EH505
Spectacular image quality, outstanding brightness and ultimate reliability

- WUXGA 5000 Lumens
- Lens shift
- Interchangeable Lenses
- Full 3D Support
EH505 features

- 5000 Lumens, WUXGA Resolution
- Installation flexibility – Lens shift, interchangeable lenses, off-axis short throw option
- Ultimate Control - Full support for Crestron, Extron, AMX, PJ-Link and Telnet LAN commands
- Powerful Image Blending tools - 3-axis colour matching system and 10x lamp-power steps
- Advanced features – Wired Remote, Full 3D Support and DICOM simulation
Superb image quality is at the heart of every ProScene product design. At every step, commencing with the incredibly reliable, high resolution WUXGA DLP® chip where the image is initially created, via the UHP lamp pulsing technology that fine tunes the colour to exacting standards, through to the precision optics to focus the image on a screen, accuracy and integrity of the image are paramount.

ProScene chose DLP® technology for its image quality and unmatched reliability. The reflective nature of DLP® micro-mirror technology provides highly efficient bright images with great contrast whilst maintaining precise colour accuracy and natural, real-world colour reproduction. For demanding professional applications, the proven reliability of DLP® technology makes it the obvious choice.

**DLP® Technology**
DLP® technology from Texas Instruments® is widely recognised and acclaimed for its unmatched reliability and long lasting image performance. When combined with high brightness and native contrast ratios, it becomes the obvious choice for demanding applications. Independent testing has proven DLP® to be the most reliable of projector technologies. Whilst other technologies may show image quality decline after only a few thousand hours, DLP® technology can remain unchanged over hundreds of thousands of hours.

**UHP lamps**
The 370W UHP lamp provides the highest possible luminance, the essential prerequisite of all highly efficient projectors.

These lamps have outstanding brightness, stay brighter for longer, and provide an optimal colour spectrum. In addition, the lamp drivers are specifically tuned for the lamps, ensuring not only optimum operating conditions for every situation, but also provide sophisticated lamp pulsing modes and the assurance that colour can be fine-tuned according to the application.

**Clear, Focused Images**
DarkChip3™ technology from Texas Instruments produces a stunning 2000:1 contrast ratio for pin sharp graphics and crystal clear text. Crisper whites, ultra-rich blacks makes images come alive and text easier to read.

**Amazing Colours**
The EH505 incorporates BrilliantColor™ technology to produce stunningly bright images with perfectly balanced life-like colours.

Where detail really matters, the full WUXGA (1920 x 1200) resolution offers 15% more pixels than 1080p and 60% more than SXGA+. This enables unscaled Full HD video and extra detail. Time Code information can be displayed onscreen at the same time, perfect for soundtrack recording & video editing where precise timing can be critical.
Installation Flexibility

To help meet the seemingly limitless challenges of ProAV installations, the EH505 provides multiple lens options with zoom and focus adjustment to ensure you can get the image size you require, while a wide lens shift range helps you get the image exactly where you want it.

All 3 optional lenses, including the 0.77:1 short throw lens can use the full lens shift range.

**Lens Options**

<table>
<thead>
<tr>
<th>Lens Type</th>
<th>Short</th>
<th>Standard</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throw Ratio</td>
<td>0.77:1</td>
<td>1.54 - 1.93:1</td>
<td>1.93 - 2.89:1</td>
</tr>
</tbody>
</table>

