NVR
Quick Start Manual

Product Description

NVR is specially designed for network video surveillance system. It has embedded Linux operating system which makes the system operation more stable; it has standard H.264 video compression algorithms which achieve high definition, low bitrate and single-frame play video function;

It can be applied to banks, telecommunications, electrics power, justice, transportation, intelligence community, factory, warehouse, resources, water conservancy facilities, and other field.

1 Declaration:

- Thank you for purchasing our NVR. If you need any help, please feel free to contact us.
- The manual will be updated according to the enhancement of product function. Description of product or program will be improved or updated periodically. The updated stuff will be added in new manual without prior notice. If any product description in manual not in conformity with the real object, subject to the real object.

2 Attentions:

- 9ch above NVR should connect with gigabit switches, otherwises there would have video loss or pause randomly;
- The IP address of all devices in LAN can't conflict with each other；
- The gate way should match with IP address, and setting up correctly.

3 Hard Disk Installation

Prepare a screwdriver. 1-9pcs HDDs could be installed in chassis from current series network video recorder, HDD capacity max supports 6TB.

3.1 Hard Disk Installation Steps

1. Remove the fix screws on the side chassis and open the top cover
2. Connect the hard disk data wire and power supply wire
3. Fix the HDD on the bottom plate
4. Put back the cover and fix it by screws

4 Host Side Operation

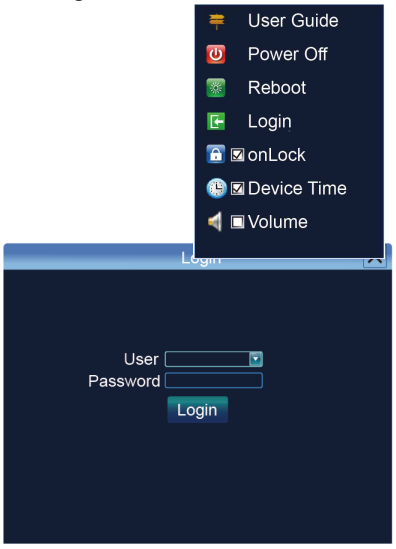
4.1 Start System

Plug power cable, press power switch, the power led will be on and the NVR will start. After booting, the video output default to multi-window output mode. If the booting time is within the record setting time period, the system will auto enable the record function.

⚠ **ATTN:** Please use the NVR matching power supply instead of any other power supply of any other type or brand.

4.1.1 System Login

After normal booting, right click  to bring the menu, select Start → Login,

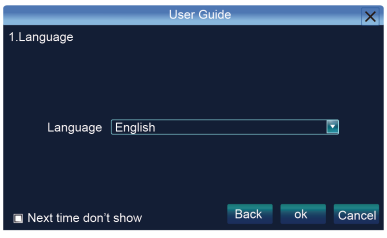


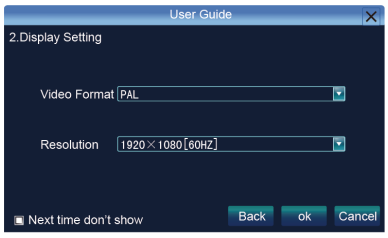
input the user name: admin and password blank (default to be blank) in the input box.

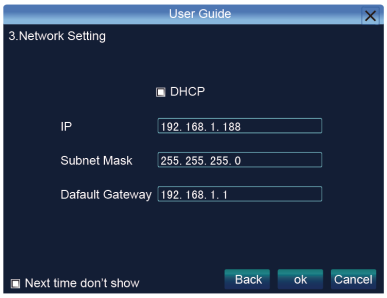
1. User guide: quick setup of language, resolution, IP address etc;
2. Power Off: click “Power off” button, the device will shutdown；
3. Reboot: click “Reboot” button, the device will reboot；
4. Login: click “Login” button , user name: admin, password: blank；
5. Lock: click “Lock”, the menu will be locked.
6. Device Time: Tick “Device Time” to display time. Vice versa.
7. Sound: Click this check box to have this button for IPC audio.

4.1.2 User Guide

After successfully login, system will automatically pop up setup for NVR’s language, monitor resolution, IP address.







4.1.3 Power Off

To power off, press power button to shut down from rear panel(user with power off authorization to login)

Get into【Main Menu】→【Power Off】to choose【Yes】.(Prompt: It is suggested to use this way to shut down in case any harm caused by accidental blackout.)

ATTN: Please shut down and cut off power supply in advance to operate before remove HDD.

4.2 Display Setting

Click  icon, show the menu as the right side:

1. “Resolution” setting: the default resolution is 1920×1080.

please select the best resolution according the monitor condition, or it will affect the image definition. There are 6 modes for option:

2. “Display” setting: set monitor lightness, contrast, saturation, color;

3. “Language” setting: select different language according to the necessary, after that need restart the device;

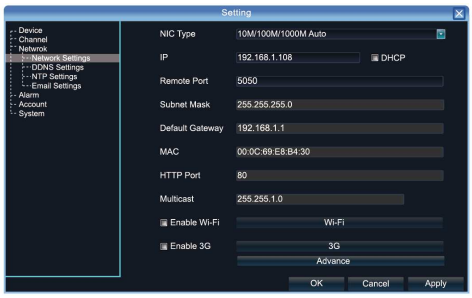
4. “Interface” setting: there are blue and black two color for selection;

5. “Screen Split” setting: 1、4、9、16、25、36 screens optional and select accordingly based on NVR channel numbers;

6. “Automatic logout time” setting: system automatic logout and lock time in a unit of minute;

7. “Rotation interval” setting: Setup the time interval of rotation. Tick “Enable SEQ” to start rotation.

5 .1Network Setting(Further Network Setup after User Guide)



Connect NVR with network cable to the LAN switch,

After power on, click  to enter setting menu and move to Network Setting to set NVR IP address, subnet mask, and gateway and so on.

Users can run ping command on PC in the LAN to check whether NVR IP address is existed in LAN.

ATTN: IP address might conflict with each other, please set the gateway correctly, or NVR might fail to work. Please ensure all the IP addresses in LAN are unique.

"**Device port"** setting：The default is 5050, if there are several NVRs in the LAN, need to change this port is for login NVR by IE, CMS. Login NVR by mobile, the port should be +3 based on the device port.

"**HTTP port**" setting: the default port is 80, suggest modifying it. This port is for login NVR by IE, input NVR IP address or domain name; need to add colon and HTTP port number.

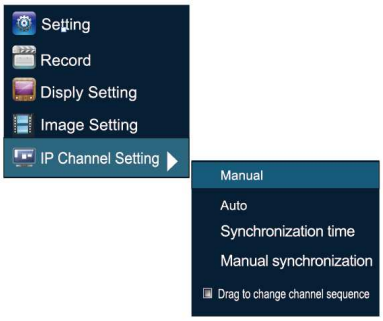
Example: show as the above right picture, access NVR by IE in LAN, first add 2 forwarding rules in the router, the IP address is 192.168.1.188, the forwarding ports are 5050-5053, 80. Please input http://192.168.1.188:80 at IE browser and download ActiveX, then close the IE before install the ActiveX, after installing it successfully, then reopen IE with http://192.168.1.188:80, it will show login menu, input device port:5050, user name: admin, no password, can access NVR.

