POE NVR KIT HM541
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
SAFETY CAUTIONS

1. Please do not place any container with liquid such as water, coffee, or beverage on the NVR.
2. Please put the NVR at a ventilated space and do not block the air vents.
3. For the system security, please use the original power supply provided.
4. Check the power voltage in case of any damage due to the wrong voltage.
5. Please obey the local security regulations and policies when installing the product.
6. If the NVR starts or works abnormally, please unplug the power adapter and carefully clean the dust on the mainboard in the NVR device, then restart the NVR.
7. We assume no liability or responsibility for any fires or electrical shock caused by improper installation.

ABBREVIATIONS OR TERMS

POE: Power Over Ethernet
NVR: Network Video Recorder
HDD: Hard Disk Drive
SATA: Serial ATA, a common hardware interface employed by our NVR.
EseeCloud: A software designed for this product.
FAT32: A file system of your USB Drive.
PACKING LIST

- NVR x1 (HDD not included)
- POE IP Camera x4
- 65ft (20m) Ethernet Cable with Waterproof Connector x4
- USB Mouse x1
- DC 48V/2A Power Adapter x1
- Screw x4 (for HDD)
- 3ft (1m) Ethernet Cable x1
- Screw Kit x4 (for POE IP Camera)
- Quick Guide x1

* If there is any part missing or damaged, please contact HeimVision support.
PRODUCT OVERVIEW

NVR

HDD Indicator
Screen On/Off
Power Indicator
USB Port
Ethernet Port
DC-In
HD Output
Display (Adjustable)
POE Ports
Indicators for
POE status
Audio Out
USB Port

☀ Tip:
The display is rotatable and foldable. Please gently adjust the display when using.
INSTALLATIONS AND CONNECTIONS

HDD Installation

1. **IMPORTANT:**
   1. To record video and play the recorded video, the installation of the HDD is a must. Otherwise, you can only watch the live picture.
   2. A HDD is not included in this NVR System.
   3. This NVR system works with a 3.5" SATA HDD. The HDD should be formatted if it's installed.
Step 1:
Vertically unfold the display of the NVR, then unscrew and remove the upper cover of it.

Step 2:
Connect the SATA power cable and data cable of NVR to the corresponding ports of your HDD.

Step 3:
Hold the HDD and the NVR together, carefully turn them over, then align the screw holes on the HDD with the screws on the NVR housing. Fasten the screws.

Step 4:
Assemble the upper cover of the NVR, then fold the display.
System Connections

⚠️ Do not fix the POE IP Camera before you can view the image on the screen and confirm the ideal position to install it.

1️⃣ Plug the 3ft Ethernet Cable into the Ethernet Port on the NVR and your router.

2️⃣ Plug the 65ft Ethernet Cable into the POE IP Camera and the POE Port on the NVR.

💡 Tips:

1️⃣ For cameras used outdoors, please tighten the waterproof connectors.

2️⃣ Please connect the cameras to the POE ports from 1 to 4 to check the live pictures from 4 channels. Otherwise, you need to change the numbers of channels from Split-Screen.

3️⃣ Connect the USB mouse to the USB port on the back or the front of the NVR.
4 Unfold the display of the NVR, then plug the power adapter into the NVR and a socket to power on the NVR. The **Power Indicator** will be solid red and the **HDD Indicator** will flash green.

💡 Tip:
If necessary, you can connect an external monitor to the **HD Output** with an HDMI cable (not included).

5 You can add more devices as required.
Camera Installation

Step 1:
Drill 3 holes on the wall/ceiling according to the holes on the camera base, then insert 3 green plastic expansion pipes into the holes.

Step 2:
Fix the base of the camera into the expansion pipes with 3 metal screws.

Step 3:
Loosen the screws on the camera to adjust the angle of the camera and tighten the screws after the adjustment.
Tips:
① For getting the best image, please don’t point the camera towards a light source.
② Pointing the camera towards a window to see outside is not recommended, which may result in poor image due to glare, reflection and other reasons.
③ Clean the lens of the camera regularly.
④ The camera can be used outdoors but cannot be soaked in water. Please make sure the waterproof connector is used correctly and the port of DC In is protected from water.

OPERATE NVR SYSTEM WITH THE DISPLAY

Live Picture
After connecting the NVR to power, wait for 2-3 minutes, the live pictures from the cameras will be displayed on the screen.

Startup Wizard
A Startup Wizard will start to guide you via a series of pop-up windows.

1. The default Username for the NVR system is admin and the default Password is empty. Tap OK to continue.

Tip:
To protect your privacy, please change the password at your earliest convenience. Right click on the main interface, then go to System setup > System Admin > User > Set password to set a new password.
2. Scan the QR code to download the APP into your mobile device and get the **Cloud ID** of the NVR system.

