



Software Operating Manual

AHD 5 in 1 Series

2017 FEB V1.0

Table of Contents

A.	Safety Precautions	1
B.	DVR system operation.....	2
	1. Front panel setting	2
	2. Mouse.....	2
C.	DVR system operation.....	2
	1. ON.....	2
	2. OFF.....	2
	3. Login.....	3
	4. Preview Image	4
	5. Quick start menu	6
	5.1 Main menu	6
	5.1.1 Record function	7
	5.1.1.1 Time setting	7
	5.1.1.2 Backup playback records.....	8
	5.1.1.3 Backup files.....	13
	5.1.2 Alarm function.....	15
	5.1.2.1 Movement Detect.....	15
	5.1.2.2 Channel blind	17
	5.1.2.3 Video Loss.....	18
	5.1.2.4 Alarm Input.....	19
	5.1.2.5 Alarm output (some DVR not support this function).....	21
	5.1.2.6 Abnormality	21
	5.1.3 System setting.....	22
	5.1.3.1 Regular Setting	22
	5.1.3.2 Resolution and FPS setting	23
	5.1.3.3 Network setting.....	24
	5.1.3.4 Network service	25
	5.1.3.5 Display setting.....	32
	5.1.3.6 PTZ setting.....	34
	5.1.3.7 Protocol port.....	34
	5.1.3.8 Tour	35
	5.1.3.9 Channel management	36
	5.1.4 Management tools	51

5.1.4.1	Hard disk management.....	52
5.1.4.2	Account management	52
5.1.4.3	Online user	53
5.1.4.4	Output adjustment.....	53
5.1.4.5	Automatic maintain	54
5.1.4.6	Restore	54
5.1.4.7	Update.....	54
5.1.4.8	Device info	55
5.1.4.9	Input/output	55
5.1.5	System information	56
5.1.5.1	Hard disk information	56
5.1.5.2	Bit statistics.....	57
5.1.5.3	Information content.....	57
5.1.5.4	System Version	58
5.1.6	Logout	58
5.2	Recording mode.....	58
5.3	Playback Backup.....	59
5.4	PTZ setting.....	59
5.5	High speed PTZ.....	59
5.6	Alarm output.....	59
5.7	Image color	60
5.8	Output adjustment.....	60
5.9	Logout.....	61
D.	NET Surveillance WEB IE remote operation.....	62

A. Safety Precautions

Dear Vacron user,

Appreciate for you purchase Vacron products. Please contact your local distributor if you meet any question or need for any assistance. We will offer you complete and in time service via local distributor. However, we still have rights to upgrade software and hardware without any kind notice beforehand. Please read this manual carefully prior to use of this product.

Precautions for use

- Do not put heavy object on the device. This device use with hard disk, so check the device cooling fan regularly and ensure it working properly, do not use device if cooling system is not working.
- Do not let any solid or liquid to penetrate inside the device.
- Clean the circuit board, connector, chassis fan, and device cover with dust clean tools regularly. Turn off and unplug the power supply before do the cleaning.
- Do not try to disassemble, repair or replace components of the device. Please contact distributor or manufacturer immediately if you meet any problem that cause device stop working. Once we receive the report, We will solve the problem as soon as possible
- Remove battery for remote controller if you not use remote controller for a long time.
- Avoid static electricity and others burn host, the equipment best connects with ground wire if device installed the outdoor cameras which connected with alarm I/O or other accessories.
- This DVR has remote live view watch and online video playback function. However, only the ISP company has the responsibly for network disconnect during video watching, whatever ISP company offer user free or chargeable network service. Usually, the free network connecting may have higher possibility for network disconnect, please be careful with network function selection.

Environment of use

- Use and install the device under 0°C~40°C, avoid direct sunlight and do not put device nearby heat source.
- Do not install this device in humid surrounding.
- Do not place device in smoke and dusty environment.
- Avoid strongly collision on device, and install device in stable environment

that prevent device drop.

- Set this equipment in ventilation space, and do not block the device' s ventilator.
- Please use device under rated voltage and Amp.
- For safety, keep flammable objects away from the device.

B. DVR system operation

1. Front panel setting

Every device has different front plane, please set it as different DVR operation manual.

2. Mouse

- When you watching the live view video records, click right button can open the quick menu.
- Click left button, can open a new menu on main menu options.
- Under the menu mode, click left button, get into the submenu.
- Exit the menu page by click right button.
- The value that under submenu can be set by click or virtual keyboard.

C. DVR system operation

1. ON

Turn on the device by connects device power, and then the power signal is bright. After the device activated, you will hear a "beep" sound. The image default setting as multiple screen output models, if the device activates time under setting time, the system will start timer recording function automatically. The relate signal light is bright, and the system working regularly.

Note: 1. before turn on power switch, ensure the power cable was connected, and input voltage match the device' s power supply.

2. External Power requirements Refer to DVR hardware specifications table. Recommend using power input with stable voltage and low electromagnetic interference, if condition permit, use UPS power protection.

2. OFF

There are two switches to turn off this device, software switch and hardware switch. For the software switch, get into right button function table, select OFF under Turn off system. The hard switch is on the front panel, press OFF button on the front panel will turn off power supply.

Description :

- Power recovery

If user meets abnormal power off during recording, restart device and the device will automatic save the recording information before power off, and restore setting as power off before.

- Change hard disk

Turn off power supply before change hard disk.

- Change battery

Turn off power and save setting information before change battery. This device use button battery, which require check system time regularly. Change battery when system showing incorrect system time. Recommend change same type battery annually.

Note: the setting information will be lost if do not save it before battery change.

3. Login

- For operate system, user requires to login into system. System will integration system functions to different account permit.

- There are 2 default user accounts [admin] and [default] in products default setting.

The user name [admin] is default setting as super user permit

The user name [default] is default setting as normal user permit.

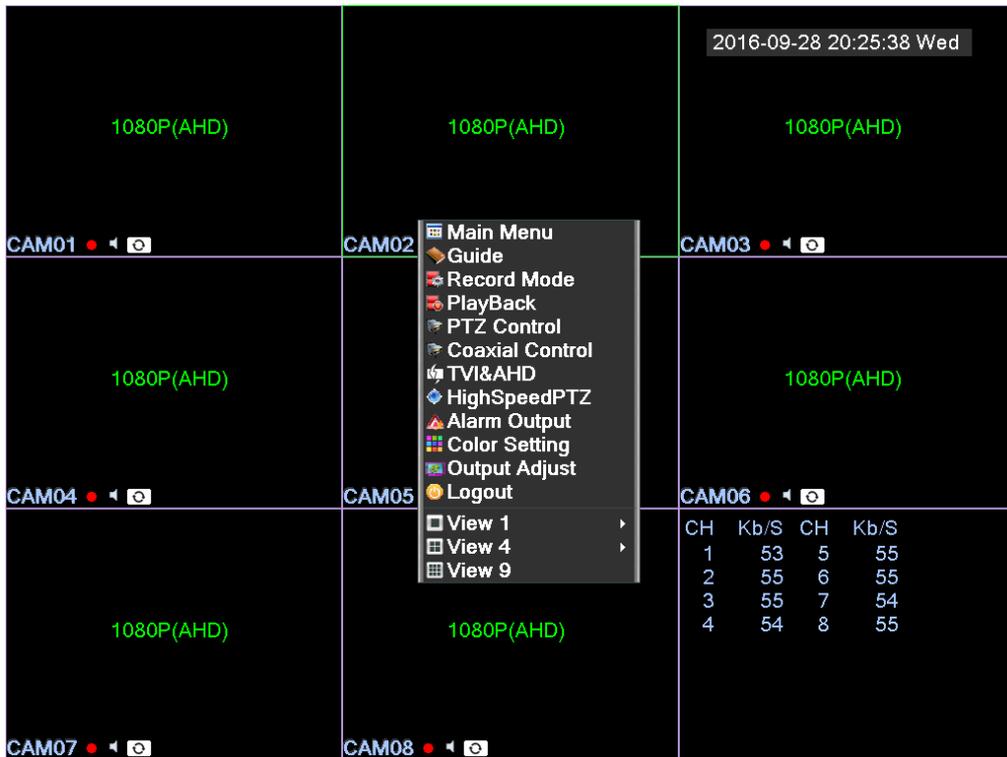
- Default login user: admin, password: (empty)

- For account safety, please change user name and password after the first time login. Change user name and password by go to **【right button function list】 > 【main menu】 > 【manage tools】 > 【user management】**



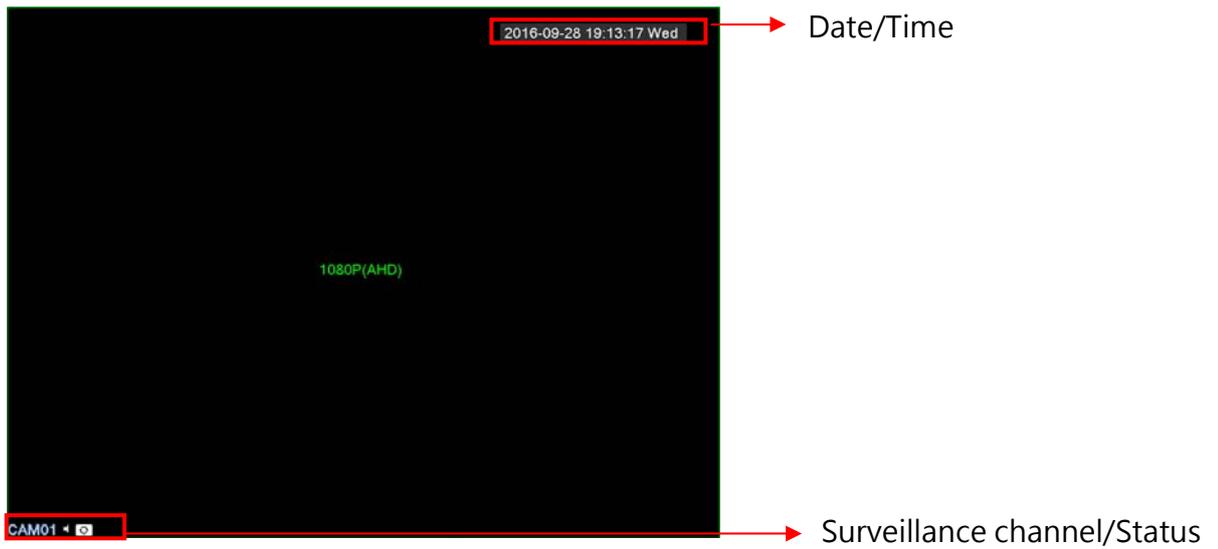
4. Preview Image

- After login in system, the preview image will showing on screen, click right button for image change.



Capable select image display screen:
Single screen/ 4 screens/ 9 screens

- The date, time, channel name, recording video and audio will display on every preview image.

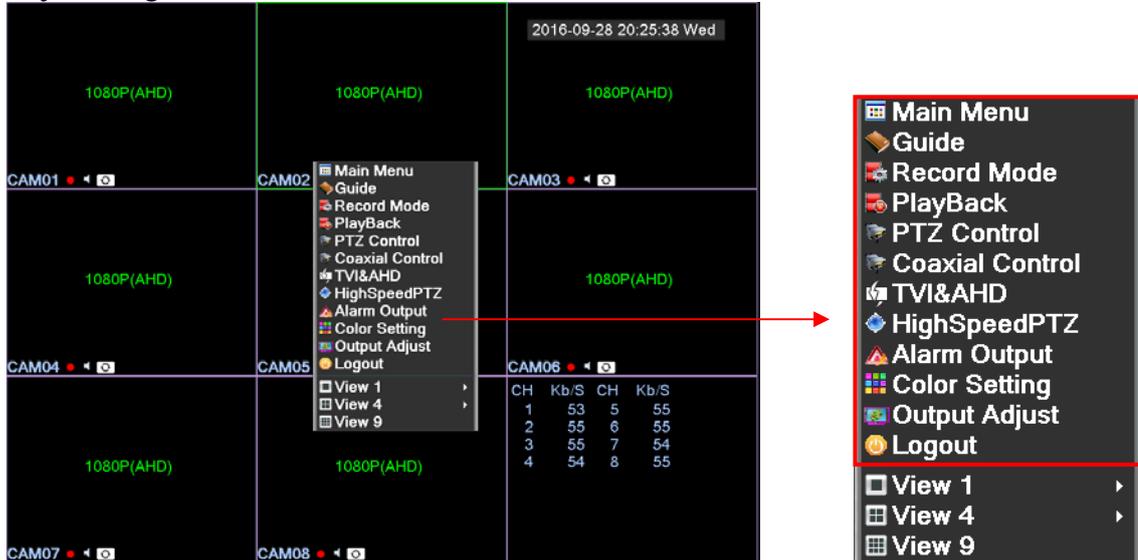


Status display :

●	Recording
🔊	audio
🔄	Automatic judgment
CVI	CVI image display
AHD	AHD image display
TVI	TVI image display

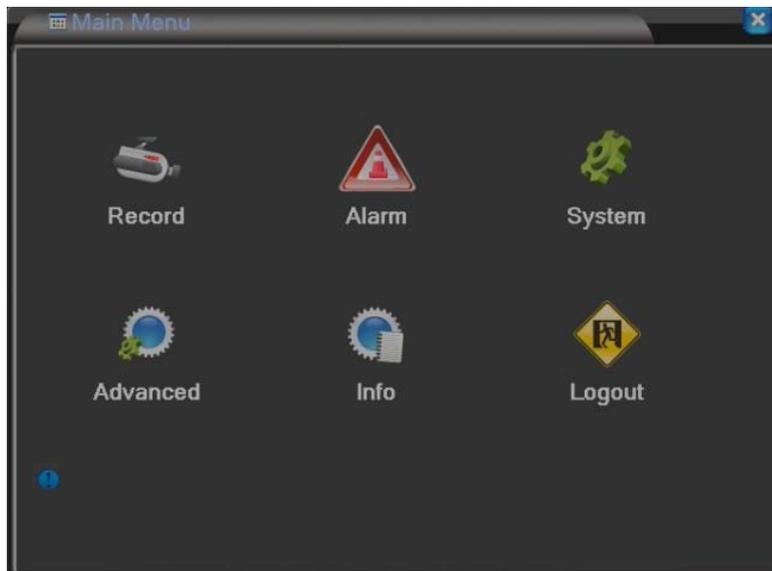
5. Quick start menu

Under preview model, click right button, it will show up a quick start menu below. Fast function table includes: main menu, guide, record mode, playback, PTZ setting, high speed PTZ, alarm output, color setting, image adjust, logout.



5.1 Main menu

- Path : fast menu/main menu



5.1.1 Record function

- Path: Main Menu/Record function



- Record : Open or close some cameras recording function which includes time setting/ playback backup/ files backup

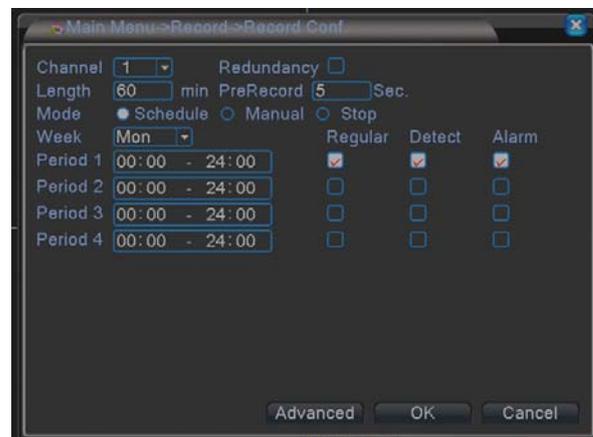


5.1.1.1 Time setting

- Path: Main Menu/Record function/ time setting



- Record Conf. : Operation setting for current week. Setting time period for many kinds recording type.



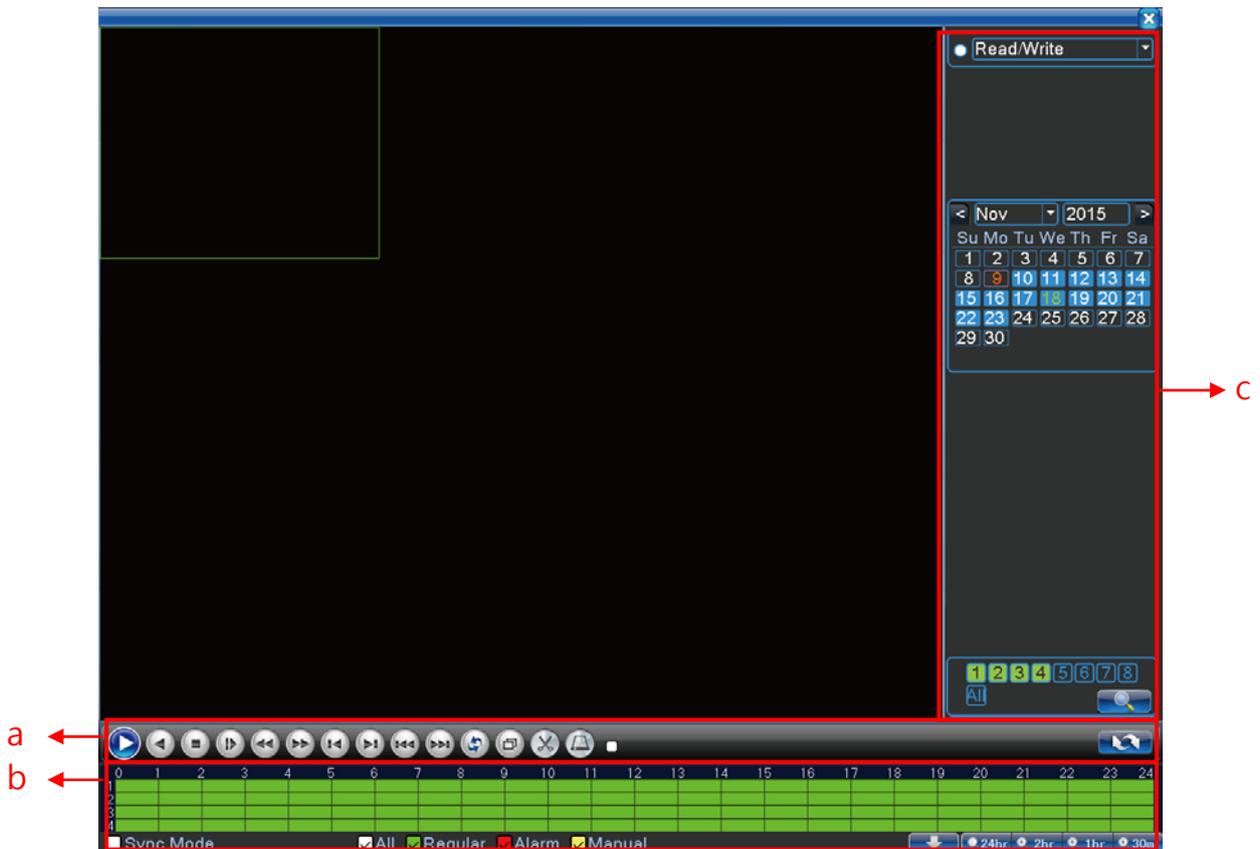
- Channel: click and select the channel window, can setting one or multiple channels. The default setting channel is channel 1.
- Mirror: if device installed the second hard disk, the mirror function will be activating, this function can synchronize record files from one hard disk to another hard disk. Mirror default setting is off.
- Length: can setting the recording time length, minimum as 1 minute, maximum as 120 minutes, and the default setting as 60 minutes.
- Pre-recorded: record few second video before when system trigger the alarm. The minimum pre-recorded time is 1 second; maximum is 5 second, and default setting as 5 second.
- Recording model: can choose setting, manual operation and off. When you select setting, can choose any single working day or all working days from Monday to Friday.

There are 4 fields that can do time Setting for recording model and time. If select manual operation, you have to set the entire thing before recording, the default setting is setting. Select off will stop recording.

5.1.1.2 Backup playback records

- Path: main menu/ recording function/backup playback records.

-  : search the image files, and playback files.

