



The HD82^t has the highest ANSI contrast we have yet measured on any projector.

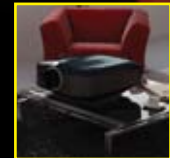
Evan Powell, Editor, ProjectorCentral.com

Purity of Vision

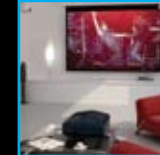
Full HD
1080P



www.themescene.tv



HD82





The astonishing HD82 Full HD projector brings to your home a paradigm shift; a truly astounding cinematic experience.

New revolutionary PureEngine technologies combine to create the clearest and sharpest ever 1080P images with the purest, deepest colours, even with the highest speed action pictures; enhanced by our stunning new motion control processing.

Easy to install with Pureshift and zoom there is absolutely no routine maintenance and because Optoma are the projector experts, we guarantee that the vibrant colours will be just as incredible after five years as they are out of the box.

PureEngine

The PureEngine contains the finest collection of signal processing technologies expertly blended to enhance the image on the screen whilst maintaining the purity of the original image. Pure technologies included in the HD82: PureMotion, PureShift, Pure Colour and PureDetail.

PureMotion



With

Without

PureMotion technology ensures you see all the detail in fast moving sequences. Traditional projection systems often suffer from “motion blur” or “judder” in moving images. These issues are not just distracting they also lower the resolution of the image – PureMotion eliminates these issues and ensures all of the detail from any source, especially High Definition, is preserved leaving a crystal clear image with pure natural motion.

PureColour



With

Without

PureColor provides vivid, perfectly balanced colour with impeccable colour uniformity for vibrant natural looking images. Deep Color makes it possible for the HD82 to reproduce billions of colours ensuring smooth tonal transitions and subtle graduations between hues.

PureShift

The PureShift lens system enables the vertical and horizontal position of the projected image to be adjusted without moving the position of the projector. PureShift is an image shift system for purists. By using an innovative Non-Telecentric lens system the contrast ratio, uniformity and brightness of the shifted image is maintained at a much higher level than is possible with traditional systems.

PureDetail



With

Without

PureDetail uses sophisticated motion adaptive edge enhancement algorithms to ensure that all the information contained in an image is faithfully reproduced on the screen giving a stunning crystal clear, pin sharp picture.

Pure Optics

Nothing affects the image quality more than the lenses. Designed and manufactured in our own factory, specifically for this projector, each HD82 Pure Optics lens system is individually tested and evaluated to the most stringent standards of resolution, uniformity and focus. The result is a first-class lens of unquestionable quality.

The HD82† has the highest ANSI contrast we have yet measured on any projector.

Evan Powell, Editor, ProjectorCentral.com

ANSI Contrast

ANSI Contrast is a way of measuring the true “real world” contrast performance you can expect from a projector. Only ANSI contrast has a documented, reproducible procedure that can be used to compare the performance of projectors using different display technologies.

With an ANSI contrast ratio significantly higher (in some cases 2-3 times) than many LCD, LCOS or SXRD based projectors, the HD82 is the only choice for Home Cinema purists that expect the ultimate image fidelity in their home.



High ANSI Contrast



Low ANSI Contrast

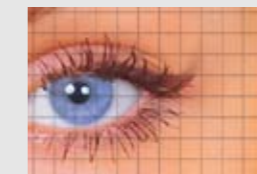
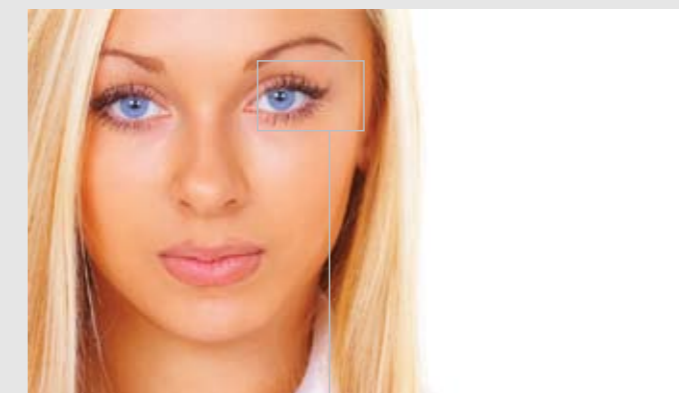
24P

PureMotion works in harmony with 1080P24. Most movies are shot at 24 frames per second. To preserve the purity of the original image the HD82 can accept High Definition sources at 24 frames per second and so display movies exactly as the director intended.

