NUROUM V21

NUROUM V21 2K Webcam Instruction Manual

Model: V21

1. INTRODUCTION

The NUROUM V21 2K Webcam is designed for high-quality video calls and live streaming, offering advanced features such as 2K resolution, AI-powered auto-framing, 5X digital zoom, HDR technology, and a 4-element noise-canceling microphone array. This manual provides detailed instructions for setting up and operating your webcam to ensure optimal performance.
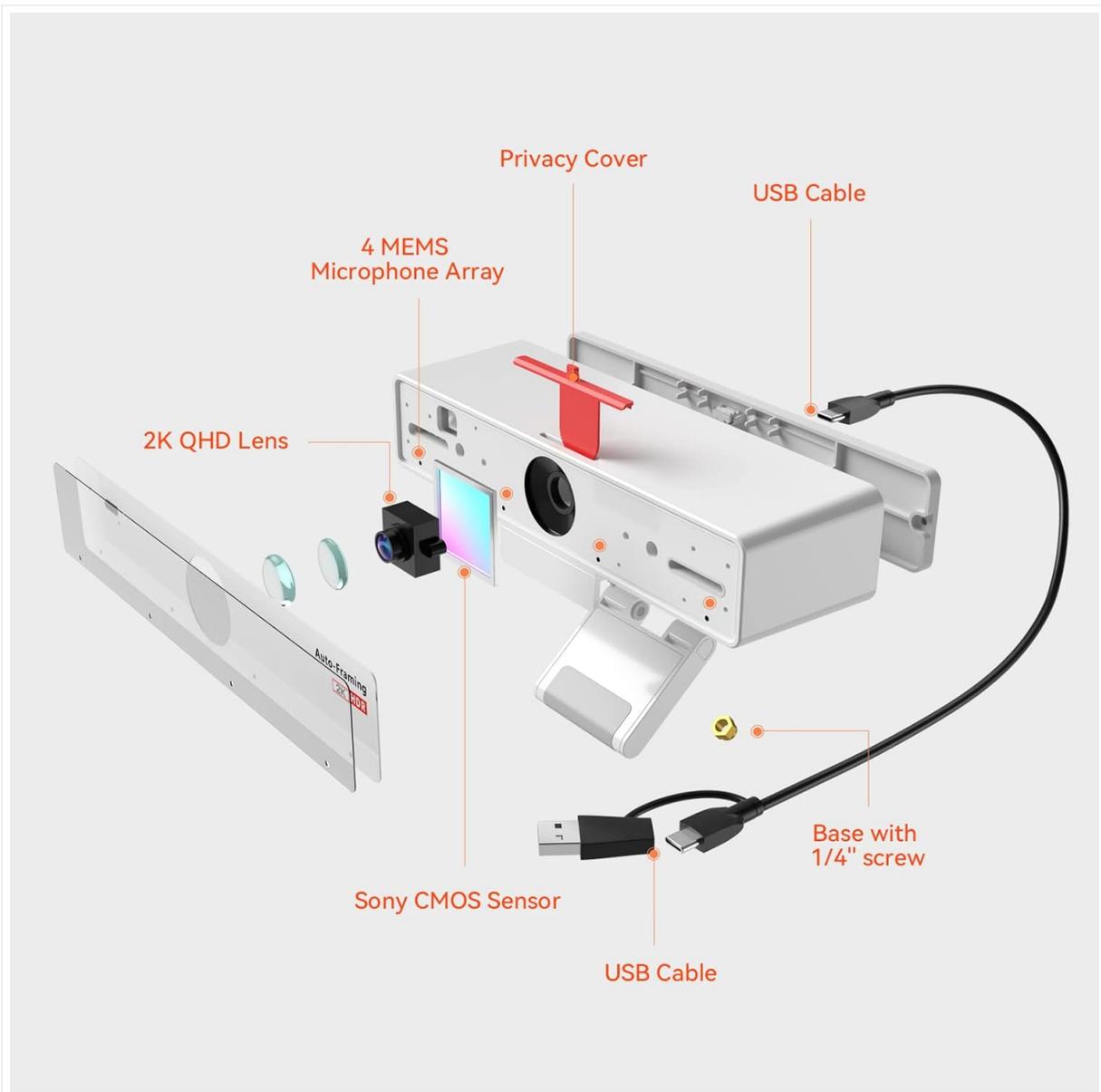
2. WHAT'S IN THE BOX

- NUROUM V21 Webcam
- Remote Control
- USB2.0 Type-C Cable
- Warranty Card
- Instruction Manual

Please ensure all items are present before proceeding with setup.

3. PRODUCT OVERVIEW

The NUROUM V21 webcam features a sleek design with integrated components for enhanced functionality.

Image 3.1: Diagram showing the main components of the NUROUM V21 Webcam, including the 2K QHD Lens, 4 MEMS Microphone Array, Privacy Cover, USB Cable, Sony CMOS Sensor, and Base with 1/4'' screw.