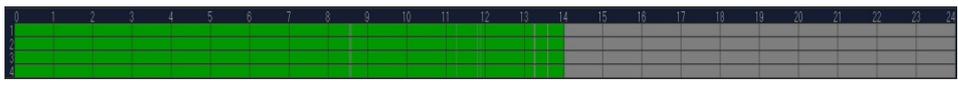


a). Button function

	Play	Choose the date and channel that you want to playback, press play button, and then begin to playback.
	Pause	Pause video
	Backward play	Video play backward
	stop	Stop playback video
	Slowly playback	Playback video slowly, can select speed with 4 speed level, press this button

		again playback video as normal speed
	High speed play backward	Play video backwards with high speed. can select speed with 4 speed level, press this button again playback video as normal speed
	High speed play forward	Play video backwards with high speed. Can select speed with 4 speed level, press this button again playback video as normal speed.
	Previous Frame	Play previous frame one by one
	Next Frame	Play next frame one by one
	Previous file	Go back and playback last 1 hrs file
	Next file	Playback video file at next 1 hrs
	Loop play	Loop play video file, press  button to stop the loop
	Full screen display	Display image in full screen, press this button again go back to normal size screen.
	File capture	Press this button, and then playback video, this button will became this  button. Choose the time you want to capture, press this  button, backup capture file.
	USB backup	Can backup captured file to USB
	Change Search function	Change search menu by 「 search by date 」 or 「 search by time 」 , refer to 【 c).search menu 】 description.

b). Record status



All Regular Alarm Manual

Display playback timeline recording status.

■ Regular: display regular video recording status in playback timeline.

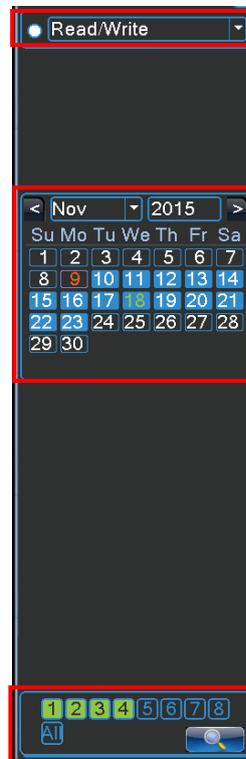
<p>■ Alarm: display alarm video recording under playback timeline. ■ Manual : display manual recording status under playback timeline.</p>	
	<p>Check this function, synchronize channels time by click and select play, pause and other functional buttons; if user do not check this function, the timeline cannot synchronize in different channels.</p>
	<p>Select the accurate time as 24 hrs, 2hrs, 1hrs, 30mins when you playback video. Default time setting as 24 hrs.</p>

c). Search menu



can exchange the search menu by 「search with date」 or 「Search with time」

◆ Video search with date

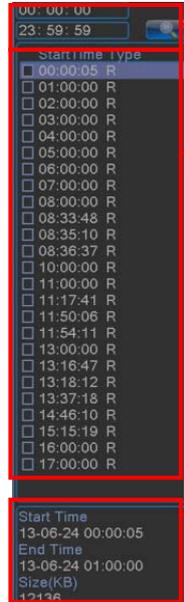


1. Choose read/Write Hard disk for storage recoding files

2. Select the recording date :
Year /Month /Day
The blue background date has records; the black background date does not have video records.

3. Select the channel to display
Green background channels as play records channels, black channels are not play records.

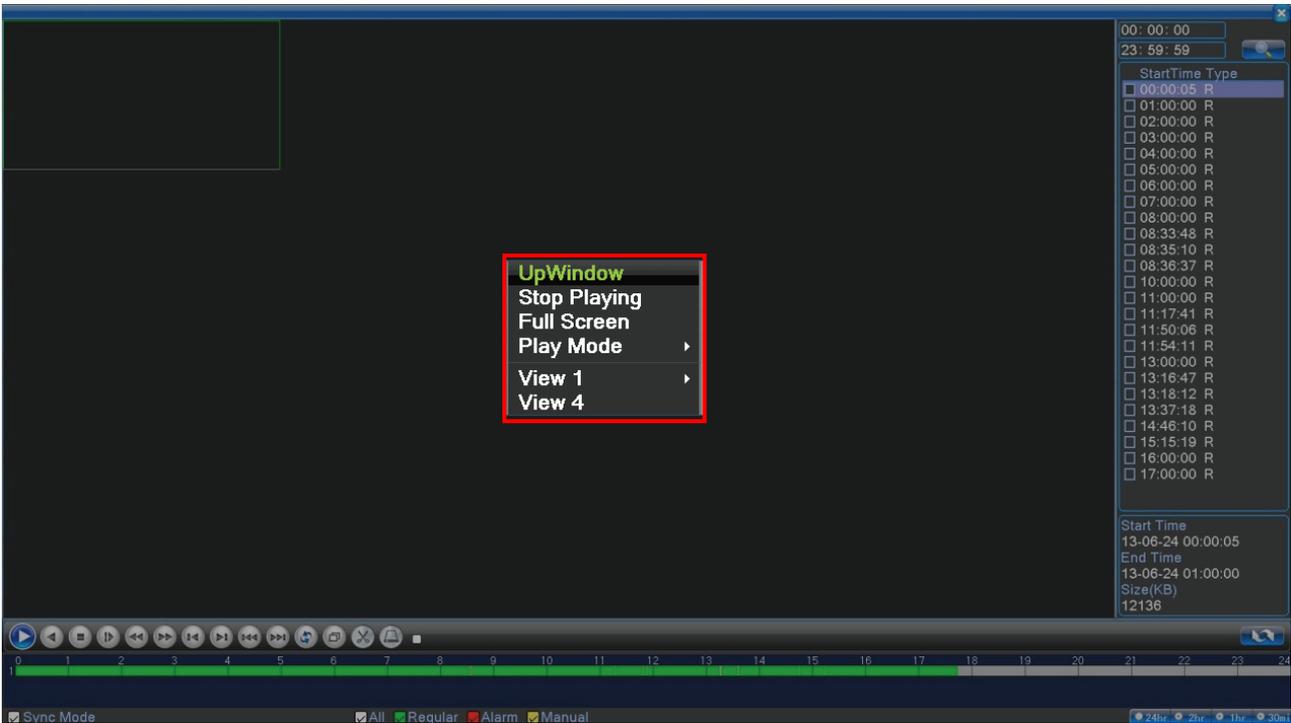
- ◆ Video time search: can select the date you want to playback, by 「search by date」, next, press  「search change button」, change search function as 「Search by time」, if you do not choose the playback date, search the time from current record.



The screenshot shows a video search interface. At the top, there is a time display showing '00:00:00' and '23:59:59'. Below this is a list of video records with columns for 'StartTime' and 'type'. The records are listed from 00:00:05 to 17:00:00. At the bottom, there is a section for 'Video information' showing 'Start Time', 'End Time', and 'Size(KB)'.

1. Select the time you want to search.
2. Select the video records that you want to playback.
3. Video information: beginning time/ ending time/ files size

- d). Screen change menu
Click right button; show up the screen change menu which can select screen change options.



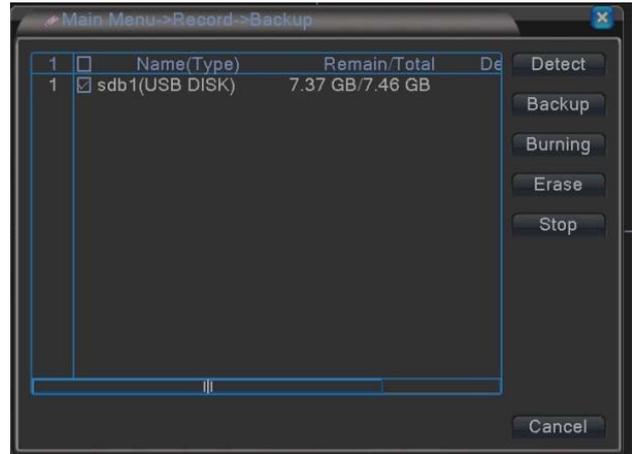
Back	Select go back last page, will back to recording function page.
Stop playback	Click stop playback, the video stop play.
Full screen display	Full screen display have play full screen image, click right button can cancel full screen.
Single image	Select channel 1 to 8 playback single video.
4 image	Select channel 1 to 4 and channel 5 to 8 playback multiple image.

5.1.1.3 Backup files

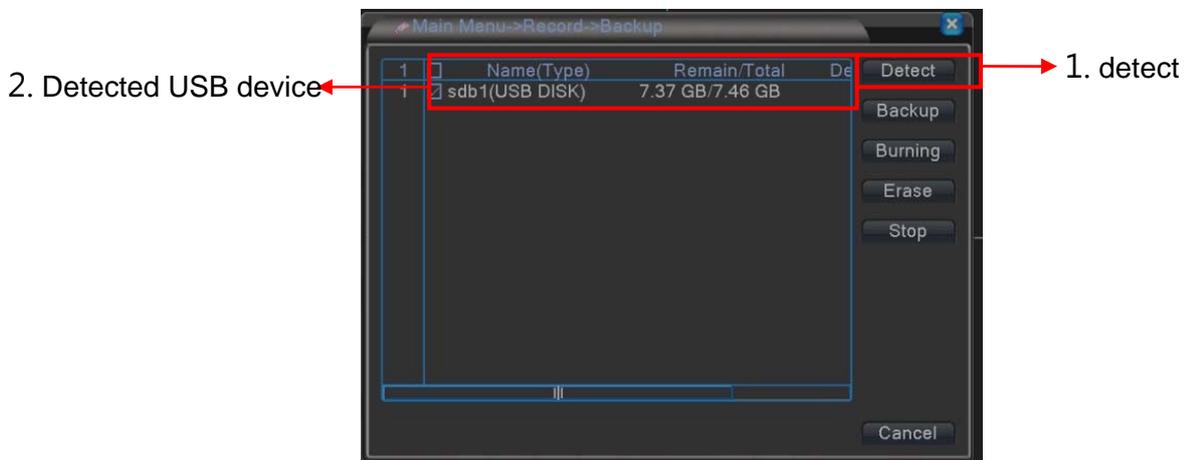
- Path: main menu/ recording function/ information backup



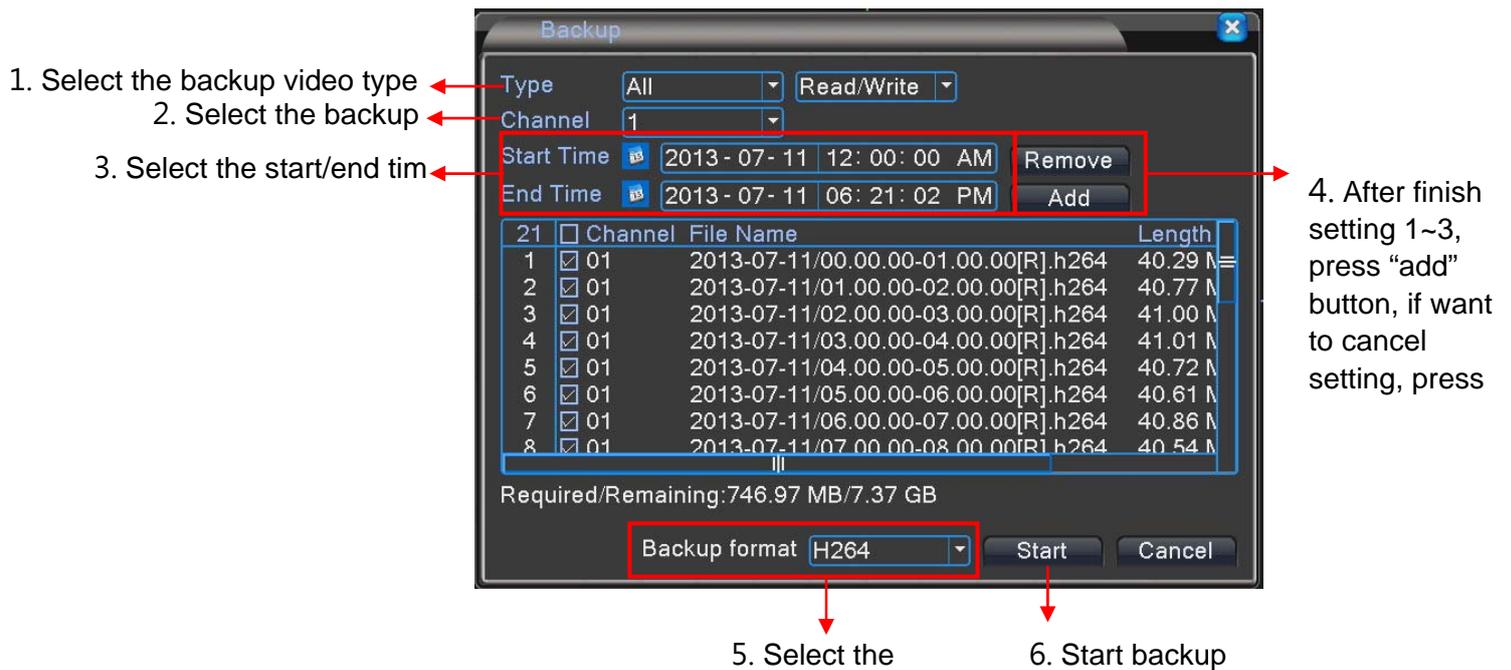
- Record : back up/delete specific records



- Detect: insert USB storage device, click detect search USB again.

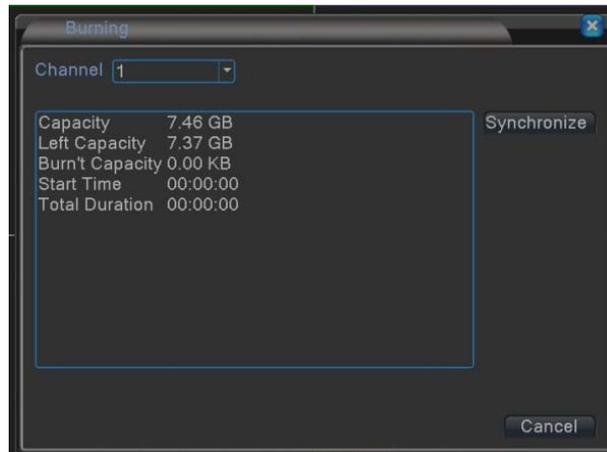


- Backup: backup the storage files in USB storage device.



- ◆ Type: can select the recording type as all, external alarm, movement detect, all alarm, manual, regular. The default setting is all.
- ◆ Channel: choose the backup channel 1 to 8, the default setting is channel 1.
- ◆ Start time: backup starting time
- ◆ End time: backup ending time
- ◆ Remove: remove all files.
- ◆ Add : add select type or channel
- ◆ Backup format: can choose H264 and AVI format. The default setting is H.264.

c). Record: Synchronize USB storage device with channel 1 to 8

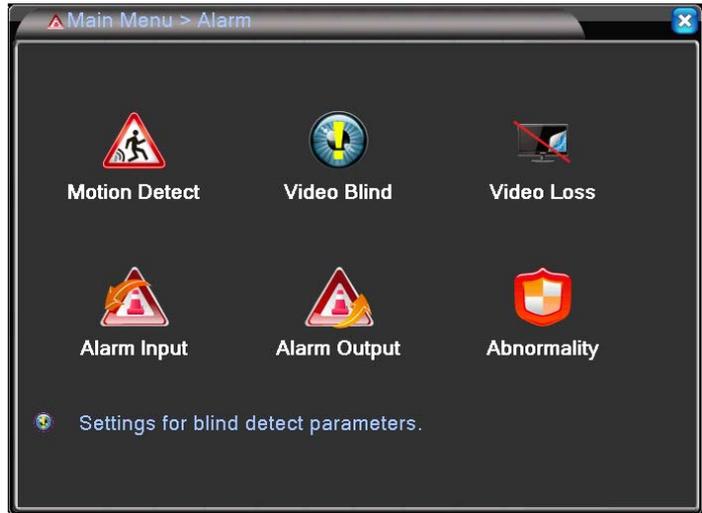


d). Delete: format selected USB storage device

e). Stop: stop backup process.

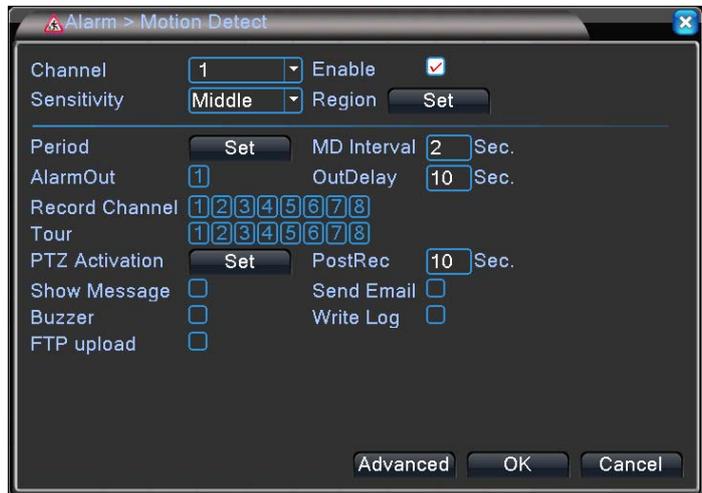
5.1.2 Alarm function

- Path: Main Menu/Alarm
-  : On or Off video recording for alarm function. It can be divide into movement detect/ channel blind/video loss/ alarm input/ alarm output/ abnormality



5.1.2.1 Movement Detect

- Path: Main Menu/ Movement Detect
-  : Set the dynamic detection alarm to reported value (alarm output, synchronized video)



- Channel: Set channel 1 to 8 separately or set all channels together.
- Start: set movement detection. Default setting is OFF.
- Sensitivity : Setting the sensitivity that trigger movement detect. The sensitivity has 6 levels: the lowest, low, medium, high, the highest. Default setting is medium.
- Region setting: Select trigger region, the default setting is all regions.



- e). Detect time period: alarm set any 4 days from Monday to Sunday.
- f). Interval time: setting internal time between trigger events, the type-in rage from 1 to 600 seconds.
- g). Alarm output: the alarm output as setting if you check this term. Default setting as not check.
- h). Alarm time: activate the recording time length for movement alarm, setting rage from 10 to 300 seconds. Default setting as 10 second.
- i). Recording channel: setting the recording channel after trigger movement detection. Default setting is OFF.
- j). Platform: Setting jump out channel from 1 to 8 after trigger the movement alarm. If select all channel, it take turns from channel 1 to 8. The default setting is OFF.
- k). PTZ activation: Setting whether activate the PTZ or not if trigger movement detection.



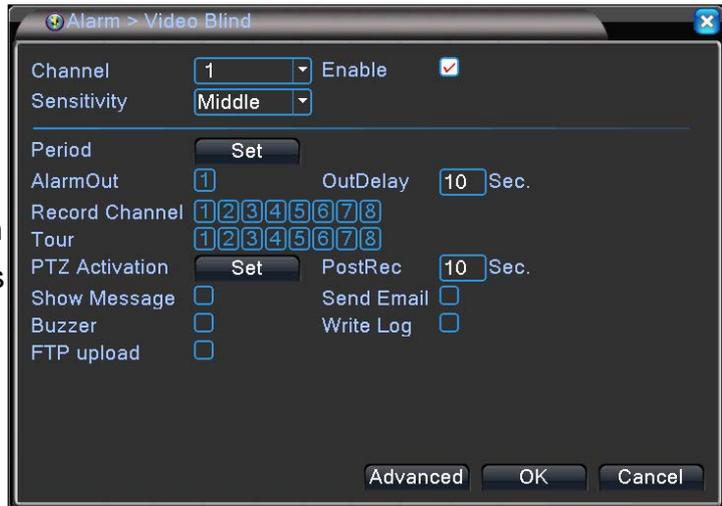
- l). Recording delay: setting the time to cancel alarm after trigger movement alarm. Setting rage from 10 to 300 second. Default setting as 10 second.
- m). Prompt info: select showing prompt info on screen or not, default setting is not check.
- n). Send MAIL: send the alarm information by specified email address when trigger the movement alarm. Default setting as not check.
- o). Buzzer: the buzzer will make noise when trigger movement alarm, the default setting as not check.
- p). FTP upload: delivery the AVI files to specified FTP server when trigger the movement alarm.

5.1.2.2 Channel blind

- Path: Main Menu/Alarm Function/Channel Blind



- **Video Blind** : set occlusion detection alarm information (alarm output, synchronous video)



- Channel: Can set channel 1 to 8 separately, or set all channels together.
- Start: set channel blind. Default setting is OFF.
- Sensitivity : Setting the sensitivity that trigger channel blind. The sensitivity has 6 levels: the lowest, low, medium, high, the highest. Default setting is medium.
- Region setting: Select trigger region, the default setting is all regions.
- Detect time period: alarm set any 4 days from Monday to Sunday.
- Interval time: setting internal time between trigger events, the type-in range from 1 to 600 seconds.
- Alarm output: the alarm output as setting if you check this term. Default setting as not check.
- Alarm time: activate the recording time length for Channel blind, setting range from 10 to 300 seconds. Default setting as 10 second.
- Recording channel: setting the recording channel after trigger Channel blind. Default setting is OFF.