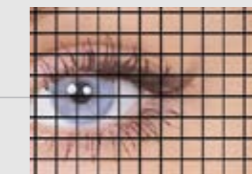


Latest DLP™ technology

The latest DarkChip3 technology from Texas Instruments ensures an invisible pixel structure from normal viewing distances and provides the highest ANSI contrast ratios available.



HD82 – High contrast film-like images



Conventional – Visible pixel structure mars image quality and reduces the contrast ratio



Optoma guarantees colour quality will remain as new for 5 years*

For Home Cinema colour accuracy is critical. We are so confident that, unlike competing technologies, the HD82 colour will not change in use that we have guaranteed it will stay the same as the day you bought it, for at least 5 years.

The HD82 projector based on an all-digital DLP® chip delivers stunning picture quality again and again. Unlike competing analogue technologies, the semiconductor that makes DLP® projection possible is virtually immune to environmental factors that can cause an image to degrade over time.

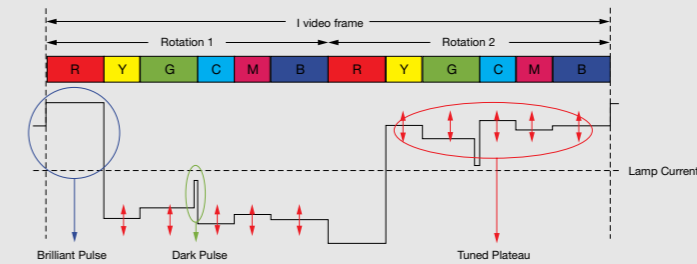
Run continuously for 4,000 hours in an independent laboratory test, projection systems using DLP® technology maintained their picture quality throughout. By contrast, in the same test±, data projectors using LCD technology exhibited considerable picture degradation by 2558 hours on average.

± Conducted by the Rochester Institute of Technology's Munsell Color Science Laboratory and sponsored by Texas Instruments. The test included a sample of commercially available data projectors, five featuring LCD technology and two featuring DLP® technology. The projectors varied in features such as panel size, weight, resolution and brightness. All units were run in a continuous operation mode at an ambient room temperature of approximately 25°C.



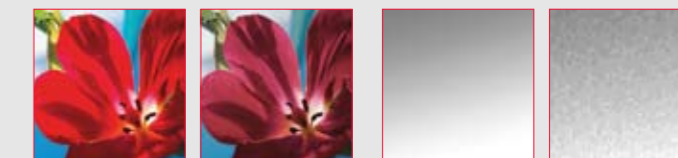
VIDI technology

The HD82 incorporates VIDI, a Philips lighting technology that further improves image quality, brightness and contrast. VIDI technology enables the HD82 colour performance to be fine tuned directly from the lamp – this unprecedented control makes it possible to achieve vibrant, perfectly saturated colours across the whole light spectrum resulting in stunningly natural and life-like images.



Improved Colour

VIDI technology enables the HD82 to be fine tuned to provide vibrant natural colour, accurate greyscale performance and virtually eliminates dither noise.



With Without With Without

DynamicBlack

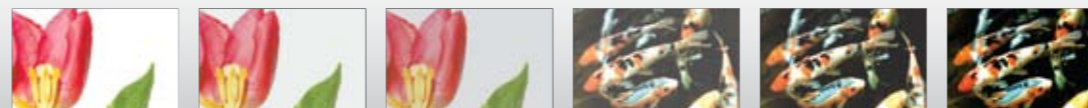


A large aperture for natural contrast during bright scenes

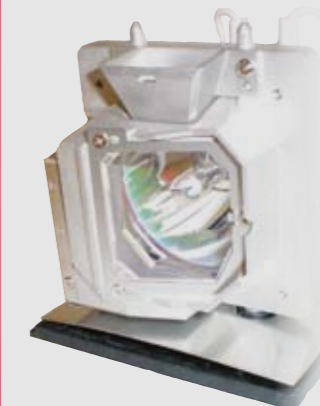
DynamicBlack modulates the lamp output automatically based on the brightness information of each scene

