

# Network Video Recorder System HM241 Quick Guide

Please read this quick manual throughly before using this product and keep it for future reference.

For more detailed instructions, please contact us at support@heimvision.com.





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# **SAFFTY CAUTIONS**

- 1. Please do not place any container with liquid on the NVR.
- 2. Please use the product in an open space and do not block the air vents.
- 3. For your safety, please use the original power supply provided.
- 4. If the NVR starts or works abnormally, please unplug the power adapter and clean the dust on the mainboard in the NVR device, then restart the NVR.
- 5. Please obey the regulations and policies in your country and area when installing the product.

# **PACKING LIST**



Screw x4

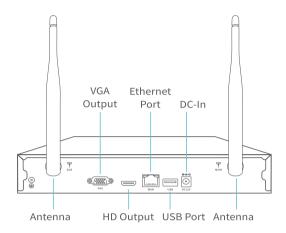
(for HDD)

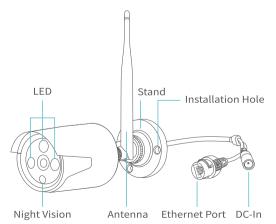
5DB Antenna x4

(for IP Camera)

USB Mouse x1

# **PRODUCT OVERVIEW**





# HARD DISK DRIVE INSTALLATION AND SYSTEM CONNECTIONS

## Hard Disk Drive Installation

#### IMPORTANT:

- 1. To record video and play the historical video, the installation of the Hard Disk Drive is a must. Otherwise, you can only watch the live picture.
- 2. A Hard Disk Drive is not included in this NVR System.
- 3. This NVR system works with a 3.5" SATA HDD. The HDD shoud be formatted if it's installed.

#### Step 1:

Unscrew and remove the top cover of the NVR.



## Step 2:

Connect the SATA power and data cables of the NVR to the corresponding ports of the Hard Disk Drive



# Step 3:

Hold the Hard Disk Drive and the NVR together, carefully turn them over, then align the screw holes on the Hard Disk Drive with the screw holes on the NVR housing.



#### Step 4:

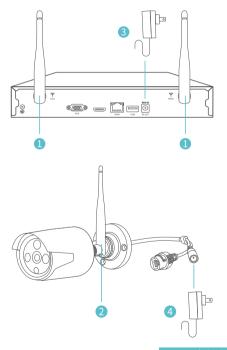
Using a Phillips screwdriver to tight the Hard Disk Drive and NVR housing with the provided screws, then assemble the top cover of the NVR



# **System Connections**

Do not fix the IP Camera with the screws before you can see the image on the monitor and know the ideal position to install it.

- Unwind the antennas of the NVR;
- Install and tighten the antennas on the IP cameras;
- 3 Plug the power adapter (12V/2A) into the NVR and the socket;
- 4 Plug the power adapter (12V/1A) into the IP Camera and the socket.



## OPERATE NVR SYSTEM WITH A MONITOR

## Live Picture

After connecting the NVR and cameras to power, connect a monitor to the NVR through the HDMI or VGA port (HDMI and VGA cable are not included) and wait for 2-3 minutes, then the live pictures from the cameras (main interface) will be displayed on the monitor. Connect the mouse to start operating the NVR system.

#### Notes:

- The default Username for the NVR system is admin and the default Password is empty (no need to enter anything);
- This NVR system can be only connected to the network by the Ethernet cable currently;
- 3. To protect your privacy, please set the password at your earliest convenience.
  Right click the mouse on the main interface, then go to System setup >
  System Admin > User > Set password to set a password;



4. If you do not have a monitor, you can operate the NVR system on PC. See more details from page 11 and 18.

# **Hard Disk Drive Formatting**

Install the HDD first, then right click the mouse on the main interface and go to System Setup > General setup > HDD Setup to check its status. If it's not Formatted, tick to select the right HDD, then click Format.

# Video Recording

Right click the mouse on the main interface, then select **System setup** > **Record setup** > **Record Plan** to set the record mode. The default record mode of the NVR is 24/7 all time record.



IMPORTANT: Click Reset before you change the record mode.

