Optoma

EH415

A compact and versatile package

- High resolution for stunning clarity

- Full HD 1080p - 4200 Lumens

- Ultimate Control - Full support for Crestron, Extron, AMX, PJ-Link and Telnet LAN commands

- Installation flexibility – Vertical lens shift and 1.5x zoom

DLP — TEXAS INSTRUMENTS | HDMI™ HIGH DEFINITION MULTIMEDIA INTERFACE | 5 YEARS | BrilliantColor | AMX | Crestron RoomView connected | Eco⁺ | Full 3D

EH415

Full HD 1080p clarity combined with vertical lens shift and amazing colours, make the compact Optoma EH415 projector an ideal candidate for both desktop and installation use.

Full support for Crestron Roomview, Telnet, Extron IP Link, AMX dynamic device discovery and PJ-Link protocols, allow almost all aspects of the EH415 to be controlled across a network, keeping you in control, wherever you are.

The environmentally friendly EH415 has energy saving features including Eco+ lamp power management, <0.5W standby mode and auto power off, saving you both time and money. Our unique Optoma Colour Guarantee ensures hassle-free, long-lasting projection.

3D Technology

Using the inherent speed of DLP® technology, Optoma Full 3D projectors can output video and images at an astonishing rate of 120Hz, allowing you to show full screen, full colour, stereoscopic 3D. The 3D effect is generated by splitting this signal into two standard video streams, one for each eye. Using DLP® Link™ technology, the 3D glasses synchronise with the image on screen to filter each stream to the correct eye. Your brain then combines the two streams to make them jump into life.

The EH415 supports multiple 3D formats from various devices such as PC, Blu-ray 3D™, Sony® PS3, Microsoft® Xbox 360 or 3D TV broadcast systems.
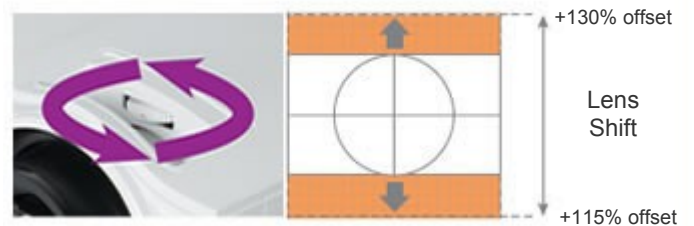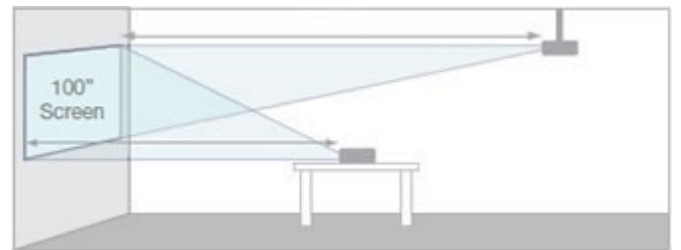
Image quality

A Full HD projector with 1920x1080 pixels has more than twice the resolution of an HD-Ready display. Fully compatible with HDTV broadcasts and high definition media, the EH415 is able to display un-scaled 1080p signals in their original form for use where exceptional clarity and detail are essential.

XGA (1024 x 768)   1080p (1920 x 1080)

Easy installation - 1.5x zoom and lens shift

The EH415 can project a 100" diagonal image from any distance between 3.08m and 4.63m. The Lens Shift system can be used to adjust the vertical position of the projected image within the range detailed in the diagrams below.

When replacing existing projectors, the 1.5x zoom and Lens Shift systems greatly increase your installation flexibility.

