

# Quick Guide

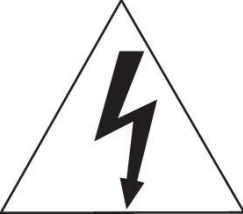

4/8/16/32 Ch NVR (Network Video Recorder)

*Please read this manual thoroughly before use and keep it handy for future reference.*

# WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

## CAUTION

	<div><b>CAUTION</b></div> <div>RISK OF ELECTRIC SHOCK DO NOT OPEN</div>	
<p>WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL</p>		

## EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



# FCC COMPLIANCE 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC INFORMATION:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

# CE COMPLIANCE STATEMENT

## WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## CAUTION

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

# IMPORTANT SAFETY INSTRUCTIONS

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1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **CAUTION – THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.**
16. **Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.**
17. ITE is to be connected only to PoE networks without routing to the outside plant.



# 1. Overview

## 1.1 Package Contents

The device package contents consist of the following:



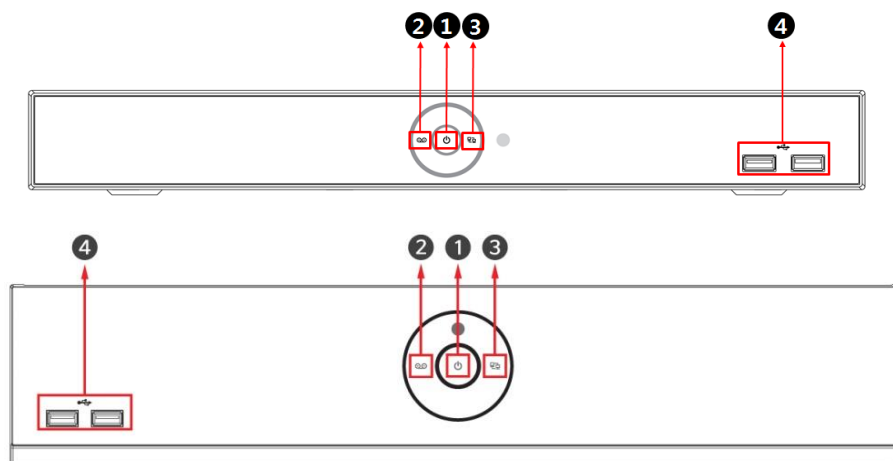
**Note** Please check all components involved.

**Table 1-1 Package contents**

No.	Name	No.	Name
1	NVR	2	DC Adapter(4/8ch only)
3	Power cord	4	Mouse
5	SATA cable	6	SATA power cable
7	HDD fixing screw	8	Rack mount bracket & screws
9	Program CD	10	Quick guide(This document)

## 1.2 NVR Description

Each part is listed in the below:

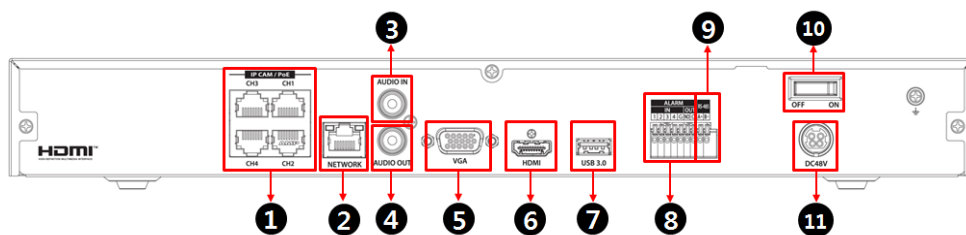


**Figure 1-1 Name and Connection of each front section**

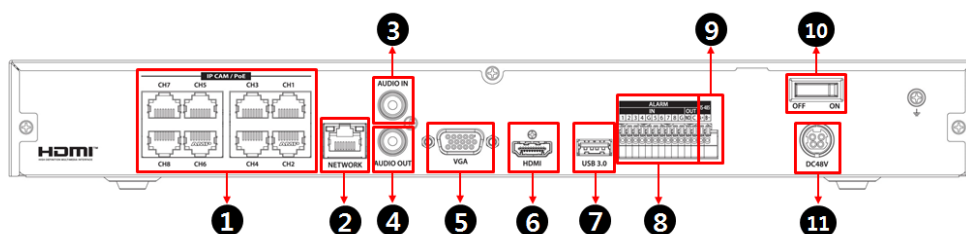
**Table 1-2 Name and Function of each front section**

No.	Name	Function
1	Power status LED	Pointing out device on/off.
2	Recording status LED	Pointing out recording in process.
3	Network LED	With a network viewer, pointing out network in connection.
4	USB port	USB port is connected for USB mouse or firmware upgrade, and data back-up.

