Introducing the Barco D-Cine Premiere DP100, the world’s most advanced large screen digital cinema projector; combining the highest resolution 2k DLP Cinema™ technology from Texas Instruments with a host of unique installation and operating benefits.

The DP100. Truly a no-compromise projection solution that guarantees exceptional performance over time, enables the easiest possible installation and operation and provides unique maintenance, safety and security benefits.

- Meets or exceeds SMPTE screen brightness standards on screens up to 23m (75ft) wide
- Based on TI m25 DLP Cinema technology incorporating CineBlack™, CineCanvas™, CineLink™ and CinePalette™ signal management
- Integrated light path and digital processing for optimum performance and reliability
- Modular construction for the easiest maintenance
- Flexible two-piece construction for convenient installation and operation in the Theater or Post-Production
- Compatible with D-Cine Communicator the industries’ most advanced projector control and diagnostic software
Preliminary specifications

Digital projector head

Digital Micromirror Device™
- 3 x 1.2” dark metal type
- Equipped with advanced DLP Cinema® signal processing: CineCanvas® image management; CinePalette®, color management, CineBlack® contrast management and CineLink® security management

Native resolution
- 2048 x 1080 per Red, Green and Blue channels. Equivalent to 6.6 million pixels

Color processing
- Bit depth: 45 bit (15 bit per color)
- Color gamut: 35 trillion
- Color gamut: 40% better than HDTV (equivalent to film)

Housing
- Designed for easy installation in parallel with existing 35mm projector
- Removable side panels for easy access and quick service
- Quick change, washable, air inlet filters
- Hermetically sealed DMD™ and optical assembly
- Secure, double locked video processing card cage
- Slide-in lamp, video processing and optical block modules
- Integrated slide-in water cooling reservoir
- Integrated video and control input panel and cable tidy
- Space for integrated alternative content switcher and router
- Pedestal or ceiling mounted. Up to 15 deg tilt on pedestal
- Integrated projector head ceiling mount fixings
- Lockable doors with auto shutdown on unauthorized entry
- High visibility on and error LED indicators
- Convenient lamp change card

Optical

Lamp
- Accepts 2k to 7k Xenon arc lamp sizes
- Compatible with standard and high performance lamp types
- Quick-fit replacement lamp modules

Lamp module
- Incorporating F1.5 double glass cold light reflector
- Quick and easy on-site lamp change within the module
- X, Y and Z lamp alignment

Brightness
- Meets or exceeds SMPTE screen brightness standards up to 23m (75ft) wide
- Adjustable light output to conform to SMPTE screen brightness standards on smaller screen sizes via optional CLO software

Uniformity
- > 90% for the total screen area

Contrast ratio
- minimum 1700:1 (full white/full black)

Convergence
- Convergence control of Red, Green and Blue DMD’s

Dowser
- Motorized, built-in

Inputs

Digital Video Inputs
- 2 x SMPTE 292M inputs, selectable individually or as a linked pair
- Single port compatible with the formats listed as follows

Graphics input
- 2 x DVI interface selectable individually or as a linked pair
- Supports standard and non standard DVI source formats
- Also supports non-standard packaging at 10 or 12 bit per color

Lenses

Prime lenses
- Flush fit zoom lens options 1.45:1 - 1.8:1 / 2.1:1 / 2.2:1 - 3.0:1 Zoom and 2.8:1 - 5.5:1

Anamorphic lens
- Optional 1.26:1 scope lens option
- Motorized lens change

Lens shift
- Motorized. Range dependent on lens type

Projector control

Built-in touch screen control of all projector control and diagnostic functions
- 4 x LED status indicators
- On, OK, IR and receiving meta data
- Push button control and status indication of lamp and electronic dowser
- Push button control and status indication of 14 display configurations including digital cinema inputs and format switching, all alternative content inputs and customizable picture in picture presentation screen displays
- Customizable button labeling

Projector diagnostics

Via touch screen
- Temperature of DMD™, power supply, and ambient.
- Status of power supply voltage, lamp run time, lamp strikes, alarms
- Via D-CINE Communicator control software
- All of the above plus status of switch mode and lamp power supplies, TI video process cards, CLO, card cage security and projector log file

Image control

Via D-CINE COMMUNICATOR software
- For projector, lens and source set-up plus display, geometry (resizing), masking (cropping) and color calibration

Control interface
- PC set up via K5232/K5422 serial communications and 100 T base ethernet connection

Projector pedestal

13u rack space
- Incorporating electronic power supply
- Fully ventilated
- Handle for easy transport and positioning
- Optional wheels and lock down legs
- Up to 15 deg tilt angle

Power

Power supply
- Electronic lamp power supply, microprocessor controlled
- External power switch and high accuracy current meter

Power requirement
- 3 x 400V + N or 3 x 220V versions available

Mechanical

Dimensions (mm/inch) approx
- Projector head: 620(W) x 768(W) x 1120(D) mm / 24(H) x 30(W) x 44(D) inch
- Projector head and pedestal: 1482(H) x 768(W) x 1120(D) mm / 58(H) x 30(W) x 44(D) inch

Weight
- Projector head: approx 95kg (210lb)
- Projector head and pedestal: approx 150kg (332lb)

Options
- CLO - Constant Light Output control
- Anamorphic lens fitting for 1.26:1 scope lens
- High resolution alternative content interface and processor

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www.d-cine.barco.com