A smaller aperture for dynamic dark scenes

Bright scenes are crisp and clear



Dark scenes are detailed with deep blacks



UHP Lamp

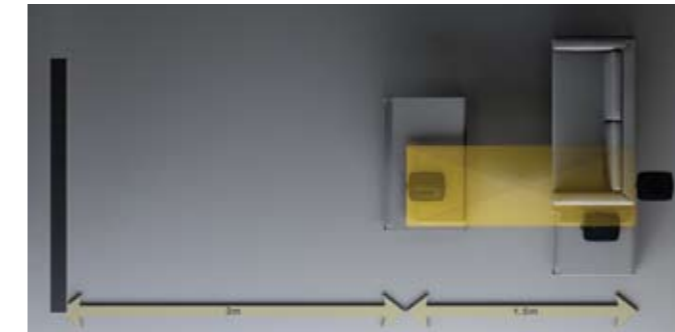
Emmy award winning UHP lamp technology is used in the HD82. This advanced lighting technology provides an optimal colour spectrum and ultra reliable operation.

Installation is a breeze



FLEXIBLE PLACEMENT

The combination of PureShift and a wide 1.5 zoom range enables a wider range of projector placement possibilities. This remarkable combination makes it easier to position the projector in your viewing room and allows a wider range of screen size options.