+130% offset

Lens Shift

+115% offset

DICOM simulation mode

Designed specifically for larger meeting rooms and lecture theatres, the EH415 includes a special DICOMsim mode that has been specially tuned for viewing greyscale images, perfect for viewing X-rays and scans during medical training.*

*The EH415 is not suitable for use in medical diagnosis.
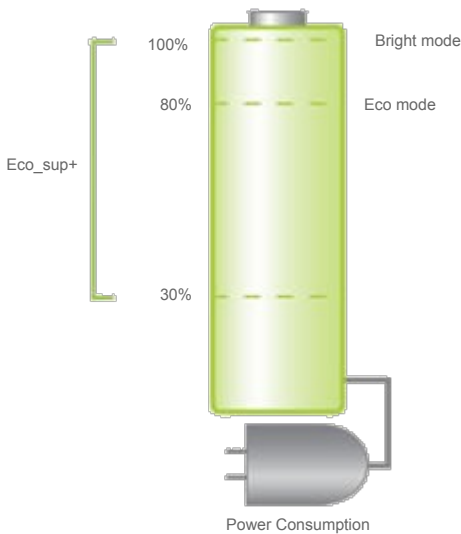
Clear, focused Images

DarkChip3™ from Texas Instruments, combined with Eco+ dynamic lamp technology produce a stunning 12,000:1 contrast ratio for pin sharp graphics and crystal clear text. Crisper whites, ultra-rich blacks makes images come alive and text easier to read - ideal for business and education presentations.

12,000:1 Contrast Ratio

Eco⁺ mode

Saving energy, saves money! Eco⁺ technology reduces the power consumption to as little as 30%. This intelligent feature also has a positive effect on the lamp life, increasing it up to 70% while lowering the total cost of ownership and reducing maintenance*.

Dynamically adjusts the brightness and power consumption

| **Bright scene** | **Dark scene** |
| ~ 100% Power consumption | ~ 30% Power consumption |

System integration and control

Using the free Crestron Roomview software, multiple EH415 can be monitored over LAN and also provide the user with an email message alert in case an error occurs or a lamp fails. Cut up to 30% from your energy bills using 24-hour automated power scheduling to ensure that projectors power off when not in use.

The web browser interface and full support for Extron's IP Link, AMX dynamic device discovery and PJ-Link protocols, allow almost all aspects of the EH415 to be controlled across a network, reducing installation costs and keeping you in control, wherever you are. While RS-232 connectivity ensures legacy support for existing control systems.
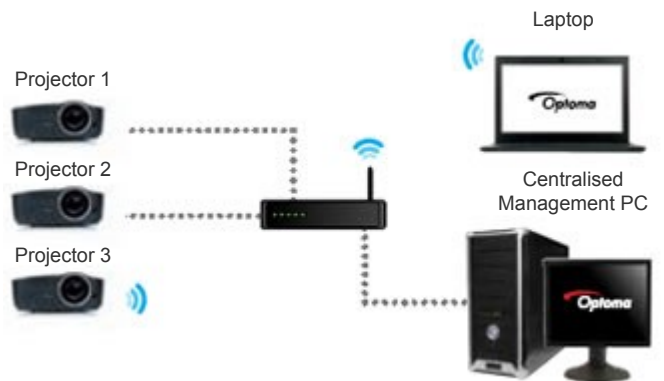

Global monitoring of all AV devices

Track projector lamp life

Email alerts and instant notifications help desk requests, service reminders, device failure or theft

Event Scheduling

Download Crestron RoomView® Express software from:
www.crestron.com/getroomview

+12v Trigger

Power on both your projector and screen at the touch of a single button. For ultimate convenience, connect an Optoma electric screen directly to your EH415.

For more info on Optoma screens, please visit www.optomaeurope.com

Easy lamp replacement

In applications requiring smooth continuous operation, minimising service time is essential. The EH415 lamp can quickly be replaced without the need to remove the projector from where it is installed.

Extra features

Direct & Signal Power ON -Start up time can be significantly reduced if standby mode is bypassed, eliminating the need to use the 'Power' button on the remote control or the projector keypad.

Direct Power ONswitches the projector on when the power cable is inserted into an active power outlet.

