

STAND ALONE MULTI- CHANNEL Digital Video Recorder

OCB-DVR404DB

User Instruction Manual

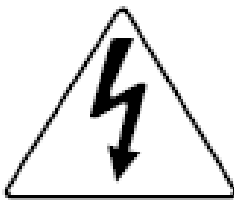
VERSION 1.0

Statement : Print edition will be provided as a formal attachment.

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

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.

Limitation of liability

This publication is provided “as is” without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for any particular purpose, or non-infringement of the third party’s right.

This publication could include technical inaccuracies or typographical errors. Changes are added to the information herein, at any time, for the improvements of this publication and/or the corresponding product(s).

Disclaimer of warranty

In no event shall our company be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to below:

- (1) Any damage and loss, including without limitation, direct or indirect, special, consequential or exemplary, arising out of or relating to the product;
- (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.

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 it 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.
(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.

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 standalone 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 standalone 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.

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.
- Support 4CH playback synchronously 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.
- 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 to 55 deg Celsius
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. Open DVR as shown in Fig.1.

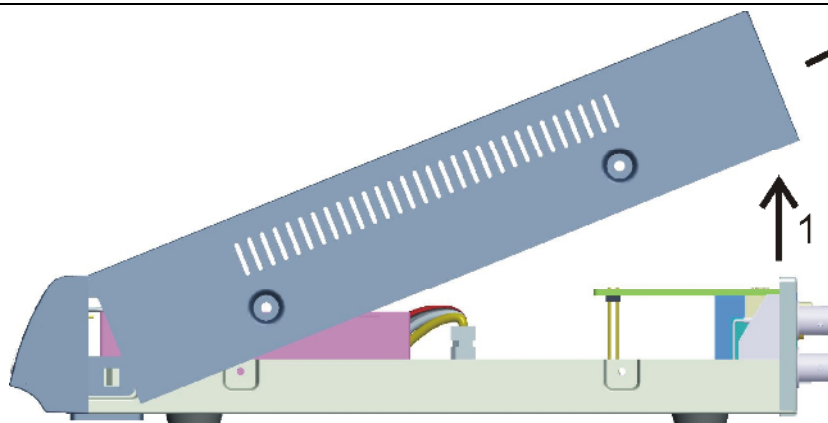


Fig. 1

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.
8. Replace the top of the DVR enclosure.

NOTE: Please format the hard disk before record.

Section 3 Back panel

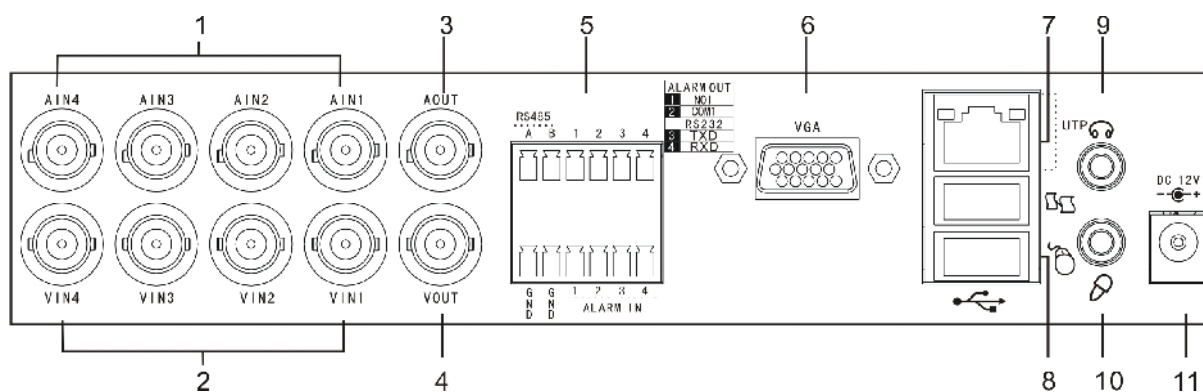


Fig. 2

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 BN interface

3	(A OUT)Audio output	connect audio output device, standard BNC interface
4	(V OUT) Video output	connect monitor, local video signal output
5	Alarm input and output.,RS485 and RS232	connect alarm input, alarm output device and PTZ
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 when connecting with DVR_WEB, this port will occupy the signal from “A OUT”, only one of them can be took.
10	intercom input	audio input when connecting with DVR_WEB, this port will occupy the signal from “V OUT”, only one of them can be took.
11	power supply(DC 12V)	12V volts D.C. input

Section 4 External alarm in/out connection

Alarm in

The alarm input is NO/NC input, and this DVR has 4 ports for alarm input.

While sensor signal output is connected to DVR input, the signal port is connected to “1-4” port of ALARM IN, GND port connect to GND port. Default alarm input mode is “NO”. So ALARM IN port connect to GND will be considered as an alarm input; ALARM IN port disconnect with GND or has a high voltage (5V) input will be considered as no alarm input by default;

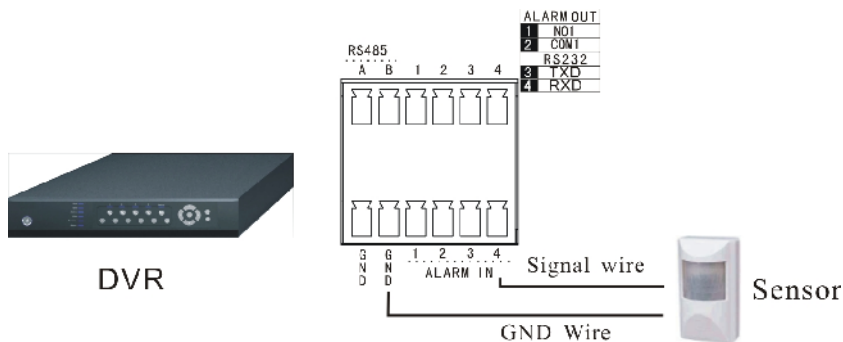


Fig. 3

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

Alarm out

Alarm output is NO/NC output, and this DVR has 1 port for alarm output.

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

the alarm output enable.

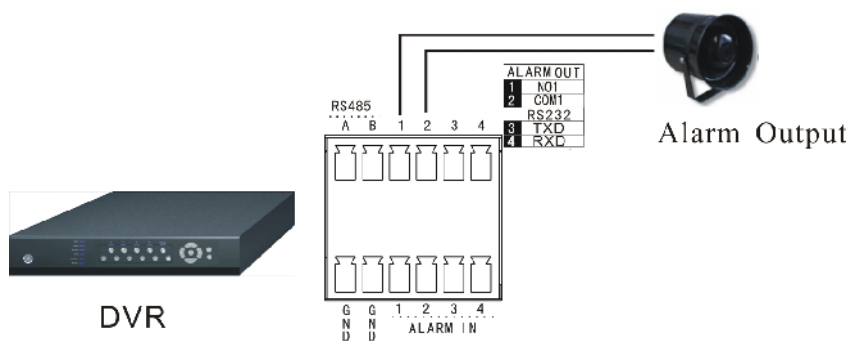


Fig. 4

Note: 24VDC(1A), 120VAC(1A) voltage and current are suggested.

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

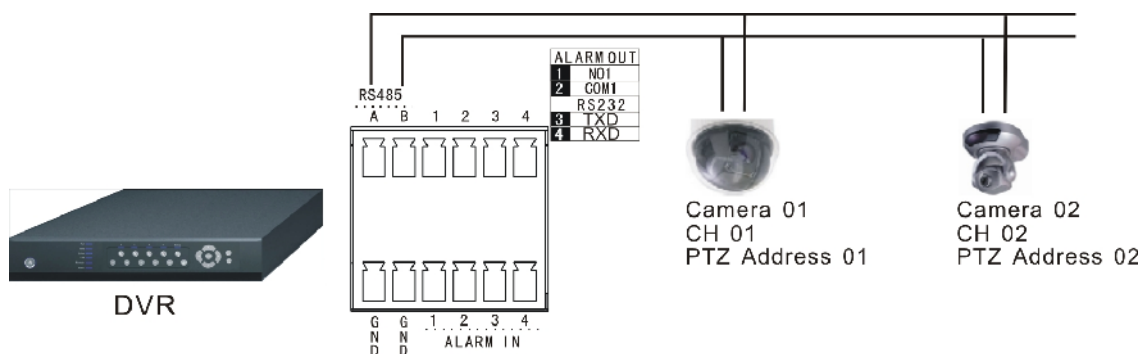


Fig. 5

A and B 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, PZT protocol. After the setup, please control them by running the DVR_WEB software. About the DVR_WEB setting please refer “Chapter VII”.

WARNING: PLEASE SET ALL OF THE PTZ ADDRESSES DIFFERENTLY.

Note: 1. Please do not connect RS485 and RS232 simultaneously.

Section 6 Voice Communication

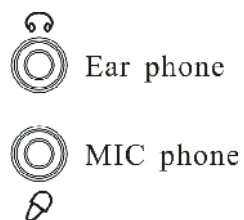


Fig. 6

In the above illustration, the up icon is an ear phone socket and the down icon is a MIC phone socket. While connect them with ear phone and MIC phone, a two-way communication can be realized when click the intercom icon of the DVR_WEB software which has connected with the host. 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 VII”.

NOTE: Audio input of Voice Communication will take up the audio input of the first channel (A IN1). Audio output of Voice Communication will take up the audio output (A OUT).

