

## UNV NVR301-08E

# UNV NVR301-08E 4K 8-Channel Network Video Recorder User Manual

Your guide to setting up, operating, and maintaining your UNV NVR301-08E.

## 1. INTRODUCTION

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The UNV NVR301-08E is a high-performance 8-channel 4K Network Video Recorder designed for reliable surveillance in various environments. This manual provides essential information for the proper installation, configuration, and operation of your device, ensuring optimal performance and security.

## 2. PACKAGE CONTENTS

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Verify that all items are present and in good condition upon unpacking:

- UNV NVR301-08E Network Video Recorder
- Power Adapter
- USB Mouse
- SATA Cables (for HDD installation)
- Quick Start Guide

## 3. PRODUCT OVERVIEW

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Familiarize yourself with the front and rear panels of the NVR for proper connection and operation.

### Front Panel



*Image: Front view of the UNV NVR301-08E. This image displays the front panel of the NVR, featuring a USB port on the left, a power button, and several indicator lights (PWR, HDD, NET, REC) in the center. These indicators provide status updates on power, hard drive activity, network connection, and recording status.*

- **USB Port:** For connecting a USB mouse, external storage, or for firmware upgrades.
- **Power Button:** To power on or off the device.
- **Indicator Lights:** Display system status (Power, HDD activity, Network connection, Recording status).

### Rear Panel (Typical Connections)

- **Power Input:** Connect the provided power adapter.
- **HDMI Output:** Connect to a monitor for high-definition video display.
- **VGA Output:** Connect to a monitor for standard video display.
- **LAN Port:** Connect to your network router or switch.
- **USB Ports:** For additional peripherals like a mouse or external storage.
- **Audio In/Out:** For connecting external audio devices (if available on model).

## 4. SETUP

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### 4.1. Hard Drive Installation

The NVR301-08E supports one SATA HDD up to 8TB. A hard drive is required for recording video footage.

1. Ensure the NVR is powered off and unplugged.
2. Remove the NVR's top cover by unscrewing the retaining screws.
3. Connect the SATA data and power cables from the NVR to the hard drive.
4. Secure the hard drive to the NVR chassis using the provided screws.
5. Replace the top cover and secure it with the screws.

### 4.2. Connecting Peripherals

1. **Connect Monitor:** Use an HDMI or VGA cable to connect the NVR to a monitor.
2. **Connect Mouse:** Plug the USB mouse into a USB port on the NVR.
3. **Connect Network:** Connect an Ethernet cable from the NVR's LAN port to your router or network switch.
4. **Connect IP Cameras:** Connect your IP cameras to the same network as the NVR. Ensure cameras are powered on.
5. **Connect Power:** Plug the power adapter into the NVR's power input and then into a power outlet.

### 4.3. Initial Power On and Setup Wizard

Upon first boot, the NVR will guide you through an initial setup wizard.

1. Follow the on-screen prompts to set the language, date/time, and create an administrator password.

2. The wizard will assist in detecting and adding IP cameras on your network.
3. Format the newly installed hard drive when prompted to prepare it for recording.

## 5. BASIC OPERATION

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### 5.1. User Interface Navigation

Use the connected USB mouse to navigate the NVR's graphical user interface (GUI). Right-click to access the main menu, and left-click to select options.

### 5.2. Live View

The default screen after login is the Live View, displaying real-time feeds from connected cameras. You can switch between single-camera view and multi-camera grid layouts.

### 5.3. Recording Configuration

Access the 'Record' settings from the main menu to configure recording schedules and modes.

- **Continuous Recording:** Records 24/7.
- **Motion Detection Recording:** Records only when motion is detected by the camera.
- **Scheduled Recording:** Records during specific time periods.

### 5.4. Playback

To review recorded footage, select 'Playback' from the main menu. Choose the camera and date/time range to view recordings. Use the timeline to navigate through events.

### 5.5. Network Access and Remote Viewing

Configure network settings (IP address, gateway, DNS) in the 'Network' section of the main menu. For remote viewing, ensure the NVR is connected to the internet and configure port forwarding on your router or use the manufacturer's cloud service/app.

## 6. ADVANCED FEATURES

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- **Video Compression:** Supports Ultra 265, H.265, and H.264 for optimized storage efficiency while maintaining video quality.
- **ONVIF Conformance:** Ensures compatibility with a wide range of third-party IP cameras (Profile S, G, C, Q, A, T).
- **ANR (Automatic Network Replenishment):** Prevents data loss by automatically retrieving recorded video from IP cameras' SD cards (if equipped) when network connection is restored after an interruption.
- **Cloud Upgrade:** Supports convenient firmware updates directly from the cloud, ensuring your NVR always has the latest features and security patches.

## 7. MAINTENANCE

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### 7.1. Hard Drive Management

Regularly check the hard drive status in the 'Storage' section of the main menu. Format the HDD periodically if needed, or when replacing it. Ensure sufficient free space for continuous recording.

### 7.2. Firmware Updates

It is recommended to keep your NVR's firmware updated. Use the 'Cloud Upgrade' feature in the system

settings to check for and install the latest firmware versions. This improves stability and adds new features.

### 7.3. System Backup

Periodically back up your NVR's configuration settings to a USB drive. This allows for quick restoration of settings in case of a system reset or replacement.

### 7.4. Cleaning

Keep the NVR free from dust. Use a soft, dry cloth to clean the exterior. Ensure ventilation openings are not blocked to prevent overheating.

## 8. TROUBLESHOOTING

This section addresses common issues you might encounter.

Problem	Possible Cause	Solution
No video output on monitor	Loose HDMI/VGA cable; Incorrect monitor input; NVR not powered on.	Check cable connections; Select correct input on monitor; Verify NVR power.
No camera display	Camera not powered; Network issue; Incorrect camera IP address; Camera not added to NVR.	Ensure camera power; Check network cables; Verify camera IP and NVR network settings; Add camera via NVR interface.
No recording	Hard drive not installed/formatted; Recording schedule not set; HDD full.	Install and format HDD; Configure recording schedule; Check HDD status and free space.
Network connection failure	Loose Ethernet cable; Router issue; Incorrect NVR network settings.	Check Ethernet cable; Restart router; Verify NVR IP address, gateway, and DNS settings.

## 9. SPECIFICATIONS

Feature	Description
Model Number	NVR301-08E
Channels	8-channel input, expandable up to 16 channels
Video Compression	Ultra 265, H.265, H.264
Recording Resolution	Up to 8MP
Video Output	4K HDMI output & VGA output with simultaneous display support
HDD Support	1 SATA HDD slot, supporting up to 8TB of storage
ONVIF Conformance	Profile S, G, C, Q, A, T
ANR Technology	Yes, prevents data loss during network disconnections

Feature	Description
Firmware Updates	Cloud upgrade support
Package Dimensions	10 x 10 x 0.1 inches

## 10. WARRANTY AND SUPPORT

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For warranty information, please refer to the documentation provided with your purchase or contact your retailer. For technical support, please visit the official UNV website or contact their customer service department directly. Ensure you have your model number (NVR301-08E) and purchase details available when seeking support.