NVR Quick Start

1. Statement:

1.This manual supports NVR model:1U 4/8ch、1.5U 4/8/9/16ch、2U 9/16/36ch

2.As product updating, the NVR functions might be different from the manual showing, please follow the product that you got.

2. Attention ⚠

9ch or more channels NVRs must use gigabit switch, or it might have the problem of losing video or video stuck

All the NVRs' IP address in the LAN cannot be conflicted with each other

The gateway should be matched with the IP address and set correctly.

3. Hard Disk Installation

Prepare a screwdriver. Take 1U chassis as an example, this series of NVR can have a hard disk installed in the chassis, the largest capacity of which amounts to 4TB.

3.1 Hard Disk Installation Steps

1. Remove the fix screws on the side chassis and open the top cover
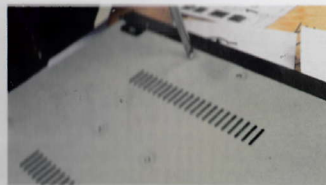

2. Connect the hard disk data wire and power supply wire

3.Fix the HDD on the bottom plate

4.Put back the cover and fix it by screws

4.1 Host Side Operation

4.1.1 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 is multi-window output mode. If the booting time is within the record setting time period, the system will automatically enable the record function.

⚠ Notice: Please use the NVR matching power supply instead of any other power supply of any other types or brands.

4.1.2 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

Click 🔽 icon.

1. Power Off: click "Power off" button, the device will shutdown.
2. Reboot: click"Reboot" button, the device will reboot.
3. Login: click"Login" button, user name: admin,password: blank
4. Lock: click "Lock" , the menu will be locked.

4.1.3 IP Channel Setting

After login successfully, system will pop out the host side IP address setting menu automatically, after setting successfully click " OK", then it will pop out the menu for IP channel setting, click " Yes", the system will save the IP automatically. If need to manually setting IP address, click "NO".
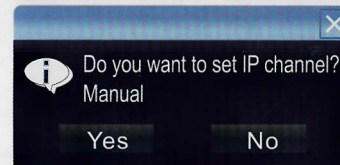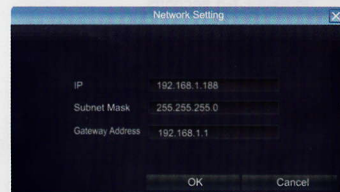
4.1.4 Power Off

1. To click the power switch at the rear panel can shutdown the device.
2. 【Main Menu】→【Power Off】, select【Yes】(By this way, user need to have shutdown authority) Note: Suggest to shutdown device in this way, it can avoid damaging the device from electricity cut-off by accident).
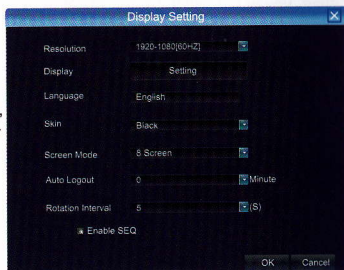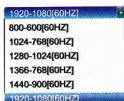
⚠ Notice: Before changing the HDD operation, please shutdown the device and cut the power supply first.

5.1 Display Setting

Click 🖼 icon, show the menu as the right side:

1. Resolution setting: the default resolution is 1024x768, please select the best resolution according to the monitor condition, or it will affect the image definition. There are 6 modes for option.

| 1920-1080[60HZ] |
| --- |
| 800-600[60HZ] |
| 1024-768[60HZ] |
| 1280-1024[60HZ] |
| 1366-768[60HZ] |
| 1440-900[60HZ] |
| 1920-1080[60HZ] |

2. Display setting: set monitor lightness, contrast, saturation, color
3. Language: select different language according to your need, after that you need to restart the device
4. Skin: there are two color for selection blue and black
5. Screen: 1、4、9、16、25、36 screens are optional,
6. Automatic logout time: system automatic logout and lock time,
7. Rotation interval: Setup the time interval of rotation. Tick "Enable SEQ" to start rotation.

6.1 Network Setting

Connect NVR with network cable to the LAN switch, After power on, click ⚙ to enter setting menu, set NVR IP address, subnet mask, gateway and so on. Then use PC to run ping command to check if NVR IP is connected with LAN

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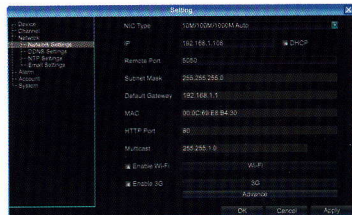
Device port setting: the default is 5050, if there are several NVRs in the LAN, need to change. This port is for login NVR by IE, CMS. Login NVR by mobile, the port should be +3 based on the device port.

