# Northern

N2NVR Series

 If this device is installed in places where thunder and lightning frequently occur, ground the device nearby to discharge high energy such as thunder strikes in order to prevent device damage

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- · Avoid heavy loads, intensive shakes, and soaking to prevent damages during transportation and storage. The warranty does not cover any device damage that is caused during secondary packaging and transportation after the original packaging is taken apart.
- · Protect this device from fall-down and intensive strikes, keep the device away from magnetic field interference, and do not install the device in places with shaking surfaces or under shocks.
- · Clean the device with a soft dry cloth. For stubborn dirt, dip the cloth into slight neutral cleanser, gently wipe the dirt with the cloth, and then dry the device.
- · Do not jam the ventilation opening. Follow the installation instructions provided in this document when installing the device.
- · Keep the device away from heat sources such as radiators, electric heaters, or other heat equipment.
- Keep the device away from moist, dusty, extremely hot or cold places, or places with strong electric radiation.
- · If the device is installed outdoors, take insect- and moistureproof measures to avoid circuit board corrosion that can affect monitoring
- Remove the power plug if the device is idle for a long time.

- All complete products sold by the manufacturer are delivered along with nameplates, quick setup quide and accessories after strict inspection. The manufacturer shall not be held responsible for counterfeit products.
- · The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Update information will be added to new versions of this manual without prior notice.
- This manual may contain misprints, technology information that is not accurate enough, or product function and operation description that is slightly inconsistent with the actual product, the final interpretation of company is as a standard.
- · This manual is only for reference and does not ensure that the information is totally consistent with the actual product. For consistency, see the actual product.

# Open Package Examination

obvious damage, and confirm the item list for table 1-1 is consistent

Component	Quantity	Remark
Network Video Recorder	1	
Quick Setup Guide	1	
Mouse	1	
Power adapter	1	8 &16ch
Power cord	1	
Terminal block	2	
Phillips head screw	6/12	4 ch / 8 &16 ch
Hangers	2	32 ch
Countersunk head black screws	6	32 ch
Countersunk head imperial Whitescrews	24	32 ch

# Device Structure

## 2.1 Device Ports

**NOTE** 

Different device may have different ports and multi-head

cable, please refer to the actual product. Front panel description of device, please refer to table 2-1.

## Table 2-1 Front panel description

Port Name	Description
PWR Indicator	When the NVR is operating, the PWR indicator is steady on.When the NVR is shut down, the PWR indicator is turned off.
HDD Indicator	Hard disk status indicator This indicator flashes when data is transmitted.
PoE Indicator	PoE network status indicator This indicator flashes when data is transmitted.
KB/MOUSE	Supports connection to a USB mouse or keyboard.
BACKUP	Supports connection to a USB flash drive or USB removable hard disk.

Rear panel description of device, please refer to table 2-2.

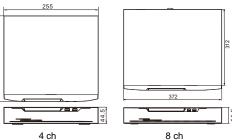
## Table 2-2 Rear panel description

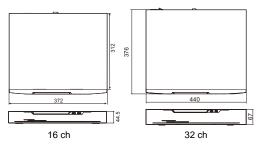
Name	Description			
POE Port	POE network interfaces			
LAN	RJ45 10 /100/1000 Mbps adaptive Ethernet interface			
AUDIO OUT/ AUDIO IN	Audio output / Audio input			
VGA	Video output interface			
ндмі				
Alarm I/O	Alarm input/Alarm output			
DC48V	Connected to an external power adapter (4 & 8 ch)			
	AC 110V - 220V power input interface (16 & 32 ch)			
(±)	G, ground			
- 0	Power switch (16 & 32 ch)			
USB 3.0	Only supports connected to 3.0 U disk (32 ch)			
	Alarm input and alarm output			

## 2.2 Device Dimensions

**NOTE** 

Different device may have different dimensions. please refer to the actual p





# Device Installation

Take the following steps to install hard disks (4 & 8 & 16 ch)

- Step 1 Remove the screws for fixing the cover and take down the cover
- Step 2 Take out the screws and mount two of them to the screw holes of hard disk, as shown in figure 3-1.

Figure 3-1 Installing the hard disk screws



#### **NOTE**

· Just screw the screws about 1 to 2 turns instead to the end.

- Step 3 Route the screws through the gourd holes on the base, push the hard disk to the appropriate position on the left, as shown in figure 3-2.
- Step 4 Turn the device over, and mount other two screws to the holes, as shown in figure 3-3. Then fasten all the screws.

Figure3-2 Installing hard disk Figure3-3 Fixing hard disk

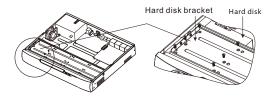


Step 5 Install other hard disks following step 2, step 3 and step 4, and insert the hard disk data cable and power cable, then put on the upper cover and fasten the fixing screws.