Chapter III DVR Operation

Section 1 DVR Front Panel

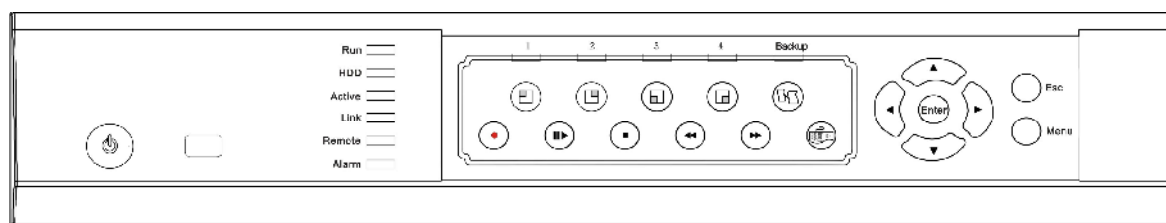
















Fig. 7

Name	specification
	Power switch
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.
1—4	1-4ch 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
	1. Direction key “LEFT” 2. Playback forward slowly at *1/2, *1/4 in full screen mode
	1. Direction key “RIGHT” 2. Playback forward fast at *2, *4, *8 in full screen mode
ENTER	1. “OK” key 2. Set up mute mode and cancel mute mode
ESC	“Cancel” key
Menu	Entering system menu
	1. 4-screen display or the first channel full screen display 2. Motion and Shelter area enable 3. Select pane “1” in cover area setting
	1. 4-screen display or the second channel full screen display 2. Motion and Shelter area disable 3. Select pane “2” in cover area setting
	1. 4-screen display or the third channel full screen display 2. Select pane “3” in cover area setting
	1. 4-screen display or the forth channel full screen display 2. Select pane “4” in cover area setting
	Entering the backup menu
•	Pop-up the dialogue box of manual recording
	1. Entry search and playback interface 2. Pause/Play recording file , under playback mode
	Stop playback
	Jump forward under playback mode.
	Jump backward under playback mode.
	Entry input interface

Section 2 IR remote controller

Insert the battery. Please 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” button, then input the host address of which DVR need to be controlled and press “OK” 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 000-255. It can be modified in the “Main Menu-Advanced -General”.

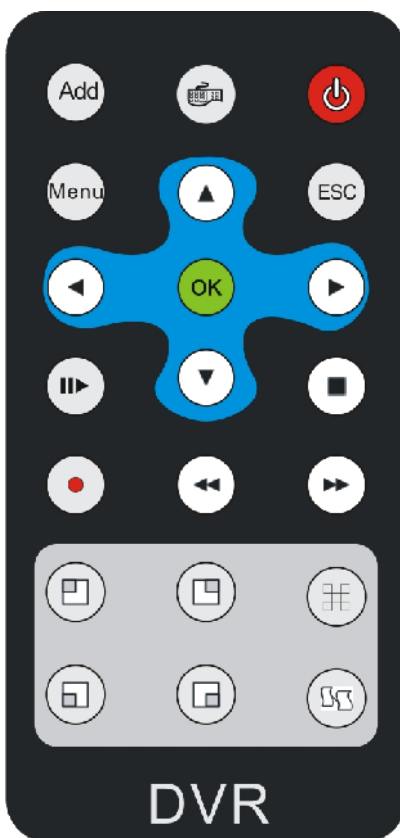



Fig. 8

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.

Section 3 Mouse operation

This DVR supports a USB mouse:


After plugging in the mouse the mouse cursor will appear on the screen.

➤ 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 On 4-screen, move mouse cursor to a channel, double-click mouse left key to view Full screen, double-click again will back full screen to 4-screen.

Section 4 Input mode introduction

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. 9:

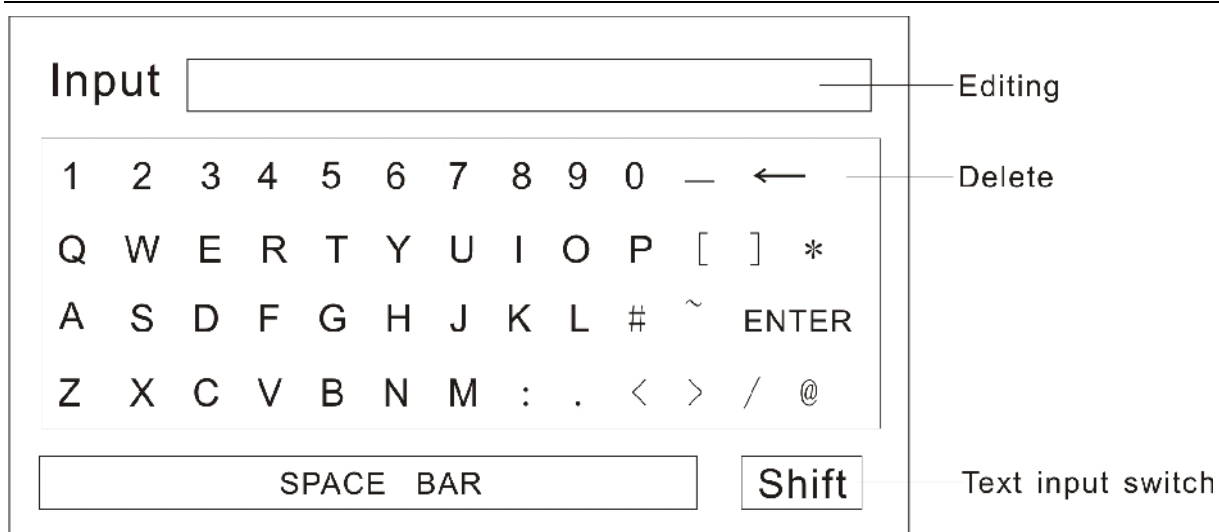


Fig. 9

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

Chapter IV System operation

Section 1 Menu Navigation

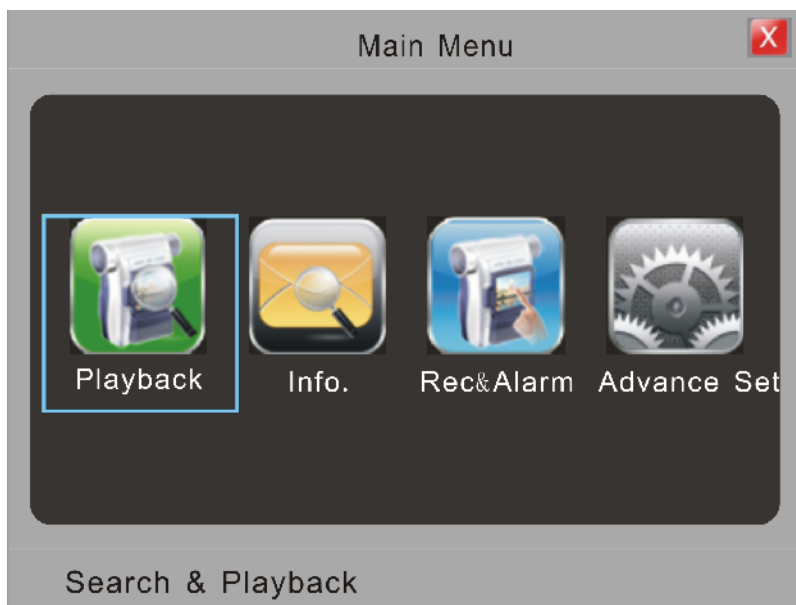


Fig. 10

Main Menu	Sub Menu	Function
Playback		Search recording, playback or backup
Information	HDD	HDD status check, HDD format and HDD alarm setup
	Log	System running and alarm information
	Version	System firmware version information
	Online	Check online user information, force kick online user
Rec. & Alarm	General	Setup recording resolution, codec type, image quality, stream bit, frame rate of channels, Setup HDD overwrite automatically.
	Schedule	Schedule recording channel selection and recording time period setup
	Alarm	Alarm input, motion detection, video shelter and video lost alarm and recording setup.
Advanced	General	DVR name, remote control number, system time, menu alpha, VGA resolution, auto logout, idle time, circular monitor, 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 and PPPoE network parameters setup
	Transfer	Set network transmission resolution, codec type, stream bit, frame rate, image quality for every channel
	Maintenance	Resume default configuration, log out, restart and timing restart.







Section 2 Surveillance View









Status Bar








Fig. 11

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. Press "ENTER" to switch.
	Cancel buzzer alarm
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
x	---the channel is neither under recording nor preview remotely

Screen Switch

Under surveillance mode, system default is 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.

Screen Circular Monitor


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.

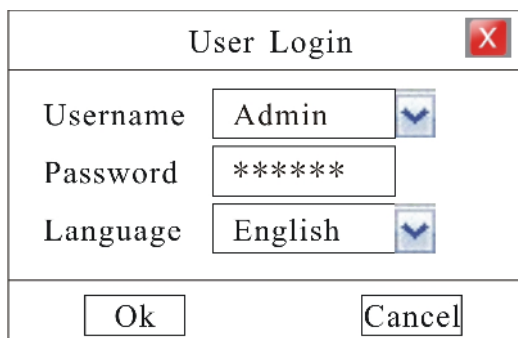
Section 3 Login and Logout

System Login

Press any key of front panel, system will pop-on the login interface as shown in Fig. 12.

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

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



The image shows a 'User Login' dialog box with a title bar containing a red 'X' button. Inside the box, there are three input fields: 'Username' with 'Admin' and a dropdown arrow, 'Password' with '*****', and 'Language' with 'English' and a dropdown arrow. At the bottom, there are 'Ok' and 'Cancel' buttons.

Fig. 12

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

NOTE: 1. System will reject login after three times incorrect password input and activate buzzer automatically.

2. System default administrator "Admin", password "333333", possesses the superlative level authority.

3. 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. 13.