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

Example: 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 installing 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,whicn can access NVR.

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

6.2 Connect with IP Camera

6.2.1 Manual Search

Right click to select 【IP Channel Setting】 →Manual, click Search button, NVR will search out all IP cameras in the LAN, it will take 18-30 seconds, after finishing the configuration, click Save to logout, then the image will come out.
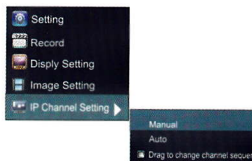
A-Area is cameras IP address searching area——click Search to get the camera IP addresses in LAN
B-Area is camera IP address modification area——double click IP camera in A zone, B zone will show camera network data, some cameras can change IP address directly in B zone

C-Area is cameras channel setting area——according to the selection sequence in A zone, to sort the 1-36 channels image order. Select All to add IP cameras to all the channels by one click.

D-Area is camera user name and password filling area——this area is camera network parameter

6.2.2 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 searching, it will connect the image automatically. Camera IP addresses will be added automatically in the preview channel area.

6.3 Preview

6.3.1 Drag and drop the image

The preview image location can be draged to different placs as necessary, but the channel physical address will keep the same
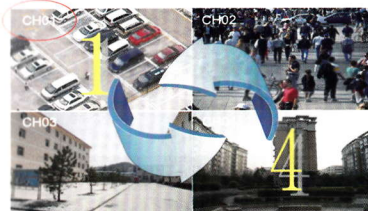
6.3.2 Drag to change channel sequence

Right click to select 【IP Channel Setting】 → 【Drag to change channel sequence】, then drag the image as 6.3.1, IP camera will reconnect in the new channel, during this process, the image will lose for a while till the image connected sucessfully.

6.3.3 Digital Zooming

During image preview and playback, roll mouse roller to do digital zooming, it zooms the image by taking mouse pointer as the center. it can do 15X zooming in max. Drag the zoomed image by mouse to see image detail.
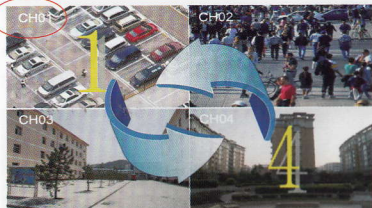
Zoom In

Zoom Out

Original Image

Image by 15x zooming

- The channel is recording. Light flashing means frame lost or recording lost. Please adjust the code stream, for details, please refer to 6.5.2;
- Magnifying glass: digital zooming, the red number in the middle is magnification figures, click this icon, it can change to PTZ control

6.4 Manual Capture

Right click to bring main menu, click 📷 【Capture】, it supports all channels manual capturing. After capture, there is information to hint whether capturing is successful or not 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 backuped in file manage folder

▶ Playback
Backup
PTZ
Capture
Alarm
File Manager

Right click to bring main menu, click 【File Manager】 and click Refresh button, the captured file shows in the files list area, the files are named after channel number& capture time, double click it to check.

Capture back up: plug flash disk by USB port, click Refresh to check if flash disk is connected well, then select the capture files that need back up, and click Back Up to begin it.

6.5 System Setting

6.5.1 Device Parameter

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

⚠️ **Notice:** Attention: select mode according the connected IP camera channels and resolution, after changing the mode, click save and reboot the device.
When the image is good in 9/16/25/36 screen modes, after double click the image to zoom, the image is stuck or become black screen, change to 1080P mode, which can solve it.

Systerm version: check the system version and time first before updating, to avoid updating failure and damage the device.
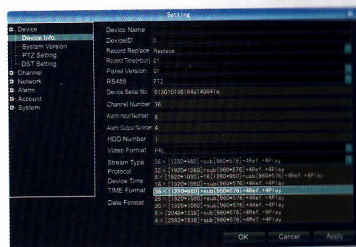
6.5.2 Channel Information

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

1. Encoding Type: Main Stream (Normal), Sub Stream, MainStream (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.
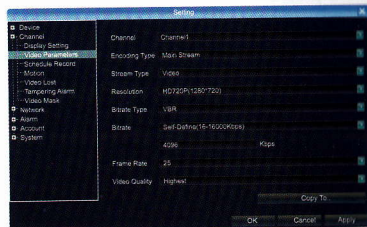
2. Stream Type: video, video & audio two type for selection. When connect with audio, please select video & audio mode, or there is no audio when playback.