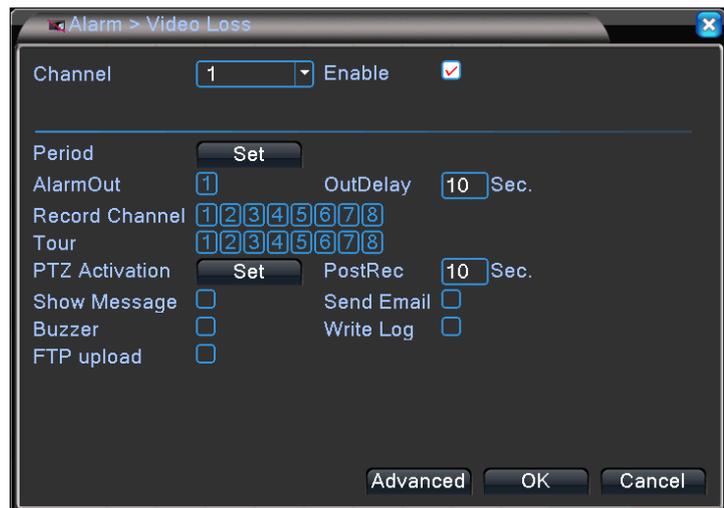


- j). Platform: Setting jump out channel from 1 to 8 after trigger the Channel blind. If select all channel, it take turns from channel 1 to 8. The default setting is OFF.
- k). PTZ activation: Setting whether activate the PTZ or not if trigger Channel blind.
- l). Recording delay: setting the time to cancel alarm after trigger Channel blind. Setting rage from 10 to 300 second. Default setting as 10 second.
- m). Prompt info: select showing prompt info on screen or not, default setting is not check.
- n). Send MAIL: send the alarm information by specified email address when trigger the Channel blind. Default setting as not check.

5.1.2.3 Video Loss

- Path: Main Menu/Alarm Function/Video Loss

-  : Setting image loss alarm (alarm output, synchronous video)



- a). Channel: Can set cannel 1 to 8 separately, or set all channels together.
- b). Start: set video loss. Default setting is OFF.
- c). Sensitivity : Setting the sensitivity that trigger video loss . The sensitivity has 6 levels: the lowest, low, medium, high, the highest. Default setting is medium.
- d). Region setting: Select trigger region, the default setting is all regions.
- e). Detect time period: alarm set any 4 days from Monday to Sunday.
- f). Interval time: setting internal time between trigger events, the type-in rage from 1 to 600 seconds.

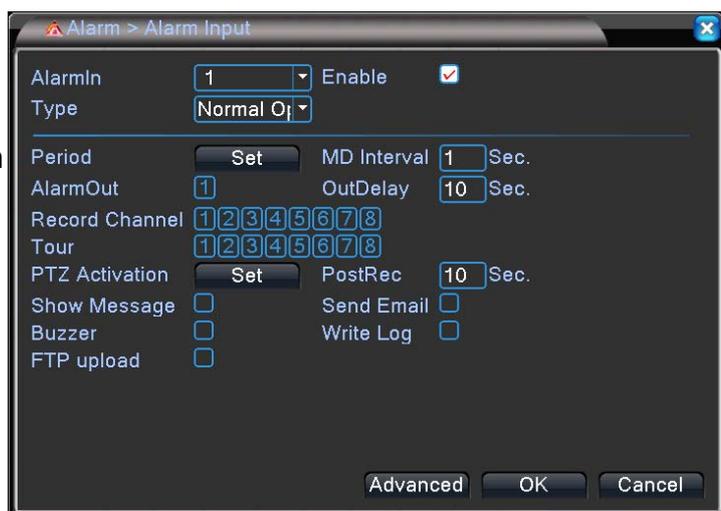
- g). Alarm output: the alarm output as setting if you check this term. Default setting as not check.
- h). Alarm time: activate the recording time length for video loss, setting rage from 10 to 300 seconds. Default setting as 10 second.



- i). Recording delay: setting the time to cancel alarm after trigger video loss. Setting rage from 10 to 300 second. Default setting as 10 second.
- j). Prompt info: select showing prompt info on screen or not, default setting is not check.
- k). Send MAIL: send the alarm information by specified email address when trigger the video loss alarm. Default setting as not check.
- l). Buzzer: the buzzer will make noise when trigger video loss alarm, the default setting as not check.
- m). FTP upload: delivery the AVI files to specified FTP server when trigger the video loss alarm.

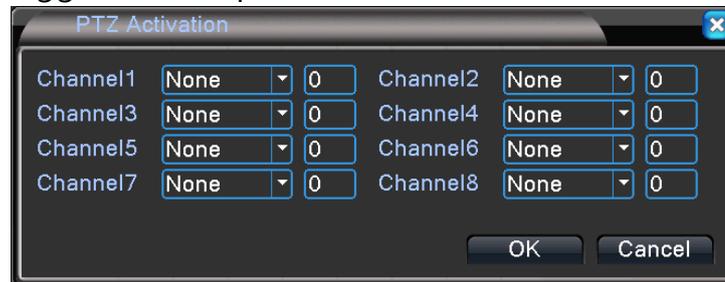
5.1.2.4 Alarm Input

- Path: Main Menu/Alarm Function/Alarm Input
-  : set external alarm (usage, synchronous video)



- a). Channel: Can set cannel 1 to 8 separately, or set all channels together.
- b). Start: set alarm input. Default setting is OFF.

- c). Sensitivity : Setting the sensitivity that trigger alarm input. The sensitivity has 6 levels: the lowest, low, medium, high, the highest. Default setting is medium.
- d). Region setting: Select trigger region, the default setting is all regions.
- e). Detect time period: alarm set any 4 days from Monday to Sunday.
- f). Interval time: setting internal time between trigger events, the type-in rage from 1 to 600 seconds.
- g). Alarm output: the alarm output as setting if you check this term. Default setting as not check.
- h). Alarm time: activate the recording time length for alarm input, setting rage from 10 to 300 seconds. Default setting as 10 second.
- i). Recording channel: setting the recording channel after trigger alarm input. Default setting is OFF.
- j). Platform: Setting jump out channel from 1 to 8 after trigger the alarm input. If select all channel, it take turns from channel 1 to 8. The default setting is OFF.
- k). PTZ activation: Setting whether activate the PTZ or not if trigger alarm input.



- q). Recording delay: setting the time to cancel alarm after trigger alarm input alarm. Setting rage from 10 to 300 second. Default setting as 10 second.
- r). Prompt info: select showing prompt info on screen or not, default setting is not check.
- s). Send MAIL: send the alarm information by specified email address when trigger the alarm input alarm. Default setting as not check.
- t). Buzzer: the buzzer will make noise when trigger alarm input alarm, the default setting as not check.
- l). FTP upload: delivery the AVI files to specified FTP server when trigger the alarm input alarm.

5.1.2.5 Alarm output (some DVR not support this function)

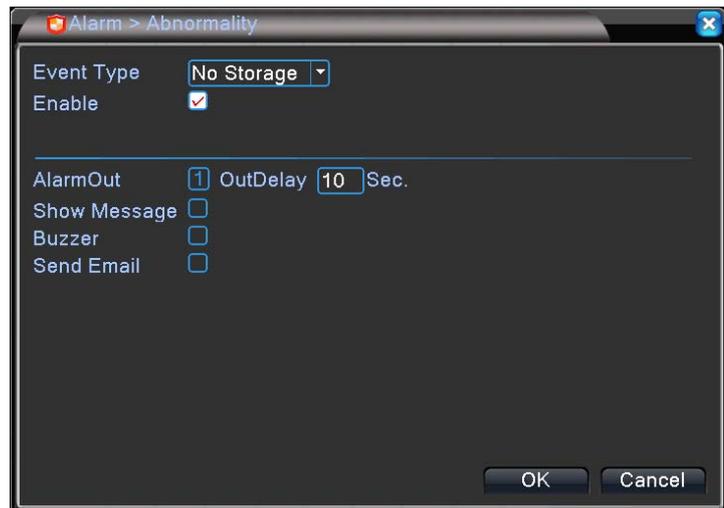
- Path: Main Menu/Alarm Function/Alarm Output
-  : Search alarm output



Control alarm output status, display “●” for 「All」 「1」 stand for current DVR supported alarm output number.

5.1.2.6 Abnormality

- Path: Main Menu/Alarm Function/Alarm Output
-  : Set abnormality includes alarm input, screen notification.



- a). Event type: can select event type as no hard disk, storage device error, insufficient hard disk space, network break, IP conflict and so on.
- b). Enable: activate as selected event.
- c). Alarm output: select enable alarm output or not after trigger alarm under selected event type. Alarm has Max. 1 output, and the alarm time range from 10 second to 300 second.
- d). Screen prompts: jump out prompts when selected event happened.
- e). Buzzer: enable buzzer or not after trigger event.
- f). MAIL delivery: send Mail when exception event happen.

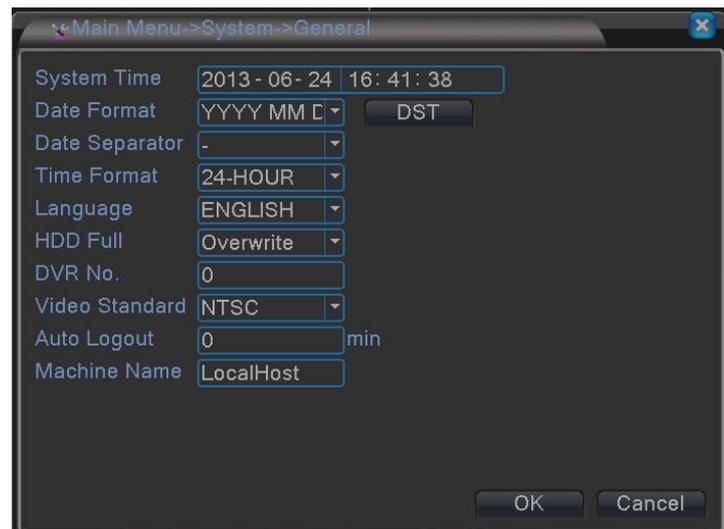
5.1.3 System setting

- Path: Main Menu/System setting
-  : Set system basic setting which includes: regular setting, resolution, network setting, network service, channel manage screen display, PTZ Setting, tour and channel management.



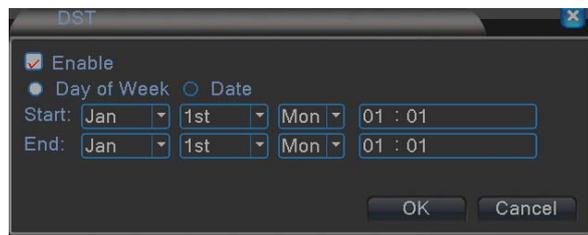
5.1.3.1 Regular Setting

- Path: Main Menu/Regular Setting
-  : set system time, video storage method, device No., video format and so on

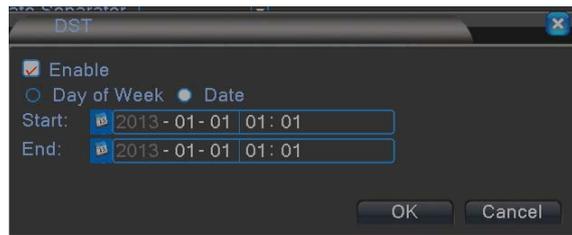


- a). System time: current date setting.
- b). Date format: setting date display format as year/month/day, month/day/ year, or day/month/year. The default setting as year/month/day.
- c). Date separator: can choose - or /, default setting as -.
- d). Time format: can set as 24 hours or 12 hours. The default setting as 24 hours.
- e). Language: capable setting 28 languages.
- f). HDD Full: setting overwrite hard disk or stop recording after hard disk storage full. Default setting is overwrite.

- g). DVR No.: setting remote controller number from 0 to998. The default setting is 0.
- h). Video standard: setting video input, NTSC or PAL.
- i). Auto logout: setting the logout time when user is not operating system for a long time. The auto logout time can set as 0 to 60 minutes, the default setting as 0, not setting this function. Login again into main menu needs passwords.
- j). DVR Name: setting DVR name, max type in 32 characters, the default name as Local Host.
- k). Daylight saving time: set date or weeks, time will change as daylight saving day.



(Cycle setting)



(Date setting)

5.1.3.2 Resolution and FPS setting

- Path: Main Menu/ System Setting/ Resolution and FPS setting



- Encode : FPS setting



- a). Channel: enable to set channel 1 to 8 separate or together.

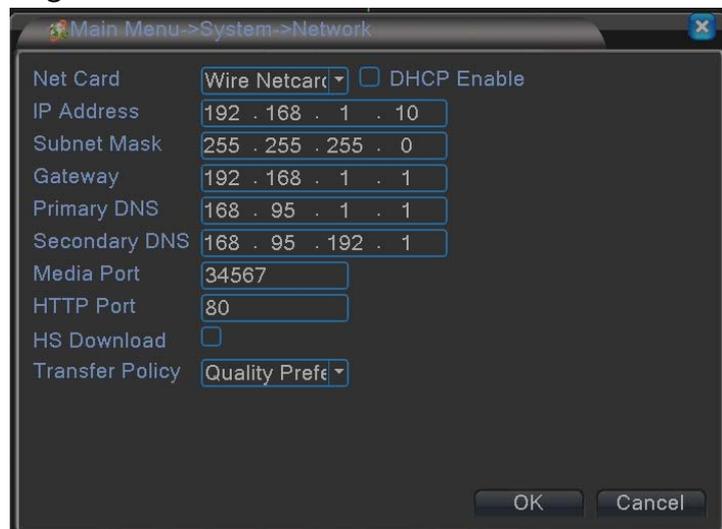
- b). Recording mode: capable set as H.264 or Sub-bit, the H.264 is the main recording mode for device, sub-bit mainly monitor for internet and smart phone.
- c). Resolution: The resolution for H.264 is device playback resolution: 1080P (1920x1080), 720P (1280x720), 960H (960x480), and D1 (704x480).
- d). Sub-bit: the resolution for playback in internet or smartphone: QCIF (176x120) and CIF (352x240).
- e). FPS: 1080P NTSC 12 Fps, PAL 12 Fps; 720P NTSC 30 Fps, PAL 25 Fps; 960H NTSC 30Fps, PAL 25 Fps; D1 NTSC 30 Fps, PAL 25 Fps ; QCIF and CIF NTSC/PAL Fps.
- f). Bit control: changeable bit or stable bit.
- g). Image quality: very poor, poor, regular, good, very good, excellent. Default setting as good.
- h). Bit value: set bit value that is referring to resolution and Fps, this term is default setting.
- i). 1 frame interval: select from 2 to 12.
- j). Video/audio: choose record audio/video or not in main data stream and sub-data stream. The default setting as video ON/ Audio OFF.

5.1.3.3 Network setting

- Path: Main Menu/ System setting/ Network setting



- Network : setting IP address, DDNS and so on

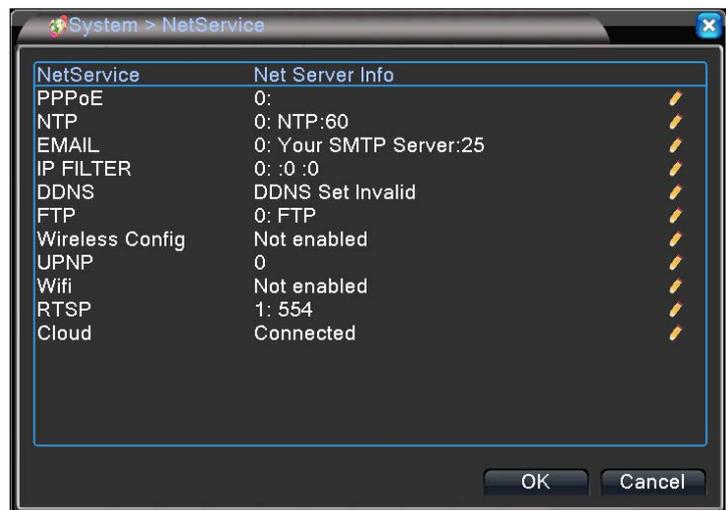


- a). NIC: wired LAN.
- b). DHCP: check this term will distribute IP address automatically. Not check this term user can type IP address by themselves.
- c). IP address: type in IP address, the default setting as 192.168.1.10 °

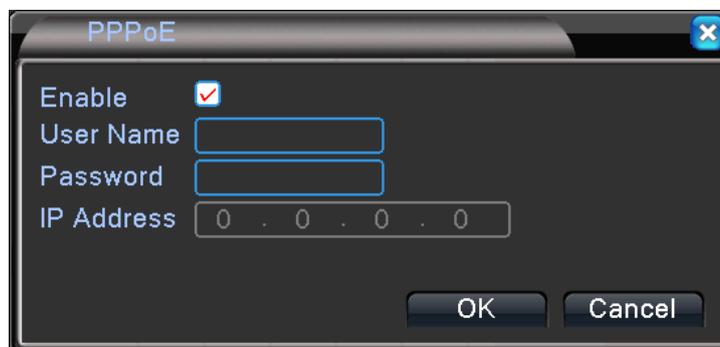
- d). Subnet mask: type in subnet mask, the default setting as 255.255.255.0.
- e). Gate way: type in gate way, the default setting as 192.168.1.1.
- f). Primary DDNS: type in primary DDNS server, the default setting as 192.168.1.1.
- g). Sub DDNS: type in the sub DDNS server, the default setting as 8.8.8.8.
- h). TCP Port: type in TCP, default setting as 34567.
- i). HTTP Port: type in HTTP Port, the default setting as 80.
- j). Network transmission mode: automatic adjustment, image quality priority, transmission fluency priority; default setting is image quality priority.

5.1.3.4 Network service

- Path: Main Menu/
System Setting/ Network
service
-  : setting network
service.



- a). PPPOE :

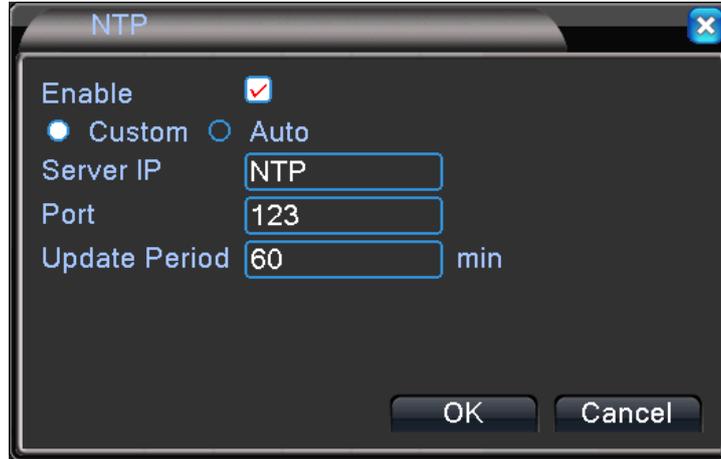


Check enable and press setting, type in user name and password that offered by telecommunications industry, save

and restart it can produce a group of IP, the default setting is close.

b). NTP :

Open it to activate NTP time adjustment, the default setting as close.



Server IP: type in local NTP IP.

Port: not recommend changing the default setting unless built and contact with personal server.

Update period: period rage can set from 0 to 65535 minute.

c). Email setting :

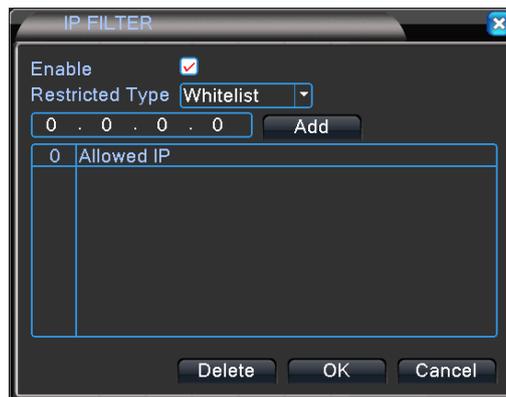
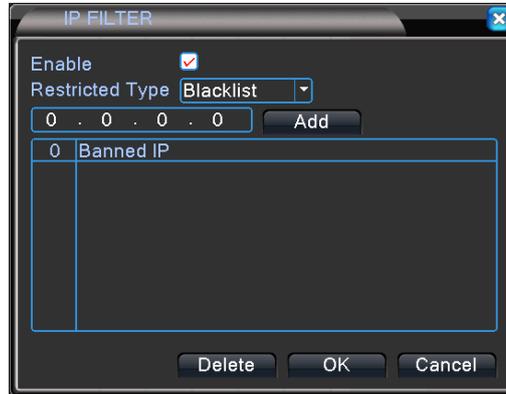
Enable email setting can deliver the email to specific email address when trigger the event alarm. Default setting as not enable.