3. Select the time zone, date format and language for your NVR.

4. NVR system will automatically connect to your router.
5. Check whether the HDD is formatted. If not, check the box on the top right, then click **Format** and **Done** to continue.

### Video Recording

Right click on the main interface, then go to **System setup > Record setup > Record Plan** to set the recording mode. The default recording mode of the NVR is 24/7 all time record.
IMPORTANT:
Click **Reset** before you change the recording mode.

Scheduled Recording
After reset, select **Channel** and click ⏳ **Time** to start scheduled record setup. Left click 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 Recording
After reset, select **Channel** and click ⚾️ **Motion** to start motion record setup. Left click 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.

💡 Tip:
External device is required for **Alarm Recording** and this NVR does not support it.

Video Playback
Right click on the main interface, then select **Video Playback** to play the videos recorded. Select the **Date** in **Green**, **Channel** and **Recording Mode** (攸), 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 File Playback to play the selected video.

Option 2:
Click the Red/Green (Red for Scheduled Recording and Green for Motion Recording) part of the timeline to play the selected video.

💡 Tip:
The recorded videos from 4 channels can be played at the same time with the resolution of 1080P. You can set it from System Mode.
Alarm Setting

Right click on the main interface, then go to **System Setup > Channel Setup > Video detection** to set alarms for channels.

**Channel:**
Select a channel from 1 to 8.

**Detection:**
Select the alarm(s) for the channel(s).

- **[Motion]**: This option is enabled by default and will be triggered when motion detected.

  🔄 **Note:**

  Enabling this option is necessary for **Motion Recording**.

- **[Video loss]**: This option will be triggered when the camera gets lost or disconnected.

- **[Video cover]**: The area you select will become black without image to protect your privacy.

**Alarm duration:**
Set the duration for **Buzzer**.

**Sensitivity:**
Set the sensitivity for the **Motion detection**, which ranges from 0 to 100 and the default setting is 50.
IR cut mode:
Select from daylight, night and Infrared mode (default).
【daylight】: The image from the camera is in color mode.
【night】: The image from the camera is in black&white mode.
【Infrared mode】: The image from the camera automatically toggles between color and black&white mode according to the ambient light.

Arming Time:
Set the time period for Motion and Video loss. The default setting is 24/7 all day monitoring and you can modify the time period. Click Reset, then select the time period you prefer.

Area edit:
Set the area for Motion and Video cover. The default setting is all selected. If you’d like to customize the detection area, please right click on the screen to bring up options of all selected, all clear and return. Select all clear, then left click and hold to start setting an area for detection.

Buzzer:
Check the box, and the camera will buzzer when the selected option of Detection is triggered.

E-Mail Notice:
Check the box, and the NVR will send the messages to your email when the selected option of Detection is triggered. Please go to Network Setup > E-Mail to enable and set your email.

App Alarm:
Check the box, and the App will push notifications to your mobile device when Motion Detection is triggered.

⚠️ Note:
A ⚠️ icon will be displayed on the live picture when any selected option of Detection is triggered. Click it to check the detailed alarm information.
Audio In and Out

There is a microphone on each camera which can pick up the sound around. Move the mouse to the live picture of each channel, you can see a 🎧 icon.

When there is sound around the camera, you can hear it from the NVR by connecting an earphone or external speaker to the Audio Out port on the NVR. However, you can only hear from one camera per time. Talking to the people near the camera via the NVR is not available as well.

💡 Tips:

1. Click the 🎧 icon to turn on or off the sound that you can hear from the camera.
2. Videos will be recorded with sound all the time.
Video Backup

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

### Video backup

<table>
<thead>
<tr>
<th>ID</th>
<th>Channel</th>
<th>Mode</th>
<th>Begin time</th>
<th>End time</th>
<th>Duration</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>Time</td>
<td>16:00:02</td>
<td>16:10:13</td>
<td>00:10:11</td>
<td>19M</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>Time</td>
<td>16:00:01</td>
<td>16:10:13</td>
<td>00:10:12</td>
<td>100M</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Time</td>
<td>16:00:01</td>
<td>16:10:13</td>
<td>00:10:12</td>
<td>30M</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Time</td>
<td>16:00:00</td>
<td>16:10:13</td>
<td>00:10:13</td>
<td>30M</td>
</tr>
<tr>
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<td>5</td>
<td>Time</td>
<td>15:33:50</td>
<td>16:00:01</td>
<td>00:26:11</td>
<td>275M</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>Time</td>
<td>15:27:50</td>
<td>16:00:02</td>
<td>00:32:12</td>
<td>46M</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>Time</td>
<td>15:27:49</td>
<td>16:00:01</td>
<td>00:32:12</td>
<td>111M</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Time</td>
<td>15:27:48</td>
<td>16:00:00</td>
<td>00:32:12</td>
<td>117M</td>
</tr>
</tbody>
</table>

**Step 1:**
Select **Channel**, **Record mode** and **Search Time**, then click **Search** to display the filtered videos list.

