ANNKE WS500

ANNKE WS500 5MP Super HD Wireless Security Camera System

User Manual

Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your ANNKE WS500 5MP Super HD Wireless Security Camera System. Please read this manual thoroughly before using the product to ensure proper setup and functionality. Keep this manual for future reference.

Product Overview

The ANNKE WS500 system is designed for reliable indoor and outdoor surveillance, featuring advanced imaging and connectivity technologies.

Key Features:

- **5MP Super HD & EXIR 3.0 Night Vision:** Captures clear 5-megapixel images. EXIR 3.0 technology enhances low-light performance, providing bright and sharp footage up to 30 meters (100 feet) in complete darkness.
- **2T2R MIMO Antennas:** Equipped with dual antennas and MIMO technology for improved anti-interference capabilities and a stronger, more stable WiFi signal, supporting smooth 5MP streaming up to 122 meters (open areas).
- **H.265+ Video Compression:** Offers superior compression efficiency, reducing bandwidth usage and storage requirements by up to 80% compared to H.264, allowing for more video storage and smoother streaming.
- **Robust IP66 Weatherproof Casing:** Constructed from durable aluminum and premium ABS materials, ensuring resistance to impacts and corrosion. The waterproof and dustproof design allows for reliable operation in various environmental conditions, from -22°F to 140°F.
- **Hi-Fi Audio Recording:** Features a noise-canceling microphone for high-fidelity, unidirectional audio recording up to 4.8 meters (16 feet). This allows for ambient sound capture during live viewing or playback. Audio recording can be disabled if not required.
- **Digital WDR & 3D DNR:** Digital Wide Dynamic Range (WDR) balances bright and dark areas for clear images in high-contrast scenes. 3D Digital Noise Reduction (DNR) reduces image noise for cleaner video, especially in low

light.

Setup

1. Unpacking and Initial Inspection

Carefully unpack all components. Inspect for any signs of damage. If any items are missing or damaged, contact customer support immediately.

2. Camera Placement

Choose strategic locations for your cameras that provide optimal coverage and are within range of the NVR's WiFi signal. Ensure the cameras are positioned to avoid direct sunlight or strong backlighting that could affect image quality. The cameras are IP66 weatherproof for outdoor use.



Image: The ANNKE WS500 camera is designed with an IP66 weatherproof casing, suitable for outdoor installation and operation in various weather conditions, including rain.

3. Powering the System

Connect the power adapters to the cameras and the NVR (Network Video Recorder). Ensure all connections are secure. The system is designed for plug-and-play installation.



Image: A visual representation of the plug-and-play installation process, showing the camera and NVR connected to power sources.

4. Network Connection

For initial setup and remote access, connect the NVR to your router via an Ethernet cable. The cameras will connect wirelessly to the NVR. The 2T2R MIMO antennas provide a strong and stable wireless connection.



Image: The camera features 2T2R MIMO antennas, designed to provide a stronger and more reliable wireless signal for enhanced connectivity.

5. Mobile App Setup

Download the official ANNKE mobile application from your device's app store. Follow the in-app instructions to add your NVR system. This typically involves scanning a QR code on the NVR or manually entering device details. Ensure your mobile device is connected to the same network as the NVR during initial setup.

Operating the System

1. Live View

Access the live feed from your cameras via the connected monitor or the mobile app. You can switch between cameras and view multiple feeds simultaneously.

