

Network Video Recorder User Manual

1.0.0.22

Product name:	Network Video Recorder
Release Date:	2015/05
Manual Revision:	V1.0
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Table of Contents

Chapter 1. Introduction	2
1.1 Hardware Description	3
1.1.1 NR-1100 Series	3
1.1.2 NR-2100 Series	4
1.1.3 NR-4200 Series	5
1.1.4 NR-8200-RM Series	6
1.2 LED Indicators Status.....	7
1.2.1 NR-1100 Series	7
1.2.2 NR-2100 Series	8
1.2.3 NR-4200 Series	9
1.2.4 NR-8200-RM Series	11
1.3 Dual Display Solution: HDMI/VGA/DVI-I Connection.....	13
Chapter 2. NVR Installation.....	14
2.1 Remote Web Browser PC System Requirements	14
2.2 Connect to NVR	15
2.2.1 Quick Guide.....	15
2.2.2 Install NVR Search	15
2.2.3 Activate Live View Service	21
2.2.4 Quick configuration	23

Chapter 1. Introduction

Before You Use This Product

When you first open the product's package, verify that all the accessories listed on the "Package Contents" of "Quick Installation Guide" are included. Before installing the NVR, please read the instructions in the "Quick Installation Guide" to avoid misuse and then follow the instructions in the "Hard Disk Installation" section to avoid damages due to faulty assembly or installation.

1.1 Hardware Description

1.1.1 NR-1100 Series



Figure 1-1. Front & Rear View of NR-1100 Series

1. Power button
2. LED indicators: HDD
3. USB 2.0 x1 (Support auto video backup)
4. USB 2.0 x1
5. Power connector
6. USB 3.0 x 2
7. DVI-I
8. eSATA x 1
9. HDMI x 1
10. Gigabit LAN
11. USB 2.0 x 2
12. Audio mic input (reserved)
13. Audio output (reserved)

1.1.2 NR-2100 Series



Figure 1-4. Front & Rear View of NR-2100 Series

1. Power button
2. LED indicators: HDD
3. USB 2.0 x1 (Support auto video backup)
4. USB 2.0 x1
5. Power connector
6. USB 3.0 x 2
7. DVI-I
8. eSATA x 1
9. HDMI x 1
10. Gigabit LAN
11. USB 2.0 x 2
12. Audio mic input (reserved)
13. Audio output (reserved)

1.1.3 NR-4200 Series



Figure 1-5. Front & Rear View of NR-4200 Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 2.0 x 1(Support auto video backup)
5. USB 2.0 x 1
6. HDD1
7. HDD2
8. HDD3
9. HDD4
10. Gigabit LAN x 2
11. USB 2.0 x 4
12. eSATA x 2
13. VGA output
14. HDMI output
15. DI/DO (4 in 2 out)



↓ Top to bottom: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO-1, DO-2

16. Reset button*
17. Power connector
18. K-lock security slot

1.1.4 NR-8200-RM Series



Figure 1-8. Front & Rear View of NR-8200-RM Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)
 Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2
19. Reset button*
20. Power connector

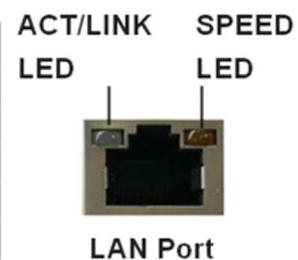
1.2 LED Indicators Status

1.2.1 NR-1100 Series



Figure 2-3. NR-1100 Series Front Panel

LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection



⚠️ Note:

**To turn off your NVR, long pressing power button at least 2 seconds.

**To turn on your NVR, long pressing power button at least 3 seconds.

⚠️ Note: To reset to default, please follow below methods:

Press the power button twice with the interval of one second. In other words, please press the power button in the 1st second and press the power button again in the 2nd second. It will be easier to operate the reset to default with the assistance of watch or clock.

