HIGHlite 660 WUXGA 3D

8,000 Lumens | Contrast Ratio: 2,000:1 | Part No:113-137

HIGHLITE 660 SERIES
DIGITAL PROJECTORS

THE VISIONARIES CHOICE

Color System: 3-chip DLP®

DMD Specification:
1920 x 1200 pixels native.
Fast transit pixels for smooth greyscale and improved contrast.

Display Type: 3 x 0.67” DarkChip™ DMD™

Aspect Ratio:
16x10
Fill Factor
87%

Key Features

Standard Inputs (1-8): Front End Video Capabilities

Video & Graphics Processing
- High bandwidth digital & analog receiver with 10 bit A-D.
- Automatic detection of interlaced video and implementation of 3:2 or 2:2 extraction as appropriate, with pixel based, motion adaptive interpolation and auto cadence correction.
- Displayed image frame locked to input with as low as 1 frame total latency.
- 24p and 1080p native display.
- Image enhancement for MPEG, Mosquito noise & color transients in composite sources.

Geometry Correction
- Cornerstone, Vertical & Horizontal Keystone, Pincushion & Barrel, and Image Rotation.
- Non-linear Warp adjustment by moving points on an interpolated grid.

Edge Blending
- Semi-automated multi projector tiling
- Correction for non-active pixels at the edge of the display.

HDBaseT® Interface
- Built in support for transmission of uncompressed High Definition Video over standard CAT5e/6 LAN cable.
- Allows projector to be placed up to 100m from source with low cost cabling.

Super Image Clarity
- Geometry correction and Edge Blending implemented in single stage process, retaining maximum image resolution.

Picture in Picture
- Two sources can be displayed either one within the other (PIP), or side by side, with original aspect ratios maintained.

ColorMax™
- Accurate matching of projectors in tiled or blended applications.
- User selection and storage of primary and secondary color targets.

High Bandwidth Inputs (9-11): Bypassing Front End for Minimal Latency
- Pixel mapped to the display.
- HDMI 1.4 for Side by Side, Frame Packing & Top Bottom formats.
- Dual Flash Processing can be used to multiply the displayed frame rate for 3D sources (example 144Hz display).
- FastFrame™ Smear Reduction.
- Dual Pipe processing: two sources in parallel for left and right eyes.
- Synchronisation of active glasses or polarising switcher.

**Projector Controller Software**
- Intuitive user interface for network control
- Simultaneous control of user-defined groups of projectors
- At-a-glance monitoring of projector status

**Source Compatibility:**
3GSDI is SMPTE 292M, SMPTE 259M-C and SMPTE 424M compliant.
HDMI and DVI include Deep Color™ processing up to 36 bit.
DVI inputs are HDMI compatible.
Digital Audio Extraction via SPDIF for HDMI sources.
Graphics standards up to 1920 x 1200 at 60Hz via DVI or VGA.
Component Video (SD and HD) via YPrPb, RGB or RGBS.
S-Video (PAL, NTSC & SECAM)
Composite Video (PAL, NTSC & SECAM)

High Bandwidth, Pixel Mapped Path:
Dual Pipe accepts graphics standards up to 1920 x 1200 at 120Hz.
HDMI 1.4 including 3D Standards
Dual Pipe (2 x DVI)

### Inputs/Outputs

<table>
<thead>
<tr>
<th>Video &amp; Computer</th>
<th>Type</th>
<th>Connector</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVI-D / DVI-A</td>
<td>DVI-I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HDMI 1.3</td>
<td>HDMI</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3G-SDI</td>
<td>BNC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HDBaseT</td>
<td>RJ45</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>VGA / Analog RGB</td>
<td>15-pin D-Sub</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Component Video</td>
<td>4 x BNC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>S-Video</td>
<td>4-pin Mini DIN</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Composite Video</td>
<td>RCA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Composite Video</td>
<td>BNC</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication &amp; Control</th>
<th>Type</th>
<th>Connector</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Sync Out</td>
<td>BNC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3D Sync In</td>
<td>BNC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>LAN</td>
<td>RJ45</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RS232</td>
<td>9-pin D Sub</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wired Remote In</td>
<td>3.5mm Stereo Jack</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wired Remote Out</td>
<td>3.5mm Stereo Jack</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Service Port</td>
<td>USB Type B</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

High Bandwidth Ports
- Dual Pipe: DVI-D | 1
- HDMI 1.4: HDMI | 2

### 3D Formats Supported
- Frame Packing
- Dual Pipe
- Frame Sequential
- Side By Side (half)
- Top and Bottom

### HDTV Formats Supported
- 1080p (23.98Hz, 24Hz, 25Hz, 29.97Hz, 30Hz, 50Hz, 59.94Hz, 60Hz), 1080i (50Hz, 59.94Hz, 60Hz), 1080sf (23.98Hz, 24Hz), 720p (50Hz, 59.94Hz, 60Hz)

