



[Manuals.plus](#) /

› [GW Security](#) /

› [GW Security 32 Channel 4K NVR 5MP AI Human Vehicle Detection Security Camera System User Manual](#)

GW Security VD32CHC5071IPX32

GW Security 32 Channel 4K NVR 5MP AI Human Vehicle Detection Security Camera System

Model: VD32CHC5071IPX32 | Brand: GW Security

1. PRODUCT OVERVIEW

This manual provides comprehensive instructions for the installation, operation, and maintenance of your GW Security 32 Channel 4K NVR 5MP AI Human Vehicle Detection Security Camera System. This system is designed for advanced surveillance, offering high-resolution video, intelligent detection capabilities, and robust recording features.



Image: Overview of the GW Security 32 Channel 4K NVR system, showing multiple dome cameras, NVR unit, PoE switches, and a hard drive, alongside a smartphone displaying live view.

The system includes a 32-channel Ultra HD 4K H.265 NVR with a pre-installed 8TB hard drive, 32 x 5.0 Megapixel 1920P dome IP PoE cameras, and two 16-port PoE switches. Key features include Power Over Ethernet (PoE) for simplified installation, Super HD 1920P resolution, 2.8-12mm varifocal lenses, built-in microphones for audio recording, AI Human & Vehicle Detection, and remote access via smartphone, PC, or tablet devices.

2. PACKAGE CONTENTS

Verify that all items listed below are present in your package. If any items are missing or damaged, please contact GW Security support.

- 1 x GW4232S: 32 Channel 4K H.265 NVR with pre-installed 8TB Hard Drive
- 32 x GW5071IP: 5MP IP dome cameras
- 2 x GWSW1602G: 16 Ports PoE Switch
- 16 x GWCAT60: 60ft Ethernet Cables
- 16 x GWCAT100: 100ft Ethernet Cables



Check in from Anywhere

Even when you're miles away, keep an eye on your home, kids and mischievous pets in True life HD.



Mobile View Setup within Mins

- 1 Scan QR for free APP "GWVIEW"
- 2 Scan QR for the S/N via the APP
- 3 Live Viewing

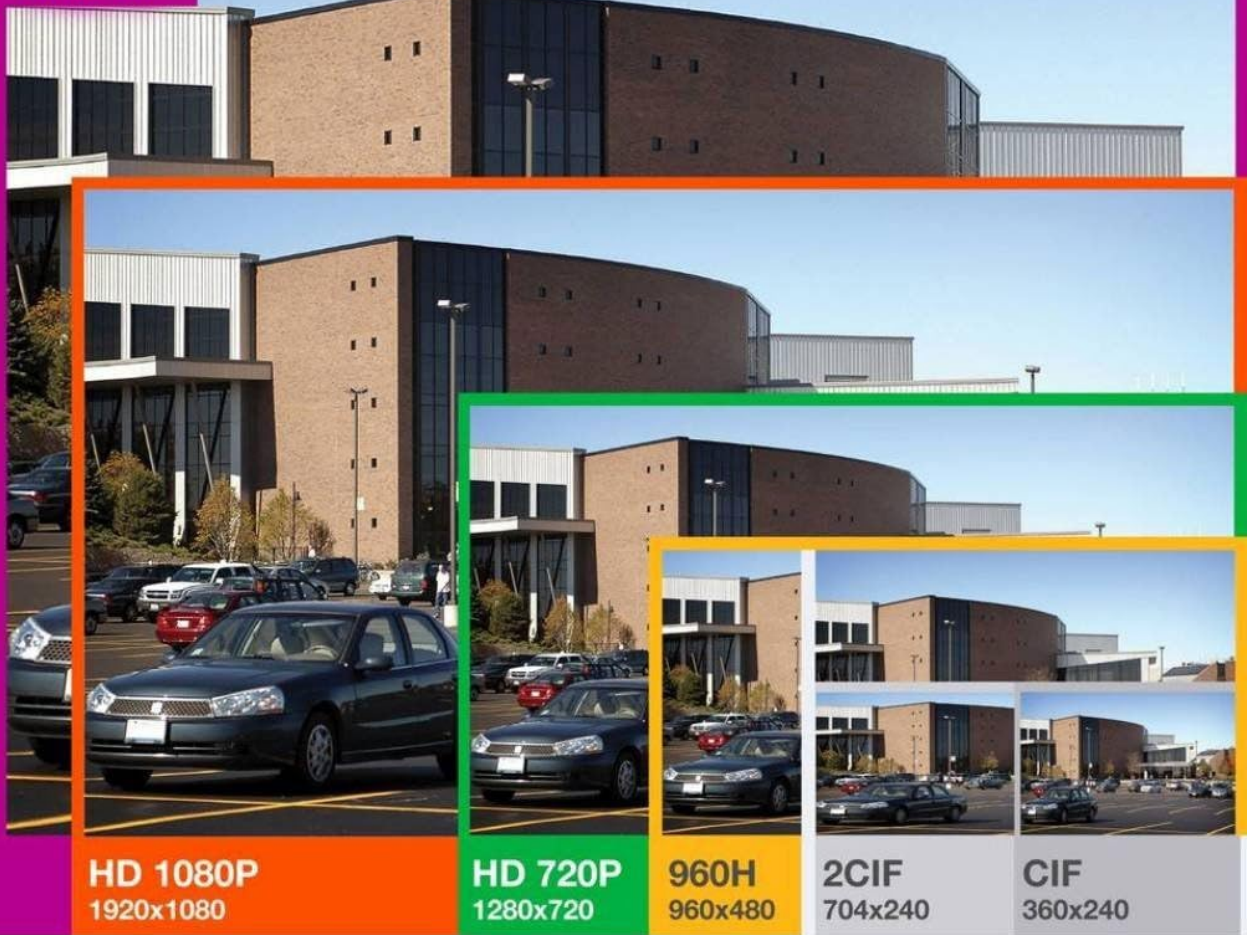
[iPhone](#)
[Android](#)
[iPad](#)
[Computer](#)

