

# 64 Channel H.265 12MP NVR with 8x HDD Bays

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WNVR8645



## Quick Start Guide

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

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.

**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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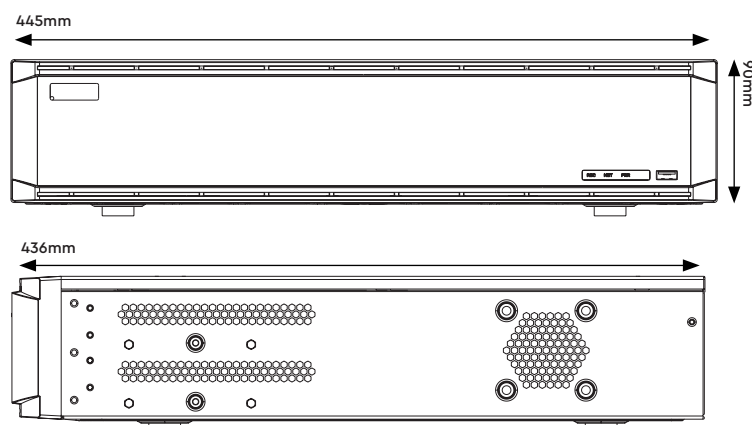
## 1.0 Introduction

The Genie WNVR8645 is a 64 channel ultra-high definition 4K network video recorder. network video recorder with 8 HDD bays. The WNVR8645 features up to 16 channel simultaneous playback as well as two independently configurable gigabit ethernet Lan ports. The NVR can support the latest H.265 and H.264 encoding streams. The WNVR8645 NVR has a dedicated iPhone and Android App (Super Live Plus) and are supplied with free Windows / MAC CMS software.

### 1.1 Product Features

- Supports 64 CH 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080p, 720p input
- H.265S, H.265+, H.265, H.254 high profile compression
- • Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse
- Multi-mode recording: Manual / Timed / Motion / Sensor / POS / AI recording and Smart search
- Supports POS information overlay on live view and playback Playback : 16 CH simultaneous playback
- Search : Time slice, Time, Event, Tag, Smart search
- Authorisation management, log view and device status view
- Pentaplex : Preview, record, playback, backup and remote access
- DHCP, DDNS, PPPoE network protocol
- Multi-user online simultaneously
- Remote control via Web Client or CMS: Preview, playback, backup, PTZ and configuration
- Supports RAID0, RAID1, RAID5, RAID6, RAID10
- Express and flexible backup via USB, network and so on
- Dual stream technology for local storage with high definition, remote network transmission and remote surveillance with mobile device
- 4K UHD output at up to 60Hz Supports PTZ preset and auto cruise, up to 255 presets and 8 cruises
- Supports NAT function and QR Code scanning by mobile phones
- Powerful iOS and Android smartphone and tablet surveillance with push notifications
- Supports multiple VCA (Video Content Analytics) events, such as object abandoned/missing, region intrusion, tripwire, video exception, etc.

