

# 4K UHD Home Theater Projector

## UHD50



Bring the cinematic 4K UHD experience home with the **Optoma UHD50**



4K UHD and bright 2,400 lumens with RGBRGB color wheel



HDR technology with HDR10 and DCI-P3 wide color gamut support for brighter whites, deeper black-levels and vivid color



Dynamic Black delivers 500,000:1 contrast ratio for exceptional black levels



HDMI 2.0 and HDCP 2.2 technologies ensure compatibility with 4K UHD video sources for amazing details, clarity and vibrant colors



4K UHD HDR gaming ready with the latest consoles and gaming PCs



Vertical lens-shift and 1.3x zoom for easy and flexible installation

TRUE **4K** 4KULTRA HD™

2160P



**HDMI**™  
HIGH DEFINITION MULTIMEDIA INTERFACE

**HDCP 2.2**

**16:9**  
WIDESCREEN  
ENHANCED



Transform your living room into a high-quality home cinema with the affordable Optoma UHD50 4K UHD home theater projector. Its high 4K UHD resolution, 2,400 lumens of brightness, wide color gamut support and up to 500,000:1 contrast ratio combined with HDR compatibility delivers amazing detail, clarity and vibrant colors that bring your favorite Hollywood blockbusters and games to life.

The latest Texas Instruments 4K UHD DLP chipset with high-performance DMD and XPR video processing technology forms the heart of the Optoma UHD50 and meets the CTA's definition of 4K Ultra HD. This innovative fast-switching technology displays 8.3-million simultaneous distinct pixels at screen sizes up to 140-inches for immersive home cinematic experiences.

A pair of HDMI 2.0 inputs with HDCP 2.2 support ensures the Optoma UHD50 works with the latest 4K UHD video playback devices and game consoles with HDR at 60 Hz refresh rates for unmatched eye-candy and smoothness. A 1.3x optical zoom and 15% vertical lens shift provide installation flexibility.

### CONNECTIVITY (May require optional accessories)



4K UHD Blu-ray Player



4K Game Console



4K Media Streaming



Computers

## 4K UHD HOME THEATER PROJECTOR - UHD50

### OPTICAL/TECHNICAL SPECIFICATIONS

<b>Display Technology</b>	Single 0.47" 4K UHD DMD DLP® Technology by Texas Instruments™
<b>Color Wheel</b>	RGBRGB 6 Segment color wheel
<b>Native Resolution</b>	4K UHD 3840x2160 @ 60Hz with XPR Technology
<b>Maximum Resolution</b>	4K 4096x2160 @ 60Hz
<b>Brightness</b>	2,400 ANSI lumens
<b>Contrast Ratio</b>	Up to 500,000:1 with Dynamic Black
<b>Color Gamut Support</b>	REC.709 color gamut provides rich accurate color based on the HDTV broadcast specification and used with all non-HDR content. DCI-P3 wide color gamut is the equivalent to color in the CIE 1931 color space, resulting in vivid colors
<b>HDR (High Dynamic Range)</b>	HDR10 compatible (REC.2020) Picture Modes: Normal, Bright, Detail, Film HDR SIM (simulate HDR effect with non-HDR content)
<b>4K UHD Upscale</b>	Upscales WXGA, 720p, 1080p, WUXGA, 1440p resolutions and frame rates up to 4K UHD (3840x2160), 60 Hz
<b>Video Processing</b>	UltraDetail Technology enhances image quality by improving image depth and clarity
<b>Color Depth</b>	3840x2160 @30Hz YUV 4:4:4 (8bit, 10bit, 12bit), YUV 4:2:2 (8bit, 10bit, 12bit), YUV 4:2:0 (8bit, 10bit, 12bit) 3840x2160 @60Hz YUV 4:4:4 (8bit), YUV 4:2:2 (8bit), YUV 4:2:0 (8bit, 10bit, 12bit)
<b>Lamp Life and Type*</b>	4000/10,000/15,000 (Bright/ECO/Dynamic)
<b>Projection Method</b>	Front, rear, ceiling mount, table top
<b>Vertical Lens Shift</b>	15% offset (with tolerance +/- 5%)
<b>Uniformity</b>	80%
<b>Offset</b>	100%
<b>Aspect Ratio</b>	16:9 (native), 4:3 and LBX compatible
<b>Throw Ratio</b>	1.21 - 1.59 (with tolerance +/- 5%)
<b>Projection Distance</b>	2.9' - 34.89'
<b>Image Size</b>	34.1" - 302.4 (34.1" to 140" optimal image size)
<b>Projection Lens</b>	F=2.5~ 3.26, f=20.91 ~ 32.62 mm manual focus
<b>Optical Zoom</b>	1.3x
<b>Digital Zoom</b>	0.8 - 2.0
<b>Audio</b>	2x5W speakers (stereo)
<b>Noise Level</b>	28/25dB (Bright/ECO)
<b>Remote Control</b>	Full function home remote control
<b>Operating Temperature</b>	41–104°F (5–40°C), 85% max humidity
<b>Power Supply</b>	AC input 100–240V, 50–60Hz, auto-switching
<b>Power Consumption</b>	317W typical (Bright mode), 348W max (Bright mode), 259W typical (Eco+ mode), 285W max (Eco+ mode)
<b>High Altitude</b>	Operating temp @ sea level to 10000 feet = 23C (max); must manually switch to high altitude mode @ 5000 feet & above (using OSD)

