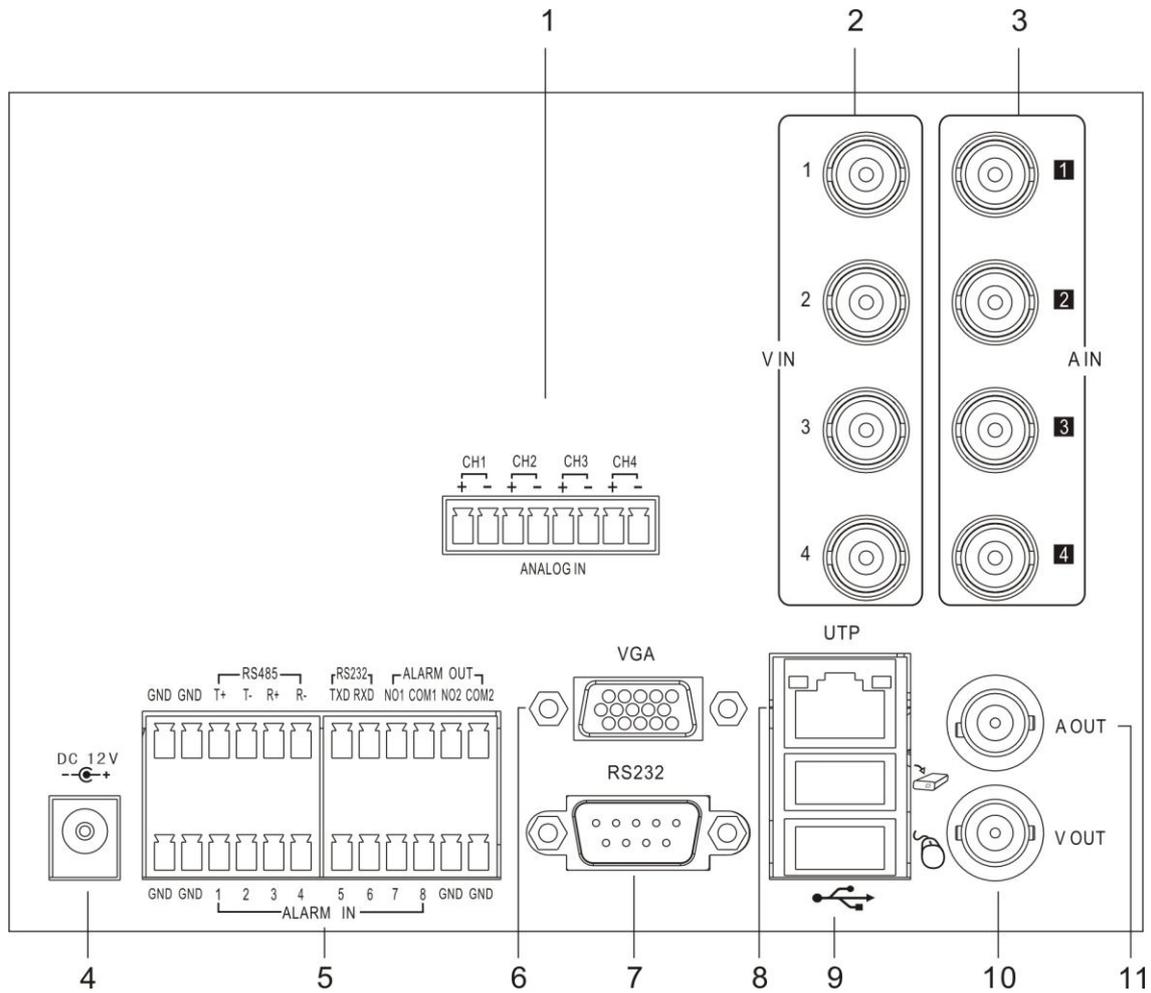


Fig. 10

No.	Interface	Connection Description
1	A/D capture input (optional)	Alarm read analogue input, and it can connect sensor
2	Video Input (V IN)	BNC input
3	Audio Input (A IN)	BNC input
4	power supply(DC 12V/5A)	12V volts D.C. input
5	RS485 port	connect RS485 device, details refer to “Section 5 PTZ (pan, tilt and zoom) control connection”
	Alarm input (ALARM IN)	connect alarm input device (8CH, details refer to “Section 4 External alarm in/out connection”)
	Alarm output (ALARM OUT)	connect alarm output device (2CH, details refer to “Section 4 External alarm in/out connection”)
6	VGA interface	connect VGA display device, such as PC VGA display
7	RS-232 connector	Connect RS-232 device, modem and PC for example
8	RJ45 connector (UTP)	Network port
9	USB interface	connect USB device. Up-side link is USB2.0 which adapt to USB storage device. Down-side link is USB1.1 which

		adapt to USB mouse.
10	Video Output (V OUT)	Connect monitor, local video output
11	Audio Output (AOUT)	connect audio output device, standard BNC interface

## Section 4 External alarm in/out connection

### Alarm in

The alarm input is NO/NC input. Please connect signal port to any of 1-16 port and GND port. For NO input please setup “Main Menu—Rec. &Alarm—Alarm—Open” in the menu. For NC input please setup “Main Menu—Rec. &Alarm—Alarm—Open” in the menu.

4 CH series DVR has 4 ports for alarm input, 8 CH series DVR has 8 ports for alarm input, 16 CH series DVR has 16 ports for alarm input.

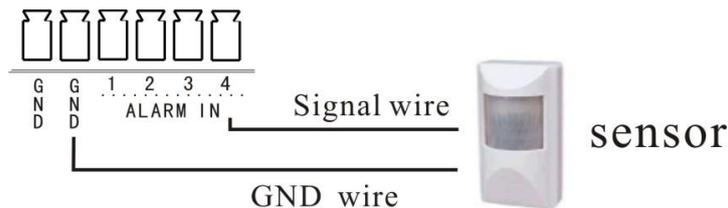


Fig. 11

Note: external input voltage can not be higher than 5V.

### Alarm out

Alarm output is NO/NC output. I type 4 channel model and II type model has 1 CH alarm output, III type model provides 2 CH alarm output, and I type 16 channel model has 4 CH alarm output.

When “NO1” and “COM1” was off, the alarm output disables, otherwise “NO1” and “COM1” was connected, the alarm output enable.

I type 4 channel model and II type model alarm output linkage should be as follows:

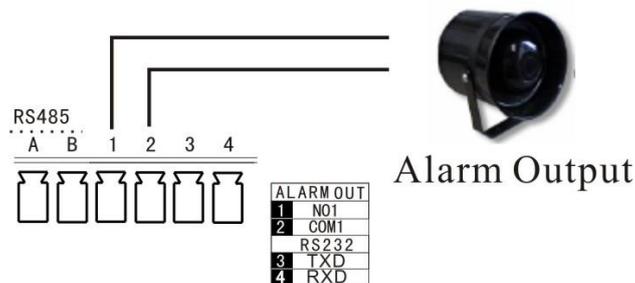


Fig. 12

I type 16 channel model and III type model alarm output linkage should be as follows:

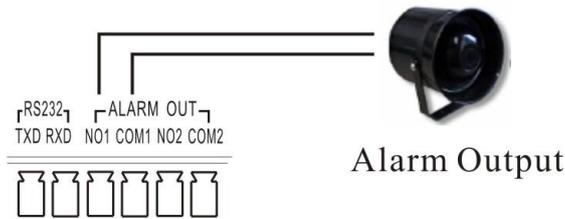


Fig. 13

Note: 24V DC (1A), 120V AC (1A) voltage and current are suggested.

## Section 5 PTZ (pan, tilt and zoom) control connection

I type 4 channel model and II type models' PTZ linkage should be as follows:

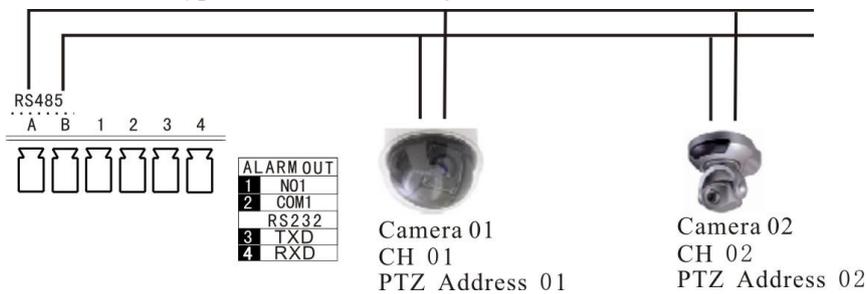


Fig. 14

A and B ends of RS485 can be connected with the Rx+, Rx- on PTZ or High Speed Dome.

I type 16 channel model and III type models' PTZ linkage should be as follows:

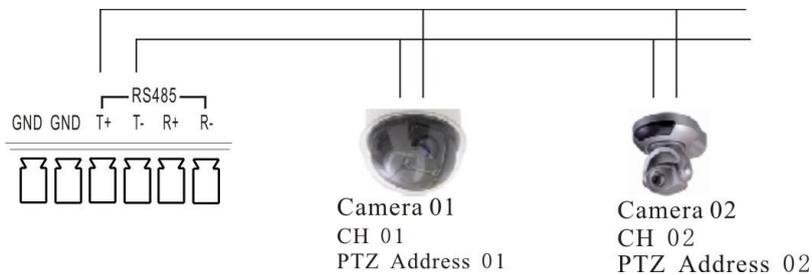


Fig. 15

T+ and T- ends of RS485 can be connected with the Rx+, Rx- on PTZ or High Speed Dome.

After all the above connection, please enter the “PTZ” menu to setup camera and PTZ address, baud rate, PTZ protocol.

After the setup, click “” icon on the status bar to enter the PTZ control interface. Also you can run the DVR\_WEB software or Netclient to control PTZ. About the DVR\_WEB setting please refer “Chapter V”.

**Note: I type 16 channel model support 485 (1) and 485 (2) port, RS485 (2) is set as default, If you want to use 485 (1) port for PTZ control, please setup as following:**

“Menu--Network--Serial Port Setup—PTZ Port: Port1”.

WARNING: PLEASE SET ALL OF THE PTZ ADDRESSES DIFFERENTLY.

---

Note: Please do not connect RS485 and RS232 simultaneously.

## Section 6 Intercom



Fig. 16

In the above illustration, the up icon is an ear phone socket and the down icon is a MIC phone socket. After the DVR\_WEB or Netclient software has connected with the host, and also the ear phone and MIC phone be connected. Click the intercom icon on the DVR\_WEB, a two-way communication can be realized. In the meantime, audio input from DVR can be heard on PC; audio input from PC can be heard on audio output of DVR.

**About the DVR\_WEB setting please refer “Chapter V”.**

- NOTE:**
- I type 16 channel model and II type model’s intercom is independent.**
  - I type 4 channel model and III type model’s intercom input will take up the channel 1 audio input, intercom output is audio output port**
  - Active device is requested while using intercom function for I type 4 channel model and III type model. Other type model can not use active device while using intercom function.**

## Section 7 A/D capture input

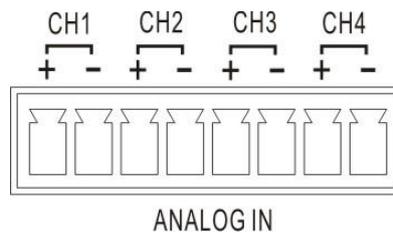


Fig. 17

This function is optional function for III type model.

It provides 4 analog input ports and special for III type model. The ports can be connected with sensor for temperature or humidity.

## Chapter III DVR Operation

### Section 1 DVR Front Panel

I type 4 channel model and II type model

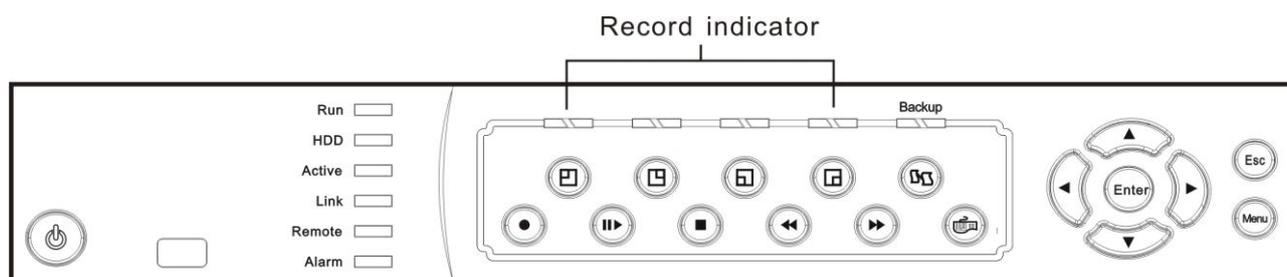


Fig. 18

Name	specification
	Power switch
	IR receiver
Run	Working indicator, flashing after boot normally.
HDD	HDD indicator, flashing when access HDD date.
ACTIVE	Network communication indicator, flashing when network is connected.
LINK	Network connection indicator, lighting constantly when network is connected.
REMOTE	IR remote receive indicator, flashing when control this DVR with IR controller.
ALARM	Alarm indicator, flashing when alarm is activated.
Record indicator	Corresponding channel record indicator (it lights when corresponding channel is recording)
Backup	Backup indicator, lighting constantly when backup is working.
	1. Direction key "UP"                      2. Display the status bar in preview mode
	1. Direction key "DOWN"                    2. Hide the status bar in preview mode
	Direction key "LEFT"
	Direction key "RIGHT"
ENTER	"OK" key
ESC	"Cancel" key
Menu	Entry system menu
	1. For 8 CH series DVR, Select 1-split, 4-split,9-split display; for 4 CH series DVR, select 1 split, 4 split display

	<ol style="list-style-type: none"> <li>Motion and Shelter area enable</li> <li>Select pane “1” in cover area setting</li> </ol>
	<ol style="list-style-type: none"> <li>For 8 CH series DVR, Select 1-split, 4-split,9-split display; for 4 CH series DVR, select 1 split, 4 split display</li> <li>Motion and Shelter area disable</li> <li>Select pane “2” in cover area setting</li> </ol>
	<ol style="list-style-type: none"> <li>For 8 CH series DVR, Select 1-split, 4-split,9-split display; for 4 CH series DVR, select 1 split, 4 split display</li> <li>Select pane “3” in cover area setting</li> </ol>
	<ol style="list-style-type: none"> <li>For 8 CH series DVR, Select 1-split, 4-split,9-split display; for 4 CH series DVR, select 1 split, 4 split display</li> <li>Select pane “4” in cover area setting</li> </ol>
	Entry the backup menu
	Pop-up the dialogue box of manual recording
	<ol style="list-style-type: none"> <li>Entry search and playback interface</li> <li>Pause/Play recording file , under playback mode</li> </ol>
	Stop playback
	Jump backward under playback mode.
	Jump forward under playback mode.
	Entry input interface