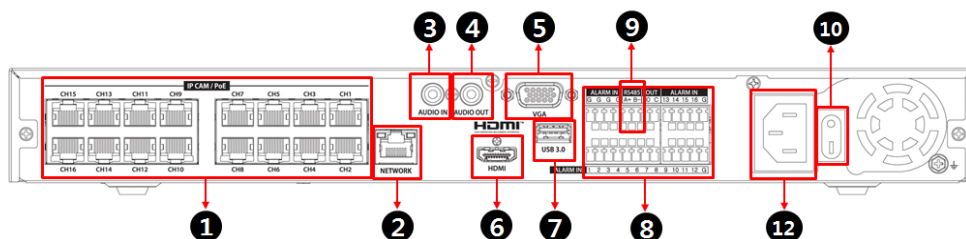
#### 4CH NVR(2HDDs)



#### 8CH NVR(2HDDs)



#### 16CH NVR(2HDDs)



#### 16/32CH NVR(4HDDs)

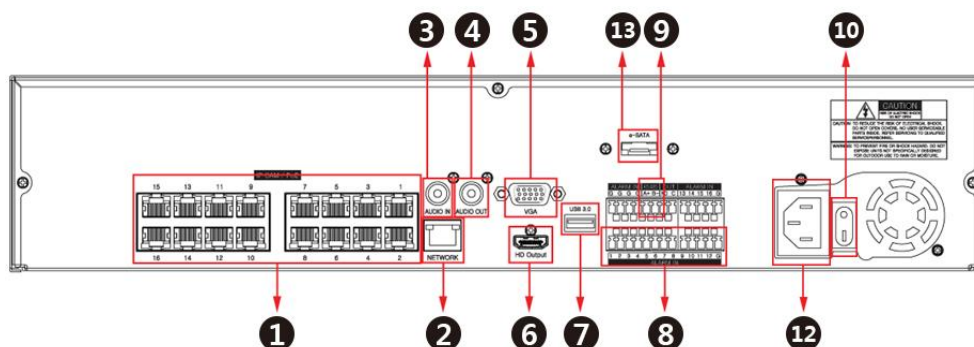


Figure 1-2 Name and Connection of rear section of 4ch, 8ch and 16ch NVR

**Table 1-3 Name and Function of rear section of 4ch, 8ch and 16ch NVR**

No.	Name	Function
1	IP CAM / PoE	IP camera input port, IEEE802.3at PoE support.
2	Network	Network connector.
3	Audio In	Audio input port.
4	Audio Out	Audio output port.
5	VGA	VGA output port.
6	HDMI	HDMI output port.
7	USB 3.0	USB 3.0 port is connected for data back-up.
8	Alarm In/Out	Alarm connector.
9	RS485	RS-485 communication connector.
10	Power Switch	Power On-Off.
11	DC48V	DC adapter input port.
12	AC POWER INPUT	AC Power cord input port.
13	e-SATA	e-SATA storage connection connector.

## 2. Installation

This chapter describes the way to install NVR.

When installing a device, connect rear of the device with each port on the basis of below connection map.

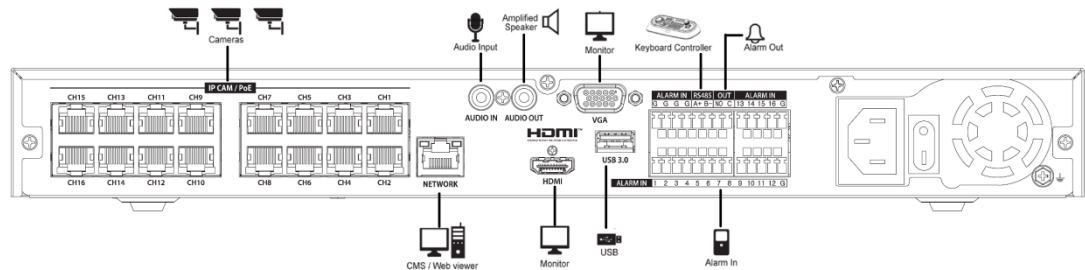


Figure 2-1 Connection map

The device starts first like below sequences:

- 1 Installing HDD
- 2 Connecting with an exterior device
- 3 Starting a system
- 4 Setting a quick setup

### 2.1 Installing HDD

How to install HDD in the device:



#### Attention

- Withdraw the mains plug before installing HDD to reduce the risk of injury or electrical shock, or device malfunction.
- Make sure to check the compatibility of HDD with the device.

- 1 Always switch off and unplug the unit.
- 2 Unscrew with a screw driver (+) and open the unit cover.
- 3 Install HDD in the bottom case.
- 4 Connect a data cable and power cable with HDD.
- 5 Close the cover and tighten screws.



## 2.2 Starting System

Power supply begins with system operation as follows:

- 1 Switching on initialize with below icons in order.



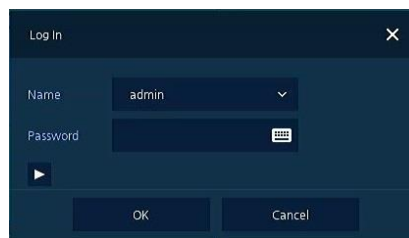
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**Note** Installing new HDD might take more initialize time.


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- 2 With buzzer sounds, the start screen is presented.

- 3 In **Log in** screen, enter the **ID**, **Password** and press **OK**.



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**Note** Default ID & Password is admin/admin.  
Click  to see the MAC address.  
If lost password, inform the MAC address to supplier to create temporary password.

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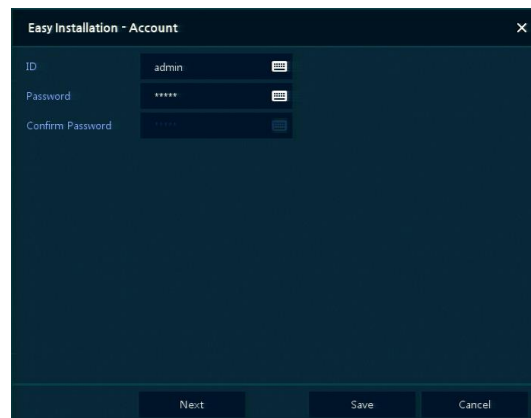
Default password must be changed at the Quick Setup – Account menu due to security.

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## 2.3 Quick Setup

### 2.3.1 Account

- 1 Set **ID** and **Password**.



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**Note**

- Default ID/Password is admin/admin.
  - The default password must be changed for security.
  - Max character length is 12.
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A password can be used if it satisfies two or more in the following criteria:

- 1) It contains at least one lowercase English character.
- 2) It contains at least one uppercase English character.
- 3) It contains at least one special character. The special characters are “! @ # \$ % ^ & \* ( ) - + ...”
- 4) It contains at least one digit.

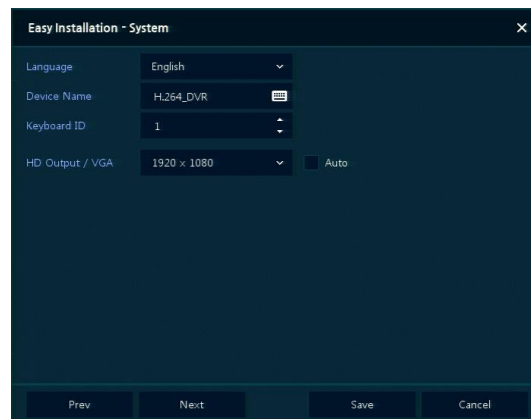
Its length must be at least 10 if it satisfies only two of the above criteria.

Its length must be at least 8 if it satisfies three or more of the above criteria.

## 2.3.2 System

How to set the system of Easy Installation:

- 1 Set each item in **System** setting screen.



- Language: Select system language.
- Device Name: Enter the device name.
- Keyboard ID: To identify device usages in controlling NVR with RS485 through a keyboard
- Selecting the device ID. In case of simultaneous use of equipment, set ID with difference.