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

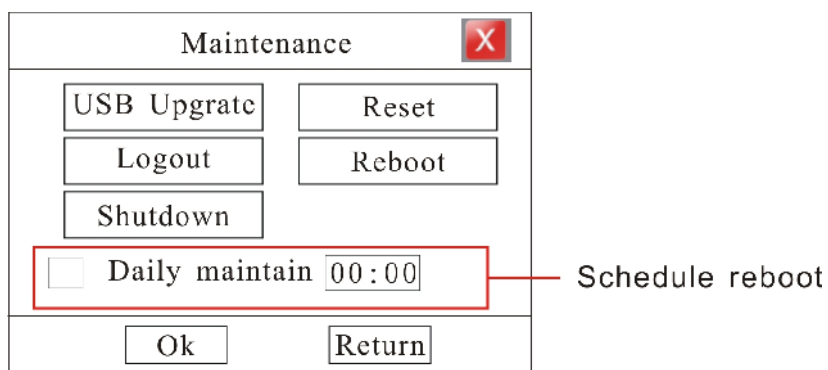


Fig. 13

Section 5 OSD Setup

Time Modify

Enter “Main Menu - Advanced - General” as shown in Fig. 14.

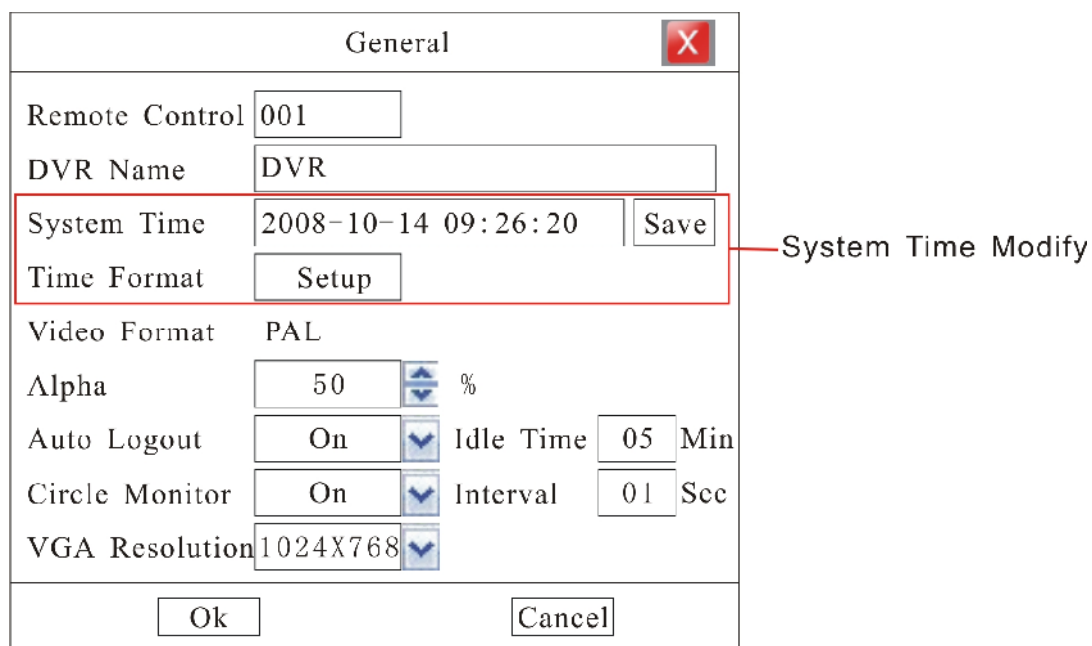



Fig. 14

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

- System Time : Press  to get into input interface for time inputting.
- Time Format : Setting the time format and DST. Please refer Fig. 15.

Time Format Option	
Time Format	12H ▼
Data Format	Yyyy-mm-dd ▼
DST	Yes ▼
DST Begin Time	DST End Time
03-25 02:00:00	10-28 02:00:00
Ok	Cancel

Fig. 15

- 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: yyyy-mm-dd
- DST Setting (Summer time setup): Default DST setting: NO.

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

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  on front panel to enter text input

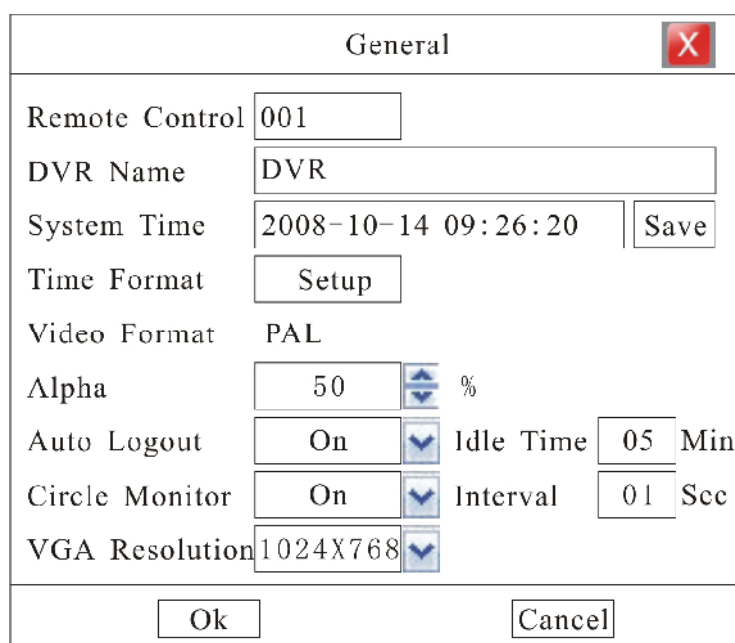
interface then channel name can be defined with uppercase or lowercase letter, number and symbol.

- **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. 16.




The image shows a 'General' settings window with a red 'X' button in the top right corner. The window contains the following fields and controls:

- Remote Control:** A text box containing '001'.
- DVR Name:** A text box containing 'DVR'.
- System Time:** A text box containing '2008-10-14 09:26:20' and a 'Save' button.
- Time Format:** A button labeled 'Setup'.
- Video Format:** A dropdown menu showing 'PAL'.
- Alpha:** A text box containing '50' and a percentage sign '%', with up and down arrow buttons.
- Auto Logout:** A dropdown menu showing 'On'.
- Idle Time:** A text box containing '05' and the unit 'Min'.
- Circle Monitor:** A dropdown menu showing 'On'.
- Interval:** A text box containing '01' and the unit 'Sec'.
- VGA Resolution:** A dropdown menu showing '1024X768'.

At the bottom of the window are 'Ok' and 'Cancel' buttons.

Fig. 16

Move cursor with ▲ and ▼ on the front panel and select item with ⏮ and ⏭.

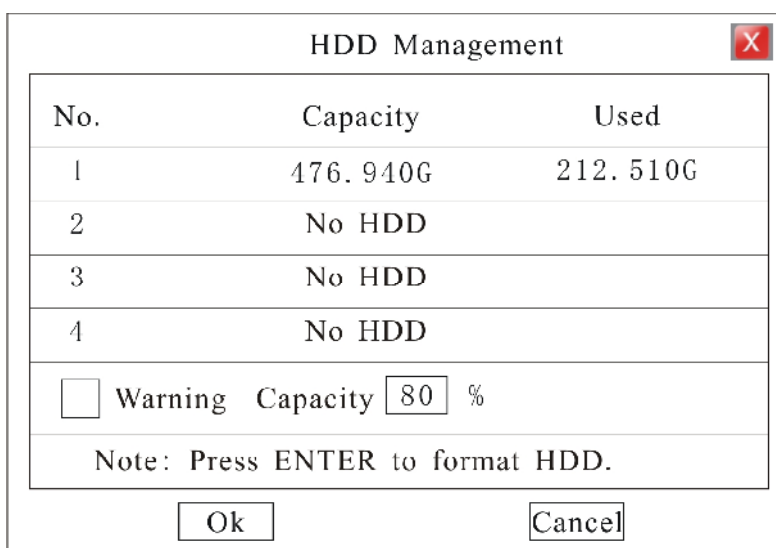
- **Remote Control:** When you use IR controller to operate DVR, you must use DVR address to select DVR. If there are more than one DVR in one place, please define different address for each DVR. The default address is “001”, the value field among 000-255.
- **DVR Name :** Define DVR name. When you access 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  key to enter into input mode.
- **Video Format :** Auto adapt according to video input.

- **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 chose.
- **Idle time :** Length of time during which no operation is executed. Default Idle time: 5 minute.
- **VGA Resolution (Option) :** 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 - Information—HDD” as shown in Fig. 17.



HDD Management		
No.	Capacity	Used
1	476.940G	212.510G
2	No HDD	
3	No HDD	
4	No HDD	
<input type="checkbox"/> Warning Capacity <input type="text" value="80"/> %		
Note: Press ENTER to format HDD.		
<input type="button" value="Ok"/>		<input type="button" value="Cancel"/>

Fig. 17

Move cursor with ▲ and ▼ on the front panel and select item with ⏪ and ⏩.

- **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:** Move cursor to the HDD which will be formatted, press “Enter” key to get into HDD format interface as shown in Fig. 18.

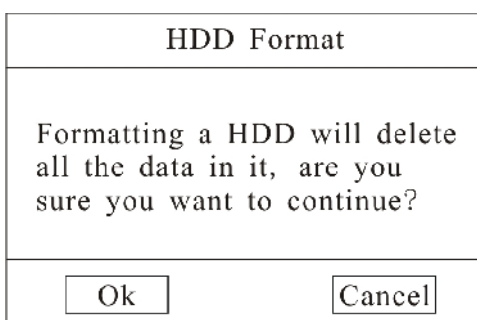


Fig. 18

Press "Ok" to format HDD.

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

Recording Auto Overwrite

- Enter "Main Menu - Rec. & Alarm—General" 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. 19.