If access NVR by IE in WAN, please use static IP or dynamic domain name, the operation is same as LAN.

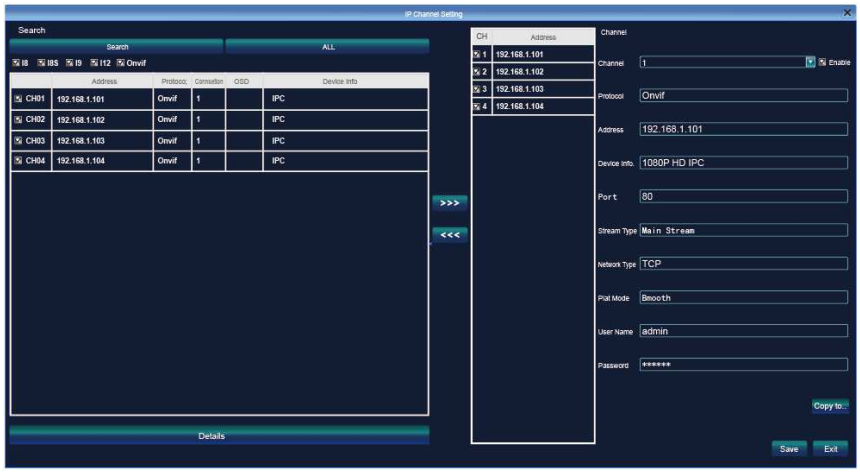
5.2 IPC Search

5.2.1 Manual Search

Right mouse to click【  IP Channel Setting】→Manual,



Click ***Search*** button. NVR will search out all IP cameras in the LAN,it will take 18-30 seconds and then to fill in the username and password in below searched IP address, after finishing the configuration, click Save to quit, then the image will appear in 1-60 seconds.



1. Click Search to get the camera IP addresses in LAN;
2. Double click IP camera in A Area or choose to click for detailed info, then it would show this IPC's network data and some IPC via private protocols could directly change IP address;
3. B Area for channel sequence setting area of IP camera;
4. C Area for camera user name and password filling area.

5.2.2 Automatic Search

Right click to select 【IP channel Setting】→Auto.

If the IP camera has private protocol with NVR, NVR will assign IP address to the camera automatically, after finish the searching, will connect the image automatically.

ATTN: Only in the premise that NVR channel is blank, NVR would carry out IP auto assign. If NVR channel has IP address, no matter whether IPC has been connected or not, it wont do it.

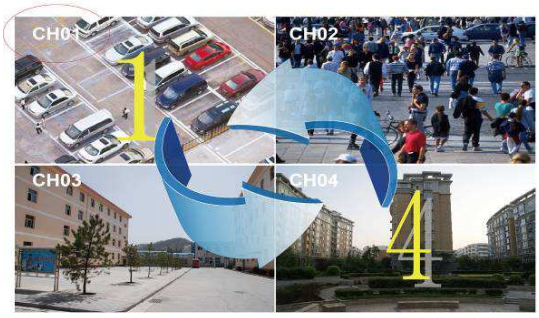
1. If NVR is in same gateway and has IP conflict, it would start assignment from *.*.*.2 in this gateway. When assigning, NVR would automatically judge whether newly assigned IP address has conflict. If conflicted, it would move to next IP address.
2. If IPC and NVR are not in the same gateway, same assignment principle as 1;
3. If IPC and NVR are in the same gateway and without IP conflict, auto search will not modify IPC's IP address;
4. If IPC has been added by other devices(NVR), it wont modify IP address neither;

(Onvif protocol supports IP address modification in the premise of filling username and password of IPC in modifying interface)

5.3 Preview

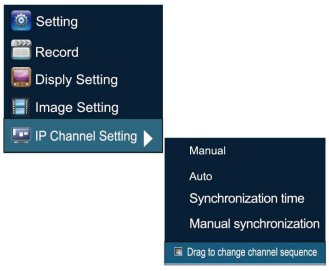
5.3.1 Drag and Drop the Image

The preview image location can be drag and drop to different place by pressing tight on mouse left button to drag relevant images to channel needed, but the channel physical address will keep the same(ATTN: channel number in red circle as below)



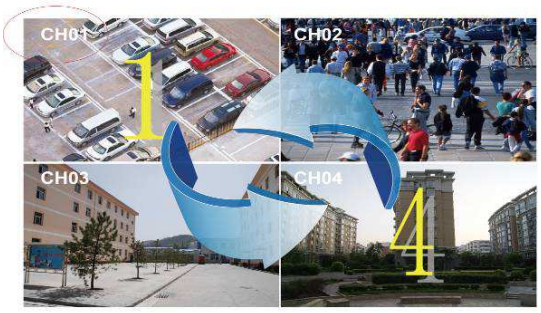
Preview image can randomly drag to adjust according to actual management requirement, which makes surveillance management more systematic and friendly.

5.3.2 Drag to Change Channel Sequence



During real video surveillance, it's very important to have preview channel position of IPC image.Simple image dragging could not meet the need of multi-channel simultaneous playback and it's frustrating to match channel position respectively when searching. Dragging channel sequence can better solve this problem.

Right Mouse to click【 IP Channel Setting】, choose【Drag to change channel sequence】 Operation is same as 5.3.1. After dragging channel sequence, users are unnecessary to fill in username, password and IPC will reconnect in its new channel position. When dragging, 2 channels exchanged would lose image for a short while till reconnection. Time for reconnection depends on different IPC, which costs about 1 to 60 second.



5.3.3 Digital Zooming

During image preview and playback, roll mouse roller to do digital zooming, it zoom the mouse pointer as the center. The max can zooming. Drag the zoomed image by see

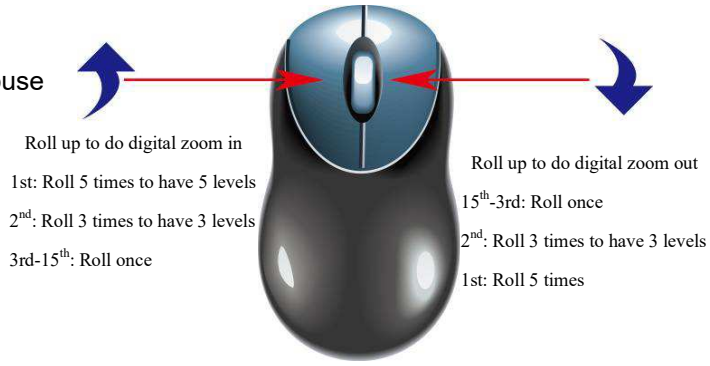
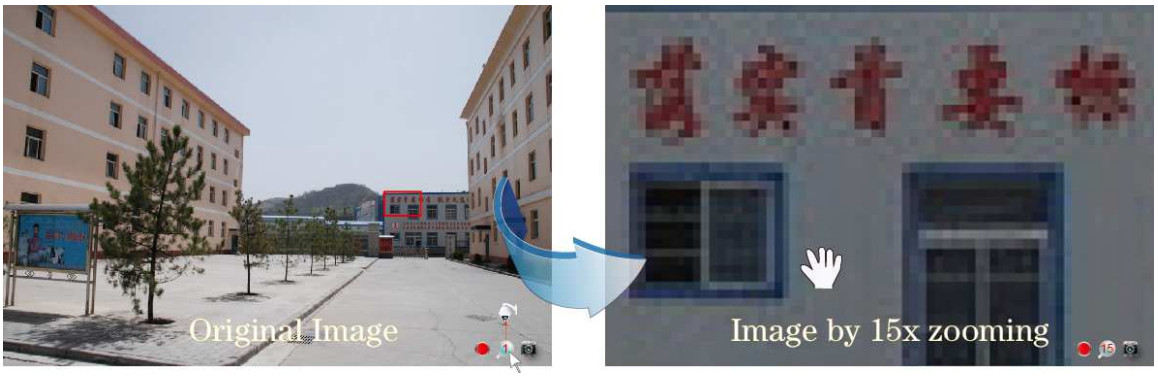


