

NVR Quick Start

1. Statement:

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

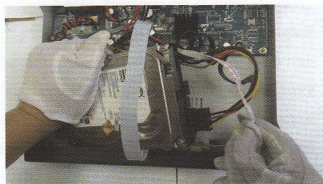
Prepare a screwdriver. Take 1U chassis as an example, this series of NVR can have a hard disk installed in the chassis, the largest capacity of which amounts to 4TB.

3.1 Hard Disk Installation Steps

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

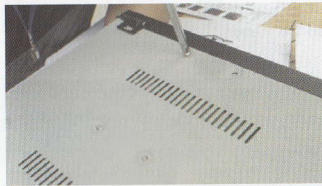


2. Connect the hard disk data wire and power supply wire



NVR Quick Start

3. Fix the HDD on the bottom plate

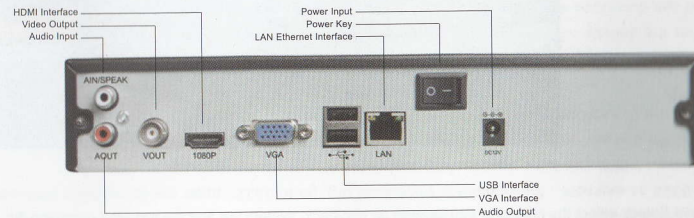


4. Put back the cover and fix it by screws

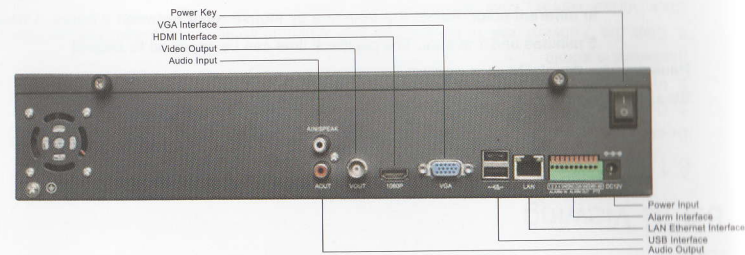


4.1 Rear Panel Interface

1U 4/8ch rear panel

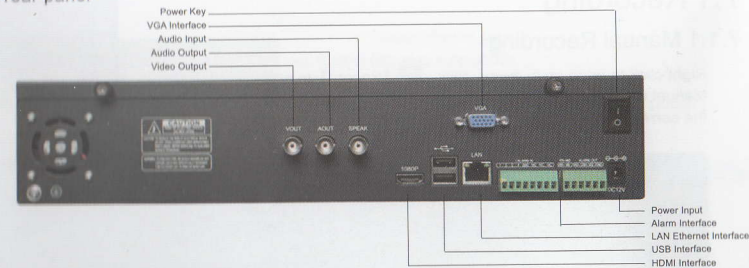


1.5U 4/9ch rear panel

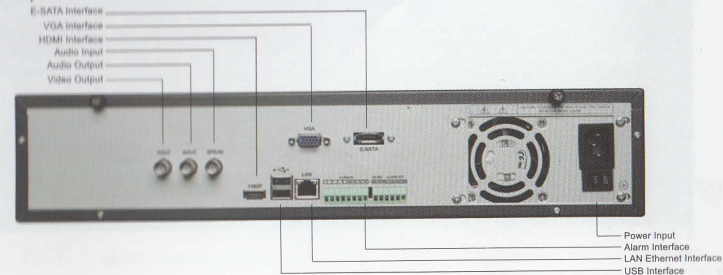


NVR Quick Start

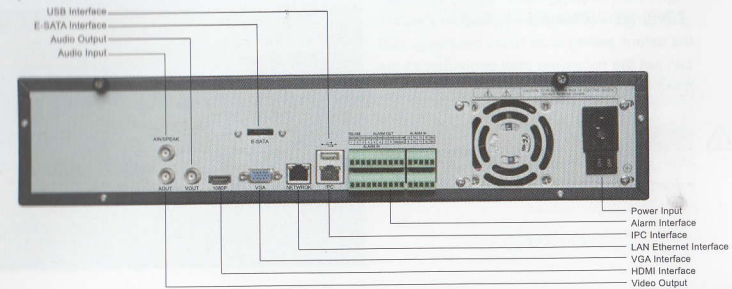
1.5U 16ch rear panel



2U 9/16ch rear panel



2U 36ch rear panel



5.1 Host Side Operation

5.1.1 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.

