

HD28DSE

Breathtaking Clarity, Depth and Realism

- Powerful Darbee Visual Presence™ technology enhances images to reveal extraordinary levels of detail, depth, lighting and object separation
- 1920x1080 Full HD resolution, 3000 lumens, and 30,000:1 contrast ratio delivers luminous images and profound black levels
- Four Corner Adjustment allows quick & easy adjustment to correct trapezoidal images
- BrilliantColor™ dazzles with 10 preset color enhancement profiles



HD28DSE

The HD28DSE is a powerful home cinema projector engineered in collaboration with DARBEEVision™. DARBEEVision's Visual Presence technology was created by Paul DARBEE in the 1970's and was pioneered using an unorthodox technique that involved "defocusing" one of two images, using a video synthesizer to invert the image, and then combining the defocused inverted image with the sharp image. The end result produced images with unrivaled separation in depth, amazing detail and image clarity that is simply striking.

The DARBEE Visual Presence™ enabled Optoma HD28DSE delivers an immersive experience in Xbox One and PS4 games, Blu-ray movies, HDTV programming, home videos and even vacation photos. The integrated DARBEEVision™ image enhancement technology utilizes neurobiologic algorithms to achieve unprecedented detail in skin tones, textures, and reflective surfaces while delivering superior depth, object separation and automatic removal of unsightly artifacts. The end result is Xbox One and PS4 games, Blu-ray movies, HDTV programming, home videos, and photos that are simply mind-blowing and larger-than-life.

Installing projectors on a table or pedestal can quickly become a frustrating experience as tilting the projector from various angles to reach the projection surface can result in trapezoidal images and the need to use keystone correction, which is also a frustrating experience. With Four Corner Adjustment the trapezoidal image can be quickly corrected by adjusting the corners of the image in or out, which simplifies installation and eliminates frustration.

The HD28DSE's features the latest and greatest digital media interface with support for MHL v1.2. MHL v1.2 enabled HDMI ports allow MHL devices such as Optoma's HD Cast Pro, Roku's Streaming Stick and Smart Phones to connect directly to the projector to playback music and video, view pictures and even share webpages and other user generated digital media content.

Some external audio/video devices today require USB power or external AC power to function properly. To satisfy this requirement, the HD28DSE includes a powered USB port that is great for powering devices such as Chromecast and FireTV media dongles, Optoma's WHD200 Wireless HDMI System or any media device that requires USB power or AC power.

Many projectors require a new lamp every 4000-5000 hrs, but with an excellent cost to performance ratio, the HD28DSE will only require one lamp every 8000 hrs when the lamp mode is set to Bright+Dynamic.

Full HD 1080p

1080p resolution gives you sharp and detailed images from HD content without downscaling or compression; perfect for watching Blu-ray movies, HD broadcasting and playing video games.



Full 3D

Optoma projectors can display true 3D content from almost any 3D source, including 3D Blu-ray players, 3D broadcasting and the latest generation games consoles. Support for 144Hz rapid refresh rate provides ultra-smooth flicker free images.



Gaming mode

Gaming mode optimises your projector for lightning response times, maximum contrast and vivid colors to capture every detail - leaving you time to focus on winning.

MHL

Turn your projector into a smart display by connecting your smartphone or tablet with a single cable using MHL; now you can play games, stream videos and share photos on the big screen.



HDMI Link

HDMI Link lets you to turn on and off two or more HDMI-CEC capable devices using a single remote control.



USB power

Use the USB-Power to power an HDMI dongle, such as Google Chromecast or the Optoma WHD200 wireless HDMI device.

Wireless

Stream Full 1080p 3D content to your projector wirelessly; eliminating the hassle and extra cost of installing long cables, the WHD200 (sold separately) allows you to connect a Blu-ray™ player, set-top box, gaming console or AV receiver instantly.

Integrated speaker

Complete your home entertainment experience with the convenience of a powerful built-in speaker. Built-in speakers provide exceptional sound quality and are easy to set up without the need for costly external speakers.

Long lamp life

The expected lifetime of a typical Optoma projector lamp is an impressive 6500 hours; so if you watch a two hour movie every day, the lamp should last for almost 9 years.

DARBEE

Darbee's acclaimed Visual Presence™ patented technology further enhances Optoma projection technology, from Blu-rays to video games, and instantly improves the way it looks. Visual Presence adds more depth and realism delivering a clearer sharper picture by embedding stereoscopic depth information from a human-vision-based model. The image processing is adjustable, giving you the flexibility to customise the visual enhancement to suit your particular taste.



Without DARBEE

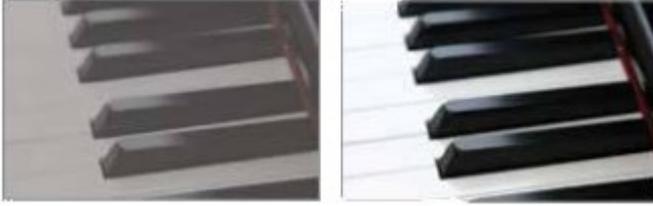


With DARBEE



Dynamic Black

This feature gives more depth to your image by smoothly adjusting the lamp output, based on the brightness information of each frame; to create a stunning high contrast ratio. Bright scenes appear crisp and clear, while dark scenes remain detailed with deep blacks and exceptional light and shade detail.



