Cube DVR

User Manual

Precautions

- Please observe the following precautions, in order to avoid damaging or losing data caused by improper operation.
- DVR should work at proper temperature and humidity.
- Do not install DVR in humid, dusty or smoky environment.
- Require a solid mounting surface for installation.
- Do not block any ventilation openings. Install under the manufacturer's instructions.
- Do not spill liquid of any kind on device.
- Do not put any other equipment on device.
- Do not dismantle the device.
- Select specified HDD by manufacture.

Note

- This user manual is for reference only, subject to available products.
- This user manual may contain inaccurate data or printing error.
- Updates to the manual or products themselves will occur without further notification.
- The products and manual will be updated regularly without further notice
- Pictures are not from the same machine, for illustrative purposes only.
- Contact the customer service department if you have any question or want the latest software and file.

Content

Chapter 1 Product introduction

1.1. Summary

Our Embedded Digital Video Recorder is an excellent digital surveillance product which adopts H.264 video compression, hard disk recording, TCP/IP transmission, and a Linux based OS in addition to some of the more advanced technologies in the information technology industry. This enables a more stable, reliable and high picture quality.

These products support synchronized video and audio recording, playback, and monitoring. This series also supports network based system control, as well as excellent network streaming capabilities.

1.2. Features

Live View

CVBS interface, TV, VGA/HDMI synchronous output.

Compression

H.264 video compression, G.711 audio compression, supports high definition, low bit-rate video coding and storage.

Recoding

Recording modes include manual, time, alarm, motion detection, etc.; Support SATA HDD and local disk S.M.A.R.T. technology, Support USB backup and internet backup.

Playback

Playback search by various conditions, local and network playback; support multiple channel simultaneous playback , support fast, slow, rewind and frame mode; support exact time playback.

Camera Control and Alarm

Remote camera control, Multi-channel alarm input interface for connecting various types alarm equipment; Motion detection alarm, video loss alarm, masking alarm; Multi-channel alarm output, alarm linkage and on-site lighting control.

Communication Interface

USB 2.0 high speed interface connecting various backup devices; Standard Ethernet interface, work under various networks.

Network Protocol

Support TCP / IP, UDP, RTP / RTSP, DHCP, PPPoE, DDNS, NTP etc.; support network real-time live view, recording, playback, control; built-in WEB Server, IE browser for direct access.

Operation Mode

Support the front panel, remote controls, mouse and so on many kinds of operating mode; With simple, intuitive graphical; With simple, intuitive graphical interface.

1.3. Installation

1.3.1. Check DVR and Accessories

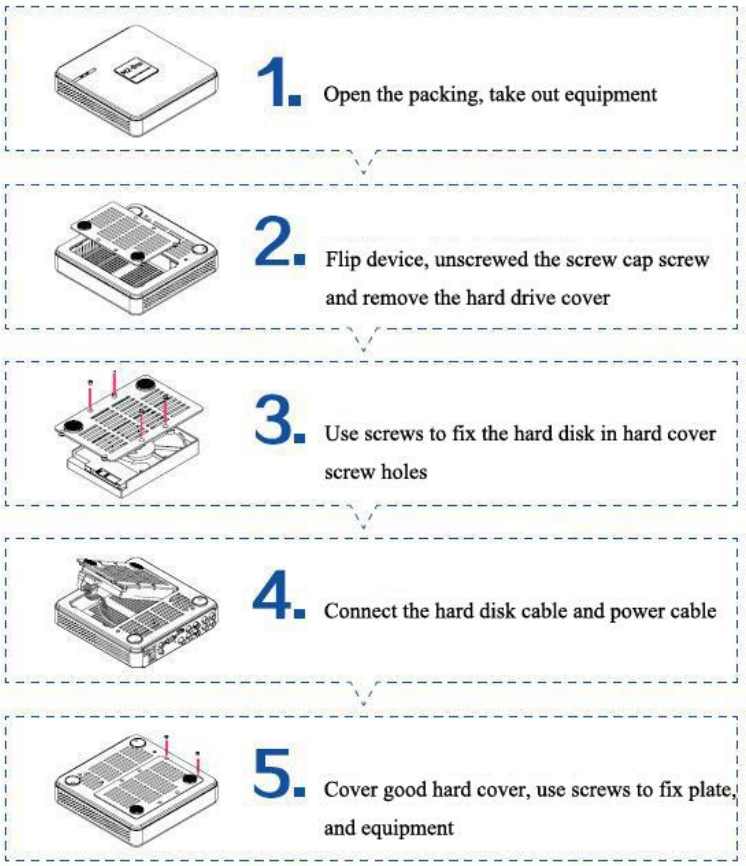
Please carefully check the contents as packing list. If any of the items are missing, please contact with your dealer.

1.3.2. HDD Installation

Preparation

Prepare a Cross Screwdriver.

Steps



Caution

Only use HDD specified by the manufacturer.

HDD will be formatted automatically during startup, it may cause data loss.

Recording duration is decided by HDD capability and DVR parameters (recording setup, encoding setup).

1.3.3. Wiring Installation

Preparing for Installation

Camera, displayer, AV cable, cable, mouse, other kind‟s cables.

Steps

DVR in a horizontal position, connect camera to video input interface in back panel.

Connect video output to the displayer.

Connect cable to RJ45 interface when access network.

Mouse should be USB interface type, front or back panel USB interface both work.

Power supply.

Caution

For an external alarm device or PTZ, please refer to the relevant instructions.

DVR power lines should be under all lines connected correctly.

1.4. Mouse

In addition to front panel keys and remote control menu, the user can use mouse for menu functions. Insert mouse with USB interface into machine panel.

Click Left Button

If the user does not log in, password box will pop up first; click the left mouse button to enter the main menu when real-time monitoring.

Left click mouse the Options icon enter the menu.

Exact Instructions on control

Change the state of check box and dynamic detection block.

Click the combo box drop-down list will pop up.

Double Click Left Button

Select and confirm or open, for example, double-click playback video.

Under multi-screen double click one channel can make the picture full screen; double-click again to return to the previous multi-screen.

Click Right Button

Pop-up context menu under monitor screen

Exit without saving under menu interface.

Turning Wheel

Increase or decrease value when fill digital box Switch combo box options.

Flip up and down for list box.

Mouse Move

Select controls in current coordinates to move.

Mouse Drag

Select motion detection area.

Set up regional coverage area.

1.5. Put Method

In the input box, choose numbers, symbols, case in English input. Click left mouse button to select value; ←means backspace, _ means a space.

Letter Input Interface

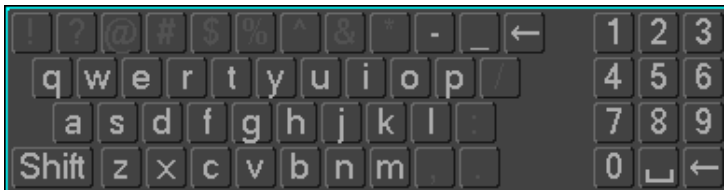


Figure1.1 Front Panel

Number Input Interface

Figure1.2 Number Input Interface

1.6. Power ON/OFF

1.6.1. Power On

DVR installed correctly, switch on with power light is on, DVR will boot up automatically. Different model have different boot up status, please refer to the Front-panel Introduction.

DVR will detect the hardware when power on, the process will last 20 seconds more or less. After the detection, DVR make a "Buzzing" sound and enter into a multi-screen live view, user can operate now. Please refer to XXX. Main Menu Introduction and Other Introduction.

If recording time contains power up time, DVR will automatically start timing recording when power on.

Figure1.3 Diagram

Note: Power supply has to match with DVR, any other substitutes are not allowed.

1.6.2. Power OFF

Hold down on-off key to turn off device.

【Main Menu】→【Power off】→【Power off】.

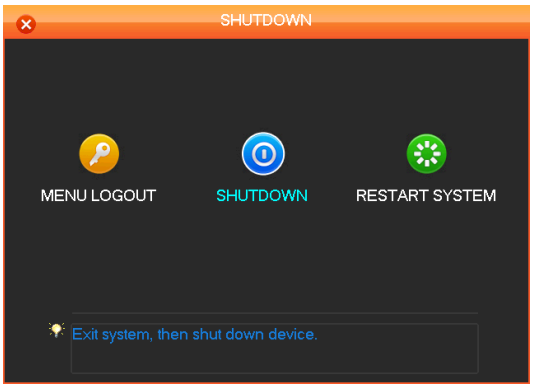


Figure1.4 Shutdown

Note: turn off device and switch off power when changing HDD.

1.6.3. Outage Recovery

Reboot after an outage or forceful shutdown, DVR will save the record before outage and return to normal operation mode.

1.7. Icon

1.7.1. Status Icons

Description of the status Icon

Table 1.1 Description of the Soft Keyboard Icons

Icons	Description	Icons	Description
	Record		Channel lock
	Video loss		Adjust the local audio output
	Motion detection		Allows screen to switch polling

1.7.2. Operation Icon

Description of the operation Icon as below

Table 1.2 Description of the Soft Keyboard Icons

Icons	Description	Icons	Description
☐	Not Selected;	Save	Save parameters
☑	Selected	Default	Restore factory settings, return to the last set of parameters after the modified parameters
▼	Down Menu	App.	Apply current set to the system
OK	Confirm revise/get into menu	Copy	Copy current set to other channels
Cancel	Cancel revise /cancel get into menu	Set	Enter the configuration menu
Select	Set parameters	Process	Config alarm, video detection trigger"s processing

Live View

Power on DVR and entry into live view mode: there are date, time, channel names icons which indicate recording and alarm status display on screen.
Switch display screens by the front panel, remote control or mouse control.

When enable the screen message for external alarm, video loss, masking, motion detection, network and IP conflict alarm, the below interface would popup when those alarm occur. Shows as:

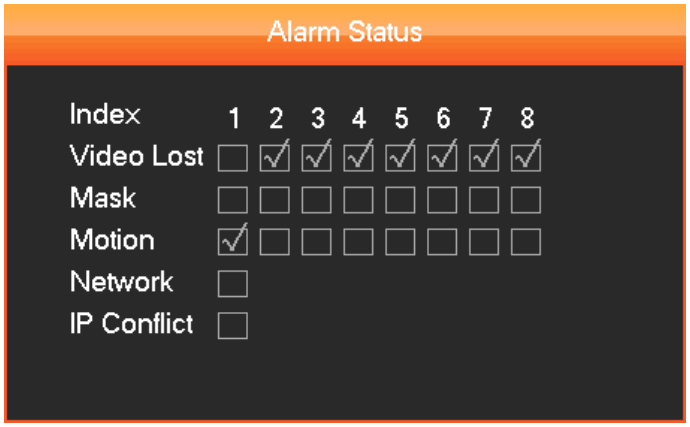


Figure1.5 Alarm Status

Chapter 2 Getting Started

2.1. Wizard

By default, the Setup Wizard starts once the device has loaded, as shown in Figure 2.1.

Steps:

1. Help: Laview app QR code and cloud server address are list as below. For more information please visit www.laviewcloud.com .

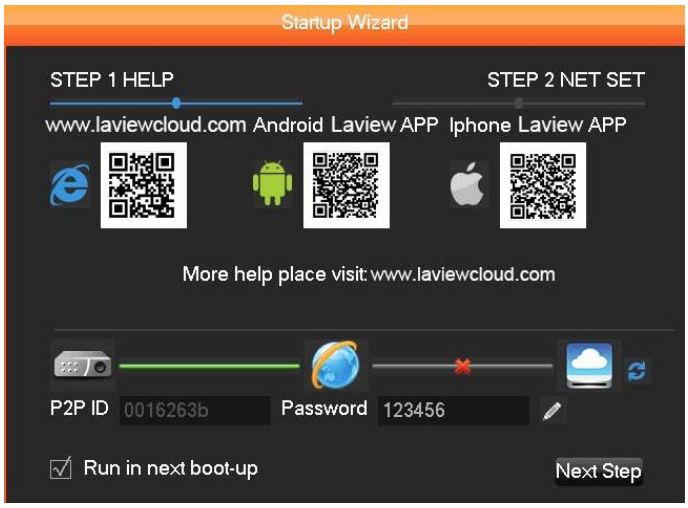


Figure 2. 1 Start Wizard Interface

2. After the step 1, click Next Step which takes you to the Network Start Wizard window, as shown in Figure 2.2. Make sure you network settings correct and can connect to cloud server

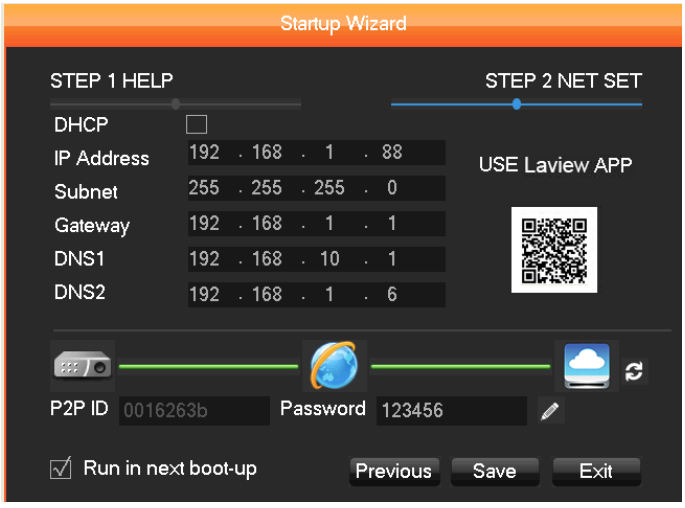


Figure 2. 2 Network Configuration

Figure 5.1

3. Save and Click OK to complete the start wizard settings.

Chapter 3 Operation guide

3.1. Right Button Menu

Click the right mouse button after booting into the real-time browser interface, action menu pop-up, shows as

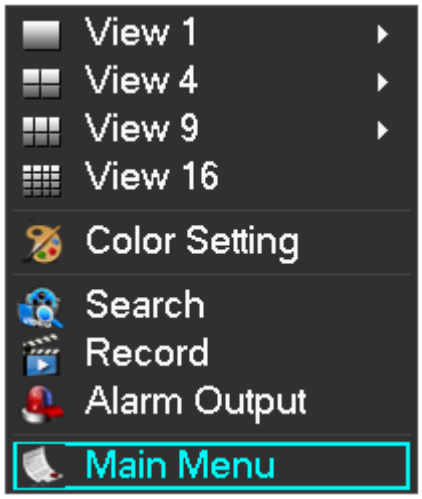


Figure 3.1Right Button Menu

3.1.1. Screen Switching

Max 16 channel in one screen, user can choose single, four, nine and sixteen channel.

3.1.3. Image

Adjust the specified screen (single screen) image color hue, brightness, contrast, saturation, gain and white-level parameters set two time periods according to the local environment difference between day and night for each adjustment period set, the device will automatically switch to the best video quality . As shown in.

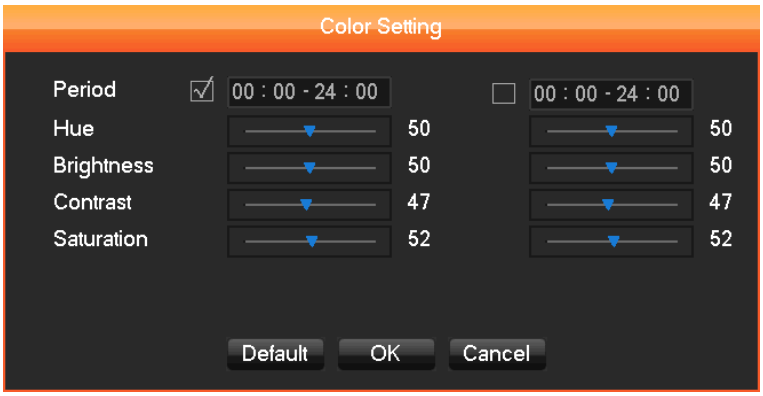


Figure 3.2Color Setting

【Period】two periods can be set according to ambient light during the day and night; device will automatically switch configuration time. Need to select the Enable box.

【Hue】 Adjust according to image color cast

【Brightness】 Visual image brightness, according to the environment, reduces or increases the brightness of the image brightness to make the image relatively clear.

