

35HD-T, 40HD-T and MMS 1000



PROJECTOR PERFORMANCE SPECIFICATIONS

Brightness (±10%)

35HD-T:
18,000 Center lumens
16,000 ANSI lumens

40HD-T:
22,000 Center lumens
21,000 ANSI lumens

Contrast Ratio (±10%)

>1600:1 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

750 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 | 1.8-2.4 | :1 zoom |
| 1.25-1.45 | :1 zoom | 2.2-3.0 | :1 zoom |
| 1.45-1.8 | :1 zoom | 3.0-4.3 | :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 23.4in(W) x 18.7in(H)
1103mm(L) x 721mm(W) x 475mm(H)

Weight (chassis only)

249lbs (113kg)

Digital Projection International, the original innovator of the 3-chip DLP™ projector, proudly introduces the LIGHTNING 40HD-T & 35HD-T Pro Series Displays.

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

Additional benefits of the LIGHTNING 40HD-T/35HD-T 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 with digital hour meter, dramatically improves projector thermal characteristics and extends reflector life and lumen maintenance.

When paired with the MMS 1000, the LIGHTNING HD-T can support extensive video, HD or computer sources. The rack-mountable system includes DigiLink, a single-link DVI and twin-link DVI ultra-high bandwidth digital output to the projector, simplifying system wiring and reducing installation costs. The MMS 1000 also includes soft-edge blend and can be configured to incorporate options such as seamless switching and geometric warp.

The new LIGHTNING 40HD-T & 35HD-T - 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.

MULTI-MEDIA SWITCHER 1000 SPECIFICATIONS

► Input capabilities-see table lower right

Video Processing

10-bit processing from video input to output
DigiScale - accurate image resizing for faithful reproduction of all displayed sources
DigiView - optimized video processing, deinterlacing and 3:2 pull-down

Edge Blending

DigiBlend - edge blending for tiling of multiple projected images

Geometry

DigiWarp (optional) - user definable control over all image geometry. Horizontal/vertical and keystone warp correction for both cylindrical and spherical displays

Interface To Projector Via DigiLink

High-bandwidth digital link extendable by rugged fibre optic cable providing optically-isolated interconnection - offering significant benefit to staging and installation customers by reducing cable complexity and signal interference due to grounding

Control

Front panel LCD, IR/Hardwired remote control, external control via RS232/422, USB or LAN

PC Card Slot

Wireless LAN, data download

Dimensions

Five RU 19" rack mountable
17.7in(L) x 19in(W) x 8.7in(H)
450mm(L) x 483mm(W) x 221mm(H)

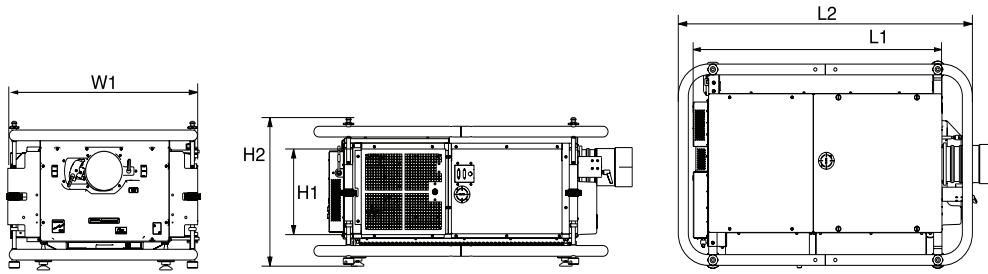
INPUT CAPABILITIES

| Type | Connector | Quantity |
|--|-----------------------------|----------|
| Projector input:¹ | | |
| Single DVI wth 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 110Hz) | DVI-Dx2 | 1 |
| MMS 1000 input/output: | | |
| Four available input slots: standard modules: ² | | |
| Composite / component video / S-video input module (mm-video) | BNCx1,BNCx3, 4-pin mini DIN | 1 each |
| RGB HV / component input module (MM-RGB) | BNCx5 | 1 |
| optional modules: | | |
| DVI-D input module (MM-DVI) | DVI-D | 1 |
| SD-SDI / HD-SDI input module (MM-SDI) | BNCx2 | 1 |
| Output: | | |
| DigiLink | DVI-D | 1 |

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

² See MMS 1000 user manual for detailed input specifications

LIGHTNING 35HD-T



Projector dimensions (in)
W1 28.4 H1 17.1 L1 43.2

Projector dimensions (mm)
W1 721 H1 434 L1 1097




Frame dimensions (in)
W1 28.4 H2 18.7 L2 43.4

Frame dimensions (mm)
W1 721 H2 475 L2 1103



Lightning 40HD-T / 35HD-T back panel

ADVANCED TECHNICAL SPECIFICATIONS

| PARAMETER |   |  |
|-------------------------------|---|---|
| Color Temperature | 3000-9300°K | NA |
| HDTV Formats Supported | All progressive formats | 1080i/24p, 720p, 480p and other current and emerging formats |
| Scan Rates Supported | All progressive formats Horizontal: 31.5kHz to 105kHz / Vertical: 24Hz to 120Hz | Horizontal: 15kHz to 105kHz / Vertical: 24Hz to 110Hz |
| Remote Control | Secure wireless LAN "802.11b" | Infrared Remote, Secure 802.11b wireless LAN compatible |
| Automation Control | Secure wireless LAN "802.11b" LAN, RS232 | RS232, USB, LAN |
| Operating/Storage Temperature | Operating: 10 to 35°C / Storage: -10 to 50°C | Operating: 10 to 35°C / Storage: -20 to 60°C |
| Operating Humidity | up to 80% non-condensing | |
| Thermal Dissipation | 13640 BTU | 1023 BTU maximum |
| Fan Noise | Less than 59dBA | NA |
| Power Requirements | 200-240 VAC, 50/60Hz single phase | 100-240 VAC, 50/60Hz single phase |
| Power Consumption | 35HD-T - 4000 watts / 40HD-T - 4600 watts | 300 watts maximum |

| PROJECTOR | PART NO. | LENSES | PART NO. | OPTIONAL SYSTEM COMPONENTS | PART NO. |
|------------------|----------|-------------------|----------|---|----------|
| LIGHTNING 35HD-T | 105-033 | 1.0 :1 fixed | 103-350 | Replacement Lamp Module 35HD-T | 103-238 |
| LIGHTNING 40HD-T | 106-264 | 1.25-1.45 :1 zoom | 103-351 | Replacement Lamp Module 40HD-T | 104-578 |
| | | 1.45-1.8 :1 zoom | 102-451 | MMS 1000 | 001-724 |
| | | 1.8-2.4 :1 zoom | 102-676 | Input cards: | |
| | | 2.2-3.0 :1 zoom | 102-677 | - Composite / component / S-Video input module (MM-Video) | 001-726 |
| | | 3.0-4.3 :1 zoom | 102-678 | - RGB HV / component input module (MM-RGB) | 001-722 |
| | | | | - DVI-D input module (MM-DVI) | 001-721 |
| | | | | - SD-SDI / HD-SDI input module (MM-SDI) | 001-720 |

- Processing options:
- Seamless switching / crossfade:²
 - Scaler
 - Image processor
 - Geometry / Warp³
 - Wireless LAN card



MMS 1000

- 001-729
- 001-730
- 001-727
- 001-723



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.
2 Seamless switching requires the addition of two cards (image processor / scaler) which must be factory installed
3 Geometry / warp is available only as a factory installed option