- 1) SMTP server: Type in SMTP that offer by Mail server. For instance, Gmail need to type in smtp.gmail.com
- 2) PORT: type in PORT that offer by Mail server. For instance, for Google server, the PORT type in 465.
- 3) SSL: checked as Mail server requirement, for Gmail, it needs to check SSL.
- 4) Account: Types in Mail account that you setting in the SMTP server.
- 5) Password: Types in Mail password that you setting in the SMTP server.
- 6) Sender: Types in complete Mail that you send from this email.
- 7) Receiver : Types in complete Mail that you will receive from this email.
- 8) Main purpose for mail: Capable to set the main purpose the mail will receive after trigger alarm.
- 9) Mail test: click this button, if test SMTP set correctly, mail box will receive the test mail.
- 10) Press confirms or cancels to finish setting.

d). IP permission settings :

Capable to setting whitelist and blacklist, the blacklist IP address cannot connect with device; on the opposite, the whitelist IP can connect with device. The default setting is OFF.



e). DDNS :

Set as DDNS, which includes: CCTV DVR 、 CN99 、 DynDns 、 Oray 、 NO-IPE and so on, the default setting as OFF.



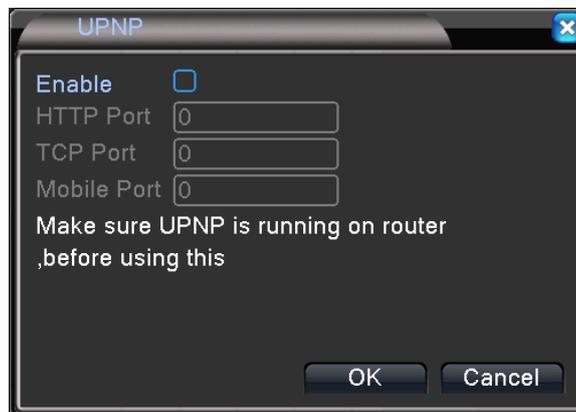
- f). FTP setting: capable setting FTP, send trigger alarm information through FTP. The default setting is OFF.

- 1) Device IP: type in FTP device IP.
- 2) Port: type in Port for FTP, the default setting is 21.
- 3) Account: type in effective user name for FTP.
- 4) Password: type in effective user password for FTP.
- 5) Anonymous: check anonymous, not need to type in user name and password.
- 6) The maximum files size: type in maximum upload file size, from 0 to 65535, the default setting as 128M
- 7) Remote menu: upload files to FTP.

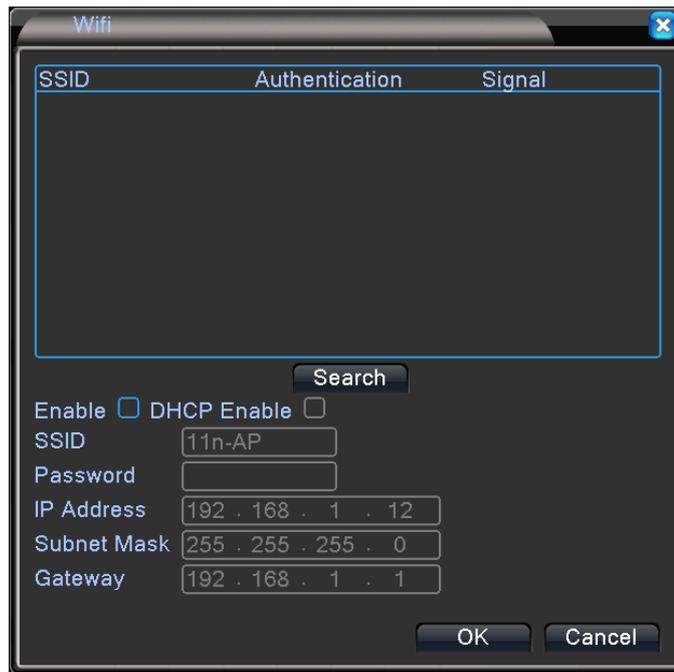
- g). Wireless dialing: capable setting wireless dialing, the default setting is OFF.

- 1) Enable: Check to enable wireless dialing,
- 2) Type: automatic TD-SCDMA 、 WCDMA 、 CDMA1.X 、 GPRS 、 EVDO and so on, currently user can use by EVDO, if EVDO is not working, please select other type.
- 3) Access point: type in access point offer by local telecommunications company, the default setting as ChinaNet.
- 4) Dial number: type in dial number that offers by local telecommunications company, the default dial number as #777.
- 5) SIM number: type in SIM Card number; leave it blank if you do not have it, the default setting as blank.
- 6) Password: type in password for SIM card, eave it blank if you do not have it, the default setting as blank.
- 7) IP address: display IP address after connect with internet correctly.

- h). UPNP: enable UPNP in IP sharing device, the default setting as OFF.



- i). WiFi: capable to receive WIFI signal when connect with WIFI USB receiver. The device currently only accept WIFI receiver of Mt7601U Chip. The function default setting is off.



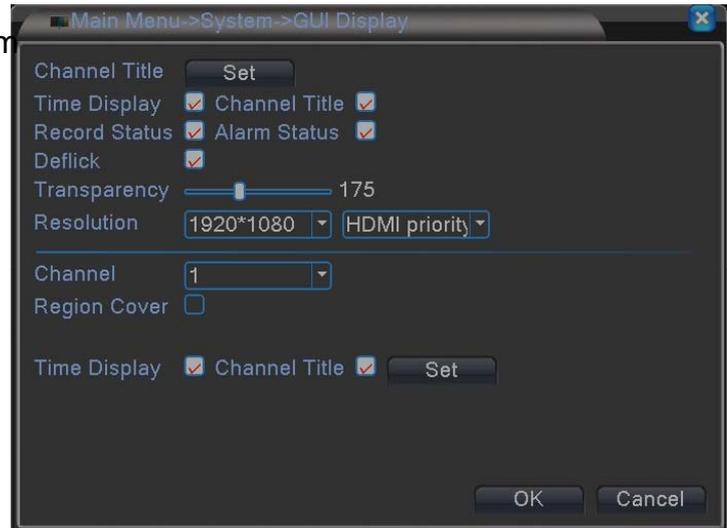
- j). RTSP: capable connect with all option that support RTSP. Default setting as 554.

5.1.3.5 Display setting

- Path: Main Menu/ System Setting/ Display Setting



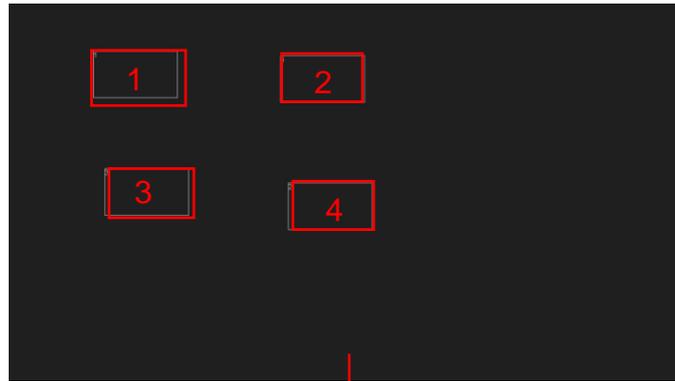
- **GUI Display** : Setting and monitoring the set value for Graphic account interface.



- Channel name: change 8CH channel name, which capable type in number 1 to 9, character A to Z.



- Time headline: display DVR time, default setting as enable.
- Channel headline: display channel name, default setting as enable.
- Record status: display record status, the default setting as enable.
- Alarm status: After trigger alarm, display alarm status or not, default setting as enable.
- Anti-shake: the image keeps stable, not shaking. The default setting as enable.
- Transparency: make adjustment for dialog window.
- Resolution: capable adjustment resolution for both VGA and HTMI, default setting as VGA, 1920*1080.
- Channel: can select from 1 to 8.
- Regional Coverage: can choose any position from display channels 1 to 4.

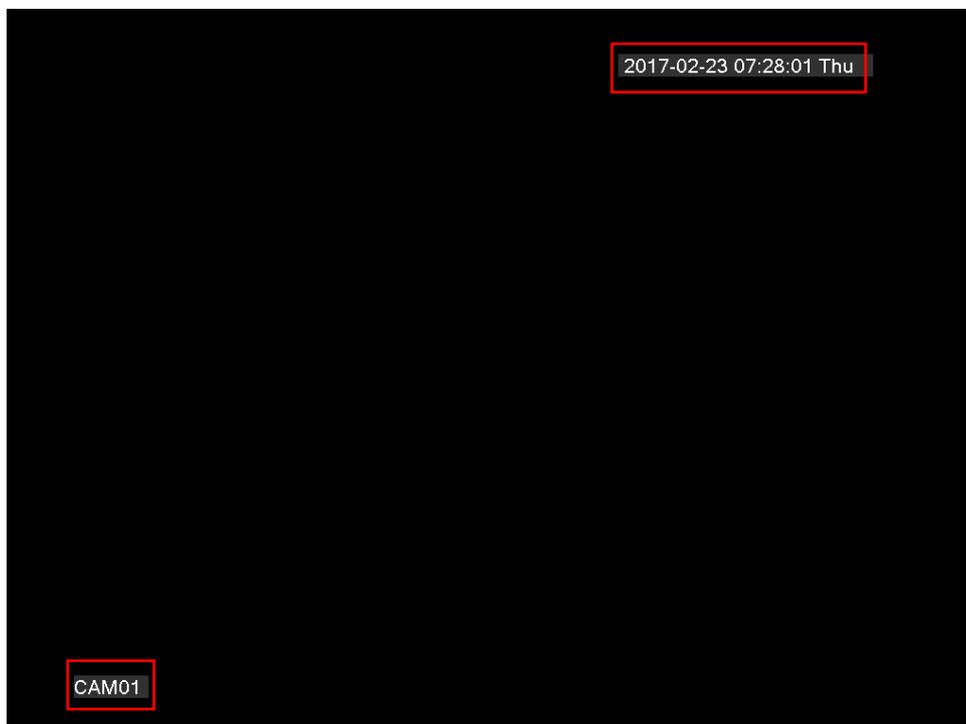


Screen display position



Screen display

- k). Time title and channel title: can move titles position on screen.



5.1.3.6 PTZ setting

- Path: Main Menu/ System Setting/ PTZ setting



- **PTZ Config** : Set PTZ device

The screenshot shows a dialog box titled "Main Menu->System->PTZ Config". It contains two columns of settings: "PTZ Device" and "RS485 Device".

PTZ Device	RS485 Device
Channel: 1	
Protocol: PELCOD	NONE
Address: 1	1
Baudrate: 9600	9600
Data Bits: 8	8
Stop Bits: 1	1
Parity: None	None

Buttons: OK, Cancel

- Channel: capable select 1 to 8.
- Protocol : capable choose 22 types protocol. The default setting as PELCOD.
- ID: PTZ address, can setting from 1 ~ 255, the default setting as 1.
- Baud rate: capable select 8 types transmit speed. The default setting as 9600.
- Data bits: capable select 4 kind data bits. The default setting as 8.
- Stop bits: capable select 2 kind stop bits, the default setting as 1.
- Parity: capable select 4 type parity. The default setting as none.

5.1.3.7 Protocol port

- Path: Main Menu/ System Setting/ Protocol port setting



- **RS232** : Set ports and PTZ function, baud rate, address and so on.

The screenshot shows a dialog box titled "Main Menu->System->RS232". It contains the following settings:

Function: NONE
Baudrate: 115200
Data Bits: 8
Stop Bits: 1
Parity: None

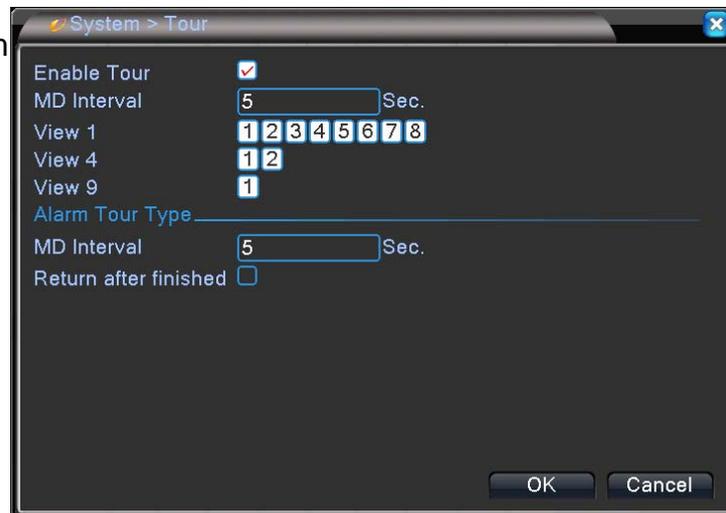
Buttons: OK, Cancel

- a). Protocol port function: Capable set 5 kind functions. The default setting is none.
- b). Baud rate: capable select from 8 kind baud rates. The default setting is 115200.
- c). Date bits: capable select from 4 kind data bits. The default setting is 8.
- d). Stop bits: capable select 2 kind stop bits. The default setting is 1.
- e). Parity: capable select 4 type parity. The default setting as none.

5.1.3.8 Tour

- Path: Main Menu/ System Setting/Tour

-  : Tour setting



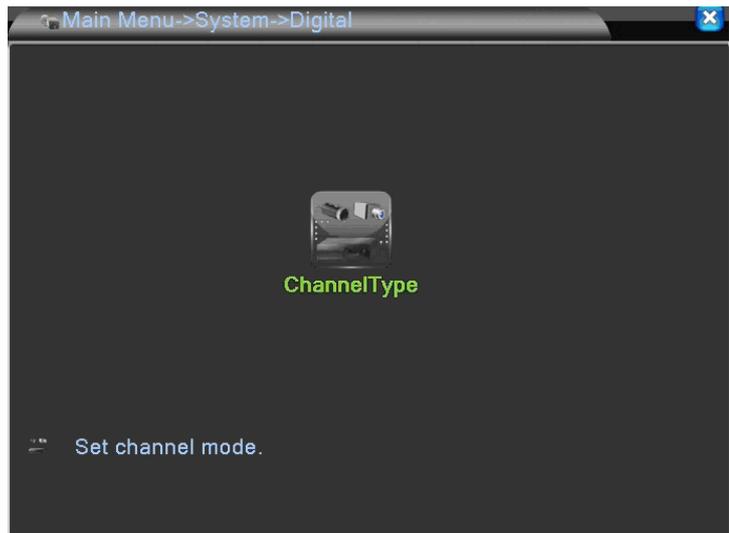
- a). Enable tour: check the box to enable and setting tour function, the default setting as Off.
- b). MD interval: setting the tour interval time from 5 to 120 seconds. Default setting as 5 seconds
- c). Single image screen: Setting the single image screen for tour; Default setting is fully open.
- d). 4 image screens: setting the 4 image screens, the default setting as fully open.
- e). 9 image screens: setting the 9 image screens, default setting as fully open.
- f). Interval time: this function have to collocate "Alarm finish and return" , setting the interval time between trigger alarm and go back to the Split screen. The interval time setting rage is 5 to 120 second. Default setting as 5 Sec. if do

not check this function after alarm finish and return, the function is invalid.

- g). Alarm finish and return: this function has to collocate with Interval time, setting the return time after alarm finished. The default setting is not check the term.

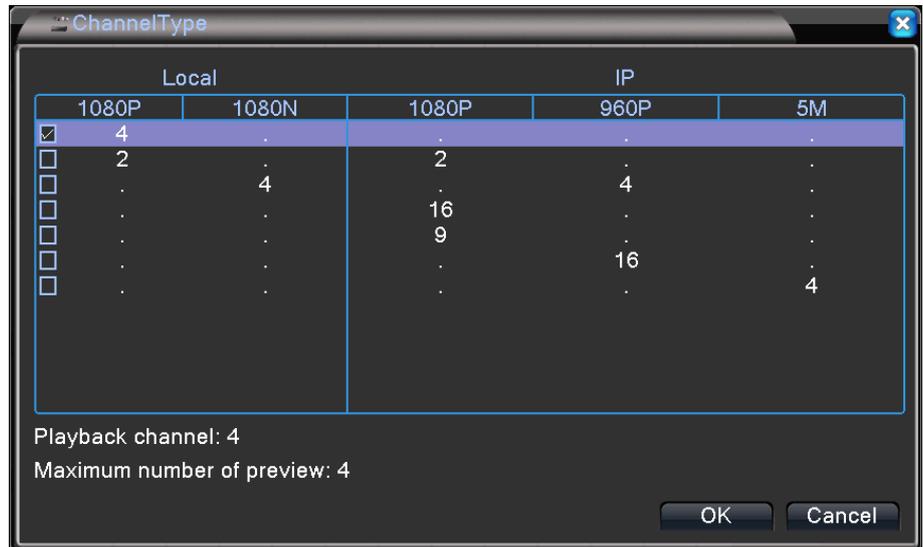
5.1.3.9 Channel management

- Path: Main Menu/ System Setting/Channel Management
-  : Setting channel mode

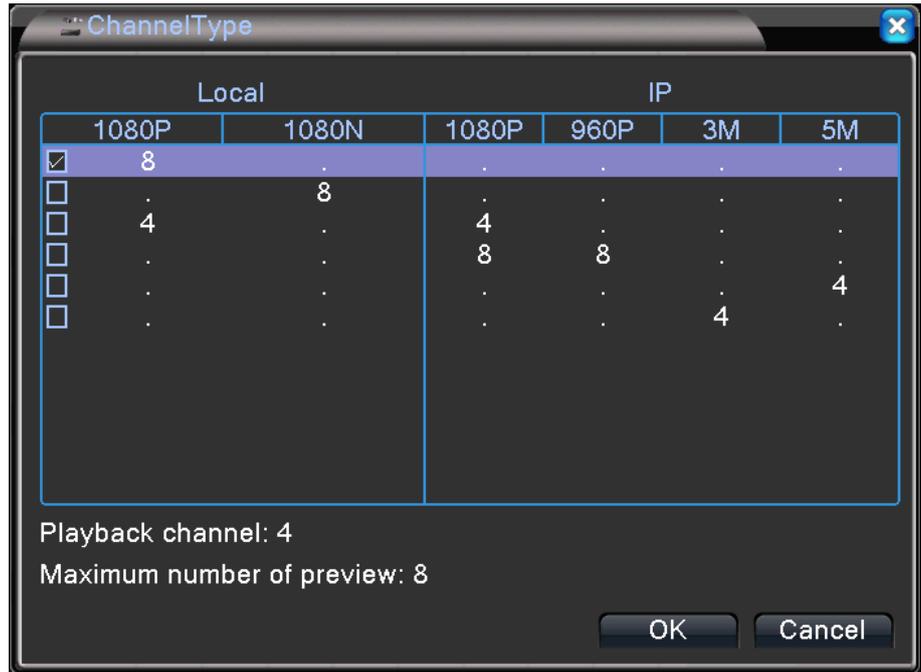


- a). Channel mode: the mode to sets camera resolution. 「Local」 is means similar kind camera, 「IP」 is means IP Camera. Click channel mode it will display 4CH and 8CH device. As the picture showing below.

