

## Optoma UHZ50

# Optoma UHZ50 Smart 4K UHD Laser Home Theater Projector User Manual

Model: UHZ50

[Introduction](#)   [Setup](#)   [Operation](#)   [Maintenance  
Warranty &  
Support](#)   [Troubleshooting](#)   [Specifications](#)

## 1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your Optoma UHZ50 Smart 4K UHD Laser Home Theater Projector. The UHZ50 is a compact smart 4K UHD laser projector designed for home entertainment, offering reliable laser 4K UHD resolution, HDR and HLG compatibility, and 3,000 lumens of brightness. It supports 1080p 240Hz for smooth gaming with a low input lag of 4ms, and features flexible installation options including 1.3x zoom and vertical lens shift. Smart features include integration with Alexa, Google Assistant, IFTTT, and Creative Cast.



Figure 1.1: Front view of the Optoma UHZ50 projector, showcasing its sleek design and prominent lens.

## 2. SETUP

### 2.1 Unboxing and Package Contents

Carefully remove all components from the packaging. Ensure all items listed below are present:

- Optoma UHZ50 Projector
- AC power cord
- Remote control (including CR2025 battery)
- Quick start user manual
- WUSB wireless adapter

## 2.2 Physical Placement

Position the projector on a stable, flat surface or mount it securely. Consider the throw distance and screen size for optimal viewing. The UHZ50 offers flexible installation with its 1.3x zoom and vertical lens shift capabilities, allowing for precise image alignment without moving the projector.



Figure 2.1: Top view of the projector, highlighting the zoom and lens shift controls for image adjustment.



Figure 2.2: Illustration of keystone correction, demonstrating how to adjust the image shape to be perfectly rectangular.

## 2.3 Connections

Connect your video sources (e.g., Blu-ray player, gaming console, streaming device) to the projector's HDMI inputs. The UHZ50 features multiple HDMI ports for versatile connectivity. For audio output, use the dedicated audio out port or the eARC/ARC compatible HDMI port to connect to an external sound system.



Figure 2.3: Rear panel of the projector, displaying various input and output ports including HDMI, USB, and audio connections.



Figure 2.4: The eARC (Enhanced Audio Return Channel) feature supports high-quality audio formats like Dolby Digital 5.1, Dolby Atmos, and DTS-X.

## 2.4 Power On

Connect the AC power cord to the projector and a power outlet. Press the power button on the projector or the remote control to turn on the device. Allow a few moments for the projector to initialize.

### 3. OPERATION

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#### 3.1 Basic Controls

Use the remote control or the control panel on the projector to navigate menus, select input sources, and adjust volume. The remote control provides direct access to various functions.



Figure 3.1: The included remote control for convenient operation of the projector.

#### 3.2 Image Adjustment

Adjust the focus and zoom using the rings around the lens. Utilize the vertical lens shift for fine-tuning the image position without distorting the picture. Digital keystone correction is also available for correcting trapezoidal image distortion.

##### 3.2.1 HDR Adjustment Options

The UHZ50 offers various HDR options, including four HDR picture modes (Bright, Film, Detail, Standard) and an adjustable HDR brightness setting. These settings allow you to fine-tune the image quality to suit your viewing environment and content.

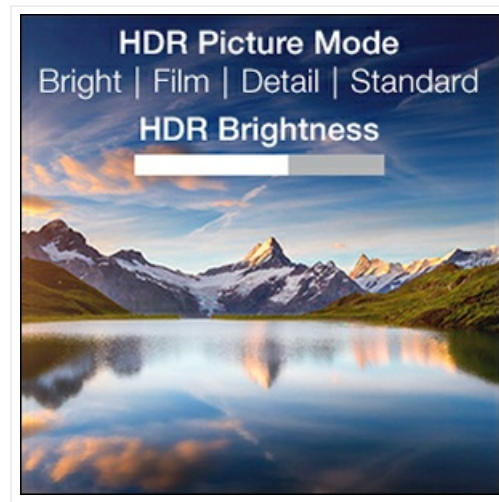


Figure 3.2: On-screen display showing the available HDR Picture Modes and the HDR Brightness adjustment.

### 3.2.2 Cinematic Color

The Cinema display mode enhances the color gamut and applies a cinema-tailored gamma curve, providing true-to-life colors. This mode specifically enhances reds for more natural skin tones and improved color saturation, contributing to a more enjoyable viewing experience.



Figure 3.3: An example of the vibrant and accurate color reproduction achieved by the projector, ideal for cinematic content.

