

PDN4EI825H-GR-APV

ENS PDN4EI825H-GR-APV Diamond 4K IP PTZ Security Camera User Manual

Model: PDN4EI825H-GR-APV

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1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ENS PDN4EI825H-GR-APV Diamond 4K IP PTZ Security Camera. Please read this manual thoroughly before using the product to ensure proper functionality and safety. Keep this manual for future reference.

The PDN4EI825H-GR-APV is a high-performance 8MP 4K PTZ camera designed for versatile surveillance applications. It features a 1/2.8" STARVISTM CMOS sensor and an impressive 25x optical zoom, delivering exceptional image clarity and detail for both indoor and outdoor monitoring. Advanced Starlight technology ensures vibrant color images even in low-light conditions, complemented by full-time color illumination, infrared capabilities, and a built-in LED. The camera supports auto-tracking 3.0, perimeter protection, active deterrence, face detection, and Smart Motion Detection (SMD) 4.0 to enhance security and reduce false alarms. With an IP66 rating, it is built to withstand environmental elements.

2. SAFETY INFORMATION

- **Power Supply:** Use only the specified power adapter. Incorrect voltage may damage the camera and void the warranty.
- **Installation:** Installation should be performed by qualified personnel. Ensure the mounting surface can support the camera's weight.
- **Environment:** Do not expose the camera to extreme temperatures, humidity, or corrosive environments. While rated IP66, avoid direct high-pressure water jets.
- **Cleaning:** Use a soft, dry cloth for cleaning. Do not use strong detergents or abrasive materials.
- **Disassembly:** Do not attempt to disassemble or modify the camera. This will void the warranty and may cause damage.
- **Cables:** Protect power and network cables from being walked on or pinched.

3. PACKAGE CONTENTS

Verify that all items are present and in good condition upon opening the package. If any items are missing or damaged, contact your retailer.

- ENS PDN4EI825H-GR-APV Diamond 4K IP PTZ Security Camera
- Mounting Hardware (screws, anchors)
- Quick Start Guide
- Waterproof Connector Kit

4. PRODUCT OVERVIEW

The ENS PDN4EI825H-GR-APV is a robust PTZ camera designed for comprehensive surveillance. Key components and features are highlighted below.



Figure 1: ENS PDN4EI825H-GR-APV Diamond 4K IP PTZ Security Camera. This image shows the white dome-shaped camera with its lens assembly visible at the bottom, featuring multiple light emitters (red, blue, yellow) around the central lens.

Key Features:

- **Sensor:** 1/2.8" 8MP STARVISTM CMOS for superior image quality.
- **Optical Zoom:** 25x optical zoom for detailed monitoring.
- **Night Vision:** Full-time color, infrared, and LED illumination with Starlight technology.
- **Durability:** IP66 rating for water and dust resistance.

- **Auto-Tracking:** Auto tracking 3.0 for real-time subject tracking.
- **Perimeter Protection:** Advanced intrusion detection capabilities.
- **Smart Motion Detection:** SMD 4.0 for accurate human detection and reduced false alarms.
- **Face Detection:** Advanced facial recognition capabilities.
- **Connectivity:** Ethernet for reliable network connection.

5. SETUP

5.1 Physical Installation

1. **Choose a Mounting Location:** Select a suitable indoor or outdoor location. The camera supports wall mounting. Ensure the chosen location provides a clear field of view and is within reach of power and network connections. The camera dimensions are 6.3 x 6.3 x 10.63 inches.
2. **Prepare the Mounting Surface:** Use the provided mounting template (if applicable) to mark drilling points. Drill pilot holes for the mounting screws.
3. **Secure the Camera:** Attach the camera securely to the mounting surface using the provided screws and anchors. Ensure the camera is stable and properly oriented.
4. **Cable Management:** Route the power and Ethernet cables. Use the waterproof connector kit for outdoor installations to protect connections from moisture.

5.2 Power and Network Connection

1. **Connect Power:** Connect the camera to a suitable power source using the provided power adapter. The camera operates on corded electric power.
2. **Connect Network:** Connect an Ethernet cable from the camera to your network switch or router. This camera uses an Ethernet connectivity protocol.