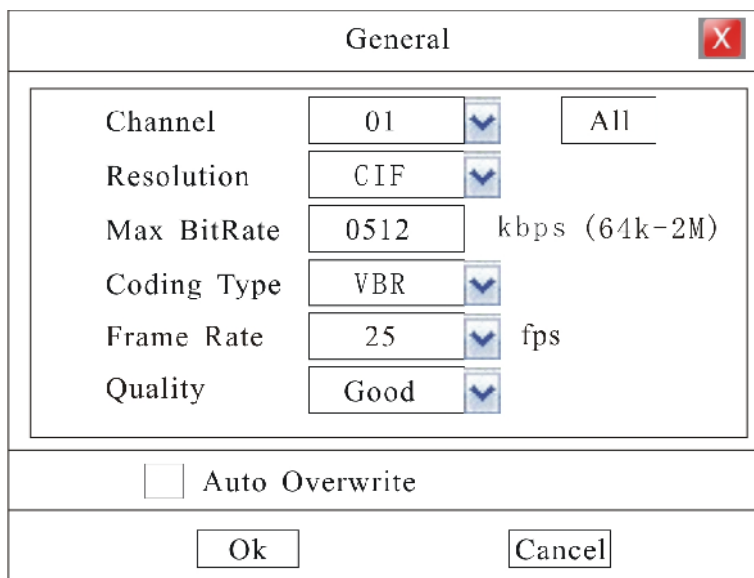


Fig. 19

Move cursor with ▲ and ▼ on the front panel and select item with ⏪ and ⏩.

- **Channel Number:** choose a channel to setup.
- **Resolution:** The higher resolution the clearer image will be. The resolution options from low to high are: QCIF, CIF. 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. Options are: 25 (PAL:25, NTSC:30), 13, 6, 3, 1. 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.

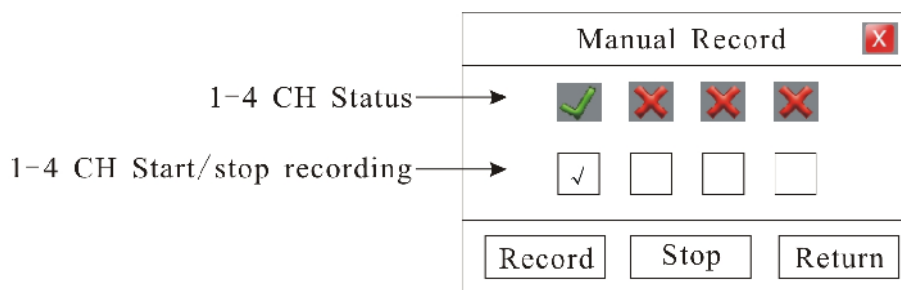


图 20

1-4 CH Status: “√” and “×” on up side stand for recording status. “√”means recording, “×”means idle.

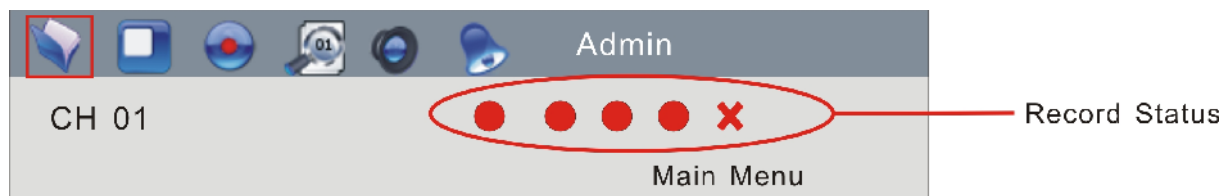
1-4 CH Start/Stop recording: Squares on downside are used to start/stop recording of the corresponding channel. Press “▲” and “▼”on the panel to select channels. Press “◀” and “▶” to start/stop recording.

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 Fig.



Please refer **Status Bar** section.

Schedule Recording

Enter "Main Menu - Rec. &Alarm—Schedule" as shown in Fig. 21

The image shows a 'Recording Schedule' dialog box. At the top, there is a title bar with a close button (X). Below the title bar, there are fields for 'Oct', '2008', 'Channel 01', and 'All'. Below these fields is a calendar grid for the month of October 2008. The calendar grid has columns for Sun, Mon, Tue, Wen, Thu, Fri, and Sat. The dates are listed in the grid. To the right of the calendar grid, there are two sections for recording periods. The first section is labeled 'Period one' and has two time fields set to '00:00' and '08:00'. The second section is labeled 'Period two' and also has two time fields set to '00:00' and '08:00'. Below the time fields are 'Apply' and 'List' buttons. At the bottom of the dialog box, there are radio buttons for 'Once', 'Daily', 'Weekly', and 'Monthly'. The 'Once' radio button is selected. At the very bottom, there are 'Ok' and 'Cancel' buttons.

Fig. 21

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 20th 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. 22



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

Previous Next Del Return

Fig. 22

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. 23




Alarm	
Record Duration	<input type="text" value="10"/> Min
Pre-record Time	<input type="text" value="5S"/> 
<div> <input type="text" value="Alarm In"/>  </div>	
Alarm In	<input type="text" value="01"/>  <input type="text" value="All"/>
Alarm Out	<input type="text" value="01"/> Rec. CH <input type="text" value="01"/> <input type="text" value="02"/> <input type="text" value="03"/> <input type="text" value="04"/>
Buzzer Time	<input type="text" value="10"/> Sec <input type="button" value="Schedule"/>
<input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

Fig. 23

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

External Alarm Input Setting

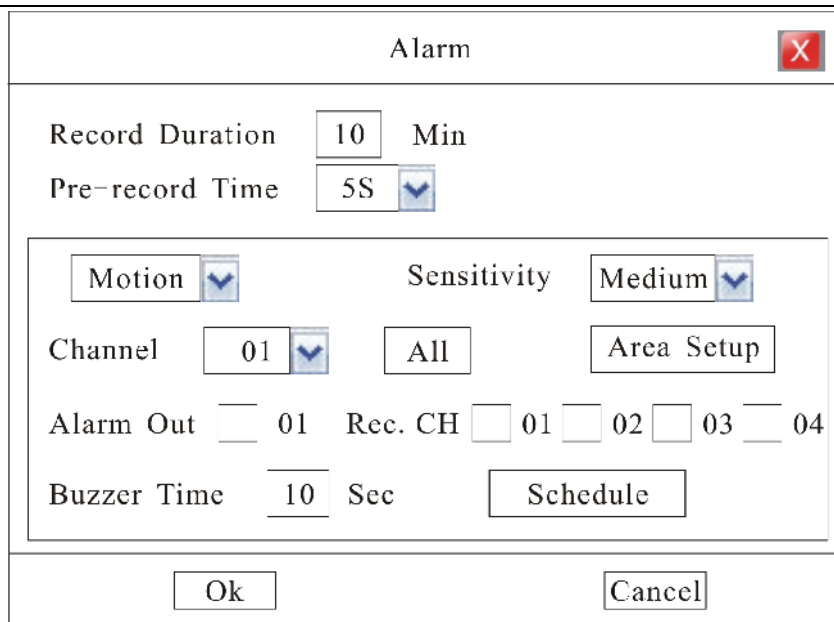
Enter “Alarm In” to set external alarm input

- **Alarm In :** Select a alarm input port for setup
- **Alarm Out:** Activate alarm out or not.
- **Relating :** When external alarm activated, relevant channel can be selected to record if recording period has been setup in “Schedule” menu.
- **Buzzer Time :** Buzzer time length when alarm, motion detection, video lost or video shelter is activated. Default length: 10 seconds.

Schedule: Enter “Schedule” interface to setup alarm period in which system will activate relevant disposal mode such as buzzer alarm, alarm output, relevant channel recording if alarm has broken out. 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 image shows a software window titled "Alarm" with a red close button in the top right corner. Inside the window, there are several configuration options:

- Record Duration:** A text box containing "10" followed by the label "Min".
- Pre-record Time:** A text box containing "5S" followed by a dropdown arrow.
- Motion:** A dropdown menu currently showing "Motion".
- Sensitivity:** A dropdown menu currently showing "Medium".
- Channel:** A dropdown menu currently showing "01".
- All:** A button.
- Area Setup:** A button.
- Alarm Out:** A checkbox.
- 01:** A text box.
- Rec. CH:** A checkbox.
- 01:** A text box.
- 02:** A text box.
- 03:** A text box.
- 04:** A text box.
- Buzzer Time:** A text box containing "10" followed by the label "Sec".
- Schedule:** A button.

At the bottom of the window, there are two buttons: "Ok" and "Cancel".

Fig. 24

- **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. Use direction key to move cursor, press  to cancel chose area, and press  to recover chose area.

- **Relating :** When alarm activated, relevant channel can be selected to record if recording period has been setup in "Schedule" menu.
- **Alarm Out :** Activate alarm out or not.