5.1.2 System Login

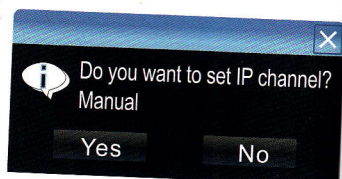
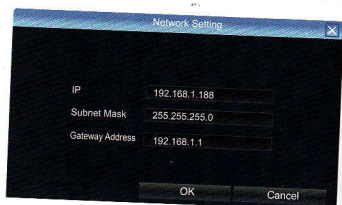
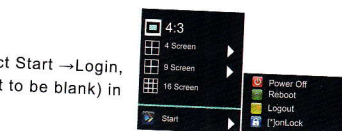
After normal booting, right click to bring the menu, select Start → Login, input the user name: admin and password blank (default to be blank) in the input box

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.

5.1.3 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".




5.1.4 Power Off

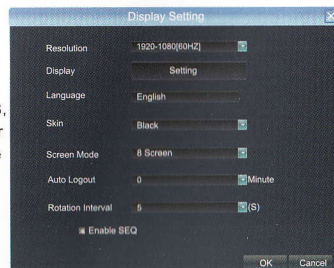
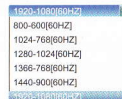
1. Click the power switch at the rear panel can shutdown the device.
2. **【Main Menu】** → **【Power Off】**, select **【Yes】** (By this way, user need to have shutdown authority)
Note: Suggest to shutdown device in this way, it can avoid damaging the device from electricity cut-off by accident).

⚠ Notice: Before changing the HDD operation, please shutdown the device and cut the power supply first.

5.2 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.

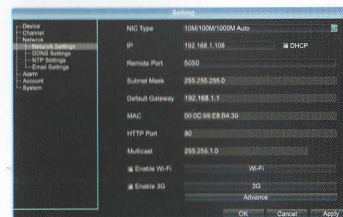


2. Display setting: set monitor lightness, contrast, saturation, color
3. Language: select different language according to your need, after that you need to restart the device
4. Skin: there are blue and black two color for selection
5. Screen: 1、4、9、16、25、36 screens are optional,
6. Automatic logout 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 logging in NVR by IE, input NVR IP address or domain name; need to add colon and HTTP port number.

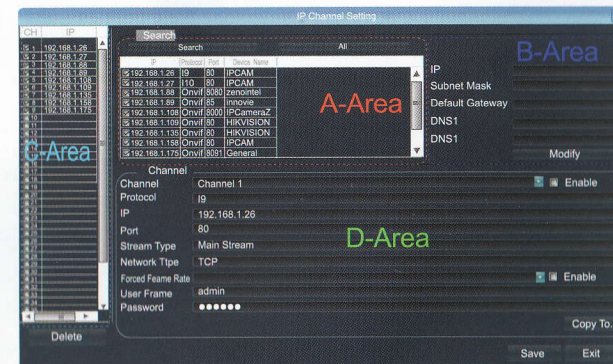
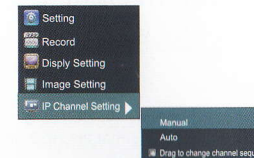
Example: as the above right picture, access NVR by IE in LAN, first add 2 forwarding rules in the router, the IP address is 192.168.1.188, the forwarding ports are 5050-5053, 80. Please input http://192.168.1.188:80 at IE browser and download ActiveX, then close the IE before installing the ActiveX, 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, 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 the all channel by one click.