image detail. (Like picture management software in PC, after zoom in, press tight on mouse right



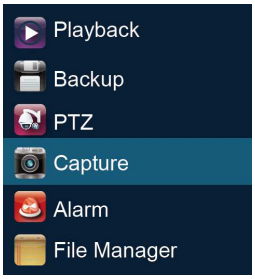
button and when mouse icon becomes hand type, you could drage the image)

The channel is recording. Light flashing means frame lost or recording lost. Please adjust the code stream, for details, please refer to 5.5.2；

Magnifying glass: digital zooming, the red number in the middle is magnification figures, click this icon, it can change to 3D PTZ control; Manual capture, please refer 5.4.

5.4 Manual Capture

Right click to bring main menu, click 【Capture】, it supports all channels manual capturing. After capture, there is information to hint capturing is successful or failure or this channel does not support capture. The image of capture resolution is D1 by JPG format, and it is saved in special area, the recording file will not overlay it. The capture image can be viewed or backup in file manage folder.



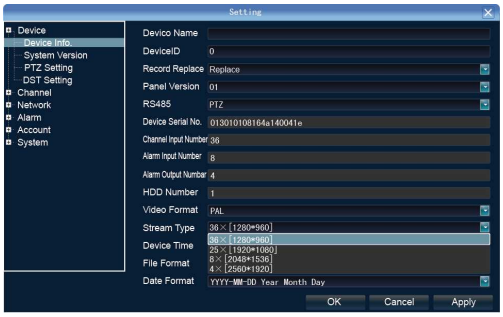
Right click to bring main menu, click 【File Manager】, and click Refresh button,

the captured file shows in the file list area, the file are named by channel number& capture time, double click it to check.

Capture back up: plug flash disk by USB port, click Refresh to check whether flash disk connect well, then select the capture files that need back up, and click Back Up to begin it. After succeeding, please click to remove it.

5.5 System Setting

5.5.1 Device Parameter



Click 【Setting】→Device→Device info to check device spec. information and time setting;

ATTN: Select mode according the connected IP camera channels and resolution, after change the model,click save and reboot the device. When the image is good in 9/16/25/26 screen modes, after double click the image to zoom, the image is stuck or become black screen change to 1080 mode

can solve it.

Systerm version: check the system version and time, when do software update, need to check version first to avoid updating failure and damage the device.

5.5.2 Channel Information

Click 【Setting】→Channel→Video Parameters, to adjust IP camera preview and recording resolution.

1) **Encoding Type:** Main Stream (Normal), Sub Stream, Main Stream (Event) for selection

Main Stream：double click to show single image or full screens image are main stream, also recording playback is main stream.

Sub Stream：9/16/25/36 screens display are using sub stream, IE or mobile reviewing are sub stream also.

Main Stream (Event)：motion detection and alarm trigger recording are using this

2) **Stream Type**：video, video & audio two type for selection. When connect with audio, please select video & audio mode, or there is no audio when playback.

3) **Resolution Ratio**：NVR will get IP camera main stream and sub stream resolution automatically, when the image is not good, can adjust from here according to necessory.

4) **Bitrate Type**：set variable bit rate and constant bit rate

5）**Bitrate:** set the bit rate upper limit for coding main stream are 1080P: 6000kbps, 720P: 4000kbps ; set the bit rate upper limit for coding sub stream is 512-1024kbps

6）**Frame Rate**：suggest to set full frame 25/30

7）**Video Quality:** suggest to select highest

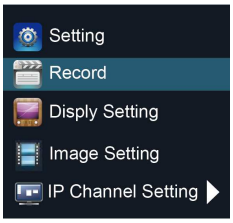
When all the IP cameras connected with NVR are same brand, after finish setting 1st channel, can click ***Copy To*** to apply the setting to all channels, then click ***Save***.

6.1 Recording

6.1.1 Manual Recording

Right click 【Record】to enter record setting.

Manual recording has the highest priority, after performing Manual, the corresponding channel will begin recording.



6.1.2 Schedule Record

Right click  【Setting】

【Setting】→Channel→Schedule Record, the default setting is 24 hours recording, user can set the recording plan according to the necessary and copy it to other channels.

⚠ **ATTN:** If NVR stop recording in a regular time, please check schedule record status, the schedule might be in wrong, please adjust them to manual record.

6.2 Motion Detection

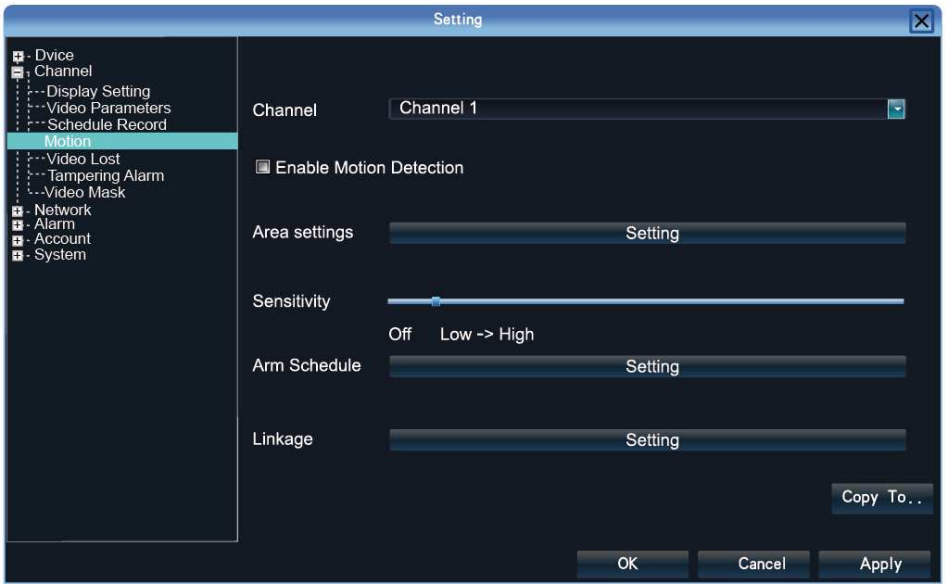
6.2.1 Click Setting → Channel Parameters → Schedule Record