Schedule : Enter "Schedule" interface to setup alarm period in which system will activate relevant disposal mode such as buzzer alarm, alarm output, relevant channel recording if alarm has broken out. 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 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. 25

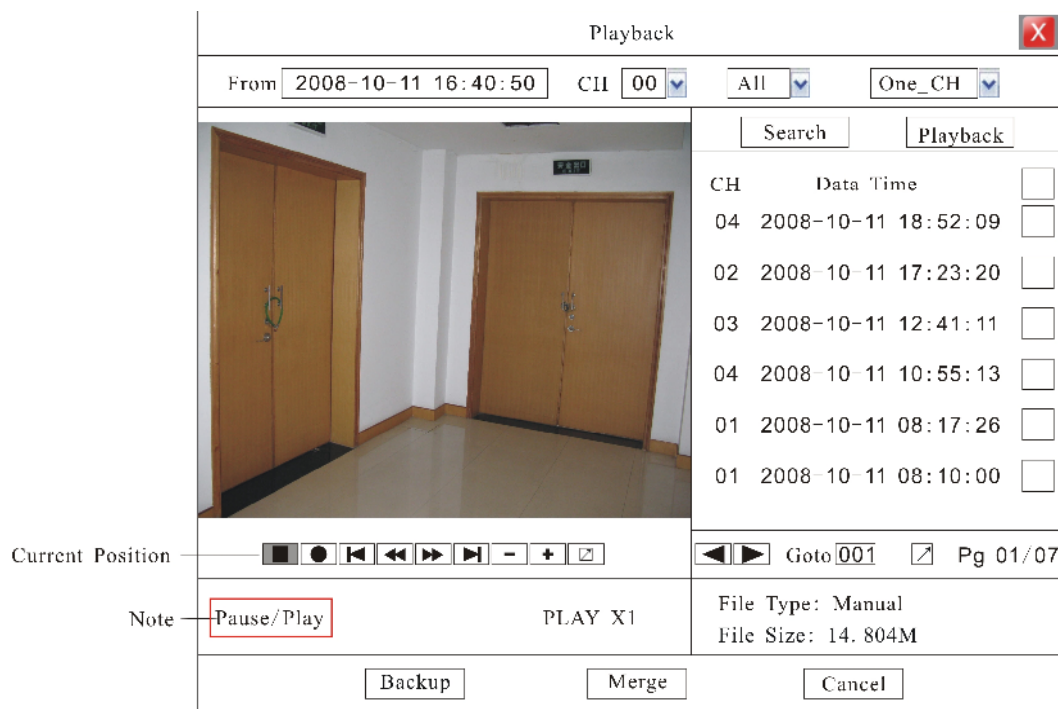












Fig. 25




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, and at this time, 4 channel playback simultaneously is unavailable.

- **All** : Recorded files type. The file type options have “All, Timer, Motion, Alarm, Command, and Manual”.
- **One_CH** :Option includes both “One_CH” and “Four_CH”. 4 channels playback simultaneously is available if “Four_CH” has been selected.
- **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.

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)

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.

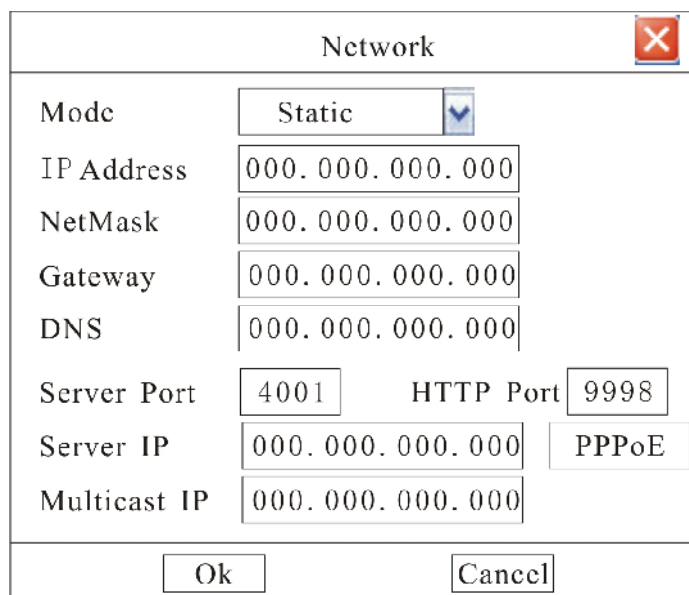
Note: 1.USB device and DVR may be damaged if USB device falls off during backup.

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.26

Static/DHCP



The image shows a 'Network' configuration window with a close button (X) in the top right corner. The window contains the following fields:

- Mode:** A dropdown menu currently set to 'Static'.
- IP Address:** A text box containing '000.000.000.000'.
- NetMask:** A text box containing '000.000.000.000'.
- Gateway:** A text box containing '000.000.000.000'.
- DNS:** A text box containing '000.000.000.000'.
- Server Port:** A text box containing '4001'.
- HTTP Port:** A text box containing '9998'.
- Server IP:** A text box containing '000.000.000.000'.
- PPPoE:** A checkbox that is currently unchecked.
- Multicast IP:** A text box containing '000.000.000.000'.

At the bottom of the window are two buttons: 'Ok' and 'Cancel'.

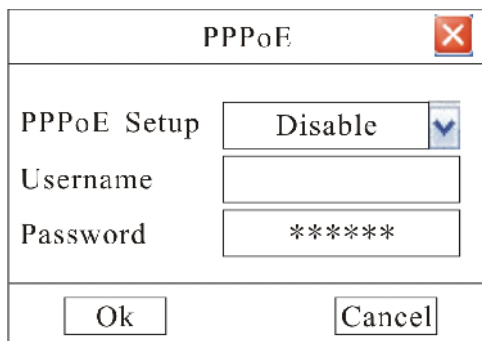
Fig.26

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.
- **IP Address:** This IP address must not be conflict with other IP. Example **192.168.000.100**.
- **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.)
- **HTTP Port:** Example **9998**.
- **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.
- **Multicast IP:** It is one D-class IP address, among 224.0.0.0 --- 239.255.255.255. If you do not use multicast function, you do not need to set. Some routers will prohibit multicast function in case of network storm.

PPPoE

Enter “Network” “PPPoE Setup” as shown in Fig.27



The dialog box titled "PPPoE" contains the following fields and controls:

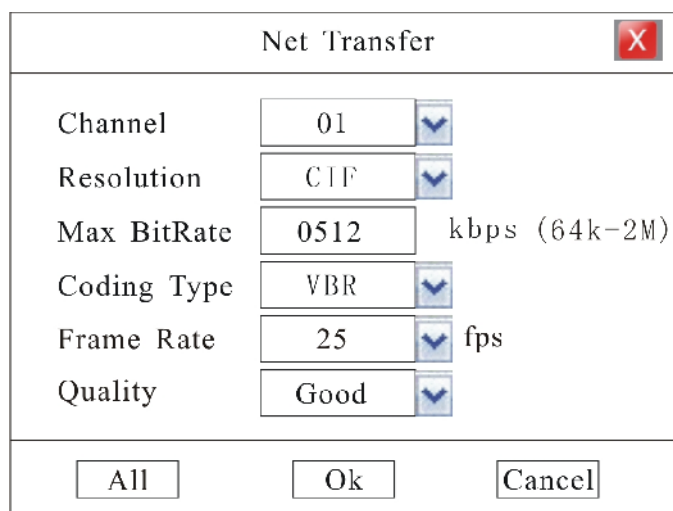
- PPPoE Setup:** A dropdown menu currently set to "Disable".
- Username:** An empty text input field.
- Password:** A text input field containing six asterisks (*****).
- Buttons:** "Ok" and "Cancel" buttons at the bottom.

Fig.27

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.

Section 11 Net Transfer Parameter Setup

Enter “Main Menu - Advanced - Transfer”, as shown in Fig.28



The dialog box titled "Net Transfer" contains the following fields and controls:

- Channel:** A dropdown menu set to "01".
- Resolution:** A dropdown menu set to "CIF".
- Max BitRate:** A text input field set to "0512", with the unit "kbps (64k-2M)" displayed to its right.
- Coding Type:** A dropdown menu set to "VBR".
- Frame Rate:** A dropdown menu set to "25", with the unit "fps" displayed to its right.
- Quality:** A dropdown menu set to "Good".
- Buttons:** "All", "Ok", and "Cancel" buttons at the bottom.

Fig. 28

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

- **Channel number:** select relevant channel to setup.
- **Resolution:** The higher resolution is, the clearer the image is. The resolution options from low to high are:

QCIF、CIF. 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.

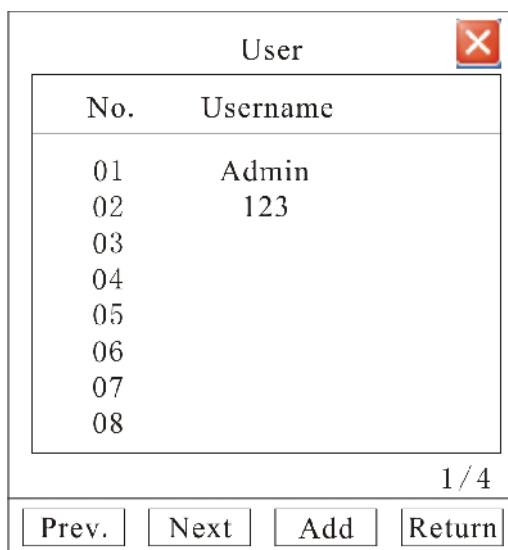
If you select CBR, DVR will use the fixed bit rate to compress image.

- **Frame Rate:** Frame per second. Options are: 25 (PAL:25, NTSC:30), 13、6、3、1. 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.29.



The dialog box titled "User" contains a table with two columns: "No." and "Username". The table lists 8 rows, with the first two rows populated: "01 Admin" and "02 123". The remaining rows (03-08) are empty. At the bottom right of the table area, it says "1 / 4". Below the table are four buttons: "Prev.", "Next", "Add", and "Return".

No.	Username
01	Admin
02	123
03	
04	
05	
06	
07	
08	

1 / 4

Prev. Next Add Return

Fig. 29

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

- **User list:** list administrator and new user name. Move cursor to select a user name and press "ENTER" to enter "User Operation" interface in where to modify password, setup local and remote right, delete user.
- **Admin :** Administrator who has supreme right on operation. Move cursor to "Admin" and press "ENTER" to modify password in input interface.

Add User

When you login as "Admin", you can add new user. Select "Add" to enter into "Add User" menu as shown in Fig. 30.

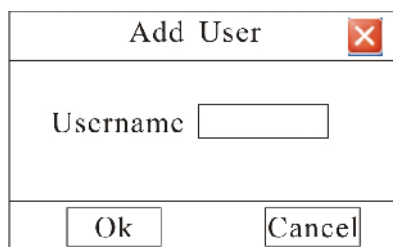



Fig. 30

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

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 "▲" and "▼" keys to select the new user name, then press "ENTER" key to enter into the "User Operation" menu as shown in Fig. 31.