### I type 16 channel model

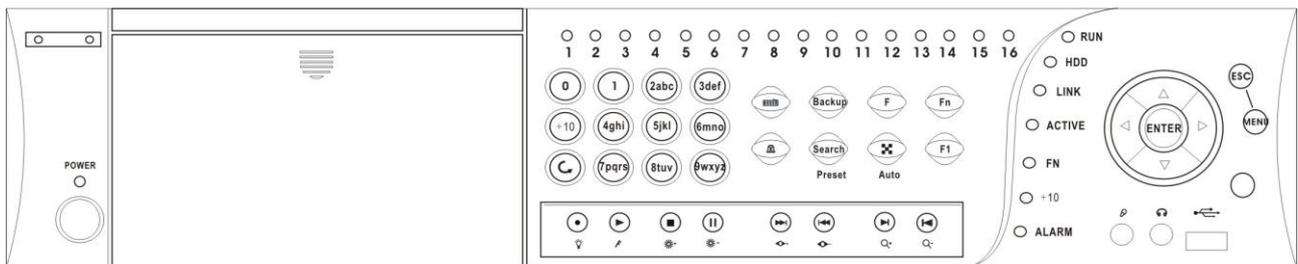


Fig. 19

Name	specification
	Power switch
POWER	Power indicator, lighting constantly when connected power
RUN	Working indicator, flashing after boot normally
HDD	HDD indicator, flashing when access HDD data
LINK	Network link indicator, lighting constantly when network is connected
ACTIVE	Network communication indicator, flashing when network is connected
Fn	PTZ control indicator, lighting constantly in PTZ mode
+10	Plus 10 indicator, it lights when +10 function is enabled

ALARM	Alarm indicator, flashing when alarm is activated
1—16	1-16ch record indicator (it lights when corresponding channel is recording)
	1. Direction key 'UP'; 2. Display the status column in preview mode
	1. Direction key 'DOWN' 2. Hide the status column in preview mode
	Direction key 'LEFT';
	Direction key 'RIGHT';
ENTER	"OK" key
ESC	"Cancel" key
Menu	Entering system menu mode
0	1. Number key "0" 2. input number "0" in input mode window
1	1. Number key '1' (Corresponds relevant letter); 2. Select pane "1" in cover area setting 3. input number "1" in input mode window
2	1. Number key '2' (Corresponds relevant letter); 2. Select pane "2" in cover area setting 3. input number "2" in input mode window
3	1. Number key '3' (Corresponds relevant letter); 2. Select pane "3" in cover area setting 3. input number "3" in input mode window
4	1. Number key '4' (Corresponds relevant letter); 2. Select pane "4" in cover area setting 3. input number "4" in input mode window
5—9	1. Number key '5-9'(Corresponds relevant letter) 2. input number "5-9" in input mode window
+10	Plus 10
	Channel auto-switching (sequencing)
	1. Entry "Handle Record" interface; 2. Light control in PTZ mode; 3. Switch the input method in input mode interface
	1. Playback by frames under PAUSE mode 2. Wiper control in PTZ mode; 3. Select the character in input mode window
	1. Jump forward 2. Focus+ In PTZ mode
	1. Jump backward 2. Focus- In PTZ mode
	1. Jump to next recorded file. 2. Zoom+ In PTZ mode
	1. Jump to previous recorded file. 2. Zoom- In PTZ mode
	1. Stop playback operation 2. Aperture+ In PTZ mode; 3.Delete current character in input mode window,
	1. Pause playback 2. Aperture- In PTZ mode
	Entry input interface
	Entry "Playback Dialog" interface
	Call PTZ initial position of current channel
	PTZ enable switch
	Cancel alarm beep

	Entry "Playback Dialog" interface
	Split screen mode switch
	Reserved for future use
	USB port (support USB2.0 which adapt to USB storage device)
	MIC and earphone
	IR receiver

### III type model (without LCD)

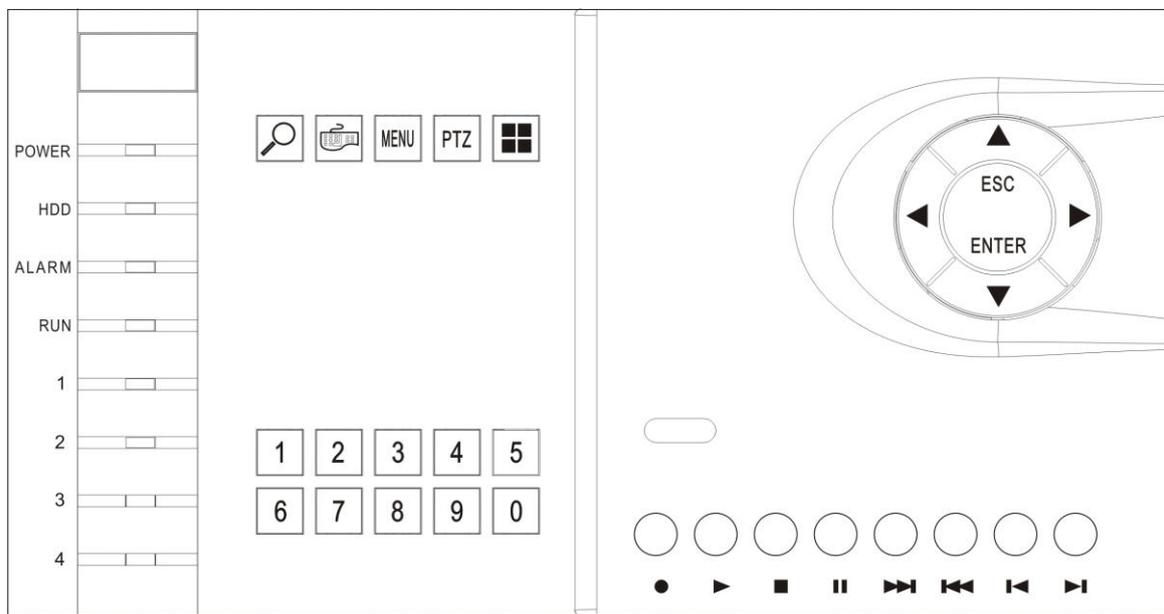


Fig. 20

Name	specification
	Power switch
	IR receiver
POWER	Power indicator, lighting constantly when connected power
HDD	HDD indicator, flashing when access HDD date
ALARM	Alarm indicator, flashing when alarm is activated
RUN	Working indicator, flashing after boot normally
1-4CH record indicator	Corresponding channel record indicator (it lights when corresponding channel is recording)
	Entry search and playback interface
	Entry input interface
Menu	Entry system menu
PTZ	Entry PTZ control mode

	Select 1, 4 split display
	1. Direction key “UP”                      2. Display the status bar in preview mode
	1. Direction key “DOWN”                  2. Hide the status bar in preview mode
	Direction key “LEFT”
	Direction key “RIGHT”
ENTER	“OK” key
ESC	“Cancel” key
0	1. Number key “0”                          2. input number “0” in input mode window
1	1. Number key ‘1’ (Corresponds relevant letter);                  2. Motion and Shelter area enable                  3. Select pane “1” in cover area setting                  4. input number “1” in input mode window
2	1. Number key ‘2’ (Corresponds relevant letter);                  2. Motion and Shelter area disable                  3. Select pane “2” in cover area setting                  4. input number “2” in input mode window
3	1. Number key ‘3’ (Corresponds relevant letter);                  2. Select pane “3” in cover area setting                  3. input number “3” in input mode window
4	1. Number key ‘4’ (Corresponds relevant letter);                  2. Select pane “4” in cover area setting                  3. input number “4” in input mode window
5-9	1. Number key ‘5-9’(Corresponds relevant letter)                  2. input number “5-9” in input mode window

### III type model (with LCD)

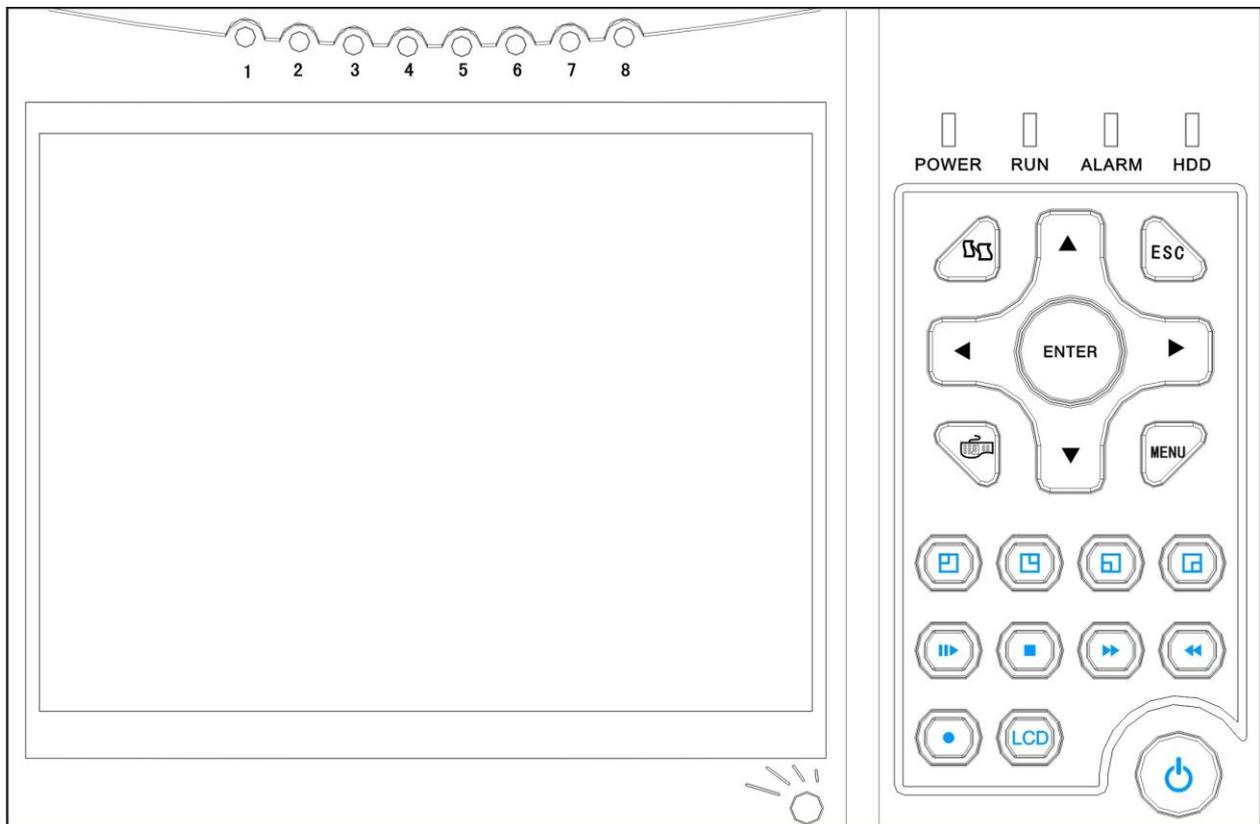


Fig. 21

Name	specification
	Power switch
	IR receiver
POWER	Power indicator, lighting constantly when connected power
RUN	Working indicator, flashing after boot normally
ALARM	Alarm indicator, flashing when alarm is activated
HDD	HDD indicator, flashing when access HDD data
1-4CH record indicator	Corresponding channel record indicator (it lights when corresponding channel is recording)
	Entry playback and backup interface
	Entry input interface
Menu	Entry system menu
ENTER	“OK” key
ESC	“Cancel” key
	1. Direction key “UP”                      2. Display the status bar in preview mode
	1. Direction key “DOWN”                2. Hide the status bar in preview mode
	Direction key “LEFT”
	Direction key “RIGHT”
	1. 4-screen display or channel 1 full screen    2. Motion and Shelter area enable    3. Select pane “1” in cover area setting
	1. 4-screen display or channel 2 full screen    2. Motion and Shelter area disable    3. Select pane “2” in cover area setting
	1. 4-screen display or channel 3 full screen    2. Select pane “3” in cover area setting
	1. 4-screen display or channel 4 full screen    2. Select pane “4” in cover area setting
	1. Entry playback and backup interface            2. Pause/Play recording file, under playback mode
	Stop playback
	Jump backward under playback mode.
	Jump forward under playback mode.
	Entry the “Manual Record” interface
LCD	LCD display ON/OFF

## Section 2 IR remote device (optional)

This is the optional part for this DVR.

Insert the battery, then aim the launch end at the receive end of DVR while using IR remote controller.

In the control range, if more than one DVR need to be controlled separately, please press “ID” or “SELECT” button, then input the host address of which DVR need to be controlled and press “OK” or “ENTER” button will realize the function.

NOTE: Press “ID” in IR remote controller, then input “000” in “Remote Control Address Set” will control all DVRs in the effective range.

The defaulted host address is 001, the value field among 001-255. It can be modified in the “Main Menu-Advanced -General”.

IR remote device for I type 4 channel model, II type model and III type model as follows:

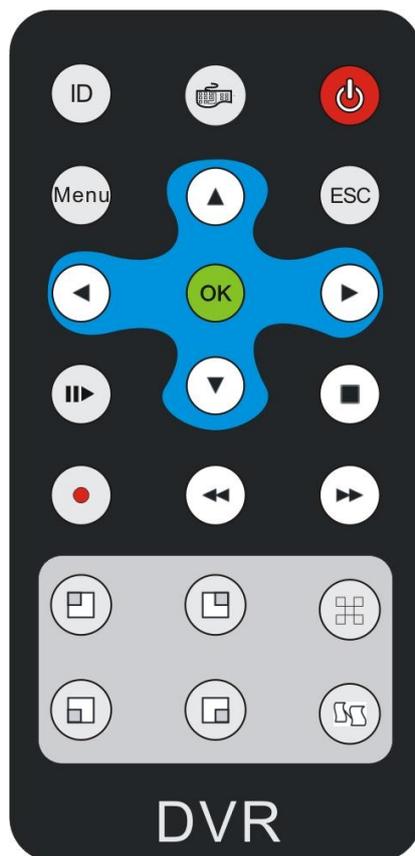


Fig. 22

Refer to the section of “DVR Front Panel” for the detailed description of the function of the keys on remote controller.

 : Screen-split mode switch.

IR remote device for I type 16 channel model as follows:



Refer to the section of 'Panel' for the detailed description of the keys function on remote control unit.

Here are the function buttons on the remote control:

Buttons	Functions
P/Z	PTZ enable switch;
SETUP	Plus 10
SAVE	Entering "Search dialog"
RETURN	Enter the input mode window

### Section 3 Mouse operation

This DVR supports a USB mouse:

Plug the USB mouse into the USB port marked , and then the mouse cursor will appear on the screen.

