

## 1. Statement:

- This manual supports NVR model:1U 4/8ch、1.5U 4//9/16ch、2U 9/16/36ch
- As product update, the NVR functions might be different from the manual showing, please follow the product that you got.

## 2. Safety Precautions

- 1) Do not use wet hands or any damp objects to touch the power switch and network digital video recorder (NVR), in order to avoid electric shock;
- 2) After installing the host, it must be ensured that the host and the chassis have grounded to avoid the video, audio signal being disturbed, and to avoid NVR being damaged by static electricity;
- 3) The device does not include hard disk. Hard disk should be properly installed before use, otherwise it can not perform the record and playback;
- 4) Host system supports format of the hard disk. If the hard disk has been used, please note whether it is FAT32 format. The embedded network digital video recorder supports only FAT32 format, otherwise there will be a hidden danger. Note: Please format hard disk when it is the first time for you to use;

## 3. Hard Disk Installation

Prepare a screwdriver. Take 1U chassis as an example, this series 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

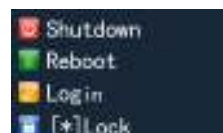
Plug power cable, press power switch, the power led will be on and the NVR will start. After booting, the video output default to multi-window output mode. If the booting time is within the record setting time period, the system will auto enable the record function.

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

### 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 manual setting IP address, click “NO”.

### 4.1.4 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 have shutdown authority)  
 Note: Suggest to shutdown device in this way, it can avoid damaging the device from v electricity cut-off by accident).

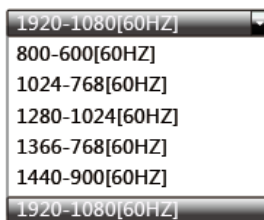
 **Notice:** Before changing the HDD operation, please shutdown the device and cut the power supply first.

## 4.2 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 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 the necessary, after that need 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.

## 5.1 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, and gateway and so on. Then use PC to run ping command to check NVR IP has 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.

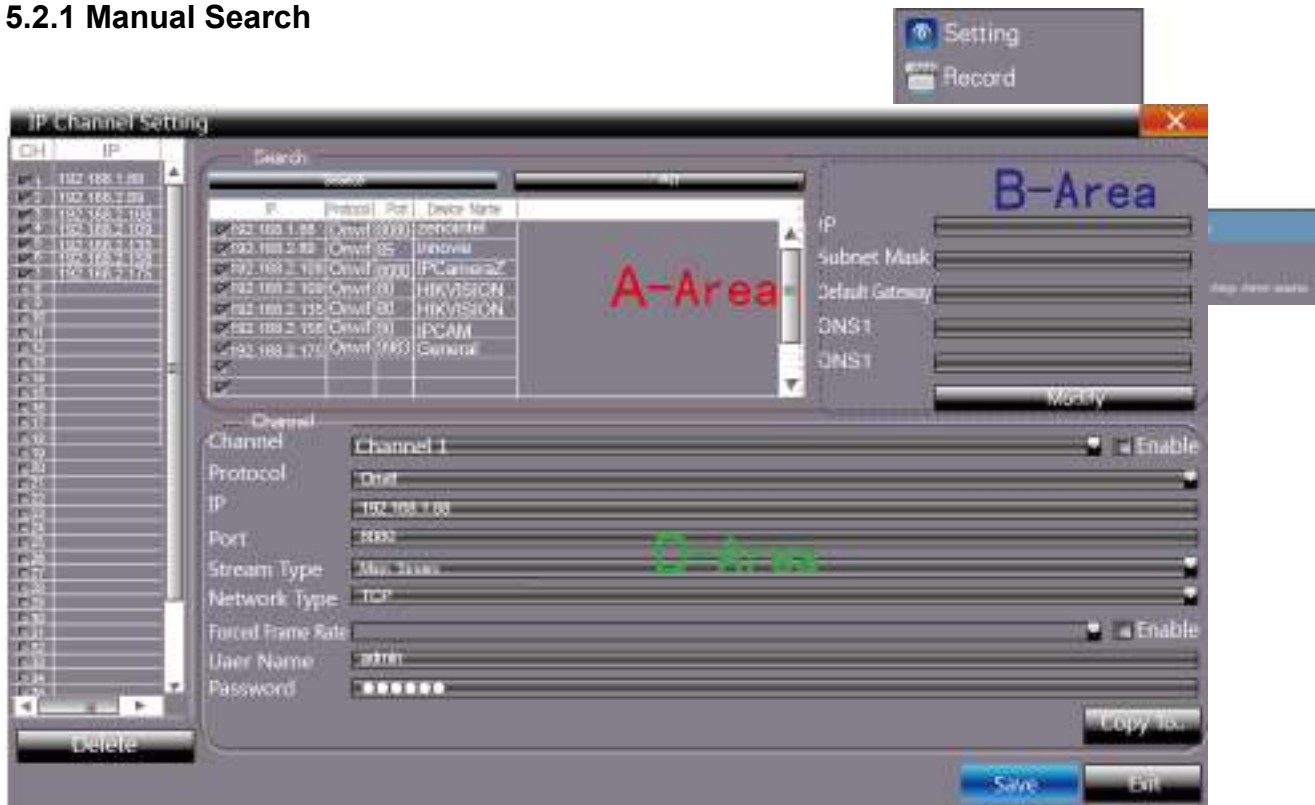
**HTTP port:** the default port is 80, suggest modifying it. This port is for login NVR by IE, input NVR IP address or domain name; need to add colon and HTTP port number.