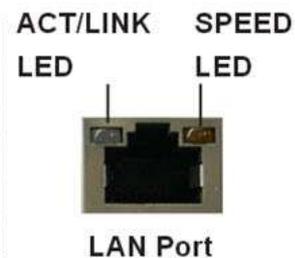
⚠️ Note: Once users press reset button, configuration of **Camera Setting, Recording Settings, Event & Action Setting, E-Mail Settings, and Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual [5.6.3 Save/Load Configuration](#).

1.2.2 NR-2100 Series



Figure 2-4. NR-2100 Series Front Panel

LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection



⚠️ Note:

**To turn off your NVR, long pressing power button at least 2 seconds.

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1.2.3 NR-4200 Series



Figure 2-5. NR-4200 Series Front Panel & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1	Off	Hard disk drive device is not established
HDD2	Green	Hard disk drive is ready to be accessed
HDD3	Green blinking	Hard disk drive data is being accessed
HDD4	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

 **Note:** Once users press reset button, configuration of **Camera Setting, Recording Settings, Event & Action Setting, E-Mail Settings, and Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual [5.6.3 Save/Load Configuration](#).

1.2.4 NR-8200-RM Series



Figure 2-8. Front View of NR-8200-RM Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1	Off	Hard disk drive device is not established
HDD2		
HDD3	Green	Hard disk drive is ready to be accessed
HDD4		
HDD5	Green blinking	Hard disk drive data is being accessed
HDD6		
HDD7	Red	Hard disk drive failure and need to be removed
HDD8		
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

*** The LED in the HDD trays are reserved.

 **Note:** Once users press reset button, configuration of **Camera Setting, Recording Settings, Event & Action Setting, E-Mail Settings, and Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual [5.6.3 Save/Load Configuration](#).

1.3 Dual Display Solution: HDMI/VGA/DVI-I Connection

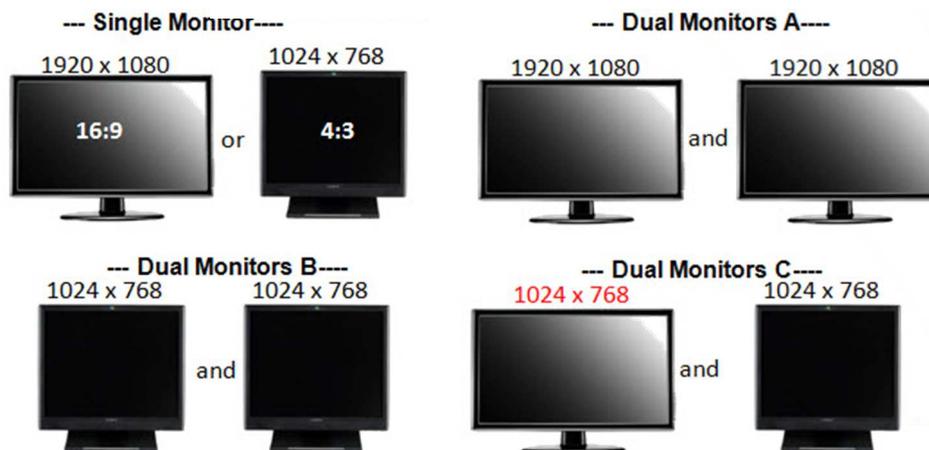
NR-4200, NR-8200-RM provide HDMI and VGA port for local display. Users can connect both of HDMI and VGA at the same time for video output.

NR-1100 Series, NR-2100 Series provide HDMI and DVI-I port for local display. Users can connect both of HDMI and DVI-I at the same time for video output.

Scenario A: If both monitors are Full HD(1920x1080),those will be shown as Full HD.

Scenario B: If both monitors are VGA (1024x768), those will be shown all as VGA.

Scenario C: If one of monitors is 1920x1080 and another is 1024x768, both monitors are set as 1024x768



Chapter 2. NVR Installation

2.1 Remote Web Browser PC System Requirements

The following information is the minimum required specification for remote Windows PC, which users can open a remote browser from the PC to access the Linux NVR server on the network.