Note: I type 16 channel model and III type model, plug the USB mouse into either of the USB ports.

#### ➤ User Login

Right click on screen and a pop-up login box will appear; Move cursor to the password input frame, double-click left key of mouse to enter the input box, click relevant character to input the password, then click ENTER or right click to reserve and exit.

#### ➤ Entry Menu

Method 1: Right click to enter the main menu after logging system.

Method 2: Move cursor to the bottom of screen, reveal the status bar automatically, and click  icon to enter the main menu.

➤ **Mouse Option**

- \* Modify Number                    Double-click mouse left key to input number or use trolley of mouse to modify number directly.
- \* Modify Character                Double-click mouse left key to input character.
- \* Modify Option                    Choose option with trolley of mouse or in the option box after left click.
- \* Exit Menu                         Right click to exit menu step by step.

➤ **Adjusting the Monitor views**

- \* Image Switch                    On display, move mouse cursor to bottom, status bar will reveal automatically, then click  icon to switch image.
- \* Full Screen Image                when multi-screen display, move mouse cursor to a channel, double-click mouse left key to view Full screen, double-click again will back full screen to multi-screen.

## Section 4    Input mode introduction

### Input mode interface of I type 4 channel model, II type model, and III type model:

DVR support three input modes: number, capital and lowercase letter input. Press  to get into input interface on number input box or character edit box as shown in Fig. 23:



Fig. 23

In the input interface, “←” means “delete”, “Shift” means “uppercase or lowercase letter input switch”. Press “ESC” in the front panel to save and exit.

---

## Input mode interface of I type 16 channel model:

DVR support four input modes: number, Chinese, capital and lowercase letter input. Press  to get into input interface on number input box or character edit box as shown in Fig. 24:

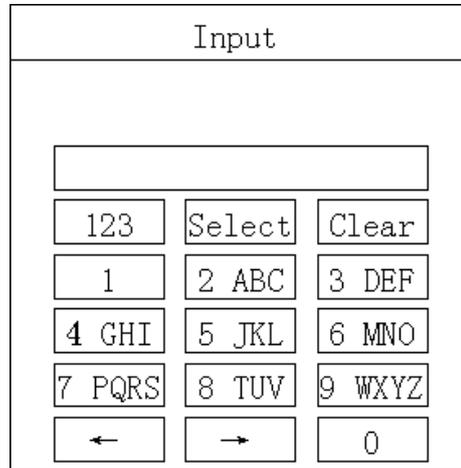


Fig. 24

In the input interface, use mouse to click “123” to change input modes, click “←” and “→” to move cursor, click “Select” to confirm selection; click “Clear” to delete the character in front of cursor. Right click to quit the input dialog.

In the input interface, press “●” key on the front panel to change input methods, press number key to input numbers, uppercase, lowercase and Chinese, press “▶” key to confirm selection, press “■” key to delete the character in front of cursor. Press “ESC” in the front panel to save and exit.

## Chapter IV System operation

### Section 1 Menu Navigation



Fig. 25

Main Menu	Sub Menu	Function
Playback		Search recording, playback or backup
Rec. & Alarm	General	Setup recording resolution, codec type, image quality, stream bit, frame rate of channels
	Schedule	Schedule recording channel selection and recording time period setup
	Alarm	Alarm input, motion detection, video shelter and video lost alarm and recording setup.
	HDD	HDD status check, HDD format, HDD alarm and HDD overwrite automatically setup
Advanced	General	DVR name, remote control number, system time, menu alpha, VGA resolution, auto logout, circular monitor, NTP, time format setup, and video format display
	User	Add and delete user, modify password, set user rights
	Display	Channel name modification and display, system time display, cover area setup, video parameters setup
	PTZ	Communication parameters, PTZ address, PTZ protocol setup
	Network	IP address, host port, DHCP, PPPoE and DDNS network parameters setup
	Transfer	Set network transmission resolution, codec type, stream bit, frame rate, image quality for every channel
	Serial Port	set parameters for serial port, select the PTZ control port, temp and hum setup
Maintenance	Resume default configuration, log out, restart and timing restart.	

Information	Log	System running and alarm information
	Version	System firmware version information and MAC
	Online	Check online user information, force kick online user

## Section 2 Surveillance View

### Status Bar



Fig. 26

Status bar button function definition:

Icon	Function
	Entering main menu
	Split screen mode switch
	Entering "Manual Record" dialog
	Entering "Playback" dialog
	Mute mode and cancel mute mode.

	Cancel buzzer alarm
	Entry PTZ control mode
Admin	Current login user
CH01	Current channel
Notation	Icon description
 	Record status and remote preview switch automatically.
	---the current channel is recording manually
	--- prerecord
	---timing recording
	---alarm recording
	---motion detection recording
	---the channel is under remote preview
×	---the channel is not under recording or not under remote preview.

## Screen Switch

### I type 4 channel model, II type 4 channel model and III type model (with LCD):

Under the surveillance mode, system defaults 4-screen, press  to have the first split screen full screen, press  to have the second split screen full screen, press  to have the third split screen full screen, press  to have the forth split screen full screen. When the first split screen is the full screen, press  to return to 4-screen, so do the other 3 buttons.

### II type 8 channel model:

Under the surveillance mode, system defaults 9-screen, press , display the first channel in full screen mode, press again , display the second channel in full screen mode. Press again , display 1-4 channels, press again , display 5-8channel, press again , display 9-screen. Press again , display the first channel in full screen mode. So as to analogize the other three buttons.

Note: under non 9-screen mode, press “ESC” system will return to 9-screen display.

### III type model (without LCD):

Press “” key to switch split screen and single screen mode.

---

### I type 16 channel model:

Press “” key to switch split screen and single screen mode.

### Screen Circular Monitor

#### I type 4 channel model, II type model and III type model:

Enter “Main Menu → Advanced → General”, select circular monitor “ON”, set circular monitor interval (interval of circle monitor), press “OK”, the system will start circular monitor. Default system configuration: OFF.

“Auto Switch” will show on status bar when auto circular is activated.

#### I type 16 channel model:

Under the surveillance mode, press  and the system enters single screen mode. “Auto switch” will be displayed on the status column. Press  again and the sequence mode will be canceled. The “Auto switch” on the status column will disappear.

## Section 3 Login and Logout

### System Login

Press any key of front panel, system will pop-up the login interface as shown in Fig. 27.

Please select a user in “User Login”, then move cursor to password input box and press  or  on front panel to get into input interface in which to input the password. Language can also be selected in this dialogue box.

For I type 16 channel model, password can be input immediately by press the number key in front panel.

Move cursor with  and  on the front panel and select item with  and .

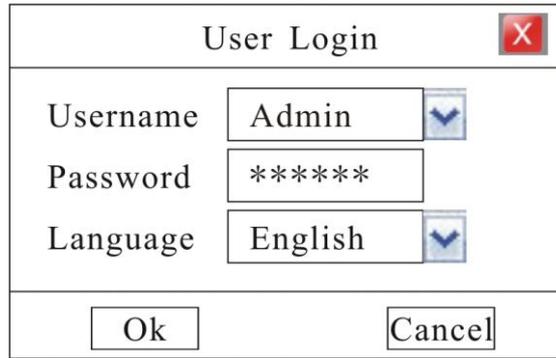


Fig. 27

In User Login box, language, including Chinese and English.

NOTE: 1. System will activate buzzer automatically after incorrect password input.

2. System will reject login after three times incorrect password input.

3. System default administrator “Admin”, password “123456”, has the superlative level authority.

4. Assure system security, please enter ‘Main Menu—Advanced—User’ to modify original password of Administrator in time.

## System Logout

Method 1: Enter “Main Menu—Advanced—Maintenance” then select ‘Logout’ to logout the system.

Method 2: Set ‘Auto Logout’ as **ON** in “Main Menu”→ “Advanced”→ “General” and input idle time, then system will auto-lock keyboard if no command input within the time set.

## Section 4 System Reboot

### Shutdown

Method 1: Press  on front panel then the shutdown interface will pop-up. DVR will be Shutdown after inputting the username and the password correctly.

Method 2: Enter “Main Menu—Advanced—Maintenance” and select ‘Shutdown’ to shutdown DVR.

Note: After power off, restart after 10 seconds to protect disk.

### Reboot

Enter “Main Menu—Advanced—Maintenance” and select ‘reboot’ to reboot DVR manually. Please refer Fig. 28.

Schedule reboot is available, if it is selected and inputted schedule reboot time (24H) for everyday.

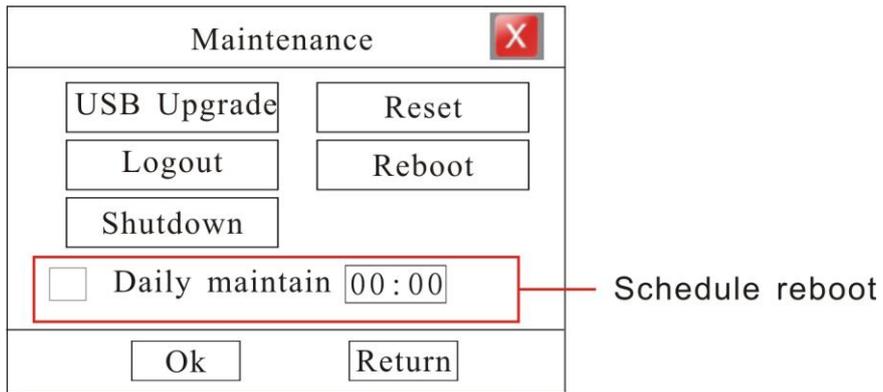


Fig. 28

## Section 5 OSD Setup

### Time Modify

Enter “Main Menu—Advanced—General” as shown in Fig. 29.

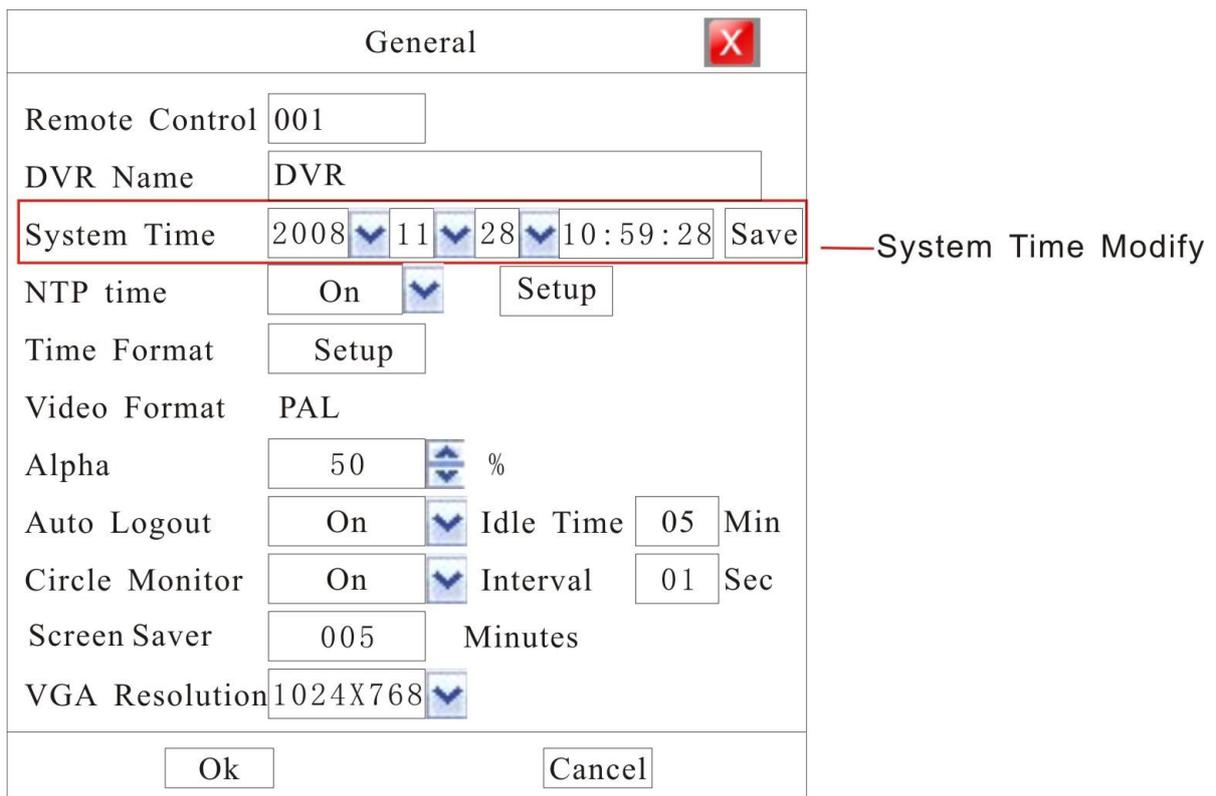
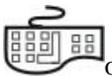


Fig. 29

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- System Time: Press  or  to get into input interface for time inputting.
- Time Format: Setting the time format and DST. Please refer Fig. 30.

**Note: If you need to modify system time please close the record.**

Fig. 30

- Time Format: 12H and 24H is selectable
- Data Format: yyyy-mm-dd, mm-dd-yyyy, yyyy-mm-dd and mm-dd-yyyy is selectable. Default Format: mm-dd-yyyy.
- DST Setting (Summer time setup): Default DST setting: NO.

## Time Display.

Enter “Main Menu—Advanced—Display”. In the interface, when recording or remote monitoring chose, time display or not is selectable. To display time Enter “Set” to adjust display location on the screen.

Whenever the Time box and Channel name box are overlapped, the system will separate them automatically.

Note: Time position of realtime monitoring screen is unalterable.

## Channel Name Setup and Display

Enter “Main Menu—Advanced—Display”. In the interface, channel name and display location can be modified.

- Modify channel name: move cursor to “Name” item box. Press  or  on front panel to enter text input interface then channel name can be defined with uppercase or lowercase letter, number and symbol. Details refer to section 4, chapter III.

Note: I type 16 channel model can get into input interface by “”, while other model by



- Channel name display: Display channel name or not is selectable. Enter “Set” menu to adjust display location

on the screen.

Note: When the Time box and Channel name box are overlapped, the system will separate them automatically.

## Section 6 Basic Parameter Setup

Enter “Main Menu—Advanced—General” as shown in Fig. 31.

General	
Remote Control	001
DVR Name	DVR
System Time	2008 11 28 10:59:28 Save
NTP time	On Setup
Time Format	Setup
Video Format	PAL
Alpha	50 %
Auto Logout	On Idle Time 05 Min
Circle Monitor	On Interval 01 Sec
Screen Saver	005 Minutes
VGA Resolution	1024X768
Ok Cancel	

Fig. 31

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

➤ **Remote Control:** When you use IR controller to operate DVR, you must use this address to select DVR. If there are more than one DVR in one place, please define different address for each DVR. The default address is “001”, the value field among 001-255.