### Computer Compatibility
- Up to 1920 x 1200

### Bandwidth
- 170 MHz on analog RGB
- 165 Megapixels per second on HDMI and DVI
- 300 Megapixels per second on Dual Pipe DVI

### Remote Control
- Addressable IR remote control, wireless and wired with loop-through.
- On-Board keypad

### Automation Control
- RS232
- LAN

### Colour Temperature
- User selectable from 3200 to 9000K
### Lamp Type

<table>
<thead>
<tr>
<th>Lamp Type</th>
<th>Typical Lamp Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 330W High Intensity Discharge</td>
<td>Full Power: 1500 hours (up to 3000 hours in lamp sequential mode)</td>
</tr>
<tr>
<td></td>
<td>Eco Mode: 2000 hours (up to 4000 hours in lamp sequential mode)</td>
</tr>
</tbody>
</table>

### Lenses

<table>
<thead>
<tr>
<th>Lens</th>
<th>Part No.</th>
<th>Focus Range</th>
<th>Lens Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.77 : 1 fixed HB</td>
<td>110-808</td>
<td>1.3m - 15.0m</td>
<td>Vert: 0.2 (U) 0.2 (D) frame, Hor: 0.05 (L) 0.05 (R) frame</td>
</tr>
<tr>
<td>1.16 : 1 fixed HB</td>
<td>110-809</td>
<td>1.4m - 25.0m</td>
<td>Vert: 0.5 (U) 0.5 (D) frame, Hor: 0.15 (L) 0.15 (R) frame</td>
</tr>
<tr>
<td>1.45 - 1.74 : 1 zoom HB</td>
<td>110-803</td>
<td>1.8m - 9.3m</td>
<td>Vert: 0.6 (U) 0.6 (D) frame, Hor: 0.15 (L) 0.15 (R) frame</td>
</tr>
<tr>
<td>1.74 - 2.17 : 1 zoom HB</td>
<td>112-878</td>
<td>2.2m - 11.8m</td>
<td>Vert: 0.6 (U) 0.6 (D) frame, Hor: 0.15 (L) 0.15 (R) frame</td>
</tr>
<tr>
<td>2.17 - 2.90 : 1 zoom HB</td>
<td>113-852</td>
<td>2.7m - 15.4m</td>
<td>Vert: 0.6 (U) 0.6 (D) frame, Hor: 0.15 (L) 0.15 (R) frame</td>
</tr>
<tr>
<td>2.90 - 4.34 : 1 zoom HB</td>
<td>110-806</td>
<td>3.6m - 22.5m</td>
<td>Vert: 0.6 (U) 0.6 (D) frame, Hor: 0.15 (L) 0.15 (R) frame</td>
</tr>
<tr>
<td>4.34 - 6.76 : 1 zoom HB</td>
<td>110-807</td>
<td>5.5m - 35m</td>
<td>Vert: 0.6 (U) 0.6 (D) frame, Hor: 0.15 (L) 0.15 (R) frame</td>
</tr>
</tbody>
</table>

### Lens Mount

Motorised shift, zoom and focus.

### Mechanical Mounting

<table>
<thead>
<tr>
<th>Table/Rear Table</th>
<th>Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Top or Inverted: Yes</td>
<td></td>
</tr>
<tr>
<td>Front/Rear Ceiling</td>
<td>Pointing Up: Yes</td>
</tr>
<tr>
<td>Adjustab Front/Rear Feet</td>
<td>Pointing Down: Yes</td>
</tr>
<tr>
<td>Optional RapidRig™ frame with integrated pitch, roll and yaw adjustments</td>
<td>Roll (Portrait): Yes</td>
</tr>
</tbody>
</table>

### Power Requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>90 - 240VAC 50/60Hz single phase</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>840W</td>
</tr>
</tbody>
</table>

### Thermal Dissipation

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan Noise</td>
<td>39dBA</td>
</tr>
</tbody>
</table>

### Operating/Storage Temperature

<table>
<thead>
<tr>
<th>Operating Temperature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating: 0 to 40C (32 to 104F)</td>
<td>20% to 90% non-condensing</td>
</tr>
<tr>
<td>Storage: -20 to 60C (-4 to 140F)</td>
<td></td>
</tr>
</tbody>
</table>

### Weight (Chassis Only)

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Only Weight</td>
<td>27 kg 60 lb</td>
</tr>
<tr>
<td>Dimensions</td>
<td>L: 66.5 cm W: 50 cm H: 22 cm</td>
</tr>
<tr>
<td></td>
<td>L: 26.2 in W: 19.7 in H: 8.7 in</td>
</tr>
</tbody>
</table>

### Safety & EMC Regulations

CE, FCC Class A & B, UL, CCC, KC

*Dimensions included for reference only and are subject to change. Please download the full set of CAD files for this display for more accurate information.

### Downloads

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<th>Downloads</th>
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<td>PDF CAD Drawings</td>
<td>User Guides</td>
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<tr>
<td>AUTO CAD Drawings</td>
<td>Important Information</td>
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