1） “Record Trigger”：Tick in the grid to trigger recording;

2） “Whole Day Record”: Tick in the grid to trigger whole day recording and choose motion detection recording;

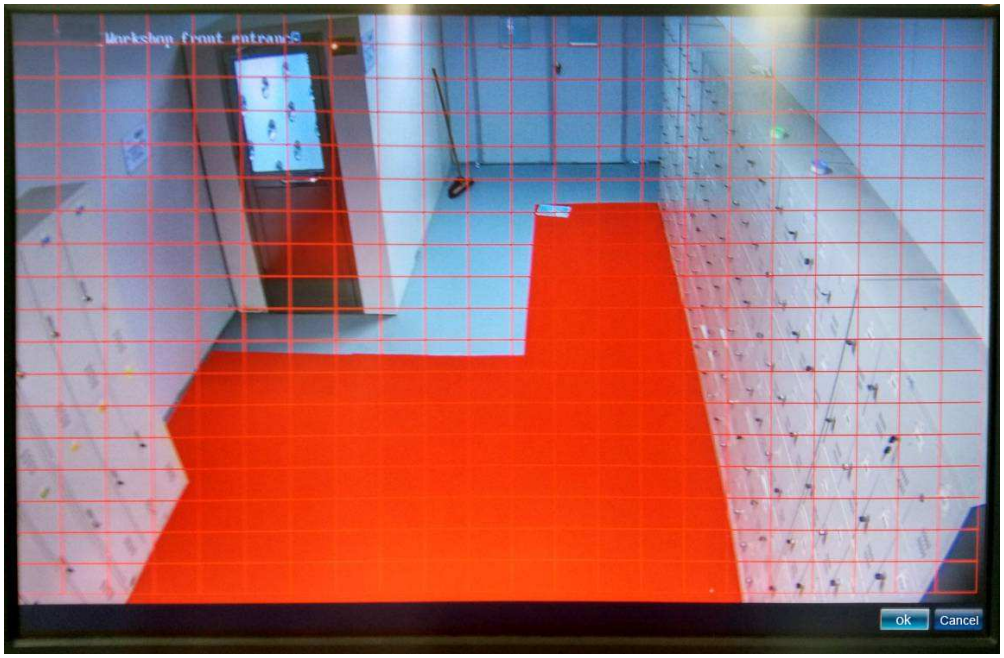
Users need to carry out this for motion detection and then to realize motion detection record triggering and follow corresponding channels accordingly.

6.2.2 Click Setting → Channel Parameters → Motion Detection



1） “Trigger Motion Detection”：Tick in the grid to trigger motion detection;

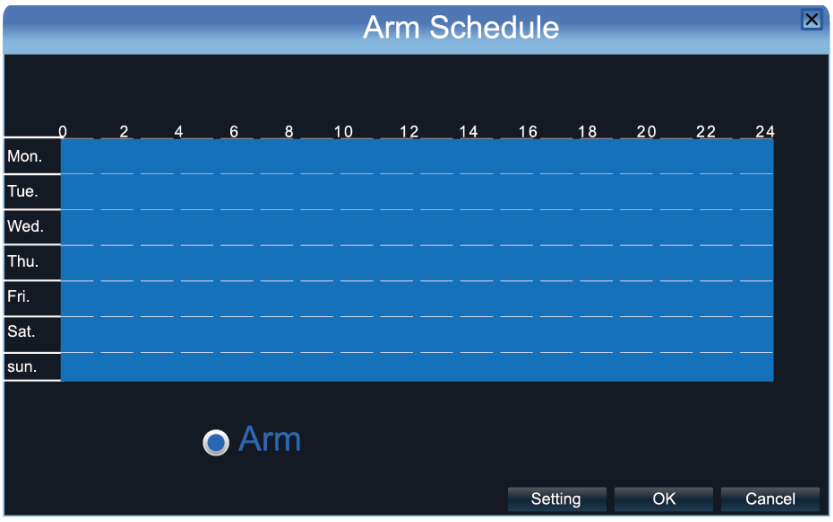
2） Device Detection Area: Tick “Area Setting” to enter below interface;



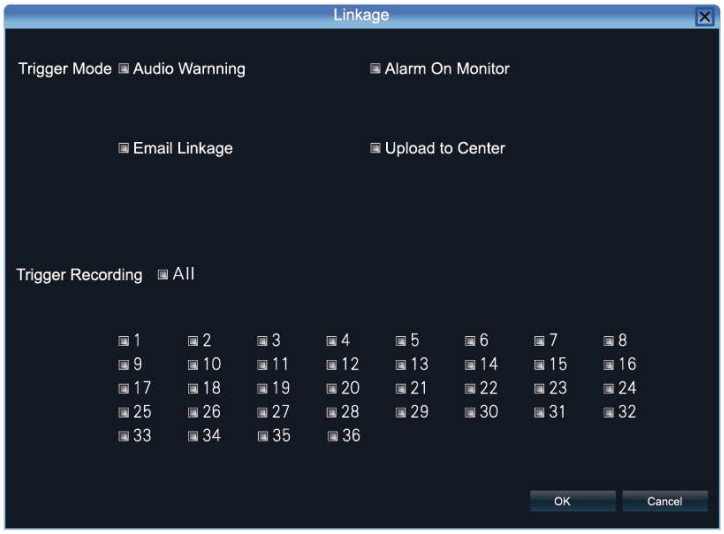
Choose area needed for motion detection and based on different IPC, users could setup different area numbers. Normally 4 areas and hold left mouse button to area which needs motion detection, hold the right mouse button to the area which can cancel the selected motion detection. Click ok to save the settings.

3） “sensitivity”: Set the detection sensitivity of perception, suggestions to moderate.

4） “Arming Time”：Click“protection time settings”，Enter the following interface.



4） “Linkage way”：click“ Linkage way setting”, Enter the following interface.



Trigger mode introduction:

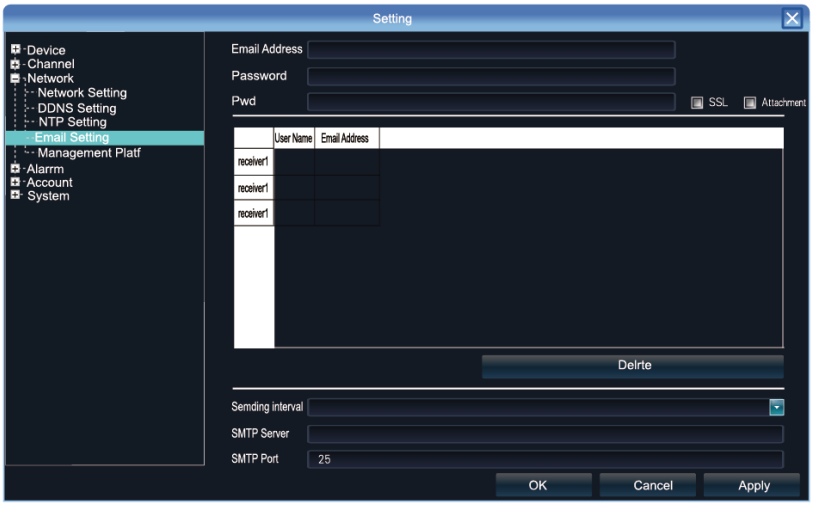
“Sound warning”: After check, when motion detection alarm is triggered, the NVR onboard buzzer will ring.
“Monitor alarm”: After check, when motion detection alarm is triggered, Bottom right corner of the screen will appear like little red sports people.
“Mail Linkage”: Here is the message linkage switch, after checking the network parameters→ Email settings that are.