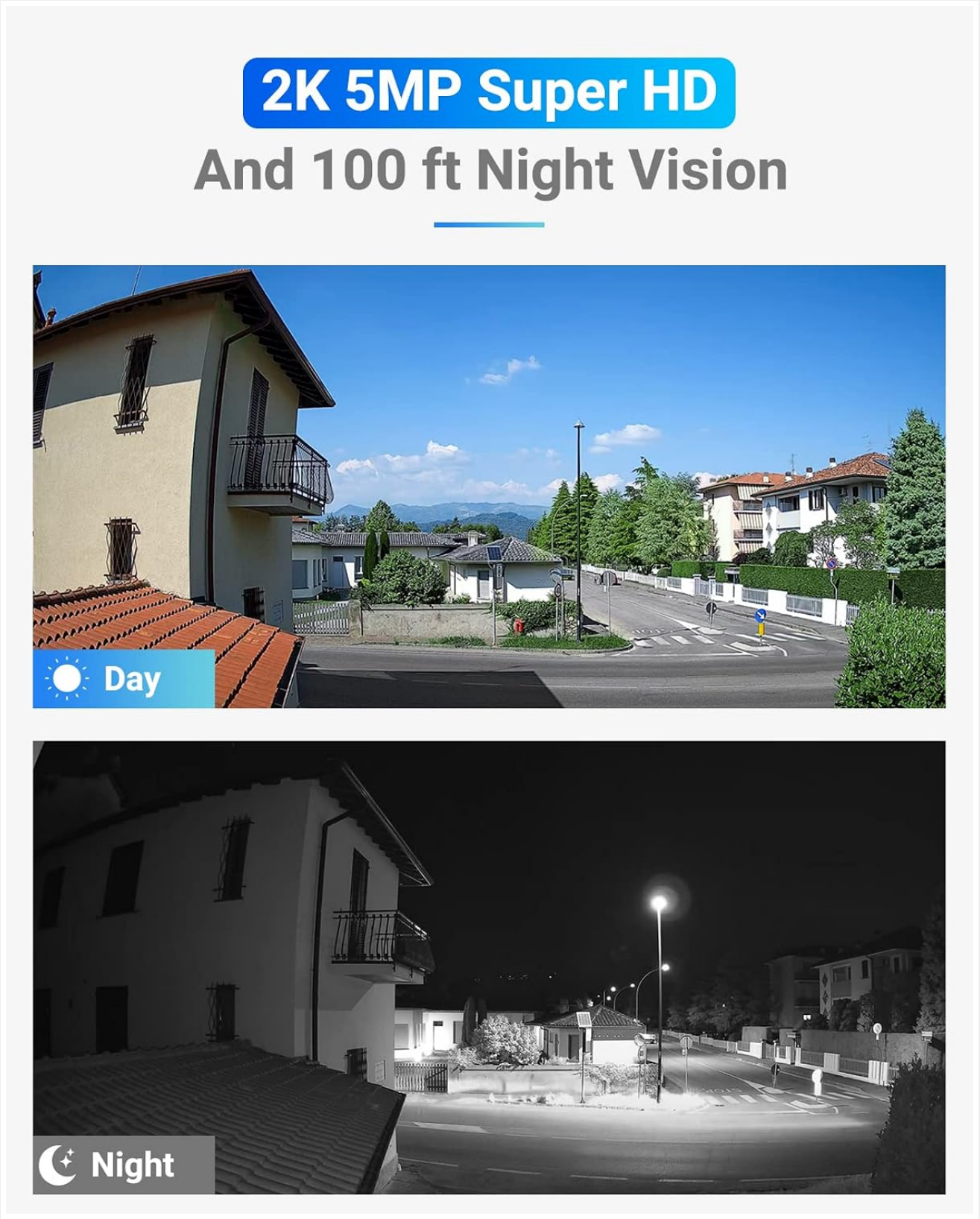


Image: A comparison demonstrating the camera's 5MP Super HD resolution and effective night vision capabilities, capturing clear images both during the day and in low-light conditions.



Image: This image illustrates the difference in field of view provided by different focal lengths (3.6mm vs. 2.8mm), allowing users to choose the optimal lens for their surveillance needs.

2. Recording Settings

Configure recording schedules (continuous, motion-triggered, or scheduled) through the NVR interface or mobile app. The H.265+ compression technology optimizes storage space.