➤ **DVR Name:** Define DVR name. When you access DVR remotely, you can find all the DVR intuitively by their names. If you want to modify the DVR name, please move cursor to DVR name edit box and press

“” or “” key to enter into input mode.

Note: I type 16 channel model can get into input interface by “”, while other model by

“”. Details refer to section 4, chapter III.

➤ **NTP time:** Select NTP time as “On”, you can entry “NTP service setup” to set service and interval of NTP.

- **Video Format:** Auto adapt according to video input. When video format is changed on operation, you need to reboot the DVR to take effect.
- **Alpha:** Adjust menu contrast. (Range from 00 to 99. 99 stands for low contrast).
- **Auto logout:** “Off”: Only can logout manually in “Maintain” → “Logout”. “On”: Logout automatically in the time set in idle time box which will show only “On” is chosen.
- **Idle time:** Length of time during which no operation is executed. Default Idle time: 5 minute.
- **Screen Saver:** This option is special for III type model( with LCD), and it can control LCD display time. DVR will not get into power saving mode if the option is set as 000. And the default value is 5min.
- **VGA Resolution:** Setup VGA output resolution. There are following options: 800×600, 1024×768 and 1280×1024. Default: 1024×768.

## Section 7 HDD Management

### HDD State Inquiry

Enter “Main Menu—Rec.& Alarm—HDD” as shown in Fig. 32.

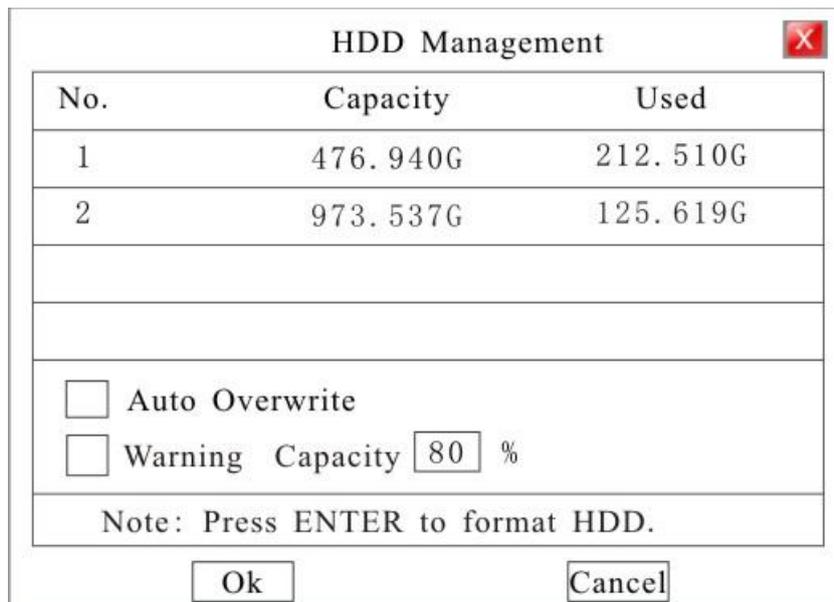


Fig. 32

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **Auto Overwrite:** Select it, and it will overwrite the earliest recording when HDD is full.

- 
- **HDD Alarm:** HDD alarm will activate once the capacity of HDD is lower than a value set by user. The range of warning capacity is among 30 to 99. Alarm mode: buzzer alarm. Default buzzer time is 10 second which can be modified in “Main Menu”→ “Rec. &Alarm”→ “Alarm”.
  - **HDD Format:** Select the HDD which will be formatted, press “Enter” key to get into HDD format interface as shown in Fig. 33.

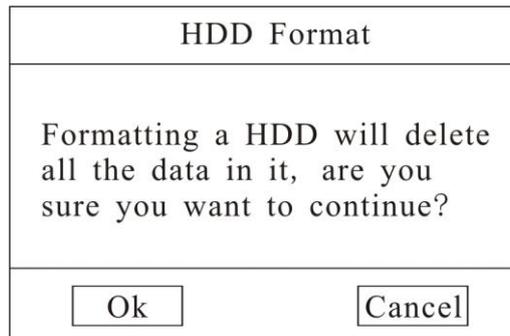


Fig. 33

Press “Ok” to format HDD.

Note: 1. Do not format a disk while it is recording.  
2. Format a HDD will delete all the data in it.

## Recording Auto Overwrite

- Enter “Main Menu—Rec. &Alarm—HDD” to setup ‘Auto Overwrite’ function: whether activate overwrite function when HDD is full. Select on then system will overwrite the earliest recording when HDD is full.

## Section 8 Recording

### Record Parameter Setup

Enter “Main Menu—Rec. &Alarm—General” as shown in Fig. 34.

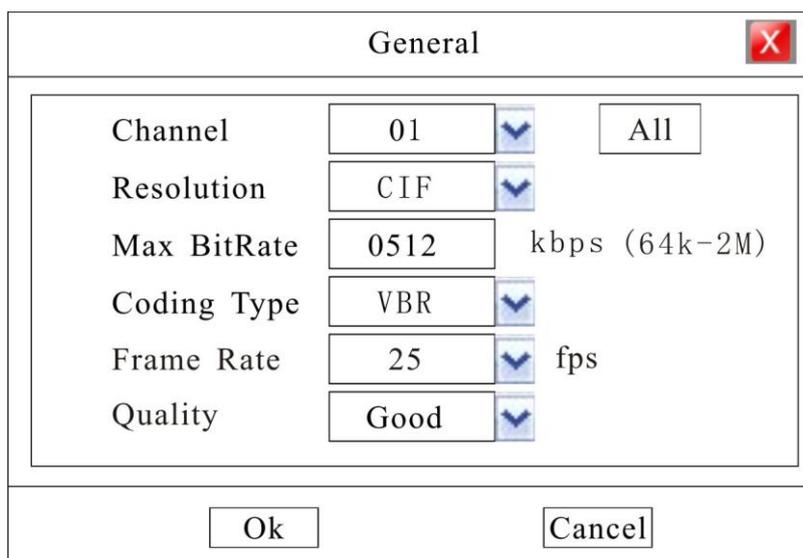


Fig. 34

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **Channel Number:** choose a channel to setup.
- **Resolution:** Options are CIF and D1. Default resolution: CIF
- **Max Bit Rate:** If you select VBR, when the video input has great movement, we need to limit the max bit rate. The max bit rate selection has relations with resolution. If you select high resolution, you must select high bit rate. If you select CBR, you can select bit rate size. Default bit rate: 512K
- **Coding Type:** There are two options: CBR or VBR. Default coding type: VBR

If you select VBR, DVR will adjust the actual bit rate according to the video movement. When there is not much movement, DVR will use low bit rate, while there is much movement, DVR will use high bit rate. In this case, DVR can save HDD usage and network bandwidth.

If you select CBR, DVR will use the fixed bit rate to compress image.

- **Frame Rate:** Frame per second. Default frame rate: “25”
- **Quality:** Define the image quality. There are 5 options: Basic, Medium, Good, High, and Best. High image quality needs high bit rate size. Default quality: High

In the course of setting up the parameters, if the parameters needed to be set the same in all channels, you can select ‘ALL’ after finishing the setup of parameters of one channel. The system will prompt a dialog box. When pressing ‘OK’, parameters setup for all channels will be achieved.

## Manual Recording

Press “●” button on the panel to enter into “Manual Record” interface directly.

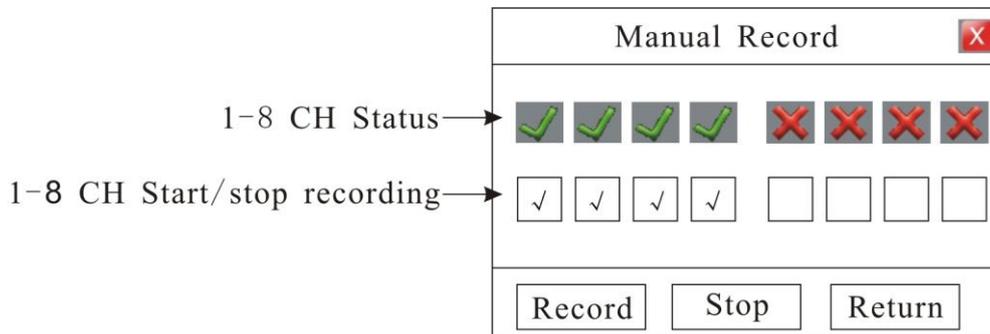


Fig.35

- **1-4 CH Status:** “√” and “×” on up side stand for recording status. “√”means recording, “×”means idle.
- **1-4 CH Start/Stop recording:** Squares on downside are used to start/stop recording of the corresponding channel. Press “▲” and “▼” on the panel to select channels. Press “◀” and “▶” to start/stop recording.
- **Record:** Press this button to start all channels recording.
- **Stop:** Press this button to stop all channel recording.
- **Return:** Press this button to close the Manual Record window.

Check channel recording status in the red circle of status bar as shown in the following Fig36.



Fig. 36

Please refer **Status Bar** section.

## Schedule Recording

Enter “Main Menu—Rec. &Alarm—Schedule” as shown in Fig. 37

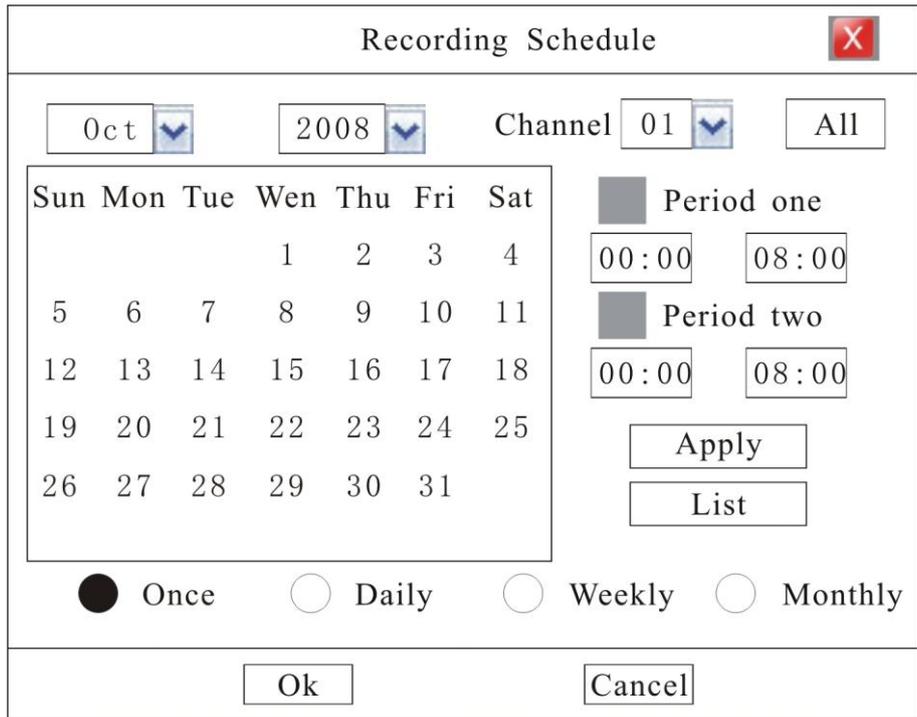


Fig. 37

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **Channel Number:** Select a channel for setup
- **All:** After setup one channel. Apply this strategy to all channels
- **Calendar:** “yy/mm/dd/” can be chose on the left of Calendar. For Example : choose 2008-10-20
- **Time Period:** Setup max two period for one day recording at most
- **Once, Daily, Weekly, Monthly:** System default recording period setup is for Once. Recording for Daily, Weekly or Monthly can also be selected. Take 2008-10-20( Monday) for example, select “Once” means only recording during the set periods in 2008-10-20, select “Daily” means recording during the set periods everyday from 2008-10-20, select “Weekly” means recording during the set periods every Monday from 2008-10-20 and select “Monthly” means recording during the set periods at the 20<sup>th</sup> of every month from 2008-10-20

**NOTE: Reset at the same day is available. The later mode will replace the former one. The function can be applied to holiday setting.**

- **Apply:** Press ‘Apply’ to save setting temporarily, if need to set multiple recording periods. For example: set recording periods in 2008-10-20 and press ‘Apply’, then other recording period could be set in the same menu without exit. Press ‘OK’ to save all setting permanently.

**NOTE: Only press ‘OK’ to save all setting permanently without lost when power is blackout. Press**

**‘Apply’ to save temporarily, all setting will lost when power is off.**

In the course of setting up the parameters, if the parameters needed to be set the same in all channels, you can select ‘ALL’ after finishing the setup of parameters of one channel. The system will prompt a dialog box. When pressing ‘OK’, parameters setup for all channels will be achieved.

- **List:** Press ‘List’ to list schedule recording time table(Max.120 records) of current channel, records delete operation is available as shown in Fig. 38

Recording Schedule					
No.	Date	Period 1	Period 2	Type	<input type="checkbox"/>
1	2008-01-01	00:00-10:00	11:00-18:00	Daily	<input type="checkbox"/>
2	2008-02-30	00:00-08:00	00:00-08:00	Every Tue.	<input type="checkbox"/>
3	2008-08-21	08:00-11:00	12:30-17:00	Monthly	<input type="checkbox"/>
4					
5					
6					

1/1

Fig. 38

Four time modes could be showed in this menu including: One day, Daily, Every Tue., Monthly. One day is equal to ‘Once’

Move cursor to one record with ◀ or ▶ on the front panel then move to the “delete” box. Press ‘ENTER’ to delete the record.

### **Recording Alarm Setup.**

Enter “Main Menu—Rec. &Alarm—Alarm” as shown in Fig. 39

Fig. 39

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **Record Duration:** Length of recording whenever alarm or motion detection is activated. Default length: 10 minutes.
- **Pre-record Time:** Activate pre-record function including “OFF、5s、15s、25s、30s”. Default pre-record time: OFF

**Note:** The max pre-record time of II type 8 channel model is 5S.

### External Alarm Input Setting

Enter “Alarm In” to set external alarm input

- **Alarm In:** Select a alarm input port for setup
- **Open:** This is sensor type.
- **Alarm Out:** Activate alarm out or not.
- **Rec. CH:** When external alarm activated, relevant channel can be selected to record if recording period has been setup in “Alarm Schedule” menu.
- **Spot Camera:** The channel, which external alarm happened in, can be selected to display as full screen.
- **Buzzer Time:** Buzzer time length when alarm, motion detection, video lost or video shelter is activated. Default length: 10 seconds.
- **Schedule:** Enter “Alarm Schedule” interface to setup alarm period in which system will activate relevant

disposal mode such as buzzer alarm, related channel full-screen display, alarm output, relevant channel recording if alarm has triggered. Alarm schedule setting is the same as schedule recording setting, please refer **Schedule Recording** section.