**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 Connect with IP Camera

### 5.2.1 Manual Search



Right click to select 【IP channelSetting】 →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 area, B area will show camera network data, some cameras can change IP address directly in B area

**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

### 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. Camera IP addresses will be added automatically in the preview channel area.

## 5.3 Preview

### 5.3.1 Drag and Drop the Image

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



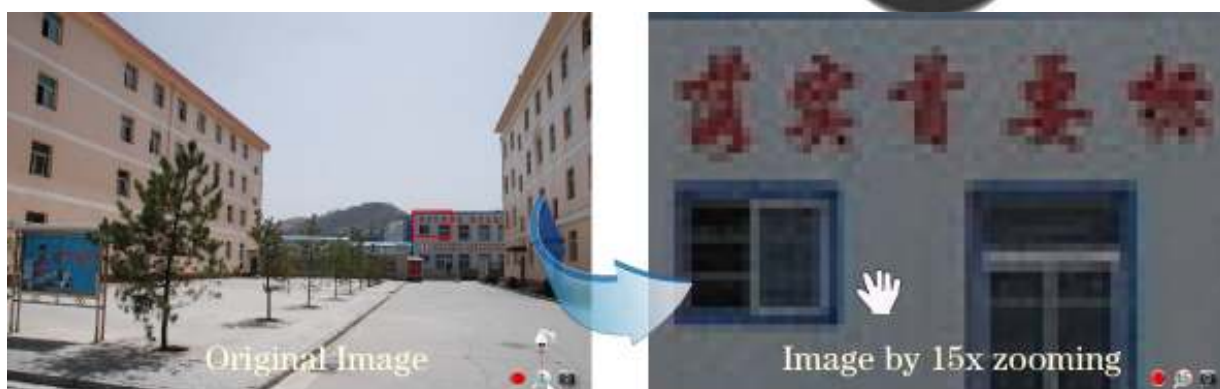
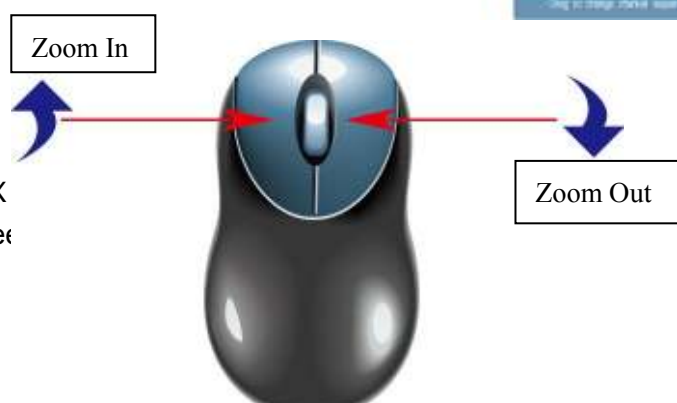
### 5.3.2 Drag to Change Channel Sequence


Right click to select **【IP channelSetting】** → **【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 lost for some while till connect the image connect successfully.




### 5.3.3 Digital Zooming

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




 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

## 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.

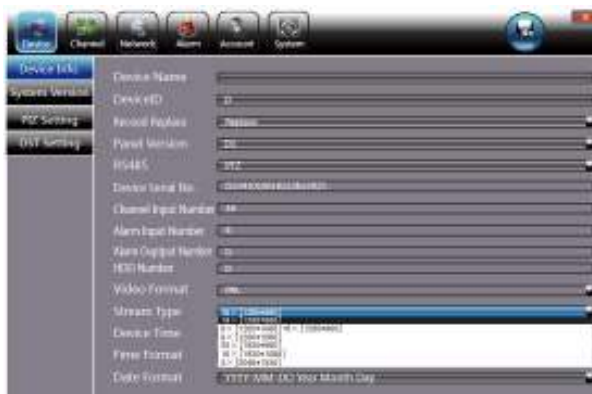
## 5.5 System Setting

### 5.5.1 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 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.



**System 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:** NVR will get IP camera main stream and sub stream resolution automatically, when the image is not good, can adjust from here according to necessary.
- 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

