ANNKE N46PCK0-V4-94DH

ANNKE 8MP 16-Channel NVR Security System User Manual

Model: N46PCK0-V4-94DH

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ANNKE 8MP 16-Channel NVR Security System. This system includes a 16-channel Network Video Recorder (NVR) and four 4K bullet PoE cameras, designed for comprehensive surveillance with advanced features such as AI human/vehicle detection, color night vision, and two-way audio communication. Please read this manual thoroughly before using the product to ensure proper setup and optimal performance.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact ANNKE customer support.

- 1 x 16CH 12MP PoE NVR (without Hard Drive)
- 4 x 4K 2-way Talk Bullet Cameras & Screw Kits
- 2 x 60ft Network Cables
- 2 x 100ft Network Cables
- 1 x HDMI Cable
- 1 x Ethernet Cable
- 1 x Power Adapter
- 1 x USB Mouse
- 1 x User Manual
- 1 x Wall Sticker
- 4 x Screws
- 4 x Waterproof Lids

Figure 2.1: All components included in the ANNKE 8MP 16-Channel NVR Security System package. This image displays the NVR unit, four bullet cameras, power adapter, USB mouse, various network cables, HDMI cable, wall sticker, user manual, screws, and waterproof lids.

3. PRODUCT SPECIFICATIONS

3.1 NVR Specifications

- **Live View, Recording & Playback:** Up to 12 MP resolution
- **IP Camera Connectivity:** Up to 16 channels with built-in PoE inputs
- **Third-Party Camera Support:** Connectable to third-party network cameras
- **HDMI Video Output:** Up to 4K (3840 × 2160) resolution
- **SATA Interfaces:** 2 for recording and backup (HDD not included)
- **Human and Vehicle Detection:**

  - 16-ch with IP camera support
  - 4-ch without IP camera support (resolution cannot exceed 4MP)

- **Video Compression:** H.264+/H.264/H.265/H.265+
- **VGA Output:** Up to 1080p
- **Smart Event Detection:** Line crossing, intrusion, region entrance/exiting detection (requires IP camera support)

3.2 Camera Specifications

- **Type:** 4K Turret Network Camera
- **Image Scale:** 16:9
- **Lens:** 4mm@F1.6
- **Compression Technology:** Efficient H.265+
- **Audio:** Built-in Microphone (record with audio), Built-in Speaker (max. sound pressure level: 10 cm: 95 dB) for two-way audio
- **Motion Detection 2.0:** Supports Human & Vehicle Detection
- **Night Vision:** Smart Dual-Light technology for color night vision, 3D DNR, 120DB WDR
- **Alarm Features:** Flashing alarm & Audio alarm
- **Storage:** Support on-board storage up to 512 GB (SD card slot, SD card not included)
- **Weatherproof Rating:** IP67 Dust and Waterproof
- **Power:** PoE & DC12V
- **Image Sensor:** 1/2.4" Progressive Scan CMOS
- **Max Resolution:** 3840*2160 (8MP)

4. SETUP GUIDE

Follow these steps to set up your ANNKE security system.

4.1 NVR Initial Setup

1. **Connect Monitor:** Connect the NVR to a monitor using the HDMI or VGA cable.
2. **Connect Mouse:** Plug the included USB mouse into a USB port on the NVR.
3. **Connect to Network:** Connect the NVR to your router using the Ethernet cable.
4. **Power On:** Connect the power adapter to the NVR and plug it into a power outlet. The NVR will power on automatically.
5. **Initial Configuration:** Follow the on-screen prompts to set up the NVR, including language, date/time, and creating a strong password.
6. **Hard Drive Installation (Optional):** If you wish to record footage, install a compatible SATA hard drive (up to 16TB) into the NVR. Refer to the detailed NVR manual for specific installation steps.

4.2 Camera Installation and Connection

1. **Mount Cameras:** Choose suitable locations for your cameras, ensuring optimal viewing angles and coverage. Use the provided screw kits to securely mount the cameras.
2. **Connect PoE Cables:** Connect one end of the network cable to the camera's PoE port and the other end to an available PoE port on the NVR. The cameras will receive power and data through this single cable.
3. **Verify Connection:** Once connected, the cameras should automatically appear on the NVR's monitor. If not, check cable connections and refer to the troubleshooting section.