## Motion Detection/Video Lost/ Video Shelter Alarm Setting

Enter 'Motion' to set motion detection alarm

The screenshot shows a configuration window titled "Alarm" with a red close button in the top right corner. The window contains the following settings:

- Record Duration: 10 Min
- Pre-record Time: 5S
- Motion: Motion (dropdown menu)
- Sensitivity: Medium (dropdown menu)
- Channel: 01 (dropdown menu)
- All: All (button)
- Area Setup: Area Setup (button)
- Alarm Out: 01 (checkbox)
- Rec. CH: 01 (checkbox), 02 (checkbox), 03 (checkbox), 04 (checkbox)
- Spot Camera: Spot Camera (checkbox)
- Buzzer Time: 10 Sec
- Schedule: Schedule (button)
- Ok: Ok (button)
- Cancel: Cancel (button)

Fig. 40

- **Channel:** Select one channel for setting
- **Motion:** Select activate mode including: motion detection, video shelter and video lost.
- **Sensitivity:** Select sensitivity of motion detection or video shelter. Option including: Highest, High, Medium, Low, Lowest.
- **Area Setup:** Alarm area should also be set to activate motion detection or video shelter though such function was selected.

In area setup interface, full screen is the default alarm area. In I type 4 channel model, II type model and III type model, use direction key to move cursor, press  to cancel chose area, and press  to recover chose area. In I type 16 channel model, use direction key to move cursor, press number "2" key to cancel chose area, and press number "1" key to recover chose area.

- 
- **Rec. CH:** When alarm activated, relevant channel can be selected to record if recording period has been setup in “Alarm Schedule” menu.
  - **Spot Camera:** The channel, which motion happened in, can be selected to display as full screen.
  - **Alarm Out:** Activate alarm out or not.
  - **Schedule:** Enter “Alarm Schedule” interface to setup alarm period in which system will activate relevant disposal mode such as buzzer alarm, related channel full-screen display, alarm output, relevant channel recording if alarm has triggered. Alarm schedule setting is the same as schedule recording setting, please refer **Schedule Recording** section.

In the course of setting up the parameters, if the parameters needed to be set the same in all channels, you can select ‘ALL’ after finishing the setup of parameters of one channel. The system will prompt a dialog box. When pressing ‘OK’, parameters setup for all channels will be achieved.

Note: “Sheltering” and “Video Loss” settings please refer to “Motion” setup.

## Alarm Elimination



Click  icon on the status bar to eliminate beep alarm if the alarm is activating.

## Section 9 Playback/Backup

### Playback

Press ,  or  in front panel to enter the search interface as show in Fig. 41.

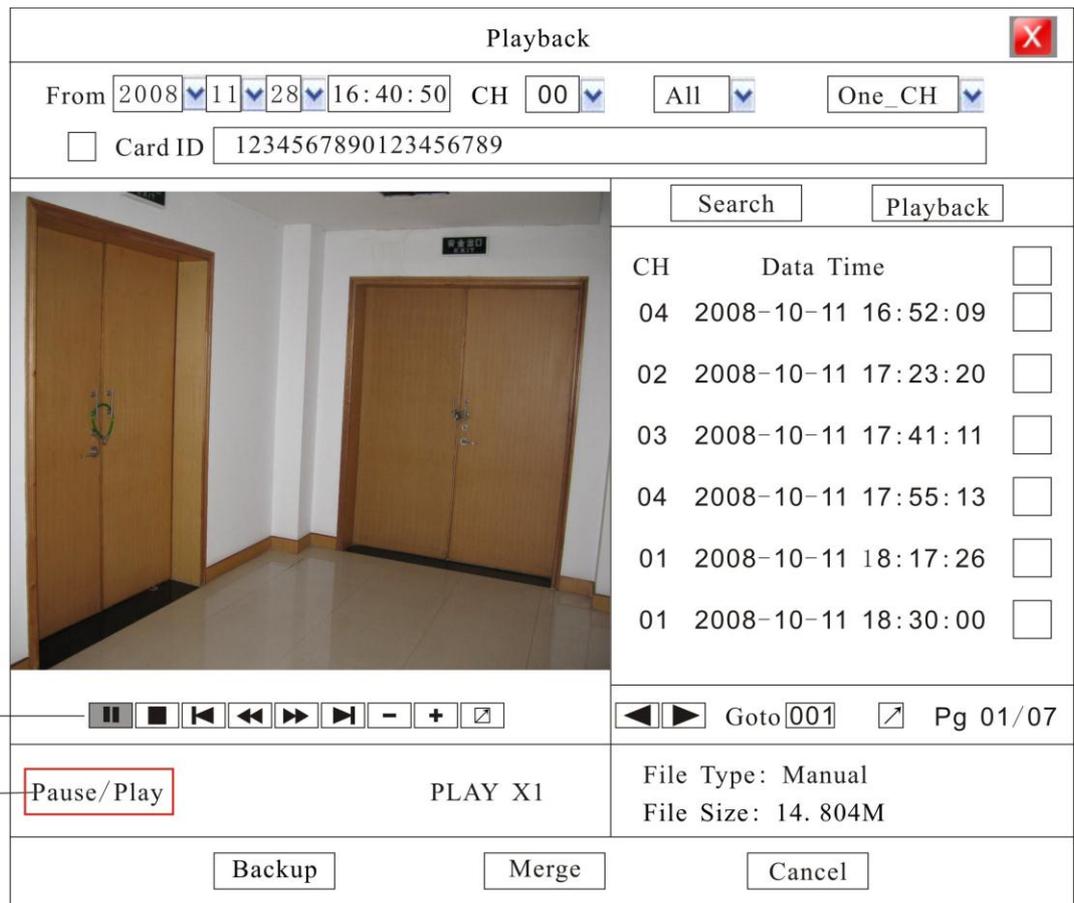


Fig. 41

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **From:** Set the starting time.
- **CH:** If the “CH” channel is selected as 00, files of all channels will be searched.
- **All:** Recorded files type. The file type options have “All, Timer, Motion, Alarm, Command, and Manual”.
- **One\_CH:** This DVR supports 1 CH playback. I type 4 channel model and III type model support 4CH playback synchronously for CIF resolution; I type 16 channel model and II type 8 channel model support 1CH playback for CIF resolution.
- **Card ID:** III type model support card ID search, and other model haven’t this option.
- **Search:** Search the matched recorded files and display them in the list box. If there is not matched file, “NO RECORD” will be displayed in the list box.
- **Playback:** Playback the recorded stream directly based on the time section.
- **File List Box:** List the matched files. Files are displayed according to their time, meanwhile display channel number and file type. You can use “▲” and “▼” to move the scroll bar to select file. Then press “ENTER” to playback.

- 
- Page flip: Use ◀ or ▶ to flip up or down page. Also can input a page number, move cursor on  and then press “ENTER” button to find the page.
  - : 1. Pause current video playback. 2. Continue playback from pause mode
  - : Stop current video playback.
  - : Skip to previous section and play automatically.
  - : Jump backward a certain time to play.
  - : Jump forward a certain time to play.
  - : Skip to next section and play automatically.
  - : Play as 1/2, 1/4 of normal speed.
  - : Play as 2, 4, 8 times of normal speed.
  - : Playback in full screen mode.
  - **Hint:** When move cursor on a icon, note of the icon will be show in the note box.

Note: If the matched files which you need can't be found, you can change “From time” and “Recorded files type” to get expected record files.

## Backup

Plug the USB storage device into the USB port marked . Press ,  or  on the front panel to enter search interface.

Note: I type 16 channel model and III type model, plug the USB mouse into either of the USB ports.

In “searching box”, after moved cursor to a certain record section, use “left” or “right” button to choose the section (“√” signal will show on select box right beside the record section )

When “**Merge**” is selected, the searched record file should be single channel, and the whole size should be less than 2GB.

If you select “**Merge**”, system will backup selected files to USB device as one file.

### Backup device note:

1. Support Portable HDD storage and flash disk. Portable HDD storage or flash disk has to be formatted as FAT32 format before backup.
2. A folder named “BACKUP” will be created in the external HDD, and the data will be put in the

“BACKUP” folder.

### Play recording files after backup

After backup, find the recording(s) in “BACKUP” folder which contains “H264ax.exe” and “Readme.txt” files.

Use a computer which installed “Windows Media Player” and then run “H264ax.exe” according to the hint of installation. After above steps recordings can be played via “Windows Media Player”.

More details please refer to “Readme.txt”.

PS: III type model’s record can be played by Media player directly after backup, and need not to install any other plug-in software.

Note: 1.USB device and DVR may be damaged if USB device falls off during backup.

2. Do not connect more than 2 USB storage devices to one DVR.

## Section 10 Network Setup

Enter “Main Menu—Advanced—Network”, as shown in Fig.42

### Static/DHCP

Network	
Mode	Static
ETH mode	adaptive
IP Address	000.000.000.000
NetMask	000.000.000.000
Gateway	000.000.000.000
Server IP	000.000.000.000
DNS	000.000.000.000
HTTP port	0080
Port	9998
Port	4001
	PPPoE
	DDNS
Ok Cancel	

Fig.42

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

➤ **Mode:** Could choose “Static” or “DHCP”. On “Static Address” status, IP Address, Net Mask, Default Gateway and DNS should input by user self. On “DHCP” status, IP Address, Net Mask, and Multicast IP will

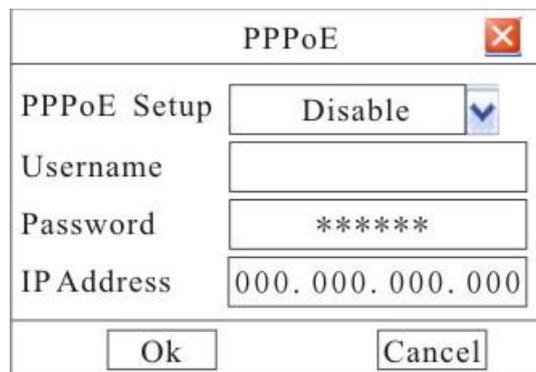
---

be obtained by system automatically.

- **ETH mode:** Could choose “Adaptive”, “Half Duplex 10M”, “Full Duplex 10M”, “Half Duplex 100M” and “Full Duplex 100M”. Default is “Adaptive”.
- **IP Address:** Example **192.168.000.100**. This IP address must not be conflicted with other IP.
- **Port:** Example **9998**.
- **Net Mask:** Example **255.255.255.000**.
- **Gateway Address:** Example **192.168.000.001** (Modem/Router local address)  
(If the Subnet Mask is set as above, then the first three levels of the IP address and the Gateway address must be identical. Use the Gateway address first.)
- **Server Port and Server IP:** If you set this IP and port, when there is alarm and exception happened, DVR will send information to that host IP.
- **DNS:** Please set DNS as local network supplier's IP when DVR is accessed from WAN.

## PPPoE

Set DNS as local network supplier's IP in “Network Setup” interface. Then select “PPPoE” as shown in Fig.43.



PPPoE	
PPPoE Setup	Disable
Username	
Password	*****
IP Address	000.000.000.000
Ok Cancel	

Fig.43

Please “Enable” “PPPoE Setup”, then input the Username and Password provided by ISP. System will use PPPoE protocol to connect the net with an auto-obtain dynamic IP address.

## DDNS setup

Set DNS as local network supplier's IP in “Network Setup” interface. Then select “DDNS” as shown in Fig.44.

DDNS	
DDNS Setup	Enable
provider	3322.org
Host name	
Username	
Password	*****
<input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

Fig. 44

User can setup DDNS in this interface and access the DVR through the set domain name.

Provider: Could choose “dyndns.org” and “3322.org”.

Host name: Domain name that user register. E.g. If the supplier is “dyndns.org”, and the registered domain name is “user.dyndns.org”, you can input “user” in “Host name” option.

Username and Password: user name and password registered in supplier’s website.

## Section 11 Net Transfer Parameter Setup

Enter “Main Menu—Advanced—Transfer”, as shown in Fig.45

Net Transfer	
Channel	01
Resolution	CIF
Max BitRate	0512 kbps (64k-2M)
Coding Type	VBR
Frame Rate	25 fps
Quality	Good
<input type="button" value="All"/> <input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

Fig. 45

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

➤ **Channel number:** select relevant channel to setup.

- **Resolution:** Default resolution: CIF.
- **Max Bit Rate:** If you select VBR, when the video input has great movement, we need to limit the max bit rate. The max bit rate selection has relations with resolution. If you select high resolution, you must select high bit rate. If you select CBR, you can select bit rate size. Default bit rate: 512K.
- **Coding Type:** There are two options: CBR or VBR. Default type: VBR.
 

If you select VBR, DVR will adjust the actual bit rate according to the video movement. When there is not much movement, DVR will use low bit rate, while there is much movement, DVR will use high bit rate. In this case, DVR can save HDD usage and network bandwidth.

If you select CBR, DVR will use the fixed bit rate to compress image.
- **Frame Rate:** Frame per second. Default frame rate: 25
- **Quality:** Define the image quality. There are 5 options: Basic, Medium, Good, High, and Best. High image quality needs high bit rate size. Default quality: Good.

In the course of setting up the parameters, if the parameters needed to be set the same in all channels, you can select ‘ALL’ after finishing the setup of parameters of one channel. The system will prompt a dialog box. When pressing ‘OK’, parameters setup for all channels will be achieved.

## Section 12 User Management

Enter “Main Menu—Advanced—User” as shown in Fig.46.



Fig. 46

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

➤ **User list:** list administrator and new user name. You can modify password, setup local and remote right, delete user for selected user in this menu.

➤ **Admin:** Administrator who has supreme right on operation. Choose “Admin”, and choose “Modify” to get into password modify interface, then press “” or “” on front panel to modify password.

## Add User

When you login as “Admin”, you can add new user. Select “Add” to enter into “Add User” menu as shown in Fig. 47.

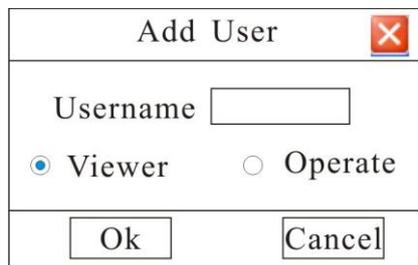


Fig. 47

Press “” or “”key to enter into input mode, then you can input the username.

The Viewer’s default authority: information view, playback all channels and monitor all channels.

The operator’s default authority: PTZ control, record management, information view, set parameter, tools, playback all channels and monitor all channels.

PS: Detail refer to “Authority Setup”.

## Setup the password for new user

1、 When you login as “Admin”, you can set the password for new user.