Take the following steps to install hard disks (32 ch)

- Step 1 Remove the screws for fixing the cover and take down the cover.
- Step 2 Put the hard disk under the hard disk bracket, hold the hard disk with one hand and aim the hard disk hole at the bracket hole, then fix the screws for hard disk(Install the hard disk near the fan first).

Figure 3-4 Installing the hard disk



Step 3 Install other hard disks following step 2, and insert the hard disk data cable and power cable, then put on the upper cover and fasten the fixing screws.

Rev. 110519

Fully understand this document before using this device, and strictly observe rules in this document when using this device. If you install this device in public places, provide the tip "You have entered the area of electronic surveillance" in an eye-catching place. Failure to correctly use electrical products may cause fire and severe injuries.

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4-8-16-32 Channel

**Quick Guides** 

It alerts you to moderate dangers which, if not avoided, may cause minor or moderate injuries.
It alerts you about risks. Neglect of these risks may cause device damage, data loss, device performance deterioration, or unpredictable results.
It provides additional information.

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· Strictly observe installation requirements when installing the device. The manufacturer shall not be held responsible for device damage caused by users' non-conformance to these requirements

· Strictly conform to local electrical safety standards and use power adapters that are marked with the LPS standard when installing and using this device. Otherwise, this device may be damaged

- · Use accessories delivered with this device. The voltage must meet input voltage requirements for this device.
- If this device is installed in places with unsteady voltage, ground this device to discharge high energy such as electrical surges in order to prevent the power supply from burning out.
- · When this device is in use, ensure that no water or any liquid flows into the device. If water or liquid unexpectedly flows into the device, immediately power off the device and disconnect all cables (such as power cables and network cables) from this device.
- Do not focus strong light (such as lighted bulbs or sunlight) on this device. Otherwise, the service life of the image sensor may be shortened.

**NOTE** 

For more information, please refer to website

Open the package, check the appearance of product for no

## Table 1-1 Packing list

product.	
Figure 2-1 Di	mensions (Unit:mm)
5	

# Device Operation

#### 4.1 Startup

Before starting NVR, ensure that the NVR is connected to a power supply properly and a monitor is connected to the HDMI or VGA interface of the NVR correctly. After starting the NVR, there is a login window located in the center, as shown in figure 4-1and 4-2.

In some environments, if the power supply is abnormal, the NVR may not work properly. In severe cases, the NVR CAUTION may be damaged. In these environments, you are advised to use regulated power supply.

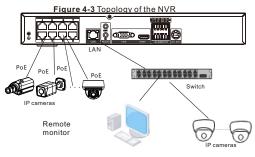
Figure 4-1 Activation interface Figure 4-2 Login interface



- User needs to create a new password to activate the device, when logging in at first time
- User can also set pattern unlock to quickly login.Set security questions to recovery password. Change the language at logging in interface.

## 4.2 Topology of the NVR

NVR with POE ports can access IP cameras immediately when plug IP cameras into NVR's POE ports. Then the NVR will assign an IP address for each camera automatically. The topology refer to figure 4-3.



4.3 Power off

Enter the path Main Menu > System > Maintenance > Shutdown to power off the NVR.

**NOTE** 

Before replacing the hard disk, the power must be turned off.

#### 5 Quick Configuration

Plug in power to access the NVR user page, the wizard window would show at first time, user can configure quickly or close immediately. The details of configure please refer to main menu. Use mouse to right-click any where of the main interface to access the main menu. Main menu comprises Channel, Record, Alarm, Network and System settings, as shown in figure 5-1.

## 5.1 Channel

Channel settings contain Camera, Encode, Image, OSD, Privacy, Zone

- · Camera: user can add cameras automatically by clicking Click to Add, and add manually by clicking add. Tick cameras then click **Delete** to delete cameras. User can batch update software.
- Encode : set stream information, encode type, resolution. frame rate, bit rate control and bitrate from drop lists for different channels

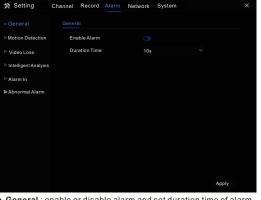
#### Figure 5-1 Main menu

				manning			
Channel			Record		Network		
	Camera Image Privacy Zone	Encode OSD		Record Schedule Disk S.M.A.R.T	S	Network DDNS Port Mapping IP Filter	802.1X Email g P2P SNMP
a a a a a a a a a a a a a a a a a a a				Syster	n Gene		
	Video Loss Alarm In	Intelligent Analysis Abnormal Alarm		Logs		Sequenc. Au enance Au	xiliary Scre. to Restart

- · Image : adjust image parameters and user can set senor parameter.
- OSD : customize time and channel name displaying in the live video page. Privacy Zone: set a privacy zone by clicking ana dragging
- cursor and double-click an exist private area to delete it. Support up to 4 zones All these settings can be copied to other channels by clicking
- copy button. 5.2 Record
- Record settings contain Record Schedule, Disk, S.M.A.R.T.
- · Record Schedule: enable or disable video and audio record, set schedule of recording.
- Disk: show capacity, SN code, used space and status of disk.
- and set expiration of the video recordings. Format the disk. • S.M.A.R.T: Self-Monitoring Analysis and Reporting Technology.
- 5.3 Alarm

Alarm settings contain General, Motion detection, Video loss, Intelligent analysis, Alarm in and Abnormal alarm as shown in figure 5-2.