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

6.2.2 Automatic Search

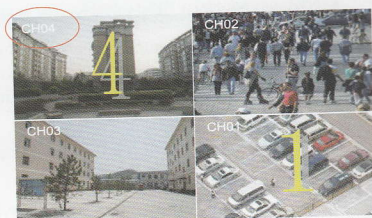
Right click to select **IP Channel Setting** → Auto

If the IP camera has private protocol with AEIVISION 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

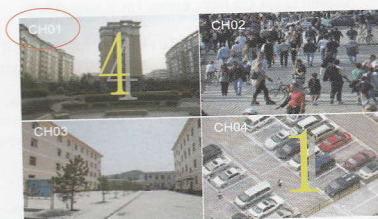
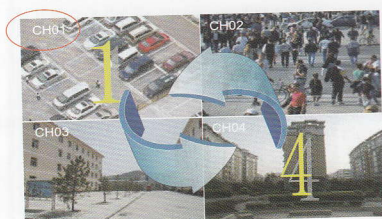
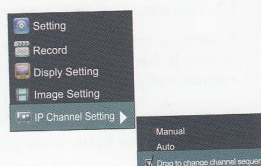
6.3.1 Drag and drop the image

The preview image location can be dragged to different place as necessary, but the channel physical address will keep the same



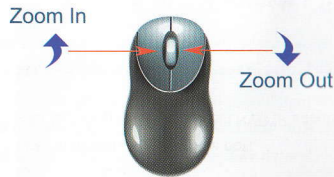
6.3.2 Drag to change channel sequence

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 successfully.



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. The max can do 15X zooming. Drag the zoomed image by mouse to see image detail.



Original Image

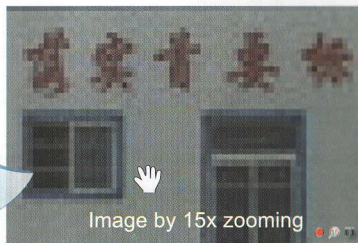


Image by 15x zooming

- 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 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 backuped 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 if flash disk is connected well, then select the capture files that need back up, and click Back Up to begin it.

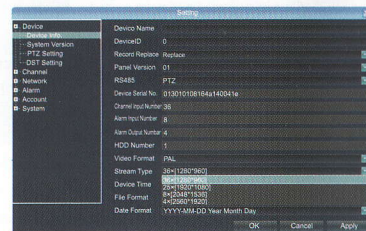
6.5 System Setting

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 1080 mode, which can solve it.

System version: check the system version and time first before updating, to avoid updating failure and damage the device.



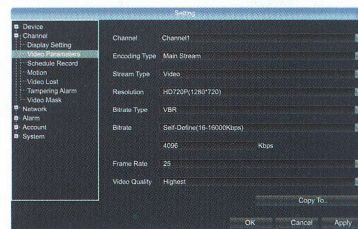
6.5.2 Channel Information

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.



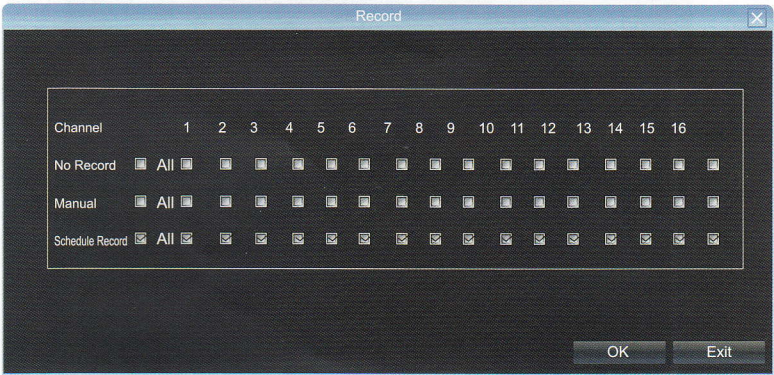
2. Stream Type: video, video & audio two type for selection. When connect with audio, please select video & audio mode, or there is no audio when playback.
3. Resolution: NVR will get IP camera main stream and sub stream resolution automatically, when the image is not good, adjust from here according 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
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