In the username list box of “User” menu, use “” or “” to choose user. Select “Modify” to enter into the “Authority Setup” menu as shown in Fig. 48:

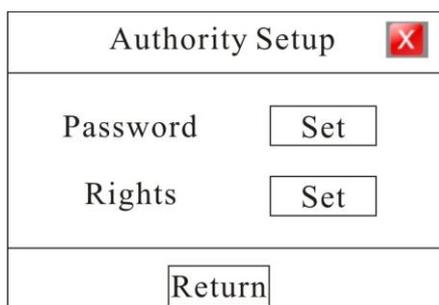
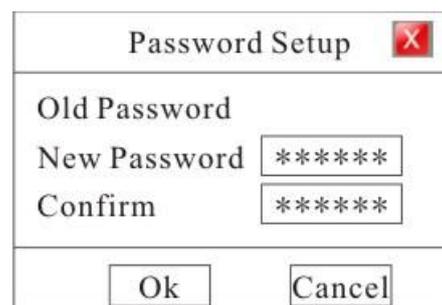



Fig. 48

Fig. 49

In “**Authority Setup**” menu, select “Password Set” to enter into “Password Setup” menu as shown in Fig. 49. Password is composed of number, uppercase and lowercase letter with 6 digit maximum. Select “Rights Set” to enter into “Right Setup” menu as shown in Fig. 50.

2. Password can be set after logging system as Normal User. Select “User” and press “ENTER” to modify password in “Password Setup” interface.

## Rights Setup

When you login as “Admin”, you can setup the rights for new users.

Use “▲” and “▼” key to move cursor to the corresponding right items, press “◀” and “▶” key to enable or disable the item.

After you finish, press “Enter” button, the user’s rights will be saved. If you press “Cancel” button, the user’s rights will be aborted.

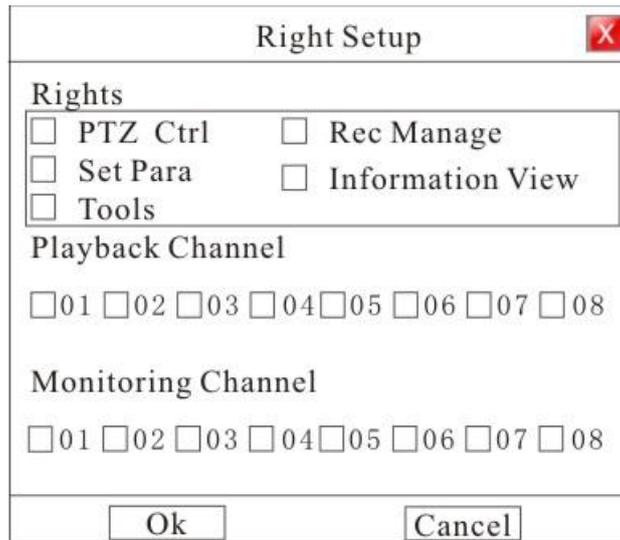


Fig. 50

Authority:

- PTZ Ctrl: PTZ control.
- Rec. Manage: General, schedule and alarm recording parameter setting. Start/Stop manual recording and mute control.
- Set Para: General setting, display setting, PTZ setting and net transfer setting included in “Main menu – Advanced”
- Information View: Log, version, online user and HDD information in “menu–information”.

- 
- Tool: HDD manage, reboot, shut down, maintenance daily and cancel alarm.

## Delete user

When you login as “Admin”, you can delete other users.

In “User” interface, move to the username by “▲” or “▼” and choose it by “◀” or “▶”. Then select “Delete” to enter into “System Message” interface as follows and delete it. E.g. the user name is “123” as shown in Fig. 51.

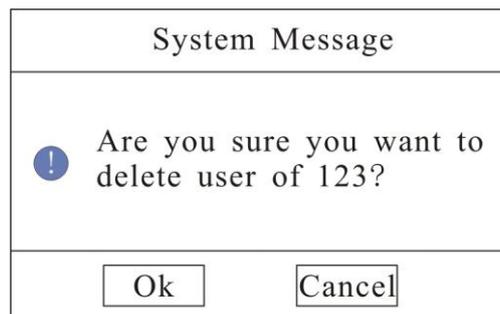


Fig. 51

## User manages explain:

- User levels have Administrator and Normal user. Can be set 1 Administrator and 29 normal users; Administrator can modify all users' password, and Normal user only can modify himself password. After input 3 times wrong password, system will be locked by itself, and warning, do not allowed to login any more.
- Only Administrator can add user in DVR, Normal user do not allow add any user. And can not add same name user in one DVR.
- Only Administrator can delete user, Normal user do not allow; Administrator can not be deleted.
- Only Administrator can set normal user's rights. Normal user can not set any rights. Administrator has all rights, and cannot modify.
- Only Administrator can use the functions: USB upgrade, Restore parameter and format HDD.

## Section 13 Display Setup

Enter “Main Menu—Advanced—Display” as shown in Fig. 52.

Display <span style="float: right;">✖</span>			
Channel	01		
Name	CH 01		
<input checked="" type="checkbox"/> Display Name	Position	<input type="button" value="Set"/>	
<input checked="" type="checkbox"/> Display Time	Position	<input type="button" value="Set"/>	
<input type="checkbox"/> Activate Shielding	Area	<input type="button" value="Set"/>	
Contrast	50 %	Saturation	50 %
Brightness	50 %	Hue	50 %
<input type="button" value="All"/>		<input type="button" value="Ok"/>	
<input type="button" value="Cancel"/>			

Fig. 52

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **Channel number:** Select one channel for setting.
- **Activate Shielding:** Provide you to mask the sensitive area. Move cursor to “Area Set” and set the area.

In the shelter area setup interface, there are four small panes. You can press “”, “”, “” and “” or number “1-4” keys to move the cursor. When you choose one pane, use direction keys to move the pane to your hope position; And press “ENTER” key to fix the pane; Then use direction keys again to extend the pane. This pane is the shelter area.

After you finish setup, press “ESC” key to exit.

- **Video Parameters:** You can adjust brightness, contrast, hue, and saturation to get the best video image. You can use ◀ and ▶ key to adjust and can find the video image will be changed at the same time. Range from 00 to 99.

In the course of setting up the parameters, if the parameters needed to be set the same in all channels, you can select ‘ALL’ after finishing the setup of parameters of one channel. The system will pop-up a dialog box. When pressing ‘OK’, parameters setup for all channels will be achieved.

## Section 14 PTZ Setup

Through DVR\_WEB could control PTZ. About the DVR\_WEB setting please refer “Chapter V”.

Enter “Main Menu—Advanced—PTZ ” as shown in Fig.53.

PTZ Setup			
Channel	01	Protocol	PELCO-D
Baudrate	9600	Data Bit	8
Stop Bit	1	Parity Bit	None
Flow Ctrl	None	Continuous	Yes
Speed	Middle	Vertical	No
PTZ Addr	001	Horization	No
All		Ok	
		Cancel	

Fig. 53

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

- **Channel number:** connect channel number of decipherer
- **RS-485 parameters:** Including baudrate, data bit, stop bit, parity bit, flow control, etc. These parameters must be the same as those of PTZ Protocol.
- **PTZ Addr:** Each PTZ has one different address. Default system configuration: 001.
- **Protocol:** DVR had the following PTZ protocol: PELCO-D、PELCO-P2、PELCO-P1、W110、P3、PLD、ENKEL、YAAN、SONY、JC4116、PD-NW、PD-CONST、PIH-1016、KRE301、PELCO9760、LILIN、T3609HD、HD600、KTD、SAMSUNG、ELEC、PANASONIC、FASTRAX、DL-0001.
- **Speed:** PTZ turning speed.
- **Vertical:** Reverse PTZ's vertical field.
- **Horization:** Reverse PTZ's horizontal field.

In the course of setting up the parameters, if the parameters needed to be set the same in all channels, you can select 'ALL' after finishing the setup of parameters of one channel. The system will pop-up a dialog box. When pressing 'OK', parameters setup for all channels will be achieved.

## Serial Port

PTZ can be controlled by 485(1) or 485(2) port in I type 16 channel model.

Enter "Main Menu—Advanced—Serial" as shown in Fig.54.

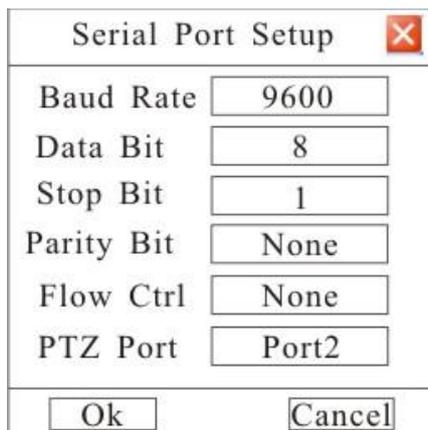


Fig. 54

Setup parameters for 485(1)R+, R-: Including baud rate, data bit, stop bit, parity bit, flow control and so on, they have to be consistent with parameters of connected series device(such as DK-204X).

PTZ Port: You should select the “Port1” when the 485 (1) is connected to PTZ; And you should select the “Port2” when the 485 (2) is connected.

Note: External Keyboard (such as DK-204X) can works only when it’s connected to R+,R- in 485(1) port.

PTZ can be controlled by RS485 or RS232 port in III type model.

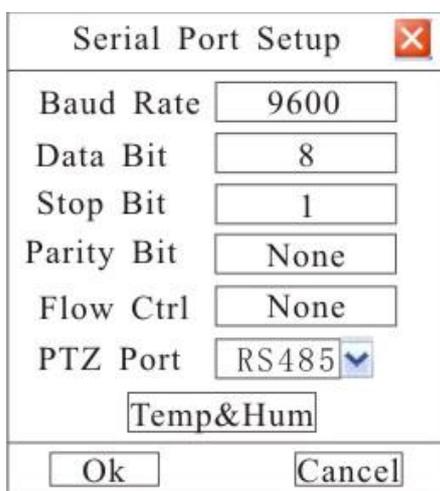


Fig. 55

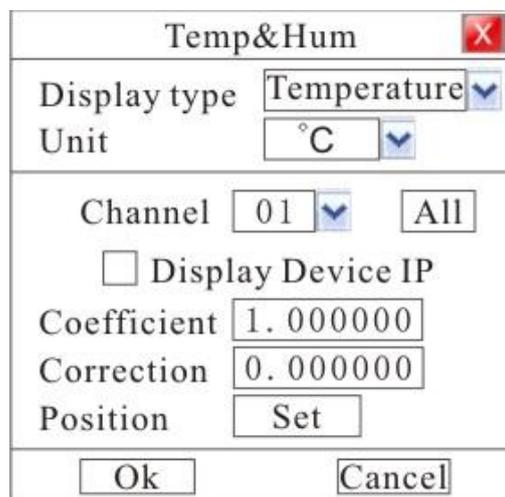


Fig.56

PTZ Port: You should select the “RS485” when the RS485 port is connected to PTZ; And you should select the “RS232” when the RS232 port is connected.

When temperature or humidity transducer is connected, user can set the parameter in fig.56. If the display value is inconsistent with the actual situation, user can adjust it by modify coefficient and correction.

Temperature or humidity value displayed =coefficient\* value from transducer + correction.

## PTZ Control

After the PTZ parameter is set, click “” key on the status bar to enter PTZ control mode.

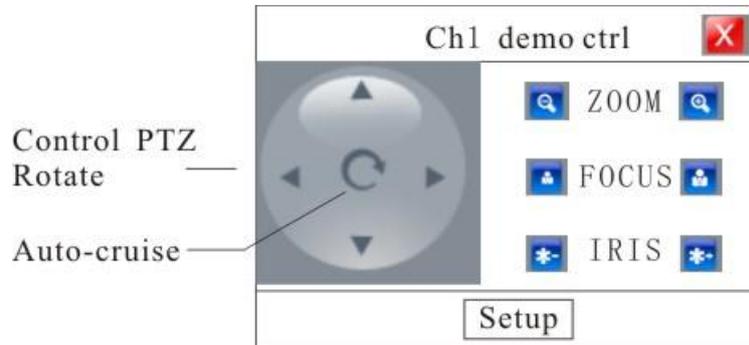


Fig. 57

In the interface, the direction, zoom, focus and Iris can be controlled.

Auto-cruise is in the middle of direction button.

### ➤ Set preset position

In PTZ control mode, select “Setup” to enter preset position setup dialog interface as shown in Fig.58.

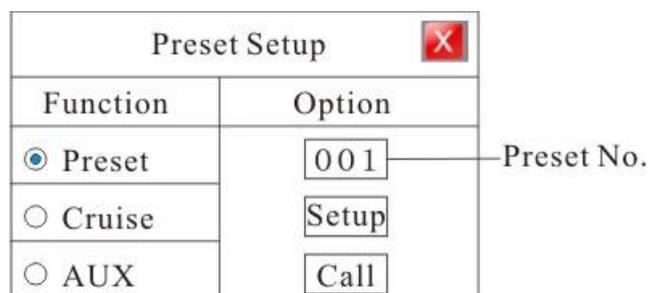


Fig. 58

Choose “Preset” to setup or call the corresponding preset.

“001” is an order of preset positions and click “Set” to set a preset position, click “Call” to move PTZ to a preset position;

### ➤ Cruise Setup

Choose “Cruise”, and get into the interface as follows:

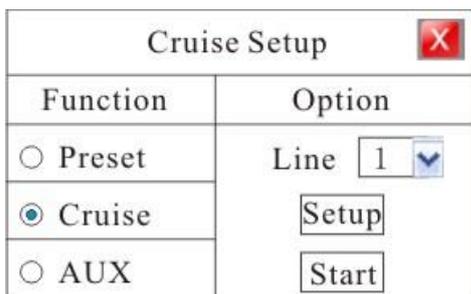


Fig. 59

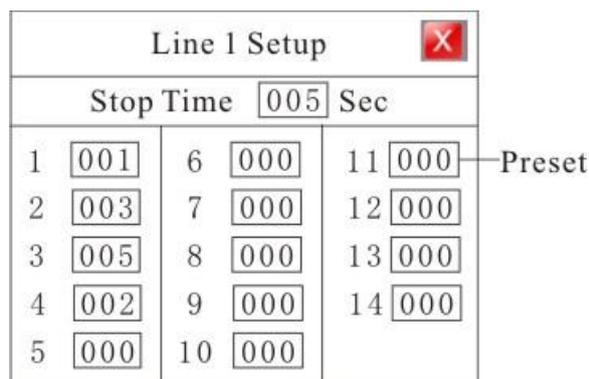


Fig. 60

Line: Select the line of the cruise.

Setup: Get into the interface as like Fig 60 to set line.

Stop Time: The time which the camera stops in the cruise dot.

➤ AUX setup

Choose “AUX” to control lighting and screen wiper.