## Figure 5-2 Alarm



 General : enable or disable alarm and set duration time of alarm. · Motion Detection : enable this function, the system would send motion detection alarm by the means of event actions when the camera detect things in the set area is moving at the set time. 1.Event actions: contain buzzer, alarm out, push message to App, pop-up message to monitor, send E-mail and post recording( after enabling, choose the recording time from drop list.)

2.Area: set motion detection area. Press left button and drag the cursor to add a detection area .and double-click an area to delete

3.Schedule: set schedule to enable or disable motion detection alarm. There are three methods to set, click the double arrows button to choose all day . The second, click and drag the cursor to select periods. The third, click one by one

- · Video Loss: enable this function to receive alarm notification while IP cameras are disconnected to NVR.
- · Intelligent Analysis: enable this function to receive alarm notification from IP cameras while IP cameras generate an intelligent analyzing.
- · Alarm In: settings for I/O alarming.
- · Abnormal Alarm: Disk alarm. IP conflict, cable disconnected

## 5.4 Network

Network settings contain Network, 802.1X, DDNS, E-mail, Port Mapping, P2P, IP Filter and SNMP as shown in figure 5-3. Figure 5-3 Network



#### · Network: set IP address, port and POE.

- 802.1X: enable or disable 802.1X(IEEE Standard for port based network access control).
- DDNS: set DDNS for remote access by URL links.
- · E-mail: set E-mails for sending and receiving alarm messages.
- · Port Mapping: set the ports for remote accessing.
- P2P: add NVR into device list of App by accessing the QR code.
- · IP Filter: settings for creating black list or white list. SNMP: simple network management protocol. There are three versions can be set.

#### 5.5 System

System settings contain Information, General, User, Password, Auto Sequence, Logs, Maintenance and Auto Restart, as shown in Figure 5-4.

#### Figure 5-4 System

Information  General  User  Password	formation Device ID Device Name Device Type	NVR1003ADFX0677RY Device		
⊳ User	Device Name	Device		
▷ Password	Device Type			
		NVR		
▷ Auto Sequence	Model Firmware Version	N2NVR8POE V4.3.0814.0000.003.1.19.0.1 13090C102631		
Auxiliary Screen	U-boot Version			
⊳ Logs	Kernel Version	13090C0E3418		
Maintenance	HDD Volume			
Auto Restart	Channel Support			
	Alarm In			
	Alarm Out			
	Audio In			
	Audio Out			

 Information : show the general information of the device and the number of part of interface

- · General: include system, date and time, time zone, DST.
- · User: add user and set advance setting(auto login, password double authentication, boot wizard).
- · Password: modify the password , unlock pattern and so on ,
- · Auto Sequence: settings for sequencing view of the channels.
- Auxiliary Screen: use HDMI and VGA to show live video at same time.
- · Logs: show operating and alarm log, user can export logs if an USB disk is plugged in.
- Maintenance: include shutdown, reboot, exit system, reset. import configuration, export configuration and (cloud) update. Auto Restart: enable this function to make device restart periodically.

#### 5.6 Live Video

Live video page is showed after starting the NVR by default, as shown in figure 5-5.

### Figure 5-5 Live video



# **Mobile Client**

Search for "NorthernView" in App Store or Google Play to download and install the mobile client. Use the App to scan the QR code on the back board of NVR, or in P2P settings page in NVR user interface. Then input the password of the NVR to add the NVR into the device list of the App. User can manage the device though mobile client.

## Figure 6-1 P2P

*	Setting	Channel	Record	Alarm	Network	System	×
⊳ Ne	etwork	P2P					
⊳ 80	02.1X		nable				
⊳ DI	DNS		atus 2P ID		Online	03ADFX0677RY	
	mail		21 10				
⊳ Po	ort Mapping					<b>(</b>	
					200	<u>29</u>	
⊳ IP	Filter					22	
⊳ SN	IMP	Ap	p Name		Northe	rnView	
		- It is available on App Store and Google Play					
							Apply

# Web Accessina

The NVR also can be accessed in a Web browser. Open a web browser like IE and enter the IP address of device (DHCP is on by default) in the address box, and press Enter. The login page is displayed as shown in figure 7-1.

#### Figure 7-1 Login



**NOTE** 

The user name and password are same as the UI interface.