

# 16 Channel H.265 Optimised NVR with 2HDD Bays

WONVR216P5



## Quick Start Guide

Please read these instructions carefully before operating the unit and keep for further reference.

genie

Please read this instruction carefully before operating the product and keep it for further reference. All examples and pictures used here are for reference only. The contents of this manual are subject to change without notice. This device should be operated only from the type of power source indicated on the marking label. The voltage of the power must be verified before use.

**CAUTION:**

- Please check the device and the accessories after getting the device. If there are any damages, shortages or defects, please contact your dealer immediately.

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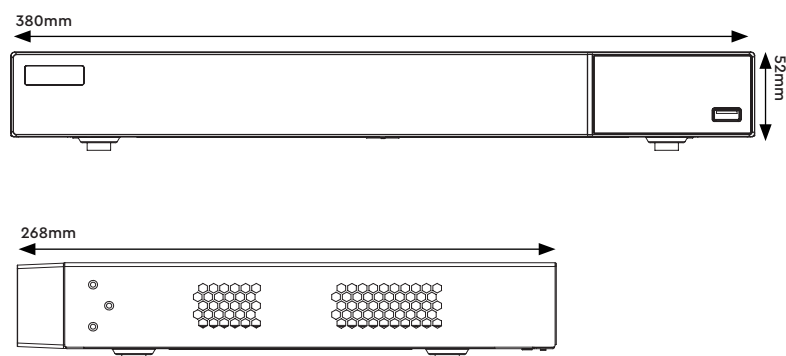
## 1.0 Introduction

The Genie 'Optimised' WONVR216P5 network video recorder is a 16 channel PoE NVR with resolution on every channel of up to 5MP. There are 16 PoE ports available, 2 bays for hard drives and this versatile NVR fully supports up to 16 channels of simultaneous playback.

### 1.1 Product Features

- Supports 16 channel 5MP, 4MP, 3MP, 1080p, 960p and 720p IP input
- Adopt standard H.265 and H.264 high profile compression format to get high quality video at much lower bit rate
- Intuitive and user friendly Graphic User Interface (GUI), Windows style operation by mouse
- Multi-mode recording: Manual / Timer / Motion / Sensor
- Search : Time slice, time, event (Manual, sensor, motion), Tag search
- Express and flexible backup via USB, network etc.
- Pentaplex : Preview, Record, Playback, Backup and Remote Access
- DHCP, DDNS, PPPoE network protocol and CMS supported
- Remote control via IE or CMS : Preview, playback, backup, PTZ and configuration
- 1080p HD output, true high resolution display
- 16 channel simultaneous playback
- Authorisation management, log view and device status view
- Multi-user online simultaneously
- 16 PoE network ports supported by IPC direct connection to NVR, supports PoE power supply
- Support PTZ preset and auto cruise, up to 255 presets and 8 cruises
- Support NAT function and QR code scanning by mobile phone and iPad
- Powerful smart phone & iPad surveillance with iOS and Android OS

