

PRELIMINARY



BARCO ELM G10

The Extreme Light Machine

The ELM G10 combines exceptional light output and high resolution with advanced signal processing to deliver a remarkable break-through in performance for large screen cinematic video display.

Equipped with high resolution Digital Light Processing™ (DLP™) sub-system which features 3 XGA resolution Digital Micromirror Devices™ (DMD™) and a state-of-the-art optical system, the BARCO ELM G10 delivers an ultra-high light output of 10,000 ANSI lumens to meet and exceed the needs of the most demanding rental, staging and electronic cinema applications.

Ready for the Road

A wide range of special features and accessories make the ELM G10 especially well suited for the most demanding Rental and Staging requirements.

Special design features enable the projector to be handled, set-up and controlled in an exceptionally easy fashion. An extremely rugged steel frame construction allows the projector to be stacked quickly and safely, without the need for a stacking frame. An innovative modular construction establishes new standards of serviceability.

Exceptional Performance

The BARCO ELM G10 combines exceptional source compatibility with advanced TCR^{PLUS} image processing to provide unique flexibility with superb video and film-like image quality.

Compatible with both current and future digital sources, the ELM G10 utilizes 13-Bit digital signal processing for superb grayscale performance.

Together with the units remarkable 10,000 ANSI lumens of light output this results in image quality that is truly in a class of its own.



BARCO

Ready for the Road

Several innovative features and accessories make the ELM G10 well prepared for a lifetime on the road in the most demanding Rental and Staging applications.

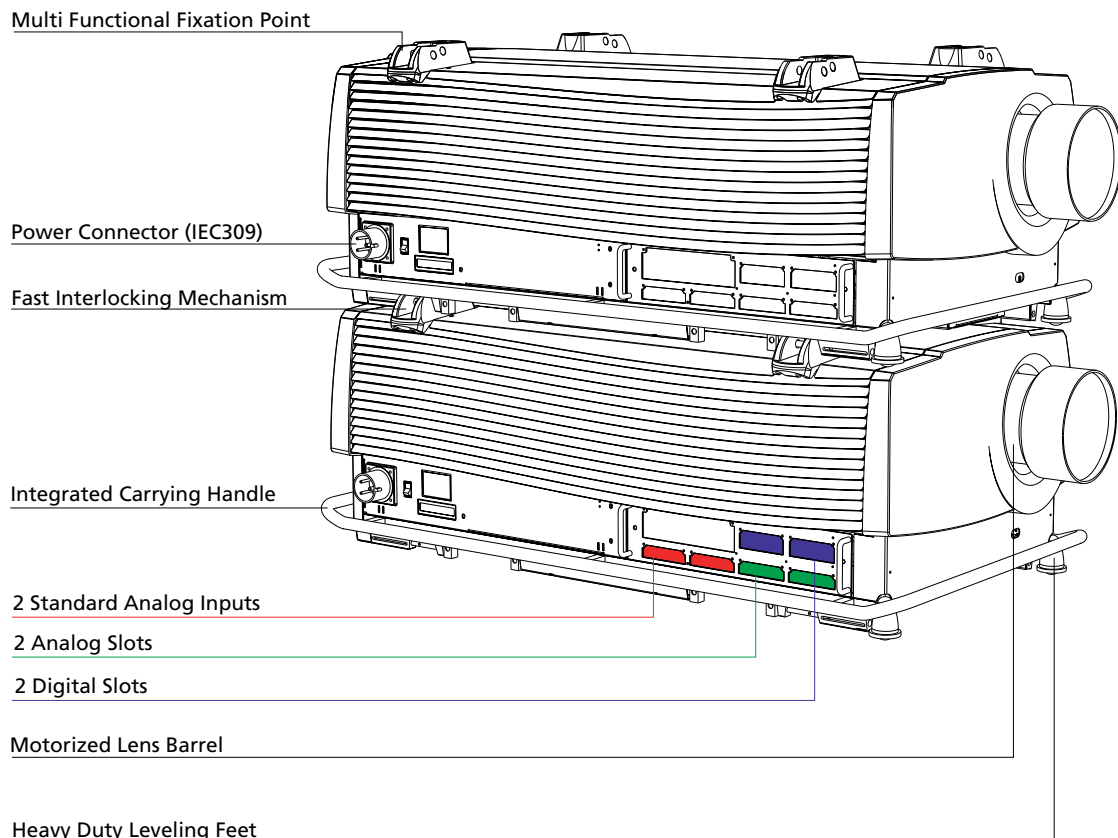
Flexible Set-Up

- An integrated all-round carrying handle and optional front and side forklift chassis attachment facilitates transport.
- A rugged internal steel frame allows double and triple stacked configurations without extra frames.
- Integrated fixation points, compatible with standard rigging gear for easy truss mounting.
- A unique interlocking feature allows direct stacking or flying of up to three projectors without tools.
- Advanced modular construction and fast removable side panels ensure easy service and maintenance even when stacked.
- Illuminated side connection of all signal and power inputs
- Motorized image shift, zoom and skew for pixel accurate picture alignment in stacked configuration
- Heavy duty adjustable leveling feet
- Rollover protection

- Built-in Serial Digital Input (SDI/4:2:2) for direct connection of digital sources with active loop-through for monitoring or double and triple stacking applications.
- Up to 175% vertical or 160% horizontal Lens Shift when using BARCO's QLD zoom lenses
- Extensive Image Size, Shift and unique digital Keystone geometry adjustments.

Versatile Control

- External auto-diagnostics with back-lit LCD display of 2 lines of 24 characters
- Internal test patterns (crosshatch, color bars, grayscale,...)
- Pre-calibrated color temperature selections (3200K, 5400K, 6500K, 9300K or custom)
- Easy firmware upgrade from PC via RS232 or RS422 input
- Intuitive on-screen display
- Multi-level password protection
- Modular lamp power supply with automatic redundancy feature.



