WISENET

NETWORK VIDEO RECORDER

Quick Manual

XRN-2010/2011/2010A/2011A
XRN-3010/3010A
XRN-1610/1610S/1610A/1610SA

CE

Features

The product records video and audio from network cameras to a hard disk, and enables playback from the hard disk. It also provides remote monitoring environment for video and audio over the network using a remote computer.

- User-friendly UI
- Supports a range of 4K camera resolutions (3840X2160, 4096X2160, 4000X3000)
- Outputs a 4K high definition image using HDMI
- Record and play video
- Record and play audio
- Supports ONVIF Profile S standard and RTP / RTSP protocols
- Display the HDD operation status by HDD SMART
- HDD overwrite enabled
- Backup using USB 2.0, 3.0 protocols and external HDD
- Simultaneous play of 16 channels
- Various Search Modes (Time, Event, Smart, Text, Backup, ARB)
- Various Recording Modes (Normal, Event, Scheduled Recording)
- Alarm Input / Output
- Remote Monitoring function by Windows Network Viewer
- Live monitoring of the network camera
- Installation Wizard Function (Easy Setup, Quick Setup)
- Supports the smartphone remote monitoring feature by P2P support (XRN-2010A/2011A/3010A/1610A/1610SA)

Package Contents

- The appearance of the components may differ from the image shown.
- Accessory category and quantity may differ depending on sales region.
- For some regions, HDD is not pre-installed. HDD Fixing Screw, SATA Power Cable, SATA data cable and SATA power/data cable quantity vary depending on the model.

XRN-2010/2011/2010A/2011A/3010/3010A

NVR	Mouse	Power Cable
Network Viewer Software / User Manual CD	User Manual or Quick Manual	Terminal block
Bracket Rack	Bracket Fixing Screw	HDD SATA/Power cable (N/A on XRN-2011/2011A)
HDD Fixing Screw (N/A on XRN-2011/2011A)		
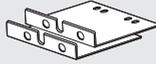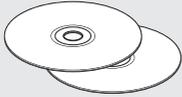
NVR	Mouse	Remote Control / Remote Control Battery (AAA)
Power Cable	Terminal block	
Network Viewer Software / User Manual CD	User Manual or Quick Manual	Bracket Rack
HDD Fixing Screw	Bracket Fixing Screw	HDD SATA/Power cable (XRN-1610/1610A)
SATA Power Cable (XRN-1610S/1610SA)	SATA Data Cable (XRN-1610S/1610SA)	

HDD Installation

> ■ If you are adding a new or previously used HDD to this product in addition to the HDD(s) originally installed, format the new HDD manually in the set before use.
> To learn how to format, see "**Device/Format**" in the Wisenet NVR User Manual.

XRN-2010/2010A/3010/3010A/1610/1610A/1610S/1610SA

**1** Remove the screws located on the left/right side and on the back side first, then remove the cover.

2 Remove the screws on the left/right side (4 screws) and remove the bracket.
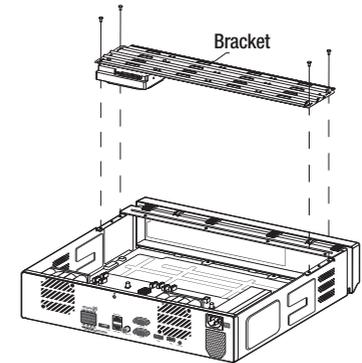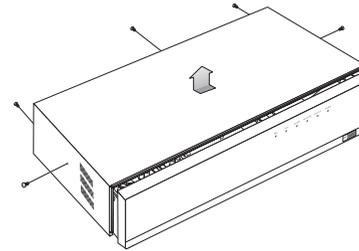
Bracket

**3** Mount HDDs to the bracket and fix it with screws.

4 Connect the cable to the HDD by matching the HDD SATA/power cable number to the HDD position number on the bracket.

> ■ For the HDD location number on the bracket, please refer to the figure below.