### 1.2 Product Dimensions



### 1.3 Specification

	Model	WONVR216P5
System	OS	Embedded Linux
Video	Network Input	16 CH IPC input
	Network Access Format	5MP / 4MP / 3MP / 1080p / 960p / 720p @ 25 / 30fps
	Output	HDMI x 1 : 1920 × 1080 / 1280 × 1024 / 1024 × 768 VGA x 1 : 1920 × 1080 / 1280 × 1024 / 1024 × 768
	Compression	Standard H.265, H.264
	Incoming Bandwidth	112Mbps
	Outgoing Bandwidth	112Mbps
Audio	Network Input	16 channel IPC audio input
	Two Way Audio	RCA x 1
	Audio Local Output	RCA x 1
Record	Record Stream	Dual stream recording
	Resolution	5MP / 4MP / 3MP / 1080P / 960P / 720P @ 25 / 30fps
	Mode	Manual, Timer, Motion, Sensor
Mobile Device	OS	iOS, Android
Storage	HDD	SATA x 2, up to 8TB per HDD
Playback	Simultaneous Playback	16 channel max.
	Search	Time slice / Time / Event / Tag search
	Smart Search	Highlight colours to display the camera record in a certain period of time, different colours refer to different record events
	Function	Play, Pause, FF, FB, Digital zoom, etc
Network	Interface	RJ45 10 / 100 / 1000 Mbps x 1
	Protocol	TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP
	PoE Port	RJ45 × 16
Record	Stream	Dual stream recording
	Resolution	5MP / 4MP / 3MP / 1080p / 960p / 720p @ 25 / 30fps
	Mode	Manual, Timer, Motion, Sensor
Alarm	Mode	Manual, Sensor, Motion, Exception
	Input	Support IPC alarm input
	Output	Support IPC alarm output
	Triggering	Record, Snap, Preset, E-mail, etc.
Remote Monitoring	Immix	Compatible with Immix via RTSP only (2-way audio not supported)
	Sentinel	Yes, Firmware 1.1.0 or later
Backup	Local Backup	USB stick, USB mobile HDD
	Network Backup	Yes
Port	USB	USB 2.0 × 2
	Remote Controller	Optional
Others	Power Supply	DC48V
	Consumption	<15W (Without HDD)
	Working Environment	Temperature: -10°C – 50°C, Humidity: 10% – 90%
	Dimensions	380 × 268 × 52 mm

## 2.0 HDD Installation

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This series of the product supports 2 SATA hard drives. Please make sure that the device is powered off before the installation. The pictures of the installation are for reference only.



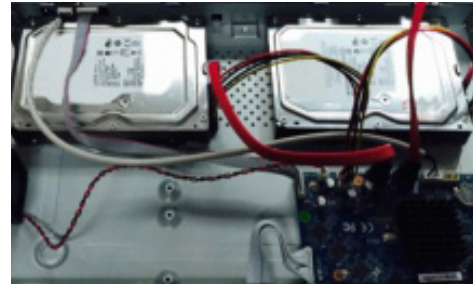
1. Loosen the screws to open the cover.



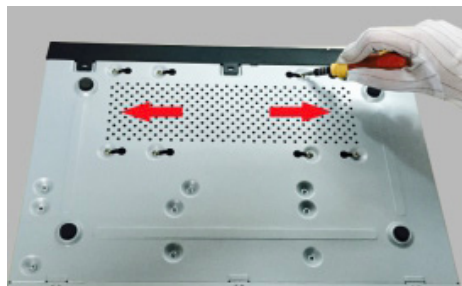
2. Place the HDD onto the bottom of the machine.



3. Put the HDDs onto the bottom of the device.



4. Connect the power and data cables.



5. Turn over the machine and secure the HDD with the screws.

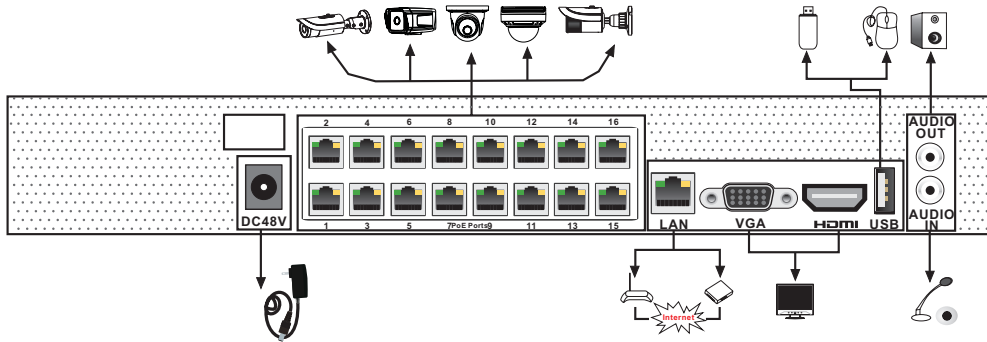


6. Install back the cover and secure it with the screws.

*Note: Please check the inside structure of the device and make sure that the cables are connected well before installing the cover back. Please format the HDD before using.*

### 3.0 Rear Panel Instruction

The interfaces of the rear panel are for reference only.