Image: Detailed view of the NVR unit, two PoE switches, and an 8TB hard drive, which are core components of the security system.

3. KEY FEATURES

- **Power Over Ethernet (PoE):** Simplifies installation by providing both power and data through a single Ethernet cable for each IP camera. The NVR includes built-in 10/100 Mbps PoE switches.
- **Super HD 1920P Resolution:** Capture high-definition video at 2592 x 1920 pixels, offering significantly sharper and larger images compared to 1080p systems.

HD 5MP
2592 x 1920



HD 1080P
1920x1080

HD 720P
1280x720

960H
960x480

2CIF
704x240

CIF
360x240

D1
704x480

RESOLUTION COMPARISON

Higher resolution results in more detailed images

Image: A visual comparison demonstrating the clarity difference between various video resolutions, highlighting the superior detail of 5MP (2592x1920) compared to lower resolutions like 1080P, 720P, and D1.

- **2.8mm-12mm Varifocal Lens:** Each camera features a manual zoom varifocal lens, allowing adjustment of the angle of view from 115 degrees (wide) to 22 degrees (narrow) for optimal coverage.



Adopting 5 Megapixel
2.8mm - 12mm

Varifocal Lens, can view different
distance image by adjusting lens by hands



2.8-12mm Varifocal Zoom Lens



Image: An illustration showing a dome camera with a 2.8-12mm varifocal lens and examples of how different focal lengths (2.8mm, 4mm, 6mm, 8mm, 10mm, 12mm) affect the field of view, from wide to narrow.

- **Built-in Microphone:** Cameras include integrated microphones for audio recording, enhancing surveillance capabilities.

Super HD 5 Megapixel Video & Audio Built-in Microphone



Image: A dome camera with a visible microphone icon, indicating its audio recording capability, shown in a meeting room setting.

- **AI Human & Vehicle Detection:** Advanced artificial intelligence technology differentiates between human and vehicle movement, reducing false alarms and providing more accurate alerts.

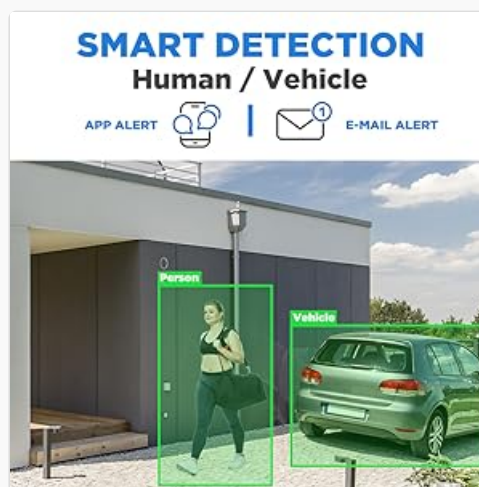


Image: A scene demonstrating AI Human and Vehicle Detection, with green boxes highlighting a person and a car, indicating the system's ability to identify specific objects.