Bracket
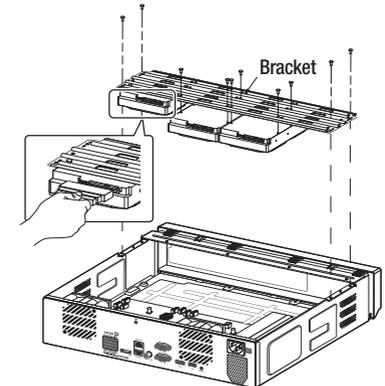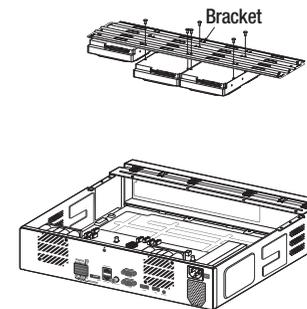
Bracket

Bracket

5 Mount the bracket on which an additional HDD is mounted on the NVR, secure it with screws and connect the SATA/power cable to the connector on the main board by matching the number.

■ For the connector numbers, please refer to the figure below.

<XRN-2010/2010A/3010/3010A/1610/1610A>

<XRN-1610S/1610SA>
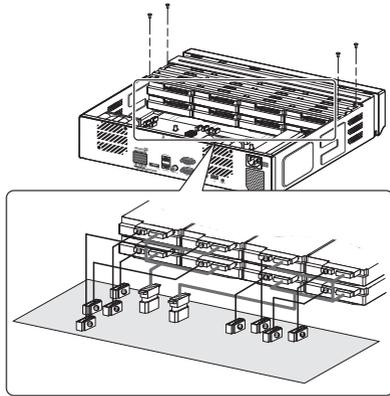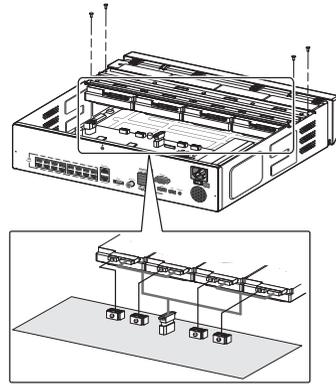
6 Check for any problems in the connection terminal and the wiring in the product, close the cover and fix it with screws.
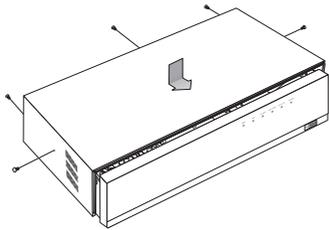
XRN-2011/2011A

1 Open the front cover and check the HDD installation bracket.

! ■ Release the USB connection before opening the front cover to prevent damage to the USB port.

2 Push the latch to the right and remove the HDD bracket.

! ■ Take care not to scratch your hands when removing the HDD bracket.
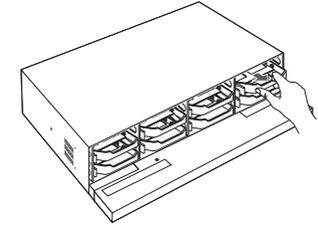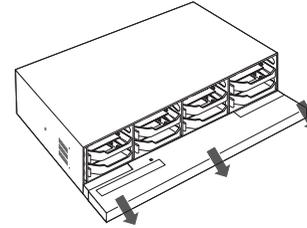
3 Align and insert HDD into the bracket home. After inserting one side, push and insert the other side slightly.

4 Align the bracket with the HDD installed with the enclosure latch, and push the bracket in the direction of the board.

! ■ Push it until you hear the latch lock sound. If the HDD is not completely connected, it may be detected.
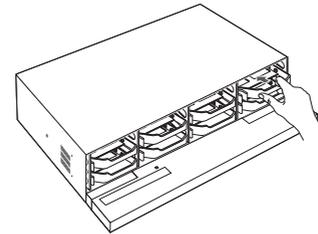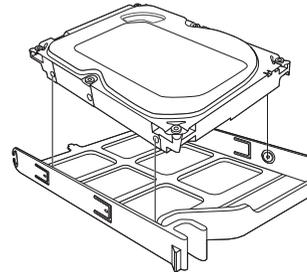

5 Push the front cover upwards and close it.
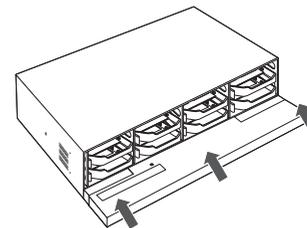
How to exchange an installed HDD

1 Open a bracket wide in the direction of the arrow and remove the holder from the HDD.

2 Open the other bracket wide and remove it from the holder.

✎ ■ The procedure after HDD exchange is the same as the procedure for "**Installing the HDD**".
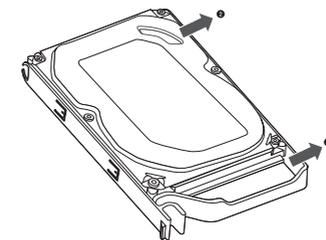
Install Wizard

1 Select the language

Select your preferred language.