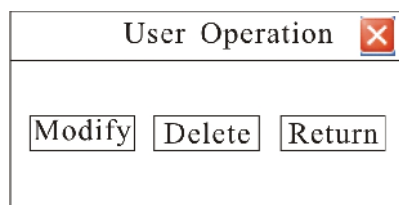


Fig. 31

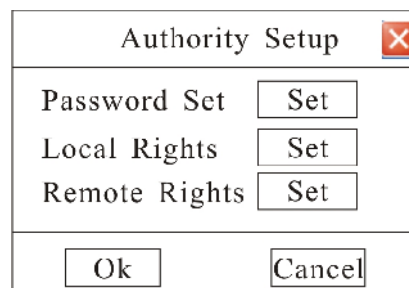


Fig. 32

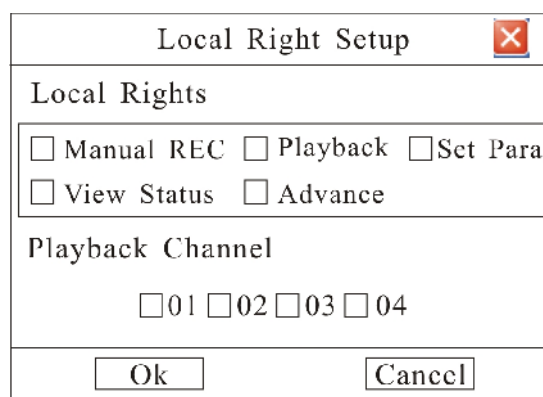
- In “**User Operation**” menu, select “**Modify**” to enter into “**Authority Setup**” menu as shown in Fig. 32. Select “**Password Set**” to enter into “**Password Setup**” menu. Password is composed of number, uppercase and lowercase letter with 6 digit maximum.
2. Password can be set after logging system as Normal User. Select “**User**” and press “**ENTER**” to modify password in “**Password Setup**” interface.

Authority Setup

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

Operational authority is divided into “Local Rights” and “Remote Rights”. You can assign the necessary rights to the user. 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.



The dialog box titled "Local Right Setup" contains two sections. The "Local Rights" section has five checkboxes: "Manual REC", "Playback", "Set Para", "View Status", and "Advance". The "Playback Channel" section has four checkboxes labeled "01", "02", "03", and "04". At the bottom are "Ok" and "Cancel" buttons.

Fig. 33

Local Rights:

Local rights are for local operation.

Manual REC: Manual start/stop recording;

Playback: Local playback and backup the recorded files, can be set for each channel.

Set Parameters: Locally setup the DVR parameters.

View Status: Locally view the log on DVR.

Advance: Locally upgrade firmware, format HDD, reboot DVR and look over the online user, etc.

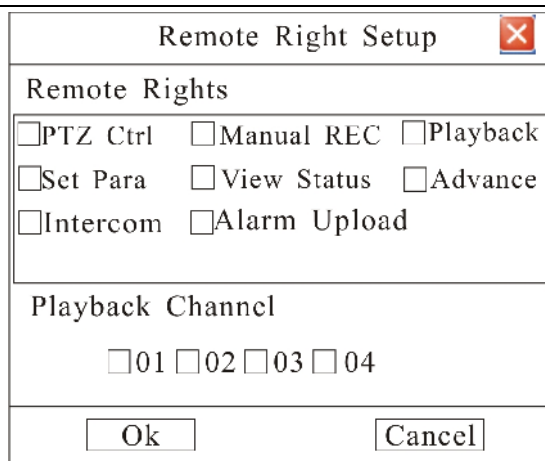


Fig. 34

Remote Rights:

Remote rights are for remote operation.

PTZ Control: Remote control PTZ and setup the PTZ parameters;

Manual REC: Remote manual start/stop recording;

Playback: Remote playback and download the recorded files on DVR, can be set for each channel.

Set Parameters: Remote setup the DVR parameters (Except the PTZ parameters).

View Status: Remote view the log on DVR;

Advance: Remote upgrade firmware, format HDD, reboot DVR and look over the online user, etc.

Intercom: Client talks with DVR.

Alarm Upload: Upload alarm information.

Delete user

In "User" interface, you can use "▲" and "▼" keys to select one user and press "ENTER" to enter into the "User Operation" menu. 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. 35.

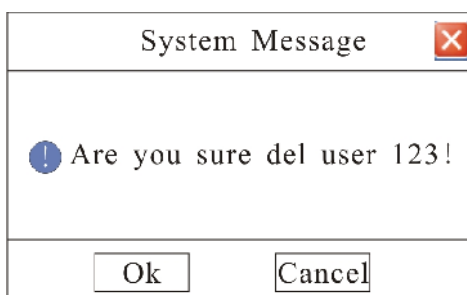


Fig. 35

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 lock by itself, and Warning, do not allowed 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 delete.
- * Only Administrator can set normal user's rights. Normal user can not set any rights. Administrator has all rights, and cannot modify. The new born normal user has not any rights in DVR.

Section 13 Display Setup

Enter "Main Menu - Advanced - Display" as shown in Fig. 36.





Display ✖			
Channel	01	▼	
Name	CH 01		
<input checked="" type="checkbox"/> Display Name	Position	Set	
<input checked="" type="checkbox"/> Display Time	Position	Set	
<input type="checkbox"/> Activate Shielding	Area	Set	
Contrast	50	%	Saturation
Brightness	50	%	Hue
	50	%	50
All		Ok	Cancel

Fig. 36

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 “Shelter Area Set” and set the area.

In the shelter area setup interface, there are four small panes. You can press “”, “”, “” and “” 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 “LEFT/RIGHT” 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 prompt a dialog box. When pressing ‘OK’, parameters setup for all channels will be achieved.

Section 14 PTZ Setup

Only through DVR_WEB could control PTZ. About the DVR_WEB setting please refer “Chapter VII”.

Enter “Main Menu - Advanced - PTZ ” as shown in Fig.37.

PTZ Setup			
Channel	01	Protocol	PELCO-D
Baudrate	9600	Data Bit	8
Stop Bit	1	Parity Bit	None
Flow Ctrl	None	Continuous	Yes
Speed	02	Vertical	No
PTZ Addr	001	Horization	No
All		Ok	Cancel

Fig. 37

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. 01: Turning slower; 03: Turning faster Default system configuration: 02.
- **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 prompt a dialog box. When pressing '**OK**', parameters setup for all channels will be achieved.

Section 15 Restore Defaults Setting

Enter "Main Menu - Advanced - Maintenance - Reset" as shown in Fig. 38

Restore Item X	
<input type="checkbox"/> General	<input type="checkbox"/> Display
<input type="checkbox"/> PTZ	<input type="checkbox"/> User
<input type="checkbox"/> Network	<input type="checkbox"/> Alarm
<input type="checkbox"/> Record	<input type="checkbox"/> Schedule
<input type="button" value="Ok"/>	<input type="button" value="Cancel"/>

Fig. 38

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.39.



Log 			
From	2008-10-10 16:40:50	Type	All 
To	2008-10-11 16:40:50	<input type="button" value="Search"/>	
No.	Time	Type	Content
1	2008-10-10 18:40:30	[E]	1 CH video loss
2	2008-10-10 19:25:30	[A]	2 CH alarm in
3	2008-10-10 20:12:15	[O]	DVR power on
4	2008-10-10 20:25:30	[O]	[R] obtion config
5			
6			
[A] Alarm [O] Operate [E] Abnormal [R] Remote Pg 01/01			
<input type="button" value="Previous"/>		<input type="button" value="Next"/>	<input type="button" value="Return"/>

Fig. 39

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.40.

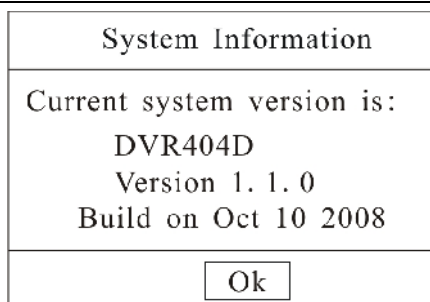


Fig. 40

Check information of current firmware version.

User Information

Enter “Main Menu - Information - Online” as shown in Fig.41.


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
<div>Previous</div> <div>Next</div> <div>Return</div>			

Fig. 41

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: Please update system through **DVR_WEB Internet**. About the DVR_WEB setting please refer

“Chapter VII”.

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, for example: ocb-dvr404d.img. Then insert external device into USB port of DVR after modification.

(2) Enter “Main Menu—Advanced—Maintenance—USB Upgrade” as shown in Fig.42.

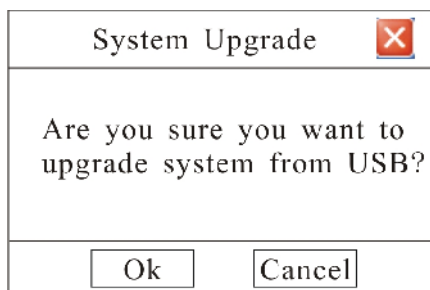




Fig. 42

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

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.

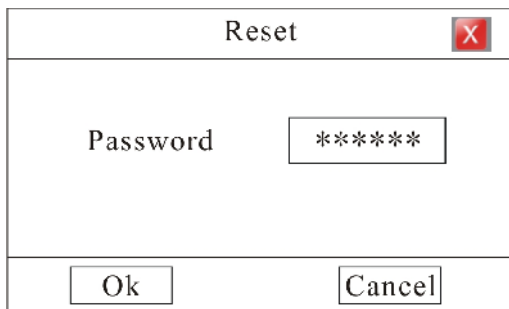


Fig. 43

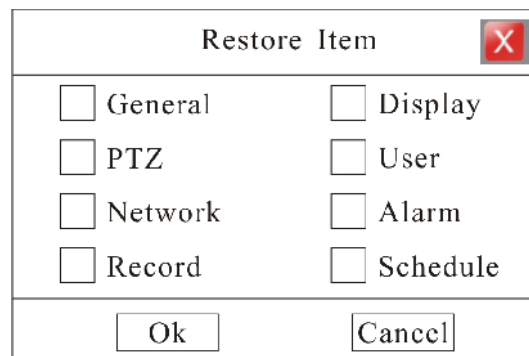


Fig. 44

Note: Please call your distributor for the password.