#### Scheduled Record

After reset, select Channel and click **( )** Time to start scheduled record setup. Left click the mouse and hold to select the day and hour you plan for recording. The area selected will turn to **Red** and click **Apply** to save the setting. The system will start recording at a specific time on a daily/weekly schedule.

## Motion Record

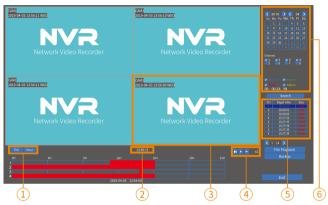
After reset, select **Channel** and click **3 Motion** to start motion record setup. Left click the mouse and hold to select the day and hour you plan for recording. The area selected will turn to **Green** and click **Apply** to save the setting. The system will start recording when the camera detects any motion.

#### Tips:

- 1. After changing the setting from 24/7 to the specific time or motion record, it helps to prolong the storage time of the HDD.
- 2. External device is required for Alarm record and this NVR does not support it.

## Video Playback

Right click the mouse on the main interface, then select Video Playback to play the videos recorded. Select the Date with Green color, Channel and Record Mode ( ® ), then click Search to list all the filtered videos.

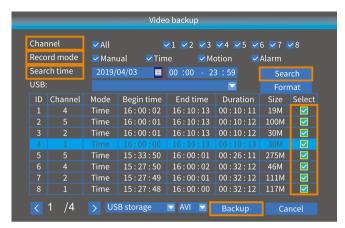


- ① Display the timeline by Day/Hour
- ② Video Recording Time
- 3 Area for Video Playing

- 4 Pause/Play/Fast Forward
- ⑤ Filtered Videos List
- 6 Filters
- Option 1: Select one video file from the Filtered Videos List (⑤), then click Play or File Playback to play the selected video.
- Option 2: Left click the mouse on the Red/Green (Red for Scheduled Record and Green for Motion Record) part of the timeline. The videos recorded from 4 channels can be played at the same time.

# Video Backup

Right click the mouse on the main interface, then select Video Backup to enter the interface below.



#### Step 1:

Select Channel, Record mode and Search Time, then click Search to display the filtered videos list.

## Step 2:

Tick to select the video files, click **Backup** and wait for a pop-up window to prompt you to insert a USB Drive within one minute.

#### Step 3:

Unplug the mouse and insert your USB Drive within one minute, then the NVR system will back up the selected videos into your USB Drive automatically.

# Tips:

- The NVR system only supports the USB Drive up to 32GB and the format of the USB Drive should be FAT32.
- 2. An extra Hub is needed when you'd like to connect the mouse and the USB Drive to the USB port on the NVR system at the same time.
- 3. To back up the video one by one via another method, go to the interface of Video Playback and select one video file from the filtered videos list. Click Backup and insert the USB Drive into the USB port of the NVR System within one minute. The video will be saved to the USB Drive automatically.

## **Network Setup**

To remote view videos from mobile device or PC, please make sure the NVR is connected to the Router with the Ethernet cable first, then go to System setup > Network setup to check the Cloud ID, IP address and Web port, etc..

- 1. Make sure the status of the Cloud(P2P) is ONLINE. If it's OFFLINE, please unplug the Ethernet cable, then plug again to check the status;
- 2. The number after Cloud(P2P), e.g. 2416666666, is the Cloud ID of the NVR device:
- 3. Make sure the DHCP, Cloud(P2P) and Enable after the Net Diagnose Info are ticked:
- 4. Make sure the Network status is Healthy Network:
- 5. Web port may vary on different NVR systems.



## Other Functions on the Menu Bar

Right click the mouse to show the main **Menu** bar as shown below, right click again to hide it.

- ⊞ Split screen
- Video Manage
- ☆ System setup
- Video playback
- Color adjust
- O PTZ control
- 🕭 Manual record
- **◄**Volume
- 🕫 Setup Wizard
- 😘 Fast Network
  - Wifi add
  - Adjust channel
- ① Exit System

#### Split screen:

change the numbers of the channels showing in the same screen.

## Video Manage:

add IP Camera by Match Code, manage IP Cameras and Channels etc..

## System setup:

includes General setup, Record setup, Network setup and System Admin.