### 3.3 Smart Features

The Optoma UHZ50 integrates with smart home ecosystems. You can use voice commands via Alexa or Google Assistant to control basic functions such as powering on/off, switching inputs, and adjusting volume. The projector also supports IFTTT (If This Then That) for custom automation.





## Optoma **Smart+**

Ask Alexa or Google to power on & off, switch sources, adjust volume & more. Includes IFTTT support.

Amazon Echo Dot not included.

Figure 3.4: The projector seamlessly integrates with smart home devices like the Amazon Echo Dot for voice control.

### 3.4 Gaming Features

For gamers, the UHZ50 offers ultra-fast 240Hz refresh rates for blur-free visuals and enhanced smoothness. When combined with the Enhanced Gaming Mode, it achieves a low response time of 4ms at 1080p resolution and 16.9ms at 4K UHD, providing a competitive edge.



Figure 3.5: A dynamic gaming scene projected, demonstrating the projector's capability for fast-paced action.

## 4. MAINTENANCE

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## 4.1 Laser Light Source

The Optoma UHZ50 utilizes a laser light source, which provides exceptional brightness and a long operational life of up to 30,000 hours. This eliminates the need for frequent lamp replacements, reducing maintenance requirements and ensuring consistent image quality throughout its lifespan.

## 4.2 Cleaning

To maintain optimal performance, regularly clean the projector's exterior with a soft, dry cloth. For the lens, use a specialized lens cleaning cloth and solution. Avoid abrasive cleaners or solvents. Ensure proper ventilation around the projector to prevent overheating.

# 5. TROUBLESHOOTING

This section addresses common issues you might encounter with your Optoma UHZ50 projector. For more complex problems, refer to the official Optoma support resources.

Problem	Possible Cause	Solution
No image displayed	Power cable disconnected; incorrect input source selected; source device not powered on.	Ensure power cable is securely connected. Verify the correct HDMI or other input source is selected. Check if the source device (e.g., Blu-ray player) is powered on and functioning.
Image is blurry or out of focus	Focus ring not adjusted; projector not perpendicular to screen; lens shift not optimized.	Adjust the focus ring on the lens until the image is sharp. Ensure the projector is positioned squarely to the screen. Use lens shift and keystone correction for fine-tuning.
No audio or low audio	Volume too low; external audio system not connected or configured correctly; audio format incompatibility.	Increase the projector's volume. Check connections to external audio systems (e.g., soundbar, receiver) and ensure they are powered on and set to the correct input. Verify audio format compatibility.
Image has distorted shape (trapezoid)	Projector is not level or angled relative to the screen.	Use the digital keystone correction feature to adjust the image shape. Ideally, position the projector as perpendicular to the screen as possible to minimize the need for keystone correction.
Intermittent signal or data issues (flashing, banding)	HDMI cable quality or length; HDCP handshake issues; source device output settings.	Use certified Ultra High Speed HDMI cables, especially for 4K content. Try shorter cables if possible. Reboot the projector and source device. Check source device display settings.
Unusual buzzing sound from projector	Internal component issue; fan obstruction.	Ensure ventilation vents are clear. If the sound persists and is disruptive, contact Optoma customer support for assistance.

# 6. SPECIFICATIONS

Key technical specifications for the Optoma UHZ50 projector:

Feature	Detail
Model Number	UHZ50
Display Resolution	3840 x 2160 (4K UHD)

Feature	Detail
Brightness	3000 Lumens
Light Source	Laser
Light Source Life	Up to 30,000 hours
Connectivity Technology	HDMI (multiple ports), USB, RJ-45, RS-232, Audio Out
Special Features	Built-In Speaker, Digital Keystone Correction, 1.3x Zoom, Vertical Lens Shift, Smart Features (Alexa/Google/IFTTT)
Recommended Uses	Entertainment, Gaming, Home Cinema, Movie
Product Dimensions	13.27 x 10.43 x 4.25 inches
Item Weight	10.5 pounds
Batteries	1 Lithium Metal battery (included for remote)
First Available Date	November 1, 2021

## 7. WARRANTY & SUPPORT

### 7.1 Product Warranty

The Optoma UHZ50 projector typically comes with a manufacturer's warranty. For specific details regarding the warranty period and coverage, please refer to the warranty card included with your product or visit the official Optoma website. It is recommended to register your product upon purchase to facilitate any future warranty claims.

### 7.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or service inquiries, please contact Optoma customer support. You can find contact information, FAQs, and additional resources on the official Optoma support website. When contacting support, please have your product model number (UHZ50) and serial number ready.