The first three lines：email address - password - confirm password: Here add the sender's Email address and password, Be sure to check the attachment, or they will not receive snapped pictures.

To: You can add up to three;

Send interval: Send capture interval;
SMTP server, SMTP port: Provided by the mail service provider, check the sender's mailbox settings.

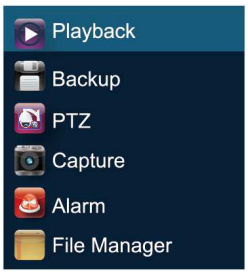
Net Ease mailbox should be completed as 163: smtp.163.com; Port: 25



“Upload Center”: after check, it can view and alarm information on IE Client.
“Trigger Alarm Output”: after check, when motion detection alarm is triggered, the siren will sound alarm output interface.
“Trigger Recording”: after check, when motion detection alarm is triggered, trigger the corresponding channel recording, make sure the corresponding appropriate channel, otherwise it will cause confusion videos.

6.3 Playback

Right click to bring main menu, click  【Playback】icon, enter the interface as shown below：



“Channel selection”: Select and check the record you want to check the channel, will automatically retrieve the qualifying record; There are video date indicated by the red color in the calendar bar.

"Date Selection": Select the desired playback date selected channel. As April 17, 2013

"Video playback": After-click Date, 24 hours color bar will show in C area. Different recording way will show in different color. Adjust the time line by mouse roller between 2 hours, 1 hours, 30 minutes, 5 minutes and 1 minute. The playback time can be specified to second. Double-click the color column timeline to quickly play back recordings, be adjusted according to the accuracy of scale demand playback, Let playback time more precise positioning.

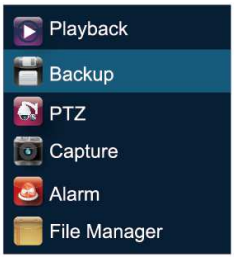
1, **Pause:** pause the playback at present
2, **Stop:** stop the playback
3, **Slow:** slow down the playback speed (1/2、1/4、1/8、1/16 multiple options)
4, **Acceleration:** speed up playback (2、4、8、16 multiple options)
5, **Capture:** you can capture any playback channel
6, **Backup:** It can back up to any video playback channel, and can be accurate to the second. 7.3 [See video backup].
7, **Mute:** banned the audio playback.

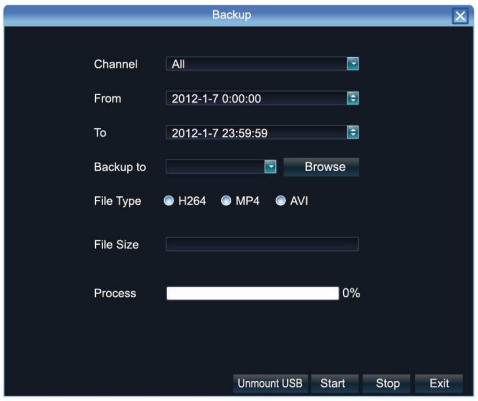
6.4 Recording backup

Before back up, please make sure the hard disk has been saved with video.

Playback Backup: click ***Back Up*** icon in area C of **6.3 Playback**,

Preview Backup:： Right click bring main menu, click  【Backup】to enter the backup interface, as right picture shows:





Video backup best way is to play back recorded video firstly, then select the backup time and channel, insert the USB memory to backup.

Insert a USB external storage device, click ***Refresh*** to detect USB devices. There are three backup file format: H.264, MP4, AVI.Recommend back up to MP4 format which can use document management to check the backup file, and computer player to play.

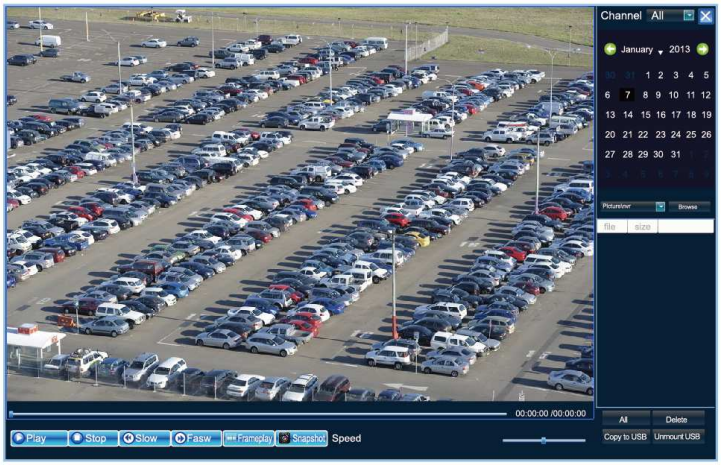
Precise Backup: the mini.backup time can be one second;

Fast Backup: high-speed transmission, saving backup time;

Backup accurate: backup video files can be reviewed in the document management NVR, ensure the accuracy of the backup video files.

6.5 File Management

Right click to bring main menu, click 【File Management】icon, the back up file of external storage device and local captured picture will list in the folder.(as follows)



1) **Check photo in the hard disk:** select date on calendar, if there was capture in that day ,then it would be displayed in list form;if no capture,then no display information.
2) **Check the U disk and other mobile storage devices:** click ***Refresh*** ,then drop-down to select U disk paths, the photos and videos in the disc will be displayed, double-click it to check. You can capture also when you view the video, the captured photos are stored in the hard disc of that very day.

6.6 System Setting

6.6.1 HDD Setting

Right click ,click 【Setting】→System→HDD setting.

In order to ensure a linear drive file management to better identify and write disk space:

1, Starting from zero track of the hard disk to write data, filled with hard cover and then start from zero track data before, very little disk fragmentation produced such a disk writing, to effectively improve the life of the hard drive, you can upgrade the hard drive from theory 2.5 times of life.

2, Recommend to format the HDD first before the recording, format the hard drive safe and fast, to end with about 1-3 seconds.

6.6.2 System Upgrade

Right click mouse, click 【Setting】→System→Update,insert the USB storage device into the NVR, click ***Browse*** to find the upgrade file, and click ***Upgrade.***

NVR for the realization of certain functions and requirements, we need to update the hardware firmware, before you upgrade, you need to prepare the following:

1) Check the product serial number: Click the System Configuration → Device parameters → the device information view;

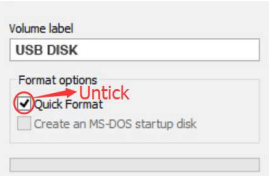
2) Check the master version: Click the System Configuration → Device Parameters → System Information View;

3) Unplug the network cable;

4) Restart NVR;

5) By providing the product serial number, the master version date, motherboard or the rear plate photographs, to get accurate upgrade file from suppliers;

NVR local U disk upgrade: U disk needs to be formatted to FAT32. If not FAT32, please format to FAT32 format, cancel a quick format before.