Signal Power Onswitches the projector on when an active VGA source is connected to the unit.

Key pad lock –once enabled prevents unauthorised adjustments ensuring the projector can only be controlled via the remote control.

Logo capture -customise your start up screen

Easy to use remote with laser pointer, mouse control and 1.2kg direct source selection

ECO AV mute

Stay in control of your presentation with the Eco AV mute feature. Direct your audience's attention away from the screen by blanking the image when no longer needed. This also instantly reduces the power consumption to 30%, further prolonging the life of your lamp.

Eco AV mute off
100% Power consumption

Eco AV mute on
30% Power consumption

Auto power off

There may be instances when the projector is left running when not in use. To help save energy if the projector is left running and no source is detected, the "Auto Power Off" feature automatically turns off the projector after a set period of time.

Environmentally friendly

To achieve the maximum 6500hrs[2] lamp life, the projector should be operating in Eco+ mode and the auto power off feature should be enabled to automatically switch off the projector if it is accidentally left on. Enabling the <0.5W standby mode ensures the minimum energy consumption when the projector is not switched on.

We know that improving our products is the best way to reduce our impact on the environment. That's why at Optoma, we design our products to have a long usable life, use fewer materials, ship with the minimum packaging and be free of all possible toxic substances. Naturally, energy efficiency and being recyclable are built in at the design stage. With each new product, we strive towards minimising our environmental impact. For full details of Optoma Project Green please visit our website.
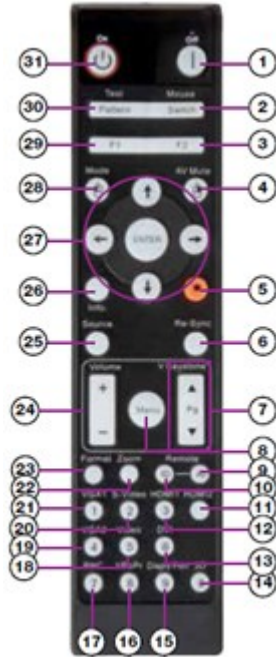
eh415 Specification

Display Technology	Single 0.65" DarkChip 3 1080p DLP® Technology by Texas Instruments
Native Resolution	1080p 1920 x 1080
Brightness[1] (Bright Mode)	4200 ANSI Lumens
Contrast	12,000:1
Noise Level (Eco mode)	32dB
Weight (kg)	3.4
I/O Connectors	HDMI, DisplayPort, 2x VGA (RGB/YPbPr), S-Video, Composite, 2 x Audio In (RCA/3.5mm), Audio Out 3.5mm, VGA Out, RJ45, RS232, +12v Trigger
Maximum Resolution	Full HD 1920 x 1080
Computer Compatibility	UXGA, SXGA+, HD, WXGA, XGA, SVGA
Video Compatibility	PAL SECAM 576i/p, NTSC 480i/p, HD 720p/1080i/1080p
Displayable Colours	1.07 Billion
Projection Lens	F/2.42~2.97; f=20.77~31.05mm, 1.5x Manual Zoom
Throw Ratio	1.39 - 2.09:1, Offset: 115%~130%
Projection Screen Size	0.76 – 7.62m (30" - 300") Diagonal 16:9
Projection Distance	1.2 - 10m
Zoom Type	1.5x Manual
Aspect Ratio	16:9 Native, 4:3 Compatible
Offset	115% ~ 130%
Horizontal Scan Rate	15 - 91kHz
Vertical Scan Rate	24 - 120Hz
Lamp Type	280W
Lamp Life (Eco/Bright Mode)	7000 hrs / 3000 hrs
Keystone Correction	± 40° Vertical
Audio	10W
Dimensions (W x D x H) (mm)	286 x 266 x 124 (inc. feet)
Remote Control	Full function remote with laser pointer, mouse control and direct source selecting
Power Supply	100-240V, 50-60Hz
Power Consumption	290W Bright mode, 250W Eco+ mode, <0.5W Standby mode
Uniformity	85%
Security	Kensington Lock, Security Bar, Password Protection
Standard Accessories	Soft carry bag, AC Power Cord, VGA Cable, Infra Red Remote Control with Batteries, Quick Start Card, Warranty Card
Optional Accessories	Ceiling Mount Kit, 3D Glasses
RoHS	Compliant
Lens Shift	+15% Vertical
3D Viewing	Requires Optoma DLP® Link™ active shutter glasses – sold separately
3D Compatibility	Mandatory HDMI 1.4 3D formats, 120Hz frame sequential (up to 720p)
Speaker	10
Warranty	2
On Screen Display	19 Languages: English, German, French, Italian, Spanish, Portuguese, Polish, Dutch, Russian, Finnish, Swedish,Greek, Norwegian/Danish, Hungarian, Czech, Arabic, Turkish, Farsi, Romanian
Colour Guarantee[3]	5 Years
Optional Wireless	Yes
Features	V.Lens Shift, Crestron RoomView®, PJ-Link