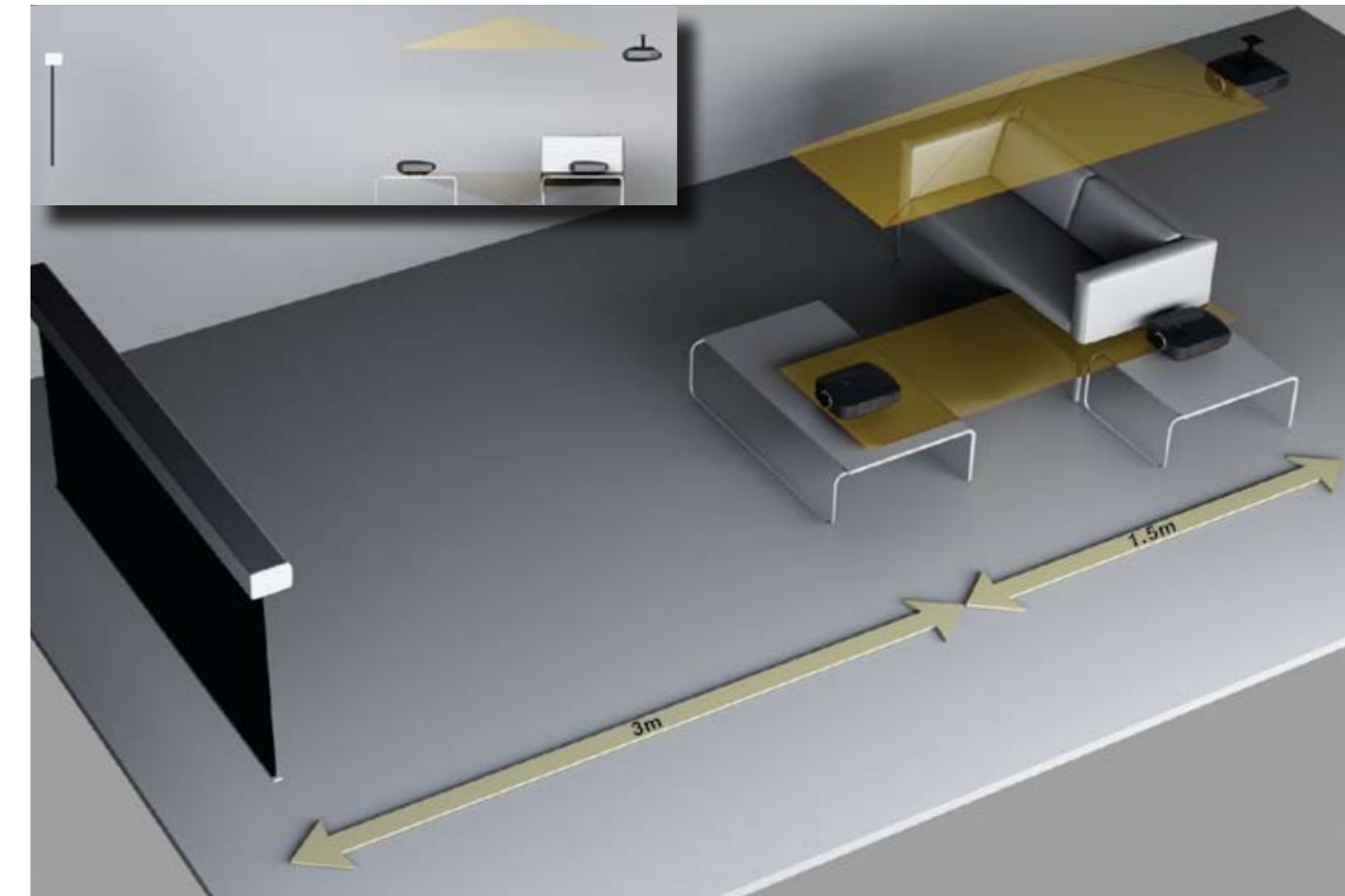


The shaded pyramids show the positions in which the projector can be placed to fill the screen (90").

Diagrams are for illustration only.
For detailed information please refer to the User Manual

Projection Distance

Projection Distance (m)	Diagonal Image Size (inch)	Max Vertical optical shift (m)	Max Horizontal optical shift (m)
3.00	60.2 - 90.3	0.06 - 0.22	0.2 - 0.3
4.00	80.3 - 120.4	0.07 - 0.3	0.27 - 0.40
5.00	100 - 150	0.09 - 0.37	0.33 - 0.50





FULLY AUTOMATED CONSTANT HEIGHT PROJECTION

The optional Optoma BX-AL133-B Anamorphic Projection Kit, combined with the HD82 projector, provides a unique “fit and forget” solution for Constant Height projection. Most major movie titles are released in the 2.35:1 format and the BX-AL133-B Kit provides uncompromised widescreen reproduction of this format. When a change from a 1.78:1 (16:9) to a 2.35:1 movie is detected the image simply gets wider - the full screen height is maintained and so eliminates black bars. The resulting 2.35:1 image is bigger, brighter, higher resolution and completely immersive - exactly as it would be at the cinema.

The BX-AL133-B Anamorphic Projection Kit Comprises:

Anamorphic Lens

- Five element, 100% glass, fully multicoated optical design corrected for chromatic aberration and astigmatism
- Optics designed to exceed the resolution requirements for 1080P projection

Motorised Lens Mount

- Integrates with the ThemeScene Auto235 feature to automatically detect 2.35:1 presentations and configure the projector and anamorphic lens accordingly
- High Precision maintenance free mechanism

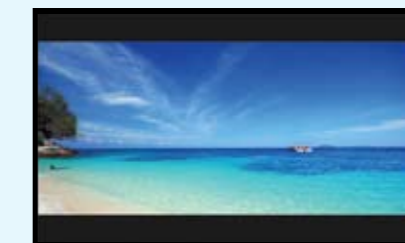
Mounting Plate

- Allows the lens and the motorised lens mount to be mounted perfectly in relation to the projector
- Enables the projector and the Anamorphic Projection Kit to be mounted as one

CEILING MOUNT ASSEMBLY

What is Constant Height Projection?

Many movies are presented in 2.35:1 aspect ratio. When these are viewed on a 16:9 projector with a 16:9 screen black bars are visible at the top and bottom of the image as below. A 16:9 source – like TV fills all of a 16:9 screen with no black bars. This is called Constant Width projection as with both formats the width of the image stays the same.



2.35:1 Movie



16:9 TV

Constant Height projection uses a 2.35:1 aspect ratio screen. A 2.35:1 movie is displayed with no black bars top and bottom. 16:9 TV is displayed with black bars at the sides.



2.35:1

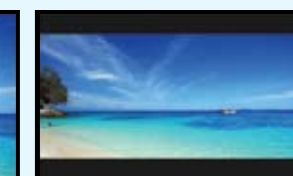


16:9

Constant Height projection is optimised for watching movies. When using the Optoma Anamorphic Kit the full potential of the projector is used when displaying 2.35:1 movies. This enables a brighter, higher resolution image.