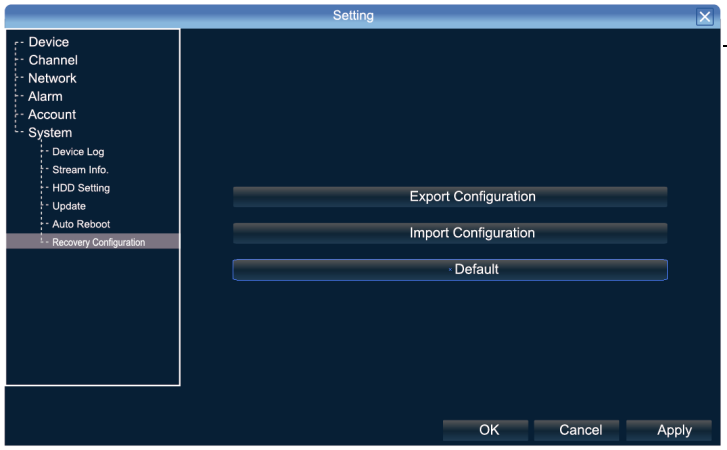


Upgrade: upgrade file name must not have spaces, not a Chinese or English characters, example &，*，$，@ etc. Update to .update end of the file and copy it to the root directory of U, do not put a folder, click the System Configuration → System Management → System Upgrade, click to see, select the correct upgrade files in the root directory of U, click the Upgrade, do not power off during the upgrade, or perform other operations, to avoid upgrade failure and returned for repair.

Network Upgrade: first make sure to install hard disk in NVR, mechanisms for network upgrades to first upgrade file is transferred to the hard disk, avoid disconnection causes the upgrade to fail. Upgrade file must be placed on the computer D packing directory, do not put in the folder or on the desktop, download IE controls, open IE, Enter the System Configuration → System Management → System Upgrade, click to see, select the correct upgrade file, click upgrade.

6.6.3 Import-Export Configuration

Right click mouse，click 【Setting】→System→Recovery Configuration.



The following two situations can use the Import and Export configuration:

1, NVR firmware upgrade or restore the default settings;
2, Sever NVRs' configuration are same, just connect different IP camera, need to save the configuration time;
【Export Configuration】:Export equipment parameters,and save it in the assigned place of U disc;
【Import configuration】:Open the menu in the NVRs that need the same configuration,import data of U disc to copy the NVR conf iguration.

7 IE Viewing

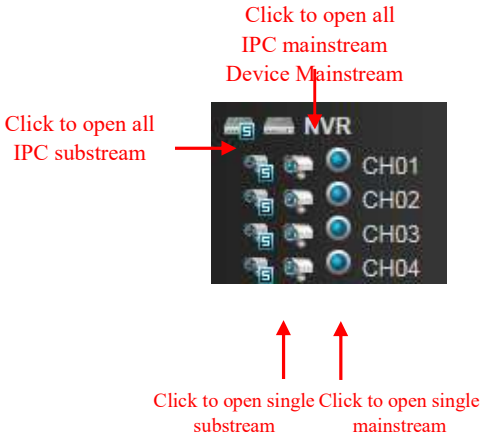
7.1 LAN IE browser

1. IE browser address bar enter the IP address of the NVR, you can configure the NVR system→Network → Network Settings View. The default IP address is 192.168.1.188

2. Download the plug-in, close the browser before installing, open the browser and enter the remote IP address or domain name again successful, Login window appears, and enter the port number, user name, Password to connect successfully ejected following screen.

1) After successfully installing the plug-in, enter the IP address of the NVR in IE browser address bar, Login screen appears, User Name: admin, Password: empty. Chinese and English for optional.

3) Can choose the IE plug-in, or free plug-in. (IE plug-in to download, free plug directly into), the difference is that IE plug-in while watching the large ones of the largest main stream and sub-stream, playback 4 channel; Free plug-in is to use the computer to install the Adobe flash play player, while watching 4, 9 channel sub-stream, playback 1 channel. Free plug-in which can use Apple browser safari, Firefox, Google browser, IE browser can also be used.
3) After the successful login, open the remote image preview screen, Click on the upper left corner of the icon to display a preview image.



7.1.2 WAN IE browser

Advising close NVR and routers Upnp, do port mapping, which means UPNP, the Upnp of NVR is turned off defaultly.

If you have a fixed IP, only two rules needs to be mapped in the router, the first is 5050-5053, NVR of the corresponding IP address, the second is 80(It is strongly recommended to change), NVR of the corresponding IP address, Port Mapping Successfully.

Some routers only by-port mapping, need to map 5050,5051,5052,5053 four ports, Plus HTTP port, Otherwise, the image will not being. Mobile Access is the device port basis +3.

Free plug-mapping in addition to the five port outside 80.5050.5051.5052.5053, also need mapped port: 1935,843.

Then open the IE browser and enter the fixed IP address, access is ok. If you change the HTTP port 80 to 88, should enter http:// fixed IP address:88 (: English characters).

Router Setting：

Because the router brands and models are various , now we take TP-LINK router as an example:

1. Open the IE explore , enter the Gateway in the address, eg: http://192.168.1.1

2. In the open page ,enter the user name and password , the default user name of TP-Link is :admin , password is admin.

3. Click the “Forward rule” in the left side tool option, in some router called “mapping port “. Click “Virtual server”, click “add new”, Manually enter the port and click save. The port in Forwarding rule is same as the “device port and HTTP port “ in the NVR setting. Take P5 6.1 network setting as example , it is 5050-5053,80

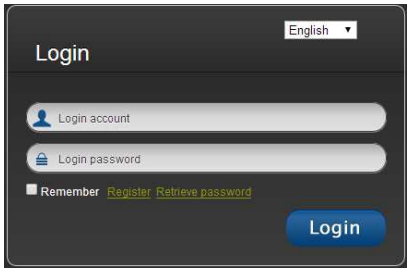
Finish the adding , click “ enable all the rule”.

No fixed IP addresses, and after port mapping, you need to do dynamic binding domain.

7.13 P2P Cloud Monitoring

Vist http://www.goolink.org P2P website.

First register account, click to register, page will jump to the user registration interface:



After successful registration, return to the login screen, enter the registered user name and password, Click to login.

After login successfully, please download and install plug-ins.