Easy To Use Remote

EH415 Remote Control

1. Power Off
2. Mouse
3. Function 2 (assignable)
4. AV Mute / right mouse button
5. Laser
6. Re-Sync
7. Page Up/Down
8. Menu
9. Remote code All
10. Remote code 01~99
11. HDMI 2
12. HDMI 1
13. DVI
14. 3D Mode
15. DisplayPort
16. Component Video
17. BNC
18. Composite Video
19. VGA 2
20. S-Video
21. VGA 2
22. Zoom
23. Format (aspect ratio)
24. Volume Up/Down
25. Source
26. Information Panel
27. Four Directional Select Keys
28. Display mode / left mouse button
29. Function 1 (assignable)
30. Test Pattern
31. Power On

EH415 Connections

32. VGA 2
33. VGA 1
34. VGA Out
35. DisplayPort
36. HDMI
37. RJ45
38. USB Remote Mouse
39. RS-232C
40. S-Video
41. Composite Video
42. Kensington™ Lock
43. Power
44. +12V Trigger (3.5mm)
45. Audio Out
46. Audio In (VGA 1 and 2)
47. Audio In (S-Video and Composite)

EH415 Distance Table

Image diagonal (inch)	Image width (m)	Image height (m)	Min throw distance (m)	Max throw distance (m)
50	1.11	0.62	1.54	2.31
60	1.33	0.75	1.85	2.78
70	1.55	0.87	2.15	3.24
80	1.77	1.00	2.46	3.70
100	2.21	1.25	3.08	4.63
120	2.66	1.49	3.69	5.55
200	4.43	2.49	6.15	9.25
250	5.53	3.11	7.69	11.57
300	6.64	3.74	9.23	13.88

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[1]Brightness and lamp lifetime will vary depending on the selected projector mode, environmental conditions and usage. As is common with all lamp based projectors, brightness will decrease over the lamp lifetime. [2]Typical lamp life achieved through testing and will vary according to operational use and environmental conditions. [3]Optoma guarantees that in normal use, Optoma DLP® colour quality will be indistinguishable from when new. Exclusions: (a) Guarantee is voided if the projector is subject to damage through misuse. (b) Guarantee may be void in industrial or commercial entertainment environments where dust or smoke is excessive (c) Guarantee will not apply if lamp brightness is below 50% due to wear or if the projector is not working due to other faults. (d) Over time worn lamps within all projector types will show a slight colour variance. Copyright © 2013, Optoma Europe Ltd. All other product names and company names used herein are for identification purposes only and may be trademarks or registered trademarks of their respective owners. Errors and omissions excepted, all specifications are subject to change without notice. DLP®, BrilliantColor™ and the DLP logo are registered trademarks of Texas Instruments. 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, product specifications or product images without notice. Some images may be simulated.

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