# POWERFUL LASER PHOSPHOR 4K ULTRA HIGH DEFINITION PROJECTOR





# Larger-than-life 4K laser home viewing experience with stunning color and amazing clarity





Native 4K UHD 3840x2160 2160p, bright 3000 lumens, and a laser phosphor light source for for vibrant, vivid cinematic color and no lamps to change



HDR-compatible - HDR10 produces the brightest whites, deepest blacks, and striking, life-like colors courtesy of wide color gamut support featuring REC.2020 and DCI-P3 coverage



Dynamic Black delivers 2,000,000:1 contrast ratio for exceptional black levels



HDMI 2.0 and HDCP 2.2 deliver a full 18Gbps for the best 4K UHD video bandwidth, image quality and device compatibility



Vertical Lens Shift and 1.6x zoom for an intuitive and flexible installation



PureMotion technology eliminates noise, motion blur, and judder in fast motion video, producing clear and consistently smooth images



Stereo speakers and optical output to AV receiver delivers crisp and sharp audio



4KULTRA HD













The UHZ65 is a state-of-the-art 4K Ultra High Definition (UHD) projector for home cinema viewing capable of delivering incredibly sharp images with a high level of detail and breathtaking color. With 4 times the pixels of 1080p, an ultra high resolution of 3840x2160, 3000 lumens, and 2,000,000:1 contrast ratio, the UHZ65 has been engineered to deliver the ultimate 4K UHD home viewing experience. Its powerful laser phosphor light engine, High Dynamic Range in the form of HDR10, vertical lens shift and massive 1.6x Zoom, take image quality and use of the UHZ65 to world class, cinema-quality. The UHZ65 is powered by a revolutionary Texas Instruments 4K DLP UHD chipset with a high performance DMD utilizing XPR video processing technology with fast switching to display 8.3 million "distinct" pixels as mandated by the Consumer Technology Association's 4K UHD 2160p specification.

The UHZ65 can project 4K UHD images of 140+ inches, allowing viewers to sit as far a way as 11 feet from the screen and still enjoy the full 4K UHD pixel experience. The average 55-75 inch 4K UHD TV simply cannot match this, as viewers typically sit further away from their TV than the optimum viewing area of 4-6 feet. High Dynamic Range (HDR) is the true star of the 4K UHD show. HDR leverages wide color gamut with REC.2020 and DCI-P3 coverage to deliver luminous whites, deep black levels, and striking, like-life, real world color that was previously only possible at the movies.

The UHZ65's PureMotion technology dramatically enhances games, movies, and sports by eliminating noise, motion blur, and erratic movement in fast motion video, producing images that are clear, consistent, and smooth. In terms of at-home installation, a generous 15% vertical lens shift and a massive 1.6x optical zoom provide a great deal of flexibility, while dual stereo speakers generate audio that is loud and crisp. The UHZ65's light source provides a remarkable 20,000 hours, eliminating the need to replace the light source throughout the life of the projector.

CONNECTIVITY (May require optional accessories)