Click on the Device Manager, Enter the device ID. NVR device ID that is the product serial number,

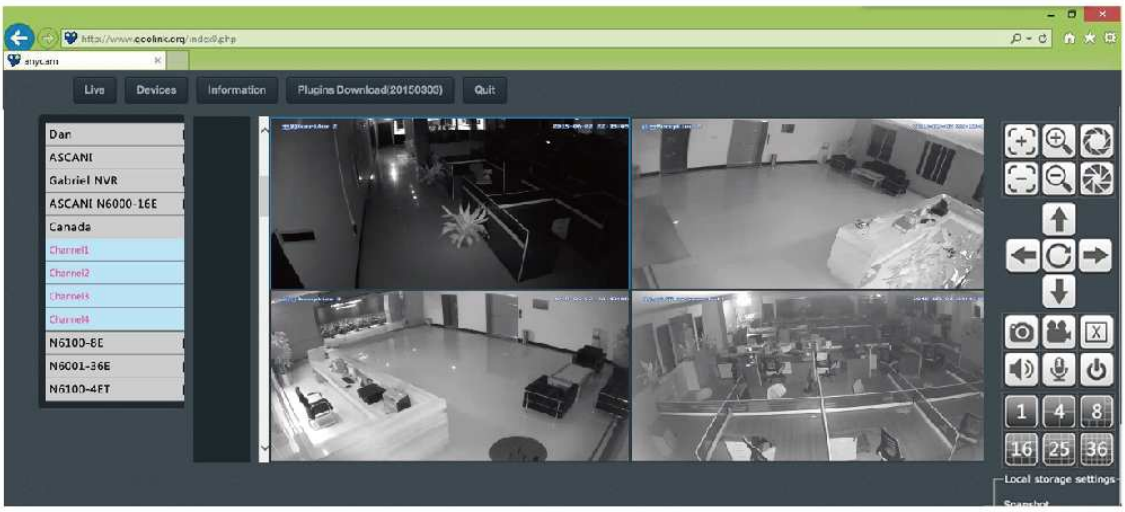
In the NVR system configuration→ device parameter → the device information.

Device Name: you can enter any; Device: Enter NVR user name, the default is admin.

Equipment Password: Enter password NVR, default is empty;

Channel: 1、4、8、16、32 for optional, please matches with NVR channel; In operation at the click Add.

Now, will be added successfully. click on live video, click the + sign, Then click on the preview channel respectively.



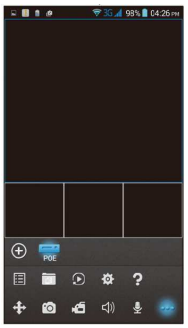
In case of problems, please check the NVR settings:

1) Check whether your NVR with P2P, click the System Settings → Network Settings → platform management, to see if there have been a Icolud, if not, need to upgrade the hardware firmware.

2) NVR network cable need to access the public network, Current network DNS must fill in the DNS NVR in the network settings.

7.2 Mobile Monitoring

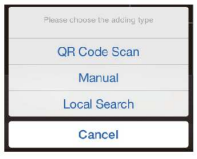
7.2.1 Mobile P2P Cloud Monitoring



Goolink P2P

Mobile APP acquisition: Android phones go to the Android Market or 360 phone guardian download goolink. iPhone and ipad please download goolink in IPhone App Store.

After install successfully, click goolink icon, enter the mobile phone monitoring interface. Click on the left button, choose add mode, or adding two-dimensional code scanning.



NVR device parameters Configuration → System → two-dimensional code,

old versions in NVR system configuration, → Settings → Device parameter information→ Product serial number, then click to scan two-dimensional code.

If LAN has WIFI, Click "*LAN Search*";

If the NVR is not local, normally We choose"*Manually Input* ".

Record name: necessary and can input any, It recommends no more than seven characters;

GID: is NVR serial number, See NVR system configuration → device parameter → The

device information;
Username: Please fill in the NVR"s user name, NVR default is admin;
Password: default is empty, do not fill in, if you modify a password, you need to fill in the correct;
Channel: Followed by NVR true channel number, Minimum 1 channel and Maximum 64ch;
After added successfully, if the middle line color is blue in the rectangle icon, it means NVR online and can link with video data.

Goolink can achieve real-time preview, remote NVR video playback, PTZ control, language speaking, capture, cell phones and other local recording function.

Danale P2P

Mobile APP acquisition: Android phones go to the Android Market or 360 phone guardian download danale. IPhone and ipad please download danale in iPhone App Store.
In the Network → platform management, configuring dana P2P, click modification, drop-down arrow to select 3, another line drop-down arrow to select dana, Save and restart. In the device parameters→there are two-dimensional code, the first one is goolink, and the second one is danale.

Danale can add only one user, if more, need some equipment back across the three points and shared, here advise private sharing, enter the person's account to be shared, do not add equipment, click on the top right corner with three points, click Share, you can see the video who others share to you.

7.2.2 VMeye/TMeye (Mobile Monitor Operation Guide)

VMeye/Tmeye mobile monitoring is mainly targeted at users accustomed to the traditional way of using the route map, and Blackberry、windows mobile、Symbian etc. mobile phone users successfully implement monitoring.
Android、Blackberry、windows mobile、Symbian mobile download the VMeye, iphone and ipad download the TMeye in App Store.
Routers and NVR settings, details pleasure finding WAN IE browser Introduction—7.1.2 page16

Note: Mobile monitoring port is generally plus 3 on the basic of device port, eg: Device Port 5050, the mobile monitor port is 5053.

8.1 NVR Common NVR Faults and Troubleshooting

8.1.1 Device Restart Continuously

1）The program does not match：

When upgrading a new program, the version were locked mini panel program, if the machine's panel has arrow keys, Keypad, after upgrade the main program, please upgrade a 01_mianban.update more. Otherwise it will cause every 3-5 minutes automatically restart the phenomenon

If your front panel is metal aluminum, Or non-digital, directional buttons plastic panel, Only such a panel for two lights and a USB interface, It is a mini panel program itself, you do not need to upgrade.

2) Upgrading wrong program

After the NVR wrong firmware upgrade, will be unable to start up or frequent restart failures,

Please not worry and contact your supplier, get U disk boot upgrade program, or U disk automatically RUU rescue. NVR will be a great chance of success can rescue without Depot Repair.

3) Losing the program

NVR missing the flash program can also be used to upgrade U disk boot program. If the underlying program lost, can get the flash hardware to repaired by themselves from supplier, or Depot Repair.

8.1.2 NVR some problems exist in image Preview or Playback

Case 1: Can search out IP, but cannot get image both on Multi-screen (sub stream) and Single-screen (main stream);

Case 2: Single-screen (main stream) has images; but Multi-screen (sub stream) gets black screen;

Case 3: Multi-screen (sub stream) has images, but Single-screen (main stream) or playback get black screen or images freezing;

Case 4: Images or screen become mess.

NVR are compatible with different brands and resolution of IPC and it is important that NVR select the correct stream type.

It is common to see above 4 cases. All are relevant to the setting up of

“Setting→Device→Device info→Stream Type”.

The first three values of NVR must match the IPC. The value of main stream, sub stream and the reference frame must be equal to or less than the value of NVR stream type. Then, please restarting your NVR after you choose and save the NVR Stream Type.

The first value means the channel numbers that NVR can access to IPC and resolution of NVR main stream; “Sub” means the resolution of NVR Sub Stream; “Ref” means the NVR reference frame that NVR can access to the IPC; “Play” means the playback channel numbers in this stream type.

