

Insight Laser 4K (Preliminary)

12,000 ANSI Lumens | Contrast Ratio: 2,000:1 | Part No:114-821

Insight Laser 4K Digital Projectors

DIGITAL  **PROJECTION**

Colour System: 3-chip DLP®	DMD Specification: 4096 x 2160 pixels native. Fast transit pixels for smooth greyscale and improved contrast.
Display Type: 3 x 1.38" DarkChip™ DMD™	Aspect Ratio: 1.90:1 Fill Factor 87%

Key Features

Video & Graphics Processing

- Up to 60fps 4096 x 2160 pixels sequential input via single cable (Display Port 1.2)
- Dual Pipe input capability (2 x Display Port 1.2)
- 3D Capable
- Scaling of HDMI 1.4 formats to fill the 4K display
- Input 4 (HDMI) can be assigned to overlay a scaled or native image over the main video image.
- Dark Time insertion capability
- 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).
- Dual Pipe Processing: Two sources in parallel for Left and Right Eyes.
- Synchronisation of active glasses or polarising switcher.

Edge Blending

- High bit-depth blending up to 20% of the image width on all four sides of the DMD (approximately 800 pixels overlap per edge).
- Black level equalisation across different overlap areas.
- Correction for non-active pixels at the edge of the display.

Image Blanking

- Linear black "curtains" adjustable for all four edges.

Color adjustments

- Up to 12 bits per color processing (depending on source and input type).
- Degamma table maps 12 bit input to 16 bit palette (R, G & B) for display.
- Individual R, G & B lift and gain.
- Black and White level adjustment via Brightness & Contrast control.
- Degamma selection from a list of parametric curves.

ColorMax™

- Accurate matching of projectors in tiled or blended applications.
- User selection and storage of primary and secondary user defined color targets up to 7 points.

3D Functionality

- Full 4K 3D display capability
- Frame multiplication capability (2x, 3x) with interleaving of Left/Right repeated frames.
- Dual Pipe processing: two sources in parallel for left and right eyes.
- Synchronisation of active glasses or polarising switcher.
- Adjustable Dark Time and Synch Offset for optimisation of ghosting and smooth greyscale for switching glasses and polarizers.
- HDMI 1.4 mandatory standards decoded and then scaled to DMD.

Projector Control

- Keypad with LCD panel.
- Wired remote control.
- Network control via RJ45 and protocol.
- Group Controller Application

Source Compatibility:

Graphics standards up to 4096 x 2160 at 60 fps via DisplayPort. 30 fps via HDMI. 30 fps per pipe in Dual Pipe mode. Higher input frame rates supported at lower input resolution.

Inputs/Outputs

Video & Computer			Communication & Control		
Type	Connector	Qty	Type	Connector	Qty
DisplayPort 1.2	DisplayPort	2	LAN	RJ45	1
HDMI	HDMI	2	RS232	9-pin D Sub	1
HD-SDI (Optional)	BNC x 4	1	Wired Remote In Service Port	3.5mm Stereo Jack USB Type B	1 1

3D Formats Supported

Frame Packing
Dual Pipe
Frame Sequential
Side By Side (half)
Top and Bottom

HDTV Formats Supported

N/A

Computer Compatibility

Up to 4096 x 2160

Bandwidth

N/A

Remote Control

Wired remote control
On-Board keypad with LCD screen

Automation Control

RS232
LAN

Colour Temperature

User selectable from 3300 to 10000K

Lamp Type

Laser Light Source

Typical Lamp Life

20,000 hours

Lenses

Lens	Part No.	Focus Range	Lens Shift
1.13 - 1.72:1	115 - 627	TBD	Vert: 0.275 (U) 0.275 (D) frame, Hor: 0.09 (L) 0.09 (R) frame (Preliminary)
1.65 - 2.60:1	115 - 630		Vert: 0.275 (U) 0.275 (D) frame, Hor: 0.09 (L) 0.09 (R) frame (Preliminary)
2.53 - 4.98:1	115 - 632		Vert: 0.325 (U) 0.325 (D) frame, Hor: 0.105 (L) 0.15 (R) frame (Preliminary)

Lens Mount

Motorised shift, zoom and focus. Intelligent Lens Memory with user-definable preset positions.

Mechanical Mounting

Orientation

Front/Rear Table
Front/Rear Ceiling
Adjustable Front/Rear Feet
Robust attachment points for use with ceiling mounts and rigging frames
Resilient to shock and vibration standards

Table Top or Inverted: Yes
Pointing Up: Yes
Pointing Down: Yes
Roll (Portrait): Yes

Power Requirements

200 - 240VAC 50/60Hz single phase

Power Consumption

1600W

Thermal Dissipation

5027 BTU/Hour

Fan Noise

48 dBA

Operating/Storage Temperature

Operating: 0 to 40C (32 to 104F)
Storage: -10 to 50C (14 to 122F)

Operating Humidity

20 to 80% non-condensing

Weight (Chassis Only)

67 kg
148 lb

Dimensions

H: 32.5 cm (without feet (+2.5cm))
W: 70.0 cm
L: 93.5 cm
H: 12.8 in (without feet (+1 in))
W: 27.56 in
L: 36.8 in

Safety & EMC Regulations

CE, FCC Class A, UL, CCC

**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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