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**Note**

- As for using many NVRs, set ID with difference.
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- HDMI/VGA: Set resolution of a monitor connected to the device.
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**Note**

- Video is not displayed through VGA port if set 3840x2160 resolution.
  - If resolution is set to 3840x2160 and a monitor that does not support this resolution is connected to the HDMI port, it will automatically change to 1024x768 resolution.
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### 2.3.3 Network

How to set the network of Easy Installation:

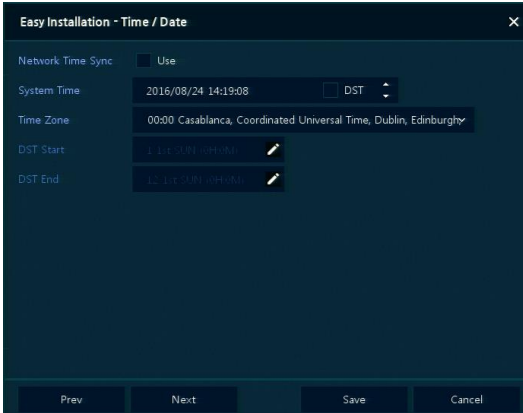
- 1 Set each item in **Network** setting screen.



- WAN Port: Select whether to use static IP or dynamic IP.
- IP Address, Subnet Mask, Gateway, DNS, and Port: As for dynamic IP, enter information in each space.

### 2.3.4 Time/Date

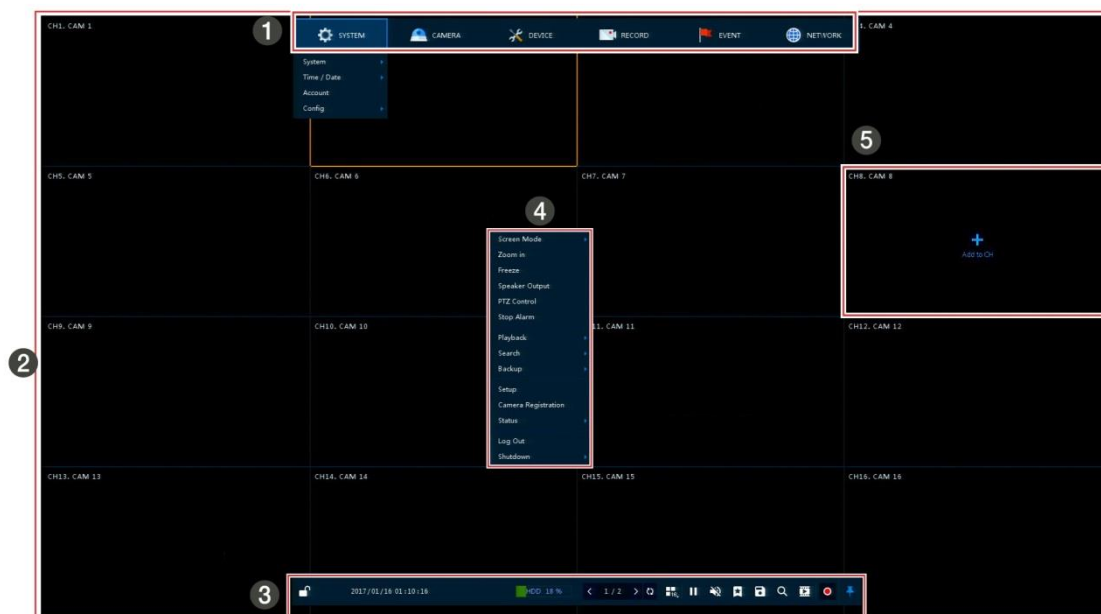
- 1 Set each item in **Time/Date** setting screen.



- Network Time Sync: Select network for synchronizing with time server.
- System Time: Not for synchronizing with network time server, set the device time; otherwise (applying for Daylight saving time), select DST.
- Time Zone: Select time zone for the system being installed.
- DST Start/End: For applying Daylight saving time, set the application period.