Chapter V 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 separate them automatically when they are overlapped.
- 3、 Why cannot control the PTZ?
 - 1) Only can control the PTZ remotely, local control is unavailable.
 - 2) Please check whether the PTZ setup in "PTZ" is setting correctly, including protocol, baud rate and address.
 - 3) 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" "General" "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.

Chapter VI Specification

Model	4CH
processor	Embedded high performance processor
operation system	embedded RTOS
Video	
Video format	PAL/NTSC
image compression	H.264(Main Profile)/MJPEG
Video input	4 Channel BNC(1.0Vp-p,75)
Video output	1 Channel BNC (1.0Vp-p,75)
	1 Channel VGA (800×600 , 1024×768 , 1280×1024) (optional)
Audio	
audio compression	ADPCM
Audio input	4CH BNC(linear voltage,10.0 K) (or 3CH Audio + 1 CH Intercom)
Audio output	1CH BNC(linear voltage,1.0 K)
Intercom	support intercom
Display	
resolution	D1 : 704×576(PAL) 704×480 (NTSC)
frame rate	25 (PAL) /30 (NTSC) FPS
division	1; 4CH
Record	
resolution	CIF : 352×288(PAL) 352×240 (NTSC)
image frame	25(PAL)/30(NTSC) FPS , adjustable
image quality	5 levels(basic, medium, good, high, best)
Recording mode	Manual, auto motion detection (support 396 grid blocks) , timing ,alarming trigger, auto start ,pre-recording.
video output stream	64K-2Mbps adjustable
play back	4CH playback simultaneously
HDD	
interface	1 SATA interface, Max. 2T/HDD
Alarm	

Input (NO/NC)	4CH
Output(NO/NC)	1CH
Other	
system resource	Multi-CH record ,playback ,network operation and monitoring simultaneously
network	RJ45 , auto adapt 10/100M Ethernet ,support PPPoE, DHCP
backup	1 USB2.0 ,support flash memory, remote HDD
mouse	1 USB1.1 interface ,support mouse operation
serial port	1 RS232 port or 1 RS485 port (alternative)
power supply	DC 12V / 3A
power(with out HDD)	<10W
unit weight	3kg
dimensions(W×D×H)	250×260×50mm
Operating humidity	Humidity 10% ~ 95%
operation temperature	temperature -10°C ~ 55°C

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):

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

Chapter VII IE Monitor

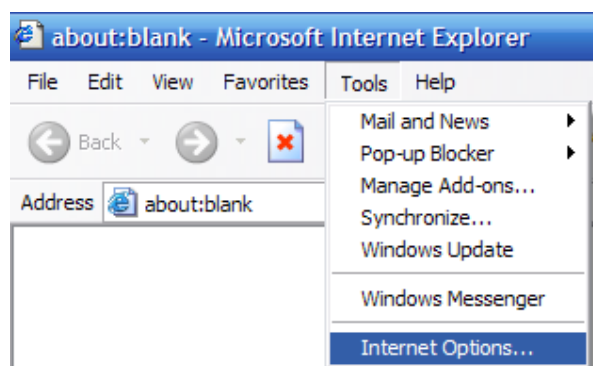
Section 1 Introduction

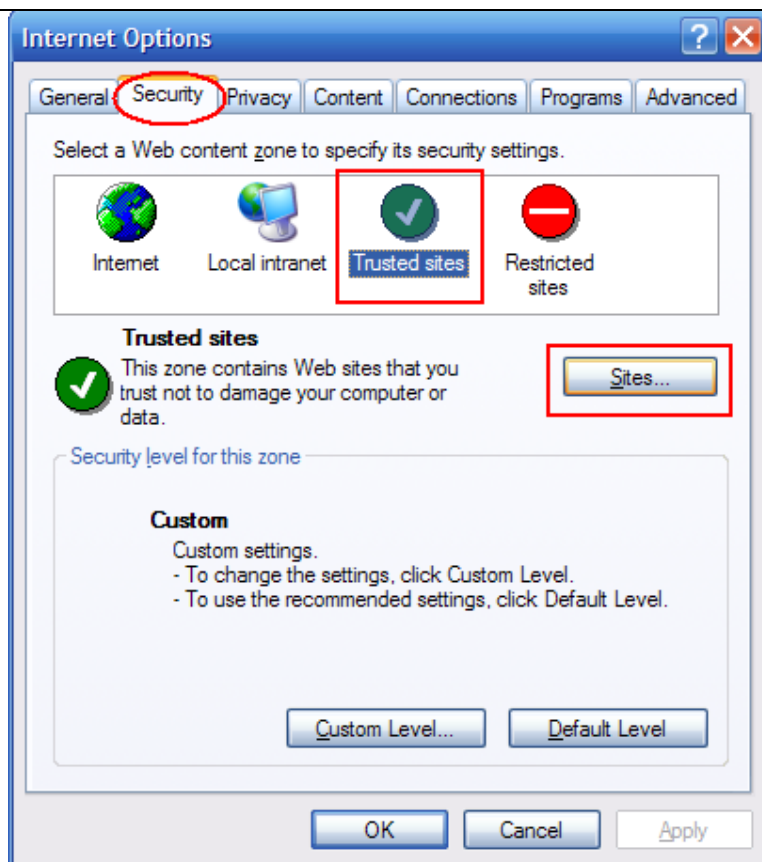
The DVR can be visit and control by IE browser. IE provides the functions, such as remote monitor, local record, PTZ control, Remote control, etc.

Section 2 IE Setting

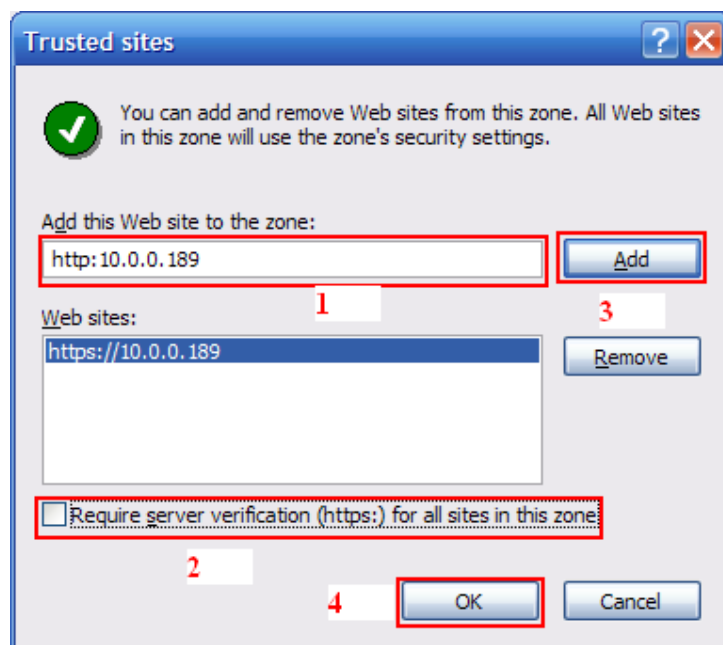
Please follow next steps before monitoring videos on IE at the first time:

1. If the computer has installed other softwares of our DVR in IE, please run CLEAR program that form a complete set with this software, to eliminate them firstly.
- 2 . Open IE. Enter “Tool” “Internet Option” and then click “Security” label. (Or right click on IE browser icon, enter “Attribute”, enter “Security” label). Please refer figures below:

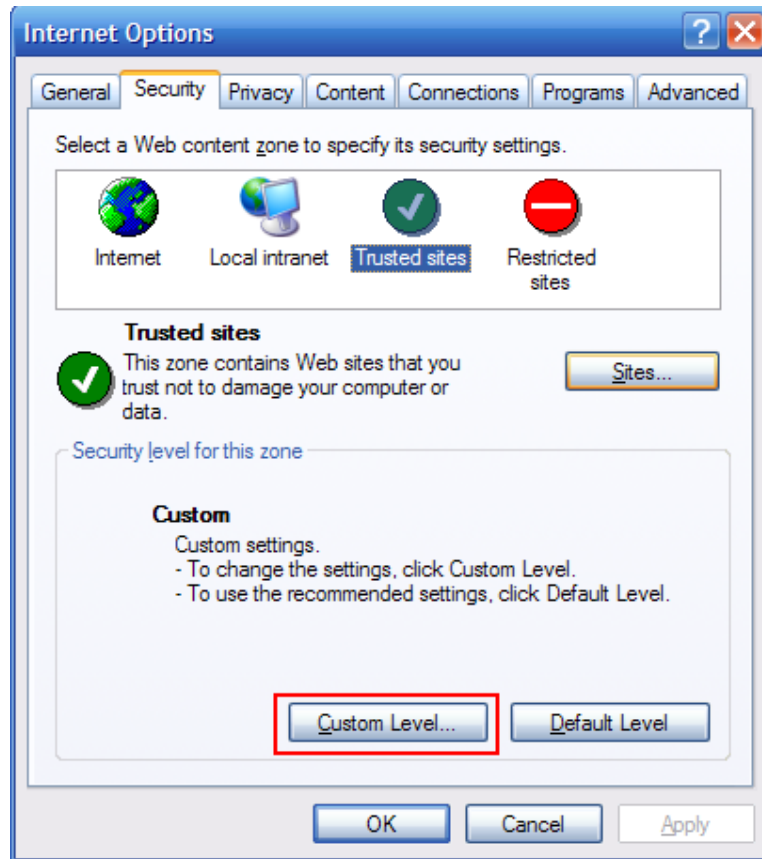




3. Input IP address of DVR to “Add this Web site to the zone” text box and click off “√” in the front of “Require server verification(https:) for all sites in this zone”. Click ‘Add’ and then ‘OK’ to finish as shown in following figure. (presume IP Address as 10.0.0.189)