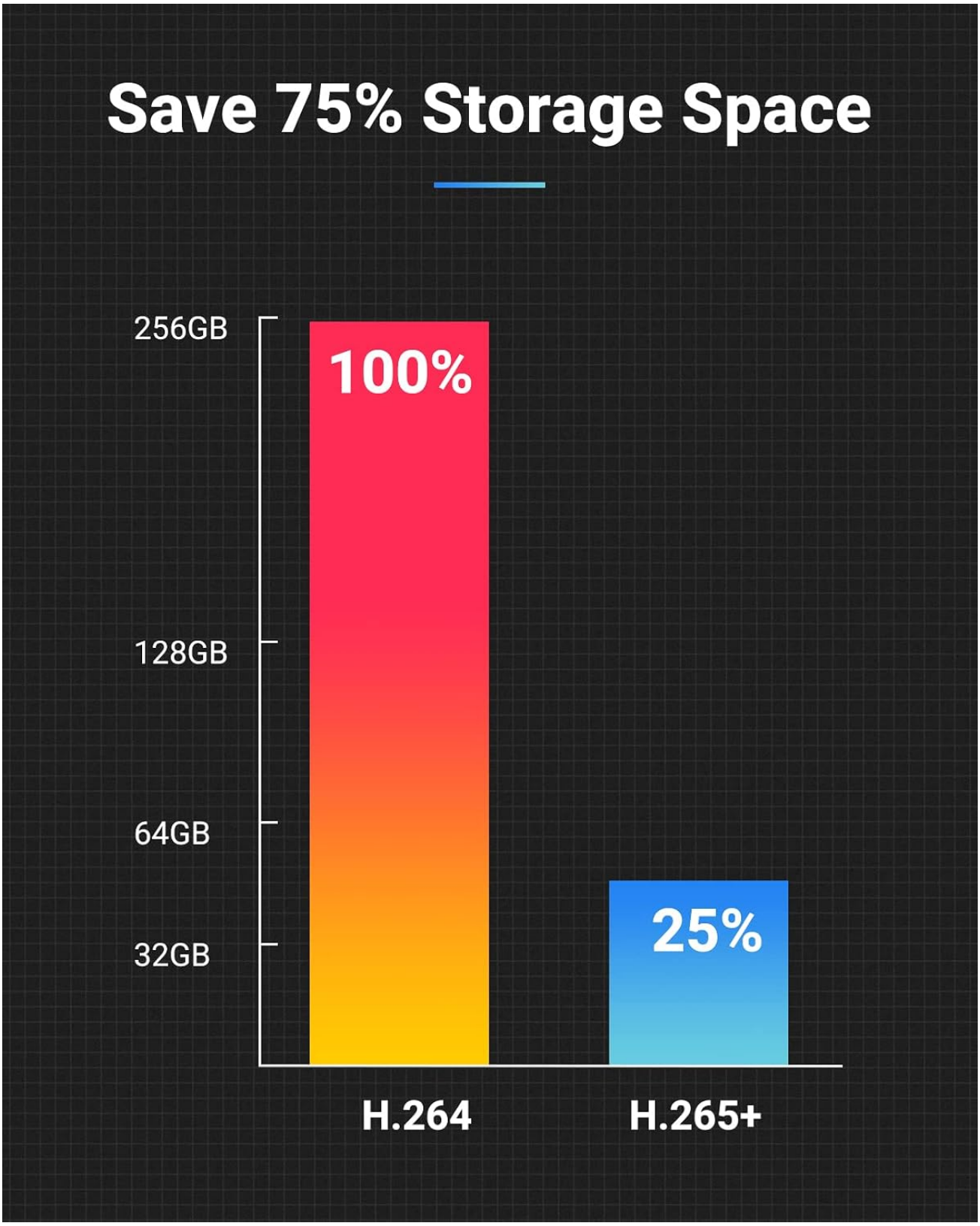


Image: A chart demonstrating the efficiency of H.265+ video compression, which can save up to 75% of storage space compared to H.264, allowing for longer recording times.

3. Playback

Review recorded footage by selecting the desired date and time. You can search for events based on motion detection or other triggers.

4. Audio Monitoring

Utilize the built-in microphone for audio monitoring. This feature can be enabled or disabled in the system settings.