Figure 4.1: Illustration of the Plug and Play PoE system setup. Cameras connect directly to the NVR via Ethernet cables, simplifying installation by providing both power and data.

5. OPERATING INSTRUCTIONS

This section details the key features and how to operate your ANNKE security system.

5.1 4K UHD Video Quality

The system provides crisp 8MP (3840x2160) 4K Ultra HD video quality, ensuring clear and detailed surveillance footage.

The 16:9 image scale optimizes the viewing experience, capturing a wide field of view with precision. 120dB WDR (Wide Dynamic Range) technology helps balance lighting in scenes with high contrast, preventing overexposure or underexposure.
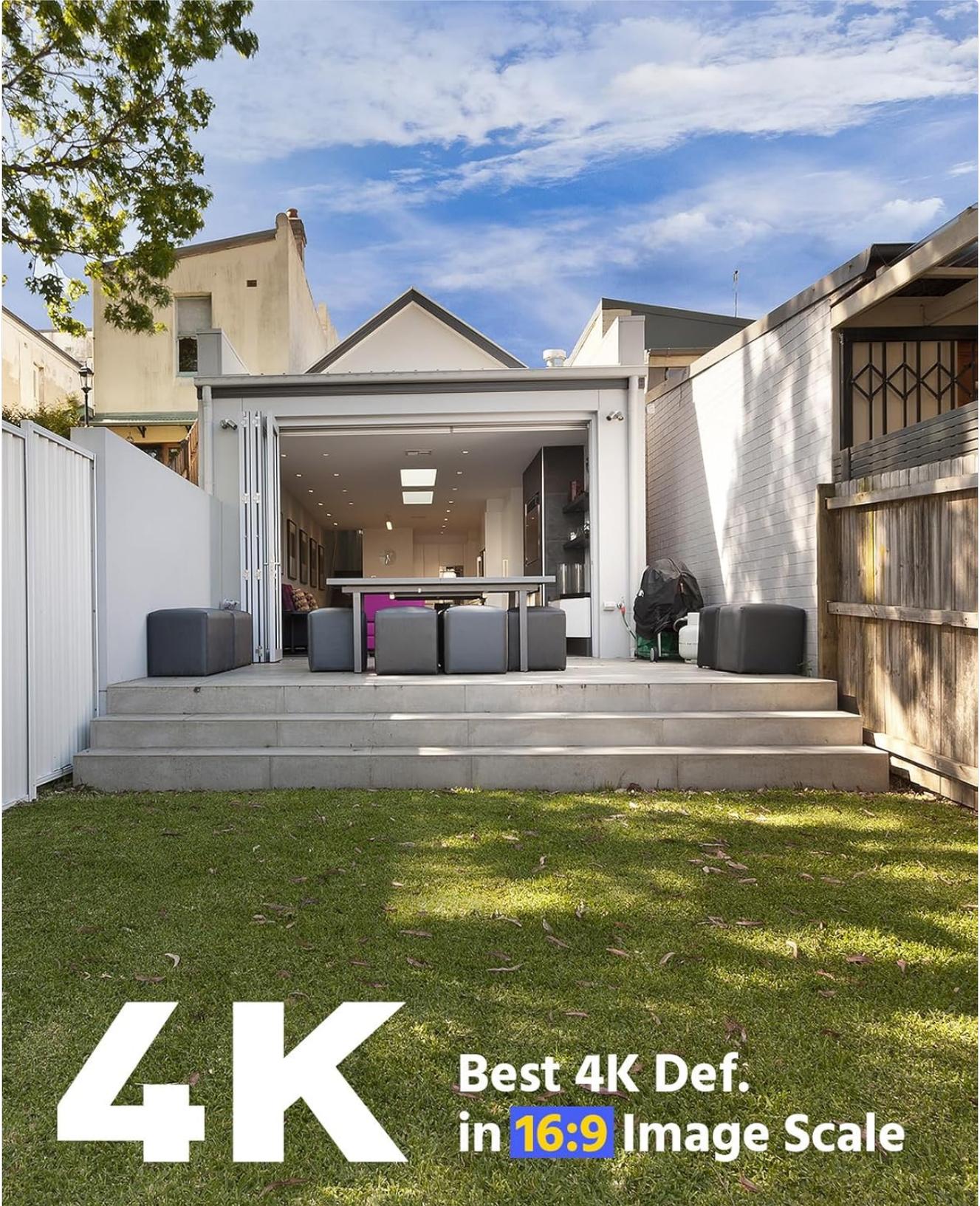

Figure 5.1: An example of the 4K UHD video quality, showcasing clear detail and a 16:9 image scale for optimal viewing.