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

4. Bitrate Type: set variable bit rate and constant bit rate

5. Bitrate: set the bit rate upper limit for coding main stream is 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 fps

7. Video Quality: suggest to select highest

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

7.1 Recording

7.1.1 Manual Recording

Right click to bring main menu, click 🎬 【Record】 to enter record setting. Manual recording has the highest priority, after performing Manual, the corresponding channel will begin recording

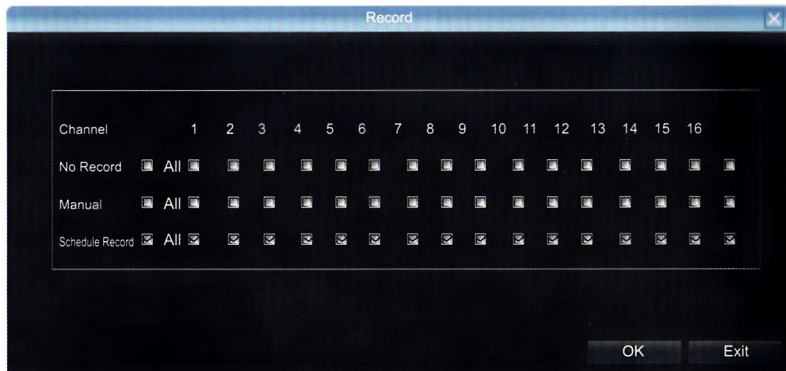|	Setting
	Record
	Disply Setting
	Image Setting
	IP Channel Setting ▶

Record																	✕
Channel		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No Record	All ☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Manual	All ☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Schedule Record	All ☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

OK   Exit

7.1.2 Schedule Record

Right click to bring main menu, click 🔧 【Setting】 →Channel→Schedule Record, the default setting is 24 hours recording, user can set the recording plan according to the need and copy it to other channels

⚠️ Notice: 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.

7.2 Playback

Right click to bring main menu, click ▶ 【playback】 to open the menu：

	Playback
	Backup
	PTZ
	Capture
	Alarm
	File Manager

A-Area

B-Area

C-Area

Channel Select: select the channels that need to do playback, system will find the required recording file. The date that has records is highlighted by red color in calendar

Date Select: select the playback date

Playback: after choosing the 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

Pause: pause the playback at present

Stop: stop the playback

7.3 Record Backup

To back up,please make sure there is a hard disk recording videos.

Playback Backup: click Back Up icon in area C accord ing to 7.2 Playback Preview Backup: Right click to bring main menu, click 💾 【Backup】 to enter the backup interface, as right picture shows

The best way for video backup is to play back recorded video firstly, then select the backup time and channel, insert the USB memory to backup.
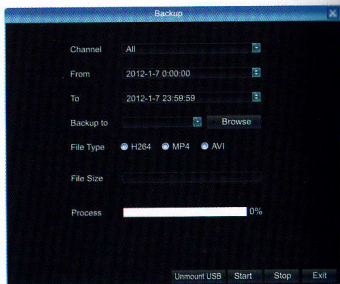
Insert a USB external storage device, click Refresh to detect USB devices. There are three backup file formats: H.264, MP4, AVI.Recommend that back up to MP4 format which can use document management to check the backup file, and computer player to play.

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

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

7.4 File Manager

Right click to bring main menu, click ▦ 【File Manager】 icon, the back up file of external storage device and local captured picture will be listed in the folder.

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 disk will be displayed, double-click it to check. You can also capture when you view the video, the captured photos are stored in the hard disk of that very day
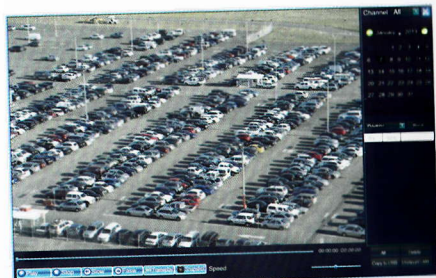
7.5 System Setting

7.5.1 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 Recommend to format the HDD first before the recording, format the hard drive safe and fast and complete in about 1-3 seconds.