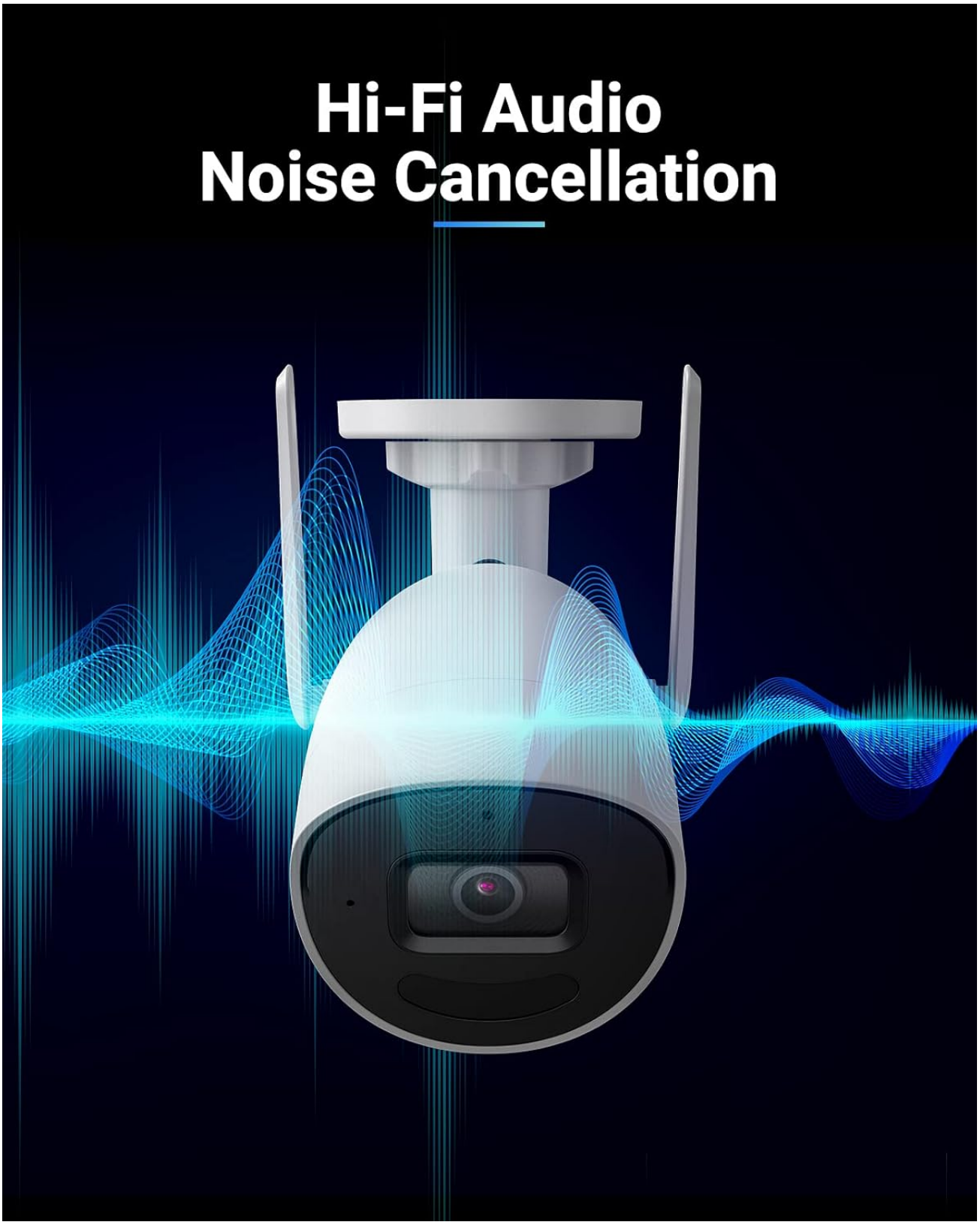


Image: The camera's Hi-Fi audio recording with noise cancellation captures clear sound, enhancing the surveillance capabilities by providing auditory information.

5. Advanced Image Settings

Adjust image parameters such as brightness, contrast, and WDR/DNR settings to optimize video quality for specific environments.