- \* General setup: change Language, set up the Time, Change Display Resolution and check HDD information etc..
- \* Record setup: set up the record mode for each channel.
- \* Network setup: check the IP address, Cloud ID etc..
- \* Channel setup: change the name of the

camera, check the Bitrate etc..

\* System Admin: check the system version, update the system, User and password setup, make a factory reset and check the system log etc..

## Video backup:

back up the selected historical videos.

## Color adjust:

adjust the **Brightness**, **Contrast**, **Sharpness** etc. of the picture in each Channel.

## Manual record:

turn on the video recording manually when the current time is not within the specific recording schedules.

#### Setup Wizard:

show the QR codes for App downloading and checking the Cloud ID.

#### Fast network:

configure the network.

#### Adjust channel:

adjust the display order of each channel.

#### Exit System:

Log out, reboot and shut down the system etc..

## **OPERATE NVR SYSTEM FROM CLIENT ON PC**

#### Important:

- https://www.heimvision.com/download/Cameras is the link for downloading the EseeCloud client. After downloading, install and operate the Client following instructions;
- Check the Cloud ID from the Network setup mentioned in the section of OPERATE NVR SYSTEM WITH A MONITOR:
- 3. Connect the NVR system to the Router via Ethernet cable in advance.
- 4. Make sure the status of the Cloud(P2P) is ONLINE. If it's OFFLINE, please unplug the Ethernet cable, then plug again to check the status;
- 5. Make sure the Network status is Healthy Network

# Client Installation and Login

#### Step 1:

Double left click the **EseeCloud\_Setup.exe** file to install and run the Client.

## Step 2:

Log in to EseeCloud Client with the default User Name (admin) and password (empty, namely enter nothing) if you did not set any password.

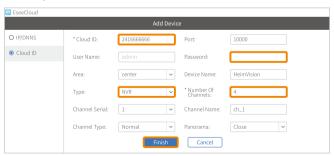


#### Step 3:

Read the tips and click **Experience** to start. Click **+Add** on the right upper corner to enter the window of **Add Device** 

#### Step 4:

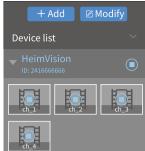
Switch to Cloud ID option first. Enter the Cloud ID of your NVR system, select Type as NVR, enter the password if you set one (if not, the default password is empty) and enter 4 in the box of Number of Channels, then click Finish to add the NVR system.



Step 5:

After it's added successfully, left click the mouse on the icon to connect your NVR system and show the live picture of the channels.





#### Tip:

The **Device list** is displayed with the **Graphic** structure. If it's displayed with a **Tree** structure, please double click on the device name to connect the system.

# Video Playback and Backup

#### Step 1:

Left click the (3) on the bottom menu bar, then click **Confirm** in the pop-up window of **Tip** to enter the interface of **Video Playback**.

## Step 2:

Select Channel, Record type and Date, click Retrieval to display the videos recorded, then left click the mouse on the timeline with colors or drag the white time box to play the video.



#### Step 3:

Click the **Download** button on the right bottom corner or the  $\ddots$  icon on the bottom menu bar to pop out the window of **Download Resources**. Click the  $\ddots$  icon to download the video one by one or click the **Batch Download** button to download all the videos together to your computer.

		Download Resources		0
Start Time: 2019-04-01	(m):(00):(00)	End Time: 2019-04-01	# 23:59:59	Batch Download
Channel	Start Time	End Time	Туре	
2	2019-04-01 14:00:00	2019-04-01 14:26:17	■ Timing Detection	ك
2	2019-04-01 13:00:00	2019-04-01 14:00:00	■ Timing Detection	ر ا
2	2019-04-01 12:00:00	2019-04-01 13:00:00	■ Timing Detection	ك
2	2019-04-01 11:35:33	2019-04-01 12:00:00	■ Timing Detection	<u>.</u>
2	2019-04-01 11:33:59	2019-04-01 11:35:33	Motion Detection	ىك
2	2019-04-01 11:29:16	2019-04-01 11:33:59	■ Timing Detection	.Ł.
2	2019-04-01 11:17:39	2019-04-01 11:24:32	■ Timing Detection	<u>.</u> .