### COMPATIBILITY SPECIFICATIONS

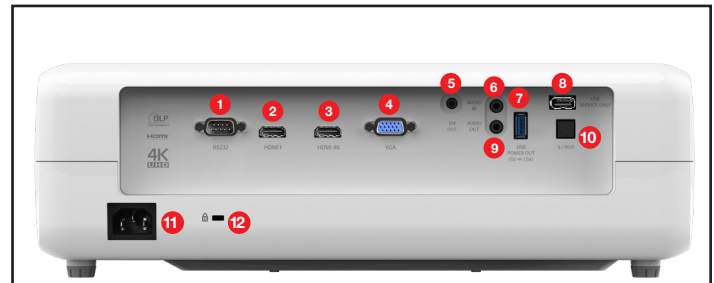
<b>Computer Compatibility</b>	4K UHD 2160p, WUXGA, HDTV 1080p, UXGA, SXGA, WXGA+, WXGA (1366x768), WXGA, HDTV (720p), XGA, SVGA, VGA, PC and Mac compatible
<b>Video Compatibility</b>	4K UHD 2160p (24/50/60Hz), 1080p (24/50/60Hz), 1080i (50/60Hz), 720p (50/60Hz), 480i/p, 576i/p
<b>HDR Source Compatibility</b>	Ultra HD Blu-Ray player, 4K UHD streaming media device (Roku 4K Ultra), Xbox One S / One X (Ultra HD Blu-ray, 4K media streaming & HDR gaming) and PS4 Pro (4K UHD media streaming and 4K UHD HDR gaming only)
<b>Vertical Scan Rate</b>	24Hz to 120Hz
<b>Horizontal Scan Rate</b>	31.000 to 135.000KHz
<b>User Controls</b>	Yes
<b>I/O Connection Ports</b>	2xHDMI 2.0 (w/ HDCP 2.2, MHL 2.1), VGA-in, audio-in (3.5mm), audio-out, S/PDIF out (optical), USB 2.0 (service port), USB power, RJ-45, RS-232C, 12V Trigger
<b>Loop Through (Audio)</b>	Audio passthrough from HDMI to 3.5mm audio out and optical S/ PDIF out (2 channels)

### PHYSICAL SPECIFICATIONS

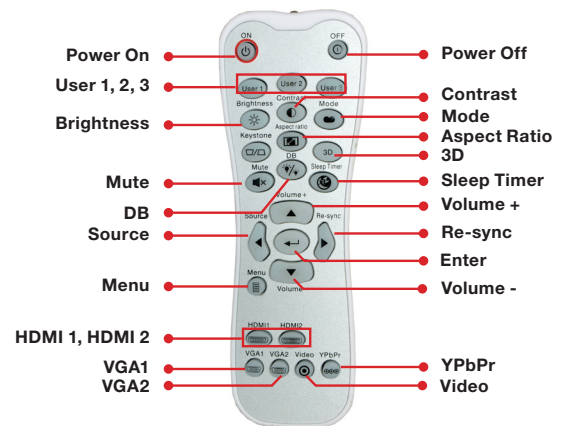
<b>Security</b>	Kensington® lock port, password (OSD)
<b>Weight</b>	11.75lbs.
<b>Dimensions (W x H x D)</b>	15.4" x 11.1" x 5.1"

\*Light source life is dependent upon many factors, including brightness mode, display mode, usage, environmental conditions and more. Light source brightness can decrease over time.

†3D content can be viewed with DLP Link active shutter 3D glasses when projector is used with a compatible 3D player. Please visit [www.OptomaUSA.com](http://www.OptomaUSA.com) for more information.



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|------------|---------------------|----------------------|
| 1. RS-232C | 5. 12V-Out          | 9. Audio-Out         |
| 2. HDMI1   | 6. Audio-In         | 10. S / PDIF         |
| 3. HDMI 4K | 7. USB Power Out    | 11. AC Power         |
| 4. VGA     | 8. USB Service Only | 12. Kensington™ Lock |



#### Warranty

1-year limited warranty, 90-days on lamp

#### What's in the Box

UHD50, lens cap, AC power cord, HDMI cable, remote control, batteries for remote, multilingual CD-ROM, user's manual, quick start guide and warranty card

#### Optional Accessories

Mount

#### Accessory Part Numbers

Lamp: BL-FP240E  
Remote: BR-3003B  
Mount: BM-5001U, OCM815W, OCM818W-RU

UPC 796435 81 300 0

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