2,000:1

25,000:1

24p

Most movies are shot at 24 frames per second (fps). To preserve the purity of the original image, Optoma projectors can accept high definition sources at 24 fps to display movies exactly as the director intended.

Amazing colors

For vibrant, natural looking images, Optoma projectors incorporate BrilliantColor™ multi-color processing technology.



HD28DSE Specification

Display Technology	Single 0.65" 1080p chip, DLP® Technology from Texas Instruments
Native Resolution	1080p 1920 x 1080
Brightness	3000 ANSI Lumens
Contrast Ratio	30,000:1
Noise Level (Eco mode)	29dB
Weight	2.6
I/O Connectors	2x HDMI 1.4a with MHL (on port 1), 3D Sync Port, mini USB, USB-A (USB Power Only), 12V Trigger
Maximum Resolution	Full HD 1080p: 1920 x 1080 (Video Timing); WUXGA: 1920 x 1200 (Graphics Timing)
Computer Compatibility	WUXGA, UXGA, SXGA+, WXGA+, WXGA, SXGA, XGA, SVGA, VGA
Video Compatibility	NTSC, PAL, SECAM, SDTV (480i), EDTV (480p), HDTV (720p, 1080i/p)
Displayable Colors	1.07 Billion
Projection Lens	F=2.5–2.67, f=21.9–24 mm, manual zoom and focus
Throw Ratio	1.48~1.62 D/W (±5% variance)
Projection Distance	59"~394"
Zoom Type	1.1x Manual
Aspect Ratio	16.9 (Native), 16:10, 4:3, LBX, Auto
Offset	116.5%
Horizontal Scan Rate	15.375–91.146 KHz
Vertical Scan Rate	24–85 Hz (120 Hz for 3D feature projector)
Lamp Type	210W
Lamp Life ² Dynamic/Eco/Bright	8000/6000/4000 (hrs)
Keystone Correction	±40° Vertical and Horizontal
Dimensions (W x H x D)	12.4" x 4.5" x 8.8" (315 x 114 x 223 mm)
Remote Control	Backlit IR remote control
Power Supply	Auto-ranging: 100V ~ 240V ± 10%, 50-60Hz
Power Consumption	238W Typical (Bright mode), 262W Max (Bright mode), 195W Typical (Eco mode), 215W Max (Eco mode)
Uniformity	75%
Security	Kensington® lock port, security bar, and keypad lock
Standard Accessories	HD28DSE projector, lens cap, AC power cord, remote control, batteries for remote, multilingual CD-ROM, user's manual, quick start card, and warranty card
Optional Accessories	Universal ceiling mount, Wireless HDMI system, DLP® Link™ 3D glasses, RF 3D glasses, RF 3D emitter, Carrying case, HD Cast Pro
RoHS	Compliant
3D Support	Full 3D - The 3D features of Optoma projectors can only be used with compatible 3D content. Typical applications include use with 3D educational or 3D design and modelling systems. 3D TV broadcast systems, (SKY in the UK), Blu-ray 3D™ and 3D games from the Sony® PS3 or Microsoft® Xbox 360 are now supported as part of the HDMI v1.4a specification.
3D Compatibility	Supports all HDMI 1.4a mandatory 3D formats (Frame pack, side-by-side, top-bottom) and up converts frame rate from 60 Hz to 120 Hz or 24 Hz to 144 Hz (i.e 60 or 72 frames per eye). 3D glasses are needed and are sold separately. Refer to user manual for details.
Speaker (Watts)	One 10-Watt Speaker
Operating Temperature	5~ 40°C
On Screen Display	27 Languages: English, French, German, Spanish, Italian, Portuguese, Dutch, Swedish, Finnish, Greek, Danish, Norwegian, Polish, Russian, Simplified_Chinese, Traditional_Chinese, Korean, Arabic, Japanese, Thai, Hungarian, Czechoslovak, Turkish, Vietnamese, Farsi, Romanian, Indonesian
Optional Wireless	Yes
Warranty	1-Year Limited Parts and Labor, 90-Days on Lamp
Projection method	Front, rear, ceiling mount, table top



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¹Lamp based projectors brightness and lifetime will vary depending on selected projector mode, environmental conditions and usage. As is common with all lamp based projectors, brightness will decrease over the lamp lifetime. LED projectors do not have a replaceable lamp and the brightness does not decay significantly over the product lifetime. ²Typical lamp life achieved through testing. Will vary according to operational use and environmental conditions. DLP®, and the DLP logo are registered trademarks of Texas Instruments. All other product names and company names used herein are for identifications purposes only and may be trademarks or registered trademarks of their respective owners. All images of products are for representation purposes only. Whilst every care is taken to provide accurate images of our products, actual products may differ slightly. Some product images may have been digitally altered by us to add an Optoma logo to the front panel. Optoma reserves the right to amend or alter actual product or product images without notice. Some images may have been simulated. Errors and omissions excepted, all specifications are subject to change without notice. Copyright © 2015, Optoma Europe Ltd.

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