**Step 2:**
Check the boxes 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:**
Insert your USB Drive within one minute, then the NVR will back up the selected videos into your USB Drive automatically.
Notes:
1. The NVR only supports the USB Drive up to 64GB and the format of the USB Drive should be FAT32.
2. 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 within one minute. The video will be saved to the USB Drive automatically.

Network Setup
For remote viewing from mobile device or PC, please make sure the NVR is connected to the Router via 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 it again to check the status.
2. The number after Cloud(P2P), e.g. 541666666, is the **Cloud ID** of the NVR.
3. Make sure the DHCP, Cloud(P2P) and Enable after the Net Diagnose Info are checked.
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 to show the main **Menu** bar as shown below, right click again to hide it.

- **Split screen**
- **System setup**
- **Video playback**
- **Video backup**
- **Color adjust**
- **PTZ control**
- **Manual record**
- **Volume**
- **Setup Wizard**
- **System Mode**
- **Fast Network**
- **Exit System**

- **Split Screen:**
  Change the number of the channels showing on the same screen.

- **System Setup:**
  Includes **General setup, Record setup**, Network setup, Channel 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 recording 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 playback:**
  Playback the videos recorded.
Video backup:
Back up the selected historical videos.

Color adjust:
Adjust the Brightness, Contrast, Sharpness and so on of the picture in each channel.

Manual record:
Turn on video recording manually when the current time is not within the specific recording schedules.

Volume:
Adjust the volume when connecting an earphone or external speaker via the Audio Out port on the NVR.

Setup Wizard:
Show the QR codes for App downloading and checking the Cloud ID.

System Mode:
Change the number of channel(s) from 1 to 4 with lower resolution when playing the video recorded.

Fast network:
Configure the network.

Exit System:
Log out, reboot and shut down the system, etc.

OPERATE NVR FROM ESEE CLOUD ON PC

Client Installation and Login

IMPORTANT:
1. https://www.heimvision.com/download/Cameras is the link for downloading EseeCloud or you can contact our HeimVision service team to get the installation link.
2. Your Cloud ID can be found in Network Setup (see on page 18).
3. Please make sure that your NVR is connected to internet, and the status of your network is Healthy Network.
Step 1:
Double click **EseeCloud_Setup.exe** to install the software and then run it.

Step 2:
Log in to **EseeCloud Client** with the default **User Name** (admin) and **password** (empty, namely enter nothing).

Step 3:
Click **Add** on the upper right corner to add your NVR.
Step 4:
- Select Cloud ID on the left;
- Input your Cloud ID, User name (admin) and Password (skip it if you didn't set one);
- Select NVR in the box of Type and input 4 in the box of Number of Channels;
- Click Finish, and the NVR added will be shown under Device list.

![Add Device form](image)

Step 5:
Click 🎥 to connect your NVR and show the live pictures of all channels.

![Device list](image)

💡 Tip:
The Device list is displayed in Graphic structure. If it's displayed in Tree structure, please double click on the device name to connect the system.
Video Playback and Backup

Click ☊ on the bottom menu bar, then click Confirm in the pop-up window to enter the interface of Video Playback.

Step 1:
Click the device name to show the channels, then select Channel, Record type and Date to filter the videos, click Retrieval to display the recorded videos. You can click on the colored timeline to see the recorded videos by time.

☀ Tip:
Select a screen and double click to enter the full-screen mode; double click again to exist the full-screen mode.
Step 2:
Click **Download** on the lower right corner to enter the interface of **Download Resources**.

![Download Resources interface](image)

Step 3:
Click **Download** to download the video one by one or click **Batch Download** to download all the videos together to your computer.

![Download Resources table](image)
Step 4:
Click to exit the video playback interface and get back to the live video interface.

Other Functions of the Bottom Menu

Device Management( ): To add/delete NVR devices; to modify the device information.

User Parameter( ): To select language; to change the storage paths of Screenshots and videos; to set time zone.

Record( ): To record the live videos on your computer.

Screenshot( ): To capture a screenshot of the live videos and save it on your computer.

Disconnect all( ): To disconnect the NVR device.

Screen Number( ): To change the number of channels showing in the screen.

More Function( ): To change the password; to check the user logs; to check system messages.
OPERATE THE NVR ON A MOBILE DEVICE

1. IMPORTANT:
2. Your Cloud ID can be found in Network Setup (see on page 18).
3. Please make sure that your NVR is connected to internet, and the status of your network is Healthy Network.
4. Please make sure the NVR and the mobile device are connected to the same network for the first time. Otherwise you can only manually add the NVR.