1) 4CH Device

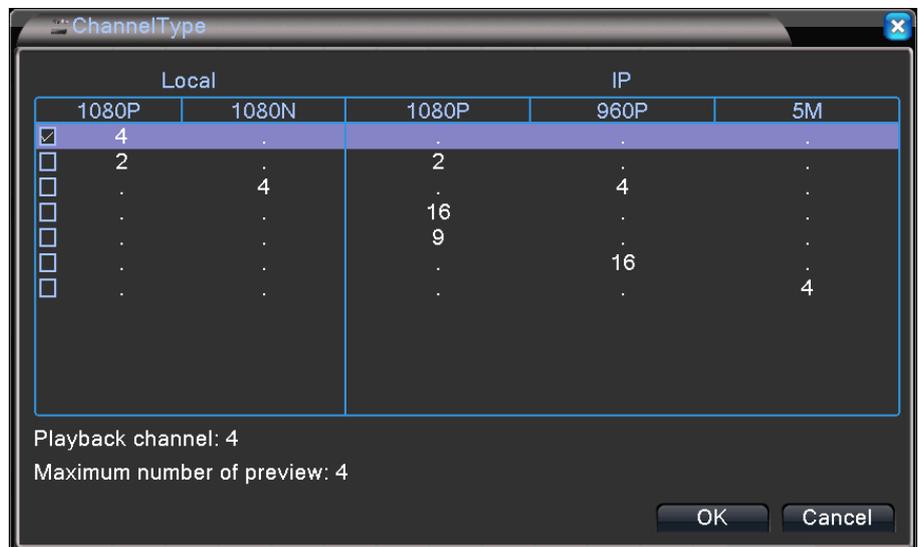


2) 8CH device



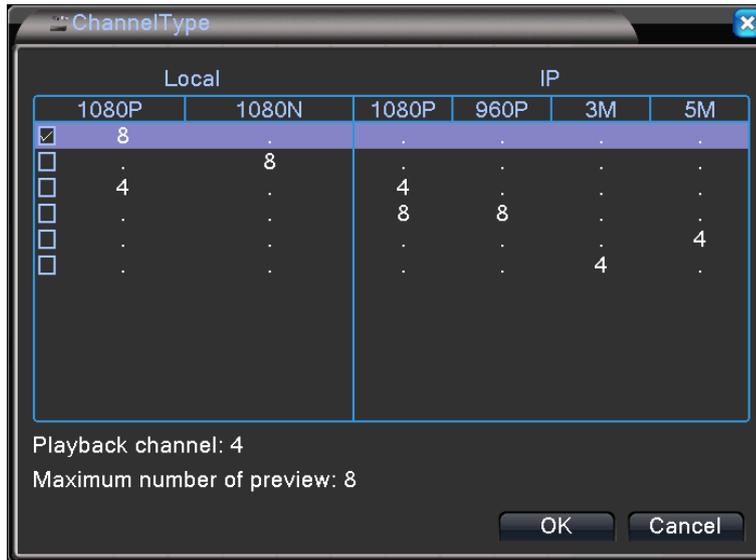
5.1.3.10.1 Regular recording mode: only has similar camera

■ 4CH



Under 4CH channel mode, check the different mode to record video with different resolution. For instance, check the 1080P 4CH under local, can record video at maximum 1080P 4CH resolution, and also display the maximum playback times under this mode. The system requires restart after you confirm this setting.

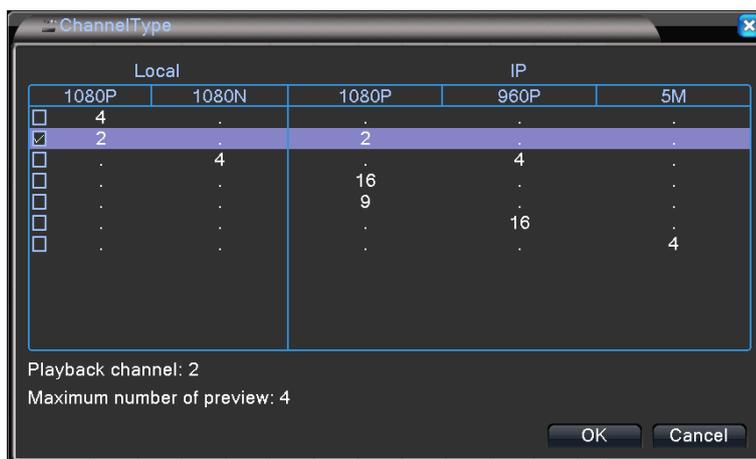
■ 8CH



Under 8CH channel mode, check the different mode to record video with different resolution. For instance, check the 1080P 8CH under local, can record video at maximum 1080P 8CH resolution, and also display the maximum playback times under this mode. The system requires restart after you confirm this setting.

5.1.3.10.2 Hybrid recording: the recording combinations of analog and network modes

■ 4CH



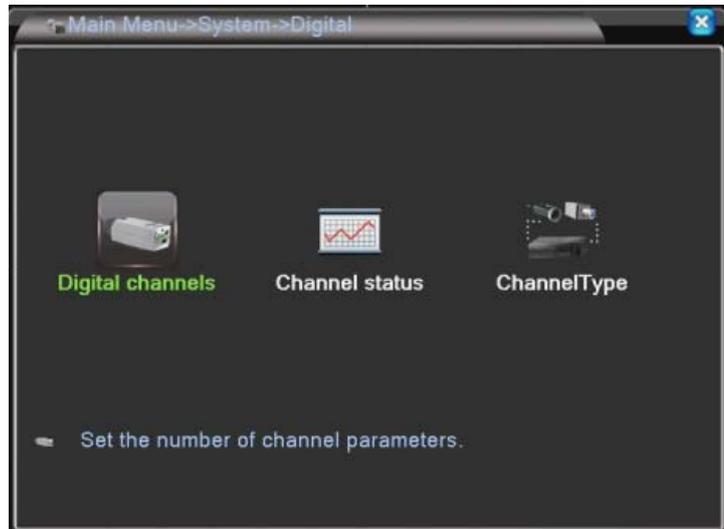
Under 4CH channel mode, check the different mode that combine analog and network mode, can recording video with different resolution. For example, check and combine the local 1080P 2CH with IP 1080P 2CH mode can record

local 1080P 2CH and IP 1080P 2CH at same time, and also display the maximum playback times under this mode. The system requires restart after you confirm this setting.

- Path: Main Menu/ System Setting/ Channel Management



- **Digital** : Set channel mode. After restart device, the channel mode connects with network, so it will display digital channels and channel status.

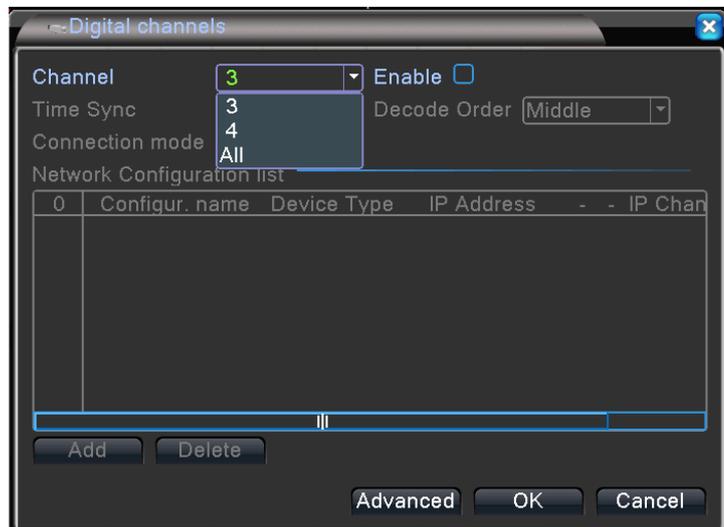


Digital channels

- Path: Main Menu/ System Setting/ Digital channels



- **Digital channels** : Digital channel capable setting record by which IP Cam or DVR.



- Channel: setting internet channel separately or together
- Enable: setting digital channel after check enable, the default setting is off.

- c). Time synchronization: check to ensure time synchronization with system time in every IP Cam and DVR
- d). Decoding strategy: select the network transmission mode, real-time priority, medium, smooth priority. Default setting as medium.
- e). Connecting mode: can select single connection or multiple connecting mode, the multiple connection can connect single channel with multi IP cam or DVR device, it display image with tour. The default setting is single connection
- f). Add: search the current connectable IP Cam or DVR device.
- g). Delete: can delete the IP Cam and DVR device from network setting list.

◆ Remote access channel setting

- Path: Main Menu/System Setting/ Channel Management/ Digital channel/ Remote access channel setting
- **Add** : get into remote channel setting, click “search” showing all current connectable IP Cam and DVR information.



- a). Device name: capable change device name, the default setting as chConfig01.
- b). Device type: select device type, which includes IPC, DVR, and HVR. The default setting as IPC.
- c). Remote access: setting the remote access, the range as 0~65535.
- d). Protocol: setting the device protocol, NETIP or ONVIF. The default setting as NETIP.

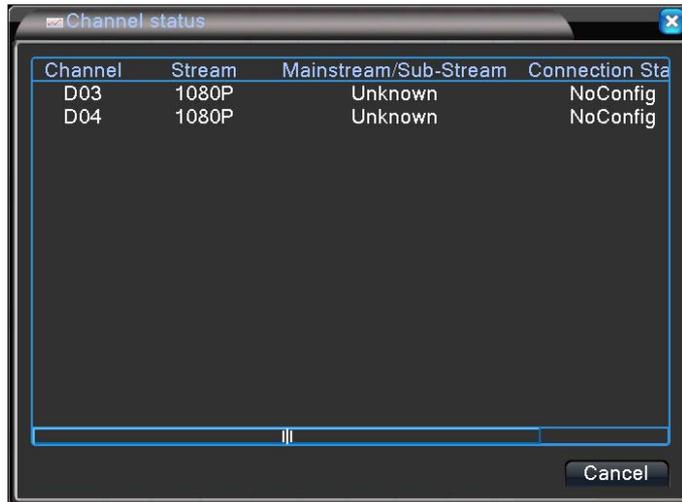
- e). Data stream: capable setting the device data stream, which includes main stream and sub-stream, the default setting as main stream.
- f). Device address: display IP Address for current selected device.
- g). Port: display the port for current selected device.
- h). User account: type in user account for IP cam or DVR. The default setting as admin.
- i). Password: type in password for IP cam or DVR. The default setting as blank.

◆ Channel status

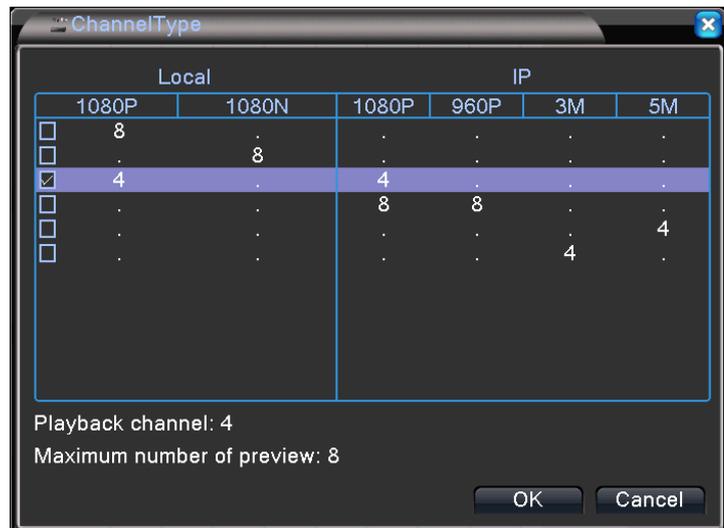
- Path: Main Menu/System Setting/ Channel Management/Channel status



- Channel status : Display the connect status for current network.



- 8CH



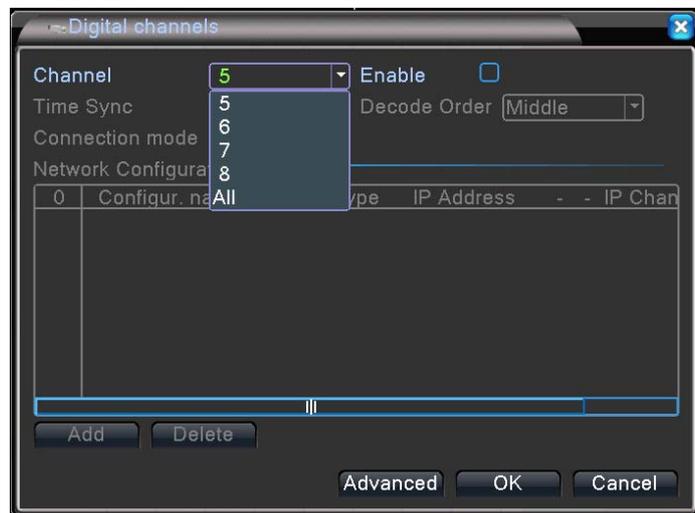
Under 8CH channel mode, check the different mode that combine analog and network mode, can recording video with different resolution. For example, check and combine the local 1080P 4CH with IP 1080P 4CH mode can record local 1080P 4CH and IP 1080P 4CH at same time, and also display the maximum playback times under this mode. The system requires restart after you confirm this setting.

- Path: main menu/ system setting/ channel management
-  : Set channel mode. After restart device, the channel mode connects with network, so it will display digital channels and channel status.



◆ Digital channels

- Path: Main Menu/ System Setting/ digital channels
-  : Digital channel capable setting record by which IP Cam or DVR.



- a). Channel: setting internet channel separately or together
- b). Enable: setting digital channel after check enable, the default setting is off.
- c). Time synchronization: check to ensure time synchronization with system time in every IP Cam and DVR
- d). Decoding strategy: select the network transmission mode, real-time priority, medium, smooth priority. Default setting as medium.
- e). Connecting mode: can select single connection or multiple connecting modes, the multiple connections can connect single channel with multi IP cam or DVR

device, it display image with tour. The default setting is single connection

- f). Add: search the current connectable IP Cam or DVR device.
- g). Delete: can delete the IP Cam and DVR device from network setting list.

◆ Remote access channel setting

- Path: Main Menu/System Setting/ Channel Management/ Digital Channel/ Remote access channel setting
- **Add** : get into remote channel setting, click "search" showing all current connectable IP Cam and DVR information.



- a). Device name: capable change device name, the default setting as chConfig01.
- b). Device type: select device type, which includes IPC, DVR, and HVR. The default setting as IPC.
- c). Remote access: setting the remote access, the rage as 0~65535.
- d). Protocol: setting the device protocol, NETIP or ONVIF. The default setting as NETIP.
- e). Data stream: capable setting the device data stream, which includes main stream and sub-stream, the default setting as main stream.
- f). Device address: display IP Address for current selected device.
- g). Port: display the port for current selected device.
- h). User account: type in user account for IP cam or DVR. The default setting as admin.

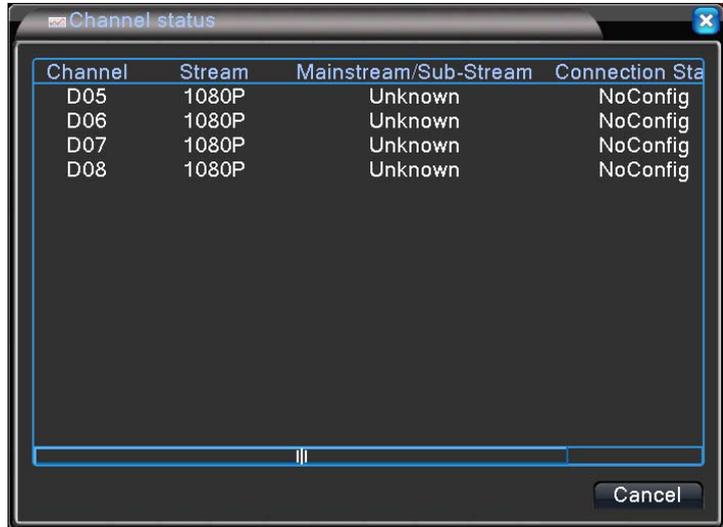
- i). Password: type in password for IP cam or DVR. The default setting as blank.

◆ Channel status

- Path: Main Menu/System Setting/ Channel Management/Channel status

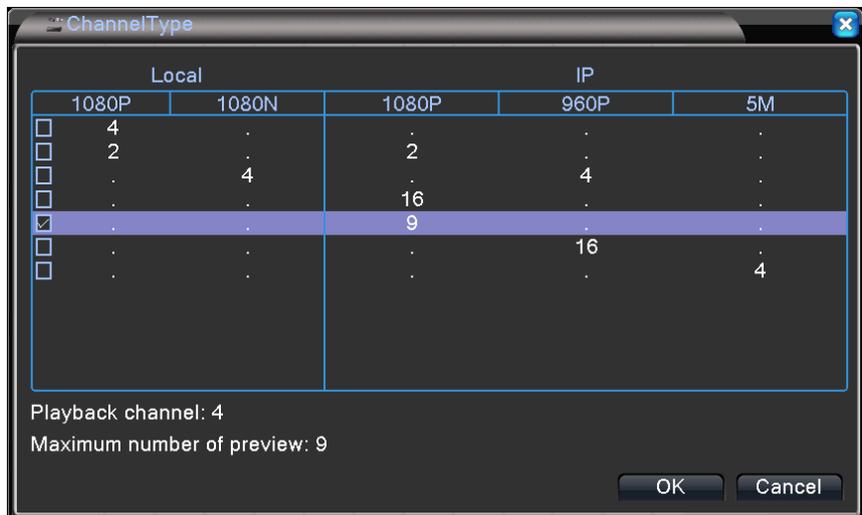


- Channel status : Display the connect status for current network.



5.1.3.10.3 Network recording: Only support IP mode

■ 4CH



Under 4CH channel mode, check the different mode to record video with different resolution. For instance, check the 1080P 9CH under IP, can record video at maximum 1080P 9CH resolution, and also display the maximum playback times under this mode. The system requires restart after you confirm this setting.

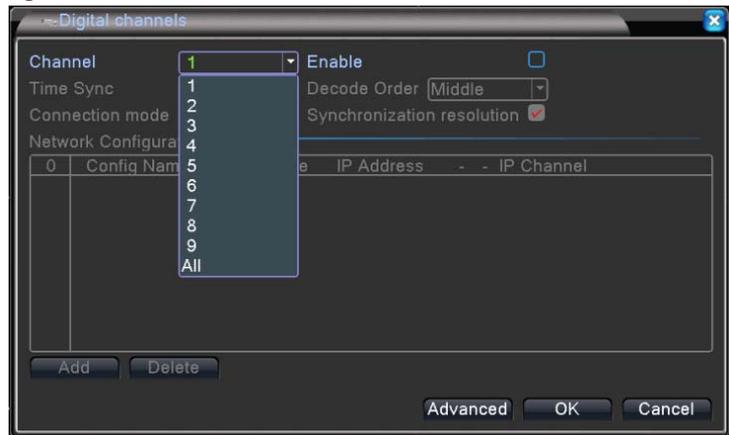
- Path: main menu/
system setting/ channel
management

-  **Digital** : Set channel
mode. After restart
device, the channel
mode connects with
network, so it will
display digital channels
and channel status.



◆ Digital channels

- Path: main menu/
system setting/ digital
channels
-  **Digital channels** : Digital channel
capable setting record
by which IP Cam or DVR.



- h). Channel: setting internet channel separately or together
- i). Enable: setting digital channel after check enable, the default setting is off.
- j). Time synchronization: check to ensure time synchronization with system time in every IP Cam and DVR
- k). Decoding strategy: select the network transmission mode, real-time priority, medium, smooth priority. Default setting as medium.
- l). Connecting mode: can select single connection or multiple connecting modes, the multiple connections can connect single channel with multi IP cam or DVR device, it display image with tour. The default setting is single connection

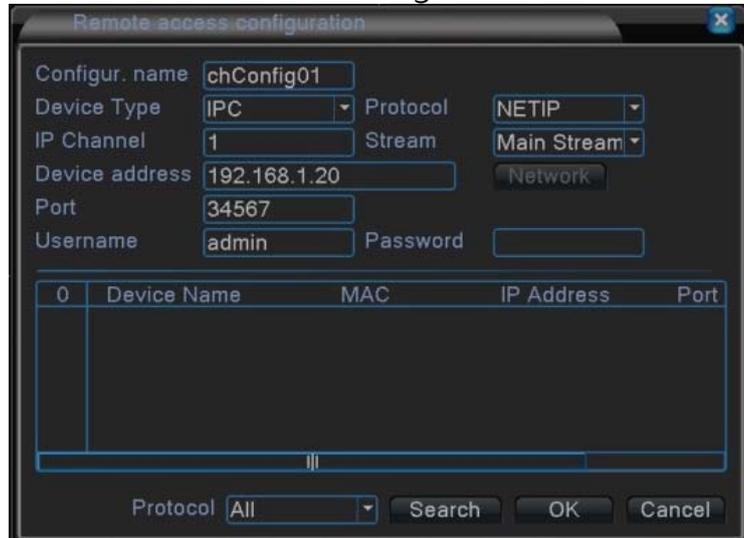
m). Add: search the current connectable IP Cam or DVR device.

a). Delete: can delete the IP Cam and DVR device from network setting list.