2 Set Password

Set a password.
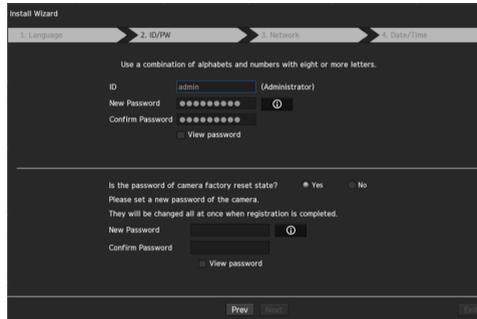
※ Click 🛈 icon to see the password rule. Check the password setting rules.

2-1. Setting Camera Password

You can change the password of the camera one step.

If the password of the camera is the default password set in the factory, enter a new password to change it. The password will be changed, and the new password will be registered.

If the password of the camera is not the default password set in the factory, enter the current camera password. The current camera password will be registered.

- New Password : Input a new password according to the password setting rules.

- Confirm Password : Input the new password again.

- ■ A camera password registered with ONVIF and RTSP cannot be changed.

3 Set up Network

- DHCP server : If the DHCP server is set to enable, an IP is automatically assigned to the camera.
- Network 1 (Camera) : Connects to the camera and receives the video feed from the camera.
- Network 2 (All) : Network for a remote viewer (SSM, Smart Viewer, Webviewer)
- Network 1 / Network 2 Setup
  - IP Type : Choose the network connection method.
  - IP Address, Subnet Mask, Gateway, DNS

※ For more details on network settings, refer to the User manual.

► To use a simple intranet, click <**Next**>.

- Switch Mode : Set the camera registration method. This function is only available for products with PoE support.
  For products with PoE support, see "**NVR products supporting each feature**". (Page 4)
  - PnP Mode : Camera connected to the PoE port of the product will be registered automatically on each channel in the order of the port number.
    This works only when camera is in factory reset state.
  - Manual Setup Mode : Automatically scans and registers camera connected to the product's PoE and camera with separate switch.
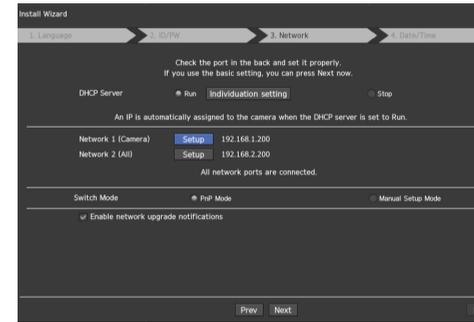
4 Set Date & Time

Set the time and date and click the <**Finish**> button, and the installation will be completed.

5 Camera Registration

When the installation wizard finishes, the camera is automatically registered.

5-1. When detected cameras are less than or equal to the number of channels supported by NVR, all the detected cameras are automatically registered and the registered camera information (fps and recording days) is displayed.

► Select <**OK**> and the frame rate of all cameras registered is set to 30fps and the installation session is completed.

► When you select <**Manual Setting**>, the frame rate of all cameras registered can be set to a value selected by the user (move to 5-2).

5-2. Adjust the recording framerate

Changes the recording frame rate for all cameras at once.
Please note that the estimated recording days vary depending on the frame rate.

< Figure 5-1 >

< Figure 5-2 >

5-3. If the detected cameras exceed the number of channels supported by NVR, select cameras to register manually and register them.

Select a camera to register and click the <**Register**> button. Once camera registration is finished, proceed in 5-1.

< Figure 5-3 >

Additional camera registration

In the <**Install Wizard**> setting, make a connection to the camera automatically registered and use the menu path to register and connect a camera.

Menu ➜ Device ➜ Camera ➜ Cam Registration ➜ Auto

To register a camera, follow these steps:

1 Select the camera to register (you can select multiple cameras).

2 Click the <**ID**> and <**P/W**> window to enter <**ID**> and <**P/W**> of the selected network camera. (If you do not register a new ID/PW, then the default ID/PW combination is used.)

