

Bright 4K UHD Smart Projector

UHD51ALV



Voice assistant-compatible projector for lights-on viewing



- Works with Amazon Alexa and Google Assistant
- 4K UHD, bright 3,000 lumens and RGBWRGBW color wheel
- HDR10 support for brighter whites, deeper black levels and vivid colors
- 4K video playback with the integrated USB media player
- Dynamic Black delivers 500,000:1 contrast ratio for exceptional black levels
- HDMI 2.0 with HDCP 2.2 connectivity ensures compatibility with 4K UHD video sources
- Vertical lens shift and 1.3x zoom for easy install

TRUE 4K 4K ULTRA HD™



HDMI™
HIGH DEFINITION MULTIMEDIA INTERFACE

HDCP 2.2



Enjoy lights-on viewing and taking control via voice commands with the 4K UHD, 3,000 lumen Optoma UHD51ALV. Compatibility with Amazon Echo and Google Assistant devices enables easy integration into smart homes regardless of the preferred voice assistant.

Use voice commands to power the projector on and off, change volume, change input source and control the USB media player. Additionally, the UHD51ALV utilizes the latest Texas Instruments™ 4K UHD DLP chipset capable of displaying 8.3-million simultaneous distinct pixels at screen sizes 140 inches and higher.

A pair of HDMI 2.0 inputs with HDCP 2.2 support, HDR compatibility and wide color gamut ensure 4K device compatibility, rich lifelike color and contrast for immersive experiences. 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

Build a **smarter** home theater.



See it all.
Control it all.
Play it all.



MEDIA PLAYER FEATURES

USB Media Player Compatibility	Videos: 480p, 720p, 1080p, 1440p, 4K UHD, 4K UHD HDR File formats: MKV, MP4, M4V, AVI, H.264, HEVC, MOV, TS Audio: MP3, AAC, WAV, FLAC 16/24-bit Images: JPEG, BMP, GIF
Video streaming	Web browser provides access to popular websites for video streaming
PC-free Image Viewer and Document Viewer	Supports viewing of office documents (Word, Excel & PowerPoint), PDFs and images via USB storage devices Autoplay PDF / PowerPoint: 3, 5, 10, 15 & 20 second intervals

SMARTPHONE FEATURES

Multimedia Streaming	Casting: videos, images and music from Android, iOS, Windows and Mac OS X (requires EZCast app)
Wireless Screen Mirror	Mirror Android, Windows & Mac OS X (requires EZCast app)
Companion App	iOS (App Store) & Android (Play Store & Amazon Appstore)

AMAZON ALEXA FEATURES

Smart Home Skill	Commands: power on/off, volume control (1-10), change input source, media player controls (play, stop, pause, next, previous, FF, REW, start over)
Custom Skill	Commands: change display mode, HDR picture mode, PureMotion setting
Alexa AV Gear Region Support	United States - English, Canada ² - Canadian English

GOOGLE ASSISTANT FEATURES

Actions	Commands: power on/off, volume control (1-10), change input source, media player controls (play, stop, pause, next, previous, FF, REW, start over), change display mode, HDR picture mode, PureMotion setting
Region Support	All regions - English only



²French language support arriving late 2018.