◆ Remote access channel setting

- Path: Main Menu/System Setting/ Channel Management/ Digital Channel/ Remote access channel setting

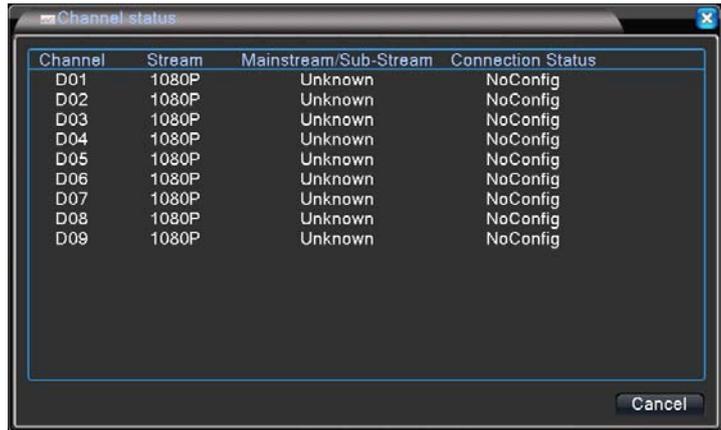
- **Add** : get into remote channel setting, click "search" showing all current connectable IP Cam and DVR information.



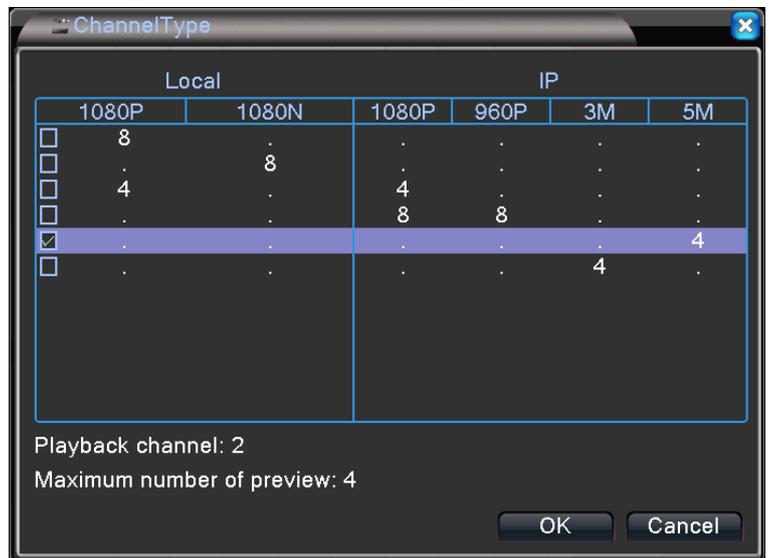
- a). Device name: capable change device name, the default setting as chConfig01.
- b). Device type: select device type, which includes IPC, DVR, and HVR. The default setting as IPC.
- c). Remote access: setting the remote access, the range as 0~65535.
- d). Protocol: setting the device protocol, NETIP or ONVIF. The default setting as NETIP.
- e). Data stream: capable setting the device data stream, which includes main stream and sub-stream, the default setting as main stream.
- f). Device address: display IP Address for current selected device.
- g). Port: display the port for current selected device.
- h). User account: type in user account for IP cam or DVR. The default setting as admin.
- i). Password: type in password for IP cam or DVR. The default setting as blank.

◆ Channel status

- Path: Main Menu/System Setting/ Channel management/Channel status
-  Channel status : Display the connect status for current network.

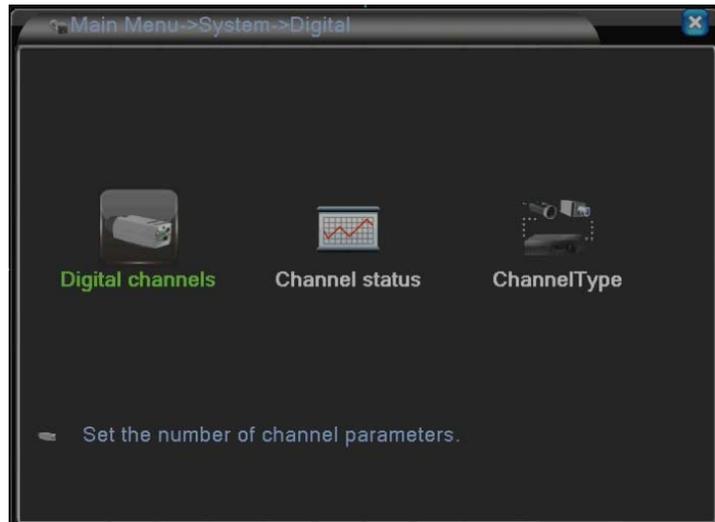


■ 8CH



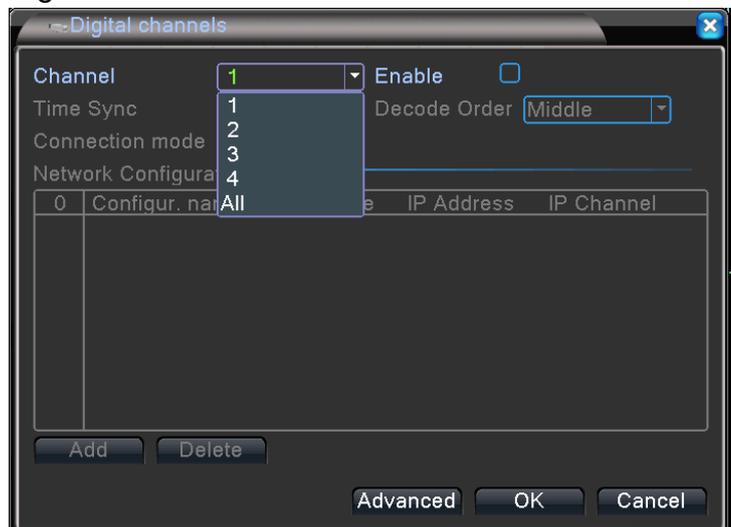
Under 8CH channel mode, check the different mode to record video with different resolution. For instance, check the 5MP 4CH under IP, can record video at maximum 5MP 4CH resolution, and also display the maximum playback times under this mode. The system requires restart after you confirm this setting.

- Path: Main Menu/
System Setting/
Channel management
-  : Set channel mode.
After restart device, the
channel mode connects
with network, so it will
display digital channels
and channel status.



◆ Digital channels

- Path: Main Menu/
System Setting/ Digital
channels
-  : Digital channel
capable setting record
by which IP Cam or DVR.



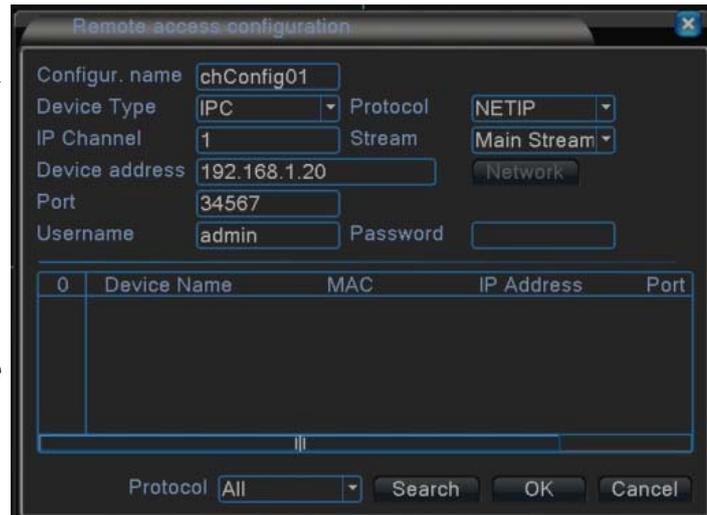
- a). Channel: setting internet channel separately or together
- b). Enable: setting digital channel after check enable, the default setting is off.
- c). Time synchronization: check to ensure time synchronization with system time in every IP Cam and DVR
- d). Decoding strategy: select the network transmission mode, real-time priority, medium, smooth priority. Default setting as medium.
- e). Connecting mode: can select single connection or multiple connecting modes, the multiple connections can connect single channel with multi IP cam or DVR

device, it display image with tour. The default setting is single connection

- f). Add: search the current connectable IP Cam or DVR device.
- g). Delete: can delete the IP Cam and DVR device from network setting list.

◆ Remote access channel setting

- Path: Main Menu/System Setting/ Channel Management/ Digital channel/ Remote access channel setting
- **Add** : get into remote channel setting, click "search" showing all current connectable IP Cam and DVR information.



- a). Device name: capable change device name, the default setting as chConfig01.
- b). Device type: select device type, which includes IPC, DVR, and HVR. The default setting as IPC.
- c). Remote access: setting the remote access, the range as 0~65535.
- d). Protocol: setting the device protocol, NETIP or ONVIF. The default setting as NETIP.
- e). Data stream: capable setting the device data stream, which includes main stream and sub-stream, the default setting as main stream.
- f). Device address: display IP Address for current selected device.
- g). Port: display the port for current selected device.
- h). User account: type in user account for IP cam or DVR. The default setting as admin.

- i). Password: type in password for IP cam or DVR. The default setting as blank.

◆ Channel status

- Path: Main Menu/System setting/ Channel management/Channel status



- **Channel status** : Display the connect status for current network.

Channel	Stream	Mainstream/Sub-Stream	Connection Sta
D01	5M	Unknown	NoConfig
D02	5M	Unknown	NoConfig
D03	5M	Unknown	NoConfig
D04	5M	Unknown	NoConfig

5.1.4 Management tools

- Path: Main Menu/Manage tools

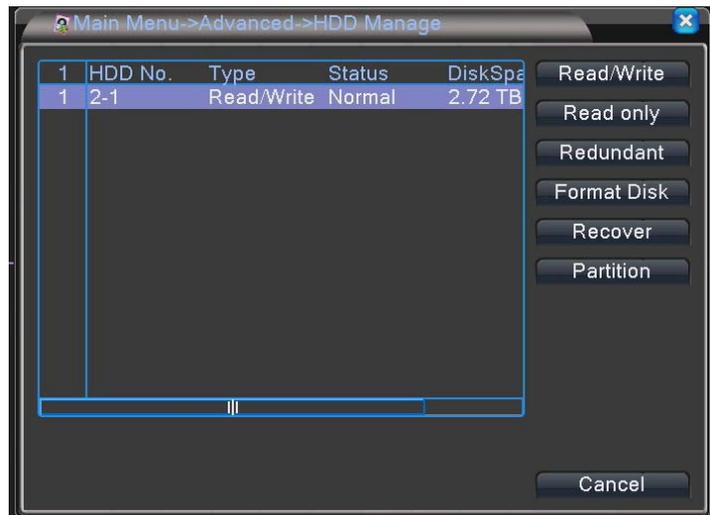


- **Advanced** : setting system tools, which includes: hard disk management, account management, online user, output adjustment, automatic maintain, restore, system update, device information and input/output.



5.1.4.1 Hard disk management

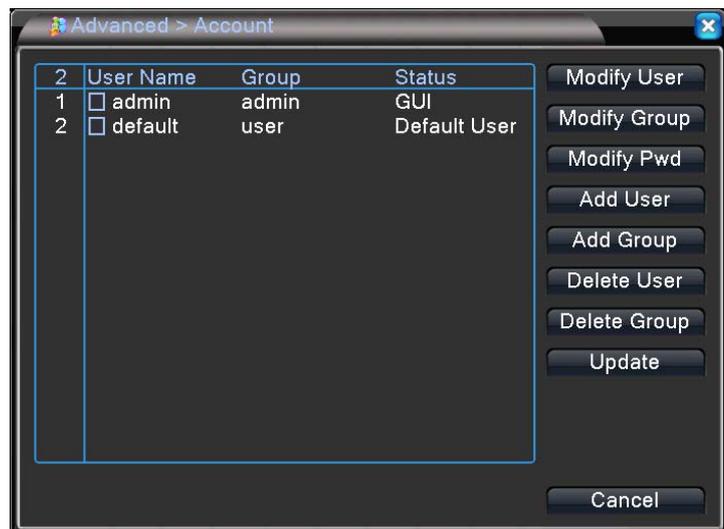
- Path: Main Menu/ Management tools/ Hard disk management
-  : delete hard disk information and other operations.



- a). Set read/write disk: capable setting hard disk as read/write disk.
- b). Set read only disk: capable setting hard disk as read only.
- c). Set Mirror disk: Set 2 synchronize hard disk, 2 hard disks have same information and files. This function only capable for use 2 hard disks above.
- d). Format hard disk: for format hard disk
- e). Restore: restore the system error.
- f). Hard disk division: divide hard disk into many area.

5.1.4.2 Account management

- Path: Main Menu/Management tools/Account management
-  : Account management: setting account user, password group and so on.

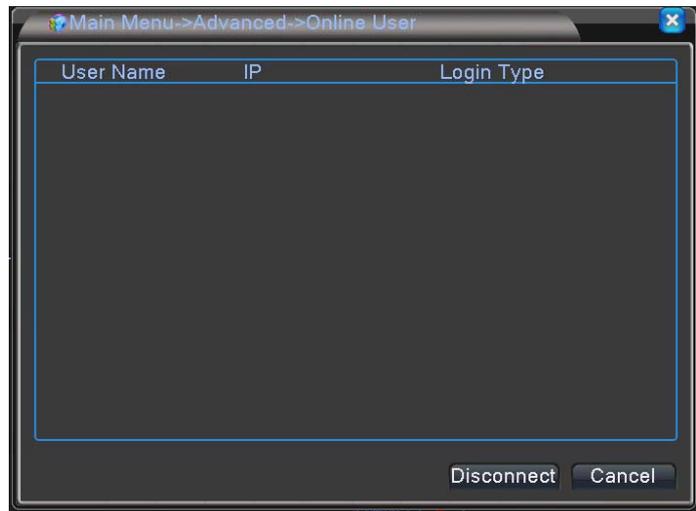


- a). Modify user: modify current or new user account.

- b). Modify group: modify current or new group
- c). Modify Pw: modify current or new account passwords.
- d). Add user: add a new user account
- e). Add group: divide current accounts with groups.
- f). Delete user: delete current user account
- g). Delete group: delete current group
- h). Update: press update button after finish add or modify account or groups.

5.1.4.3 Online user

- Path: Main Menu/Management tools/ Online user
-  : display online user account, IP, and login method.



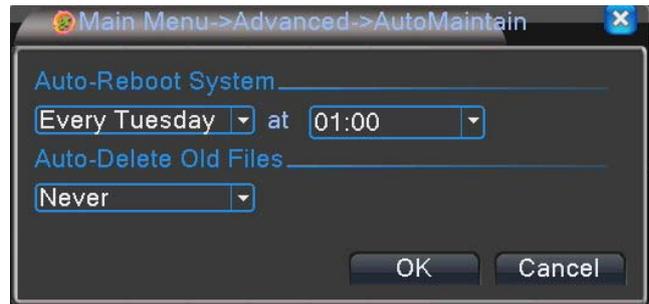
5.1.4.4 Output adjustment

- Path: Main Menu/Management tools/ Output Adjustment
-  : adjust image output setting range and image brightness, contrast, saturation, and hue.



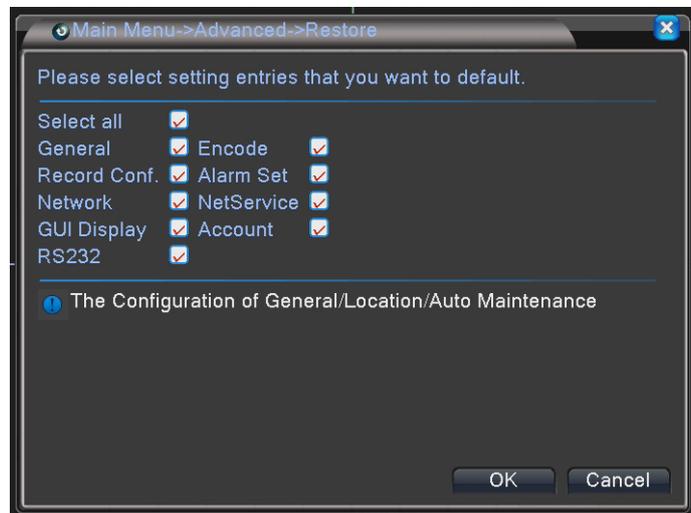
5.1.4.5 Automatic maintain

- Path: Main Menu/Management tools/ Automatic maintain
-  : Set automatic maintain time, system restart time and delete file automatically



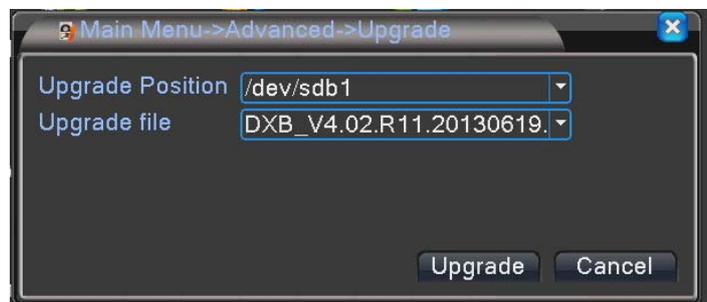
5.1.4.6 Restore

- Path: Main Menu/Management tools/ Restore
-  : restore default setting, capable select and restore single or multiple terms, which includes: general setting, resolution/FPS setting, time setting, alarm setting, network setting, network service, display setting, account management, and port.



5.1.4.7 Update

- Path: Main Menu/Management tools/Update
-  : System update: put update files in USB device, insert into DVR, select the update position, press update button and finish update.



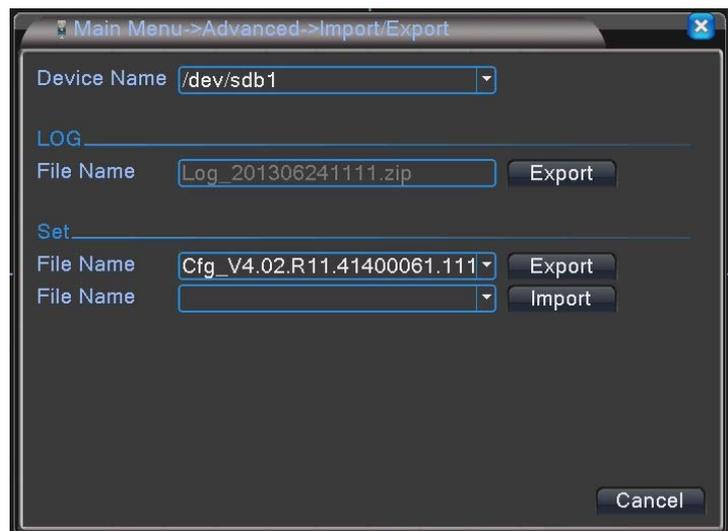
5.1.4.8 Device info

- Path: Main Menu/Management tools/Device info
-  : setting device hardware information.



5.1.4.9 Input/output

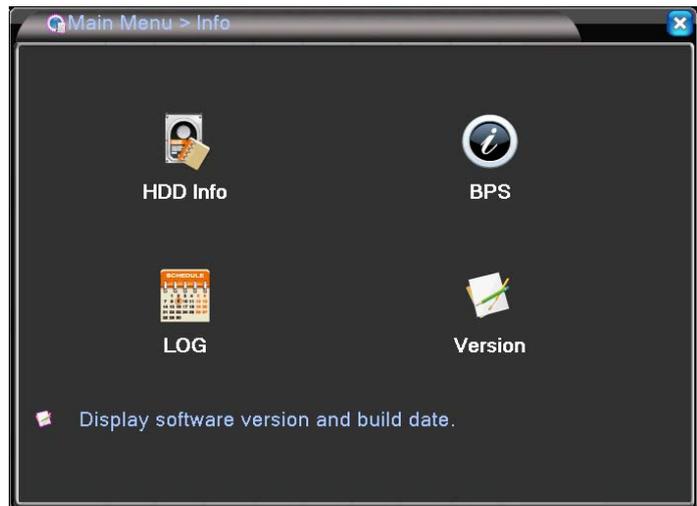
- Path: Main Menu/Management tools/Input/output
-  : Output current log and setting by USB. If user accidentally restore device, can input log and setting again.



5.1.5 System information

- Path: Main Menu/ System info

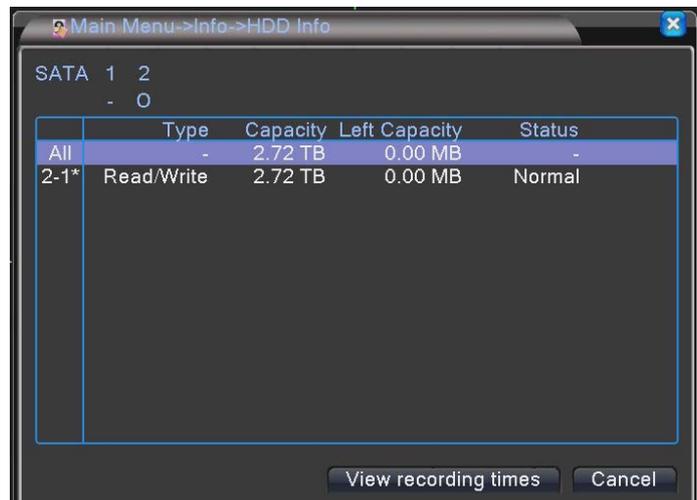
-  : review system information. Divide into hard disk information, data bits information, device version, and log.