- **2K QHD Lens:** Captures video at up to 1440P@30fps or 1080P@60fps.
- **4 MEMS Microphone Array:** Built-in microphones for stereo audio capture with AI noise cancellation.
- **Privacy Cover:** Integrated slide to physically block the camera lens for privacy.
- **USB Cable:** Type-C cable for power and data connection.
- **Sony CMOS Sensor:** Premium Starvis CMOS sensor for crisp, natural video even in low light.
- **Base with 1/4'' screw:** Universal mounting clip compatible with laptops, monitors, and tripods.
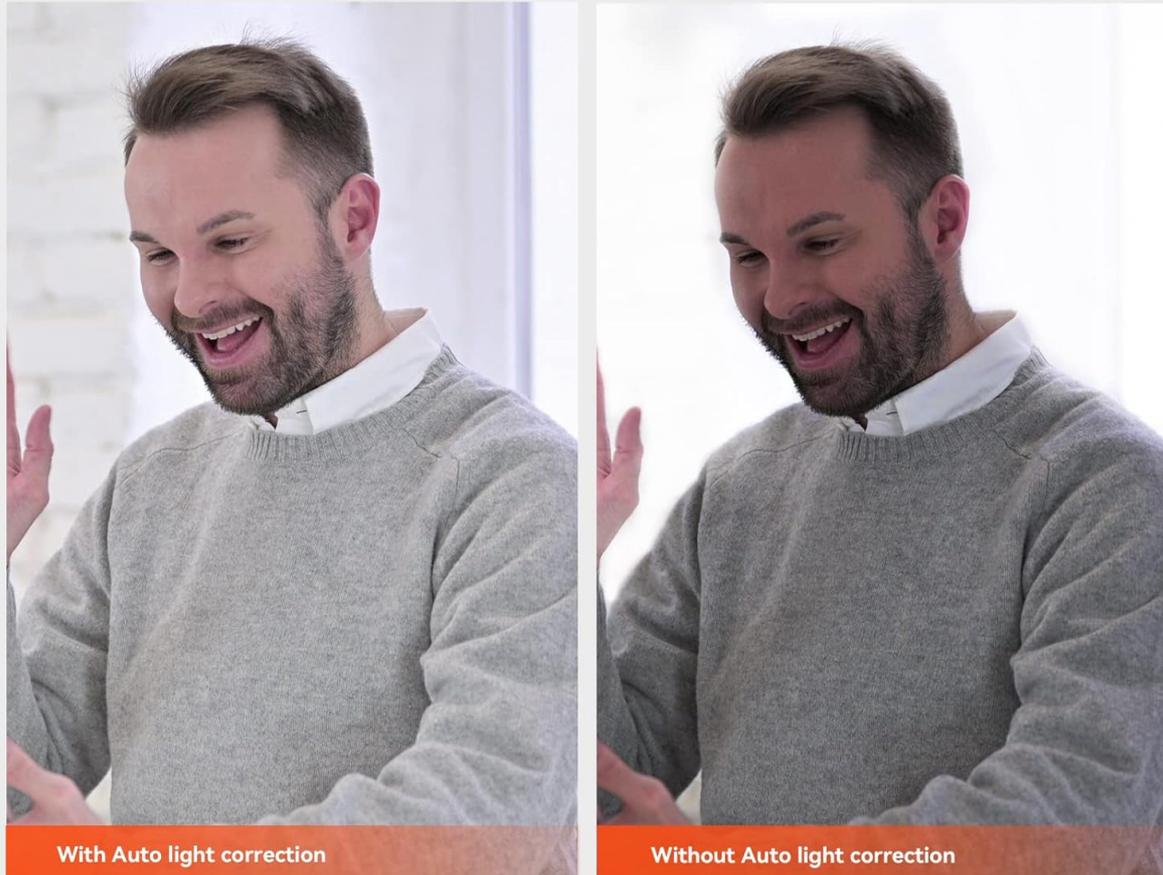
4. SETUP

4.1 Mounting the Webcam

The NUROUM V21 webcam features a versatile mounting clip. You can place it on top of a desktop monitor, a laptop screen, or attach it to a compatible tripod using the 1/4'' screw hole on the base.

4.2 Connecting to Your Computer (Plug and Play)

The webcam is designed for plug-and-play functionality. Simply connect the provided USB2.0 Type-C

cable from the webcam to an available USB port on your computer. The computer will automatically recognize the device without requiring additional software or driver installation.

ENJOY SUPERB RESOLUTION WITH AUTO LIGHT CORRECTION

With Auto light correction

Without Auto light correction

Image 4.1: The NUROUM V21 Webcam mounted on a laptop, illustrating the simple USB plug-and-play connection.