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

iOS System: iOS 8.0 or later
Android System: Android 4.4 or later

Connecting the NVR system
Install and launch HeimKits App, then follow the steps below to add the NVR.
Step 1:
Register an account with your email address and log in to HeimKits, then tap + in the center or on the upper right corner to continue.
Step 2:
Tap Kit, then the App will search the NVR automatically.

🌞 Tip:
If the NVR is not added automatically, please tap add manually to add it.
Step 3:
Tap the NVR you added, then input the information required (e.g. enter the password if you set one) and tap **Complete** to enter the main interface.

Step 4:
Tap the thumbnail on the main interface to show the live pictures.
**Playback:**
Tap to view the videos recorded.

**Window:**
Change the number of channels displayed on the screen.

**Proportion:**
Change the aspect ratio.

**SD:**
Switch the image quality between **SD** and **HD**. **SD** is the default setting and recommended for smooth streaming.

**Intercom:**
Tap to start talking with people near the NVR. Press and hold the 📩 icon to talk; press the ☎️ icon to hang up.

**PTZ:**
Unavailable.

**Screenshot:**
Tap to capture a screenshot to the App. Please go to the **Main interface > Personal center > Screenshot/Recording** to check.

**Sound:**
Turn on/off the sound from the camera.

**Recording:**
Tap to start recording the live video; tap again to end and save it into the App.
OPERATE NVR SYSTEM FROM A BROWSER ON PC

1. IMPORTANT:
   - Your Cloud ID, IP address and Web Port can be found in Network Setup (see on page 18).
   - Please make sure that your NVR is connected to internet, and the status of your network is Healthy Network.
   - 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. Input your IP address (e.g. 192.168.32.213) into the search bar of your browser and log in to the NVR. Please install Web View Control after your first login, then change the Internet setting to allow the installation of Web View Control.

You can watch live videos, play and download the recorded videos and change the settings, etc.

Tip:
If the Web port (e.g. 80) of your NVR 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 through Cloud. Please visit www.e-seenet.com, install Web View Control as well, then input your Cloud ID (e.g. 5416666666) and Username to log in to the NVR.

ADD OR DELETE CAMERAS
This kit supports up to 8 cameras, please contact HeimVision service team to get the purchase link.

Plug the ethernet cable into the extra POE IP Camera and the POE Port on the NVR, the view from this camera will be displayed on the screen automatically. To delete the camera, just unplug the ethernet cable.
TROUBLESHOOTING GUIDE

Q1. Can I add extra cameras?
* The camera with the same brand is recommended if you’d like to add more cameras to this NVR system. To get the link of buying cameras, please contact us at support@heimvision.com.

Q2. What should I do if the power adapter doesn't work?
* Check whether the power adapter is plugged well in the socket.
* Check if the power indicator is lit on when plugging the power adapter. If not, please directly contact us to get a replacement.

Q3. Can I power the camera through the port of DC In on the camera?
* Sure. The camera can be powered through either the POE port or the DC In port on the camera. To make sure the cameras work well, you can use both ports to supply power to them.

Q4. There is no live view 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.

Q5. How long is the storage time of the Hard Disk Drive?
* The example below is for an average data rate of 4Mbps and 4 cameras. Storing the videos for one day takes up about 168.75GB storage based on the formula below:
4(Mbps) * 3600(seconds per hour) * 24(hours per day) * 4(Channels)= 1382400Mb
1382400Mb= 172800MB
172800MB=168.75GB
If you have a 1TB Hard Disk Drive, the capacity of it after formatting is around 921GB. The storage time is around 5 days (921GB/168.75GB ≈ 5). 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 higher. Go to **System setup > Channel setup** to check it, then use the formula mentioned above to calculate it.

**Q6. NVR system cannot detect the HDD.**
* Make sure the NVR works well.
* Make sure the power cable and SATA cable of the HDD are connected correctly and firmly.
* Try another HDD.
* The HDD with a reputable 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 login password?**
* 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. How can I set up to automatically turn off the screen?**
* Please go to **System Setup > General Setup** to enable **Auto turn off screen**. The screen will be off if there is no any operation on the NVR within 10 minutes.
FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference;
(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING:
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
IC STATEMENT

This device complies with RSS247 of Industry Canada. Cet appareil se conforme à RSS247 de Canada d'Industrie. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) This device may not cause interference;
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes:
(1) Le dispositif ne doit pas produire de brouillage préjudiciable;
(2) Ce dispositif doit accepter tout brouillage recu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

--- The symbol indicates DC voltage

RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.