3 Click <**Connection Test**>.

4 Check the connection results.

5 If the channel connected successfully, click <**Register**> to end the camera registration process.

> ■ Click an item on the table to see a preview (you must change the ID and Password in step "2" if the camera account changes).
>
> ■ Click the table headers to sort the content.
>
> ■ Click < Refresh > to check if a new IP address was allocated to the camera when you rescan the network or when an IP address was not assigned by the DHCP server (e.g., 192.168.1.100). If the IP still stays the same, then select Assign IP to assign the IP manually.

Configuring the Recording

This section outlines how to configure and view the recording settings for each channel.

1 Shows the standard and event recording method for each channel.
  • FULL : Records all the frames received from the camera.
  • KEY : Records only the key frames received from the camera. In general, one or two frames per second are recorded, but you can adjust this in the camera settings.
  • OFF : Turns off recording.

2 Shows the transmission size of the recording data for each channel.

3 Shows the data size limit for each channel.

> ■ The orange colored channel indicates the case where the 2 input data load is greater than the 3 permitted data load. If you set the 3 permitted data load to greater than the 2 input data loads, it will be changed to orange.
>
> ■ If the sum of input data for each channel is greater than the max level for the camera, then 4 the recording exceeding icon and the alarm message will be displayed. In this case, for the channel exceeding the input limit will record the main frame(one or two per second) only.

Setting Up the Camera

From the setup menu, you can configure the camera settings (resolution, frame rate, and quality) and other functional settings.

Menu ➡ Device ➡ Camera ➡ Camera setup

Camera function settings: You can configure the camera settings or the live movie format to change the settings in the camera itself.

- Add : Adds a camera profile.
- Delete : Deletes the selected profile from the list.
- Channel Selection : You can select camera channels to change their video transmission settings.
- Profile : You can check the video profile of the camera connected in the camera setup.
- Codec : You can check the codec for the selected channel.
- Resolution : You can change the resolution of the selected channel.
- Frame Rate : You can change the frame rate of the selected channel.
- Bitrate Control : You can change the bitrate of the selected channel.

Setting Up a Channel

From the channel setup menu, you can change the camera name shown in live mode.

Menu ➡ Device ➡ Camera ➡ Channel setup
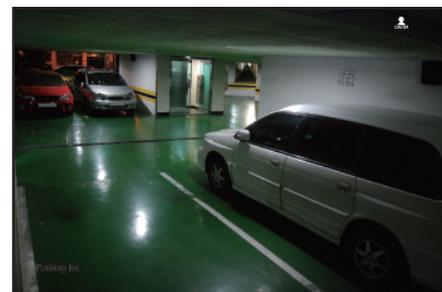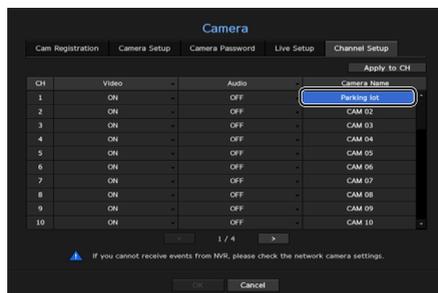
Configure and run layout

You can use the same layout set on the live screen for the Search Time function in order to perform a search using the channel sequence and combination configured by the user.

> ■ For more information about the detailed setting method for each stage, refer to the user manual.