- **H.265 Video Compression:** Utilizes H.265 compression technology for efficient storage and bandwidth usage, allowing for longer recording times and faster loading speeds compared to H.264.

H.265 VIDEO COMPRESSION



High Speed

Lower code rates obtain faster loading speeds.



Lower Costs

Deliver the same content with less resource and data consumption.



Longer Recording Time

H.265 takes up less storage space and bandwidth and provides longer recording times than H.264.



Storage Space



Bandwidth Resources



Loading Speed



Storage Space



Bandwidth Resources



Loading Speed



Image: A comparison chart illustrating the benefits of H.265 video compression over H.264, showing H.265 requires less storage space and bandwidth while offering faster loading speeds and longer recording times.

- **Network Remote Access:** Supports remote viewing and playback via smartphone (iOS/Android), PC (Windows/Mac), and tablet devices using the dedicated application.
- **Night Vision:** Equipped with 30 infrared LEDs, providing night vision up to 100 feet for clear surveillance in low-light conditions.
- **Weatherproof & Vandal-Proof Cameras:** Durable camera design suitable for outdoor installation.

4. SETUP GUIDE

4.1 NVR and PoE Switch Connection

1. **Unpack Components:** Carefully remove the NVR, PoE switches, cameras, and cables from their packaging.
2. **Connect NVR to Monitor:** Connect the NVR to a monitor using an HDMI or VGA cable.
3. **Connect NVR to Network:** Connect the NVR's WAN port to your router or network switch using an Ethernet cable for internet access and remote viewing capabilities.
4. **Connect PoE Switches:** Connect the included 16-port PoE switches to the NVR's LAN ports. Ensure the switches are powered on.
5. **Power On NVR:** Connect the NVR to a power source using the provided power adapter. The system will boot up.

4K

ULTRAHD

H.265
High Efficiency Video Coding

HDMI
HIGH DEFINITION MULTIMEDIA INTERFACE

NETWORK HD VIDEO RECORDER

24/7 Recording



Max
12MP

2 HDD
Up to 20TB

H.265
HEVC

Image: Front view of the GW Security NVR, showing status indicators and a USB port for peripheral connections.

4.2 Camera Installation

1. **Mount Cameras:** Choose appropriate locations for your 32 dome cameras, ensuring optimal viewing angles and coverage. Securely mount each camera.
2. **Connect Cameras to PoE Switches:** Use the provided 60ft and 100ft Ethernet cables to connect each IP camera directly to the PoE ports on the PoE switches. The cameras will receive both power and data through these cables.
3. **Adjust Varifocal Lens:** After mounting, manually adjust the 2.8-12mm varifocal lens on each camera to achieve the desired field of view. This can be done by rotating the lens mechanism.
4. **Verify Camera Feed:** Once connected, the NVR should automatically detect and display the camera feeds on the connected monitor.



Image: A close-up view of a GW Security 5MP dome camera, highlighting its robust design and lens.

5. OPERATING INSTRUCTIONS

5.1 Initial Setup and Configuration

- **NVR Interface:** Navigate the NVR's on-screen menu using a USB mouse (not included).
- **Network Settings:** Configure network settings to ensure the NVR has internet access. DHCP is typically enabled by default.
- **Date and Time:** Set the correct date and time for accurate recording timestamps.
- **User Accounts:** Create or modify user accounts and passwords for system security.

5.2 Recording Modes

The NVR supports various recording modes:

- **Manual Recording:** Start and stop recording manually.
- **Time Scheduled Recording:** Set specific schedules for continuous recording.

- **Alarm Triggered Recording:** Recording starts when an alarm event (e.g., motion detection) is triggered.
- **Motion Detect Recording:** Recording starts when motion is detected by the cameras.

5.3 AI Human & Vehicle Detection

To utilize the AI detection features:

1. **Enable AI Detection:** Access the NVR's camera settings and enable AI Human & Vehicle Detection for desired channels.
2. **Configure Detection Zones:** Define specific areas within the camera's view where detection should be active.
3. **Set Up Alerts:** Configure the system to send app alerts or email notifications when human or vehicle activity is detected.