4K UHD Smart Projector - UHD51ALV

OPTICAL/TECHNICAL SPECIFICATIONS

Display Technology	Single 0.47" 4K UHD DMD DLP® by Texas Instruments™
Color Wheel	RGBWRGBW 8 segment color wheel
Native Resolution	4K UHD 3840 x 2160 @ 60Hz with XPR Technology
Maximum Resolution	4K 4096 x 2160 @ 30Hz
Brightness	3,000 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. 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 (3840 x 2160), 60 Hz
Video Processing	UltraDetail Technology enhances image quality by improving image depth and clarity PureMotion technology eliminates noise, motion blur and judder in fast motion video, producing clear and consistently smooth images
Color Depth	3840 x 2160 @30Hz YUV 4:4:4 (8bit, 10bit, 12bit), YUV 4:2:2 (8bit, 10bit, 12bit), YUV 4:2:0 (8bit, 10bit, 12bit) 3840 x 2160 @60Hz YUV 4:4:4 (8bit), YUV 4:2:2 (8bit), YUV 4:2:0 (8bit, 10bit, 12bit)
Lamp Life	4,000/10,000/15,000 (Bright/ECO/Dynamic)
Projection Method	Front, rear, ceiling mount, table top
Vertical Lens Shift	15% offset (with tolerance ±5%)
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	2 x 5W 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 10,000 feet = 23C (max); must manually switch to high altitude mode @ 5,000 feet & above (using OSD)

COMPATIBILITY SPECIFICATIONS

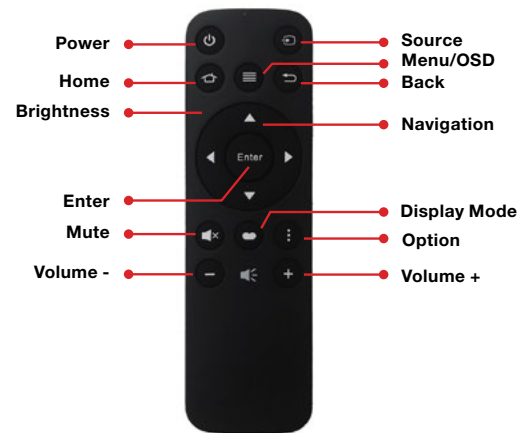
Computer Compatibility	4K UHD 2160p, WUXGA, HDTV 1080p, UXGA, SXGA, WXGA+, WXGA (1280 x 800), WXGA, HDTV (720p), XGA, SVGA, VGA, PC and Mac compatible
Video Compatibility	4K UHD 2160p (24/50/60Hz), 1080p (24/50/60Hz), 1080i (50/60Hz), 720p (50/60Hz), 480i/p, 576i/p
HDR Source Compatibility	Ultra HD Blu-Ray 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†	Side-by-side: 1080i50 / 60, 720p50 / 60 Blu-ray 3D / Frame-pack: 1080p24, 720p50 / 60 Over-under: 1080p24, 720p50 / 60
Scan Rate	Vertical: 24Hz to 120Hz / horizontal: 31 to 135 KHz
I/O Connection Ports	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 (for Alexa Wi-Fi adapter), USB (media playback), USB, RJ-45, RS-232C, 12V trigger
Loop Through (Audio)	Audio passthrough from HDMI to 3.5mm audio out and optical S/PDIF out (2-channel PCM)

PHYSICAL SPECIFICATIONS

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



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|------------|------------------------|----------------------------|
| 1. RJ-45 | 6. 12V-Out | 11. USB (Wireless Display) |
| 2. RS-232C | 7. Audio-In | 12. Optical S/PDIF |
| 3. HDMI1 | 8. USB Service Only | 13. AC Power |
| 4. HDMI2 | 9. USB (Alexa Wi-Fi) | 14. Kensington™ Lock |
| 5. VGA | 10. USB (Media Player) | |



Warranty

2-year limited warranty, 90-days lamp

What's in the Box

UHD51ALV, lens cap, AC power cord, HDMI cable, remote control, batteries for remote, WUSB Wi-Fi adapter (for Alexa Wi-Fi or wireless screen mirroring), multilingual CD-ROM, user's manual, quick start guide and warranty card

Optional Accessories

Mount, 3D glasses and wireless USB adapter (for wireless screen mirroring or Alexa Wi-Fi replacement)

Accessory Part Numbers

Lamp: BL-FP240E
Remote: BR-3081B
Mount: OCM815B, OCM818B-RU
Wireless adapter: WUSB
3D DLP Link glasses: ZD302

UPC 796435 81 315 4

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*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 us at Optoma.com for more information.

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