5.2 AI Human and Vehicle Detection

The NVR system features advanced AI-powered human and vehicle detection, significantly reducing false alarms caused by animals, rain, or swaying branches. You can configure specific detection zones and sensitivity settings through the NVR interface or the ANNKE Vision app to receive alerts only for relevant events.

Figure 5.2: Visual representation of the AI human and vehicle detection feature, highlighting how the system identifies and distinguishes between human and vehicle presence, reducing false alerts.

5.3 Two-Way Audio Communication

Each 4K bullet camera is equipped with a built-in microphone and speaker, enabling real-time two-way audio communication. This allows you to listen in on the camera's surroundings and speak directly through the camera using the ANNKE Vision app, ideal for interacting with visitors or deterring intruders.

Figure 5.3: An illustration demonstrating the two-way talk functionality, showing a person at a door communicating with someone remotely via the camera system.

5.4 Color Night Vision and Smart Dual-Light

The cameras offer versatile night vision modes. You can choose between traditional black and white IR night vision or vivid color night vision. The Smart Dual-Light mode intelligently activates the camera's white light upon detecting human or vehicle motion, providing full-color footage and acting as a visual deterrent.
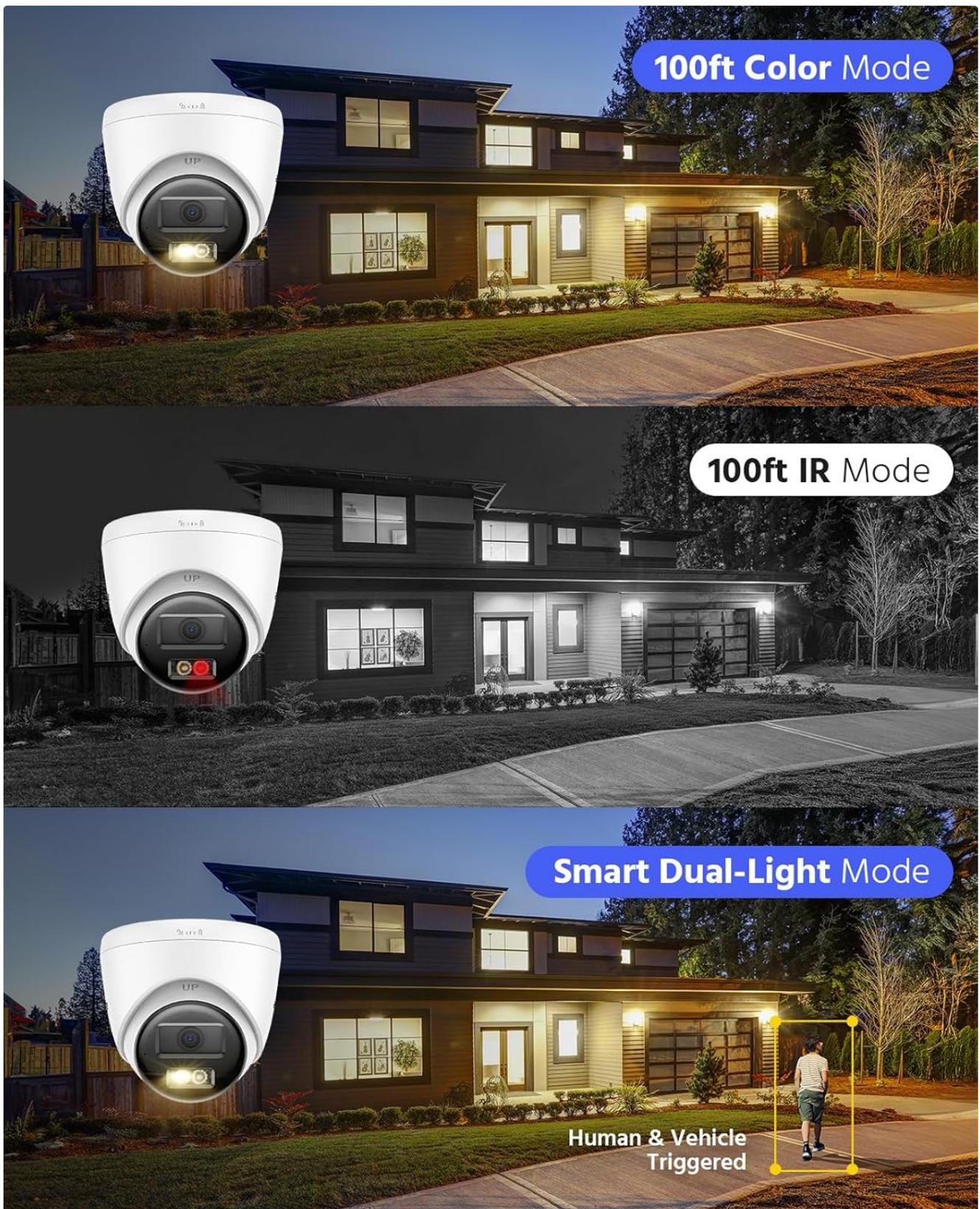
Figure 5.4: Comparison of different night vision modes: 100ft Color Mode, 100ft IR Mode, and Smart Dual-Light Mode which triggers color vision upon human/vehicle detection.