7.5.2 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.

Upgrade include:firmware upgrade,boot screen image upgrade,patch upgrade.
Except USB memory upgrade, it also support upgrade via network.

⚠ Notice:when the NVR is upgrading,don't perform any other operations or power off, otherwise NVR will fail to enter the system ,and have to be sent back to factory for repairing.
After upgrading,the device need to be rebooted.

7.5.3 Import-Export Configuration

Right click mouse, click ⚙ 【Setting】 →System→Recovery Configuration。
The following two situations can use the Import and Export configuration:
1. After NVR firmware upgraded or the default settings saved;
2. Server NVRs' configuration are same, but connect different IP cameras, need to save the configuration time

【Export Configuration】 : Export equipment parameters and save it in the assigned place of U disk;
【Import configuration】 : Open the menu in the NVRs that need the same configuration, import data of U disk to copy the NVR configuration.
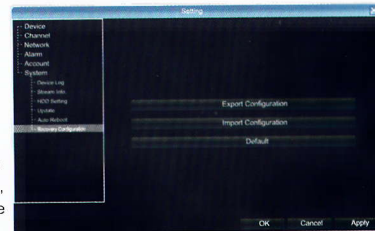
8.1 IE Viewing

8.1.1 Router Setting

Because the router brands and models are various , now we take TP-LINK router as an example.
1. Open the IE browser , 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"
Take 3322 as example , the Domain is www.3322.org, go to 3322 , enter the information and remember the domain which you have successfully registered.
Notice::the domain, user name and password need to put in the DDNS Setting in DVR/NVR.
Back to the IE browser and fill the domain, and add the colon +http port

8.1.2 User Login

1. Fill the domain+colon+Http port . or fill the static IP +colon +http port .
2. You can download and install IE ActiveX from NVR through the Internet. Then input the IP address of the NVR in the IE browser, port number 5050, user name and password, then the below interface will pop-up:

8.1.3 IE Operation

The operation of IE is same as in the local NVR.

⚠ Notice: open the preview, click the right bottom option ⊠ to let it change to ☑ or right click to Open All , the red point represent recording , and click ▦ to set the stream and switch of main stream and sub stream.

9.1 Mobile View Operation Instruction:

This operation guide is about how to install and use the mobile softwares in the mobile phones with Android, Blackberry, windows mobile, iPhone, Symbian software.

Notice:The mobile port is the device port +3, like :Device port , 5050, then the mobile port is 5053

9.1.1 Client Software Obtaining

You can obtain the mobile surveillance client software from the CD or our technical department. The corresponding client software of each system is as below:

MEYE_SB_S60_3rd.sisx: mobile surveillance client of the 3rd version of Symbian S60 system;
MEYE_SB_S60_5rd.sisx: mobile surveillance client of the 5th version of Symbian S60 system;
MEYE_WM.cab: mobile surveillance client of Window system;
MEYE_Android.apk: mobile surveillance client of Android system;
MEYE_RIM.rar: mobile surveillance client of BlackBerry system;
Note: iPhone uses TMeye+, downloaded from appstore.

9.1.2 The Parameter Settings of the NVR Which Supports Mobile Surveillance

Resolution: CIF or QCIF;
Frame Rate: 5-10fps;
Stream Type: Limited
Stream: 64-256Kb/S

Notice: you can adjust the settings according to the performance and network condition. Mobile phone with higher performance and network condition will display better effect. If the network condition is not good, you can reduce the frame rate to ensure the fluency.

9.1.3 Android Mobile Phones System

Mobile phone app supports Android system above V1.5, including HTC G1, HTC Magic, HTC Hero, HTC G5, etc.

☆ Instructions:
1. Download app MEye_Android.apk.
2. Click the app and install.
3. Open the app, as the picture on the right:
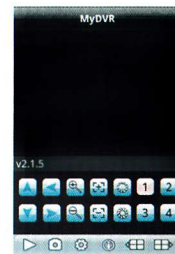
9.1.4 APPLE IOS System

Apple phone needs to support iOS 3.0 or above, including iPhone, iPod touch, etc.