5. OPERATING INSTRUCTIONS

5.1 Video Quality and HDR

The V21 webcam supports FHD 1080P@60fps and 1440P@30fps video calls. It incorporates HDR technology and auto light correction to optimize your appearance even in challenging lighting conditions (low-light or backlit environments).

1080P VIDEO CONFERENCE CAMERA

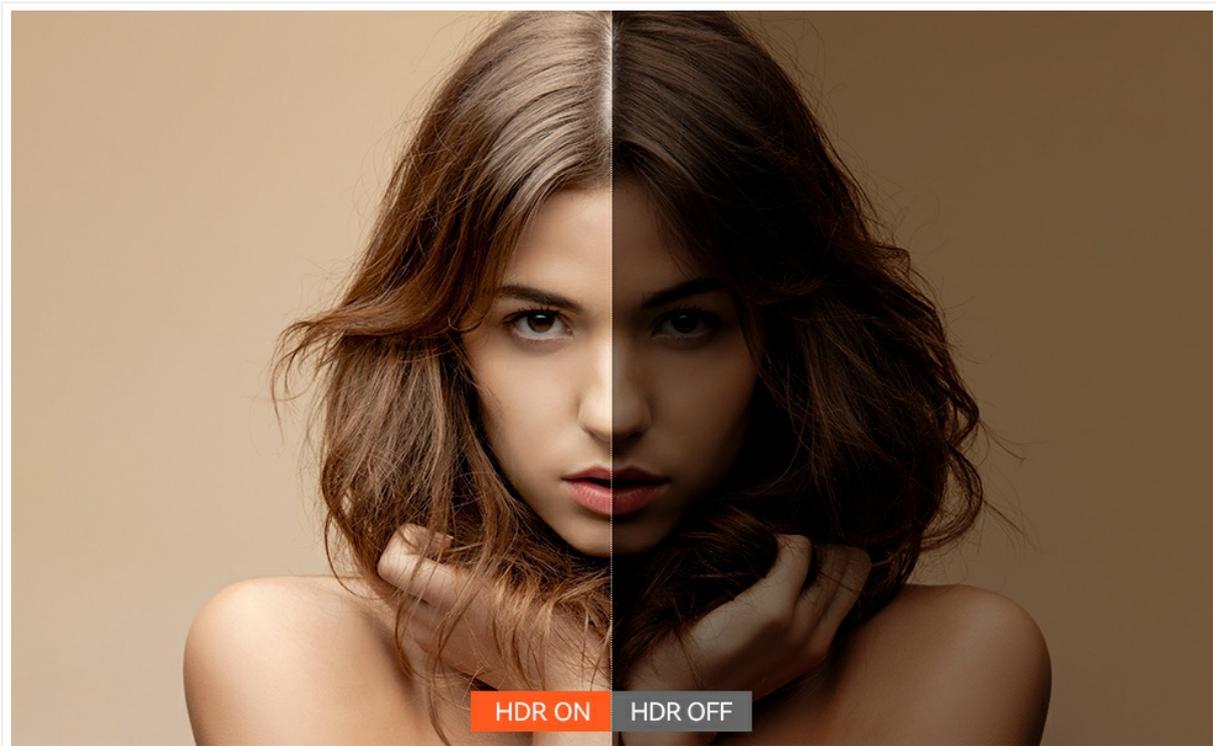**Image 5.1:** Visual comparison demonstrating the smoother motion of 60fps video compared to 30fps.

Image 5.2: A split image showing the improved clarity and exposure with auto light correction enabled versus disabled.

5.2 AI-Powered Auto-Framing and 5X Zoom

The AI-powered auto-framing function automatically detects and centers the presenter within its 93.1° field of view. This feature is active under 1080P@30fps. The 5X digital zoom allows you to adjust the field of view, either widening it to include more of the environment or narrowing it to focus on yourself. Both auto-framing and zoom can be controlled via the remote.

Image 5.3: The webcam intelligently tracks and frames individuals in a meeting room, ensuring they remain centered.

Image 5.4: Illustration of 1X, 3X, and 5X digital zoom levels, controlled by the remote.

5.3 AI Noise Cancellation

The integrated 4-element microphone array records stereo audio up to 5m/16ft. It utilizes 120° circular-sector directional voice pickup technology and AI noise suppression to filter out unwanted background noises like wind or keyboard typing. Automatic Gain Control ensures your voice is clearly picked up even from a distance.

Image 5.5: Diagram illustrating how the 4-element microphone array captures voice and filters out noise.

UNIVERSAL COMPATIBILITY

Chromebook **Windows** **Mac** **Linux**

Image 5.6: A user demonstrating the 16ft/5m 120° circular voice pickup range of the webcam.

A Webcam, with professional microphones

Before   After

Image 5.7: Visual representation of audio waveforms, showing how noise (like keyboard typing or fan noise) is reduced after noise cancellation.