1. Solution for Case 1 Solution: Can search out IP, but cannot get image
   1) Adjust to the correct stream type and choose “4ref”, Ambarella modules need “4ref” support;
   2) Whether the IP address of IPC and NVR are in the same network segment;
   3) Check the user name and password whether they are correct;
   4) The protocol of IPC has not been integrated or NVR firmware is too old. Updating Latest NVR firmware needs to get confirmation from the factory Tech person.

2. Solution for Case 2: Single-screen (main stream) has images; but Multi-screen (sub stream) gets black screen
   1) Adjusting NVR Stream Type and “Sub” choose the “720×576”. Here please pay attention to whether the resolution of main stream matches the IPC;
   2) Adjusting the Sub Stream of IPC through the IPC or Client software. Resolution chooses VGA or CIF;
   3) Updating NVR firmware.

3. Solution for Case 3: Multi-screen (sub stream) has image; but Single-screen (main stream) or playback get black screen or images freezing
   1) Adjusting NVR Stream Type, choose 1920×1080;
   2) Adjusting Main Stream of IPC through IPC or Client Software, resolution changes to 960P or 720P.
4. Solution for Case 4: Image or screen become mess
   The solution is same to Case 3. If the full screen gets mess, it may be due to the displayer, display cables or hardware failures of NVR. Then, please check the resolution of displayer and try to connect to another displayer or cables.

8.1.3 NVR no image or image not stable

1) Occupied stream of IPC exceeds the total resource stream of NVR, we suggest to choose 3M for the Main Stream and to choose 512K for the Sub Stream;
2) NVR firmware is too old and firmware version needs to be updated;
3) Ethernet switch backplane bandwidth is deficient. NVR of more than 16 channels needs to get access to a Gigabit Ethernet switch not lower than 48G in Gbps. And this switch shouldn’t have network management behavior management function, or it will limit the speed, restart the NVR, images can all show, images will drop a few, or images are all black, restart the NVR then it will be normal;
4) Carefully check out IP address is conflicted or not. If there is device sharing the IP address which is conflict with NVR local IP address in network, it happens to have image flickering every second. Probably it may have such a phenomenon that image occurs in 1st channel and next second in 3rd channel, then next second has no idea in which channel.
5) The 64channel NVR Model with 9HDD, must insert two Network lines, otherwise under the mode of 64ch 960P, appear 20 pictures only, if you switch to a 36ch 1080P mode, only appears 12 images at most.

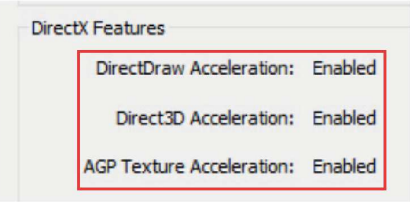
The reason is that: 9HDD 64ch dual Ethernet ports NVR adopt 2 pieces 3535 chip, Sub-master and from the film, two Ethernet ports correspond to two chips, So two Ethernet ports must be plugged in and plugged into the same switch, can you take full image.

8.1.4 NVR Audio fails to Monitor

1) Whether IP camera audio is on or off: check out and open up audio to see whether IP camera has BYO sound pick-upvia IE or IP camera BYO client software;
2) Audio format: adjust audio format to G.711 via IE or IP camera BYO client software;
3) NVR: Setting---Channel---Video Parameter, choose the corresponding channel and change stream type to Video & Audio;
4) Whether Aout port on NVR rear panel gets access to speaker working properly.

8.1.5 NVR IE Access: Fail to Install Plug-in Without Image Out

NVR: Setting---Network---Network Setting, check out IP address, Device Port, HTTP Port. First to fix LAN access:



1) WinXP: Please install VC++2008 from Microsoft download or sofware housekeeper download such as 360 Security Guard and QQ;
2) Win7 & Win8: Click “Start” to choose current login user as “Administrator”, tick Control Panel---User Accounts and Family Safety---Change User Account Control Setting, then lower down to “Never notify”. Open IE browser and press “Tools” to see “Internet Options”---“Security”---“Custom Level”, adjust ActiveX controls and plug-ins to “Enable” or “Prompt” and “Disable” “Binary and script behaviors” alone. Follow the same setting step in “Local Intranet” and tick “OK”, restart IE browser. Finally press “Alt” to see “Tools” and tick “Compability View Setting” to check “Display all websites in Compability View”. Click “OK” and reopen IE browser;
3) Check whether PC had installed ActiveX in previous time. Close IE browser and go to “Program Files” folder in C Disk, then delete “dvr_activex” whole folder, while deleting WIN7、WIN8 system in “Program Files(x86)”, then install new plug-in;
4) After successfully installing plug-in, input NVR IP address on IE browser address bar and login interface appears. Port for NVR Equipment Port as default is 5050 in port, admin in user name and no password. Tick “login”, open the remote image preview interface and tick the × to √ in the right corner of every screen or click right mouse to see “Open All”;
5) Clear IE cache nearby;
6) When WAN access port unmapped complete, need to map 5050,5051,5052,5053 four ports, Plus HTTP port, otherwise the situation to go to the login screen and the image will

not appear.

7) WAN IE Access, be sure to select the IE plugin, if you need to use the free plug-in, please note the LAN supports only one NVR to achieve free plug, the reason is the free plug-in port can not be changed and free mapping plug-in addition to 5050.5051.5052.5053 80 five ports, but also need to map 1935,843 port.

8.1.6 NVR and IPC time incorresponding

Some IPC can not get the accurate time, you need to make a comparison between onvif device test tool and IE or client. Only in this way ,can you get the accurate time. Please modify the IPC time zone and match with the NVR time zone.

8.1.7 How to set dual network port?

9HDD 25ch, 36 dual net mouth NVR, cannot search out the IPC and the solution is as follow:

1) please make sure your NVR cable insert to the net mouth under the USB port, which print with IPC or the net mouth in the left side,which print with NETWORK.

2) If you insert to the net mouth under the USB port, which print with IPC, please check the IP address of network card 1, whether the gateway and the IPC at the same VLAN or not, (system setting-network parameter-network setting), and then check the default router, it must be network card 1.

3) If you insert to the net mouth in the left side,which print with NETWORK, please check the IP address of network card 2, whether the gateway and the IPC at the same VLAN or not, (system setting-network parameter-network setting), and then check the default router, it must be network card 2.

The function of dual net mouth:

1)shunting two IP network segment, to avoid the IP address is not enough in a network segment.

2)Redundancy and insurance, if you set two network card to different IP address in the same network segment, when one of the net mouth is broken, the other can work properly.

8.1.8 how to set POE NVR dual network port?

1) Network card1 and network card2 must be in different network segment. Network card1 is used to connect with the POE port of IPC. While network card 2 is used to connect with outside network, and the default IP address of the net mouth is 192.168.2.188. Besides, this outside network refer to the same network segment of the computer which is internet accessed.

2) The IP of your computer and the IP of network card2 must be in the same network segment. So the computer can PING to work, and realize IE visiting and clients online adding.