# **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 blacklevels 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















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 eyecandy and smoothness. A 1.3x optical zoom and 15% vertical lens shift provide installation flexibility.

**CONNECTIVITY** (May require optional accessories)









Computers

#### 4K UHD HOME THEATER PROJECTOR - UHD50

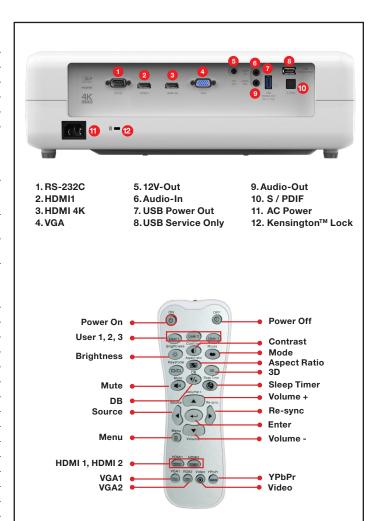
# **OPTICAL/TECHNICAL SPECIFICATIONS**

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

# **COMPATIBILITY SPECIFICATIONS**

Computer Compatibility	4K UHD 2160p, WUXGA, HDTV 1080p, UXGA, SXGA, WXGA+, WXGA (1366x768), WXGA, HDTV (720p), XGA, SVGA, VGA, PC and Mac compatible
Video Compatibility	4K UHD 2160p (24/50/60Hz), 1080p (24/50/60Hz), 1080i (50/60Hz), 720p (50/60Hz), 480i/p, 576i/p
HDR Source Compatibility	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)
3D Compatibility <sup>†</sup>	Side-by-side: 1080i50 / 60, 720p50 / 60 Blu-ray 3D / Frame-pack: 1080p24, 720p50 / 60 Over-under: 1080p24, 720p50 / 60
Vertical Scan Rate	24Hz to 120Hz
Horizontal Scan Rate	31.000 to 135.000KHz
User Controls	Yes
I/O Connection Ports	HDMI 2.0 (w/ HDCP 2.2, MHL 2.1), HDMI 1.4a, 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
Loop Through (Audio)	Audio passthrough from HDMI to 3.5mm audio out and optical S/ PDIF out (2 channels)

<sup>\*</sup>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.



# **PHYSICAL SPECIFICATIONS**

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

#### Warranty

1-year limited warranty, 90-days on lamp

#### What's in the Box

UHD50, lens cap, AC power cord, HDMl 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: OCM815W, OCM818W-RU

UPC 796435 81 300 0



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<sup>&</sup>lt;sup>†</sup>3D content can be viewed with DLP Link active shutter 3D glasses when projector is used with a compatible 3D player. Please visit Optoma.com for more information.