【Contrast】 Adjust image of black and white in proportion, the greater ratio, the brighter image.

【Saturation】 Image color purity, the greater value, the more colorful images.

【Gain】 Enlarge the image signal to improve signal quality.

【White Level】 Change the white level reference value, to improve the brightness of the image display.

Note: Different mode different function

3.1.4. Recording Search

Refer to 4.3 recording search.

3.1.5. Manual Recording

Remark: manual user must have "RECORD" right

In live view screen, click on 【Manual Record】, or press the 【video】 key on remote control into manual recording interface, as shown in.

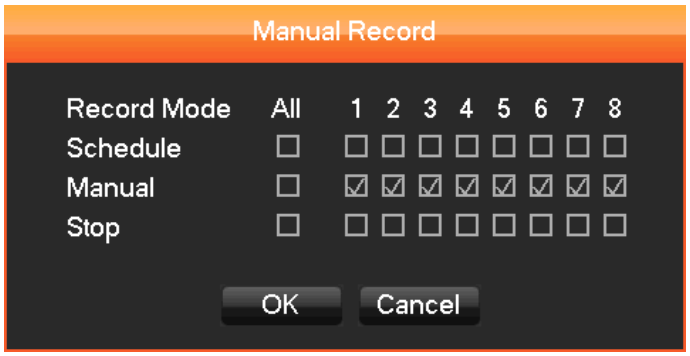


Figure 3.3Manual Record

【Manual】 The highest priority, no matter what the current status of each channel, the corresponding channels will make common recording when press "Manual" button;

【Schedule】 Record according to recording type in recoding set. (Common motion Detection and alarm);

【Stop】 Stop all channel recording.

To change record status of one channel, firstly check the recording status of the channel is selected non-selected (non-selected indicates that the channel is not recording; selected indicates the channel in recording mode).Then use mouse to click, or use【←】or【→】arrow keys move the active box to the channel, then use 【↑】or【↓】arrow keys or corresponding number key to switch the channel recording status.

Note: All selected can change record status for all channels/

3.1.6. Alarm Output

Refer to chapter 4.6.2 alarm output.

3.1.7. Main Menu

Click the 【Main Menu】, input user name and password, click【OK】to enter the system menu. As shown in.

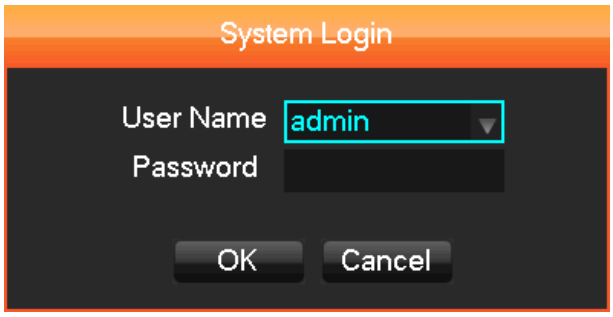


Figure 3.4System Login

Table 3.1 Default Users

User Type	User Name	Password
Administrator	Admin	123456
User	User	123456
Hidden	Default	Default

Note: Password security: occur alarm after three time's wrong input and system lockout in 30 minutes after 5 unsuccessful login. For security consideration, please modify the default password. For information on how to add groups, users and modify users information, please refer chapter 4.4.5 Uses Management, Click  *to toggle the character input method in mouse mode.*

3.2. Main Menu Introduction

The main menu as shown, there are search, configuration, storage, output, maintain and shutdown.

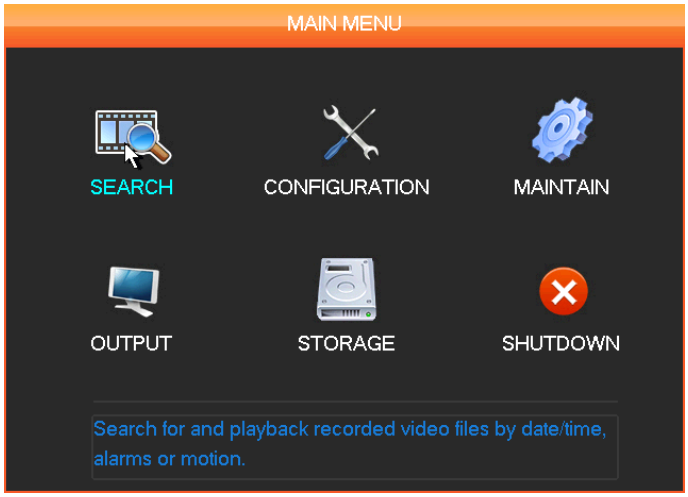


Figure 3.5Main Menu

【Search】 Search recoding by type, channel, time and playback.

【Configuration】 recording, motion detection, abnormal, alarm, system, network and user management configurations.

【Storage】 HDD management and backup management.

【Output】 PTZ, alarm output, serial and output mode configuration.

【Maintain】 to display the system log information, version information, stream statistics, and online user and set the factory default, automatic maintenance.

【Shutdown】 Log off the user menu, turn off the machine, restart the system, and switch user and other operations.

3.3. Search

In real-time monitoring screen, click the right mouse button, click 【search】, or enter video playback via main menu interface, as shown in.

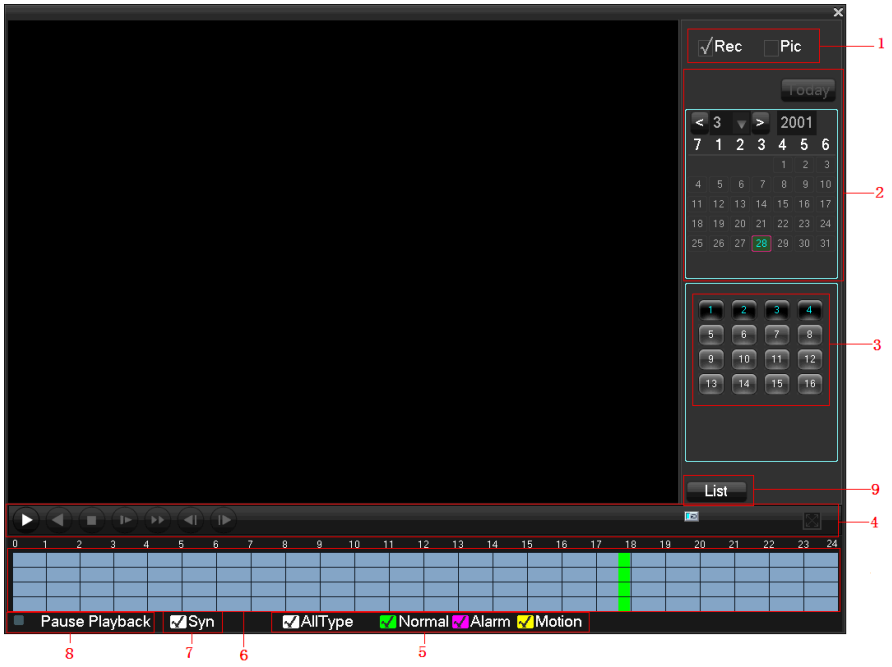


Figure 3.6Search

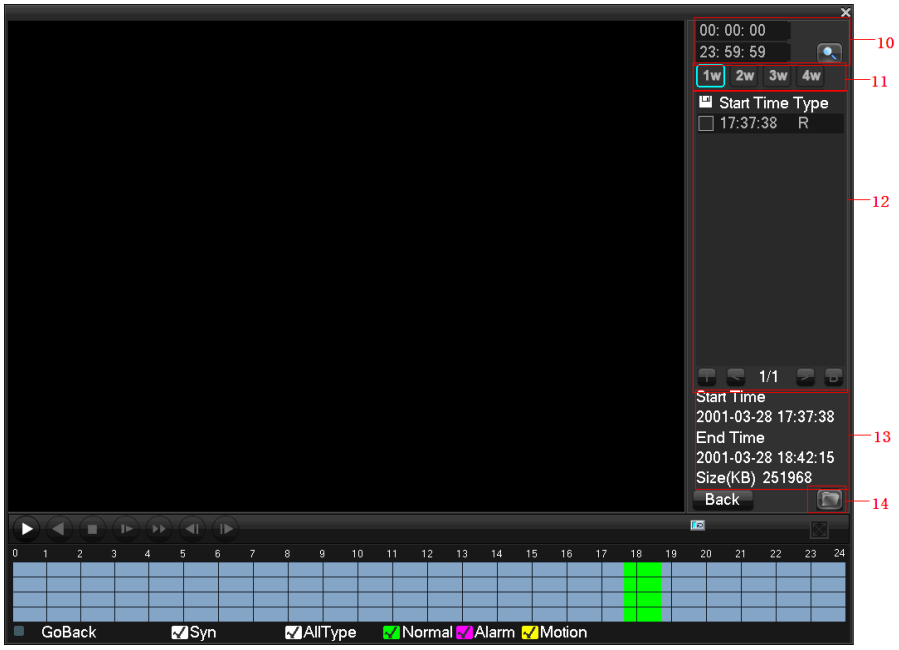


Figure 3.7Search

Table 3.2 Description of Search

Index	Name	Description
1	**Record**	Record and Picture to choice.
2	**Calendar**	Select record search day
3	**Channel**	Choose searched channel
4	**Play**	Playback control: stop/play, pause, fast, slow, previous/next frame in pause.
5	**Recoding mode**	Choose searched recording mode, including whole, outside alarm, motive detection, whole alarm recording.
6	**Time bar**	Green means Regular record; Red means alarm record; Yellow means MD record.
7	**Syn**	Implement each video playback channel in the process of playback time synchronization and consistency of the operation.
8	**Status**	Display status information of function buttons, including fast forward, slow speed, etc.
9	**List**	Choose the start time, channel, and click "search" will display results in the list.
10	**Time**	Select record search start and end time.
11	**Channel No.**	Choose searched channel
12	**Record List**	128 video records shows in searching list choose file and press enter or double click mouse to view record.
13	**Record information**	Show single record file"s start and end time, the size of the record file.
14	**Backup**	Tick "  "to choose backup file in file list box, click backup button cancel backup file ---click "√"from backup menu "√".

Table 3.3 Description of Playback Control

Icon	Key	Description	Remark
	Video playback : Fast-forward button	Under playback mode, pressing this key, you can get a variety of fast cycle switching speeds; fast-forward button can be used as slow-release button reverse switch key.	Actual play rate based on version
	Video playback : Slow key	Under playback mode, pressing this key, switch cyclically support a variety of slow-release rate, slow release button can be used as fast-forward button reverse switch key.	
►/ II	Play/pause	Play/pause switch when slow-play	
	Video playback : Slow key	Single left click backward key	To play backwards and single click again to stop back run under common playback Rewind or single-frame playback, press the play button ►/ to enter the normal playback .
	Manual single frame playback	single frame playback by clicking | and | when common playback pause	

Remark:

1. The player playback control bar show file playback speed, channel, time, playback progress and other information.

2. Playback speed and rewind function are related to DVR version, and please prompt on the player panel shall prevail.

3.4. Configuration

User can get into configuration through main menu; Function of system , record, network, alarm, account and abnormity as shown in.

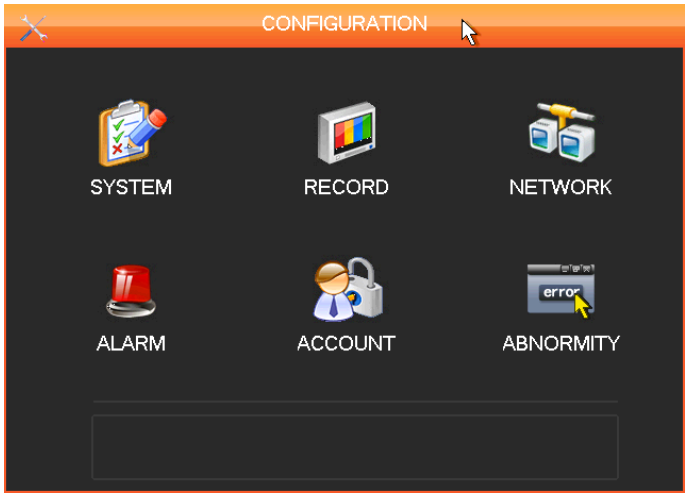


Figure 3.8Configuration

3.4.1. System

Figure 3.9System Configuration

Item	Description
【Time】	Set the current time.
【Date Format】	To modify the date display format
【Snapshot Interval】	When caught in figure set, scratching figure mode to timing diagram, timing images crawl down at a certain frequency can be uploaded to the FTP server (above maximum upload the latest four images)
【Daylight Saving Time	Click “DST” to enable the function, and enter the local DST starting and ending time
【Date Separator】	To select the separator for date
【Time Format】	24 hr or 12 hr display mode.

【Device Name】	Push function of form a complete set of network configuration, display iphone equipment received alarm information device name
【DVR No.】	Number more than one DVR, click “Ad” button on remote control and input a number to select the corresponding DVR to operate
【Full HDD】	When HDD is full, there are two options: “Overwrite” or “Stop recording”. If you select “Overwrite”, the DVR will overwrite the earliest recorded files and continue recording as all HDD in DVR are full. If you select the “Stop recording” option the DVR will stop recording when it reaches capacity
【Language】	language selections vary by different model
【Pack Duration】	To set time length for each record, default is 60 minutes, the maximum is 120 minutes
【Video Standard】	standard: PAL/NTSC (match camera model)
【Auto Logout】	This ranges from 0-60 minutes. 0 means no setting. DVR will automatically let user quit after standby

***Note**: Click to save the time modification.*

3.4.2. Record

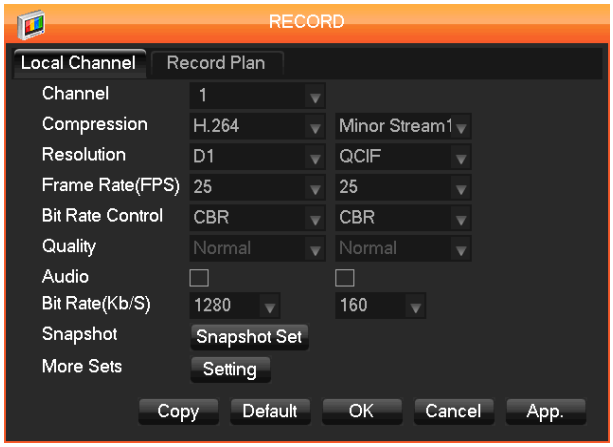


Figure 3.10 Record

Item	Description
【Channel】	the channel selection
【Compression】	H.264
【Resolution】	main stream options are D1/CIF, frame rate scope is different depending on channel and resolution. Vice stream support D1/CIF. Main stream parameters are selectable.
【FPS】	PAL: 1fps-25fps; NTSC: 1fps-30fps
【Bit Rate Control】	Constant Bit rate or Variable Bit rates. Bit rate can be settled in Constant Bit rate. There are 6 levels of image quality in Variable Bit rate, 6 is the best but it is fixed in Constant Bit rate
【Audio】	Enable or disable the recording of video and audio per channel
【Snapshot】	Select the main stream/extensional stream audio and video resolution coding on and off.
【Snapshot Mode】	Trigger capture, capture picture when alarming
【Picture Size】	CIF capture
【Picture Quality】	6 levels
【Snapshot Rate】	set highest capture rate for single channel,1s/pc 2s/pc 3s/pc 4s/pc 5s/pc 6s/pc 7s/pc 8s/pc
【More 】	enter 【Configuration】