- **Operating System**
Microsoft® Windows® Vista /7 / 8/ 8.1/ 10 (32-bit and 64-bit)
- **Browsers in Windows OS (32-bit)**
Microsoft® Internet Explorer 8.0 or above, Chrome 31.0.1650.57m or above, Firefox 25 or above, Opera 17.0 or above, Safari5.1.7 or above
- **CPU**
For channels under 16 : Intel® Dual core CPU 3.0 GHz or above.
For channels over 16 : Intel® i5/i7 CPU 3.3 GHz or above.
- **Network**
Minimum 10/100 Ethernet (Gigabit Ethernet is recommended)
 **Note:** * User is suggested to connect cameras and NVR with Gigabit switch.
- **Memory**
For channels under 16: DDR3 4G or above.
For channels over 16: DDR3 8G or above
- **Graphics Adapter**
AGP or PCI-Express, minimum 1024×768, 16 bit colors, 1G memory or above
 **Note:** It is highly recommended to use a graphics adaptor which provides higher than resolutions 1024 x 768 in order to experience the full benefits of the software.
 - Make sure the display DPI setting is set to default at 96DPI
 - To set DPI value, right-click on desktop, choose “**Settings**” tab >> “**Advanced**” >> “**General.**”
- **CD-ROM Drive**
It is necessary to read the operating instructions in the provided CD-ROM.
- **Adobe Reader**
It is necessary to read the operating instructions in the provided CD-ROM. The audio function will not work if a sound card is not installed in the PC.
 **Note:** Audio may be interrupted depending on network traffic.

2.2 Connect to NVR

To begin, please insert the product CD-ROM in a PC to access the Quick Guide, User Manual and install the utilities. As user runs the product CD, the following menu is displayed.



2.2.1 Quick Guide

Click **“Quick Guide”** to enter the folder and double click the file to open. Please read Quick Guide to quickly understand the process of NVR installation.

2.2.2 Install NVR Search

Click **“Install NVR Search”** to find NVR in the network. Please follow the instructions to install and EZ Search will run automatically.

When installing EZ Search, **Shield Wizard window for NVR Search** will pop up.

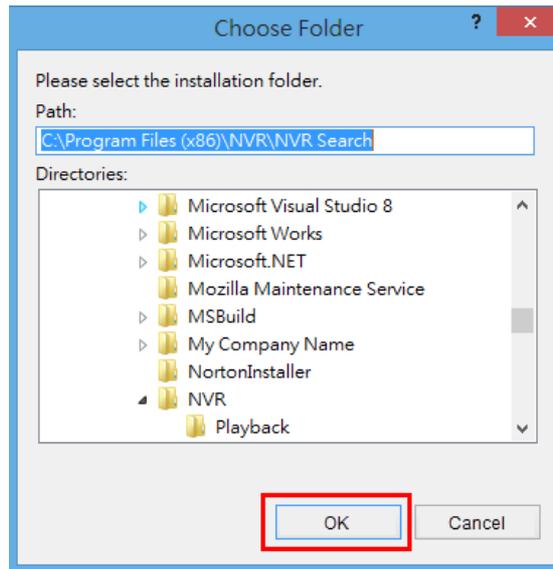
Click **“Next”** to continue installation.

Read the license agreement and click **“I accept the terms of the license agreement”**.

Click **“Next”** to continue installation.