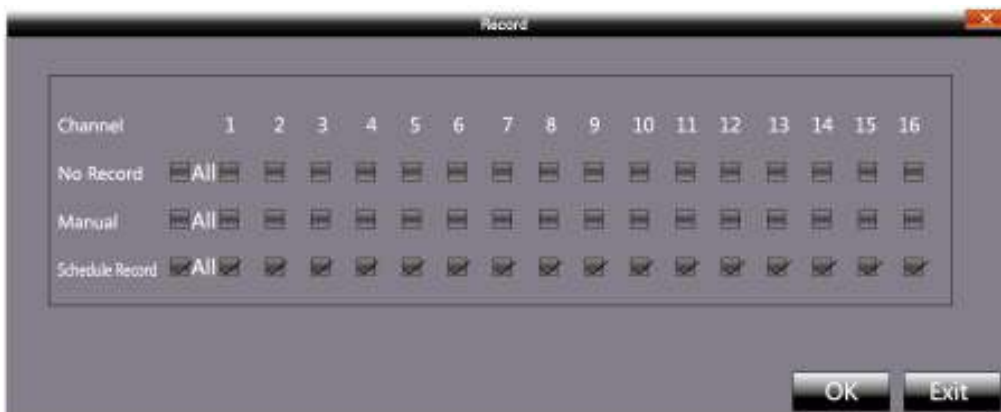
When all the IP cameras connected with NVR are same brand, after finish setting 1<sup>st</sup> channel, can click **Copy To** to apply the setting to all channels, then click **Save**.

## 6.1 Recording


### 6.1.1 Manual Recording

Right click 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.



### 6.1.2 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 necessary and copy it to other channel



**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.

## 6.2 Playback

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



### Channel Select:

select the channels that need do playback, system will find the required recording file. The date that has recording 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

## 6.3 Record 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 **7.2 Playback**

**Preview Backup:** Right click bring main menu, click

【Backup】 to enter the backup interface,

as  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;



## 6.4 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 list 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 capture also when you view the video, the captured photos are stored in the hard disc of that very day.




## 6.5 System Setting

### 6.5.1 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, to end with about 1-3 seconds.

## 6.5.2 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 by network.

**Note:**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 send back to factory for repairing.

After upgrading,the device need to be rebooted.

## 6.5.3 Import-Export Configuration

Right click mouse, click  **【Setting】** →System→Recovery Configuration。

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

1. 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 igation.



## 7.1 IE Viewing.

### 7.1.1 Router Setting

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

- 1) Open the IE 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”

Take 3322 as example , the Domain is [www.3322.org](http://www.3322.org), go to 3322 , enter the information and remember the domain which you have successfully registered.

Att:the domain, user name and password need to put in the DDNS Setting in DVR/NVR.

Back to the IE explore and enter the domain, and add the colon +http port

### 7.1.2 User Log In

- 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:






Port: 5054  
User: admin  
Password:  
Login



### 7.1.3 IE Operatio

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

Remark: 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.

## 8.1 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.

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

### 8.1.1 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.

### 8.1.2 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

**Remark:** 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.

### 8.1.3 Android Mobile Phones System

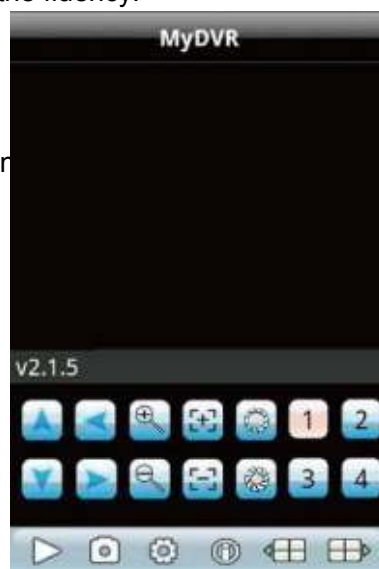
Android mobile phones system

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:



### 8.1.4 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.

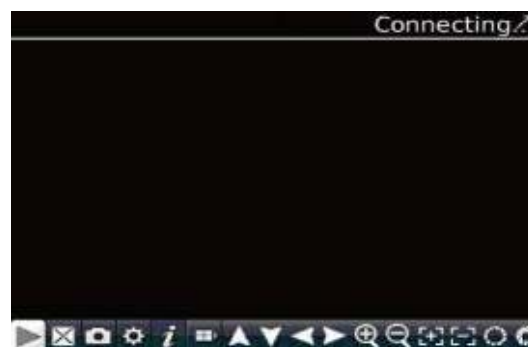
Port: The server port of DVR/NVR

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.



### 8.1.5 Windows Mobile System

Mobile client software supports 2003 windows mobile system vers 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:



### 8.1.6 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:



## Attached: NVR Faults and Troubleshooting



### **1. Device Fails to Start or Restart Continuously**

Possible Reasons:

- 1) NVR's upgrading wrong program leads to the damage of system software.
- 2) NVR encounters power or board faults, please contact the supplier for repair.
- 3) HDD error, please change another HDD.
- 4) 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.
- 5) NVR IP address conflict.

### **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.

### **5. Blurred playback screen/ fail to search recording file**

Possible reasons:

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

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 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?

- 1) Check if there is an audio in your IPC: you can test it through IE or the built-in client or through computer.

### **2. Failure to Use Remote Controller**

Possible Reasons:

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

### **4. Internet disconnected to NVR.**

Possible reasons:

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

### **6. Cannot normally play downloaded backup videos.**

Possible reasons:

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

2) 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 be because the camera gun may use a proprietary protocol leading to incompatibility. Suggestion: use camera guns that support i8 or other proprietary 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 be 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 turns to black screen or the image is 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 plugin file "dvr\_activex" firstly, then download and install it correctly again