1 Live channel layout settings

1 Open the channel layout setup menu.
2 Click <**New**>.
3 Enter a name for the selected channels (e.g., Parking lot).
4 Select the channels that you want to add to the layout (e.g., 1, 2, 3, 4).
5 Choose a split mode to apply (e.g., 4-way split).
6 Click <**OK**>.
7 Choose a layout to view it on the screen (e.g., change to Parking lot).
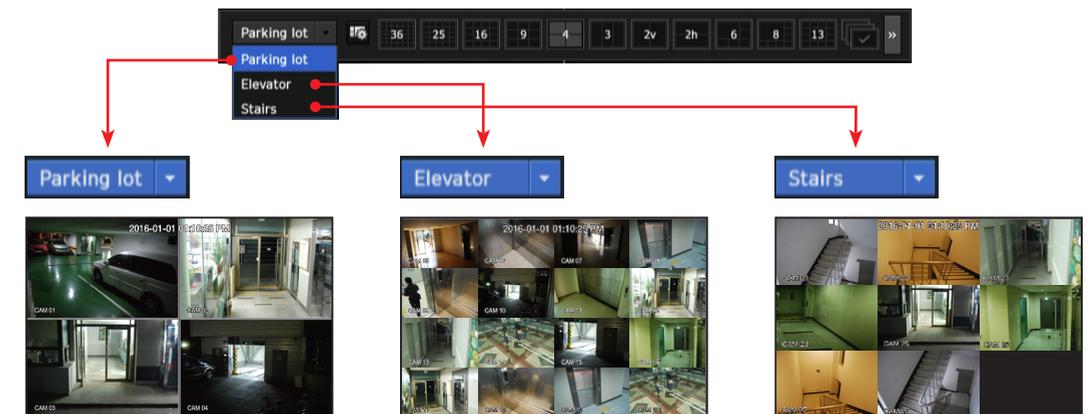
2 Search/Play
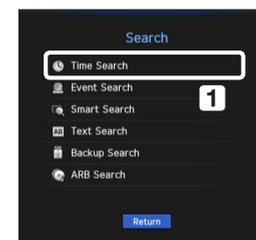

1 In live mode, right-click to select <**Search**>. Select <**Time Search**>.
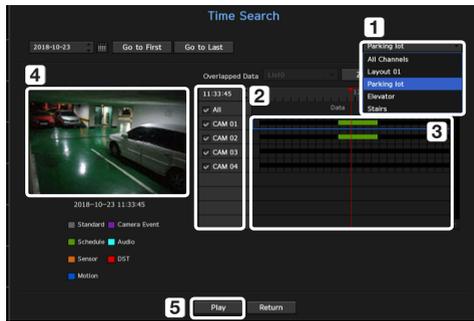
2-1 Search

1. The initial search option is set to <**All Channels**>. Select a desired layout from among the channel group created in the live screen.
2. Select a channel for each selected group.
3. Move the time bar to view the preview screen as shown in Figure 4.
5. Press the <**Play**> button to enter the play screen.

2-2 Play
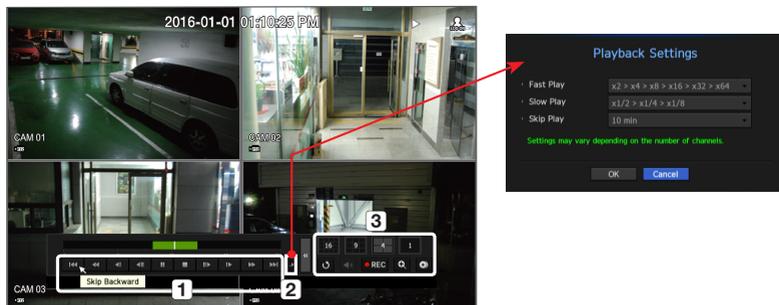
1. These are the various functions available for playback. Hover over them and a tool tip will be prompted. Control the playback by referring to the tool tip.
(Ex : Skip Backward)
2. You can configure specific functions in 1 through playback settings.
Ex) Jump to play: 10 minutes, 30 minutes, 1 hour, 24 hours, etc.
3. Displays functions that are operating in split mode and during other playback.

3 Backup

Right-click on the live screen and select <**Backup**>.
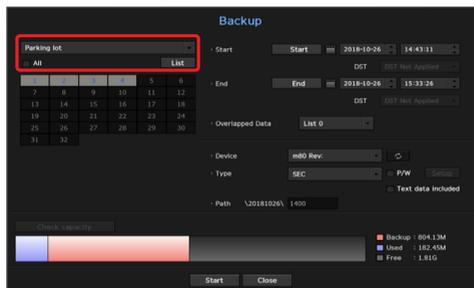

1. Select a layout.
2. Select a channel.
3. Set the time, device, and format to back up.
4. Click the <**Check capacity**> button to check if backup is possible.
5. Click the <**Start**> button to proceed with the backup.