**Throw Distance Chart**

<table>
<thead>
<tr>
<th>EH505 Throw Distance</th>
<th>Short</th>
<th>Standard</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagonal Image Size (16:10)</td>
<td>Fixed (m)</td>
<td>Min (m)</td>
<td>Max (m)</td>
</tr>
<tr>
<td>50”</td>
<td>0.82</td>
<td>1.66</td>
<td>2.08</td>
</tr>
<tr>
<td>60”</td>
<td>1.00</td>
<td>1.99</td>
<td>2.49</td>
</tr>
<tr>
<td>70”</td>
<td>1.16</td>
<td>2.32</td>
<td>2.91</td>
</tr>
<tr>
<td>80”</td>
<td>1.33</td>
<td>2.66</td>
<td>3.33</td>
</tr>
<tr>
<td>100”</td>
<td>1.67</td>
<td>3.32</td>
<td>4.16</td>
</tr>
<tr>
<td>150”</td>
<td>2.48</td>
<td>4.98</td>
<td>6.24</td>
</tr>
<tr>
<td>200”</td>
<td>3.32</td>
<td>6.64</td>
<td>8.32</td>
</tr>
<tr>
<td>250”</td>
<td>-</td>
<td>8.29</td>
<td>10.39</td>
</tr>
<tr>
<td>300”</td>
<td>-</td>
<td>9.95</td>
<td>12.47</td>
</tr>
</tbody>
</table>

For guide purposes only
DICOM simulation mode

Designed specifically for larger meeting rooms and lecture theatres, the EH505 includes a special DICOMsim mode that has been specifically tuned for viewing greyscale images, perfect for viewing X-rays and scans during medical training. *

*The EH505 is not suitable for use in medical diagnosis.

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 EH505 supports multiple 3D formats from various devices such as PC, Blu-ray 3D™, Sony® PS3, Microsoft® Xbox 360 or 3D TV broadcast system.

Edge Blending Tools

No two projectors are completely identical. When performing complex, or even simple edge-blend projects using multiple projectors, it can be difficult to achieve good results if the images do not match. The EH505 incorporates the following features to ensure high quality and consistent results.

Colour matching

The EH505 has a full 3-axis colour matching system, which combined with accurate measurements can create seamless blends every time.

Brightness matching

The brightness of a projector will vary throughout its life. To correctly match multiple units, the EH505 has 10x lamp power steps between 80~100% full brightness.

Wired Remote

The wired remote connection allows all aspects of the projector to be individually controlled without requiring a line-of-sight to the projector; invaluable when using multiple units during live events.
System Integration Control

Multiple EH505 can be monitored over LAN and can also provide the user with an email message alert in case an error occurs or a lamp fails or needs to be replaced using Crestron Roomview. The web browser interface and full support for Telnet, Extron’s IP Link, AMX dynamic device discovery and PJ-Link protocols, allow almost all aspects of the EH505 to be controlled across a network, keeping you in control, wherever you are.

Ultimate control

Cut up to 30% from your energy bills using 24-hour automated power scheduling to ensure that projectors power off when not in use.

Selected View by Rooms, Attributes or Contacts

RoomView Express gives you the ability to simultaneously view more than 250 connected devices from a single screen. Customise RoomView to view by room name, locations and group.

Display Power

Check on/off status of any projector.

Display Usage

View a bar graph to monitor the percentage of available projector lamp life and set an alert to notify the services department when a replacement lamp should be ordered, before the lamp fails.

Schedule Events

RoomView Express makes scheduling of recurring or one-time events easy. Setting RoomView to automatically power down at midnight throughout the week can save valuable lamp life and ensure security inside the facility.

Event Log

Automatically generates log files, reports and charts to analyze ROI and budget allocation. Track device usage, call statistics and user history.
Eco Friendly
Cut up to 30% from your energy bills using 24-hour automated power scheduling to ensure that projectors power off when not in use.

Direct Power On
The projector will start up instantly when power is supplied to the Unit. This eliminates the need to manually turn on the projector via the remote control or the keypad, ideal for use in rooms with a “master” power switch.

Signal Power On
The projector will power on when it receives a signal through one of the PC/video inputs. This ensures that the projector is only switched on when it is needed.

Auto Power Off
If after a pre-determined time the projector does not receive a signal, it will turn itself off automatically, conserving power and extending the life of the lamp.

Eco Standby Mode
Reduces energy consumption to less than 0.5W when the projector is not in use.

Eco AV Mute & Eco Sleep
Direct your audience’s attention away from the screen by blanking the image when no longer needed. When Eco AV-mute is enabled, or if no source is found after 60 seconds, the projector will automatically put the lamp into Eco mode, both saving power and further prolonging the life of your lamp.