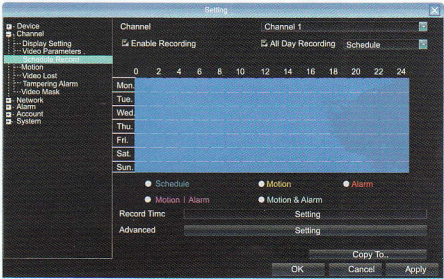


7.1.2 Schedule Record

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

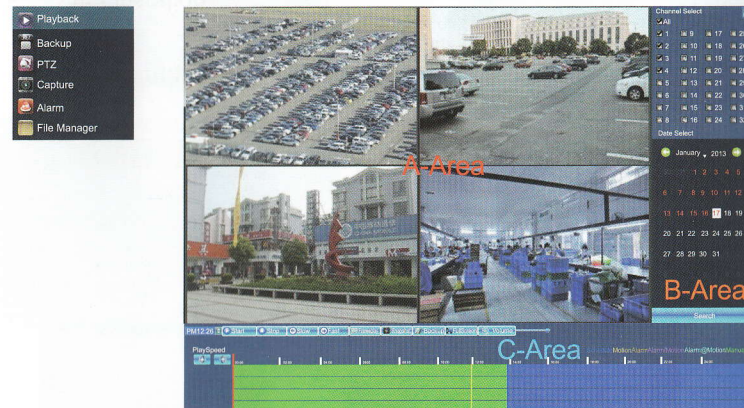


Notice: If NVR stop recording in a regular time, please check schedule record status, the schedule might be in wrong, please adjust them to manual record.




7.2 Playback

Right click to bring main menu, click  **Playback** to open the menu:



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

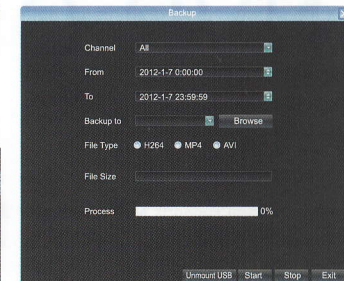
To back up, please make sure there is a hard disk recording videos.

Playback Backup: click Back Up icon in area C of 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 disc 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 disc of that very day.




7.5 System Setting

7.5.1 HDD Setting

Right click mouse, 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 disc;

【Import configuration】 : Open the menu in the NVRs
that need the same configuration,
import data of U disc 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 explorer, 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 explorer and enter the domain, and add the colon +http port

8.1.2 User Login

1. Enter the domain+colon+Http port . or enter 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  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

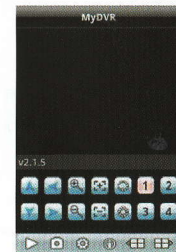
Notice: you can adjust the settings according to the performance and network condition. Mobile phone with higher performance and network condition will display better effect. If the network condition is not good, you can reduce the frame rate to ensure the fluency.

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:

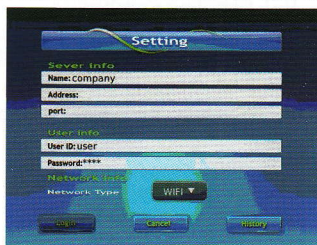


9.1.4 Blackberry Mobile Phone System

Mobile phone app supports Blackberry phones system above V4.6, with screen resolution 480*360 and 480*320, including model No. 8900, 9000, 9700, 9630 etc.

☆ Instruction:

1. Download and install vMEye.cod & vMEye.alx via BlackBerry Desktop Manager. Click 'options' and find vMEye in application, then click and find edit privilege to set all privileges as 'allow'. If a part of privileges can't be set-up as allow, you just ignore it and click save.
2. Click vMEye icon, the initial interface will be shown(as the picture on the right) after running few seconds of the programme:
Name: Enter name of device in order to distinguish other more devices.Address: The IP address or DDNS of DVR/ NVR.
Port: The server port of DVR/NVR
User ID: Same as set-up on IE
Password: Same as set-up on IE
Network Type: Select your ideal network type.
3. Click login to access main interface.

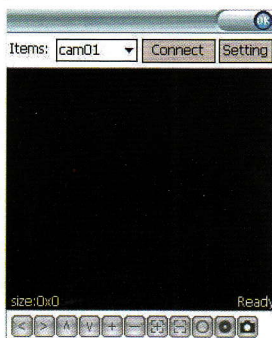


9.1.5 Windows Mobile System

Mobile client software supports 2003 windows mobile system version and above. Currently it only supports touch screen version.