#### Step 4:

Click the so icon to exit from the video playback interface and get back to the live picture again.



#### Other Functions of the Bottom Menu

**Device Management(** ⓐ ): add more NVR devices, delete the selected NVR device and modify the information of the NVR device.

User Parameter ( ): change language, change the paths of saving Screenshot, downloading the historical video and saving the recording file of current live picture, etc..

Record ( ): record the current live video into your computer.

**Screenshot(** a): capture a screenshot of the current live picture and save into your computer.

**Disconnect all( 2 ):** disconnect the NVR device.

Screen Number( ): change the channel numbers showing in the screen.

**More Function( (a)** ): change the password of the admin, check the user logs, manage the local resources like Screenshot and videos, etc.

# **OPERATE NVR SYSTEM ON MOBILE DEVICE**

#### IMPORTANT:

- 1. Connect the NVR system to the Router via the Ethernet cable in advance;
- Make sure the NVR system and the mobile device are connected to the same network;
- 3. Check the Cloud ID from the Network setup mentioned in the section of OPERATE NVR SYSTEM WITH A MONITOR.

# Download and Install the App

Search and download IP Pro into your mobile device from App Store/Google Play or scan the QR codes below to download.



iOS System: iOS 8.0 and later



Android System: Android 4.4 and later

# Add the NVR System to the App

Install and open IP Pro App, then follow the steps below to add the NVR system.

## Step 1:

Register an account with your email address and log in to IP Pro, then tap the + icon in the center or on the upper right corner to continue.



Step 2:

Tap **Kit** to start adding your NVR system, then the App will scan the NVR system nearby automatically.



# Step 3:

Tap the right NVR after the successful scanning, then input the information required (e.g. enter the password if you set one; if not, the default password is empty) and tap Complete on the right upper corner to enter the main interface.



#### Step 3:

Tap on the thumbnail to enter the LIVE interface, then you can capture a screenshot, record the live video to your mobile device and play the videos recorded in the Hard Disk Drive of your NVR system.



#### Tip:

If the NVR is not added automatically, please tap add manully to add it.

## OPERATE NVR SYSTEM FROM THE BROWSER ON PC

#### Important:

- 1. The status of the Cloud (P2P) should be ONLINE. If it's OFFLINE, please insert the Ethernet cable and check it again after 1-2 minutes.
- Check the Cloud ID, IP address and Web port from the Network setup mentioned in the section of OPERATE NVR SYSTEM WITH A MONITOR on page 5.
- 3. Internet Explorer (IE) browser is recommended.

## Option 1:

When your PC is connected to the same Router as the NVR's, you can visit the local network to operate.

After getting your IP address (e.g. 192.168.32.213), enter it into IE browser and log in to the NVR system. Please Install the Web View Control after your first login. Changing the Internet setting to allow the installation of the Web View Control on some computers is required, please contact us for more information.

Then you can check the live picture of each channel, play the videos recorded ( ), download the videos recorded, change the settings ( ) and so on.



#### Tip:

If the Web port (e.g. 80) of your NVR system has been changed to another number, e.g. 1111, please enter 192.168.32.213:1111 into the IE browser.

### Option 2:

When your PC is connected to a different Router which is not the same as your NVR'S, you can visit the NVR system from Cloud.

After getting the Cloud ID, please visit www.e-seenet.com, then enter the Cloud ID (e.g.2416666666) and Username to log in to the NVR system. You can only view the live picture from the Cloud in this option.

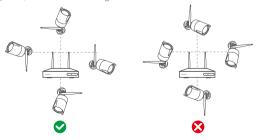


## **EXTEND THE WI-FI RANGE**

The Wi-Fi signal will be weaker when going through the wall, stairs and other obstacles. However, there are some solutions that may help to extend the Wi-Fi range.

# Adjust the Antennas to the Appropriate Angle

According to the signal transmission character of antenna, it's better to adjust the antennas of the cameras to be paralleled with the antennas of the NVR system when they are in the flat plane, or adjust the antennas of the cameras to be vertical to the antennas of the NVR system when they are in the vertical plane, to receive better signal.