Exceptional Performance

The BARCO ELM G10 combines exceptional source compatibility with advanced digital image processing to provide unique flexibility with superb video and film-like image quality

Compatibility

- All current Video sources in Composite, S-VHS, RGB or Component or Serial Digital format
- All currently proposed HDTV, extended and improved television standards (Eureka 95, Hi-Vision, ACTV, IDTV, EDTV,...)
- Computers and workstations with a resolution of up to 1280 x 1024 pixels
- Most Macintosh computers
- Two digital input slots to allow for direct digital interfacing with current and future digital standards

Display Excellence

- High light output of 10,000 ANSI lumens
- Three XGA DMD's with a resolution of 1024 x 768 pixels
- 13-Bit signal processing for superior low-light performance.
- BARCO's patented Pixel Map Processor guarantees compatibility with the widest range of sources.
- Light shutter blanks image when paused
- BARCO's advanced TCR^{PLUS} feature improves the image quality of both video and RGB sources.

TCR^{Plus} The Power to Reinforce Color and Detail



BARCO's TCR^{Plus} Technology incorporates the True Color Reproduction feature which provides true-to-life colorimetry and superior color uniformity over the entire screen, perfect color tracking and superb gamma correction, as well as a large number of image enhancement tools. The result: graphics that really stand out and video images that seem to jump right off the screen!



Dynamic Color Depth

Superior picture performance is achieved with any source by analyzing, grading and controlling the color contrast of each image pixel in real-time.

Sharper Picture Display

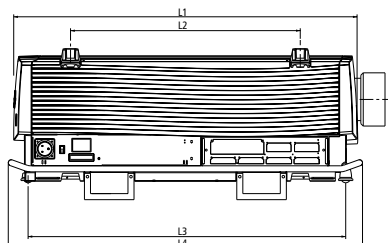
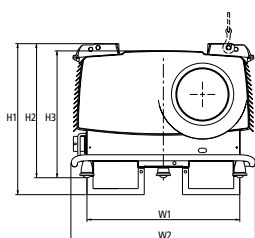
Powerful digital processing circuits dramatically improve both sharpness and picture detail for high resolution graphics and video images.



Noise Reduction

An advanced Digital Noise Reduction System reduces noise in video pictures and increases stability of graphics images without inducing motion artifacts.

Technical Specifications



Light Output

10,000 ANSI lumens

Brightness uniformity:

>90% for the total screen area

Digital MicroMirror Device™

3 high resolution XGA DMD's, with a resolution of 1024 x 768 pixels

Lamp

Typical lifetime: 500 hours

Lenses

BARCO's LD Series lenses are compatible with existing DLP projection systems.

Lens Type	Throw Ratio
LD (1.5-2.5:1)	1.5-2.5
LD (2.5-4.0:1)	2.5-4.0
LD (4.0-7.0:1)	4.0-7.0

BARCO's QLD Series lenses are designed for the ELM R12. Due to the difference in DMD's, the throw ratio will be 25% larger when used on the ELM G10.

Lens Type	Throw Ratio
QLD (1.2:1)	1.5
QLD (1.5-2.0:1)	1.9-2.5
QLD (2.0-2.5:1)	2.5-3.1
QLD (2.5-4.0:1)	3.1-5.0
QLD (4.0-7.0:1)	5.0-8.7

Contrast Ratio

>250 :1 (on 5x4 B/W checkerboard)

>450 :1 (full white/full black)

Remote Control

All controls are accessible through a soft-touch panel, a user-friendly back-lit infrared remote control of

- Source switching
- User settings per source
- Installation and service adjustments

Fixed Inputs

- RGB analog input with standard sync (BNC connectors), sync on green or separate sync
- Multifunctional 5-Cable input for the connection of
 - RGB analog signals with standard sync (BNC connectors) or tri-level sync, sync on green or separate sync
 - Standard Video signals
 - S-VHS signals
- RS232 or RS422 loop-through input (D9-connector) for PC based projector control
- SDI input (Serial Digital Input)
- Communication input (D9-connector) for peripherals
- 3 pin male XLR connector for wired remote (standard remote)
- 3 pin female XLR connector for bi-directional communication (ruggedized remote)

Dimensions	inch	mm
L1	55.9	1,420
L2	37.4	950
L3	51.7	1,314
L4	57.7	1,465
W1	24.9	632
W2	29.9	760
H1	24.6	624
H2	21.8	554
H3	20.6	524

Optional Inputs

Two additional input slots are provided for five optional types of input modules:

- Video / S-Video Input: Video on BNC, S-Video on 4-pin mini-DIN connector
- Component Video Input (Y, R-Y, B-Y, S) on 4 BNC connectors
- RGB analog input with standard sync (BNC connectors), sync on green or separate sync
- RGB analog input with tri-level sync (BNC connectors), sync on green or separate sync
- 5-Cable input

Power Consumption

Max. 3750 Watts

AC Power

230 V +/-10% .

Weight

Net weight 315lbs. / 143kg

Order Information

ELM G10	R9001500
LD (1.5-2.5:1)	R9840090
LD (2.5-4.0:1)	R9840270
LD (4.0-7.0:1)	R9840280
QLD (1.2:1)	R9840120
QLD (1.5-2.0:1)	R9840130
QLD (2.0-2.5:1)	R9840140
QLD (2.5-4.0:1)	R9840150
QLD (4.0-7.0:1)	R9840160

Digital Light Processing, DLP, Digital Micromirror Device, DMD are trademarks of Texas Instruments.



BARCO Projection Systems is an ISO9001 registered company.

The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.

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