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.
Dimensions

Dimensions in mm
Labelling

Easy to use remote control
1. Power On
2. Audio
3. Function 2 (assignable)
4. Enter
5. Four Directional Select Keys
6. Display mode
7. AV Mute
8. V Keystone +/-
9. Information Panel
10. S-Video/2
11. Re-Sync
12. HDMI/3
13. DVI/6
14. 3D/0
15. DisplayPort/9
16. Video/5
17. YPbPr/8
18. BNC/7
19. VGA-2/4
20. VGA-1/1
21. Remote code 01~99
22. Remote code All
23. 12V Trigger On/Off
24. Format (aspect ratio)
25. Menu
26. Function 1 (assignable)
27. Test Pattern
28. Power Off

Input/Output Connections
29. Power On/Off
30. VGA 1
31. HDMI
32. VGA 2
33. DVI
34. DisplayPort
35. RJ45 LAN
36. USB Power
37. 3D Sync
38. VGA Out
39. 5BNC
40. RS-232C
41. Wired Remote
42. +12V Trigger (3.5mm)
43. Composite Video
44. S-Video
45. Component Video
46. Master Switch
# Technical Specifications

## Projector

<table>
<thead>
<tr>
<th>Technology</th>
<th>DLP™ Technology by Texas Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>Native WUXGA (1920 x 1200)</td>
</tr>
<tr>
<td>Brightness</td>
<td>5000 ANSI Lumens</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>16:10 native, 4:3 &amp; 16:9 compatible</td>
</tr>
<tr>
<td>Refresh Rate</td>
<td>15kHz to 91kHz / 24Hz to 85Hz (120Hz for 3D playback)</td>
</tr>
<tr>
<td>Contrast</td>
<td>2000:1</td>
</tr>
<tr>
<td>2D Video Compatibility</td>
<td>PAL (625/576i/p), SECAM, NTSC (525/480i/p), HDTV (720p, 1080i, 1080p)</td>
</tr>
<tr>
<td>3D Video Compatibility</td>
<td>Mandatory HDMI 1.4 3D formats, 120Hz frame sequential (up to 720p)</td>
</tr>
</tbody>
</table>

## Optics

<table>
<thead>
<tr>
<th>Lamp Type</th>
<th>370W UHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp Life</td>
<td>1500 hr Bright Mode / 3500 hr Eco Mode</td>
</tr>
<tr>
<td>Lens Shift</td>
<td>Manual +70%, -20%, +/-10% H</td>
</tr>
<tr>
<td>Lenses (no lens supplied as standard)</td>
<td>Short: 0.77:1, Standard: 1.54 - 1.93:1, Long: 1.93 - 2.89:1</td>
</tr>
<tr>
<td>Keystone Correction</td>
<td>Vertical ±40°</td>
</tr>
<tr>
<td>Uniformity</td>
<td>85% (centre)</td>
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</tbody>
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## Connectivity

<table>
<thead>
<tr>
<th>Inputs</th>
<th>HDMI (with locking Screw)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DVI-D (HDCP supported)</td>
</tr>
<tr>
<td></td>
<td>DisplayPort</td>
</tr>
<tr>
<td></td>
<td>BNC (RGBHV)</td>
</tr>
<tr>
<td></td>
<td>PC RGB 2 x 15 pin D-Sub VGA</td>
</tr>
<tr>
<td></td>
<td>Component 3RCA</td>
</tr>
<tr>
<td>Output</td>
<td>PC (monitor loop-through) VGA Out</td>
</tr>
<tr>
<td></td>
<td>+12V trigger (3.5mm jack)</td>
</tr>
<tr>
<td></td>
<td>3D-Sync Out (3-Pin VESA)</td>
</tr>
<tr>
<td>Control and Communication</td>
<td>RS232 9 pin D-SUB</td>
</tr>
<tr>
<td></td>
<td>RJ45 (Crestron/Extron/PJ-Link/Telnet)</td>
</tr>
<tr>
<td></td>
<td>Wired Remote (3.5mm jack)</td>
</tr>
</tbody>
</table>