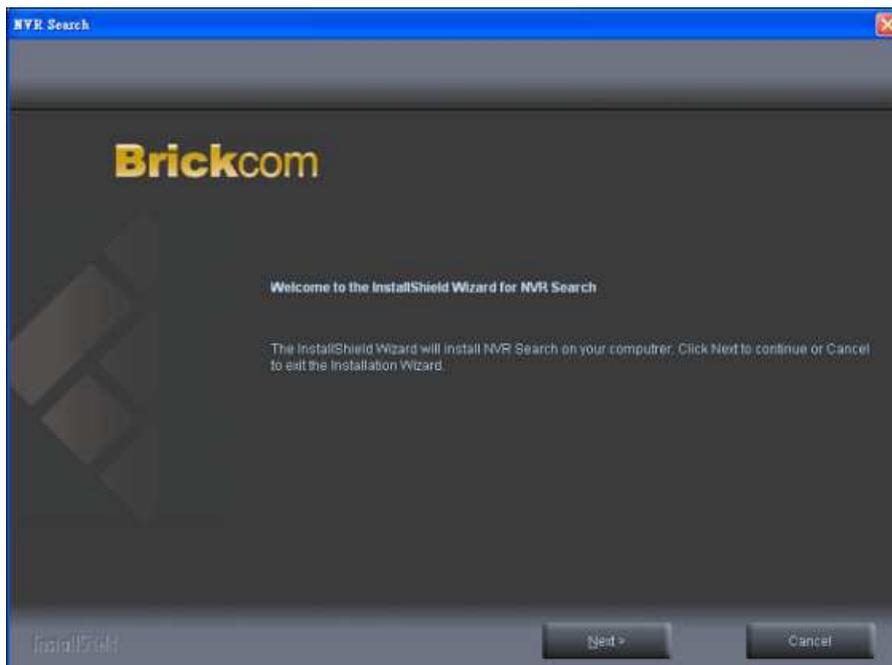
Select a location of destination and select a folder where the setup can install files.

The default location is: **C:\Program Files (x86)\NVR\EZ Search**. Users can also install NVR Search in other folder by clicking **“Change”** and select a location as below. Click **“OK”** to save the setting.



Once a folder is selected, please click “**OK**” to continue installation.

The window shows that the InstallShield Wizard is installing NVR Search. Please wait until the Wizard completes the installation.

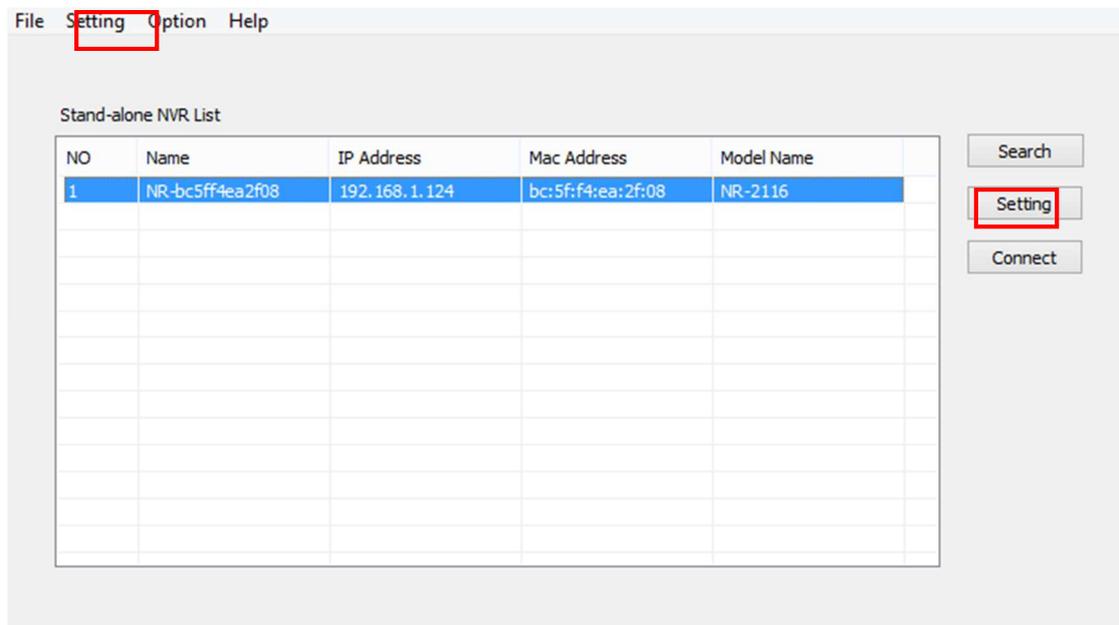


The installation is complete. Please click “**Launch application when done installing**” to execute NVR Search.