***Note**: Resolution and frame rate are vary depending on DVR model.*

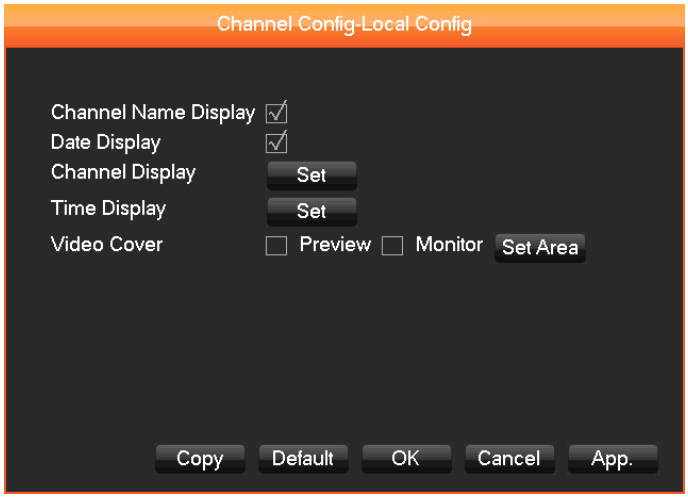


Figure 3.11 More Setting

Item	Description
【Channel Name 】	show channel name in screen or not
【Date Display】	show date or not
【Channel Display】	drag channel title, save instantly, after quitting by right button, position of channel title would not vary in displayer or monitor, and varied position can be shown recorder and WEB interface
【Time Display】	drag time title, save instantly, after quitting by right button, position of time title would not vary in displayer or monitor, and varied position can be shown recorder and WEB interface
【Video Cover】	4 zones preview and display protect, privacy zone can adjust area
【Preview】	set masking zone, masking zone shown in the screen when display, no masking zone in web and record
【Monitor】	set masking zone, masking zone shown in the screen when display or record
【Copy】	copy one channel"s configuration to other record plan

Record Plan

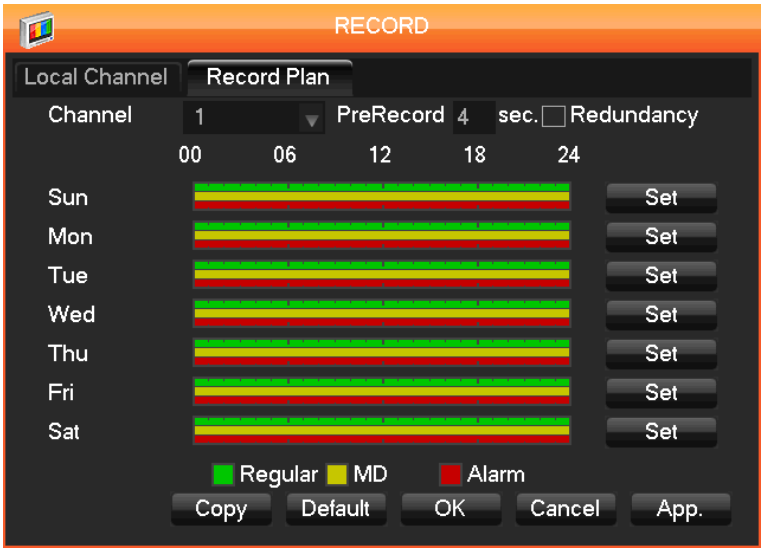


Figure 3.12 Record Plan

Item	Description
【Channel】	To select channel. Green, yellow and red refer to the normal, MD and alarm recording type. Modify it in【Set】
【Snapshot】	Form a complete set of screenshots function use regularly, used in the timing capture function of the corresponding channel number
【Set】	Set plan interface

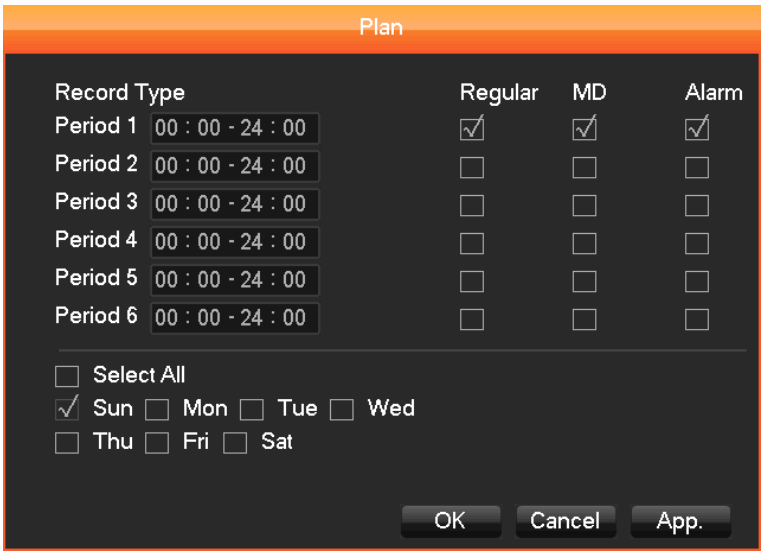


Figure 3.13 Recording Config

Item	Description
【Period】	recording time, 6 recording time zone can be set every day
【regular】	For normal record
【MD】	For Moving detection
【Alarm】	For alarm record

3.4.3. Network

Set the DVR network parameters in “Network” interface. The default IP address is 192.168.1.88

Base setting

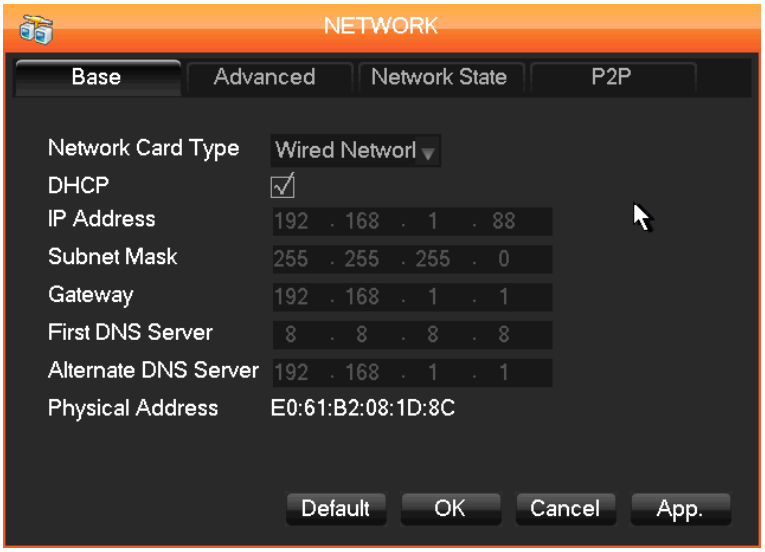


Figure 3.14 Base setting interface

Item	Description
【DHCP】	Enable the DVR to obtain an IP address automatically. If this is enabled, the DVR will reboot and search for a DHCP server, and then assign a dynamic IP address. The dynamic IP address will be displayed in the menu. Enter a static IP address if there is no DHCP service available. If you are using the advanced feature PPPoE,
【IP Address】	use(▲▼)or input numbers to modify IP, and then set【subnet mask】and【default
【First DNS Server】	DNS server IP
【Alternate DNS Server】	DNS alternate IP
【Physical Address】	physical address of current net port

Advanced

Figure 3.15 Advance interface

Item	Description
【PPPOE】	enable PPPOE, Input PPPOE username and password provided by ISP. Operation: Using this feature, the DVR will automatically obtain a public IP address from your ISP. You can then visit the web interface of the DVR by typing this IP into Internet Explorer.
【3G】	Insert the 3G card, and input use name, password etc
【DDNS】	enable the DVR to update a DDNS hostname, which run on a fixed IP address web client.Select DDNS type supports various DDNS currently, include CN99 DDNS, NO-IP DDNS, Private DDNS and Dyndns DDNS, Sysdns DDNS with many other compatible and enable the function; input the update server IP, port, DNS, username and password. Once setup, you can then login via the Web client by using this DNS in Internet Explorer.Private DDNS is available for use with a specific DDNS server and client software.Details refer to 6.1 DDNS function
【NTP】	On/off NTP. Network Time Protocol – allows the DVR to sync with SNTP time server automatically. **Host IP:** input IP of NTP **Server Port:** This SNTP support TCP only, the unique port is 123. **Update cycle**: time interval between 1 min and 65535 min. **Time zone**: London: GMT+0, Berlin: GMT +1, Cairo: GMT +2, Moscow: GMT +3, New Delhi: GMT +5, Bangkok: GMT +7, Hong Kong/Peking: GMT +8, Tokyo: GMT +9, Sydney: GMT +10, Hawaii standard time(HST): GMT-10, Alaska standard time(AKST): GMT-9, Pacific standard time (PST): GMT-8, Mountain standard time(MST): GMT-7,
【IP Filter】	DVR authority management, if you enable the white list, only the DVR in IP list is allowed to connect. This system supports a max of 64 IPs
【Multicast】	Multicast

【Max Connect】	range: 0-10, 0 indicates that no connections are allowed
【 Network Connection NUM】	0-32 should be proper. Need Check first then browse real time video on the network, the number of connections depending on network bandwidth, the greater the number, the greater the network load, the impact of video playback smooth
【Speedy online download】	0-8 should be proper.
【 Network Transmission QOS】	Fluency priority or Picture Quality priority or self-adaption according to the setting, the network automatically adjusts the stream.
【Speedy online download】	if enabled, speed is 1.5-2 times to normal speed
【HTTP】	default: 80
【TCP】	default: 8000, variable
【UDP】	default: 8001, variable
【UPnP】	Protocol on the router automatically open port mapping, make sure UPnP feature is enabled on the router
【Multicast】	tick “Multicast” and set a group in “Set”, IP should be limited as follow picture, port no limit
【Email】	Set the sender mailbox SMTP server IP address, port, username, password and sender"s mailbox, mail SSL Encryption.Email title support Chinese, English and Arabic numerals input, Max input 32 characters. Max support 3 Receive Addresses and SSL Encryption Mailbox.
【FTP】	Tick “FTP” and click “Set Set FTP server IP address, port and destination folder. System will create folders by IP, time and channel if there is no remote folder specified. FTP username and password Set a maximum file size, channel, time, type and etc. Set FTP file length. Upload the whole record if the file length is smaller than setting; leave out the exceed part if the file length is exceed the setting; 0 refers to uploading the entire record in any condition.
【Alarm Center】	reserved interface
【Push】	Push service and premium version of the Iphone client, the operating interface is mainly used to push the opening of the service function, the current mobile client associated with the hard disk video recorder, even in the case of mobile client did not open, a local of real-time alarm message will be sent to the Iphone for customer inquiries.

Network status: Display the current DHCP PPPoE and IP.

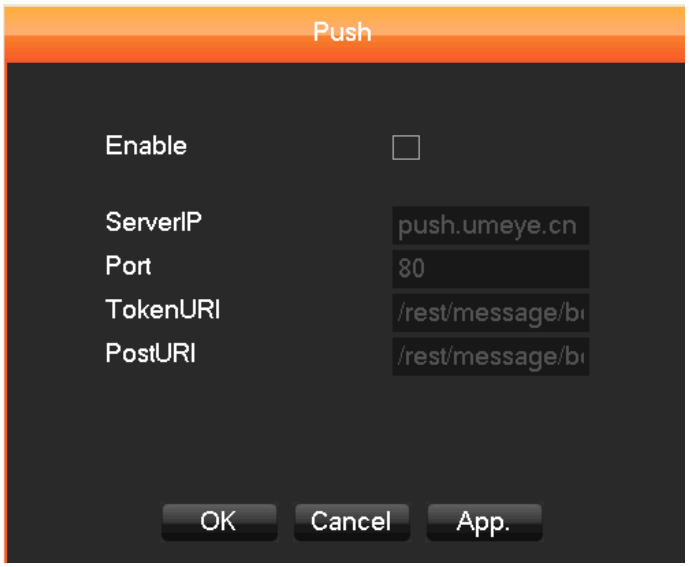


Figure 3.16 Push

P2P

Figure 3.17 Network

Item	Description
[Enable]	Enable P2P by clicking OPEN, and click OK to finish the device configuration
[Transfer Mode]	Fluency/Latency/None
[Device ID]	Each serial number Of devices are different, this cannot be modified
[Password]	This is generated by the system, you can change it
[Local Port]:	Default is 3000, can be modified
[State]	Check the connect status of the device and the server
Remark	When it shows Offline, click【Ping】 to check the connect status again

***Note**: If the status still shows offline, please check the if the network light is on, and the device is connected or not.*

3.4.4. Alarm Configuration

Local alarm

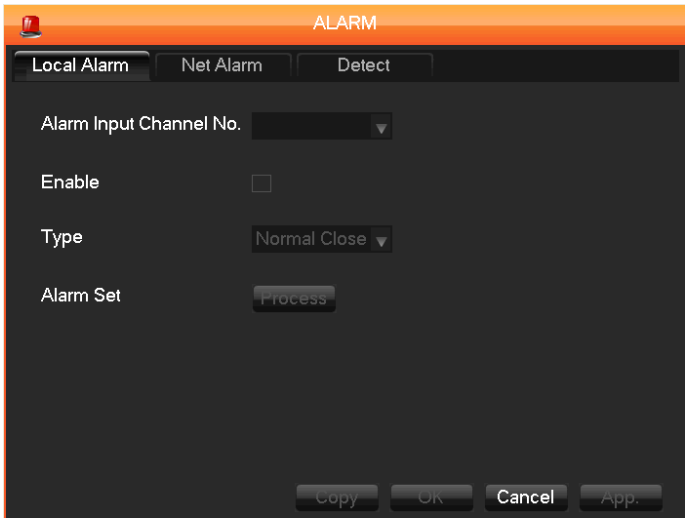


Figure 3.18 Local Alarm interface

Item	Description
【Alarm Input Channel No.】	select the alarm input channel
【Enable】	the specified alarm in /out
【Type】	select the alarm circuit type
【Process Mode】	enter alarm linkage interface

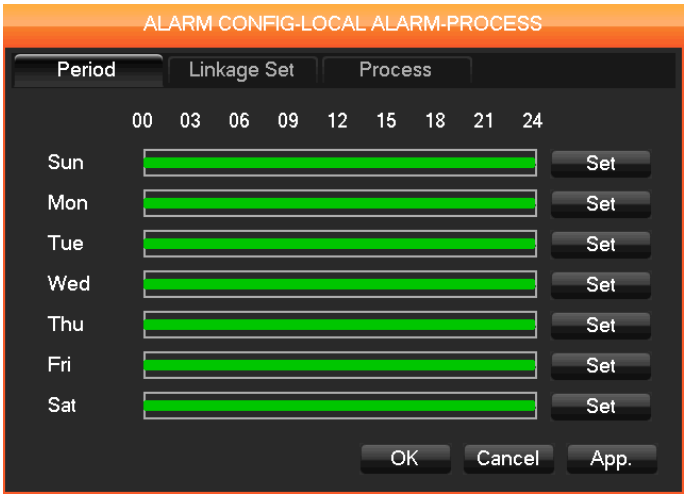


Figure 3.19 Alarm Period

Item	Description
【Period】	set alarm active period

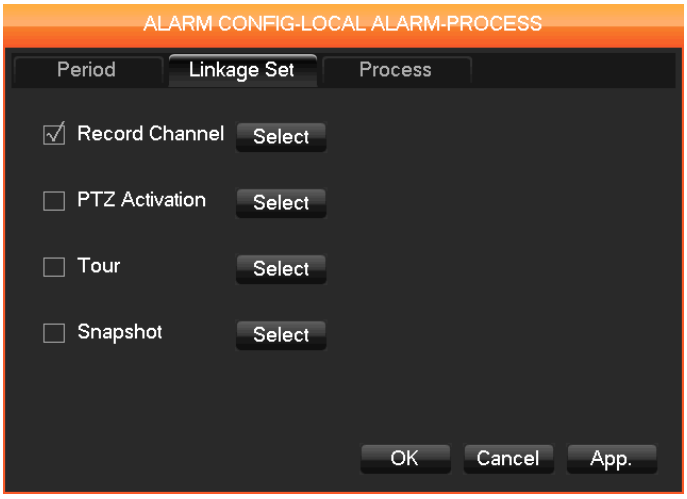


Figure 3.20 Linkage Set

【Linkage】 on/off 【Record Channel】, 【PTZ】, 【Tour】, 【Snapshot】 linkage and select channel.