PTZ can be controlled on DVR\_WEB or Netclient. The detail refer to Chapter 5

For I type 16 channel model, PTZ control interface can be shown by press “Fn” on front panel.

## Section 15 Restore Defaults Setting

Enter “Main Menu—Advanced—Maintenance—Reset” as shown in Fig. 61

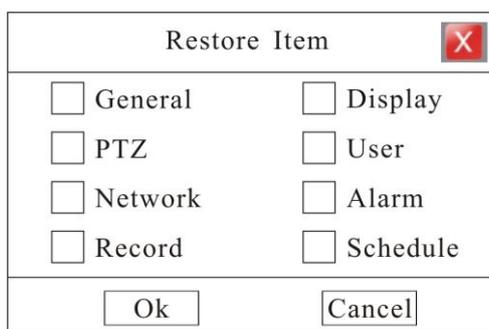


Fig. 61

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

Select a item to restore default setting.

## Section 16 Information Inquiry

### Log Information

Enter “Main Menu—Information—Log” as shown in Fig.62.

Log				
From	2009	07	13	00:00:00
To	2009	07	13	00:00:00
Type	All			
Search				
No.	Time		Type	Description
1	2008-10-10	20:40:30	[E]	1 CH video loss
2	2008-10-10	20:25:30	[A]	2 CH alarm in
3	2008-10-10	20:12:15	[O]	DVR power on
4	2008-10-10	19:25:30	[O]	[R] obtion config
5				
6				
[A] Alarm [O] Operate [E] Abnormal [R] Remote Pg 01/01				
Previous		Next		Return

Fig. 62

Move cursor with ▲ and ▼ on the front panel and select item with ◀ and ▶.

Input start time and stop time and then move cursor to “Search” button and press “ENTER” key to start searching.

Type include: Alarm (A), Operate (O), Abnormal (E), and All.

When searching is finished, DVR will list all information. You can press “Previous” or “Next” key to view more information.

### Version Information

Enter “Main Menu—Information—Version” as shown in Fig.63.

System Information	
Current system version is:	
Version 1.01.00	
Build on Jan 9 2008	
MAC: 00-00-20-90-10-98	
Ok	

Fig. 63

Check information of current firmware version.

## User Information

Enter “Main Menu—Information—Online” as shown in Fig.64.

Online 			
No.	User	State	IP Address
1	Admin	Monitor	10. 0. 0. 113
2	No online user		
3	No online user		
4	No online user		
5	No online user		
6	No online user		
7	No online user		
8	No online user		
Press "Enter" to kick the user offline			1/4
<input type="button" value="Previous"/>		<input type="button" value="Next"/>	<input type="button" value="Return"/>

Fig. 64

**List box:** Display the remote user name, State and IP address. Use ▲ and ▼ key to move the cursor. If user presses ‘Enter’ key on one item in list box, affirmation dialog box will appear. When user selects ‘Enter’, the system will terminate the remote user.

You can turn pages to look over by selecting ‘Previous’ and ‘Next’.

## Section 17 System Update

Method 1: You can update system through **DVR\_WEB Internet or Netclient**. About the DVR\_WEB setting please refer “Chapter V”.

Method 2: You can use this function to upgrade the firmware.

(1) Create a file with a name of “update” in the USB storage, and copy the firmware file to this directory and rename it with special file name.

DVR Model	I type 4 channel model	II type 4 channel model	II type 8 channel model	III type model	I type 16 channel model
File name	dvr404d.img	dvr404db.img	dvr408db.img	dvr404a.img	dvr416d.img

Then insert eternal device into USB port of DVR after modification.

(2) Enter “Main Menu—Advanced—Maintenance—USB Upgrade” as shown in Fig.65.

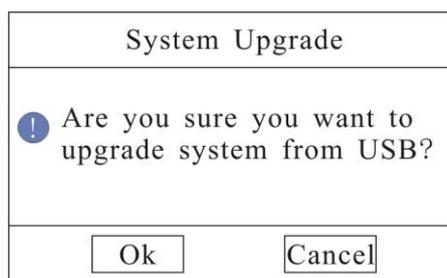


Fig. 65

Press “OK” to update system, “Cancel” to give up update.

New firmware will be applied after rebooting.

Note: Please DO NOT unplug the flash memory during the entire system updating process.

## Section 18 Reset

Under logout status, press ◀▶ and ▶▶ simultaneously for 1 second then “Reset” menu will pop-up. Input correct password and press ‘OK’ then system will pop-up “Reset Item” box. Select items in this menu and press OK to reset.

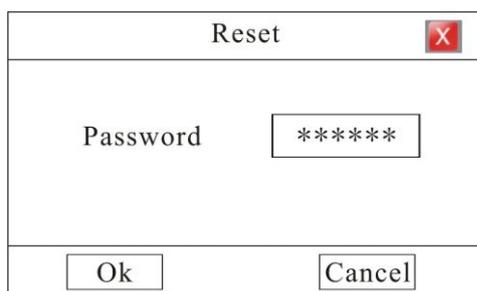


Fig. 66

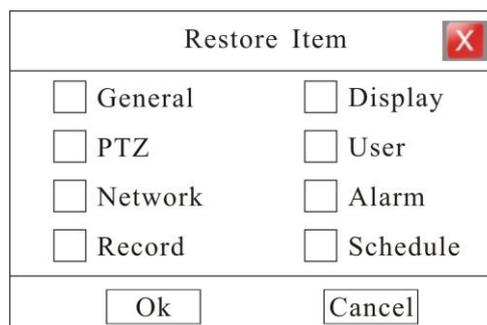


Fig. 67

PS: The function is not for I type 16 channel model.

Note: Please call your distributor for the password.

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# Chapter V IE Monitor

## Section 1 Introduction

The DVR can be visited and controlled by IE browser. IE provides the functions, such as remote monitor, local record, PTZ control, Remote control, etc.

## Section 2 Installation Requirements

Requirements for the PC hardware for monitoring, through IE access under the normal condition:

CPU: Interl pentium4 2.0GHz and higher

Ram: DDR 512MB and higher

Video card: independent video card with 64M video memory and higher

Network card: 100M

IE version: support IE6.0 and higher

Support system: support windowsXP, windows2000 and higher

Install DirectX9.0 or higher version, adjust hardware acceleration to highest.

## Section 3 Network Connection Operation

1. Insure DVR connect the network correctly
2. Using ping `***.***.***.***`(DVR IP), check if the network connect correctly.
3. Make sure Web-client net normally used, the user has to insure http port communicate normally.
4. Install the “DVR\_WEB\_X.XX.XX.msi” in CD. (X.XX.XX is version number)
5. Input `http://` and host IP address and http port in IE address bar. For example: if host IP address is “10.0.0.124” and http port is 998 then input <http://10.0.0.124:998> in IE address bar.

Note: If you have not installed “DVR\_WEB\_X.XX.XX.msi” to your PC which burned in CD, there will be a attention for installing ActiveX plug-in software in IE when remote access DVR, install it.

## Section 4 Basic Surveillance Operation

### Start Program

Input http://10.0.0.124 (suppose host IP: 10.0.0.124) in the IE address bar, after connected, display the initial interface with default English language, the user can set another language through click the “Local Setup”-“Language” at the lower right corner on the main interface.

The main interface shown as Fig.69:

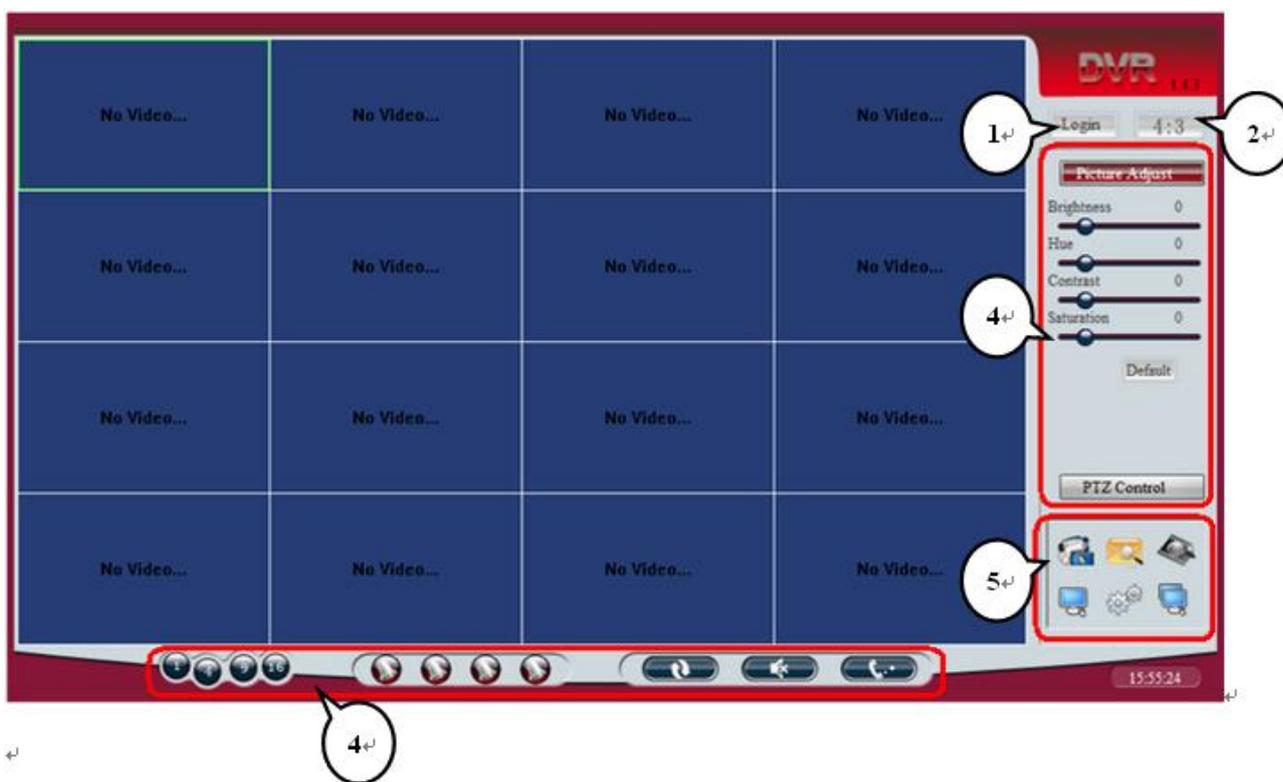


Fig. 69

The main interface includes the following module:

1. Login/logout
2. Switch the image view scale
3. Video display
4. Shortcut operation
5. Menu setup

The user connect the Host have the limitation, see the following:

- a) Login user number: support max.16 users login together at the same time, support login by same

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user name.

- b) Video user number: support max.24 users at the same time.
- c) Playback user number: support max.4 users at the same time.

## Login/logout

1. Click login button at higher right corner on the main interface(Fig69①marks), or right click the video display area anywhere, or click the menu and setup, the system will pop-up the login interface.

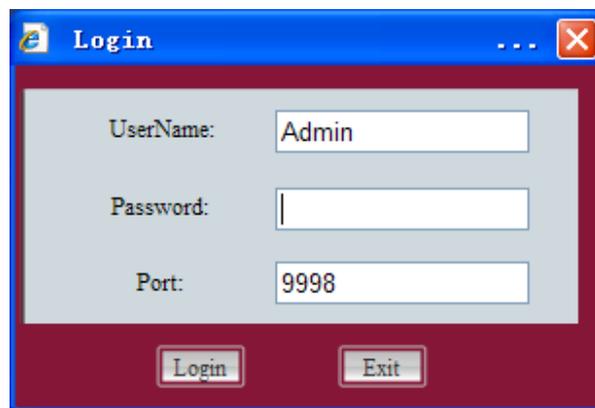


Fig.70

2. On the login interface, input the host user name (default “Admin”), password (default “123456”) and port, this port is the host’s port, not the http;
3. The user can operate the video connect, display, remote setup, only after login the system.
4. The subtitle auto change “Login” to “Logout” after login, the operation authority auto cancel after logout.

## Switch the image view scale

Click the image view scale button ,on right-top of the main interface(fig.69,mark②),can switch the scale at 4:3 and 16:9.

## Video Display Area Operation

In the main interface shown as Fig69 ③ is the video display area.

1. Surveillance connects/dis-connect: right click in the video display area, setup the channel connect, channel dis-connect, channel all connect, channel all dis-connect in the pop-up menu.

2. Full/split screen switch: when playing the video, double click switch to the full screen display. Double click again, return to the original. Also user can click the shortcut button in the bottom to switch to split screen (1/4/9/16).
3. Image adjust: select the one surveying channel image, the “Picture Adjust” bar is on the right, shows the surveying image status(brightness, hue, contrast, saturation), adjust the image effects on the host and IE web, by adjust this items.  
Click the “default” button, restore to the default.
4. Local record/local image snap: every split screen has the hover shortcut status bar on the top. Provide local record and local image snap function.

## PTZ Control

Open the surveillance channel, control the PTZ by control the “PTZ Control” status bar on the main interface right. Shown as Fig71:

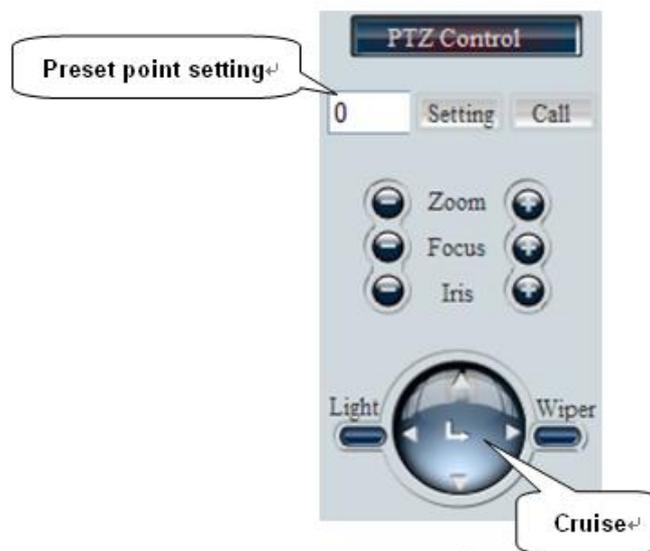


Fig.71

1. Preset point setting: preset point available value: 001~127 (different available value depend on the different PTZ).  
Preset point calling: input a preset point number which have set, click “Call” to turn the PTZ to that preset point.
2. PTZ direction control: control the PTZ direction by click the up, down, left, right, icon on PTZ control panel.

3. PTZ, camera, IRIS control: adjust focal length, focus, IRIS, by click the “+” and “—” .
4. Light, wiper function: provide lamp and wiper open and shutdown function. The PTZ should support the lamp and wiper function to realize them.
5. Cruise control: in fig69 “”icon shows the area of cruise control, cruise including auto cruise and route cruise.