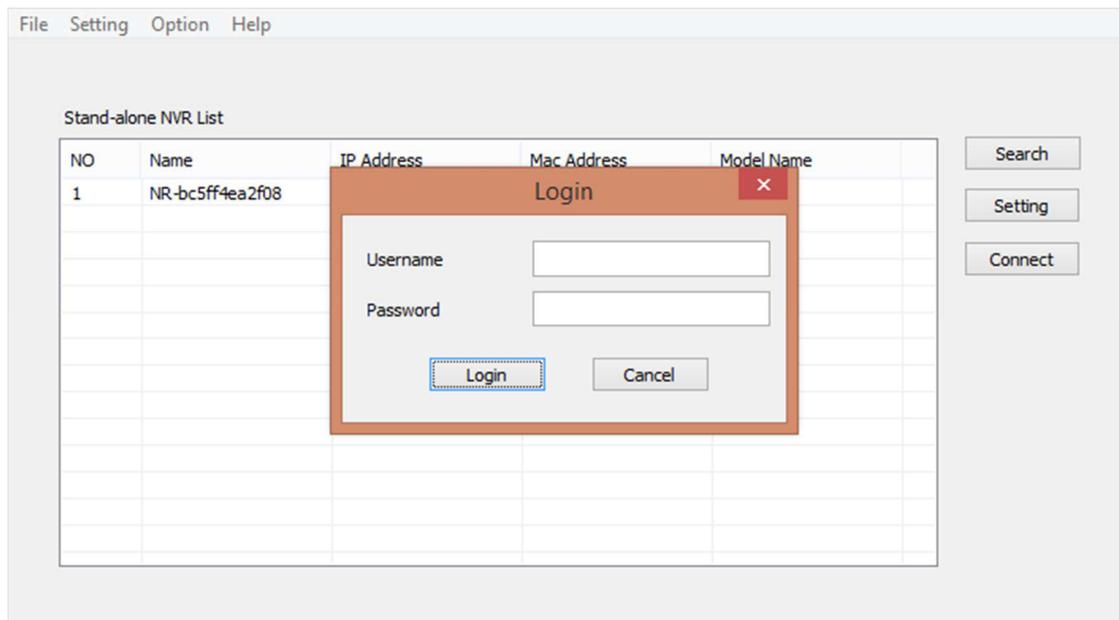
After finishing the setup, the window of NVR Search will pop up. NVR Search will execute automatically and show **NO., Name, IP Address, Mac**

2. Setting

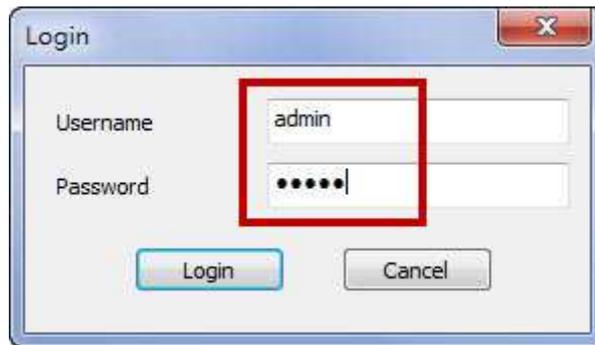
Configure UPnP and Network by clicking “**Setting**” in the top left or in the middle right.



⚠️ Note: Users will be prompted to enter the login information of NVR before being allowed to change the setting.