5.5 Remote Access and Notifications

Stay connected to your property from anywhere using the ANNKE Vision App on your smartphone, tablet, or computer. The app allows you to view live streams, playback recorded footage, and receive instant push notifications or email alerts when motion is detected. This feature ensures you are always aware of activities around your monitored areas.
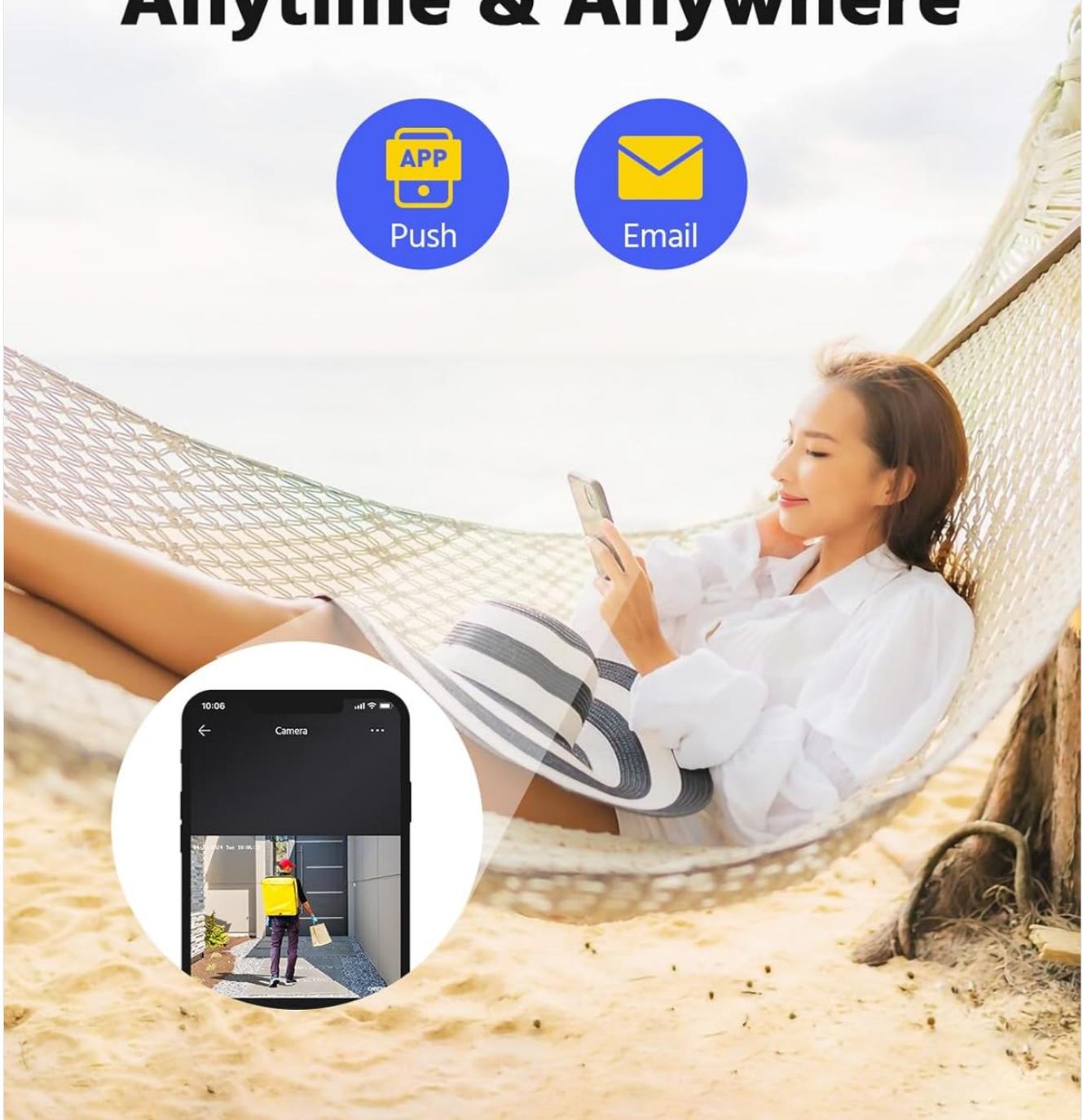
Figure 5.5: A person relaxing on a beach while remotely viewing live camera footage on a smartphone, illustrating the convenience of remote access.