☆ Installation and Operation Instruction
1. Run App Store in iPhone, and switch to the search tab. Search vMEye in the search tab, the app installation pack will be found, click to installation and the app icon will arise as below:
2. Click vMEye app icon, and the initial interface after running appears as right:

Appendix: NVR Faults and Troubleshooting

1.About Firmware Update

For access to some functions and requirements, NVR needs to update firmware.
Before update, users need to prepare as below:

- To check Serial No.: Setting→Device→Device info;
- To check Master Version: Setting→Device→System info;
- To unplug network cable;
- To restart NVR;
- By providing Serial NO., Master Version, PCB and Rear Panel Pictures, users can get the accurate update files;

    Update Operation: Setting→System→Update, click "Browse", choose U disk's .update suffix update file in root catalog, click "update", during updating, please do not cut off electricity or carry out other operations in case that update failure leads to repairing.

2.Image preview or playback abnormal, 4 kinds of ordinary situations as below,

1st, IP Camers IP address can be searched, multi-images sub stream and single image main stream all cannot have image;
2nd, Single image main stream has image, multi-images sub stream is on black screen;
3rd, Multi-images sub stream has image, single image main stream is on black screen or still image as well as black-screen playback;
4th, image or screen crashes

To choose mode is very important when NVR can be access to different brand and different resolution IPC. Above 4 kinds of malfunctions are very common in real utilization and this is all following the steps: Setting→Device→Device info→Stream type.
The first 3 numerical values must be matched with IPC's stream setting. IPC's main stream, sub stream and reference frame must be equal to or less than the numerical values of NVR's stream type. Stream type adjustment need to be saved and restart to make it effect.
The first numerical value of stream type "main" represents the IPC accessible channel numbers and main stream resolution ratio; The second one "sub" is sub stream's resolution ratio; The third one "ref" is the reference frame IPC can get access to; The fourth one "play" is the playback channel numbers under this kind of stream type.
Solution of 1st situation which IP address can be searched but without any images:

- Adjustment of stream type, choose stream type with ref value for 4ref. To get access to Ambarella solution IPC needs 4ref;
- IPC's username and password should be correctly filled in;
- This IPC has not been butt joint or version outdated, which needs supplier's confirmation for butt joint and then update NVR firmware.

Solution of 2nd situation which single image main stream has image and multi-images sub stream is on black screen:

- Adjustment of stream type, choose stream type with sub stream of 720×576, please be aware if main stream resolution ratio and IPC's are matched;
- By IPC's IE(IPC IP address access) or PC Client, users need to adjust IPC's sub stream for resolution ratio of VGA or CIF;
- To update NVR firmware.

Solution of 3rd situation which multi-images sub stream has image and single image main stream is on black screen or still image as well as black-screen playback:

- Adjustment of stream type to 1080P mode;
- By IPC's IE(IPC IP address access) or PC Client, users need to adjust IPC's main stream with resolution ratio for 960P or 720P;

Solution of 4th situation which image is crashed is same as 3rd situation; If the whole screen is crashed, it may be connected with NVR hardware malfunction or lunk. Please check if monitor resolution ratio is matched or exchange of another monitor and lunk.

3.Images cannot be all connected in full channel, image off or image sporadic

- Stream data access exceeds NVR's total network resource, 3M for main stream and 512K for sub stream recommended;
- NVR firmware outdated and needs to be updated with optimized network master version
- Ethernet switch backplane bandwidth is deficient. NVR of more than 16 channels in number needs to get access to a Gigabit Ethernet switch higher than 48G in Gbps.
- Carefully check out IP address is conflicted or not. If there is device sharing the same IP address with NVR local IP address in network, it happens to have image flickering every second. Properly 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.

4. Audio Fails to Monitor

- IP camera audio enable or not: check out and open up audio to see whether IP camera has BYO pick-up via IE or IP camera BYO client app on PC;
- Audio format: adjust audio format to G.711 via IE or IP camera BYO client app on PC;
- NVR: Setting---Channel---Video Parameter, choose the corresponding channel and change stream type to Video & Audio;
- Whether Aout port on NVR rear panel gets access to speaker is working properly.

5. New HDD Added but Video Still Recorded in Previous HDDs

- Formatting all HDDs;
- Shut down and unplug former HDDs, then only insert new HDD and after half an hour recording, shut down and insert the former ones.