## 4.0 Start Up and Shut Down

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### **Startup**

1. Connect the monitor and the power.
2. The device will boot and the power indicator will display blue.
3. A wizard window will pop up.

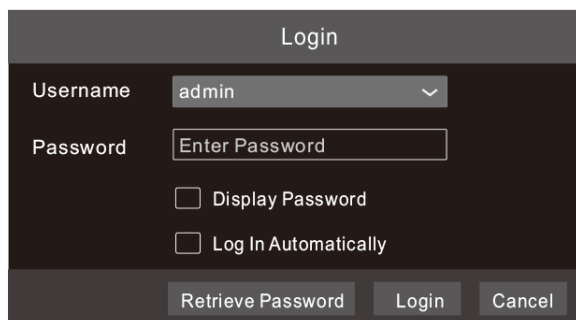
### **Shutdown**

Click "Start" and then select "Shutdown" icon. This will bring up a shutdown window. The device will shut down by clicking "OK" button. Then disconnect the power.



## 5.0 Login

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Username: admin

Password: Enter Password

Display Password

Log In Automatically

Retrieve Password Login Cancel


The default username is admin and the default password is 123456. You must configure the wizard if you start the NVR for the first time and you may change the password when you configure the wizard for the first time. You can skip the settings wizard next time. Click "Start" and select "Login". This will take you to see a login box. Enter the default username and password you set. Then you will see the live image.

### 6.1 Network Configuration & Adding IP Camera


After you finish adding IP cameras, you can see the live images through the monitor of the NVR. The following will mainly introduce how to add the IP cameras via LAN/WAN.

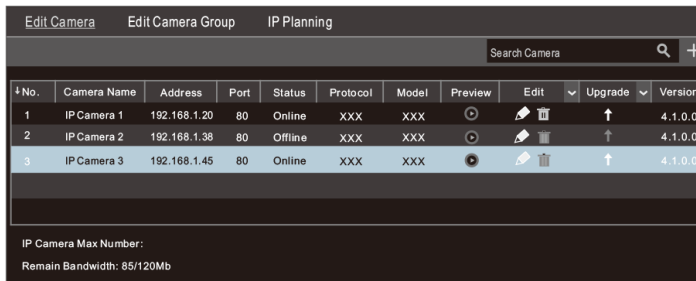
#### LAN










1. Set the network of the NVR. Go to Start → Settings → Network → TCP/IP. Enter IP address, subnet mask, gateway, etc. If using DHCP, please enable DHCP in both the NVR and the router.
2. Go to Start → Settings → Network → Port. Enter HTTP port (the default value is 80), server port (the default port is 6036).
3. The internal ethernet port is the port which connects all the PoE ports with the NVR system. The PoE ports are available if the internal ethernet port is online. If it is offline, all the PoE ports will be unavailable. The IP address and subnet mask of the internal ethernet port can be changed to make the port in the same network segment with the IP cameras which directly connect to the PoE ports of the NVR.

4. Go to Start → Settings → Camera → Add Camera. The NVR will automatically refresh the cameras searched. The IPC which supports the Onvif protocol may be added manually. If the IPC searched is not in the same local network as the NVR, you should select the device and click  to modify the IP address.

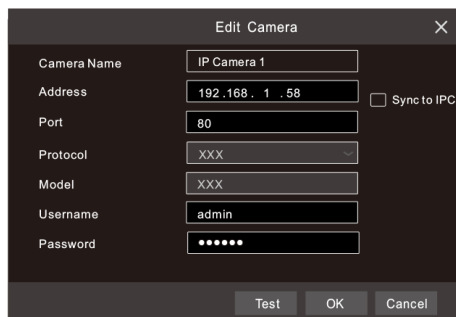
No.	Address	Port	Edit	Subnet Mask	Protocol	Model	Version
1	192.168.1.20	80		255.255.255.0	XXX	XXX	3.4.2
2	192.168.1.38	80		255.255.255.0	XXX	XXX	3.4.2
3	192.168.2.45	80		255.255.255.0	XXX	XXX	4.0.0.1.beta1

5. Checkmark the device you want to add and then click "Add" button. The NVR will automatically refresh the cameras and return to "Edit Camera" interface. "Online" status means connecting the device successfully and you will see the live image. You may select the added device and click  button to modify channel, IP address, etc.