Use the basic guide

Show shortcut menu

Right-click on the live screen and you can access various functions that NVR provides. Hover over an icon and a brief definition of term for each function is prompted.
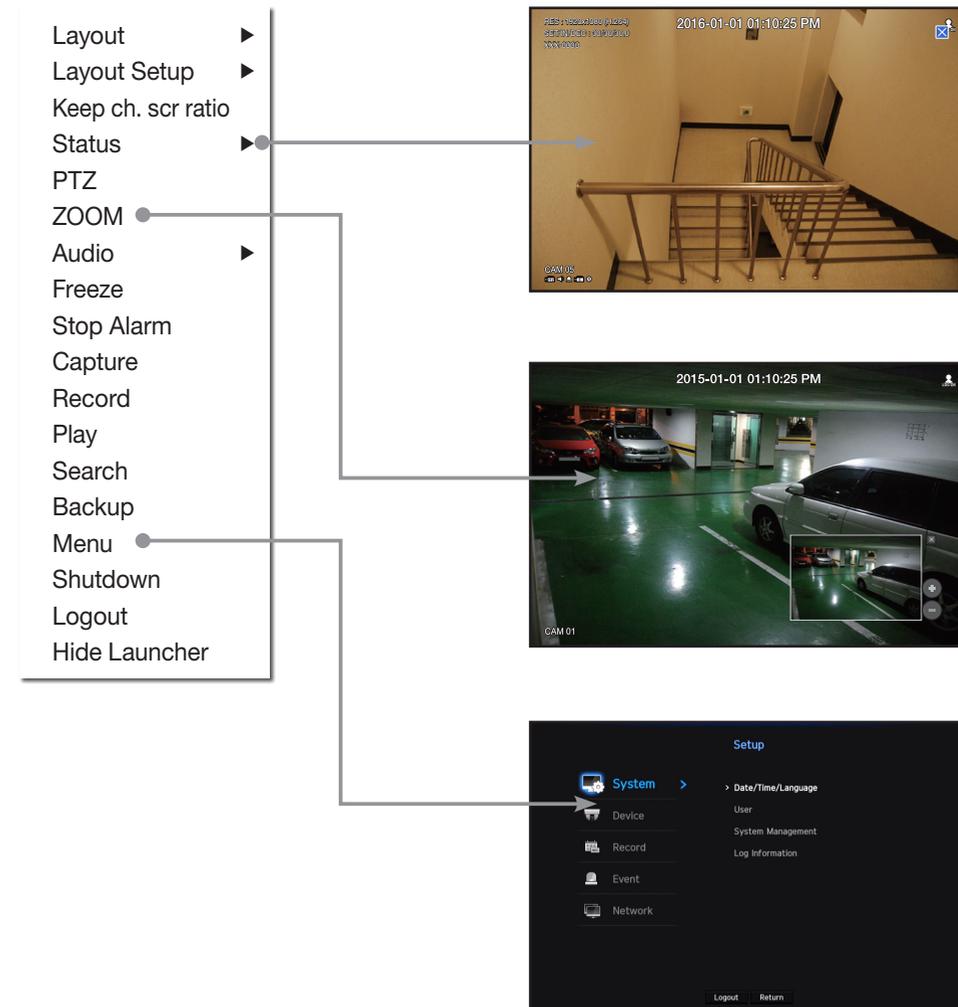
Live launcher

1. You can configure a live layout.
2. You can configure a supported split mode. You can view the end sequence ( ) in serial order for a specific period of time for each split mode.
3. You can configure additional functions in the live screen, such as alarm control or audio.

Use product information

You can check product information/user manual/firmware information/FAQ/HDD compatibility list, etc. on the website or mobile app on your smartphone.