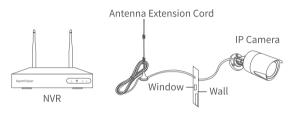


#### Tip:

Place the NVR on the desk and be far away from the devices that are easy to interfere the connection, such as microwave oven, TV, etc., Make sure the obstacles between the NVR and the cameras are as few as possible.

## Get an extra Antenna Extension Cable with Stand

Take off the antenna of the IP camera, then install the Antenna Extension Cord into the IP Camera and put it to the place where the Wi-Fi signal is strong.



# Get an extra Repeater Device

To extend the Wi-Fi range, you can also install a Repeater device. Please refer to the user manual of the Repeater device you bought for using it.

# **Set up Cascading Connection**

#### Notes:

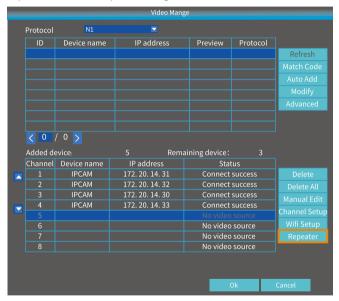
1. When the IPCAM2 is installed out of the Wi-Fi Range, but the IPCAM1 with strong Wi-Fi signal (check it from the live picture) or with smooth streaming is between the NVR and IPCAM2, then you can set up the IPCAM1 as a virtual repeater following the steps.



This virtual Repeater function cannot strengthen the Wi-Fi signal, but just help to extend the Wi-Fi distance by the IP Camera.

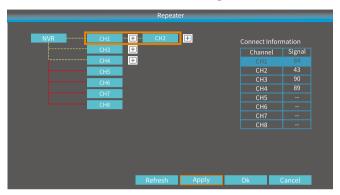
Step 1:

Right click the mouse to show the Mebu bar, then click Video Manage > Repeater to enter the Repeater setting.



#### Step 2:

Click + after CH1/IPCAM1, then select 2 to set IPCAM1 as a repeater. This means CH2/IPCAM2 is connected to the NVR through CH1/IPCAM1.



## Step 3:

Click **Apply** to finish the cascading connection. To check if it's set successfully, please click **Refresh**. To delete the **Repeater**, left click on the selected channel, then click **Apply** and **OK**.

## ADD A NEW IP CAMERA TO THE NVR SYSTEM

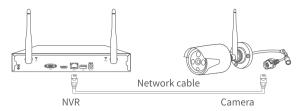
When you need to add a new IP Camera to replace the original one, please follow the steps below.

#### Step 1:

Plug the power adapter into the new camera and socket;

#### Step 2:

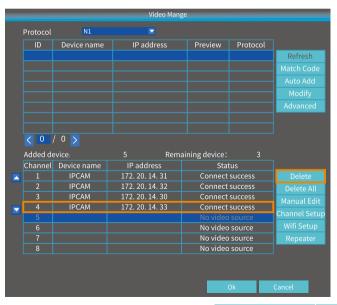
Plug the Ethernet cable into the NVR system and the camera;



Step 3:
Right click the mouse to show the Menu har then select Video Manage

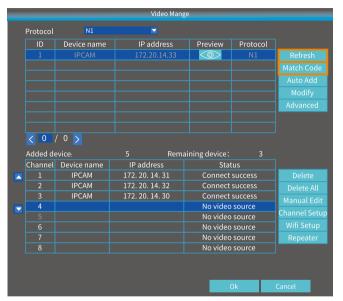
# Right click the mouse to show the Menu bar, then select Video Manage. Step 4:

Delete the original camera by selecting it from the **Added device** list and clicking the **Delete** button.



#### Step 5:

Click **Refresh** to show the new IP camera, select it, then click the **Match Code** to add the new camera automatically.