### 3. Live Screen Configuration

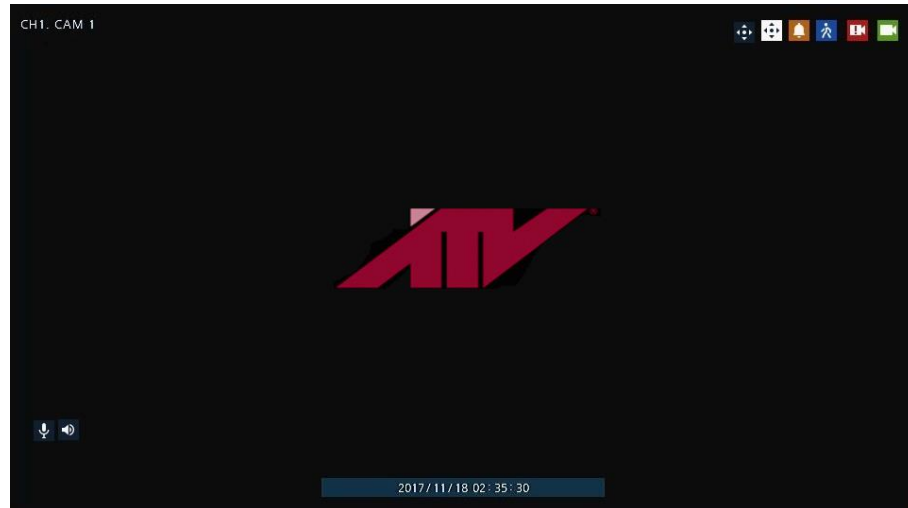
UI screen is configured like below figure.












No.	Item	Description
1	Setup menu	Setting menu is located in the corner of upper screen.
2	Live screen	Show live video of connected cameras.
3	Launcher menu	Launcher menu is located in the corner of below screen.
4	Quick menu	Clicking the right button of a mouse displays Quick menu.
5	Add to CH	Move mouse cursor on the center of window to register IP camera manually. See "3.3.1 Camera Registration" to display detailed information about the camera registration.

## 3.1 Icons in Live screen

Each icon in the live screen displays a present setting status or a function. UI screen consists of like below.



No.	Icon	Description
1	CH1 CAM1	Channel numbers and camera titles.
2		A camera with PTZ function.
		PTZ control function in process.
		Recording in alarm event mode.
		Recording in motion event mode.
		Recording in panic recording mode.
		Recording in consecutive recording mode.
3		Video loss icon.
4		Mic on/off.
		Speaker on/off.
6	2016/09/02 02:13:09 PM	Displaying present time and date.

**Note** Chosen live screen is marked as a blue frame; mouse-located live screen is marked as yellow one.

## 3.2 Live Launcher menu

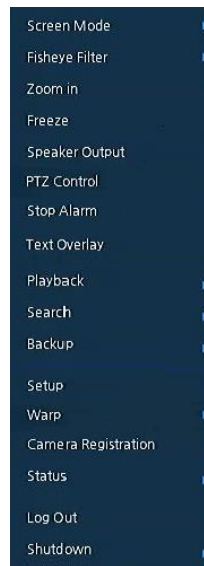
This chapter describes Launcher menu in the bottom of the screen.



No.	Item	Description
1		Log in/out status and logged in ID.
2	Date & Time	Displaying present date and time.
3	HDD	Displaying HDD capacity in use.
4		Moving to previous/next partition screen.
5		Displaying live screen in order set (toggle).
6		Selecting partition mode to mark in live screen (single screen, 4-, 9-, and 16-partition).
7		Stopping or replaying selected live screen images (toggle).
8		Audio on or mute chosen live screen(toggle).
9		Instant recording for 10 seconds.
10		Make a backup video of users want.
11		Searching recording data (time, event, thumbnail, smart search, text and VCA).
12		Playback recorded data.
13		Starting immediate recording of selected channel.
14		Locking or releasing launcher menu (toggle).

### 3.3 Quick menu

This chapter depicts Quick menu when users click the right button of the mouse in live screen.