No.	Camera Name	Address	Port	Status	Protocol	Model	Preview	Edit	Upgrade	Version
1	IP Camera 1	192.168.1.20	80	Online	XXX	XXX				4.1.0.0
2	IP Camera 2	192.168.1.38	80	Offline	XXX	XXX				4.1.0.0
3	IP Camera 3	192.168.1.45	80	Online	XXX	XXX				4.1.0.0

IP Camera Max Number:  
Remain Bandwidth: 85/120Mb




Dialog box titled "Edit Camera" with fields for:

- Camera Name: IP Camera 1
- Address: 192.168.1.58  Sync to IPC
- Port: 80
- Protocol: XXX
- Model: XXX
- Username: admin
- Password: ••••••


Buttons: Test, OK, Cancel

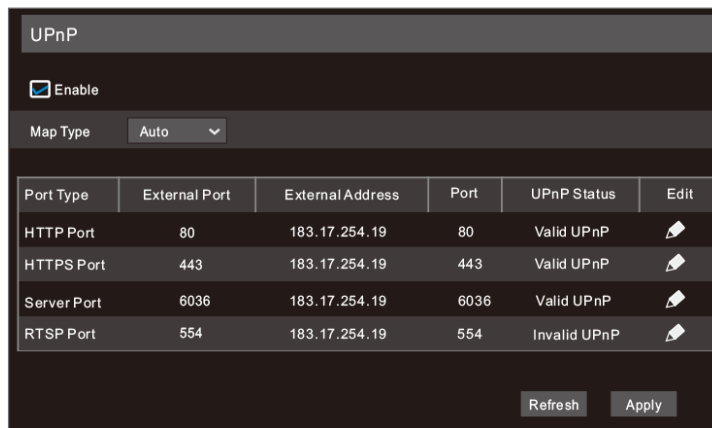
### WAN





1. Set the network of the NVR. Go to Start → Settings → Network → PPPoE. Enable PPPoE and then input the user name and password received from your ISP.
2. Go to Start → Settings → Camera. Click "Add Camera" or  behind the column of the search camera and select "Manually Add" to add the IP cameras. Enter IP address, server port, username and password of the IP camera. The IP camera must be connected over WAN. And here the IP address of the IP camera must be a WAN IP address.

## 7.0 UPnP

You can use the UPnP function to enable the fast connection of the device to WAN via a router without port mapping.

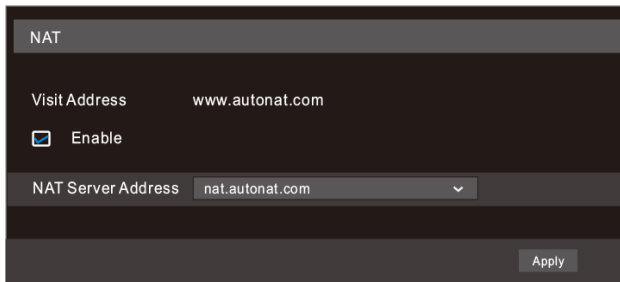
1. Go to Start → Settings → Network → UPnP, and enable UPnP and then click "Apply" button to save.
2. Enable the UPnP function in the router.
3. Click "Refresh" button to refresh the UPnP status. If the UPnP status were still "Invalid UPnP" after refreshing it for several times, the port would be wrong. Please change the mapping type to "Manual" and then click  to modify the port until the UPnP status turns to "valid UPnP".