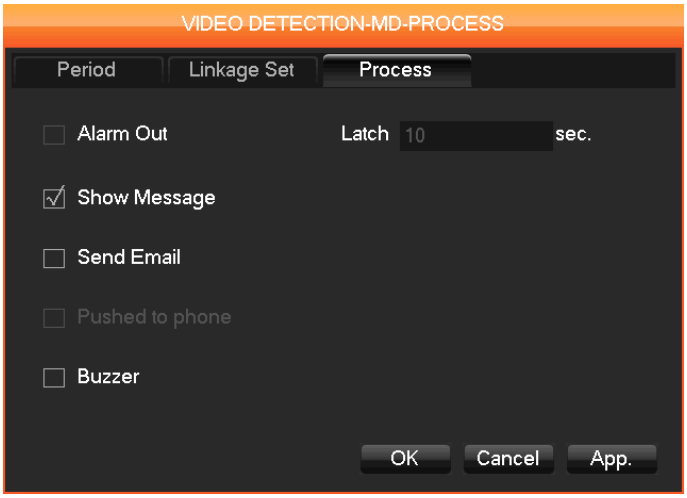


Figure 3.21 Local Alarm Process

【Abnormity】: enable or disable 【Alarm Out】, 【Show Message】, 【Send Email】 and 【Buzzing】

Time delay for alarm cancel is 10-300s

***Notice**: some models have no LOCAL ALARM Function; please refer to the Product Specification.*

Video detection

Item	Description
【motion detection】	motion detection and alarm
【zone setting】	22*18 =396 zones mask
【Sensibility】	6 grades
【management】	as same as local alarm
【preview】	alarm preview
【video lose】	detect video loses and alarm
【management】	as same as local alarm
【preview】	alarm preview

3.4.5. User Management

Note:

Group and user names can be from 1-6 characters in length. Valid characters include letter, numbers, and limited symbols: underline, subtraction sign, dot, you may not use a space as a leading or ending character.

There is no limit to the number of groups or users. By default there are two different group levels: admin and user.

User management determined upon two levels: the group and the user level.

Group and user names cannot be duplicated, and each user can only belong to one group.

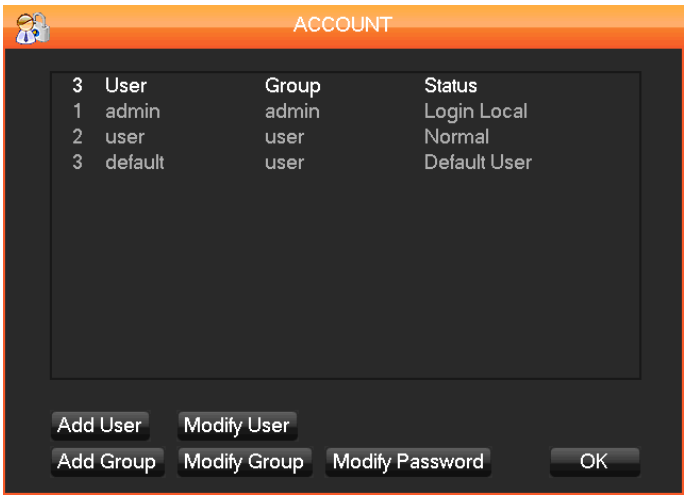


Figure 3.22 User management interface

Item	Description
【Add users】	add group member information and set authorities. Default users are: “admin”, “user” and hidden “default”, the password of first two username is 123456. “Admin” has advanced authorities; “user” only has surveillance and playback authority. Hidden default: operate in password-less login mode, cannot delete, DVR login in this name automatically if “no user login” user can revise limits of power then operate some without login. Enter【Add users】input username, password and select group and reusable options. Reusable allows the account to be used by multiple logins.
【Modify users】	modify existing group member information and authority
【Add group】	add group and set group authorities.Set a group and authorize 60 items including control panel, shut down, live view playback, record, record backup, PTZ control, account, system information, alarm in /out setting, system config, search log, log delete, upgrade, operation authority, etc.
【Modify group】	modify existing group information.
【Modify Password】	change password Select a username input the old password and new password twice. Click【Save】to confirm Password can be in 1-6 numbers, letters or symbol; blank in beginning and end is invalid.

3.4.6. Abnormity

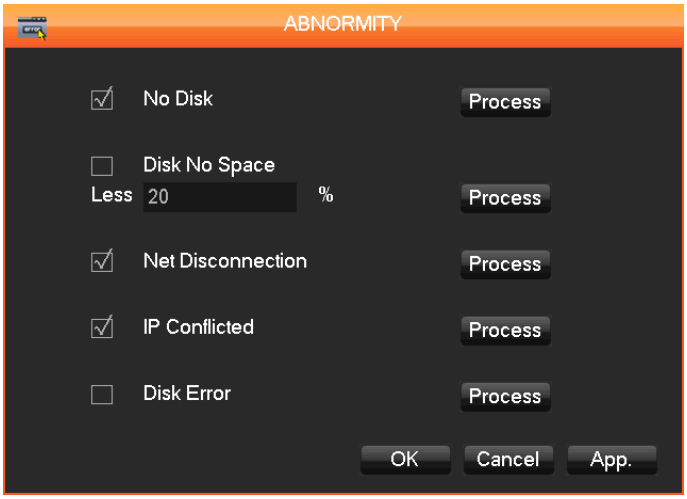


Figure 3.23 Abnormity interface

Item	Description
【No Disk】	alarm when HDD is not present or can not be detected
【Disk No Space】	alarm when hard disk capacity is lower than setting
【Network Failure】	alarm when network is not connected.
【IP Conflict】	alarm when IP address conflict
【Disk Error】	alarm when there is error in reading and writing hard disk.
【Process】	includes:【Alarm Output】, 【Display On Screen】 and 【Send Email】

3.5. Storage

3.5.1. HDD Management

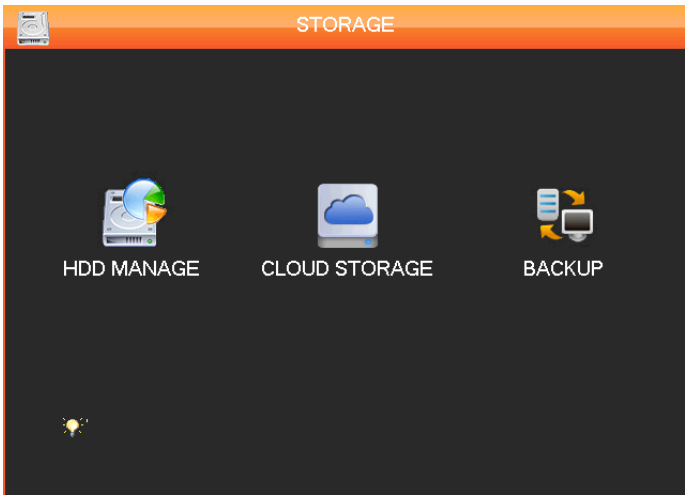


Figure 3.24 Maintain and manage local HDD

Base Configuration

"Base Config" as, shows DVR storage capacity, available space and working status.

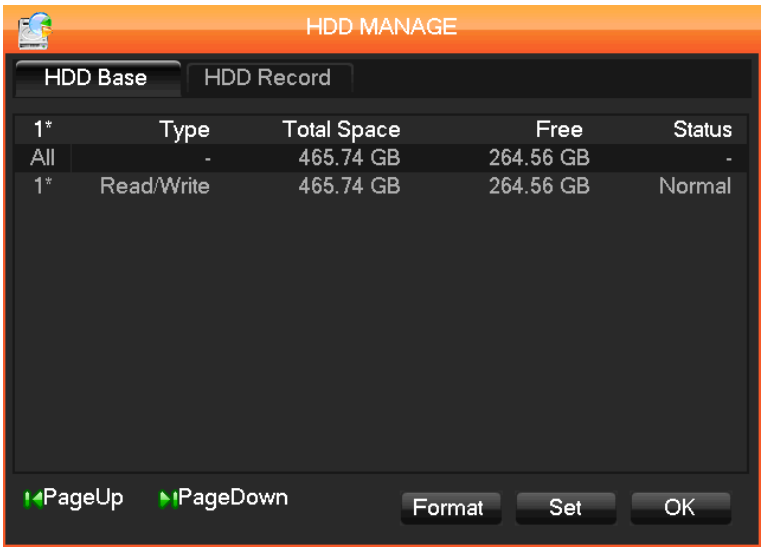


Figure 3.25 HDD Manage

【Format】it is possible to format an individual HDD.

【Set】to set HDD as read-write, read only or redundancy mode. In read only mode, video data cannot be covered.

Note: *Hard disk format operation result in the loss of video data*

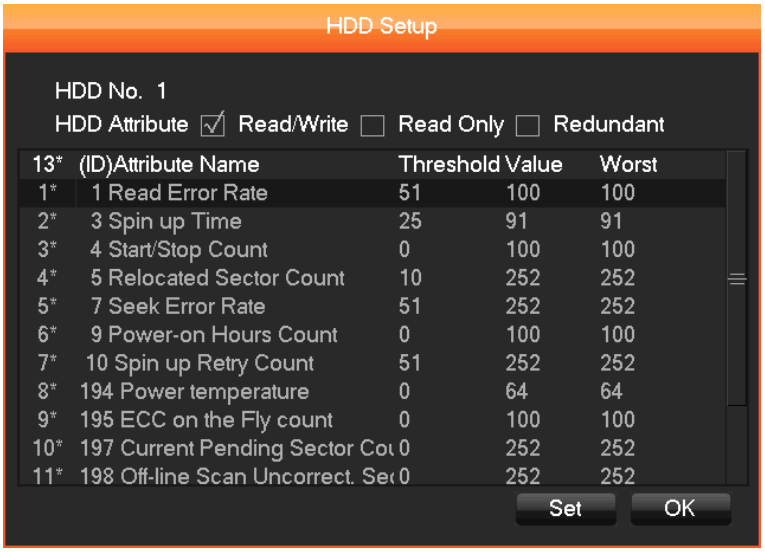


Figure 3.26 HDD S.M.A.R.T intelligent detection

Record

Record menu, shows start-stop time.

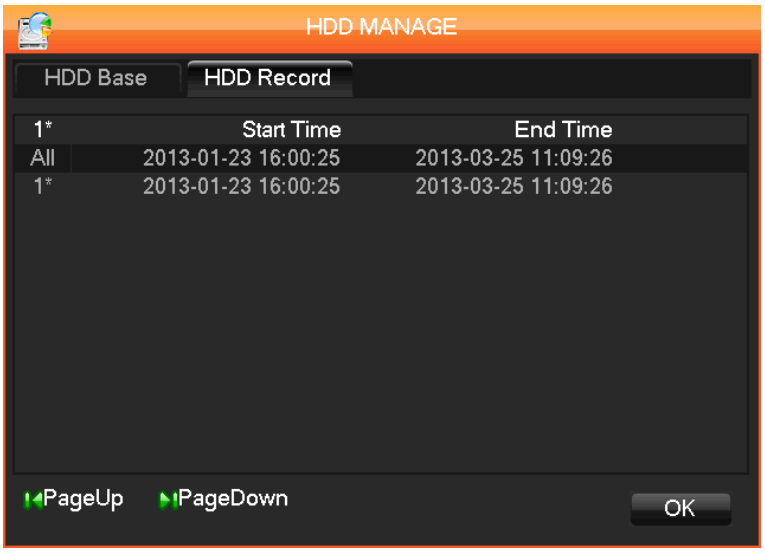


Figure 3.27 HDD Record

3.5.2. Cloud Storage

Device Configuration

Select channel and configuration your needs, here we take motion detect, Video Loss, Camera Masking as example to show you how to use cloud storage step by step.

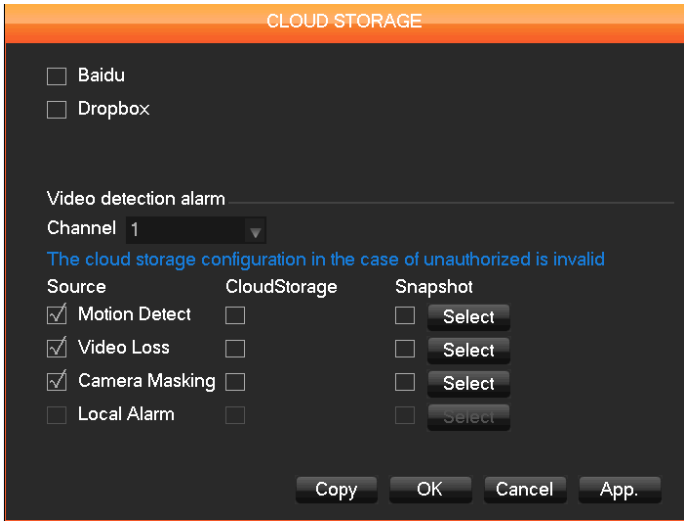


Figure 3.28 Configuration interface

Motion Detect

Upload the snapshot on cloud storage

Step 1: Enter Main Menu, and then click ALARM

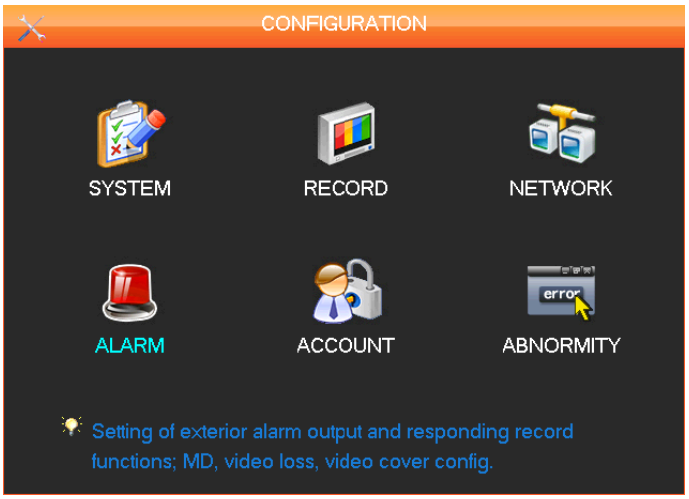


Figure 3.29 Configuration

Step 2: Enter ALARM, and then click Detect.

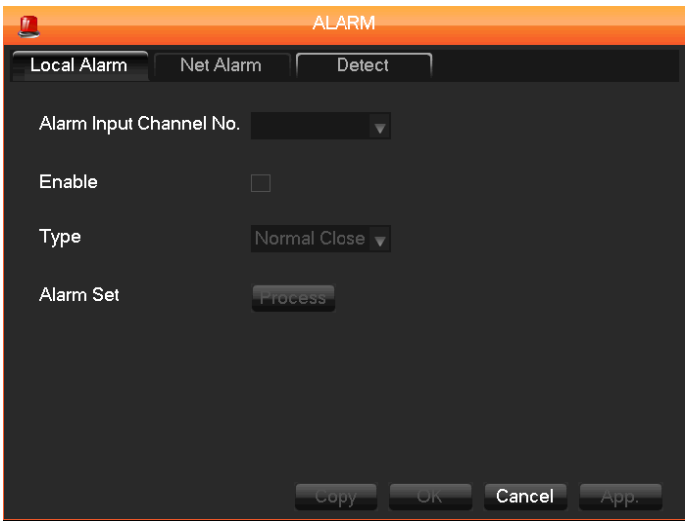


Figure 3.30 Alarm

Step 3: Enter Detect tab to choose channel, check Motion Detect checkbox, and then click Process button on the right.

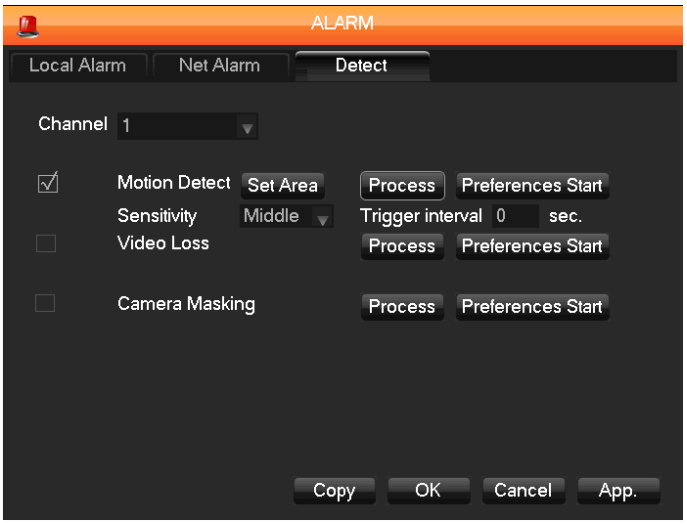


Figure 3.31 Detect

Step 4: Enter Process interface to set period, linkage set, process as below.