### 1.2 Product Dimensions



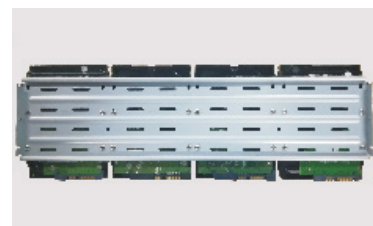
## 1.3 Specification

	Model	WNVR8645
System	OS	Embedded Linux
Video	Network Input	64 CH IPC input
	Incoming Bandwidth	320Mbps
	Outgoing Bandwidth	320Mbps
	Network Input Resolution	12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 1280×1024 / 960p / 720p / 960H / D1 / CIF
	Output	HDMI 1: 3840×2160 @ 60fps / 3840×2160 @ 30fps / 1920×1080 / 1280×1024 / 1024×768 HDMI 2: 1920×1080 / 1280×1024 / 1024×768 VGA x 1: 1920×1080 / 1280×1024 / 1024×768
	Compression	H.265S / H.265+ / H.265 / H.264
	Multi-Screen Display	1 / 4 / 6 / 8 / 9 / 13 / 16 / 25 / 32 / 36 / 64
Audio	Network Input	64 CH IPC audio input
	Two-Way Audio	RCA x 1
	Local Output	RCA x 1
	Compression	G.711(U/A)
Record	Record Stream	Dual stream recording
	Resolution	12MP @ 20fps, 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 1280×1024 / 960p / 720p / 960H / D1 / CIF @ 30fps (NTSC) / 25fps (PAL)
	Mode	Manual / Timed / Motion / Sensor / POS / AI recording
Playback	Simultaneous Playback	Max 16 CH
	Search	Time slice / Time / Event / Tag / Smart search
	Smart Search	Highlighted colour 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.
	Decoding Capability	1CH 12MP / 4 CH 5MP / 9 CH 720p / 16CH 720p (Live View / Playback)
Alarm	Mode	Manual, Sensor, Motion, Exception, Smart events
	Input	8 CH local alarm input, supports IPC alarm input
	Output	4 CH
	Triggering	Record, snapshot, buzzer, preset, e-mail, etc.
Mobile Device	OS	iOS, Android
Video Structure Analysis	Human / Vehicle Classification	Yes
Network	Interface	RJ45 10 / 100 / 1000 Mbps x 2
	Protocol	TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, Onvif, etc.
	Client Connection	Maximum 20 users access
Port	RS485	USB2.0 × 2, USB3.0 × 1
	USB	Yes (full-duplex), connectors for PTZ and keyboard
	Remote Controller	Yes
Backup	Local Backup	USB stick, USB mobile HDD
	Network Backup	Yes
Storage	HDD	SATA×8, up to 8TB per HDD; E-SATA×2
	RAID	RAID0, RAID1, RAID5, RAID6, RAID10
Remote Monitoring	Immix	Compatible with Immix via RTSP only (2-way audio not supported)
	Sentinel	Yes, Firmware 1.1.0 or later
Others	Fisheye	Supports fisheye dewarping via Web Client and mobile App
	Plate Recognition	Yes
	Power Supply	ATX 250W
	Consumption	≤ 30W (without HDD)
	Working Conditions	-10~50°C, 10%~90% humidity
	Certificate	CE, FCC
	Environmental Protection	Complies with Directive EU RoHS, REACH and WEEE
	Dimensions	445 × 436 × 90 mm

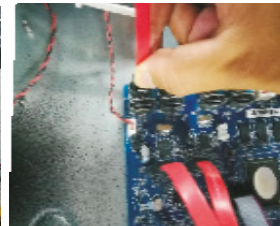
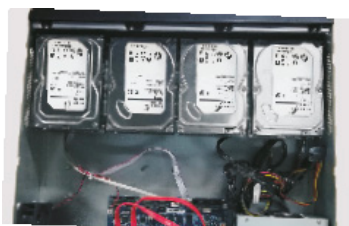
## 2.0 HDD Installation

This series of the product supports 8 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. Remove the cover and loosen the screws to take out two mounting bars.
2. Fix the HDDs on the mounting bar.



3. Install the mounting bar with HDDs back to the device (It is recommended to install the copper-pillar incase the HDDs are damaged by external force).
4. Connect the power and data cables.

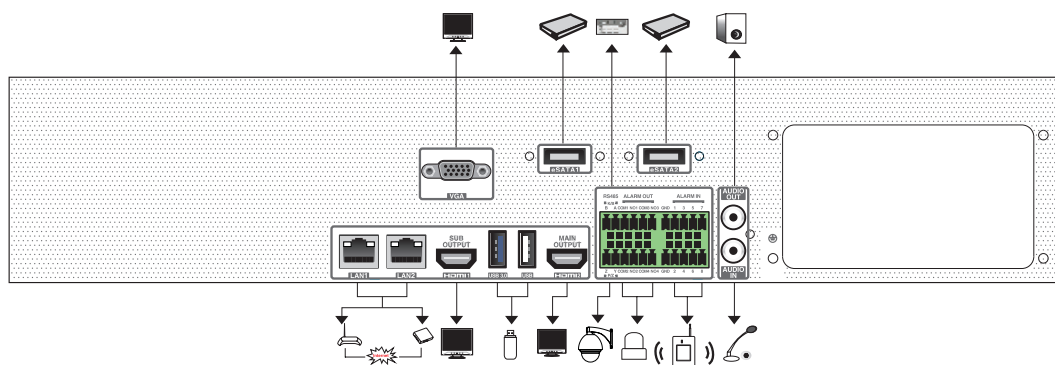


5. Install back the cover and secure it with the screws.

*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.