5.4 Remote Control Functions

The included remote control allows for convenient adjustment of webcam settings without physical interaction. Functions include manual zoom in/out, portrait mode, mirror mode, and toggling auto-framing and HDR.
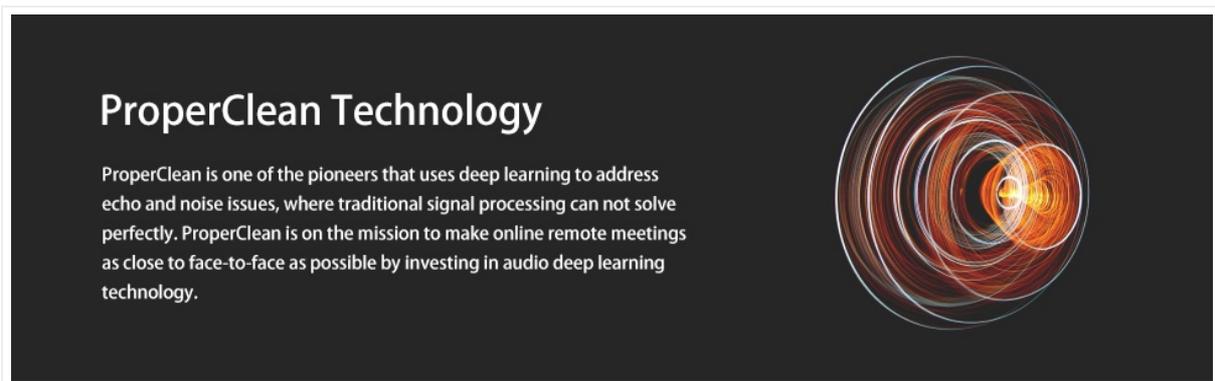
Your browser does not support the video tag.

Video 5.1: A short preview video demonstrating the remote control's functionality, including zoom and auto-framing adjustments. This video is provided by the seller.

6. COMPATIBILITY

The NUROUM V21 webcam offers broad compatibility with various operating systems and conferencing platforms:

- **Operating Systems:** Windows, macOS, Linux, ChromeOS.
- **Conferencing Platforms:** Zoom, Skype, Slack, Google Hangouts, GoToMeeting, Facebook, YouTube Live, Webex, Twitch, TikTok.

ProperClean Technology

ProperClean is one of the pioneers that uses deep learning to address echo and noise issues, where traditional signal processing can not solve perfectly. ProperClean is on the mission to make online remote meetings as close to face-to-face as possible by investing in audio deep learning technology.

Image 6.1: Icons representing various compatible operating systems (Chromebook, Windows, Mac, Linux) and conferencing platforms (Skype, YouTube, Twitch, Zoom, Webex, Slack, Gotomeeting, TikTok).

7. MAINTENANCE

To ensure the longevity and optimal performance of your NUROUM V21 webcam:

- Keep the lens clean using a soft, dry cloth.
- Utilize the inbuilt privacy cover when the camera is not in use to protect the lens and your privacy.
- Avoid exposing the webcam to extreme temperatures or humidity.
- Do not attempt to disassemble the device.

8. TROUBLESHOOTING

If you encounter issues with your NUROUM V21 webcam, consider the following common solutions:

- **No Video/Audio:** Ensure the USB cable is securely connected to both the webcam and your computer. Try a different USB port. Check your computer's privacy settings to ensure camera and microphone access is granted to your applications.

- **Poor Video Quality:** Verify that your lighting conditions are adequate. While HDR and auto light correction help, extreme darkness or direct backlighting can still affect quality. Ensure the lens is clean.
- **Remote Control Unresponsive:** Check if the remote's batteries need replacement. Ensure there are no obstructions between the remote and the webcam.
- **Auto-Framing Issues:** Remember that auto-framing functions optimally under 1080P@30fps. Rapid movements or multiple subjects might affect its performance.

For further assistance, refer to the warranty card for support contact information.

9. SPECIFICATIONS

Feature	Detail
Brand	NUROUM
Model Number	V21
Video Capture Resolution	1440P@30fps, 1080P@60fps
Photo Sensor Technology	CMOS (Premium Starvis)
Microphone	4-element array with AI Noise Cancellation
Zoom	5X Digital Zoom
Special Features	HDR, Auto Light Correction, Auto-Framing, Privacy Cover
Connectivity Technology	USB (Type-C)
Item Weight	1.17 pounds
Package Dimensions	8.74 x 5.67 x 3.23 inches

10. WARRANTY AND SUPPORT

Your NUROUM V21 Webcam comes with a warranty. Please refer to the included Warranty Card for detailed information regarding warranty coverage, terms, and conditions. For technical support or service inquiries, please contact NUROUM customer service using the information provided on your warranty card or visit the official NUROUM website.