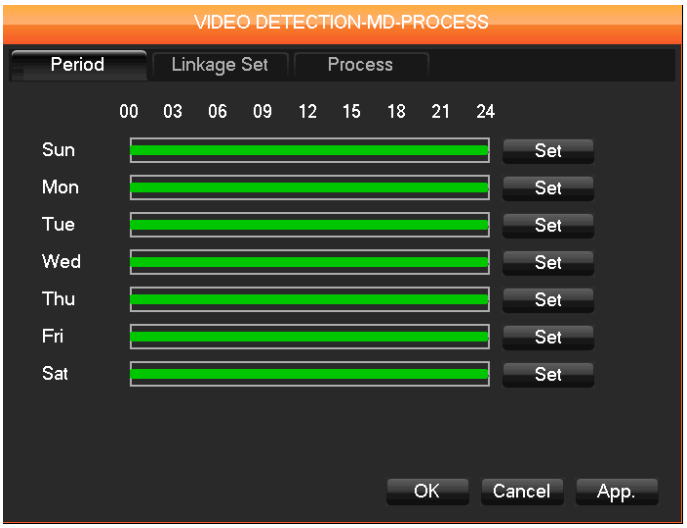


Figure 3.32 Period

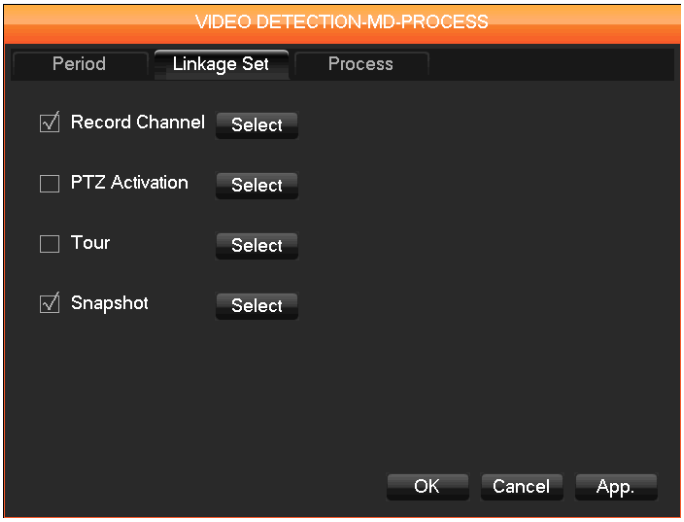


Figure 3.33 Linkage Set

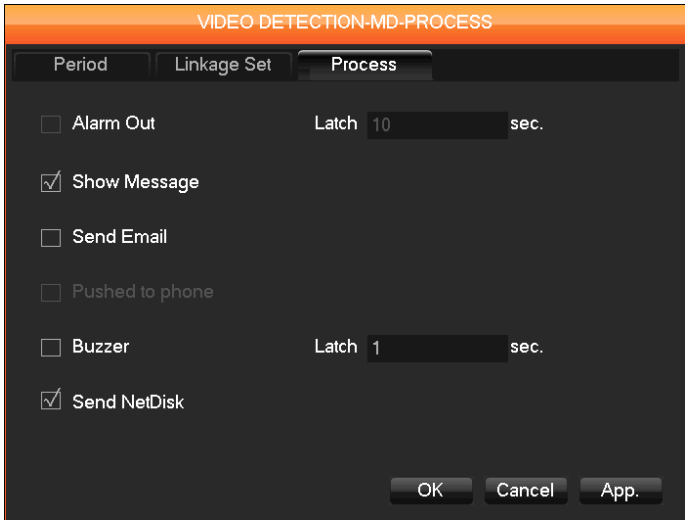


Figure 3.34 Process

Video loss/ Camera masking

Upload new and snapshot on cloud storage Follow the step from 1 to 4 as motion detect to finish the configuration.

Connect Drop box

Step 1: select Drop box, Click Bind

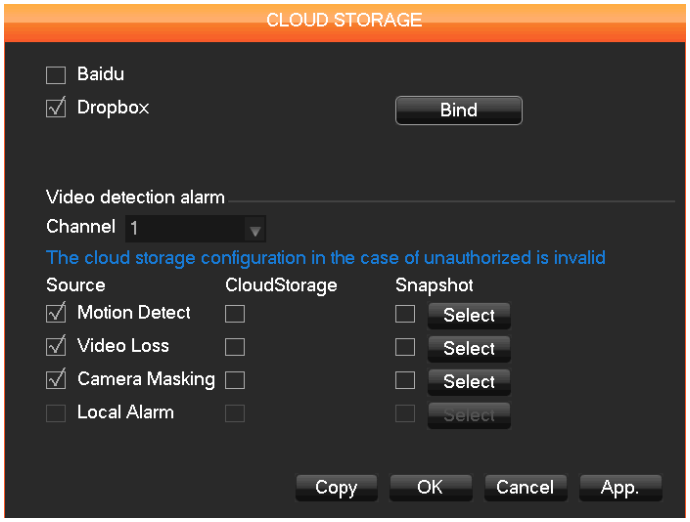


Figure 3.35 Cloud storage

Step 2: open the linking via you browser (scan QR code with your Ipad , phone.)

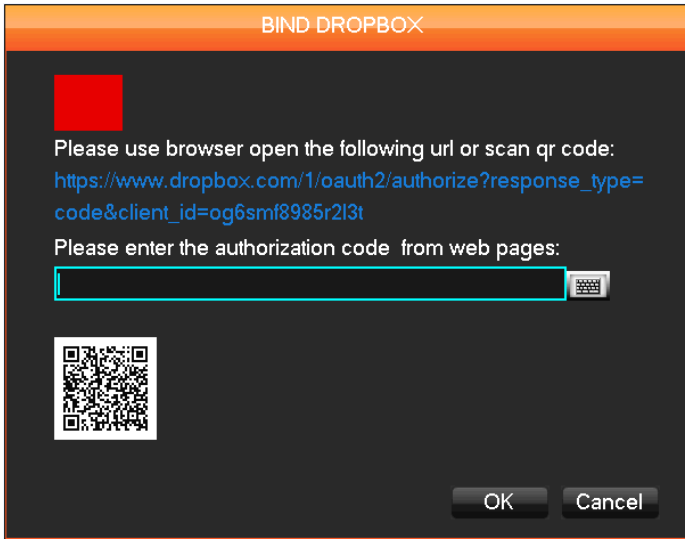


Figure 3.36 Bind Drop box

Step 3: The linking will lead to the “dropbox” website. And require to login your Account and password. (You must have account of “dropbox”, if you haven't, please enter www.dropbox.com to apply for an account)

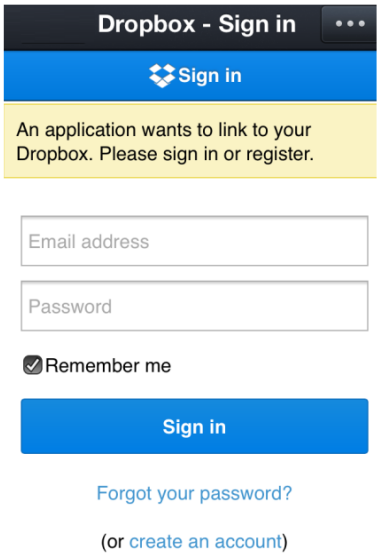


Figure 3.37 Drop box Sign in

Step 4: Authorized the specific DVR to visit your drop box, and get the authorization code.

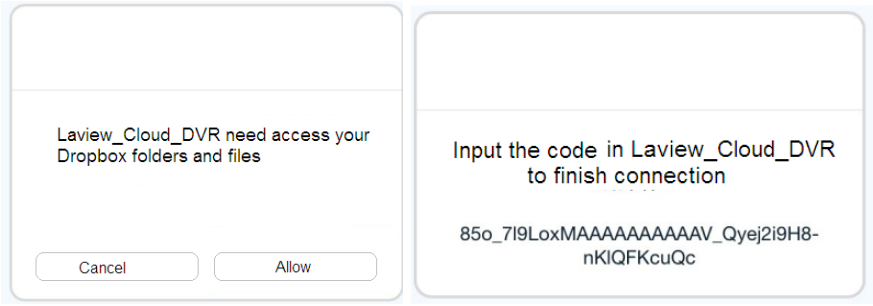


Figure 3.38 Drop box authorization

Step 5: Enter the authorization code into your DVR from web pages. And click OK

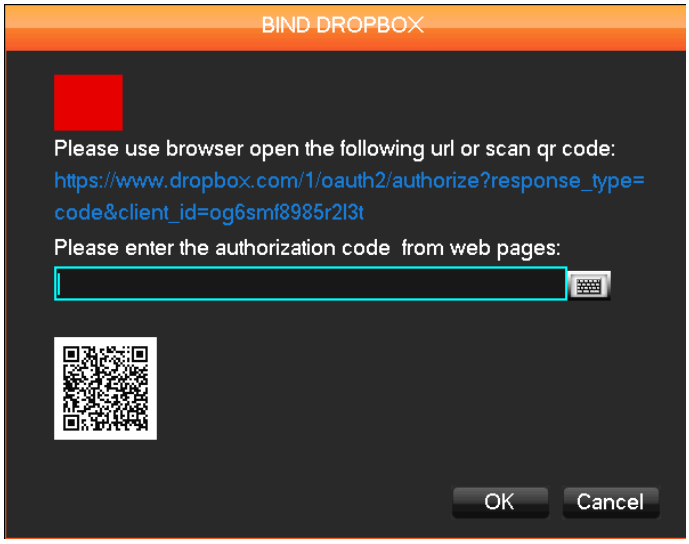


Figure 3.39 Enter authorization code

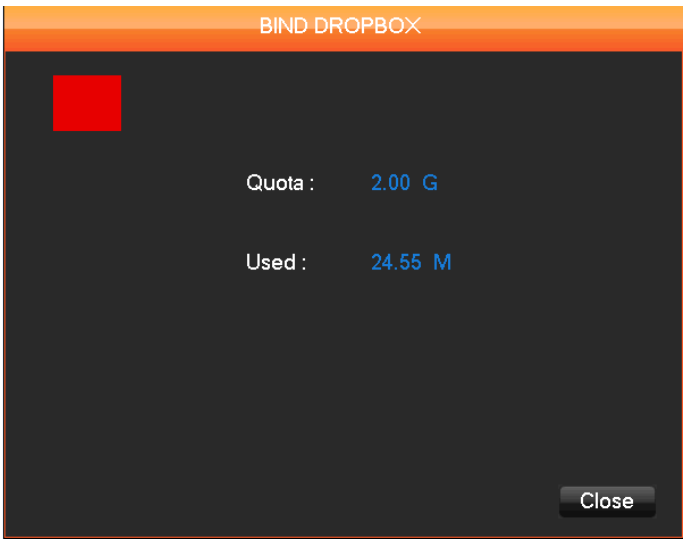


Figure 3.40 Drop box capacity

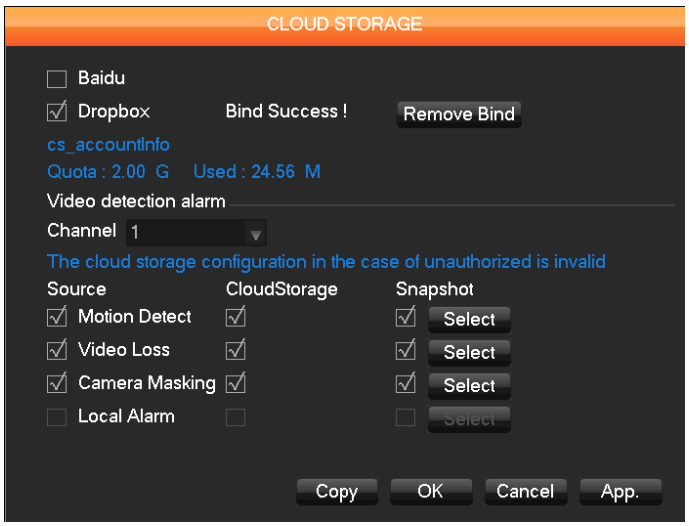


Figure 3.41 Bind Success

Step 6: After finish your DVR trigger motion detection, video loss, Camera masking settings.

It will upload the information to your drop box automatically. Then you can login drop box and get the information you want.(www.dropbox.com)

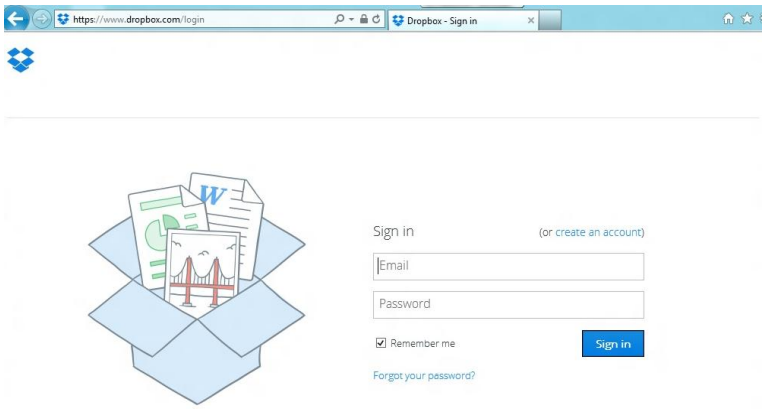


Figure 3.42 Login drop box

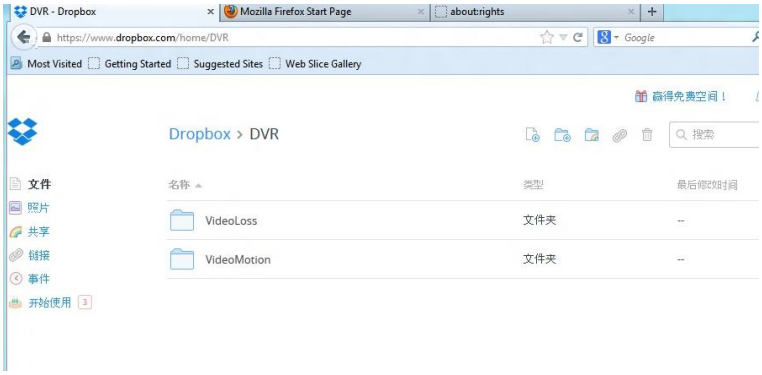


Figure 3.43 Check information

3.5.3. Record Backup

Connect an External USB device with the USB port to backup in the “Record Backup” menu

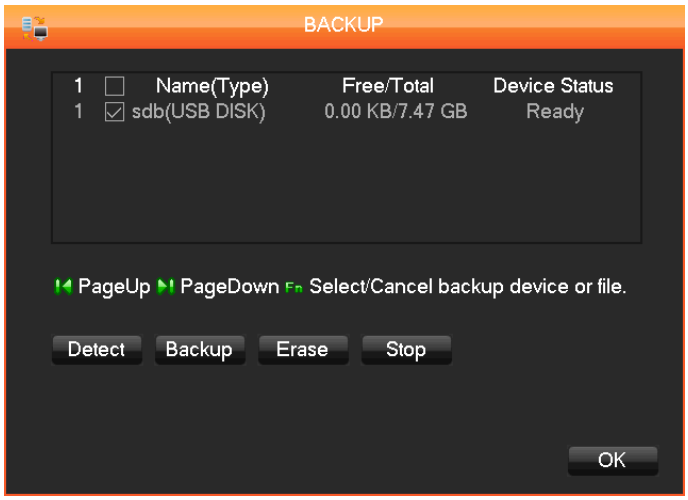


Figure 3.44 Backup

【Detect】: Identify external USB device and display the device information.