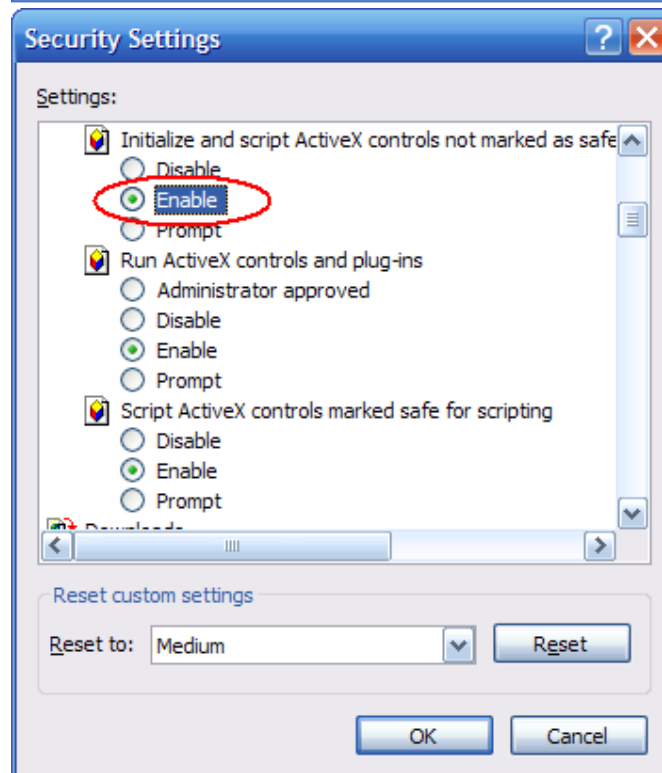
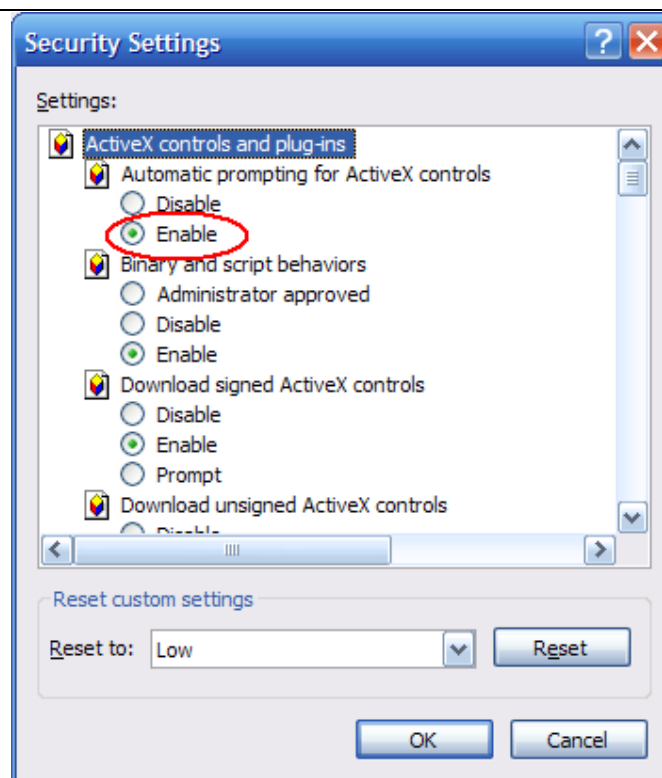
4. Click 'Custom Level' as shown in following Fig.

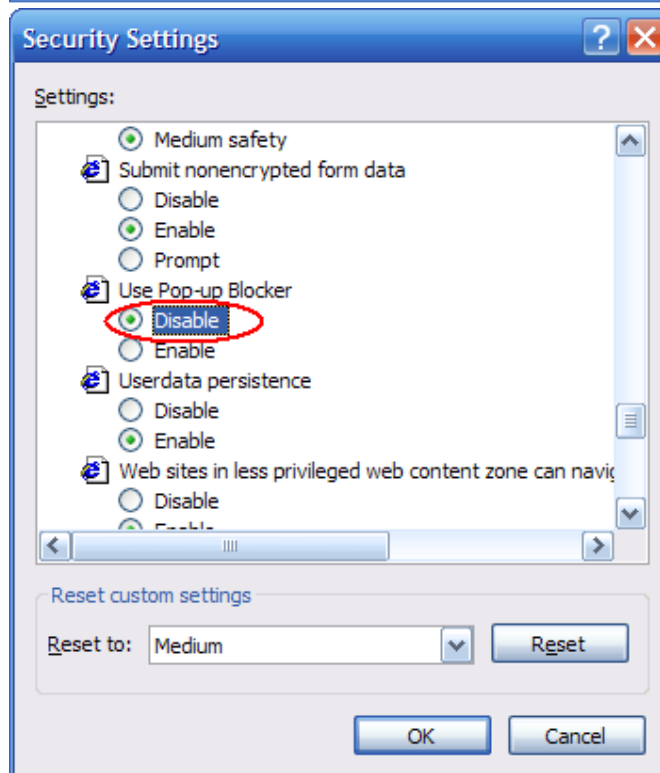
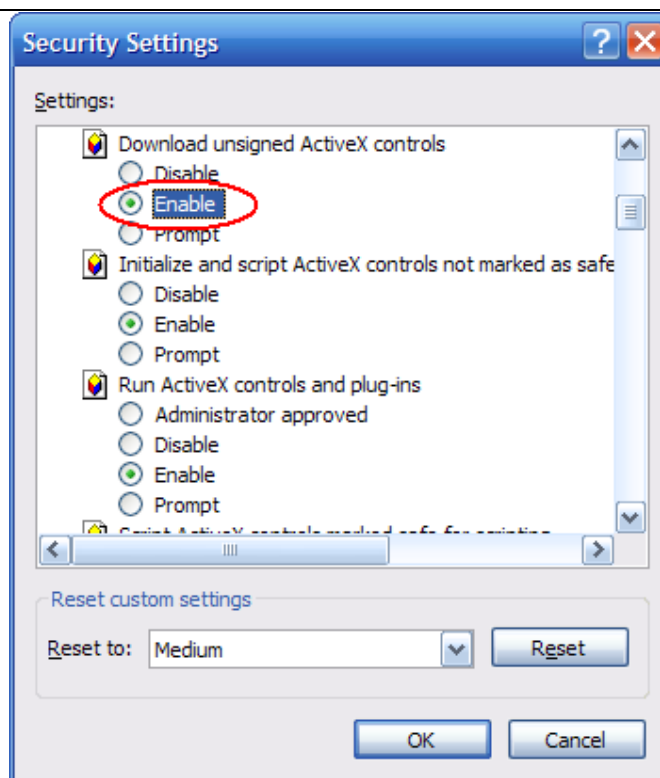


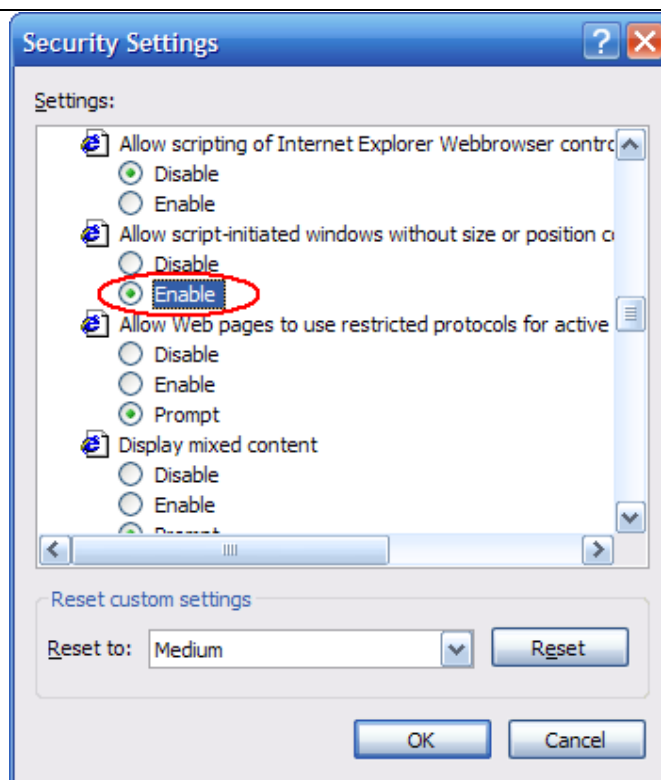
Please Modify below items (Enable/Disable) then press 'OK' to finish setting.

- a) [Enable] Automatic prompting for ActiveX controls.
- b) [Enable] Initialize and script ActiveX controls not marked as safe.
- c) [Enable] Download unsigned ActiveX controls.
- d) **[Disable] Use Pop-up Blocker.**
- e) [Enable] Allow Script-initiated windows without size or position constraints.

Keep the other items as default.







4. Input [Http://](http://10.0.0.124) and host IP address in IE address bar. For example: if host IP address is “10.0.0.124” then input [Http://10.0.0.124](http://10.0.0.124) in IE address bar.

FAQ in DVR_WEB Internet:

- 1、 When ‘Click here to activate control’ floating note box show on screen, please click the box to activate the 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 on <http://www.microsoft.com>.
- 2、 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.

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.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

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.

Contacts

If you encounter any problems when using our products, and cannot solve them by yourself, please contact our technical support team by writing an E-Mail to info@nodactechnology.com. We will be pleased to help you.