Image: A graphic highlighting the NVR's capabilities, including 4K Ultra HD, H.265 compression, 24/7 recording, support for up to 12MP cameras, and 2 HDDs up to 20TB.

5.4 Remote Access (Mobile/PC)

The system supports remote viewing and playback through the GWVIEW mobile application and PC software.

1. **Download App:** Download the "GWVIEW" app from your smartphone's app store (iOS or Android).
2. **Scan QR Code:** Use the app to scan the QR code displayed on the NVR's monitor or found on the NVR unit itself to add your device.
3. **Live View & Playback:** Once added, you can access live camera feeds and review recorded footage from anywhere with an internet connection.



Check in from Anywhere

Even when you're miles away, keep an eye on your home, kids and mischievous pets in True life HD.

Mobile View Setup within Mins

- 1 Scan QR for free APP "GWVIEW"
- 2 Scan QR for the S/N via the APP
- 3 Live Viewing

[iPhone](#)
[Android](#)
[iPad](#)
[Computer](#)

Image: A diagram illustrating the mobile view setup process, showing QR codes for iPhone and Android apps, and a smartphone displaying live surveillance footage.

6. MAINTENANCE

- **Regular Cleaning:** Periodically clean camera lenses and housings to ensure clear image quality. Use a soft, damp cloth.
- **Firmware Updates:** Check the GW Security website for available firmware updates for your NVR and cameras to ensure optimal performance and security.
- **Hard Drive Health:** Monitor the health of the pre-installed 8TB hard drive through the NVR's system settings. Replace if signs of failure appear.
- **Cable Inspection:** Inspect all Ethernet cables for wear or damage, especially those exposed to outdoor elements.
- **Backup Recordings:** Regularly back up important recordings to an external USB drive or network storage. The NVR supports USB 3.0 for backup.

7. TROUBLESHOOTING

- **No Camera Feed:**

- Check if the camera is properly connected to the PoE switch.
- Verify the Ethernet cable is not damaged.
- Ensure the PoE switch is powered on.
- Restart the NVR and the camera.

- **No Remote Access:**

- Ensure the NVR is connected to the internet.
- Check network settings on the NVR and your router.
- Verify the GWVIEW app is updated to the latest version.
- Confirm correct device ID/QR code was used for adding the NVR to the app.

- **Poor Image Quality:**

- Clean the camera lens.
- Adjust the varifocal lens for optimal focus.
- Ensure sufficient lighting for night vision.

- **False AI Detections:**

- Adjust detection sensitivity in the NVR settings.
- Refine detection zones to exclude areas with irrelevant movement (e.g., trees swaying).

8. SPECIFICATIONS

Feature	Detail
NVR Model	GW4232S
Camera Model	GW5071IP
Number of Channels	32 Channels
Video Capture Resolution	5MP (2592 x 1920P) for cameras, 4K (8MP) for NVR recording
Lens Type	2.8-12mm Varifocal Manual Zoom
Viewing Angle	115 Degrees (wide) to 22 Degrees (narrow)
Night Vision Range	Up to 100 feet (30 infrared LEDs)
Special Features	AI Human & Vehicle Detection, Built-in Microphone, PoE, Weatherproof, Vandal-proof
Video Compression	H.265/H.264
Hard Drive Capacity	Pre-installed 8TB (Supports up to 20TB via 2 SATA interfaces)
Recording Modes	Manual, Time Scheduled, Alarm Triggered, Motion Detect
Network Interface	Ethernet (NVR built-in 8 Ports 10/100 Mbps PoE Switch)
Video Output	HDMI, VGA

Remote Access	Smartphone (iOS/Android), PC (Windows/Mac), Tablet
Operating System (NVR)	Linux-based (internal)
Dimensions (NVR)	Approximately 20 x 20 x 15 inches (Product Dimensions)
Item Weight	149.7 pounds (Total system weight)

9. WARRANTY AND SUPPORT

Your GW Security 32 Channel 4K NVR Security Camera System comes with a **2-Year Warranty**.

GW Security provides **Free US-based Tech Support** for the lifetime of the product. For technical assistance, troubleshooting, or warranty claims, please contact GW Security customer service.

For the latest support information, drivers, and firmware updates, please visit the official GW Security website.

© 2023 GW Security. All rights reserved.

This manual is for informational purposes only. Specifications are subject to change without notice.