【Backup】: tick the external device and click 【Backup】 to enter the backup menu

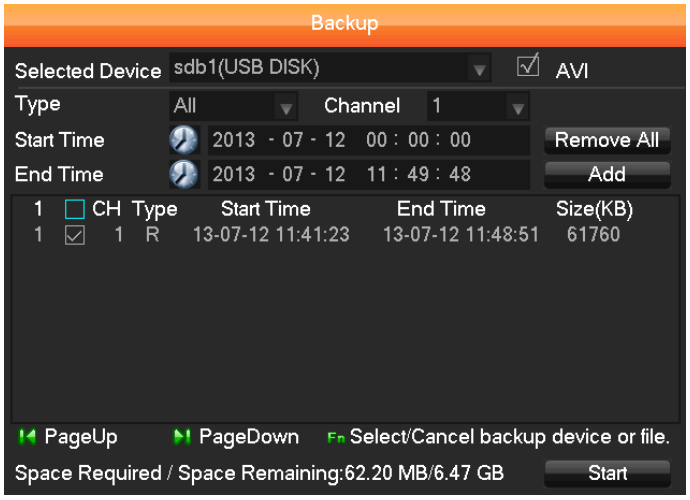


Figure 3.45 Backup

Back

Select the record start-stop time and click 【Add】 to add in list; duplicate it by inputting the start-stop time again; click【Delete】 to clear the files list. Tick the record you want and click 【Start】 to backup and display time remaining. 【Delete】 delete all data in USB backup device

Remark: USB backup carry player automatically

***Note**: this operation probably cause permanent data loss*

3.6. Output

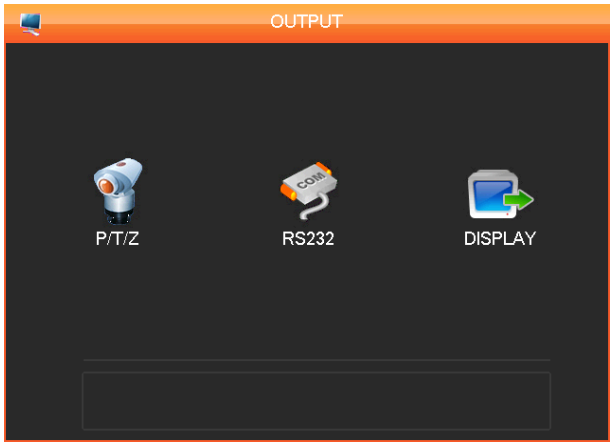


Figure 3.46 Output

3.6.1. Display

Display Menu

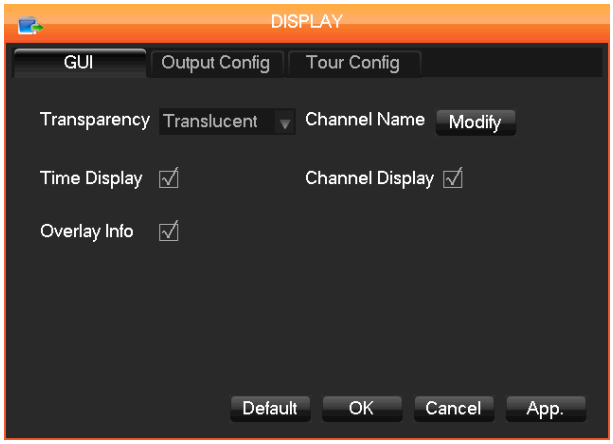


Figure 3.47 GUI

Item	Description
【Transparency】	total 4 grades
【Channel Name】	to modify channel name, available options are symbols, letters, and numbers
【Time Display】	to choose whether time displays on screen
【Channel Display】	to choose whether channel name displays on screen
【Over Info】	to choose whether overlaying information displays on screen

***Note**: 1) Channel name up to 48 half-width characters*

2) 16 characters is suitable, otherwise some problems happen when multi-screen

Output configuration

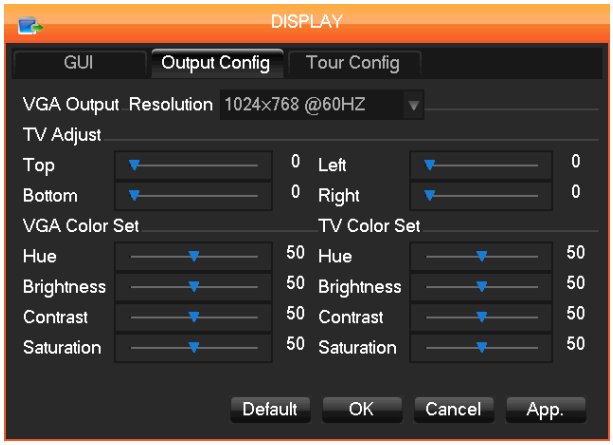


Figure 3.48 Output config

Item	Description
【VGA Output】	to select VGA resolution and refresh rate, default is 1024×768@60Hz.
【TV Adjust】	to adjust TV output area. Modify the image to the right size for monitor
【VGA/TV Color Set】	to adjust displayer"s hue, brightness, contrast, saturation
【TV Color Set】	to adjust monitor or TV"s brightness, contrast, saturation

Tour configuration

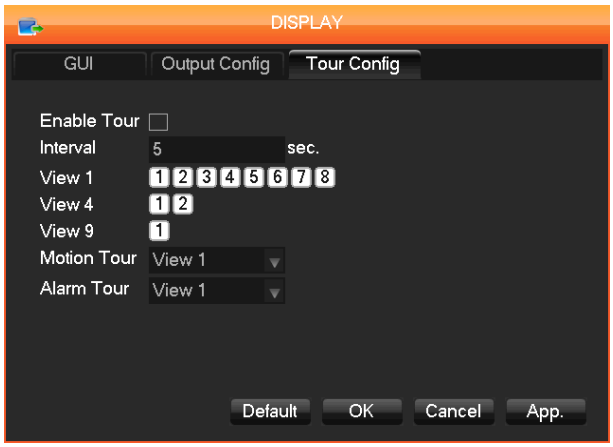


Figure 3.49 Tour configuration

Item	Description
【Motion Tour Type】	to set the motion detection tour mode
【Alarm Tour Type】	to set the alarm tour mode

Setting tour mode and interval between rotation , the time is within 5-120s,the mode include single screen, four-, eight-, nine-, sixteen-screen.

Note: *Shortcut Setting: click the button at the top right corner of the monitoring picture or press the Shift Key to switch, you can control the tour.*

3.7. Maintain

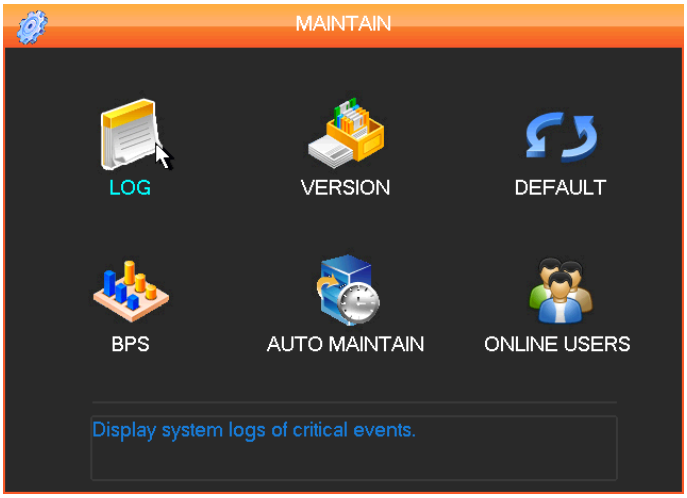


Figure 3.50 Maintain

3.7.1. Log

【LOG】 display system log information.

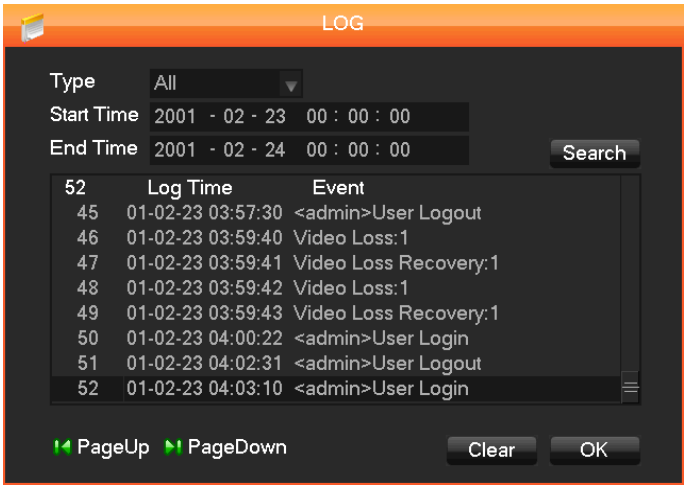


Figure 3.51 Log

Select the type and time press the Find, the system will display the log in tabular form, you can also click the backup button to export the log backup to your computer.

Log type: system operation; configuration; data management; alarm event; recording; user management; log delete; document operation. Select the type and time to filter the log list.

Click “delete” to delete all logs.

3.7.2. Version

【Version】: Show features, software version etc.

【upgrade】: Connect a USB flash device which contains the upgrade firmware and click “Upgrade”.

Note: *upgrade may cause the startup failure. Please operate under professional direction.*

3.7.3. Default

【default】 restore(items are selectable)

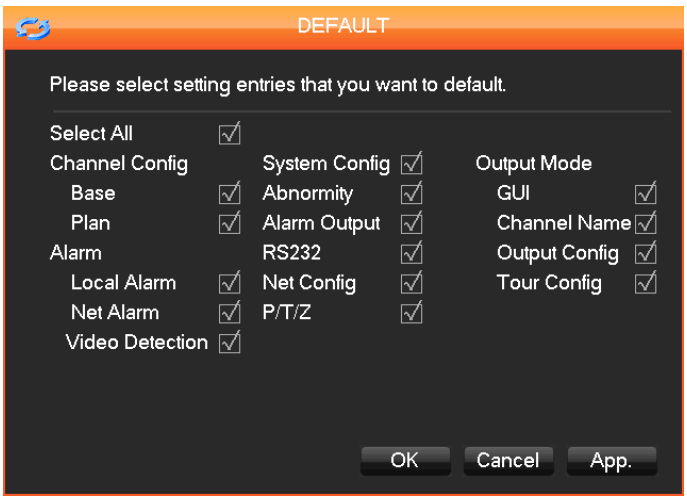


Figure 3.52 Default

Note*: Menu transparency, language, time format, video format, IP, user ID, etc are not restored.*

3.7.4. BPS

【BPS】shows video‟s size, data rate of each channel by wave form.

Note*: Estimated value just for reference*

3.7.5. Auto Maintain

【Auto Maintain】set auto maintenance items.

3.7.6. On-line User

【On-line Users】check the current online user‟s status.

3.8. Shutdown

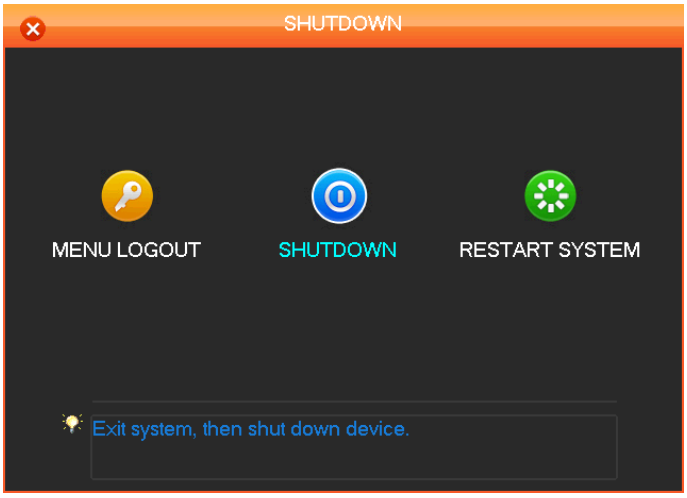


Figure 3.53 Shutdown

Item	Description
【Menu Logout】	log out of the current user account
【Shutdown】	shutdown the DVR
【Restart System】	reboot the DVR

Chapter 4 Web & Client

4.1. WEB Operation

4.1.1. Network Connection

H Series: Check network connection by LCD on front panel, “ “ refers connection error, P Series: Check B-Lamp on front panel, light indicates connection

Set IP, subnet mask and gateway for computer and DVR. Please assign the same segment IP address without router, need to set the appropriate subnet mask and gateway with router.

The detail of DVR network configuration please see【Configuration】→【Network Setting】

Ensure the IP is correct and check whether the DVR is on the network by using the Windows command “ping”.

4.1.2. Active x Control Setup & Login / Log Out

User cans remote access to DVR by Internet Explorer, assuming you have a correct network configuration.

The following interface wills popup when you access the IP address in Internet Explorer.

Figure 4.1Login

Install ActiveX: Right click and choose install. If installation is blocked by Windows, please add the IP as a trusted site or lower your Internet Explorer security settings to allow this.

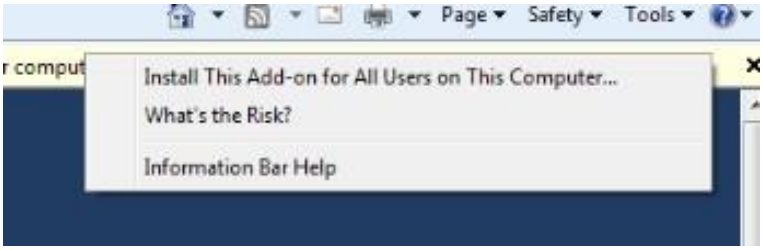


Figure 4.2 Install

The following interface will popup when you input your username, password and click “Login”. Interface like Diagram 4-3 Web Interface when user login successfully. Click “Exit” to quit.

Figure 4.3Login

If the Win 7 system prompts control is not registered, click Close button in the above page, and click close the Active X filtering, and then click Install button in the bottom of the page.

It needs resetting if you can login the interface, but camera 01 and the other 15 channels are hidden. Click 【Tool】-【Compatibility View Setting】-【Check】(display all outlets (E) in compatibility View), then click Close to finish it.

4.1.3. WEB Operation Interface

Table 4.1 Web operation Interface

Index	Name	Description
1	Channel	Channel selection
2	Function	Local playback: playback local record Open all: play live views in surveillance window
3	Surveillance window	Change window layout
4	Image color & other saturation	Image color: modify brightness, contrast and saturation Other: set capture path, record download path and reboot
5	PTZ control	PTZ Control Menu
6	Menu	System config, record search, alarm setting, exit, etc.

4.1.4. Live View

Into the WEB interface, select the focus window in live window, the focus window has a light blue border.
From the left channel column select channel

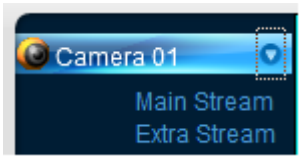


Figure 4.4Live View

Click on 2 area in upper right corner can choose open / close the channel of the main stream or secondary stream, shows the current DVR's IP and rate information, as shown in.

Figure 4.5Web Menu toolbar

Lower left corner shows the current video channel name.

Upper right corner shows the current video time information.

Click “  “(Lower left corner of the display window)to switch between single screen and multi-screen.

Lower right corner of the display window is function keys, as, refer to area zoom, Multi-screen switch, local record, capture and mute/unmute audio.

 Area zoom: Video images can be enlarged;

 Multi-screen switch: switch from single screen to multi-screen and vice versa;

 Local record: save and record video to a local HDD while in a live view. Set recording path in configuration;

 Capture: capture of the present channel, set the path in “other”;

 Sound: on/off sound.

 Off video: off the focus window video.

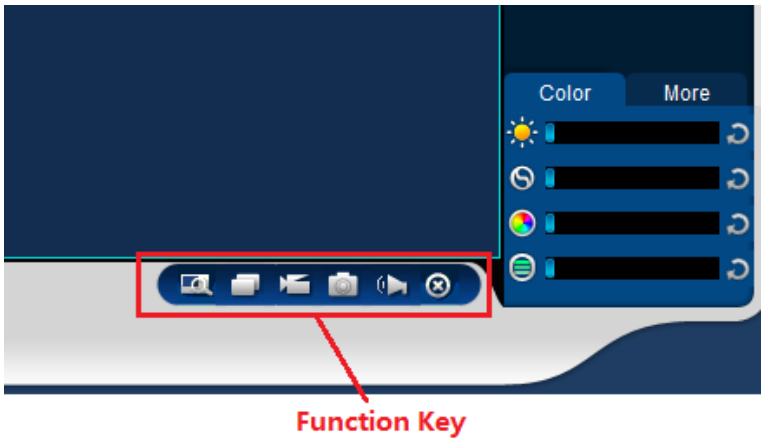


Figure 4.6Function Key

4.1.5. PTZ CONTROL

Set protocol(see【Setting】→【PTZ Config】)

Control PTZ direction, step size, zoom, IRIS, preset, tour, pattern, border scan, light, wiper, auto pan, etc.