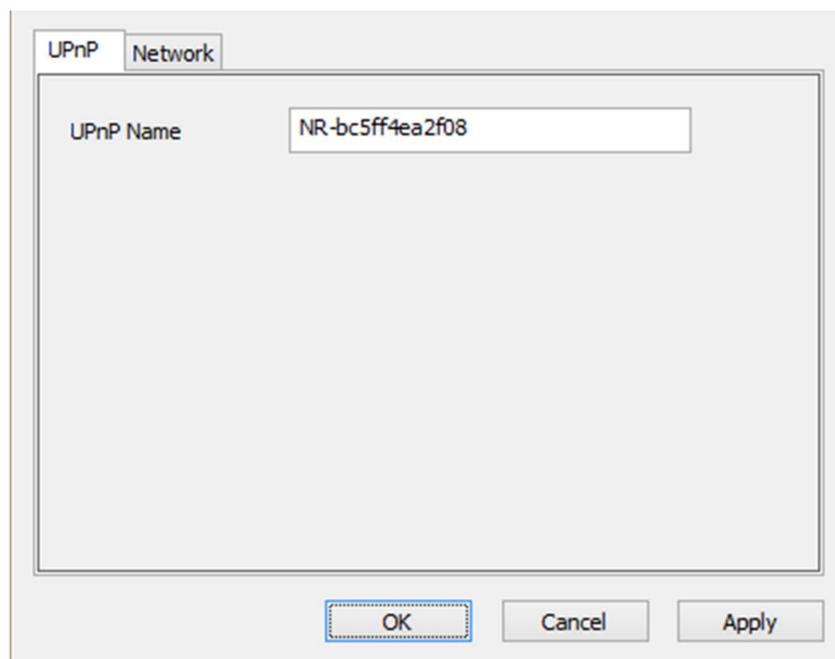


When accessing the NVR setting, users will be prompted to enter username and password. For the first-time use, the default username and password are **admin/admin**. When the correct username and password have been entered, click “**Login**” to continue.



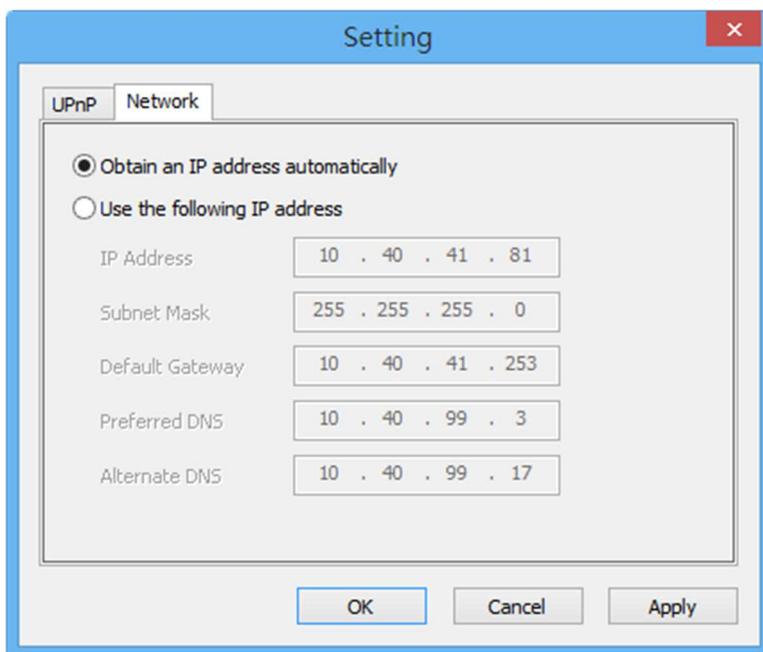
1) UPnP

Universal Plug and Play (UPnP) simplifies the process of adding a NVR to a local area network. Once connected to a LAN, NVR will automatically appear on the internet. You can rename UPnP Name on the NVR. Click “OK” to finish the setting.



