

LIGHTNING Pro Series II

LIGHTNING 38HD-3D • LIGHTNING 45HD-3D



PERFORMANCE SPECIFICATIONS

Brightness (±15%)

45HD-3D:
30,000 Center lumens

38HD-3D:
22,000 Center lumens

Contrast Ratio (±10%)

>2000:1 full-field

Display Type (one per R, G, B)

3 x 1.26" Dark Metal FTP DMD™

DMD Specification

2048 x 1080 pixels native, 12° tilt angle

Fill factor

90% pixel fill factor

Sealed Optics at DMD Interface

Protects DMD's from optical contamination

Lamp Type

Proprietary xenon arc, bubble. Hyper-cooled lamp module with directional-flow reflector mask and radial heat exchanger. Digital Hour meter.

Lamp Life

38HD-3D: 750 hours (typical)¹

45HD-3D: 500 hours (typical)¹

Lens Mount

Intelligent, programmable lens functionality
Motorized horizontal and vertical lens shift, zoom and focus. 1/4 pixel landing accuracy.

Lens Shift (typical, dependent on lens)

Vertical: ± 0.25-0.5 frame

Horizontal: ± 0.1-0.25 frame

Lens Options

1.0 :1 fixed
1.25 - 1.45 :1 zoom
1.45-1.8 :1 zoom
1.8 - 2.4 :1 zoom
2.2 - 3.0 :1 zoom
3.0 - 4.3 :1 zoom
4.3 - 6.0 :1 zoom
5.5 - 8.5 :1 zoom

Control

Rear touch screen with "ShowMode" diagnostics - provides direct control and feedback over projector functions. Wireless LAN "802.11b", LAN and RS232

Mechanical Mounting

Floor or ceiling, front or rear. Integrated handles and rigging frame with pitch and roll adjustments, flexible stacking/rigging points.

Rugged, stager tolerant chassis

Orientation

360° front to back
±15° left to right

Dimensions (excludes feet)

43.4in(L) x 28.4in(W) x 18.7in(H)
1103mm(L) x 721mm(W) x 475mm(H)

Weight (chassis only)

249lbs (113kg)

Overview

Digital Projection International, the original innovator of the 3-chip DLP™ projector, proudly introduces the LIGHTNING 45HD-3D & 38HD-3D Pro Series Displays.

The HD-3D series carries forward all of the benefits of the Professional Series LIGHTNING Chassis - exceptional RapidRig™ staging and stacking hardware with integrated pitch, roll and yaw adjustments - while also delivering the enhanced benefits of active 3D capability, extended color depth and improved lumen maintenance.

Additional benefits of the LIGHTNING 45HD-3D/38HD-3D include:

- Active 3D compatibility up to 2K resolution
- Accepts sources up to 12 bits per color (R, G & B) through twin-dual DVI input.
- Sealed optics to protect DMD's and other focal plane components from airborne contaminants
- DPI's new, hyper-cooled lamp module, one of our CoolTek™ innovations, dramatically improves projector thermal characteristics and extends reflector life and lumen maintenance.
- Onboard LCD touch screen operation with ShowMode diagnostics

When paired with the VIP series signal processor, the LIGHTNING HD-3D can support extensive video, HD or computer sources. The rack-mountable system includes DigiLink, a single-link DVI high bandwidth digital output to the projector, simplifying system wiring and reducing installation costs. The VIP also includes HDCP compliant HDMI inputs and can be configured to incorporate dual HD-SDI inputs as well.

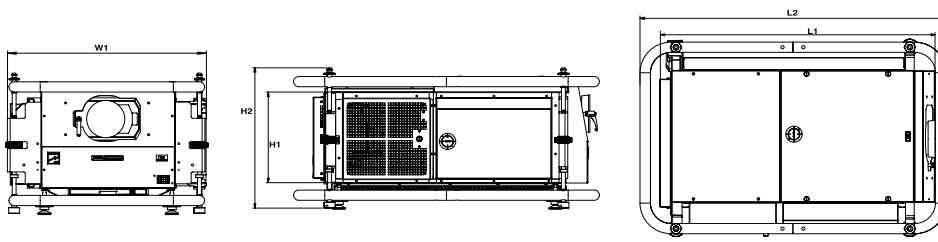
The new LIGHTNING 45HD-3D & 38HD-3D - ultra powerful, immensely capable displays for visualization, major events and color-critical applications - bringing the precision of Digital Projection to the world's most demanding venues.

INPUT CAPABILITIES

Type

Projector input: ¹	Connector	Qty
Single DVI with loop through (receives up to 8 bits per color (R,G,B) at up to 2048x1080 at 60Hz)	DVI-D	1
Twin Dual DVI - MAIN + SUB (receives up to 12 bits per color (R,G,B) at up to 2048x1080 at 120Hz)	DVI-Dx2	1

¹ Input selection is automatic but is prioritised to the MAIN+SUB input. Selection is by detection of DVI signal.





Projector Dimensions

Projector dimensions (in)	Projector dimensions (mm)
W1 28.4 H1 17.1 L1 43.2	W1 721 H1 434 L1 1097
Frame dimensions (in)	Frame dimensions (mm)
W1 28.4 H2 18.7 L2 43.4	W1 721 H2 475 L2 1103



LIGHTNING 45HD-3D Back Panel

ADVANCED TECHNICAL SPECIFICATIONS

PARAMETERS	 
Native Color Temperature	6000°K ±500°K; white balance-adjustment: 3000°K to 9300°K
HDTV Formats Supported	All progressive formats
Scan Rates Supported	All progressive formats Horizontal: 31.5kHz to 105kHz / Vertical: 24Hz to 120Hz
Remote Control	Secure wireless LAN "802.11b"
Automation Control	Secure wireless LAN "802.11b", LAN, RS232
Operating/Storage Temperature	Operating: 10 to 35°C / Storage: -10 to 50°C
Operating Humidity	up to 80% non-condensing
Thermal Dissipation	38HD-3D: 13640 BTU/hr / 45HD-3D: 15695 BTU/hr
Fan Noise	Less than 59dBA
Power Requirements	200-240 VAC, 50/60Hz single phase
Power Consumption	38HD-3D: 4000 watts / 45HD-3D: 4600 watts

Projectors

LIGHTNING 38HD-3D
LIGHTNING 45HD-3D

Part

108-358
108-360

Accessories

Hypercooled Lamp & Housing
Hypercooled Refurb Lamp & Housing
Lamp Exchange
Infrared Remote

Part

103-238
103-238R
103-238E
105-023

Lenses

1.0:1
1.25 - 1.45:1
1.45-1.8:1
1.8 - 2.4:1
2.2 - 3.0:1
3.0 - 4.3:1
4.3 - 6.0:1
5.5 - 8.5:1

Part

103-350
103-351
102-451
102-676
102-677
102-678
104-189
103-352

¹ Based on 4-6 hour/day operational profile. Venue and application conditions may impact actual lamp life. See Digital Projection's Product Warranty Statement for details on lamp warranty.