6. IE Access: Fail to Install Plug-in Without Image Out

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

- WinXP: Please install VC++2008 from Microsoft;
- 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 plugins 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.
- Check whether PC had installed ActiveX in previous time. Close IE browser and go to "Program Files[WinXP]" folder in C Disk, then delete "dvr_activex" whole folder, while deleting "dvr_activex" folder in "Program Files(x86)[Win7&8]", then install new activex.
- After successfully installing activex, input NVR IP address on IE browser address bar and login interface appeared. Port for NVR Remote Port as default is 5050 in port, admin in user name and no password. Tick "login" and click right mouse to see "Open All" or tick the × to √ in every screen right corner.
  WAN Access:
  Recommend to shut down NVR and close router's UPNP, then do the port mapping. If open UPNP without NVR shut down, it may have mapping conflict and NVR UPNP is default to be closed. If users have static IP, it needs to map two rules in router, first is 5050-5053, related to NVR IP address; second is 80(Strongly advised to alter), related to NVR IP address, then succeed to finish port mapping.
  Some Routers can only do the port mapping one by one, which needs to map 4 ports: 5000, 5051, 5052, 5053, plus HTTP port, otherwise it may occur that use can get access to login interface but fail to get image. For mobile access, use need to plus 3 based on the remote port.

  Open IE browser again and it can be access to input static IP address in bar. If you have changed HTTP port from 80 to 88, you must input http://static IP:88 (colon : is English character)
  If users don't have static IP address, after port mapping, it needs to do dynamic domain name blinding. Like 3322, Peanut Hull, No-IP, after succeed to register domain name on their websites, tick NVR Setting---Network---DDNS Setting, and fill the username, password and domain name.

7.How to Apply P2P Cloud Surveillance?

- To check whether your NVR has P2P, tick Setting---Network---Management Plat_ and check whether there is Icloud protocol on the column. If not, NVR needs to be updated with firmware;
- NVR's network cable should be access to public network;
- Smartphone is necessary to download software and install "goolink", which can be found on Android market and App store. For IE end P2P, open IE browser and input http://www.goolink.org on address bar and then register an account. After successful registeration, refresh http://www.goolink.org and after activex is successfully loaded, it will have a black screen in the middle of the page. Now users

turn to add device in device management and device ID is from users' NVR Series No. while device user is "admin" with no password. Users can manually set up device name by them self. If users had changed password already, pls fill in the right password. Channel number is according to the nvr users at hand, which max supports 32 channels. After all this, tick "add" and go to see live preview.
- After software installation, tick the left corner "+" button and choose the adding mode. If LAN has WIFI, users can click "LAN Explore" while "manually input" is common used. Tick the upward side "UID" and "record name". "record name" can be randomly filled and "UID" is from NVR's Series No. (NVR---Device---Device info). Username is admin and no password if default. If password changed, please type the right password. Channel number is determined by the actual NVR channel number, which is 1 channel in minimum and 32 channels in maxmum. After adding successfully, there is a line in the middle, if it is blue, it means device online, which can normally output image.

8. How to Achieve Centralized Management?

For simple preview, user can use standalone version network video surveillance software, which can be directly installed with compact size and manage NVR. For professional surveillance, user can use system network version CMS centralized surveillance software, which is embedded with several main module like Central Management Server, Platform Client Management Server, Storage Server and Forwarder Server, etc. It can monitor mainstream DVR, NVR and achieve the central monitor management of the different brand machines. For detail, please carefully view it on NVR CD disk.

9. How to Decode for TV Wall?

Via CMS central monitor software Client, user can configure decoder, which can decode NVR or ONVIF protocol's IP cameras. For detail, please carefully view it on Decode CD disk.

10. How to set if NVR has two Ethernet ports?

36 channels NVR has two Ethernet ports, sometimes customer fail to search out IPC, the solution is :
- Check which Ethernet port that the NVR network cable is connected:
  A port: the Ethernet port that with IPC character
  B port: the Ethernet port that with NETWORK character
- If the network cable is connected to A port, please check in the following way:
  System→Network→Network setting, check whether the IP address of NIC1 and gateway have the same segment of IPC, then check the default router must be NIC1;
- If the network port is connected to B port, please check in the following way:
  System→Network→Network setting, check whether the IP address of NIC2 and gateway have the same segment of IPC, then check the default router must be NIC2;
  After understand the setting as above, here introduce the two Ethernet ports function:
  First, two IP segments can avoid if only one IP segment, the IP address might be not enough for using;
  Second: Safe and redundancy, when set the two NIC in the same segment with different IP address, if one of them is broken, the another one can work normally to ensure the system run well