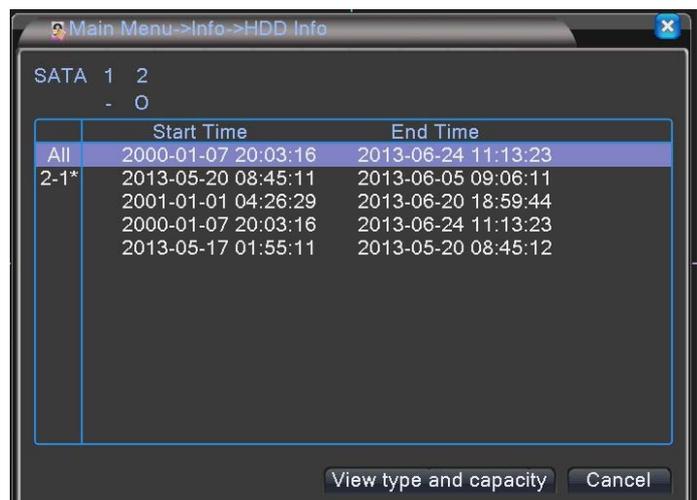
5.1.5.1 Hard disk information

- Path: Main Menu/ System info/ Hard disk info

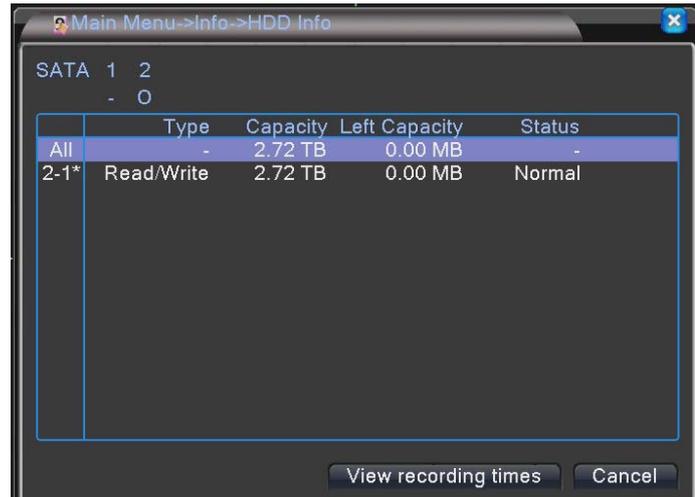
-  : review hard disk information: time period and Remaining capacity



- a). Review hard disk recording time



b). Review hard disk type and capacity



5.1.5.2 Bit statistics

- Path: Main Menu/System info/ BPS



- : review system bits stream information, display all channels recording bits.

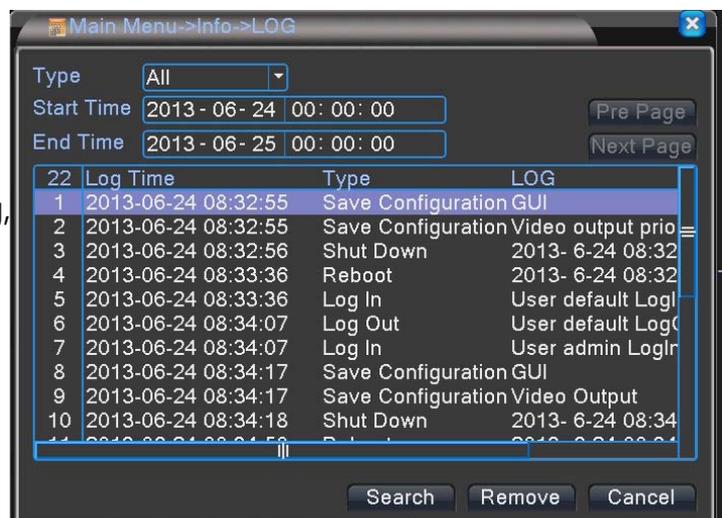


5.1.5.3 Information content

- Path: Main Menu/System info/ log

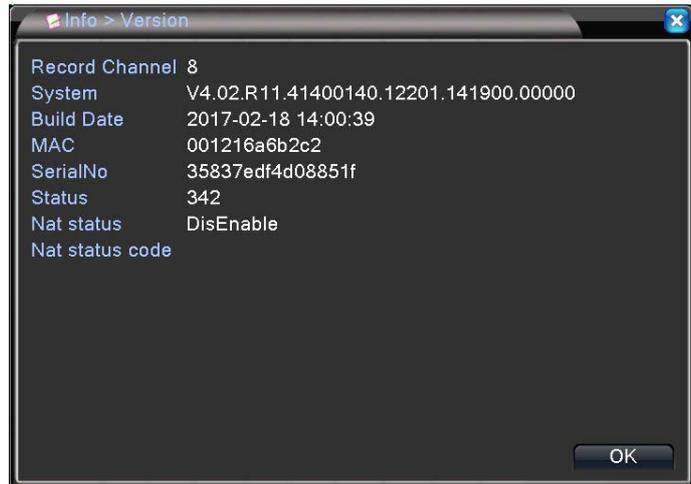


- : review system log, record device usage information.



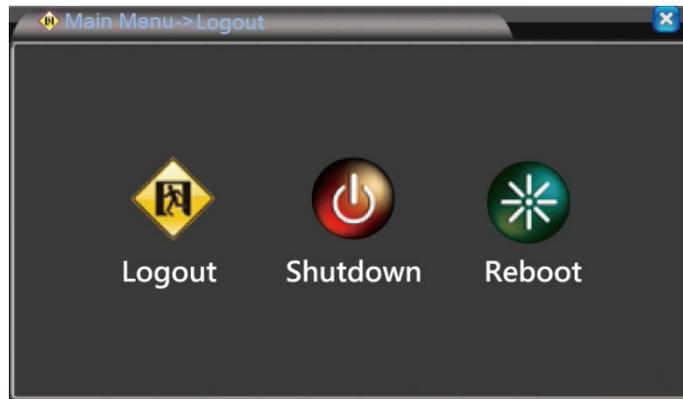
5.1.5.4 System Version

- Path: Main Menu/
System Info/ System
version
-  : review system
version, the device
number and software
version.



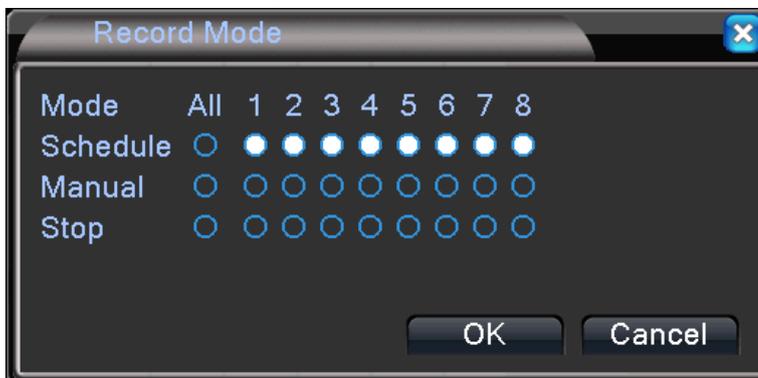
5.1.6 Logout

- Path: main menu/
logout
-  : logout system:
logout/shutdown/reb
oot



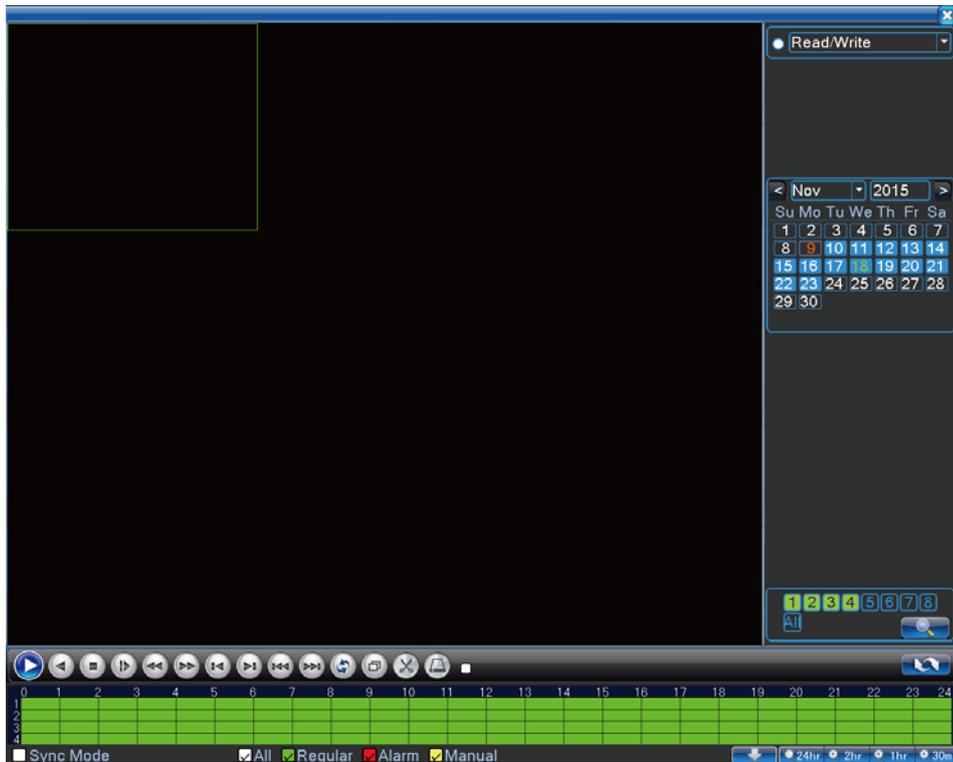
5.2 Recording mode

- Path: quick menu/ recording mode
- Quickly setting every channel mode as setting/manual/off.



5.3 Playback Backup

- Path: quick menu/ playback backup
- For details, please refer to 5.1.1.2 Playback Backup



5.4 PTZ setting

- Path: quick menu/ PTZ setting
- Setting PTZ function before operate PTZ, please refer to 5.1.3.6 PTZ setting



5.5 High speed PTZ

- Path: quick menu/ high speed PTZ
- In screen display, use mouse to control PTZ camera angle.

5.6 Alarm output

- Path: quick menu/ alarm output

- For details, please refer to 5.1.2.5 Alarm output



5.7 Image color

- Path: quick menu/ image color



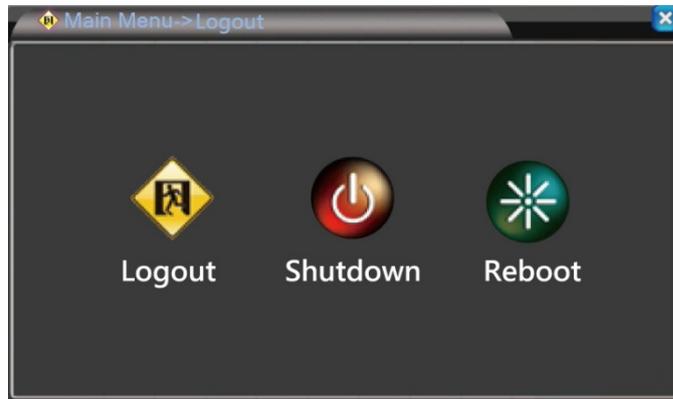
5.8 Output adjustment

- Path: quick menu/ screen adjustment
- For details, please refer to 5.1.4.4 output Adjustment



5.9 Logout

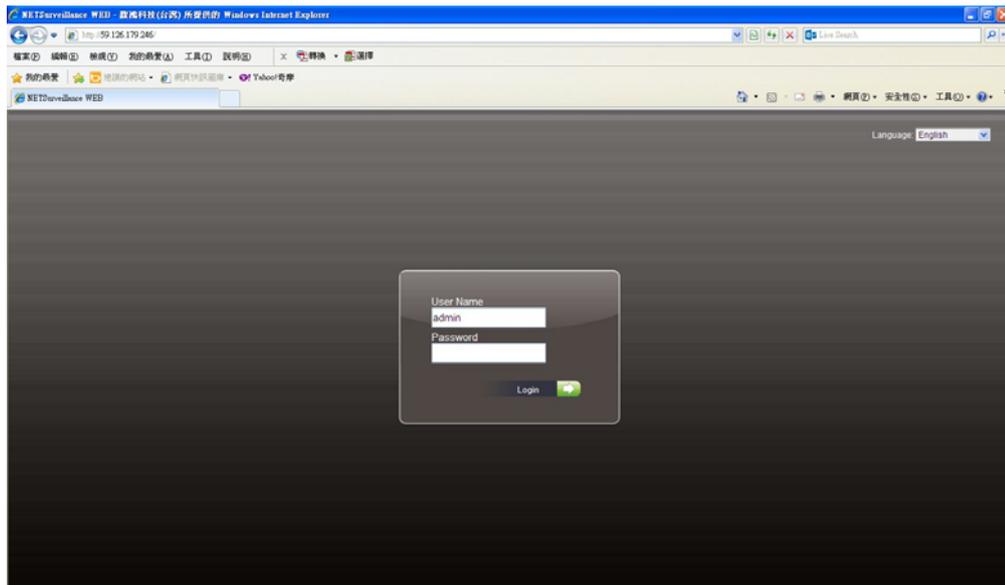
- Path: quick menu/ logout
- For details, please refer to 5.1.6 log out.



D. NET Surveillance WEB IE remote operation

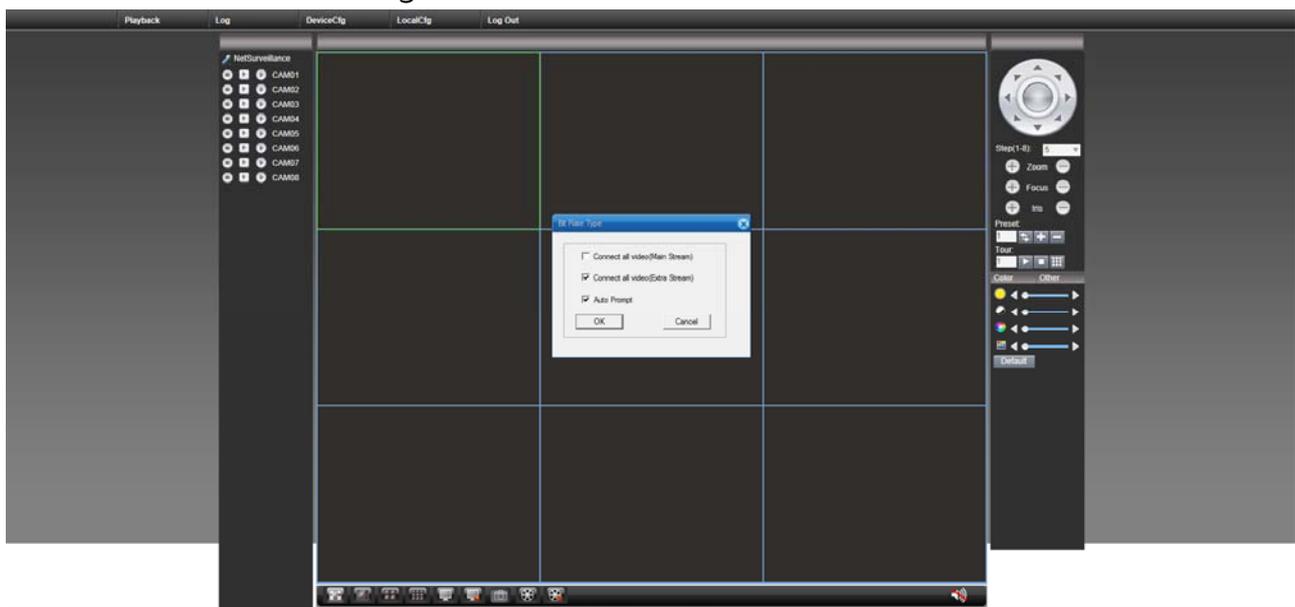
1. IE login connect

- Open IE, type in DVR name, IP address, or DDNS in address bar
- Enter login screen as showing below.
- Select language.
- Type in correct user name and password, login monitoring screen.
- If do not set user name or password, login by type in admin in user name and press login button.



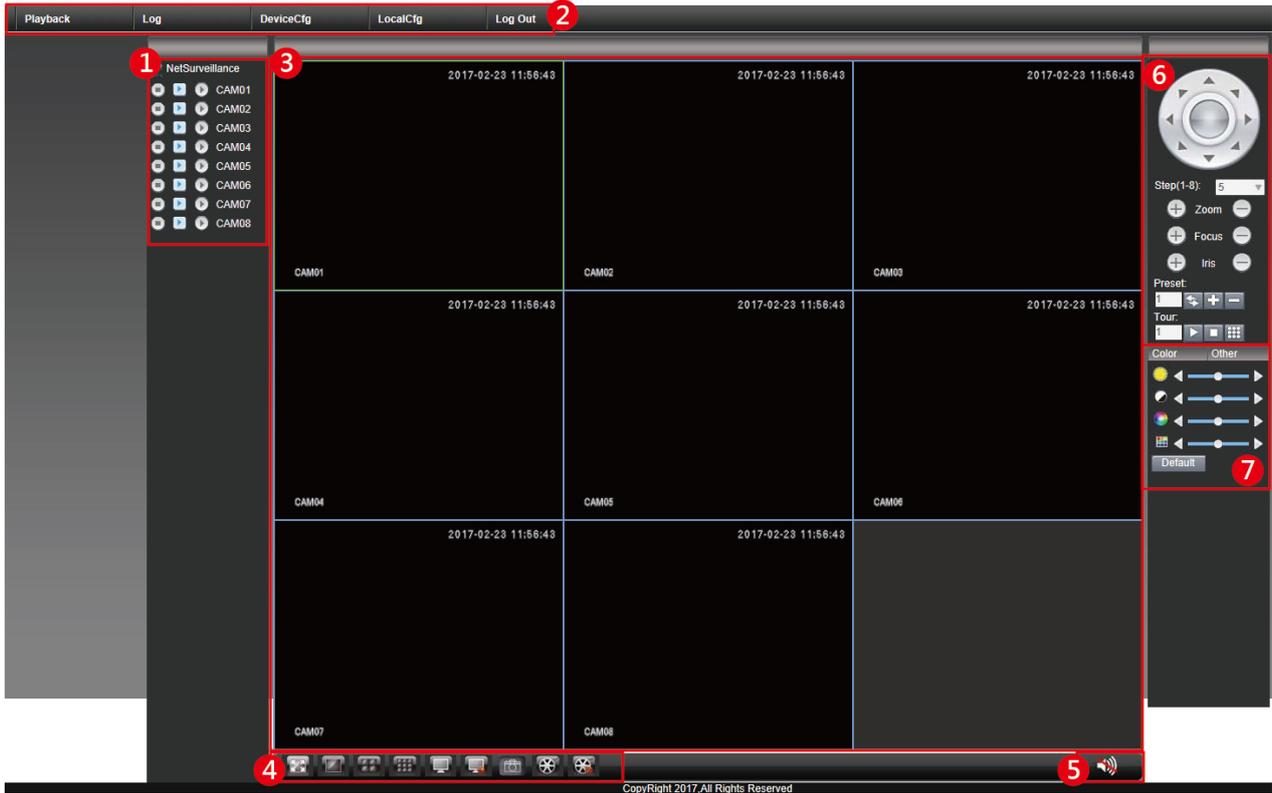
2. Login screen display

- Star screen: display main bits stream and sub bit stream monitor, the default setting as sub bits stream.