Step size controls PTZ direction and speed, e.g. step size 8 is moved faster than step size 1.

Eight direction rotations: up, down, right, left, upleft, upright, lower left, lower right.

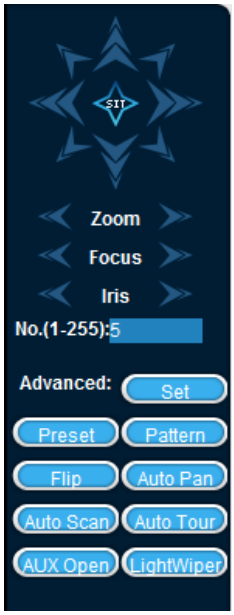


Figure 4.7PTZ config

Border scan

Operation: select the camera line scan of the left/right margin by direction button, and click the Settings button in the left /right margin position to determine the left border.

Preset

Operation: modify preset position by direction button and inputting a preset number, then click “Add” to save.

Tour

Operation: select “Tour”; Point between the first cruise line cruise input box value. And input numbers in “Path” and “preset”. Click 【Add Preset】to adds one preset in the cruise path, and repeat to add additional presets. Click 【Clear Preset】to delete a preset, repeat to delete more.

Pattern

Operation: Click “Pattern” in order to record an automated pattern. Then, go back to the PTZ controls in order to modify the zoom, focus and IRIS, etc. Stop recording in “Pattern” setting to save the pattern.

AUX

On/off one of AUX

Wiper

On/off wiper under protocol

4.1.6. CONFIGURATION

Access DVR local configuration menu by click “System Setting”, the further details please refer【Local operation guide】.

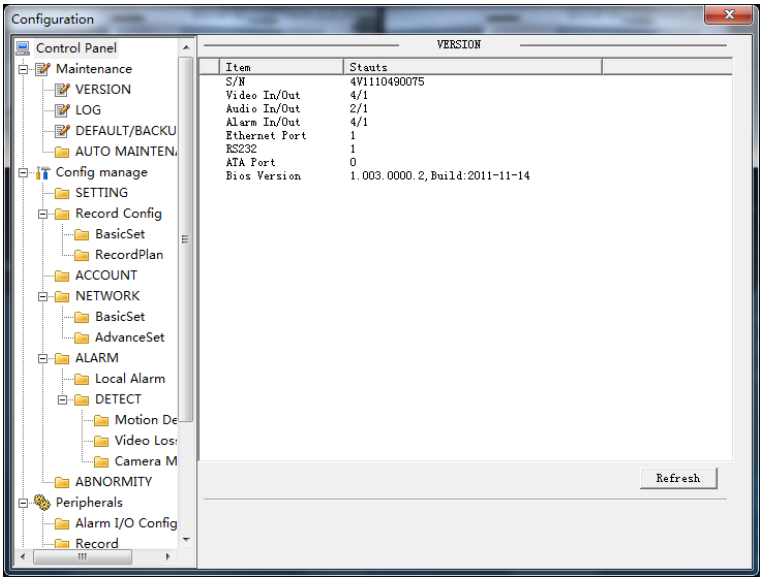


Figure 4.8Configuration

4.1.7. Search Record

Click “Search record” to open the search interface , can search and operate record, alarm, motion, local record

Search record

By selecting the record type, start and end times, and click the check button, get a list of files on the DVR. Select the appropriate file and download can be played

Play

Double click a search result to play in video window. Control the playing video by the control keys on the bottom. At this point, the bottom of the video window will display the video control buttons, video playback can be controlled.

Figure 4.9Play

Download: select a searched video to download to local. The download speed and percentage are displayed on the bottom of the screen.

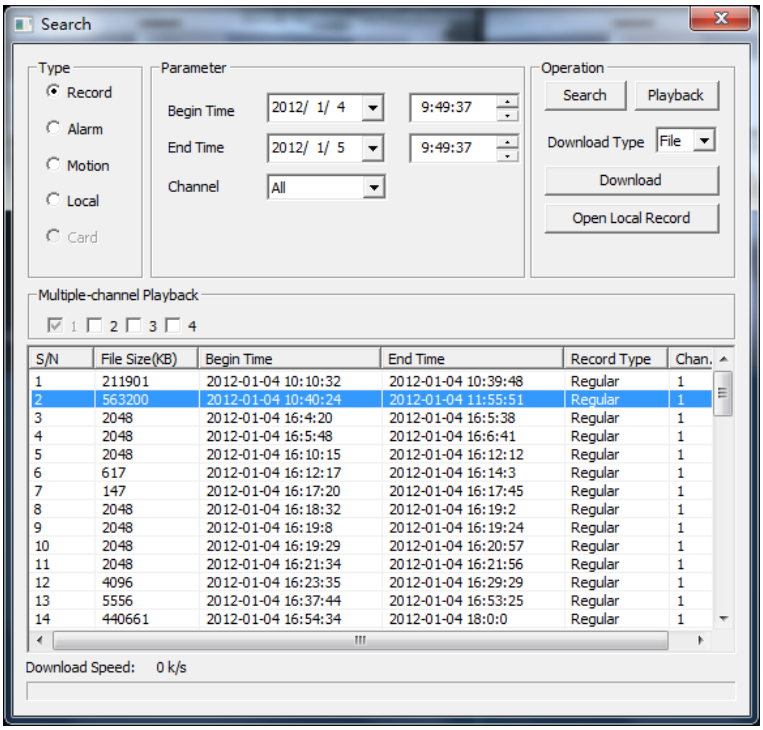


Figure 4.10 Download

4.1.8. Alarm Configuration

Click the 【Alarm】 to enter the alarm setup menu, user set up and operate the alarm mode, as.

Choose type of alarm on menu, monitor video loss, motion detection, and disk full, disk error, video mask, external alarm.

Click 【Video Pop-up】, open the video loss, motion detection, hard disk full, hard disk failure, video block, video encoder alarm pop-up linkage.

Click 【prompt】, open the prompts: when an alarm occurs in real-time will pop-up alarm window menu.

Click 【Sound Pop-up】, you can choose alarm tone pre-recorded on the local hard drive when an alarm occurs, tone file in WAV format.

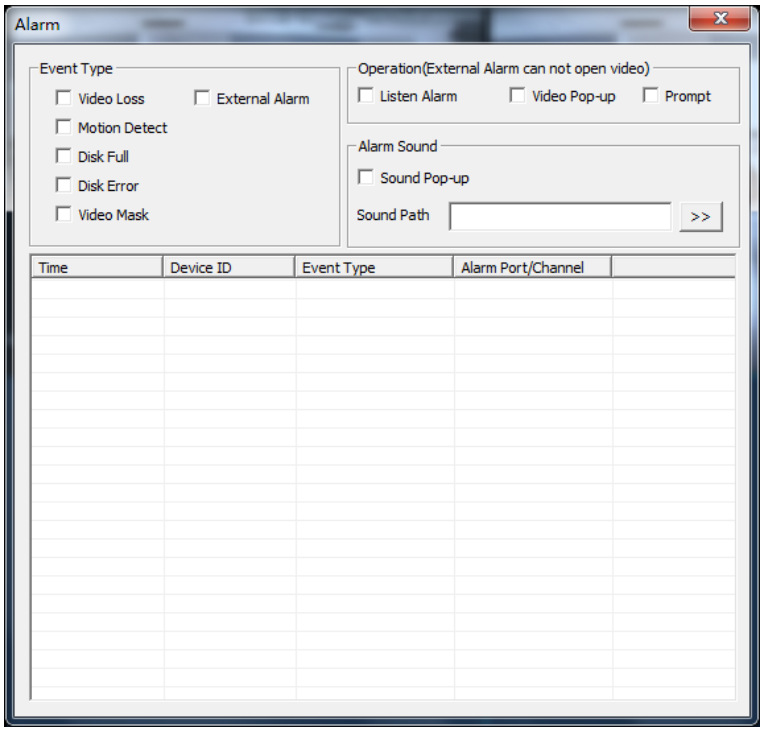


Figure 4.11 Alarm configuration

4.1.9. About

Please refer to WEB controls related version information.

4.2. Client Operation

Please refer to IMS 200 Description

Chapter 5 Function

5.1. DDNS Function

5.1.1. Summary

Dynamic DNS is a kind of system which point internet domain name to variable IP. According to the rule of internet domain name, domain name must associate with the fixed IP address. Dynamic DNS provide a fixed Name server for the dynamic domain, and then guide the domain search to the IP address of dynamic user through Name server, which can make the outside user connect to the dynamic user"s URL.

5.1.2. FNT DDNS

FNT DDNS is a professional dynamic domain name analysis server embedded in our company"s DVR.Can be directly on the device to register above, specific steps are as follows:【MAIN MENU】->【CONFIGURATION】->【NETWORK】->【Advanced】->【DDNS】,choice FNT DDNS.

Figure 5.1

1. DDNSType choice FNT DDNS, and Enable.

2. Type usename, and Domain Name=use name+.faceaip.net.

3. Type Password.

4. Click【Register】, if the domain name has not been registered, will pop up registration, if the domain name being used, you will be prompted to register failure.

Best advice: amend the basic configuration of DNS server to the router's DNS servers.

5. After successful registration, click 【OK】,complete preservation.

5.1.3. NO-IP(www.no-ip.com)

Register

Register new username at no-ip, click 【Create Account】.

Create domain name, click 【Add a Host】.

Embedded DVR Setting

Open 【Main Menu】→【Management】→【Network】→【Advanced】→【DDNS】→【Enable】

Table 5.1 Explain:

Name	Configuration
DDNS Type	NO-IP DDNS
Server IP	dynupdate.no-ip.com
Port	80
Domain Name	xxx.xxx.org
User Name	xxx
Password	xxxxxx

5.1.4. DYNDNS DDNS(www.dyndns.com)

Register

To login at dyndns, register an account.

Click on the confirmation link, login the account, click 【Add Host Services】 at [My Services], set your own realm name, and then operate according to the procedure.

Configuration of the Embedded DVR

Open 【Main Menu】→【Management】→【Network】→【Advanced】→【DDNS】→【Enable】

Table 5.2 Explain:

Name	Configuration
DDNS Type	Dyndns DDNS
Server IP	Members.dyndns.org
Port	80
Domain Name	xxx.xxx.com
User Name	xxx
Password	xxxxxx

5.1.5. Test and Verify DDNS

After setting the Embedded DVR, wait for a few minutes, analysis records will update. Click Operation in the Menu of computer, input “cmd”, click “OK” to open a window. As the shows.

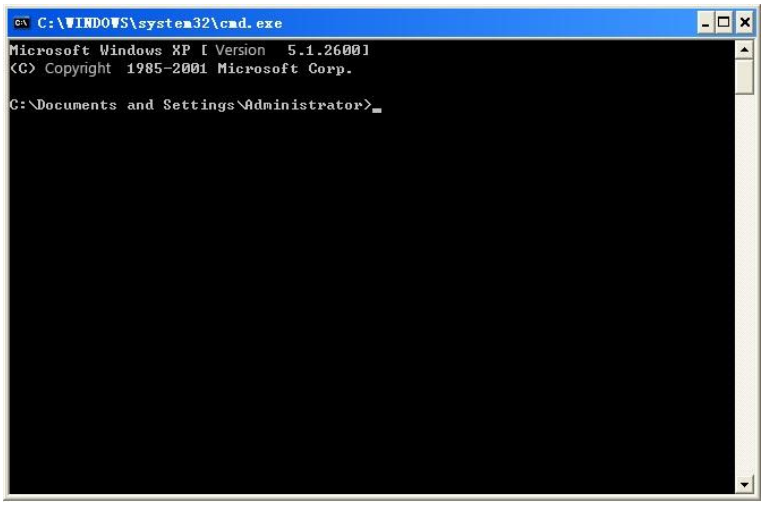


Figure 5.2

Input “ping+ Domain name” then presses Enter, as the shows.

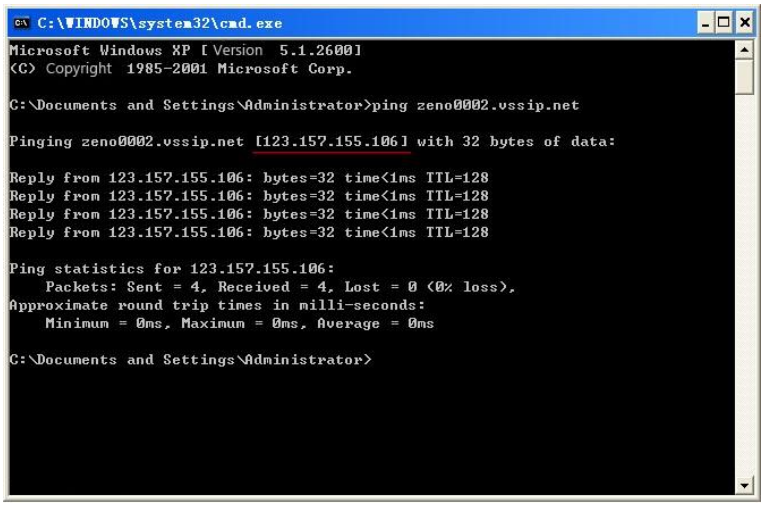


Figure 5.3

The computer will analyses the domain name confabulated in DVR, and return to the current IP, as the picture shows underlined in red. When the IP correspond to the embedded DVR"s IP in Public internet, it means the DDNS is setting right. If they are not, please check the network connection of embedded DVR and DDNS information.

5.2. Port Mapping

Port mapping is mapping a port of outside web host"s IP address to a machine inside web, and provide the service. When user connects to the port of the IP, the server will automatically map the request to the corresponding machine inside LAN.

With the function of port mapping, we can map many ports of a machine"s IP address to different machines" different ports inside web. The port mapping can also have other special agent functions, like POP, SMTP, TELNET, etc.
Theoretically, it can provide more than sixty thousand ports.

For example, if we want to map a web server which has an IP address of 192.168.111.10, we just need to input the IP address and TCP port 80 into the port mapping chart of the router.

There are two ways to map the port: UPnP function automatically map and modify the router"s port mapping chart by manual.

5.2.1. UPnP FUNCTION

In order to get connection to the Embedded DVR through Public network, we need to set the Router to cross the NAT of Embedded DVR. UPnP can make the NAT cross automatically by the UPnP agreement of Embedded DVR, and don"t have to set the Router.

 *Note: to realize the UPnP Function, there must be Router support and enable the UPnP Function.*

The first step

Connect the Router to the network, get to the Menu of the Router, set the Router, and enable the UPnP Function.

Routers made by different manufacturers may have some difference, please refer to the specification carefully before setting the Router.

The second step

Connect the Embedded DVR to the Router; the configuration will automatically gain the IP address or static IP. After setting up the IP, click the Advanced Config. And get to the XXX, ports and multicast etc. choose to open the Enable at the 【UPnP port mapping】

The third step

Enter into the Router management interface; detect the port if there is already a Port mapping. If there is, it shows UPnP setting"s finished.

The forth step

Input the IP address in IE, and add port number of the Embedded DVR, for example: 155.157.12.227:81. If you want to enter by the Client Software, use the TCP port offered by the outer net.

 *Note: if there are a few embedded DVRs need to set the UPnP function, in order to avoid IP conflict, set the ports of embedded DVR into different ports numbers. Otherwise, it will choose the embedded DVR port set preceded as the first choice.*

5.2.2. MAMUAL PORT MAPPING

The first step

Connect the Embedded DVR to the Router, set the static IP.

The second step

Log in Router, enter into the configuration menu of Router, and set the menu. Then get to port, set the IP distributed by the Embedded DVR, and set the rule of port mapping, add HTTP and TCP port into mapping list.

Default access ports of Embedded DVR include HTTP port 80 and TCP port 8000, if the ports are occupied by the other devices, please modify the default port of the Embedded DVR into other vacant ports.