## POWERFUL LASER PHOSPHOR 4K ULTRA HIGH DEFINITION PROJECTOR — UHZ65

## ODTICAL /TECHNICAL ODECIFICATIONS

OPTICAL/TECHNICAL SPECIFICATIONS	
Display Technology	Single 0.66 TRP S610 4K UHD DMD DLP® Technology by Texas Instruments $^{\text{TM}}$
Color Wheel	RGBY 4 Segment color wheel
Native Resolution	4K UHD 3840x2160 @ 60Hz with XPR Technology
Maximum Resolution	4K 4096x2160 @ 60Hz with XPR Technology
4K UHD Upscale Conversion	Upscales non-4K UHD resolutions (WXGA, 720p, 1080p, WUXGA, 1440p) and frame rates to 2160p 60Hz (4K UHD)
Brightness	3000 Lumens
Contrast Ratio	2,000,000:1 with Dynamic Black
REC.709 Color Gamut	100% REC.709 color gamut provides rich accurate color based on the HDTV Broadcast Specification. REC.709 will be used with all non-HDR content.
HDR (High Dynamic Range)	HDR Compatible (decode HDR10 metadata) / 4 Picture Modes: Normal, Bright, Detail, Film
HDR Wide Color Gamuts (REC.2020 and DCI-P3)	The RGB primaries (real color) utilized in wide color gamut with REC.2020 (BR.2020) and DCI-P3 color gamut coverage is the equivalent to those used in the CIE 1931 color space (CIE 1931 color space defines links between "pure physical colors" and "perceived" colors of human vision).
HDR Compatibility	HDR Source: 44K UHD Blu-Ray Player (such as the Samsung UBD-K8500 UHRay, 4K UHD Streaming Media Device (such as the Roku 4K Ultra), Xbox One S (4K UHD Blu-ray, 4K Media Streaming, & Games), or PS4 Pro (4K Media Streaming and Games only) HDR Content: HDR 4K UHD Blu-ray Disc, HDR Xbox One S Game, HDR PS4 Pro Game, or 4K HDR Media Streaming Service such as Amazon 4K UHD HDR Video, Netflix 4K UHD HDR Video, or Hulu 4K UHD HDR Video
SDR to HDR HDR SIM Mode (HDR Emulation, apply HDR to non-HDR content)	HDR SIM (Vivid High Color HDR Simulation mode)
PureEngine featuring PureMotion (MEMC)	PureEngine's PureMotion technology eliminates noise, motion blur, and judder in fast motion video, producing clear and consistently smooth images
UltraDetail	Enhances image quality by improving image depth and clarity. 3 levels to choose from.
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*	20,000 Hours / Laser Phosphor
Projection Method	Front, rear, ceiling mount, table top
Vertical Lens Shift	15% offset (with tolerance +/- 5%)
Uniformity	75%
Offset	100%±15% (tolerance: ±5% - see Vertical Lens Shift above)
Aspect Ratio	16:9 (native), 4:3, Auto, LBX (2160p and 1080p)
Throw Ratio	1.39 - 2.22 (with tolerance +/- 5%)
Projection Distance	16" - 581" (no zoom)
Image Size	26.45" - 302.2" (26.45" to 140" optimal image size)
Projection Lens	F=2.5~ 3.26, f=20.91 ~ 32.62 mm manual focus
Optical Zoom	1.6x
Digital Zoom	0.8 - 2.0
Audio	2x4W Stereo Speakers
Noise Level	33/29dB (Bright/ECO)
Remote Control	Full Function Home Remote Control
Operating Temperature	5°C~40°C @ 0~2,500 feet / 5°C~35°C @ 2,500~5,000 feet / 5°C~30°C @ 5,000~10,000 feet / 90% max humidity
Heat Dissipation	1754 BTU/hr (Bright mode) / 1433 BTU/hr (Bright mode), 1485 BTU/hr (HDR mode) / 1481 BTU/hr (Cinema mode)
Power Supply	AC input 100–240V, 50–60Hz, auto-switching
Power Consumption	400W Typical (Bright mode), 460W Max (Bright mode), 240W Typical (Eco+ mode), 275W Max (Eco+ mode)
High Altitude	3000m max altitude - must manually switch to high altitude mode @ 5000 feet & above (using OSD)

#### **COMPATIBILITY SPECIFICATIONS**

Computer Compatibility	UHD 2160p, WUXGA, HDTV 1080p, UXGA, SXGA, WXGA+, WXGA (1366x768), WXGA, HDTV (720p), XGA, SVGA, VGA, PC and Mac compatible
Video Compatibility	UHD 2160p (24/50/60Hz), 1080p (24/50/60Hz), 1080i (50/60Hz), 720p (50/60Hz), 480i/p, 576i/p
3D Compatibility†	1080p 60Hz - 30Hz per Eye / 60Hz Input - 120 Hz Output (PC Only, no Blu-Ray 3D)
Input Pag	77.8ms PureMotion OFF / 145ms PureMotion ON
Vertical Scan Rate	24Hz to 120Hz
Horizontal Scan Rate	31.000 to 135.000KHz
User Controls	Complete on-screen menu adjustment in 10 languages
I/O Connection Ports	1xHDMI 1.4a, 1xHDMI 2.0 (w/ HDCP 2.2, MHL 2.1 and Full 18Gbps), VGA-In, Audio-In (3.5mm), Audio-Out, SDPIF Out (Optical/2 Channel ONLY), USB 2.0 Port (Service), USB-A Power, RJ45, RS232C
Loop Through (Audio)	Audio Pass Thru via HDMI to 3.5mm Audio Out and Optical Out (AC3 Dolby Digital, Dolby Digital Plus, DTS)

## **PHYSICAL SPECIFICATIONS**

Security	Kensington® lock port, password (OSD)
Weight	20.5lbs.
Dimensions (W x H x D)	19.6" x 13" x 6"

\*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.



1. K-slot

6. HDMI2

11. Audio Out

13. S / PDIF

2. AC Power

7. VGA

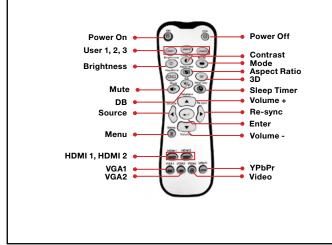
12. USB Power Out

3. RJ-45 4. RS-232 5. HDMI1

8. Audio In

9. 12V Out

10. USB/Service Only



#### Warranty

3-year Optoma Express warranty

### What's in the Box

UHZ65, lens cap, AC power cord, HDMI cable, remote control, batteries for remote, multilingual CD-ROM, user's manual, quick start card, and warranty card

#### **Optional Accessories**

Ceiling Mount

# **Accessory Part Numbers**

Remote: BR-3001B

Mount: BM-5001U, OCM815B, OCM818B-RU

UPC 796435 81 266 9



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