- Login and watch records directly

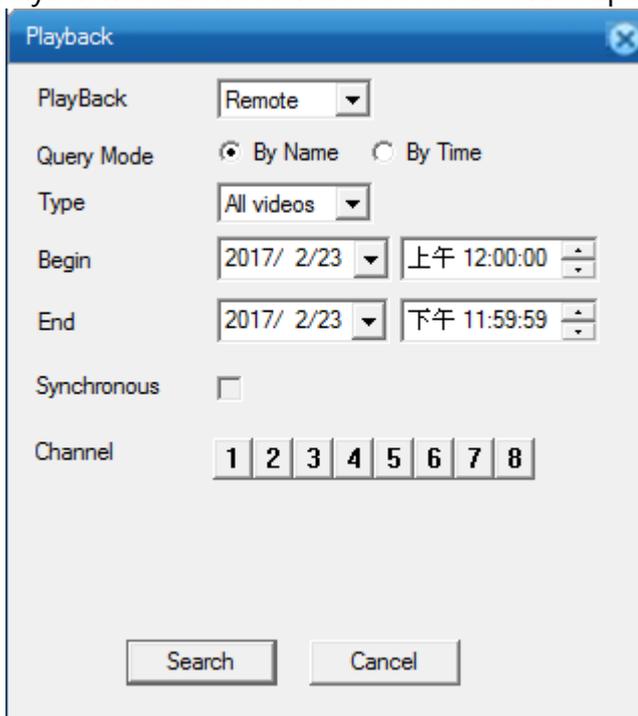
3. Operation screen display



- ❶ Select remote monitor channel
- ❷ System function



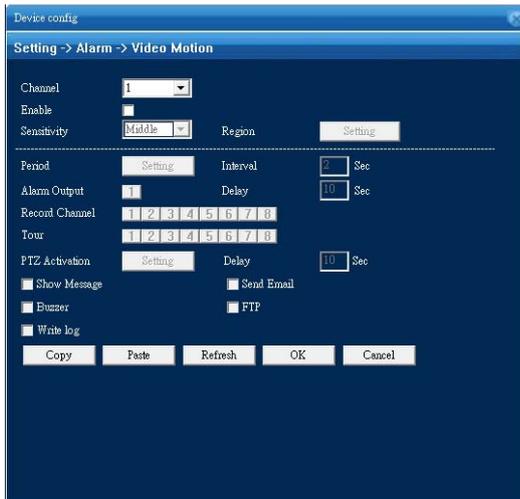
- Playback: search for video records that capable for playback.



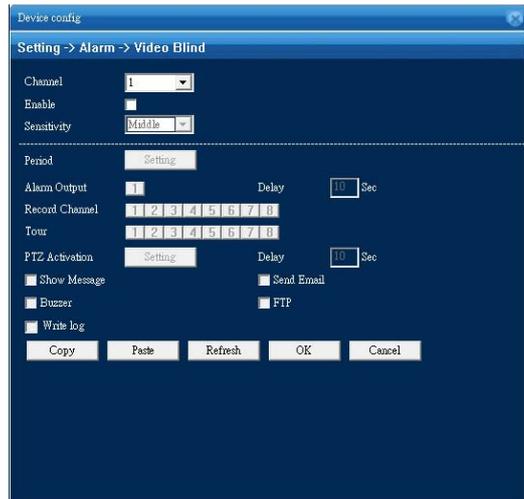
- 2)  Alarm function: offer movement detection/ channel blind/ video loss/ alarm input/alarm output/Abnormal setting and so on.



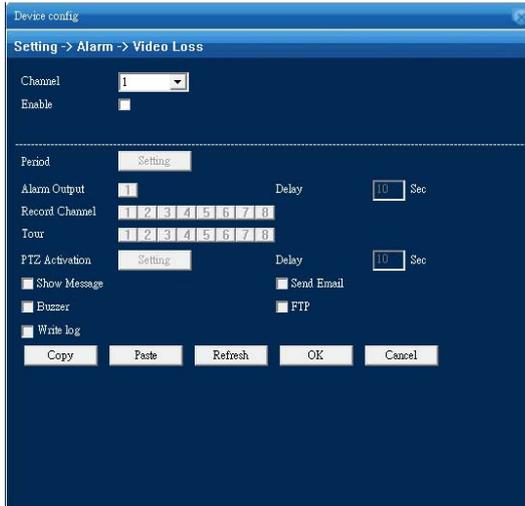
■ Movement detection



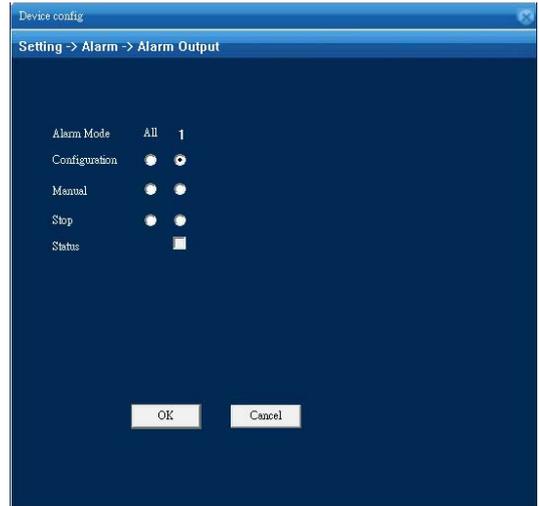
■ Channel blind



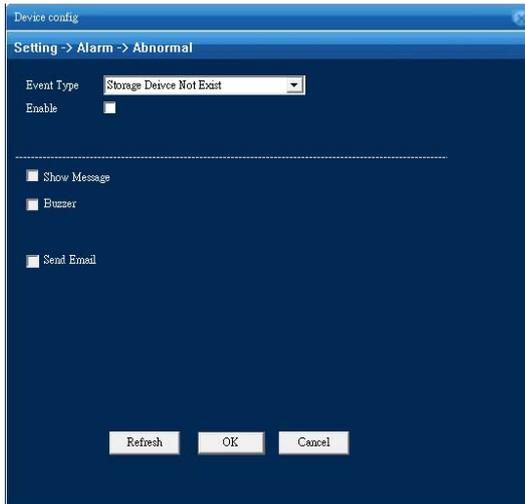
■ Video loss



■ Alarm output



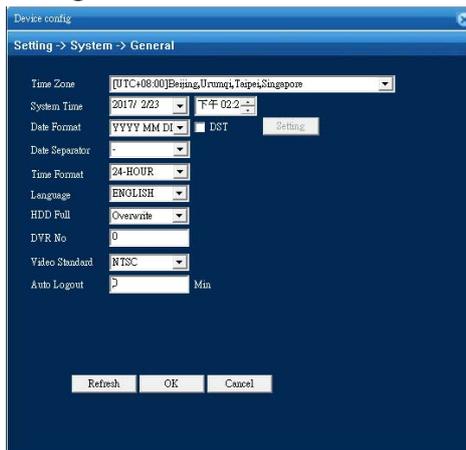
■ Abnormal



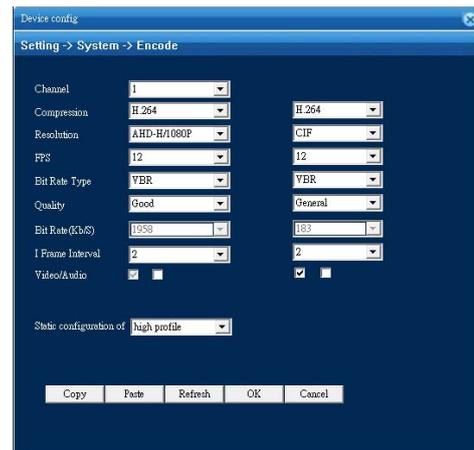
- 3)  system setting: offer general/FPS/Network/Network service/output mode/PTZ/RS232 setting.



3.1) general



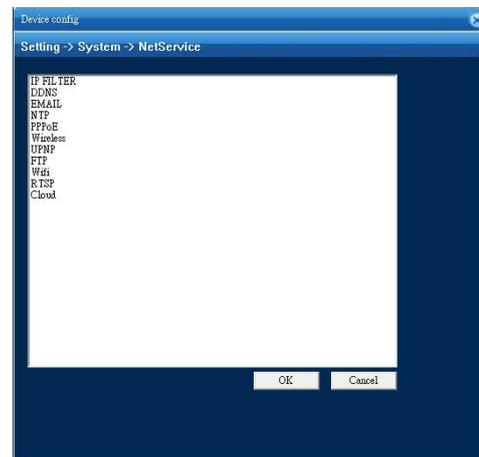
3.2) FPS



3.3) Network



3.4) Network service



3.5) Output mode

The screenshot shows the 'Device config' window with the path 'Setting -> System -> GUI Display'. The settings are as follows:

- CAM Name: Setting
- Time Title:
- Channel Title:
- Video Status:
- Alarm status:
- Anti-jitter:
- Transparency: 255
- Resolution: 1024*960
- Channel: 1
- Region Cover:
- Time Title:
- Channel Title:

Buttons at the bottom: Refresh, OK, Cancel.

3.6) PTZ setting

The screenshot shows the 'Device config' window with the path 'Setting -> System -> PTZ Config'. The settings are as follows:

- PTZ Device: RS485 Device
- Channel: 1
- Protocol: PELCOD
- Address: 1
- Baudrate: 9600
- Data Bits: 8
- Stop Bits: 1
- Parity: None

Buttons at the bottom: Refresh, OK, Cancel.

3.7) RS232

The screenshot shows the 'Device config' window with the path 'Setting -> System -> RS232'. The settings are as follows:

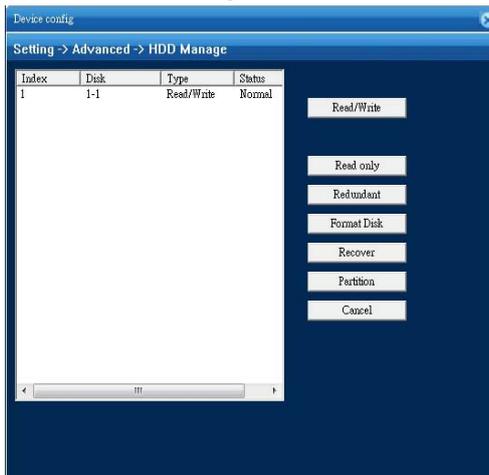
- Function: NONE
- Baudrate: 115200
- Data Bits: 8
- Stop Bits: 1
- Parity: None

Buttons at the bottom: Refresh, OK, Cancel.

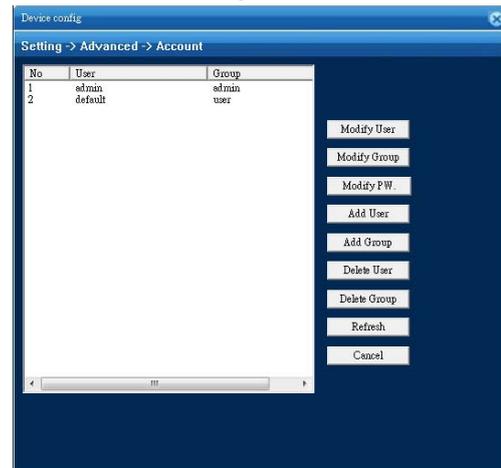
- 4)  management tools: offer disk management/ user management/automatic maintain/restore/output/input/reboot/update/channel mode setting.



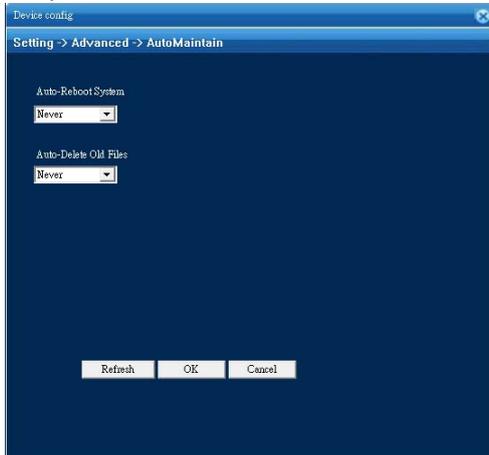
4.1) disk management



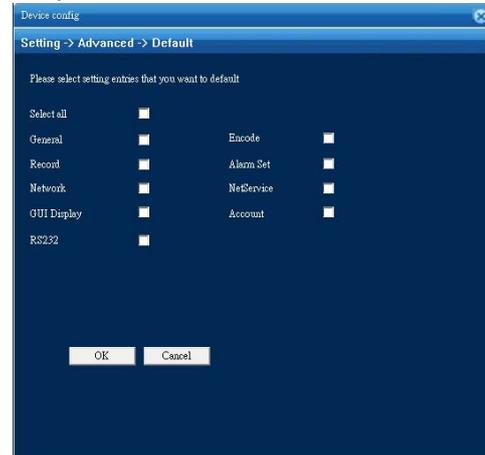
4.2) user management



4.3) Auto maintain



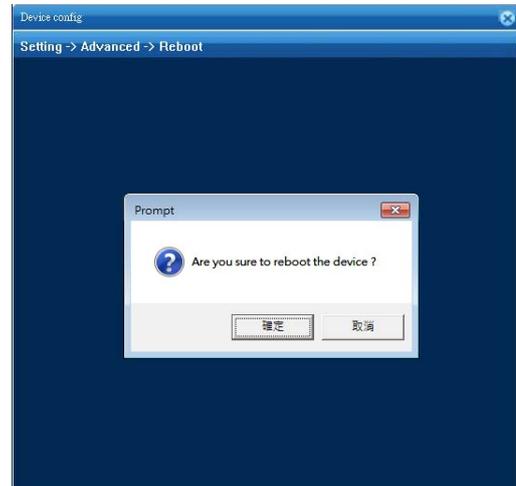
4.4) restore



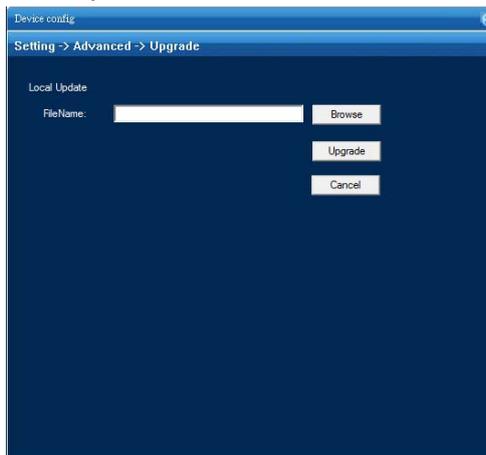
4.5) input/output



4.6) reboot



4.7) update



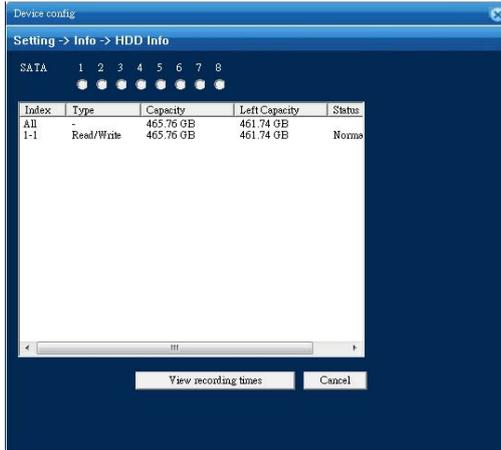
4.8) channel mode



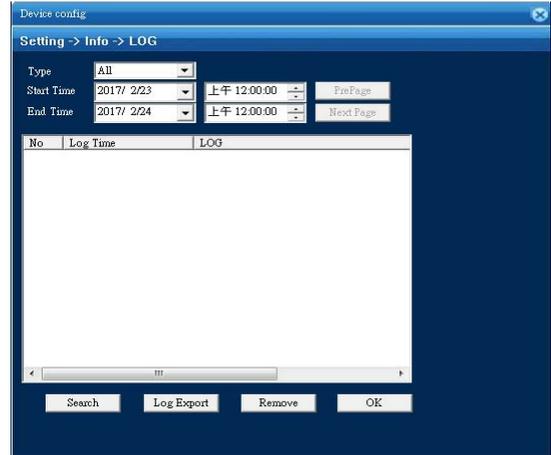
5) System info: offer hard disk information/ log info/version



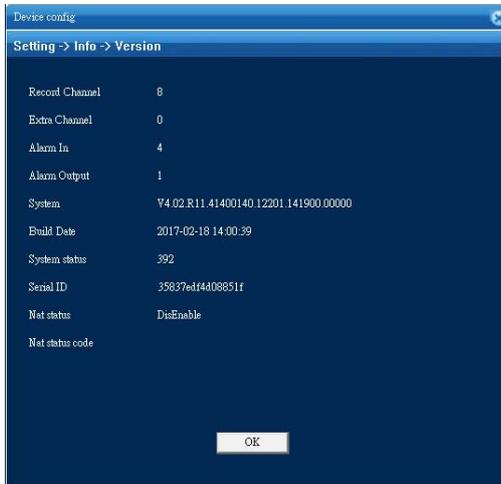
5.1) Hard disk information



5.2) log info



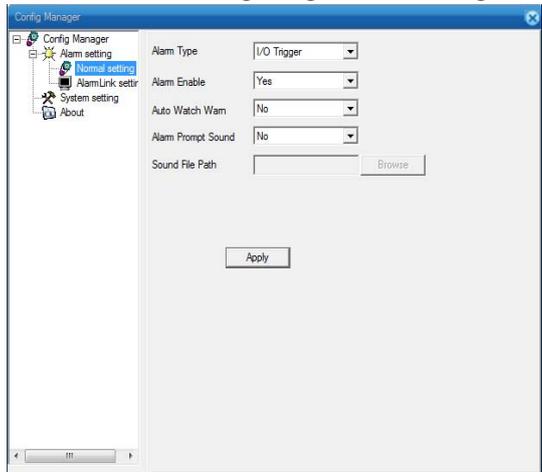
5.3) Version



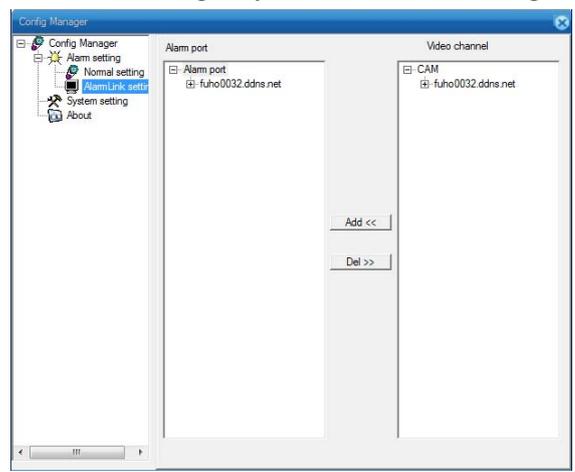
- Local setting: set recording image, photo storage position, alarm term.



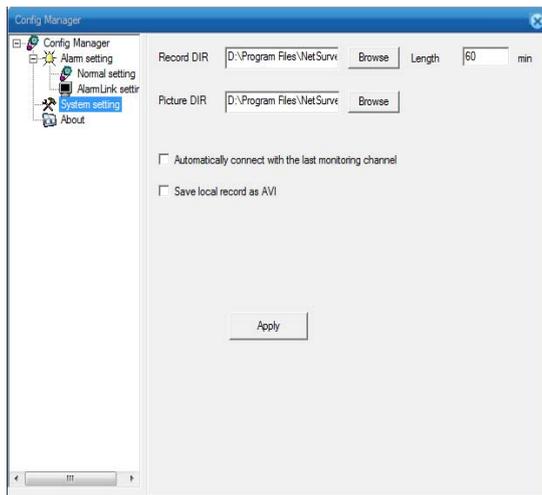
1) Alarm setting-regular setting



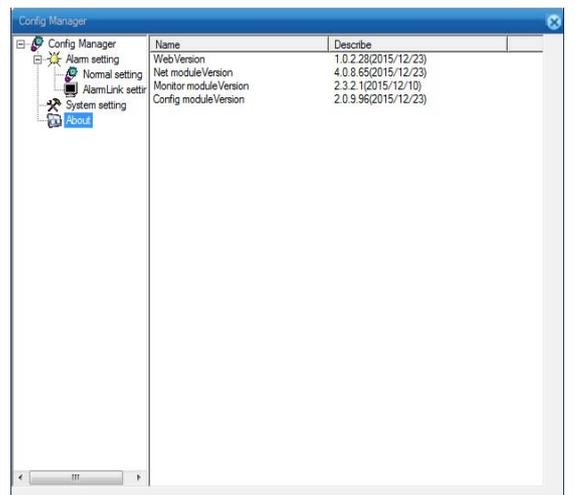
Alarm setting- Synchronous settings



2) System setting



3) About



■ User logout: logout IE

③ playback screen and channel display



④ Image function operation button

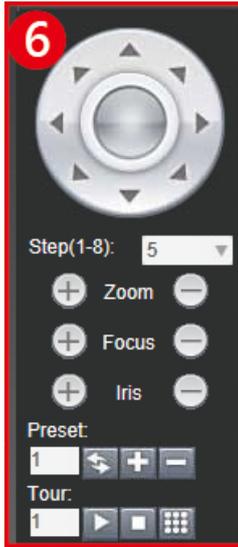


	Full screen		
	Single screen		Image capture
	4 image screen		
	9 image screen		

⑤ Volume: On or Off



⑥ PTZ operation



⑦ Image color setting





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