5.3 Initial Configuration

1. **Access the Camera:** Use the ENS App or a compatible Digital Video Recorder (DVR) to discover and access the camera on your network. Refer to the ENS App or DVR manual for specific instructions on device discovery.
2. **Set Up Network Settings:** Configure IP address, subnet mask, gateway, and DNS settings as required by your network.
3. **Change Default Password:** For security, immediately change the default administrator password to a strong, unique password.
4. **Firmware Update:** Check for and install any available firmware updates to ensure optimal performance and security.

6. OPERATION

6.1 Basic PTZ Control

The camera's Pan-Tilt-Zoom (PTZ) functions can be controlled remotely via the ENS App or a connected DVR/NVR interface. Use the directional controls to pan (horizontal movement) and tilt (vertical movement) the camera. Use the zoom controls to adjust the 25x optical zoom for wider or more detailed views.

6.2 Night Vision and Illumination

The camera features Starlight technology for enhanced low-light performance, providing color images in minimal ambient light. It also includes infrared (IR) illumination for complete darkness and built-in LEDs for full-time color illumination when

needed. These modes can typically be configured for automatic switching based on ambient light conditions.

6.3 Smart Features

- **Auto Tracking 3.0:** Enable auto-tracking to allow the camera to automatically follow moving subjects within its field of view. Configure tracking sensitivity and duration in the camera settings.
- **Perimeter Protection:** Set up virtual tripwires or intrusion zones to detect unauthorized entry into specific areas. Alarms can be triggered upon detection.
- **Face Detection:** Configure the camera to detect human faces. This feature can be used for event triggering or recording specific incidents.
- **Smart Motion Detection (SMD) 4.0:** SMD 4.0 intelligently distinguishes between human and vehicle movements and other environmental factors (e.g., animals, leaves), significantly reducing false alarms. Adjust sensitivity and target types in the settings.

7. MAINTENANCE

- **Cleaning the Lens:** Gently wipe the camera lens with a soft, clean, lint-free cloth. If necessary, use a mild lens cleaning solution. Avoid abrasive materials.
- **Housing Cleaning:** Clean the camera housing with a soft, damp cloth. Do not use harsh chemicals.
- **Firmware Updates:** Regularly check the manufacturer's website or the ENS App for firmware updates. Keeping the firmware updated ensures optimal performance, security, and access to new features.
- **Cable Inspection:** Periodically inspect all cables for signs of wear, damage, or corrosion, especially for outdoor installations.

8. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|------------------------------------|--|---|
| No image/video feed | No power; Network connection issue; Incorrect IP address. | Check power supply; Verify Ethernet cable connection; Ensure camera is powered on; Check network settings and IP address. |
| Poor image quality | Dirty lens; Insufficient lighting; Incorrect camera settings. | Clean the lens; Adjust lighting or enable night vision features; Check resolution and compression settings. |
| PTZ control unresponsive | Network latency; Firmware issue; Mechanical obstruction. | Check network stability; Restart the camera; Update firmware; Inspect for physical obstructions. |
| False alarms from motion detection | High sensitivity; Environmental factors (e.g., moving branches, animals). | Adjust SMD 4.0 sensitivity; Configure detection zones to exclude irrelevant areas; Ensure SMD 4.0 is enabled for human/vehicle filtering. |
| Cannot access camera remotely | Network configuration (port forwarding, firewall); Incorrect app settings. | Verify router settings for port forwarding; Check firewall rules; Ensure correct remote access settings in the ENS App. |

9. SPECIFICATIONS

| | |
|------------|---------------------------|
| Model Name | PDN4EI825H-GR-APV |
| Sensor | 1/2.8" 8MP STARVISTM CMOS |

| | |
|---------------------------------|---|
| Video Capture Resolution | 4K (8MP) |
| Optical Zoom | 25x |
| Night Vision Technology | Starlight, Infrared, LED Illumination |
| Connectivity Technology | Ethernet |
| Power Source | Corded Electric |
| Controller Type | ENS App, Remote |
| Mounting Type | Wall Mount |
| Indoor/Outdoor Usage | Indoor, Outdoor |
| International Protection Rating | IP66 (Water and Dust Resistant) |
| Product Dimensions (L x W x H) | 6.3 x 6.3 x 10.63 inches |
| Item Weight | 10 pounds |
| Special Features | Face Detection, Night Vision, PTZ Technology, Wide Dynamic Range, Auto Tracking 3.0, Perimeter Protection, Smart Motion Detection 4.0 |

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official ENS website. Keep your purchase receipt as proof of purchase for warranty claims.

If you encounter any issues not covered in this manual, please contact ENS customer support for assistance.