Name	Description
VGA	Connect to monitor
HDMI	Connect to high definition display device
LAN	Network port
USB	Connect to USB storage device or USB mouse
ALARM IN	Alarm input for connecting sensor
ALARM OUT	Relay output, connect to external alarm
GND	Ground
P/Z	Connect to speed dome. Y is TX+, Z is TX-
K/B	Connect to keyboard. A is TX+, B is TX-
AUDIO OUT	Audio output
AUDIO IN	Audio input
e-SATA	Connect to HDD with e-SATA interface

## 4.0 Start Up and Shut Down

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### Startup

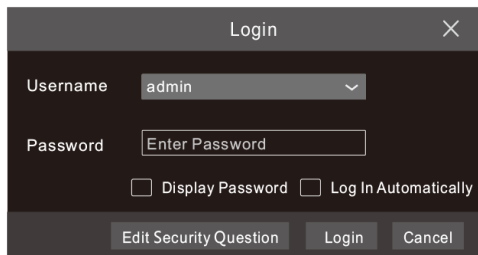
1. Connect the monitor and the power.
2. The device will boot and the power indicator will display blue.
3. A wizard window will pop up.

### 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

A dark-themed login dialog box titled "Login" with a close button (X) in the top right corner. It contains a "Username" field with a dropdown menu showing "admin", a "Password" field with the placeholder text "Enter Password", and two checkboxes: "Display Password" and "Log In Automatically". At the bottom, there are three buttons: "Edit Security Question", "Login", and "Cancel".

Username: admin

Password: Enter Password

☐ Display Password ☐ Log In Automatically

Edit Security Question 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).

IP Address Settings

Ethernet Port 1 (Online)

☐ Obtain an IPv4 address automatically

Address: 192.168.1.2

Subnet Mask: 0.0.0.0

Gateway: 192.168.1.1

MTU: 1500

☐ Obtain an IPv6 address automatically

Address:


Mask Length: 0

Gateway:

☐ Obtain DNS server address automatically

Preferred DNS: 192.168.1.1

Alternate DNS: 0.0.0.0

3. 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.

Add Camera

Quickly Add Manually Add Add Recorder

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

Selected: 1/3

Remain Bandwidth: 108 / 120 Mb

Default Password Add Cancel

Edit IP

Mac Address: CE:98:23:75:35:22

Address: 192.168.1.45 ☐ Sync to IPC


Subnet Mask: 255.255.255.0

















Gateway: 192.168.1.1

Username: admin

Password: .....

OK Cancel

4. 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.

Camera Signal <a href="#">Edit Camera</a> IP Planning										
Search Camera  +										
↓ No.	Camera Name	Address	Port	Status	Protocol	Model	Preview	Edit	Upgrade	Version
1	IP Camera 1	192.168.1.45	80	Online	XXX	XXX				4.1.0.0
2	[A01]Camera1									
3	[A02]Camera2									
4	[A03]Camera3									
5	[A04]Camera4									

Edit Camera

Camera Name

IP Camera 1

Address

192.168.1.58

☐ Sync to IPC

Port

80

Protocol

XXX

Model

XXX

Username

admin

Password


•••••

Test

OK


Cancel

## WAN

1. Set the network of the NVR. Go to Start → Settings → Network → PPPoE. Enter static IP address or enable PPPoE and then enter 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".

UPnP

☒ Enable

Map Type Auto

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	

Refresh

Apply

### 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

Visit Address

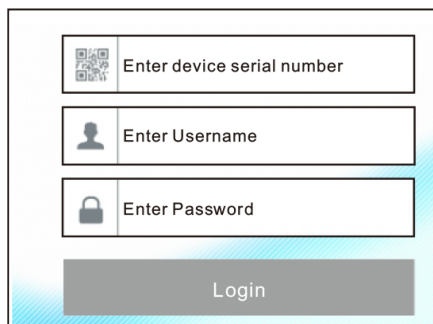
☒ Enable

NAT Server Address

Apply

### 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.




Enter device serial number

Enter Username

Enter Password

Login

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.

## 9.0 Manual Recording and Playback

### 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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