## General

<table>
<thead>
<tr>
<th>Noise Level</th>
<th>37dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>8.9Kg (without lens)</td>
</tr>
<tr>
<td>Dimensions (W x D x H)</td>
<td>431 x 341 x 183mm</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>100 – 240V AC 50 – 60Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>460W (max) bright mode, &lt;0.5w standby mode</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>5 – 40°C, max. humidity 85%, max. altitude 3000m</td>
</tr>
<tr>
<td>Portrait mode</td>
<td>Not supported</td>
</tr>
<tr>
<td>360° Operation</td>
<td>Not supported</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 – 75°C, 5 – 45°C</td>
</tr>
<tr>
<td></td>
<td>750°C – 1500°C, 5 – 35°C</td>
</tr>
<tr>
<td></td>
<td>1500 – 3000°C, 5 – 30°C</td>
</tr>
<tr>
<td>Environmental</td>
<td>RoHS and WEEE</td>
</tr>
<tr>
<td>Conformances</td>
<td>CE, TUV-GS, CB</td>
</tr>
<tr>
<td>Security</td>
<td>4-digit PIN code</td>
</tr>
<tr>
<td></td>
<td>Kensington Lock port</td>
</tr>
<tr>
<td></td>
<td>Security Bar</td>
</tr>
<tr>
<td>Warranties</td>
<td>3 Years</td>
</tr>
</tbody>
</table>

## Supplied Accessories

<table>
<thead>
<tr>
<th>Cables</th>
<th>VGA cable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AC power cord</td>
</tr>
<tr>
<td>Other</td>
<td>Infra-red remote control (selectable IR code sets for controlling multiple units)</td>
</tr>
<tr>
<td></td>
<td>Batteries x 2</td>
</tr>
<tr>
<td></td>
<td>Quick start card</td>
</tr>
<tr>
<td></td>
<td>Warranty card</td>
</tr>
<tr>
<td></td>
<td>WEEE card</td>
</tr>
</tbody>
</table>
Accessories

Universal Ceiling Mounts

Flush Mount
White P/N: OCM818W-RU
Black P/N: OCM818B-RU
The Universal Flush Mount is easy to set up with its unique low-profile design to give you everything you need for quick adjustment and the flexibility to install almost any projector hassle-free.

Pole Mount
White P/N: OCM815W
Black P/N: OCM815B
The Universal Pole Mount is height adjustable from 290mm–810mm. Suitable for virtually any projector under 15Kg. The mount comes pre-assembled with a quick projector disconnect/reconnect for rapid installation, while the 360° rotation and more than +/- 20° tilt/roll provide the flexibility to install almost anywhere. (including vaulted ceilings) Lastly, an integrated cable routing channel ensures a clean, professional finish.
Optimised edge blending
(Available direct from Optoma)

Optoma have worked in partnership with Calibre to produce special versions of Calibre’s ultra low-latency edge blending and warping products optimised for use with our ProScene projectors. This unique collaboration significantly reduces the complexity and configuration time required to edge blend multiple ProScene projectors and is covered by the industry leading ProScene technical support services should you require assistance with your edge blending project.

HQView320 HQV™ Scaler with Warp and Edge Blend
Best in class professional image processing in a compact affordable module.

HQView325 HQV™ Scaler with Warp Mapping Edge Blend & HDMI/DVI In/Out
HQView325 features 4-sided soft edge blend with multi-region black level correction for seamless blending of multiple projectors.

HQView520 Universal HQV™ Scaler-Switcher-Scan Converter with Warp, Edge Blend & 3G-SDI In/Out
Use as a routing switcher and universal interface for 3G-SDI, HD-SDI, DVI or HDMI

HQView530 LCD Screen HQV™Scaler- Switcher with 3G-SDI
HQView530 is a highly flexible video screen image scaler which provides stunning image quality for professional, broadcast, sports, digital signage & corporate AV.
Worldwide technical and commercial support

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Brightness and lamp 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. Typical lamp life achieved through testing. Will vary according to operational use and environmental conditions. 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. Crestron®, the Crestron and RoomView® logo are registered trademarks of Crestron Electronics, Inc. Errors and omissions excepted. All specifications are subject to change without notice. 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 or product images without notice. Some images may be simulated.