Marshall CV420-30X-IP

Marshall Electronics CV420-30X-IP User Manual

8.5MP 4K UHD 30x Optical Zoom IP Camera

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the Marshall Electronics CV420-30X-IP 8.5MP 4K UHD 30x Optical Zoom IP Camera. Please read this manual thoroughly before using the product to ensure proper and safe operation.

The CV420-30X-IP is a high-performance camera equipped with an 8.5MP sensor, capable of delivering stunning 4K Ultra High Definition (UHD) visuals. It supports resolutions up to 3840x2160p at 60 frames per second, ensuring exceptional detail and true-to-life colors across all HD formats.

Figure 1.1: Angled view of the Marshall CV420-30X-IP camera, showcasing its compact design and prominent lens.

2. SAFETY INFORMATION

Always adhere to the following safety guidelines to prevent damage to the camera and ensure user safety:

- Do not expose the camera to water or moisture.
- Avoid placing the camera in direct sunlight or near heat sources.
- Use only the power adapter specified for this device.
- Do not attempt to open or service the camera yourself. Refer all servicing to qualified personnel.
- Ensure proper ventilation around the camera to prevent overheating.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- Marshall CV420-30X-IP Camera Unit
- Power Adapter
- Mounting Bracket (if applicable)
- Quick Start Guide

4. PRODUCT OVERVIEW

Familiarize yourself with the components of your CV420-30X-IP camera.

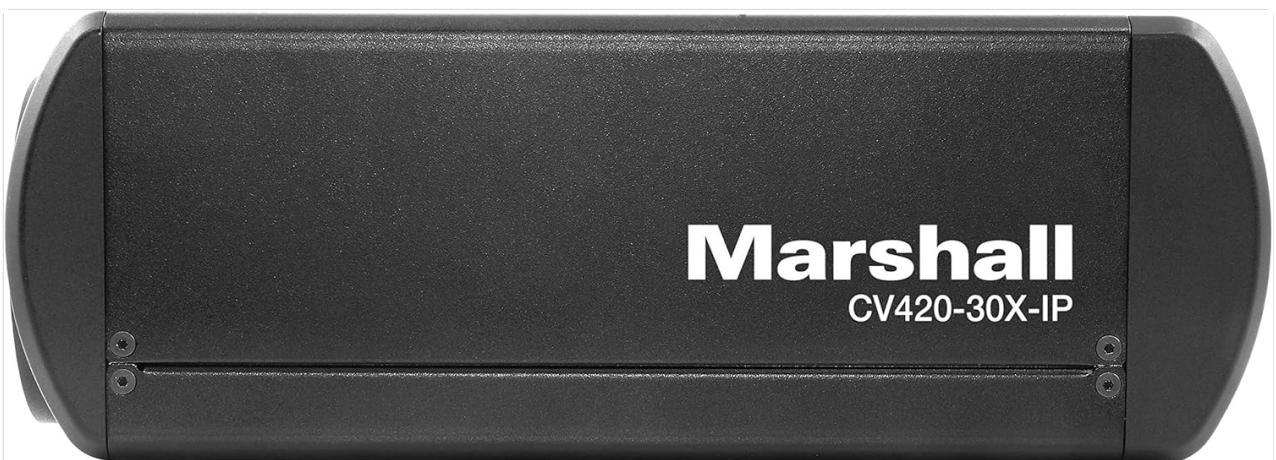Figure 4.1: Front view of the camera, highlighting the 30x optical zoom lens and status indicator light.

Figure 4.2: Top view of the camera, showing the Marshall branding and mounting points.

4.1. Key Components

- **Lens:** 30x Optical Zoom lens with a maximum aperture of 2f and maximum focal length of 135mm.
- **Status Indicator:** LED light indicating camera status (e.g., power, network activity).

- **Mounting Points:** Threaded holes for secure installation.
- **Connectivity Ports:** (Refer to specific model for exact ports, typically Ethernet, Power, etc.)

5. SETUP

5.1. Physical Installation

Before installation, ensure the mounting surface is sturdy enough to support the camera's weight (approximately 2 pounds) and dimensions (11 x 6.7 x 3.7 inches).