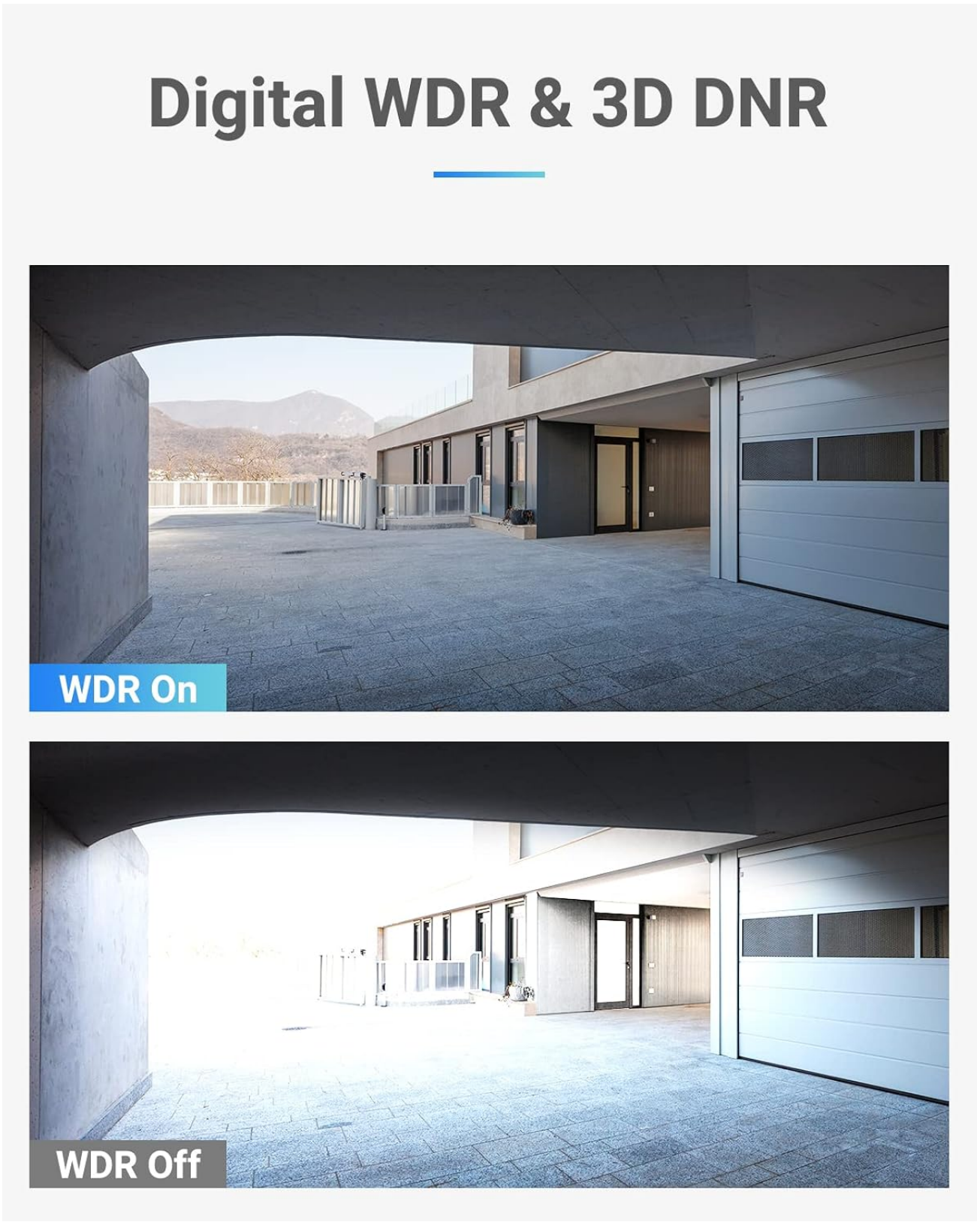


Image: This comparison illustrates the effectiveness of Digital WDR (Wide Dynamic Range) and 3D DNR (Digital Noise Reduction) in improving image clarity, especially in scenes with challenging lighting conditions.

Maintenance

1. Cleaning

Regularly clean the camera lenses with a soft, dry cloth to ensure clear image quality. For outdoor cameras, periodically check for dirt, dust, or spiderwebs that may obstruct the view.

2. Firmware Updates

Check the ANNKE official website or mobile app for available firmware updates. Keeping your system's firmware up-to-date ensures optimal performance, security, and access to new features.

3. Storage Management

Monitor the storage capacity of your NVR. Configure automatic overwriting of old footage or manually delete unnecessary recordings to free up space. The H.265+ compression helps maximize storage efficiency.

Troubleshooting

If you encounter issues with your ANNKE WS500 system, refer to the following common solutions:

- **No Video Feed:** Ensure all cameras and the NVR are powered on and properly connected. Check network cables for the NVR and verify WiFi signal strength for cameras. Restart the NVR and cameras.
- **Poor Image Quality:** Clean camera lenses. Adjust camera position to avoid glare or obstructions. Check advanced image settings (WDR, DNR) in the NVR interface.
- **No Remote Access:** Verify the NVR is connected to the internet. Ensure the mobile app is correctly configured and the NVR is added to your account. Check your router's internet connection.
- **Recording Issues:** Check NVR storage capacity. Verify recording schedules and motion detection settings. Ensure the hard drive is functioning correctly.
- **Weak WiFi Signal:** Reposition cameras or NVR to reduce obstacles. Ensure antennas are properly oriented. Consider using a WiFi extender if necessary, though the 2T2R MIMO antennas are designed for strong signals.
- **Setup Difficulties:** If experiencing issues with initial setup or app configuration, ensure you are following the instructions precisely. Some systems may require a wired LAN connection for the NVR initially before wireless features are fully configured.

For further assistance, please consult the ANNKE support website or contact their customer service.

Specifications

Brand	ANNKE
Model	WS500
Effective Video Resolution	5 MP (1920p recording resolution)
Connectivity Technology	Wireless (Wi-Fi)
Special Features	Night Vision (EXIR 3.0), Audio Recording, IP66 Weatherproof
Material	Plastic (with robust aluminum casing)
Voltage	12 Volts
Power Consumption	24 Watts
Focal Length	2.8 millimeters
Number of Channels	8
Controller Type	iOS (and likely Android via app)
Product Dimensions (L x W x H)	10 x 10 x 10 millimeters (camera)
Weight	4.02 Kilograms (system package)

Warranty and Support

ANNKE products typically come with a limited warranty. Please refer to the warranty card included with your product or visit the official ANNKE website for detailed warranty terms and conditions. For technical support, product inquiries, or service requests, please contact ANNKE customer support through their official channels. Support contact information can usually be found on their website or in the product packaging.