Image Sizes

For the same throw distance the Optoma Anamorphic Lens Kit increases the horizontal size of a 2.35:1 image by 33% relative to the same 2.35:1 image being displayed on a 16:9 screen. The vertical height stays the same.



Technical Specifications

Highlights

Full HD	Native 1080P
Display Technology	DLP 1080P
ANSI Contrast	680:1
Contrast	20,000:1
Audible Noise	22dB Standard mode
Optical Image Shift	Vertical : +105% ~ +130%, Horizontal : -15% ~ +15% [■]
Brightness	1300 Video Optimised Lumens

Connections

Signal Type	Input Connector
HDMI	2 x HDMI (V1.3 with Deep Color)
Component	3 x RCA
SCART RGB	VGA via supplied adaptor
S-Video (Y/C)	3 Pin Mini DIN
Composite Video (CVBS)	RCA
DVI-D Computer	DVI connector
RGB Computer	VGA
Screen triggers	1 x Standard 12v screen trigger, 1 x Programmable 12v trigger
RS232	9 pin D-Sub
Video Compatibility	PAL, SECAM (576i/p), NTSC (480i/p), HD1080P60\50\24, 1080i, 720p)

Display

Aspect Ratio	16:9
Throw Ratio	1.50-2.28 (Projection Distance/Image Width)
Manual zoom	x1.5
Projection Distance	1.5m – 12.5m
Image Size	0.76 - 7.67m (16:9 Diagonal)
Keystone Correction	Vertical
Projection Types	Front, Ceiling, Rear, Rear ceiling
Lamp Type	220w
Lamp Life	Standard mode 3000 hours*

General

Dimensions	490 x 372 x 194 mm
Weight	8.5 kg
Power Consumption	330W Max, <1W standby
Operating Temperature	5-35°C Max, 80% Humidity
Mounting	Ceiling mount points
Warranty	Warranty may vary by country. Please see www.optomaeurope.com or ask your local supplier for details
Lamp Warranty	6 months or 1000 hours whichever is the sooner
OSD Languages	English, French, German, Spanish, Italian, Portuguese, Dutch, Swedish, Finnish, Greek, Danish, Norwegian, Polish, Russian, S Chinese, T Chinese, Korean, Japanese, Hungarian, Czech, Arabic & Turkish
Supplied accessories	AC power cord, 1 x HDMI cable 1.8m, SCART RGB to VGA 15 Pin D-Sub adaptor, VGA cable, Main Remote control with backlight, Backup remote control, Batteries for Remote controls, Lens cap, Users guide, 2 x 12v trigger connectors, 4 x M6 screws for use with ceiling mount
Optional accessories	Ceiling Mount Kit, Anamorphic Projection Kit BX-AL133-B
EAN Number	5060059043637

* Typical lamp life achieved through testing. Will vary according to operational use and environmental conditions

■ Optical Image Shift – Both extremes of the horizontal and vertical shift can not be used simultaneously. See user manual for future details.



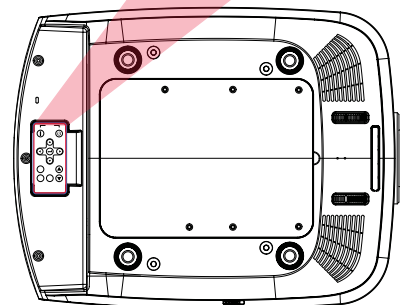
HD82 Connections

- 1 12V Trigger A
- 2 12V Trigger B
- 3 RS232
- 4 Composite Video
- 5 S-Video
- 6 Component Video
- 7 VGA Input
- 8 DVI-D Input (PC Digital and DVI-HDCP)
- 9 HDMI 1
- 10 HDMI 2
- 11 Power Socket

Backup Remote Control



Main Remote Control



Optoma

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*The HD82 is supplied in the USA as the HD8200. *Optoma guarantees that in normal use, Optoma DLP® colour quality will be indistinguishable from when new. Please note that worn lamps will give slight variance. Exclusions: * (1) Guarantee is voided if the projector is subject to damage through mis-use. (2) Guarantee may be void in industrial or commercial entertainment environments where dust or smoke is particularly excessive (3) Guarantee will not apply if lamp brightness is below 50% due to wear or if the projector is not working due to other fault.

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