http://hanwha-security.com

http://hanwha-security.com
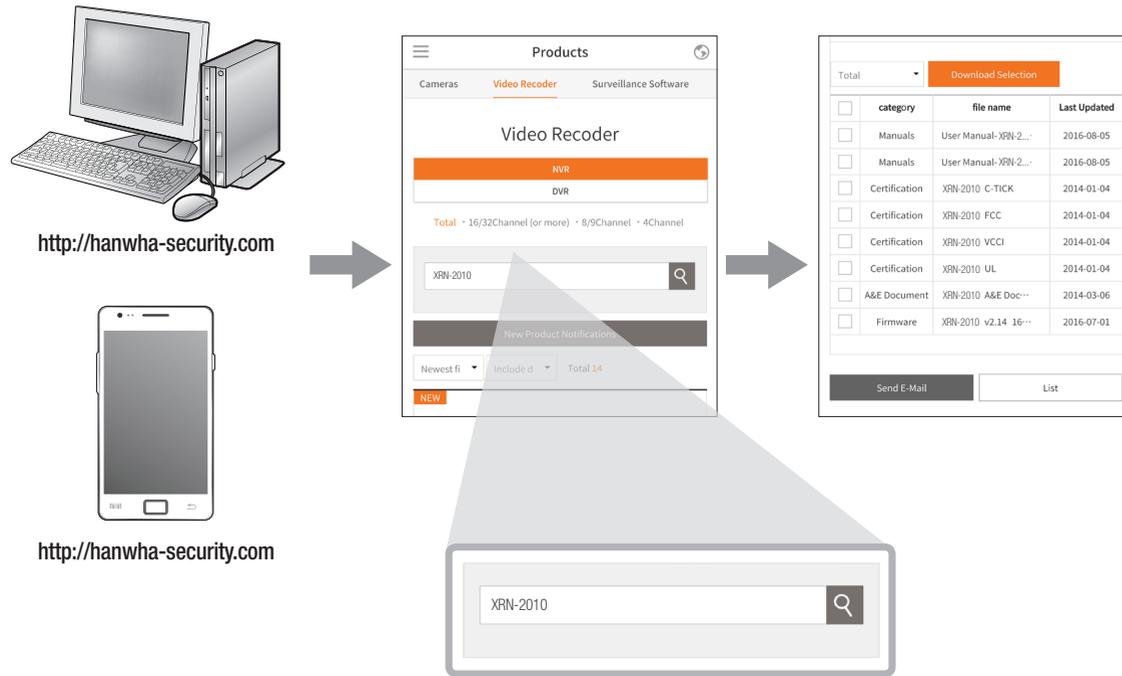
Using P2P Service

This function is provided only for products that support P2P function. For products that support the P2P function, refer to the "**NVR products supporting each feature**" in the Wisenet NVR manual.

When using P2P service, NVR can be used by connecting to mobile web viewer.

1 When <**Enable P2P**> is checked, the connection test runs to check if it can be remotely connected from the current NVR.

2 When the connection is successful, search for WiseNet Mobile from the smart phone, and then install and run it.

- ■ When Add a device > QR code is selected, the NVR QR code can be scanned.

3 When the QR code is scanned, the device ID that can be seen in NVR is automatically converted to mobile viewer ID, and the mobile viewer can be used right away when the ID/password of NVR is entered.
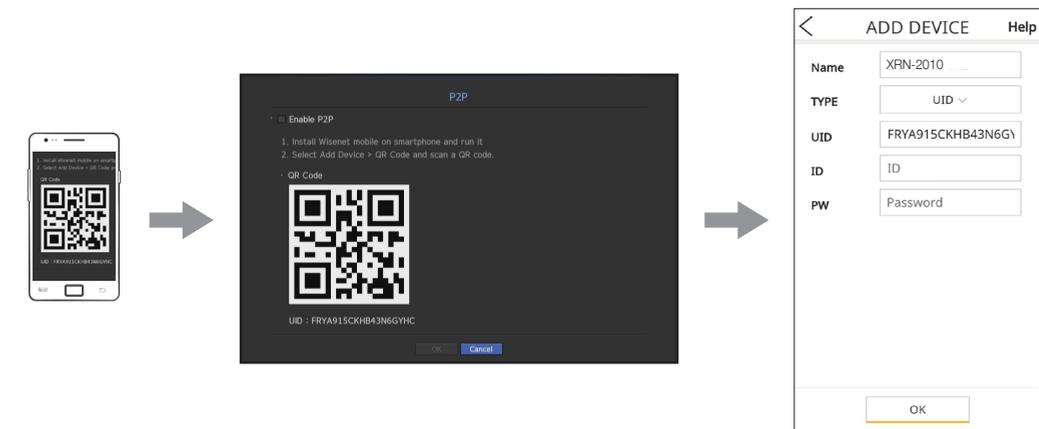
4 After this, it automatically connects to NVR and can be monitored easily with a smart phone when running WiseNet mobile app saved in the smart phone.

■ P2P s ervice period expires in 5 years. If you want to extend it after expiration, contact your vendor.

Hanwha Techwin cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products.
The Eco mark represents Hanwha Techwin's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

Hanwha
Techwin