☆ Installation and Operation Instruction

1. The Installation is carried out by copying to the phone with data cable via MEYE_WM.cab.
2. Click the corresponding icon appeared as right:

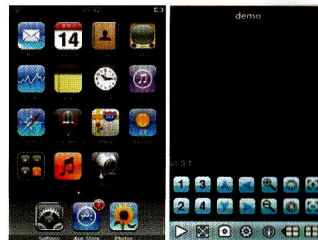


9.1.6 APPLE IOS System

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 program icon will arise as below:
2. Click vMEye program icon, and the initial interface after running appears as right:



Appendix: NVR Faults and Troubleshooting

1. Device Fails to Start or Restart Continuously

Possible Reasons:

- NVR's upgrading wrong program leads to the damage of system software.
- NVR encounters power or board faults, please contact the supplier for repair.
- HDD error, please change another HDD.
- Panel program wrong choice: Setup→Device Parameter→Setup Information→Interface Version. Aluminum panel please choose MINI. Other plastic panels choose correspondingly 01, 02, 05, etc.
- NVR IP address conflict.

2. Failure to Use Remote Controller

Possible Reasons:

- Please check whether the batteries in Remote Controller are installed correctly, especially the positive and negative.
- Please check whether the batteries in Remote Controller are still charged.
- Please check whether the Remote Controller window is hidden.
- Please check the Remote Control address in NVR is matched with Remote Controller address.

3. Blurred NVR preview screen

Possible reason:

Unmatched video input feature. If the camera uses NTSC, but the NVR uses PAL, this could lead to a blurred screen.

4. Internet disconnected to NVR.

Possible reasons:

- Please check if your physical network is normal or not.
- Please check your NVR parameter setting.
- Please if there is IP conflict.

5. Blurred playback screen/ fail to search recording file

Possible reasons:

- Program misread. Please reboot the NVR.
- Bad track or bad cluster in the hard disk data. Please detect your hard disk and change a new one if broken.
- NVR hardware fault. Please contact your supplier.

6. Cannot normally play downloaded backup videos.

Possible reasons:

- Player installing mistake.
- Wrong USB flash disk or wrong mobile hard disk drives file system.
- No DX9.0 or higher diagram speedup.

7. I set all the mobile detector alarm, occlusion alarm and video occlusion right, but why does it still not work?

It might because the ONVIF of your IPC does not support such functions.

8. No IPC searched, why?

It might be because your NVR or IPC is disconnected to internet. Please try to check if your device is right connected to internet, or check if there is a IP conflict.

9. There is no sound when preview or playback the NVR, why?

- Check if there is an audio in your IPC: you can test it through IE or the built-in client or through computer.
- Wrong audio format: NVR only supports G711 audio compressed format. Please adjust your format through IE of the built-in client.

10. There is no diagram after being saved?

It can be a wrong username or password. It might also because the camera gun may use a private protocol leading to incompatibility. Suggestion: use camera that support i8 or other private protocol or the internationally agreed ONVIF.

11. There is a videotape prompt of a certain diagram and also have images when double clicked, but there is no image in multi-channel preview, why?

Click that channel with your right-hand button and there is a pattern pull-down list in the Remote Configuration, try to replace the main stream with a sub stream and save it. If there is still no image, it might because the sub stream is set too high, below 1m is suggested.

12. A multi-channel preview is normal, but double-click on the single picture, it turn to black screen or the image stuck, unable to playback the video.

Please check whether your IPC is 1080p, if yes, then click on the Settings -> device parameters -> pattern, and see if you can use 1080p pattern. 1080p videos can only display sub stream under the 720P channel pattern. Please set 1080p IPC to the specified channel. Select the correct mode and reboot OK.

13. Why fail to login the IE viewing?

Please set up according to the following method:

1. IE setting--Internet options--Security--Custom level--enable all relevant options of ActiveX
2. Find and delete original pugin file "dvr_activex" firstly ,then download and install it correctly again