## TROUBLESHOOTING GUIDE

- Q1. There is no live picture sometimes.
  - It may be caused by the poor network due to Wi-Fi interference, obstacle blocking and so on.
    - When you are viewing the live picture from the Cloud, please make sure
      the network connection between the NVR and router works well. At the
      same time, make sure the router provides enough upload bandwidth.
      To improve the quality of network, you can reboot the router regularly.
    - When you are viewing the live picture from the same network as your router's, please make sure the network connection between the camera and NVR works well. You can check the quality of the Wi-Fi signal from the live interface.
      - \* If the Wi-Fi signal is good but the live picture of all the channels still buffers and lags, another device may interfere the connection between the NVR and cameras. Please try to get rid of it or change the Wi-Fi channel from System Setup > Network Setup > Wifi Setup > Wifi Channel
      - \* If the Wi-Fi signal of one channel is poor, move the camera close to the NVR to check whether the strength of Wi-Fi signal is stronger and make sure the antenna of the camera is fixed well and pointed at the right direction. If the Wi-Fi signal of all channels is poor, please slowly move the antennas of the NVR until they point at the right direction as mentioned in the section of Adjust the antennas to the appropriate angle from page 20.

If you need more help, please feel free to contact us at support@heimvision.com.

- Q2. There is no live picture when using a browser to log in to the NVR.
  - Please go to System Setup > Network Setup > Web port to check whether
    the Web port has been changed from 80 to another number, e.g. 1111. If
    yes, input the IP address and :1111 into IE to visit. For example, the IP
    address is 192.168.251.106 and the Web port is 1111, then please input
    http://192.168.251.106: 1111.

 Make sure you have installed the Web View Control correctly on your IE browser.

#### O3. Can I add the extra new camera?

• The camera with the same brand is recommended when you'd like to add more cameras. To get the link of buying camera and the detailed guide for adding the camera, please contact us at <a href="mailto:support@heimvision.com">support@heimvision.com</a>.

#### Q4. What should I do if I remove a camera from the NVR system?

 The steps to add it again are the same as adding a new camera mentioned in the section of Add a New IP Camera to the NVR System on page 23. Find the camera that matches with the deleted channel, connect it to the NVR with the Ethernet cable, then go to Video Manage > Auto Add to add it.

## Q5. How long is the storage time of the Hard Disk Drive?

• The example below is for an average data rate 512Kbps and 4 cameras.

The capacity of storing the video for one day (24 hours) is around 21.09GB based on the formula below:

512(Kbps) \* 3600(seconds per hour) \* 24(hours per day) \* 4(Channels)= 176,947,200Kbit

176,947,200Kbit=22,118,400KB

22,118,400KB=21,600MB

21,600MB=21.09GB

If you have a 1TB Hard Disk Drive, the capacity of it after formatting is around 921GB.

The storage time is around 43 days (921GB/21.09GB≈43).

However, the data rate of the camera is **Variable Bitrate** which depends on the surveillance environment. If there are many moving objects in the live picture, the data rate will be faster. Go to **System setup > Channel setup** to check it, then use the formula mentioned above to calculate it.

#### Q6. NVR system cannot detect the Hard Disk Drive.

- Make sure the NVR works well
- Make sure the power cable and SATA cable of the Hard Disk Drive are connected correctly and firmly.
- Try another Hard Disk Drive.
- The Hard Disk is a consumable. The Hard Disk Drive with brand and for 24/7 surveillance is recommended. Make sure you back up the important videos timely for safety.

## Q7. What should I do if I forget the password for logging in to the NVR?

 Please send us the time (e.g. 2019-03-20 23:59:57 WED) displayed on the live picture of the channel. The server will generate a temporary password which is only valid for 15 minutes. Heimvision support team will send you the password.

## Q8. No display on the Monitor of the NVR system.

• This might be mainly caused by resolution compatibility. The default resolution of the NVR is 1280\*1024, which may not be compatible with some monitors. Here are the steps for solving the issue:

#### Step 1:

Connect the NVR to any other monitor via the VGA output (or you may also try any other monitor via the HDMI output to see if you can enter the Menu bar of the NVR);

#### Step 2:

When you are able to see the menu, please go to System Setup > General Setup > Screen Setup > VGA resolution to change the resolution to 1024\*768, then click Apply.

#### Step 3:

Connect the NVR to your primary screen via the HDMI output again to check the display.



# **CUSTOMER SUPPORT**

North America support@heimvision.com

United Kingdom support.uk@heimvision.com