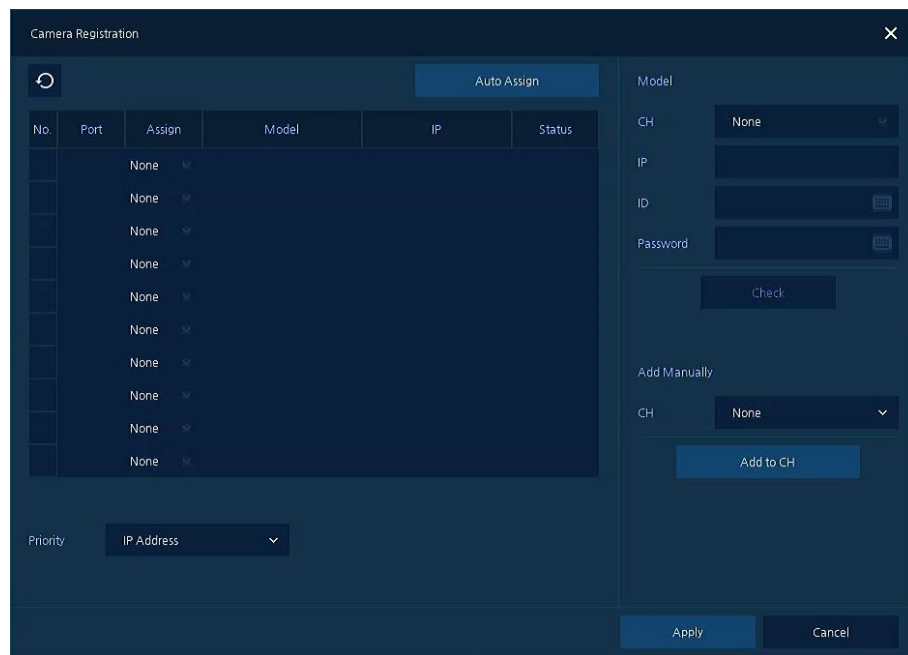



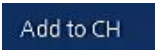
No.	Item	Description
1	Screen Mode	Selecting the partition mode of live screen (Full, 2X2, 3X3, and 4x4).
2	Fisheye Filter	Selecting Fisheye filter. This menu is shown when fisheye camera connected.
3	Zoom in	Magnifying selected live screen (Zoom out, 2 times, 4 times, and 8 times). This menu is shown full screen mode only.
4	Freeze	Freezes the video selected live screen images (toggle on / off).
5	Speaker Output/Mute	Turning on/off a sound speaker.
6	PTZ Control	Controlling PTZ function. This menu is shown when PTZ camera connected.
7	Stop Alarm	Stopping monitoring alarm output and event.
8	Text Overlay	POS text overlaid on the screen. This menu is show when enable Text menu.
9	Playback	Playing selected live screen images (before 30 sec, 1 min, 5 min, 10 min, 30 min, 1-hour, Go to last play time, and Go to last record time).
10	Search	Searching recording data (time, event, thumbnail, smart search, text and VCA).
11	Backup	Backup video to USB drive.
12	Setup	Opens the NVRs main set up menu.
13	Warp	Monitor and control for remote recorder.
14	Camera Registration	Opens a pop-up menu for IP camera registration.
15	Status	Opens a pop-up menu showing: device system log, event, and recording status (system log, event, and record).

No.	Item	Description
16	Log in/Log out	Log in/Log out.
17	Shutdown	Shuts down or restarts the device (shutdown, restart).

### 3.3.1 Camera Registration

Users can register the IP cameras



No.	Item	Description
1		Search the connected IP cameras.
2	Auto Assign	Automatically assign the channel windows.
3	Port	Show the detected camera port (WAN, PoE).
4	Assign	Selecting the channel windows manually.
5	Model	Show detected camera model number.
6	IP	Show detected camera IP address.
7	Status	Show connection status.
8	Priority	Select IP Address or Zero conf IP. When camera have IP address and zero conf IP, NVR display selected priority address.
9	Add Manually	Select channel and click  to open manual add window.



## 4. Setup menu

This chapter describes Setup menu in the upper side of the screen.



Selecting the menu opens the setting screen.

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**Note**

**Setup** screen is available to click **Setup in** Quick menu by clicking the right button of the mouse.

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No.	Item	Description
1	SYSTEM	Setting the system environment.
2	CAMERA	Setting the camera.
3	DEVICE	Setting the non-camera devices connected to the NVR.
4	RECORD	Setting the recording parameters.
5	EVENT	Setting each event.
6	NETWORK	Setting the network environment.

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**Note**

For more details on each section within the Set Up menu, please refer to the main manual contained on the CD supplied with the NVR.

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