5.6 Alexa Compatibility

The ANNKE security system is compatible with Amazon Alexa. You can integrate your cameras with Alexa-enabled devices to view live camera feeds on smart displays with simple voice commands, enhancing convenience and smart home integration.
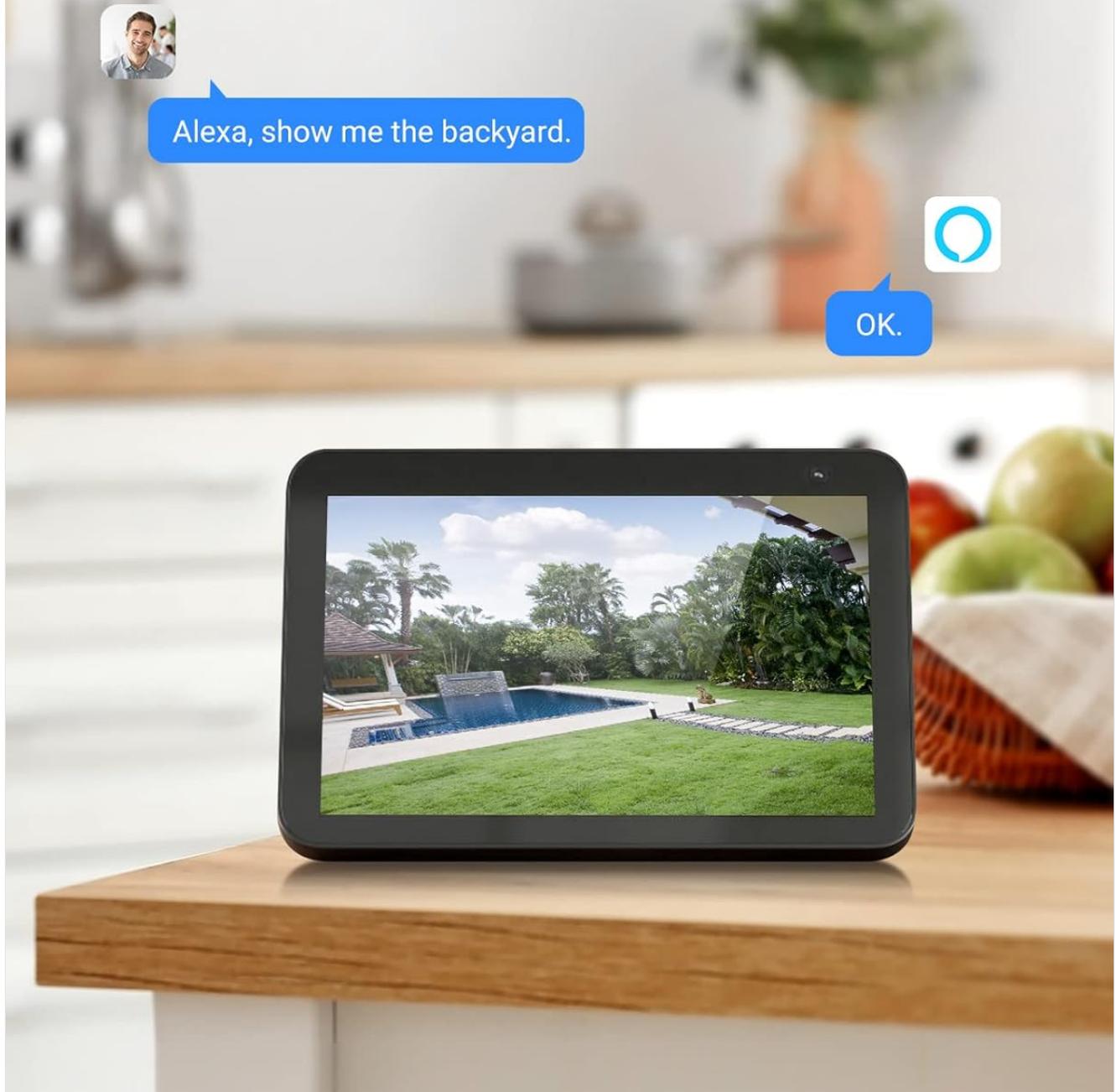
Figure 5.6: An example of Alexa integration, showing a user asking Alexa to display the backyard camera feed on a smart display.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your security system.