Auto cruise: left click the menu, select the “Automatic”, then startup the PTZ auto cruise.

Route cruise: entry “Advance Setup”-“PTZ”-“Cruise Setup” menu, setup a route include the all present point. Max.8 routes for setting.

Route stop: click “Stop” in the cruise menu, over auto cruise or route cruise.

## Shortcut Operation Button

In the main interface shown as Fig 69④, is the shortcut operation area.

### ➤ Full/ Split screen switch

1. Split screen (1-screen, 4-screen, 9-screen), by click the screen split button.
2. Screen split button will choose channel number by judging the equipment channel number. As shown fig72, the 9-screen button unavailable, when the equipment has 4 channels. 8CH DVR can switch to 9-screen. 16CH DVR can switch to 16-screen.



Fig.72

### ➤ External alarm switch

1. Open/close relevant alarm by click the alarm switch button.
2. Realize the manual control DVR’s external alarm output by this function. Each switch relevant one alarm output. User can choose open DVR’s external alarm output by this switch.
3. Alarm switch button, will choose available alarm number according to the equipment. (Fig.73)



Fig.73

### ➤ Circular Monitor , Mute, Intercom

1. Click the Circular Monitor, Mute, Intercom, function button, open/close these function.
2. When open the function, the button will turn to red, return original when closed it.

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3. During the circular monitor, do not allow to operate the video display, close the circular monitor before operate the video display.
  4. The audio output will be auto closed temporarily, when open the intercom function, and will return to original after the close the intercom (Fig 74).



Fig.74

➤ **Adjust the image**

The mark④ at right on the main interface, is image adjust area. The detail operation please see the above video area operation fig.69 image adjust instruction.

## Section 5 Menu Configuration Setup

Menu setup area including: Search&Playback, Information, Rec.&Alarm, Local Setup, Advance Setup and Remote Control modules.

## Recording And Playback



1. Click  entry “Search&Playback” interface.
2. Searching record: select the start time, channel number, model, click “Search”, finds out the qualified record.
3. Record playback: select the record slice in the search result, double click this slice or drag this slice to the selected area. Or press “Play”, play the record at this area.  
Supports select the multi-slice and continue select by “Ctrl” and “Shit”. Switch playback display screen (1-screen/4-screen/full screen). Double click the image, show full screen display.  
When at playback, user can operate: pause, stop, slow, normal, fast, and mute.
4. Download: select one of the record slice, press “Download” to download the slice (Fig.75).

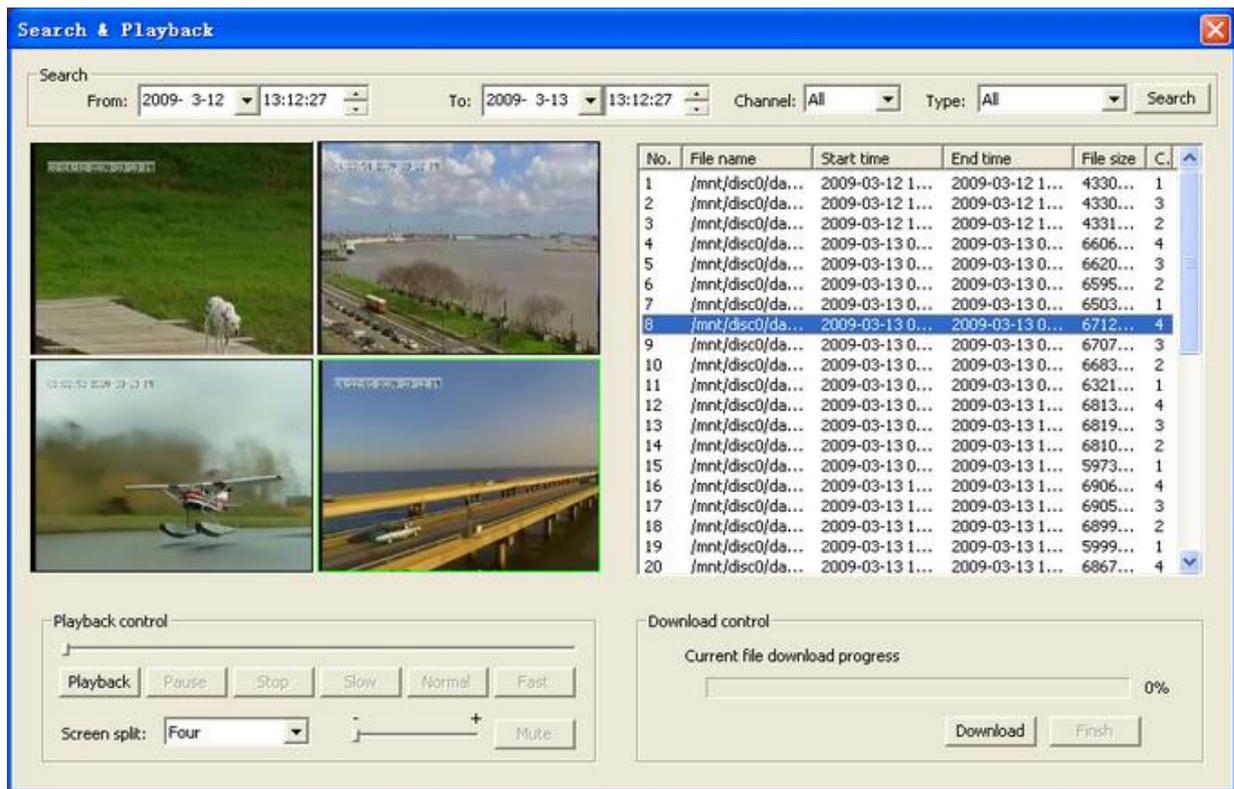


Fig. 75

## Info search



1. Click , enter "Information" interface.
2. Log information search: search the log information in the remote DVR according to the time, model.
3. HDD info: check all online HDD, HDD capacity, HDD spare capacity on the host.
4. System version: check the remote host software version info.

## Rec.&Alarm



Click  entry "Rec.&Alarm" interface, setup the remote DVR recording configuration, reference to "Recording" Section8 Chapter IV.

1. Basic record setup: setup the channel resolution, rate, rate type, frame rate, image quality, and auto record cover.
2. Schedule record setup: setup the channel schedule record time, user can choose today, daily, weekly, monthly.
3. Alarm record setup: setup record time, alarm time, pre-record, alarm input, relevant channel record, alarm output, spot camera, motion detection in defense time. Video shelter, video lost, are, sensitive etc.

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## Local Setup



Click  entry “Local Setup” interface, setup local configuration, including: language, stream type, transmit protocol, circular channel quantity, local save route etc.

1. Language selection: provide local IE web language switch and display function.
2. Stream type: select the transmit model, including main stream, sub stream (net transmit code type). The main stream setup in the “Advance Setup-Transfer”.
3. Transmit protocol: provide TCP, UDP transmit setup.
4. Circular monitor setup: Setup circular monitor display. Including: image number display at once, image stay time in circular monitor.
5. Local storage path setup: choose local image snap, local record save route.
6. Local surveillance and playback support P/N, adjust the video compression according to the video headstream itself.

## Advance Setup



Click  entry “Advance Setup” interface. These configurations are corresponding to the “Advance Setup” in the menu in DVRs.

1. System configuration: take reference at “Basic Parameter Setup” Section6 Chapter IV.
2. Channel configuration: take reference at “Display Setup” Section13 Chapter IV.
3. Network Parameters: including startup DHCP, IP address, Subnet mask, Gateway, Net card speed, ports, host MAC sits get, PPPoE setup, http port setup and DDNS setup. Take reference at “Network Setup” Section10 Chapter IV.  
  
Http port: when use the IE view browser, input the port behind the IP address, such as : IP is 192.168.2.3, http port is 998, input the IE address <http://192.168.2.3:998>;
4. Net transmit setup: setup Sub stream (Net transmit stream) configuration. Take reference at “Net Transfer Parameter Setup” Section11 Chapter IV.
5. PTZ configuration: Take reference at “PTZ Setup” Section14 Chapter IV.
6. User info.: provide remote add or change host name, password, and display all current user name. Take reference at “User Management” Section12 Chapter IV.

7. Email function: provide the email function that auto send the emails with alarm log, operation log, exception log to the host when triggered. Steps:

- a) Select the email function “yes”.
- b) Fill out the email address which the email will send to.
- c) Select triggered model for email: like alarm, operation or exception.
- d) Input the email sender address and email SMTP server address and ports.(use the Ping get the email server address, such as yahoo email box, SMTP is SMTP.MAIL.YAHOO.COM, support the IP input and DN(domain name); Input SMTP server ports (Usually 25).
- e) Authority select: ON, OFF. Start SMTP email AMF(Authentication Management Function),avoid to abuse the email server;
- f) User name, password, sender address, Email title etc, user could write it as they like, sender address could be virtual address.

When the alarm, operation, abnormal triggered in local, the host will send the information emails according to the address and setup which have set before. If you have set the remote alarm triggered input, the host will send the JPEG with the email as well. See the detail fig.76.

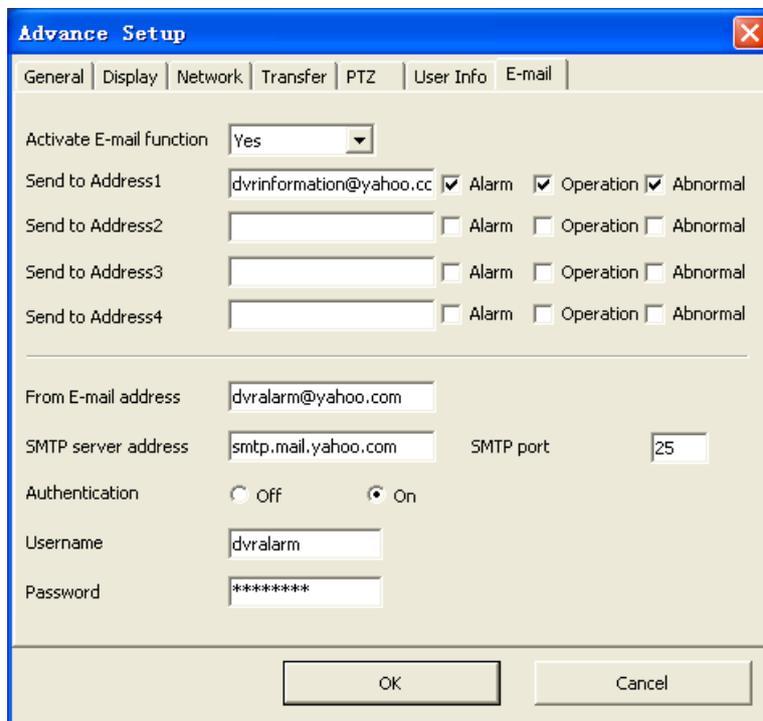


Fig. 76

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## Remote control



Click  entry “Remote Control” interface, could control remote record open /close and system maintain

1. Record control: remote open/close the host record.
2. System maintain: provide DVR system image file update, web software update, remote DVR reboot, restore default (factory default), export Remote system configuration, import remote system configuration, shutdown system and download Player plug-ins.

Player plug-in: The plug-in named “H264ax.exe” can be downloaded from host end, and installed on PC.

Then the record file can be played by Media Player immediately.

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## Chapter VI Frequency Asked Questions

1. Can not control DVR with IR controller, but it's normal while using the front panel.
  - 1) Check whether the battery is exhausted. Replace a new battery.
  - 2) Check whether the address of controller is the same as the ID of DVR. If not, please change the address of controller at 000 or input the same ID of DVR.
2. Has changed the time or the channel name position in "Display" but why it does not come into effective.
  - 1) Time and position settings in "Display" are for recording and remote monitoring. Cannot modify the time position of local monitoring.
  - 2) System separates them automatically when they are overlapped.
3. Why cannot control the PTZ?
  - 1) Please check whether the PTZ setup in "PTZ" is setting correctly, including protocol, baud rate and address.
  - 2) Please check whether the RS485 cable connection is correct.
4. Why the recording is not work?
  - 1) Please check HDD connection. If the HDD is not detected by DVR, the recording will sure not working.
  - 2) Please check whether there is available space of HDD left. If not, Please replace the HDD or set "Yes" in "Rec. & Alarm" → "HDD" → "Auto Overwrite".
5. Cannot choose options in menu.

Please confirm that you possess the rights. Please login as Admin to check the rights.
6. Please DO NOT modify the system time or format HDD while recording.
7. Active device is requested while using intercom function or output audio for I type 4 channel model and III type model. Other type model can not use active device while using intercom function.
8. Connect DVR through DVR\_WEB in VISTA: If cannot login, please setting as following: "Control Panel" → "User Account" → "Turn User Account Control On or Off", and uncheck "Use User Account Control (UAC)...". You'll have to reboot, but the UAC will be off without a Security warning.
9. After Input the host address and connected, web control auto download, if update the new web version, the original version auto deleted.
10. When 'Click here to activate control' floating note box show on screen, please click the box to activate the

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control.

After activating the control, if one or more problems occur such as channel covered with white lump, control disappear or right click pop-up no menu, please update patches (KB945007 and KB912945) on <http://www.microsoft.com>.

11. Open the IE connect interface, under the XP system, if can not download the subtitle normally, please check the XP system scripting. FileSystemObject (FSO text read and write) if it is closed, close this function will lead “automation server can not create object”, the WEB language configuration file can not download to local display, open FSO will solve this problem.

Solution: “start”-“run” input regsvr32 scrrun.dll. Press the “enter”.

12. Connect DVR through DVR\_WEB, if the icon or caption can not be displayed, you should close the IE and then install the “DVR\_WEB\_X.XX.XX.msi” which burned in CD (X.XX.XX is version number).

## Appendix 1 HDD Capability Calculate

1. Required HDD capacity for one channel one hour (unit Mbyte):

$$\text{HDD capacity} = \text{bit rate} / 8 \times 3600 / 1024$$

The unit of bit rate is Kbit/s.

2. Required one channel HDD capacity (unit Mbyte):

$$\text{HDD capacity} = \text{required HDD capacity of one channel for one hour} \times \text{daily recording time} \times \text{number of recording days}$$

3. Required HDD capacity for all channels timing record (unit Mbyte):

$$\text{HDD capacity} = \text{required one channel HDD capacity} \times \text{the number of channels}$$

4. Required HDD capacity for all channel alarm records (unit Mbyte):

$$\text{HDD capacity} = \text{required one channel HDD capacity} \times \text{the number of channels} \times \text{Alarm rate}$$

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## Information on Disposal for Users of Waste Electronic Equipment (private households)



This symbol on the products and /or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste

handling. Please contact your local authority for further details of your nearest designated collection point.

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If you wish to discard electrical and electronic equipment, please contract your dealer or supplier for further information.

### Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.