Port Type	External Port	External Address	Port	UPnP Status	Edit
HTTP Port	80	183.17.254.19	80	Valid UPnP	
HTTPS Port	443	183.17.254.19	443	Valid UPnP	
Server Port	6036	183.17.254.19	6036	Valid UPnP	
RTSP Port	554	183.17.254.19	554	Invalid UPnP	

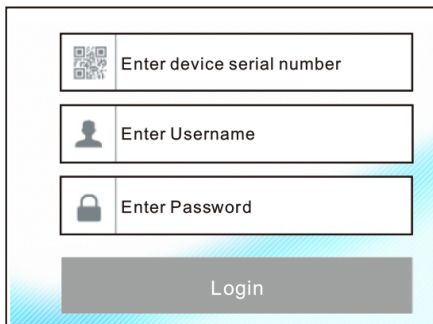
**NAT Settings**

1. The NVR shall be powered on and connected to the network.
2. Go to Start → Settings → Network → TCP/IP. You can obtain the IP address, subnet mask and gateway automatically. You can also manually enter them according to the actual network situation. Please make sure the network segment is the same as that of the network which is used.
3. Set the preferred or alternative DNS Server. Click "Apply" to save the parameters.
4. Go to Start → Settings → Network → NAT tab. Enable NAT and select the NAT Server Address (The default NAT Server Address is nat.autonat.com). Click "Apply" to save the parameters.




**NAT Access**

After finishing the NAT settings, you can enter [www.autonat.com](http://www.autonat.com) in the address bar of your browser and then press enter to go to the following interface. If you are the first time to access the NAT, you shall download and install the plug-in according to the tips. After installing the plug-in successfully, it will pop up the login box.



Device Serial Number:

Click  on the menu bar at the bottom of the live interface to check the serial number or go to Start → Settings → Network → Network Status to check the serial number of the NVR).



Username:

The username of the NVR. The default username is admin.

Password:

The password of the NVR. The password is set by yourself when you configure the wizard for the first time.

### 9.1 Manual Recording

Before recording, please install and format a HDD. In the live interface you can see the menu toolbar. Click  button to start recording. Click it again to stop recording. You can also click  to check the status of the recording.





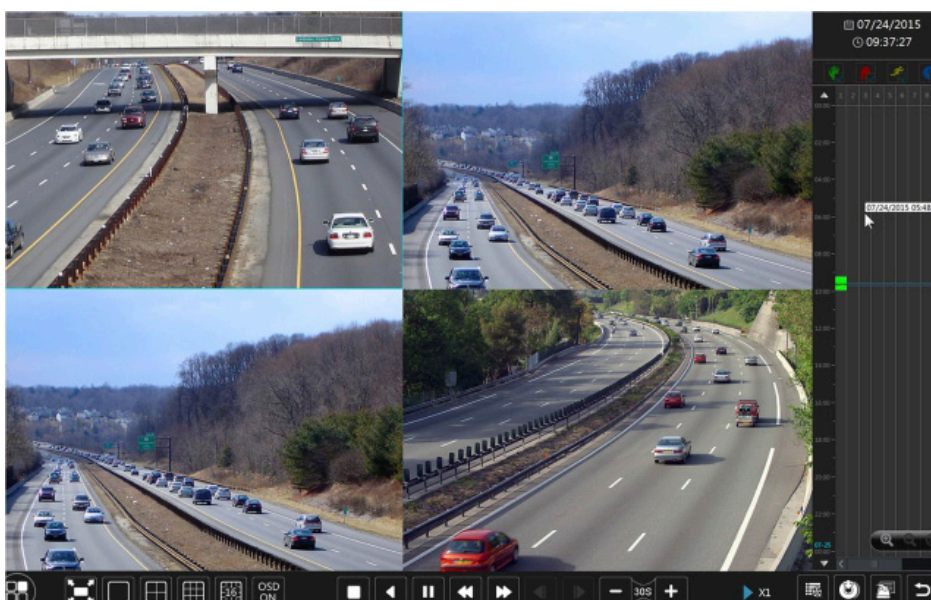
### 9.2 Playback

#### Instant Playback

Click "Instant Playback" in the right-click menu of the camera's preview window to select or drag the playback progress bar to change the playback time to play back the record.

#### General Playback

Click  on the tool bar at the bottom of the live preview interface or click Start → Playback to go to the playback interface as shown below. You can also add the playback cameras manually. Click  in the playback window to pop up the "Add Camera" window. Check the cameras in the window and then click "Add" to add playback camera. The record files of the added playback camera will be played in the playback interface.



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