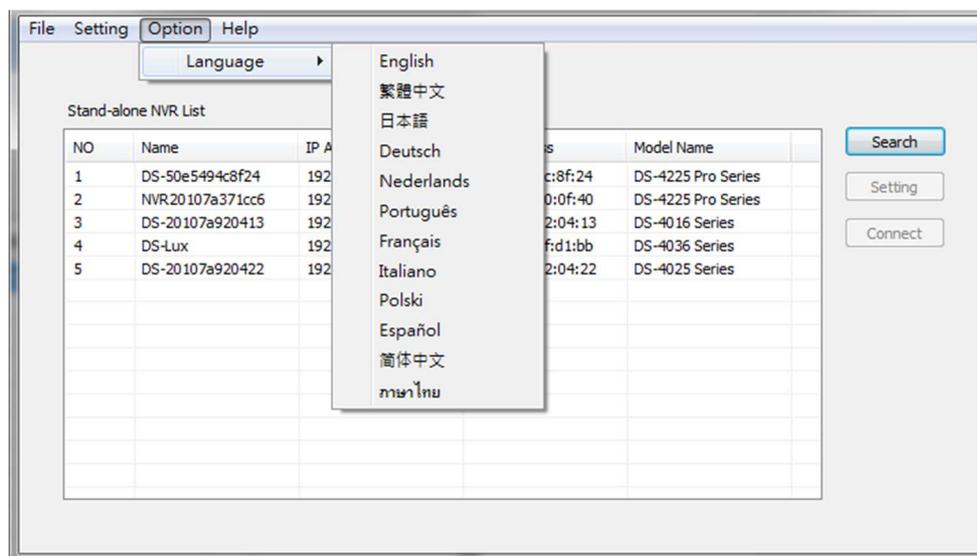
2) Network

Two models are provided for setting the network: **DHCP** and **Static IP**.



3. Option

Option provides several languages



Once you click “**Connect**” or **double click** the selected NVR list, IE browser will pop up automatically for the web-based interface.

2.2.3 Activate Live View Service

Log in to the system by entering its IP address in IE browser.



Note: There are 2 methods to set network:

- **Obtain an IP address automatically (NVR Default)**
Obtain an available dynamic IP address assigned by a DHCP server. If this option is selected, NVR will automatically obtain an available dynamic IP address from the DHCP server once it connects to the network.
- **Specify an IP address**
If there is no DHCP server existing in network environments, the static IP address will be given as 192.168.1.245. It should be adaptable in most networking environment, and user can choose to maintain the default IP address or change it in this page. However, it's recommended setting different IP address of NVR if there is more than one NVR in the same LAN.

1. Enter a user name and password

Log in the NVR with the default administrator account (user name: admin, password: admin).



The image shows a login window with a dark background. It contains two input fields: '帳戶' (Account) and '密碼' (Password). Below the password field is a checkbox labeled '記得此帳號密碼' (Remember this account password). At the bottom, there is a dropdown menu set to 'Auto', and two buttons: '登入' (Login) and '取消' (Cancel).

2. Install the ActiveX control in order to successfully view the interface of NVR from IE browser

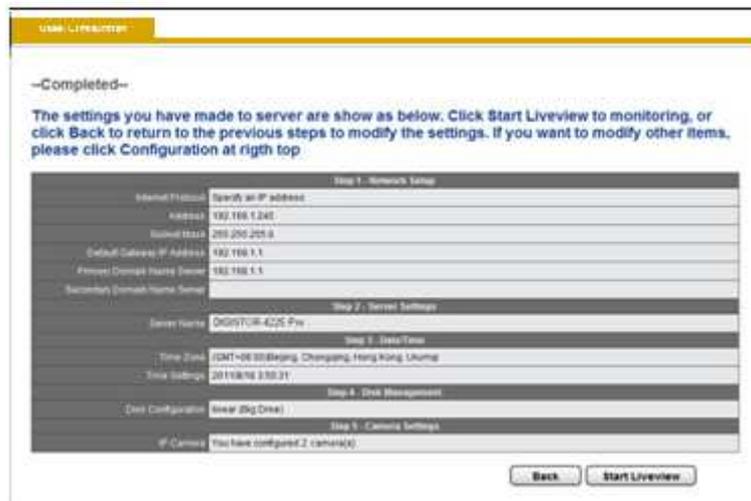


2.2.4 Quick configuration

After you install the ActiveX control, the system will direct you to set Quick Configuration in 5 steps. Follow the instructions of the Overview of wizard to complete the system setup.



Once the five steps of Quick Configuration are complete, you can click “**Start Liveview**” to start monitoring.



For further details of Quick Configuration, please refer to the user manual. When the live view is displayed, you have successfully installed the NVR. Congratulations!