- **Camera Lens Cleaning:** Periodically clean camera lenses with a soft, damp cloth to remove dust, dirt, or water spots that may obscure the view. Avoid abrasive cleaners.
- **Firmware Updates:** Check the ANNKE official website or the ANNKE Vision app regularly for firmware updates. Keeping your NVR and cameras updated ensures access to the latest features and security patches.

- **Cable Inspection:** Inspect all network and power cables for any signs of wear, damage, or loose connections. Secure or replace damaged cables promptly.
- **NVR Ventilation:** Ensure the NVR unit is placed in a well-ventilated area, free from obstructions, to prevent overheating.
- **Data Backup:** Regularly back up important recorded footage to an external storage device or cloud service to prevent data loss.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your ANNKE security system.

Problem	Possible Cause	Solution
No video display from camera	Loose cable connection, no power to camera, NVR port issue, camera fault.	Check PoE cable connection at both ends. Ensure NVR is powered on. Try connecting the camera to a different PoE port on the NVR. Restart the NVR.
NVR not powering on	Power adapter not connected, faulty power outlet, faulty power adapter.	Ensure power adapter is securely connected to NVR and a working power outlet. Test the outlet with another device. Contact support if adapter is suspected faulty.
Cannot access system remotely	Network connectivity issues, incorrect app settings, firewall blocking.	Verify NVR is connected to the internet. Check router settings (port forwarding if necessary). Ensure ANNKE Vision app settings are correct. Disable VPN temporarily to test.
False motion detection alerts	High sensitivity, environmental factors (trees, animals), incorrect detection zone setup.	Adjust motion detection sensitivity in NVR settings or app. Refine detection zones to exclude areas with frequent non-threat movements. Utilize AI human/vehicle detection.
No audio from camera	Microphone disabled, volume too low, camera fault.	Check NVR or app settings to ensure microphone is enabled and volume is adequate. Ensure camera is not obstructed.

8. WARRANTY AND SUPPORT

ANNKE products are designed for reliability and performance. For specific warranty details, please refer to the warranty card included with your product or visit the official ANNKE website. If you encounter any issues not covered in this manual or require further assistance, please contact ANNKE customer support through their official website or the contact information provided in your product documentation.

Online Support: www.annke.com/support