The third step

Input the public net IP address in the IE, and add the port number of the Embedded DVR you want to access after the IP, for example: http://155.157.12.227:81. If you want to access by Client Software, you can use the outer net TCP port directly.

 *Notice: for detail configuration setting, please refer to the user manual of Router.*

5.3. NTP Function

Enable NTP function; make the time synchronization with both the DVR and GPS clock server, to ensure the accuracy of device time.

5.3.1. Internet Configuration

Get to the 【CONFIGURATION】→【NETWORK】, choose 【Advanced】, and then choose 【NTP】to set.

After the device can access the Internet, NTP server can use the standard NTP server as the time. For example, the server of China"s national research center (IP address: 210.72.145.44). Input the IP address and domain name of relative server at NTP setting.

To activate NTP, click to choose "Enable".

The interval of changing time is from 1 to 65535 minutes.

5.3.2. Internet Configuration

If DVR work under the intranet, user can set up a privately-owned server as clock source.NTP address in DVR configuration fill in privately-owned NTP address can work.

Privately-owned NTP server can adopt standard NTP products and accurate time PC system. Please refer to below instruction when adopt PC system as a NTP server.

NTP Server Set Up under Windows

"Start" menu → "Run" (or Win+R), input "regedit" to get into REGEDIT.

Build a new key assignment of WORD Value under:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\Parameters registry sub key;

Change the value to 1, and save.

Restart the computer.

NTP server set up under Linux system

Due to the particularity of Linux system, for detail way to erect the NTP server, please refer to every editions of the manual.

5.4. Voice Intercom

5.4.1. Summarize

Embedded DVR Bidirectional Talk: user can talk to remote client software or Web via DVR audio input and output ports; user can listen voice from Client Software and WEB via DVR audio output ports.

Two types of bidirectional talk ---- sharing and standalone ----for different models, exact info please refer to specifications.

5.4.2. Configuration

Local configuration

Connect a microphone to the MIC input port, connect loudspeaker to the audio output port.

If no standalone MIC input port, please connect microphone to the number 1 audio input port.

 *Note: local output needs active audio output device.*

Remote PC Configuration

Connect microphone and loudspeaker to computer.

USE

Enable bidirectional talk in IMS software or WEB.

5.5. HDD Redundancy

HDD redundancy function can backup the recording file, user can retrieve files by HDD redundancy if single HDD damaged, by which improve the system"s safety.

Hard disk redundancy function is through the designated channel data double backup in HDD, so DVR need a standalone HDD for redundancy function.

HDD redundancy configuration

Open main menu enter into the storage configuration, choose one HDD as the redundancy HDD, click setting.

Redundancy HDD must be an independent HDD, user can set several HDDs as a redundancy HDD group. Once a HDD is assigned as redundancy HDD, the recording data can be saved in both normal HDD and redundancy HDD.

Data on redundancy HDD should be automatically cycle coverage, cycle period depends on the recording data and redundant HDD"s capacity.

Note: Make sure 2pcs HDD at least in DVR, one for read and write, another for redundancy.

Channel redundancy configuration

User can choose part channels or all channels to set redundancy backup. Please get to 【Configuration】→【Record】, choose redundancy channel, check mark 【Redundancy】.

Note: the data in channel turn off redundancy only is recorded in normal reading and writing HDD if the redundancy is not enabled.

Retrieve HDD redundancy

User can retrieve backup recording data from redundancy HDD when RW HDD damage or data lost. Firstly, shut down DVR and remove damaged HDD, then restart DVR;

Secondly, Get into 【Main menu】→【Storage】, set redundancy HDD as a reading and writing HDD, and then it can be searched.

5.6. HDD S.M.A.R.T

S.M.A.R.T: "Self-Monitoring, Analysis and Reporting Technology"

S.M.A.R.T HDD can analysis head, disc, motor, circuit operation, history and default security values via monitor instruction in HDD and surveillance software in host. Alarm will be sent to user automatically when the value is outside the scope of the security situation.

Detection parameters of Seagate HDD for example are divided into seven: ID detection code, Attribute Description, Threshold, Attribute Value, Worst, Date, and Status.

1 ID detection code

ID detection code is not the only; manufacturer can use different ID code or increase or decrease its quantity according to the detected parameter"s quantity.

For example: the ID detection code of WEASTERN Digital"s product is "04", parameter is Start/Stop Count, but the parameter of same code in Fujitsu"s product is "Number of times the spindle motor is activated".

2 Attribute Descriptions

Attribute Description: name of detection item. Manufacturer can increase or decrease. As ATA standard update constantly, sometimes different models in same brand maybe different ,but must ensure major test items specified in S.M.A.R.T .(although different manufacturers have specific naming convention ,the essence of monitoring is the same.)

1 Read Error Rate

2 Spin up Time

4 Start/Stop Count

5 Relocated Sector Count

7 Seek Error Rate

9 Power-on Hours Count

10 Spin up Retry Count

194 Power temperatures

195 ECC on the Fly count

197 Current Pending Sector Count

198 Disconnection beyond repair

199 CRC cyclic redundancy check

200 Write Error Count

Note: Different manufacturers and different models have different attribute description, user has no need to know exact meaning, attribute detection values enough for them.

3 Thresholds

It is specified by manufacturer calculated through a specific formula. If there is a attribute value lower than the threshold, which means HDD become unreliable and data stored is very easy to lose. Composition and size of reliable attribute values is different for different HDD. It should be noted that, ATA standard only provides some SMART parameters; it does not provide a specific value. "Threshold" value is determined by manufacturers based on products‟ features. Thus, results tested by manufacturer provided detection software is very different from testing software under Windows (such as AIDA32)

4 Attribute Value

Attribute value is the maximum normal value; the general range is from 1 to 253. Typically, the maximum attribute value is 100 (for IBM, Quantum, and Fujitsu) or 253 (for Samsung). Of course, there are some exceptions, for example, some models produced by Western Digital have two different attribute values, and property value is set 200 when initial production, but after then it is changed into 100.

5 Worst

Worst value is the largest non-normal value in HDD‟s running. It is a value calculates for HDD‟s cumulative running, it is constantly refreshed according to running cycle, and very closed to the threshold. Whether the HDD is normal by S.M.A.R.T analysis is based on the comparison with threshold. The maximum value appear when new HDD start to use, which would continue to decrease with

the everyday use or error happen. Consequently, larger attribute values mean better quality and higher reliability; smaller values mean more possibility of failure increases.

6 Dates

Actual values of HDD"s detection items, many items are cumulative values.

7 Statuses

It is current statues of HDD"s every attribute after analyzing and comparing above attribute values by S.M.A.R.T, also is important information to judge HDD healthy or not.

There are three statuses: Normal, Alarm and Error----which is closely related with Pre-failure/advisory BIT.

Chapter 6 Appendix

6.1. TERMS

Dual-stream

Dual-stream: one high bit rate stream for the local HD store, QCIF/CIF/2CIF/DCIF/4CIF coding, other low bit rate stream for network transmission, such as QCIF / CIF coding,

I Frame

I frame: intra frame image, remove redundant information to compress the transmittal data, also called key frames.

B Frame

B frame: According to time redundant of the source image sequence previously encoded frame and account the source image after the encoded frame to compress transmittal data, also known as bi-directional prediction frame.

P Frame

P-frame: according to image frame lower than the previous „time redundant to compress transmittal data, also called predicted frames.

Wide Dynamic

Bright parts and dark parts in particular can be seen very clearly at the same time. Wide dynamic range is a ratio between the brightest luminance signal value and the darkest value.

S. M. A. R. T

SMART (Self Monitoring, Analysis and Reporting Technology): now widely used in hard disk data security technology, monitoring system analysis Motor, circuit, HDD and disk head when HDD working, warn when abnormality, sometimes will automatically slow down and back up data.

CVBS

Composite Video Broadcast Signal, consists of luminance and color signal from the composite baseband signal.

BNC

Coaxial cable connector, composite video signals or audio signals, commonly use 75 ohm connectors. BNC welding and should pay attention to weld strength and remove burrs, or the signal wire and shield"s contact will lead to a substantial attenuation of signal strength.

6.2. HDD Capacity Calculation

6.2.1. Reference of HDD Capacity Calculation

The first time install DVR, please check if the HDD has installed.

The capacity of the HDD

There is no limitation of capacity of single HDD to DVR, please choose the HDD according to the Vedios" saving time.

The choose of the Capacity

Computational formula of HDD Capacity:

Whole HDD Capacity = number of the channels × time in need (hour) × spent of HDD Capacity per hour (MB/hour)

Similarly we can have the formula of recording time:

$$\text{Recording}time\ (hour) = \frac{Total HDD Capacity\ (\text{MB})}{Capacity Occupation per Hour\ (\text{MB}/hr) \times Amount of Channel}$$

Note: 1GB=1000MB, not 1GiB=1024MiB, so HDD capacity shown in Base Configuration under HDD Management less than real marked.

File size per hour (CBR).

Bit Rate	File	Bit Rate	File	Bit Rate	File
96k	42M	320k	140M	896k	393M
128k	56M	384k	168M	1.00M	450M
160k	70M	448k	196M	1.25M	562M
192k	84M	512k	225M	1.50M	675M
224k	98M	640k	281M	1.75M	787M
256k	112M	768k	337M	2.00M	900M

Table 6.1

File size is more unpredictable when VBR style, please refer to the real size of recording file.

6.2.2. Hard Disk Problem

Use Detection Tool provided by the HDD manufacturer to detect the Function of HDD to solve data problem.

We recommend Seagate and Western Digital.

How to detect Seagate HDD

a) Get into www.seagate.com, Click Support & Downloads →choose Sea Tools, download tool, as

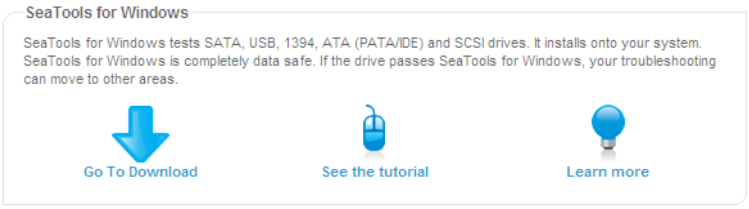


Figure 6.1

b) Double-click to install downloaded file 

, click installed file to detect the HDD information on PC. 

c) Choose the HDD for detection (other manufacturer"s hard disk suitable too).

How to detect WDC HDD

a) Get into www.wdc.com , choose WD support / download / SATA&SAS / WD Caviar / GP, download software as

Figure 6.2

b) Click Icon to hard disk detection after downloading 

.

c) Double click hard desk in device list, as:

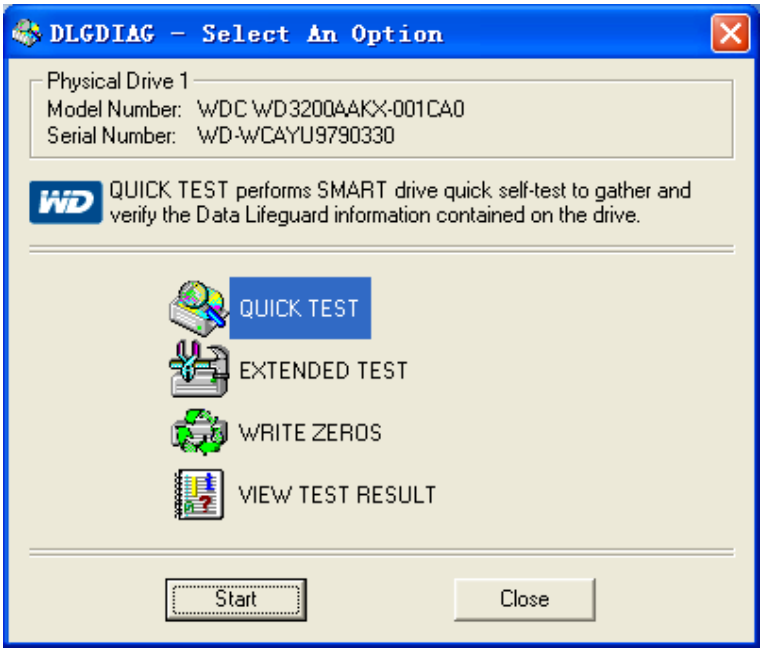


Figure 6.3

6.3. Common Faults

DVR startup failure or continuously reboot

Possible reasons:

1. The system has been damaged from a bad DVR update.
2. There is a problem with the DVR main board error, please contact supplier.
3. There is an HDD error. Replace faulty HDD.

Remote control does not work

Possible reasons:

1. Check for batteries in remote control , especially Positive and Negative;
2. Check for batteries‟ power;
3. Check if remote receiver is obscured;
4. Check if DVR address corresponds to the remote control address.

DVR cannot control PTZ

Possible reasons:

1. RS-485 cable connection error, A, B ports are inversely connected;
2. PTZ decoder, protocol, baud rate, address are incorrect;

3. Parallel connect a 120Ω resistance to resolve signal reflex caused by too many PTZs on the line.

4. The RS-485 port on DVR is defective

Blurred screen in preview mode

Possible reasons:

Please make sure your cameras match your video format selected in the General menu. E.g. camera is NTSC standard but the DVR is PAL standard, the preview would be blurred.

Blurred screen in playback mode or failure to playback records

Possible reasons:

1. Procedure error, reboot the DVR

2. HDD error, test or change out the HDD

3. DVR hardware failure, contact your local supplier

Can not connect DVR through network

Possible reasons:

1. Check the physical network connection is correct.

2. Check the DVR network configuration parameters.

3. Check whether IP conflicts exist in network.

Download recording can not be played

Possible reasons:

- Player installation error.
- The USB or HDD device has an error.
- Do not install graphic software later than DX8.1.

Internet Explore Crash

Possible reasons:

Close IE explore, enter into the tool bar.

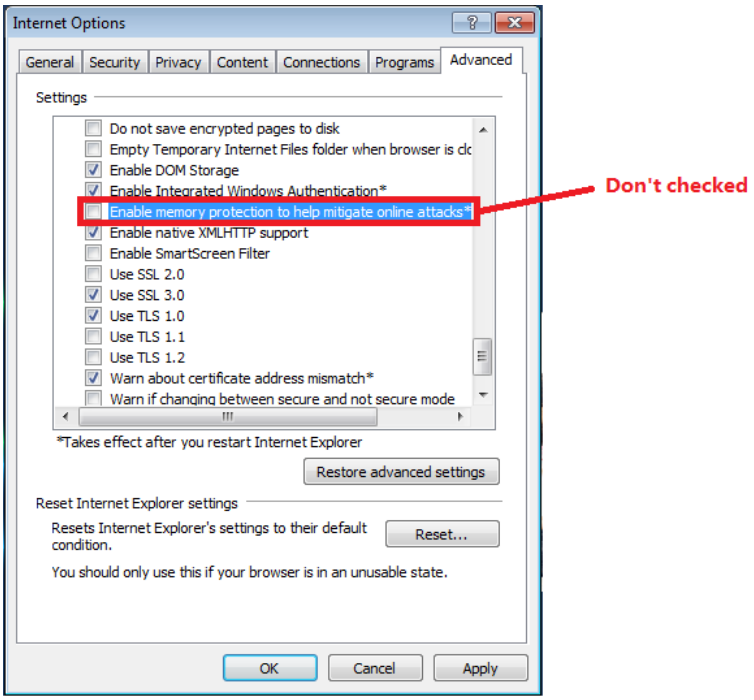

Internet Options
General
Security
Privacy
Content
Connections
Programs
Advanced
Settings
Do not save encrypted pages to disk
Empty Temporary Internet Files folder when browser is cl
Enable DOM Storage
Enable Integrated Windows Authentication*
Enable memory protection to help mitigate online attacks*
Enable native XMLHTTP support
Enable SmartScreen Filter
Use SSL 2.0
Use SSL 3.0
Use TLS 1.0
Use TLS 1.1
Use TLS 1.2
Warn about certificate address mismatch*
Warn if changing between secure and not secure mode
*Takes effect after you restart Internet Explorer
Restore advanced settings
Reset Internet Explorer settings
Resets Internet Explorer's settings to their default condition.
Reset...
You should only use this if your browser is in an unusable state.
OK
Cancel
Apply
Don't checked

Figure 6.4