1. Choose a suitable location that provides the desired field of view and is protected from extreme environmental conditions.
2. Secure the mounting bracket (if included) to the chosen surface using appropriate screws.
3. Attach the CV420-30X-IP camera to the mounting bracket, ensuring it is firmly secured.
4. Connect the power adapter to the camera and plug it into a power outlet.
5. Connect an Ethernet cable from the camera's network port to your network switch or router for IP connectivity.

Figure 5.1: Angled view of the camera, illustrating its form factor for installation purposes.

5.2. Network Configuration

The CV420-30X-IP is an IP camera, requiring network configuration for remote access and video streaming.

- Upon initial power-up, the camera will typically attempt to obtain an IP address via DHCP.
- Use the Marshall IP Camera Tool (available on the Marshall website) to discover the camera on your network and configure its IP settings (e.g., static IP, subnet mask, gateway).
- Ensure the camera's IP address is within the same subnet as your viewing device or NVR.

- Default login credentials (if any) will be provided in the Quick Start Guide or on the camera's label. Change these immediately after initial setup for security.

6. OPERATING

6.1. Basic Operation

- **Power On:** Once connected to power, the camera will automatically power on. The status indicator light will illuminate.
- **Accessing Video Stream:** Access the camera's web interface via its IP address in a web browser, or integrate it with compatible NVR/VMS software using ONVIF or RTSP protocols.
- **Video Resolution:** The camera supports various resolutions including 1080p, 4K, and 720p. Adjust these settings through the camera's web interface or connected software.

6.2. Advanced Features

- **Optical Zoom:** Utilize the 30x optical zoom feature to magnify distant subjects without loss of image quality. Control zoom via the web interface or integrated software.
- **Focus:** The camera typically features auto-focus. Manual focus adjustments can be made through the web interface if needed.
- **Frame Rate:** Adjust the frame rate (up to 60fps at 4K) to balance video smoothness and network bandwidth usage.
- **Image Settings:** Configure brightness, contrast, saturation, white balance, and other image parameters to optimize video quality for your specific environment.

7. MAINTENANCE

7.1. Cleaning

- Gently wipe the camera body with a soft, dry cloth.
- For the lens, use a lens cleaning cloth and specialized lens cleaning solution. Do not use abrasive materials or harsh chemicals.
- Ensure the camera is powered off before cleaning.

7.2. Firmware Updates

Periodically check the Marshall Electronics website for firmware updates. Firmware updates can improve performance, add new features, and address security vulnerabilities. Follow the instructions provided with the firmware update package carefully.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Power	Power adapter disconnected or faulty outlet.	Check power connections. Try a different outlet. Ensure power adapter is functioning.

Problem	Possible Cause	Solution
No Video Stream	Network connectivity issue, incorrect IP settings, or software configuration.	Verify Ethernet cable connection. Check IP address and network settings. Ensure firewall is not blocking ports. Restart camera and viewing device.
Poor Image Quality	Dirty lens, improper focus, or low light conditions.	Clean the lens. Adjust focus settings. Ensure adequate lighting or adjust camera's low-light settings.
Camera Not Found on Network	Incorrect network segment, DHCP issue, or camera not powered on.	Confirm camera is powered. Use the Marshall IP Camera Tool to scan for devices. Check network cable. Ensure camera and discovery tool are on the same network segment.

9. SPECIFICATIONS

Feature	Detail
Model Number	CV420-30X-IP
Sensor	8.5MP
Video Capture Resolution	1080p, 4K (3840x2160p), 720p
Frame Rate	Up to 60 frames per second (at 4K)
Optical Zoom	30x
Maximum Focal Length	135 Millimeters
Maximum Aperture	2f
Lens Type	Zoom
Connectivity Technology	Wireless (IP)
Video Capture Format	MP4
Product Dimensions	11 x 6.7 x 3.7 inches
Item Weight	2 pounds
Manufacturer	Marshall
ASIN	B07YN5LKLD
Date First Available	October 2, 2019

10. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Marshall Electronics website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.
Website: www.marshall-usa.com
Contact: Refer to the website for contact numbers and support channels.