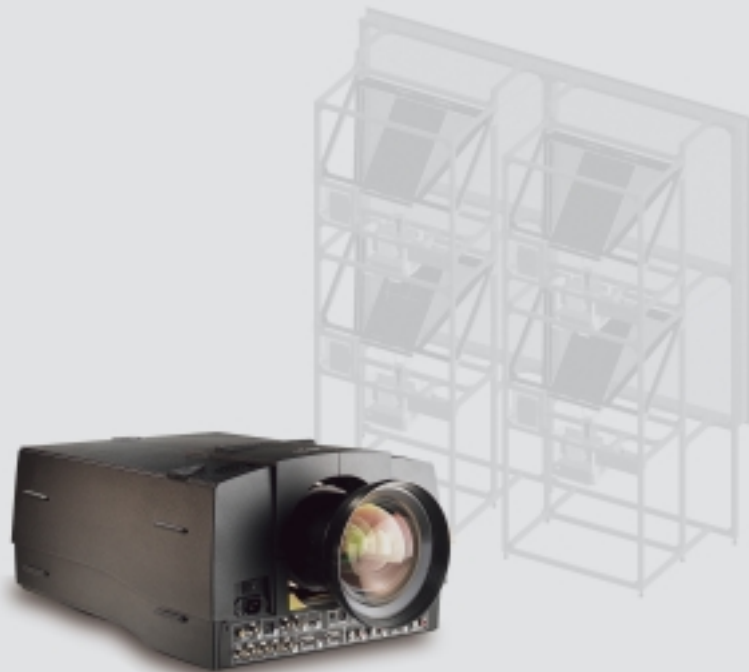# Helios

Digital light valve projector for retro enclosure

A perfect combination of compact size, high light output and exceptional resolution make Barco's Helios highly recommended for rear projection mount. It can easily be integrated into any retro enclosure or used as a replacement projector for older generation projectors.

This "drop-in" projector is equipped with Poly-Silicon SXGA panels and accomplishes high brightness, high resolution pictures on screens measuring 84" and higher.

Especially multi-screen applications highly benefit from the unit's advanced features for superior color uniformity across all screens.

- high light output of 650 ANSI lumen full white
- three active matrix Poly-Silicon LCD panels (1.8" diagonal) with a resolution of 1,280 x 1,024 pixels (aspect ratio 5:4). SXGA resolution can even be obtained in a 4:3 aspect ratio thanks to the built-in Pixel Map Processor
- 120 Watts lamp with a typical 6,000 hours lifetime. A different lamp type can be selected depending on the application
- Barco's powerful TCR processing enhances the quality of conventional video sources and transforms them into brilliant images with remarkable depth and clarity
- Barco's Patented Pixel Map Processor guarantees very legible characters and the greatest amount of picture detail possible. It recalculates every pixel with state-of-the-art digital signal processing techniques. The result is optimal picture quality, crisp graphics with exceptionally readable characters
- precision projection lenses provide superior image quality with an absolute minimum of geometric distortion. A wide range of lenses is available for rear screen installations from practically any angle and throw distance
- state-of-the-art optics ensure the highest resolution with unsurpassed clarity in every part of the projected image

BARCO

TCR - The power to reinforce **color and detail**
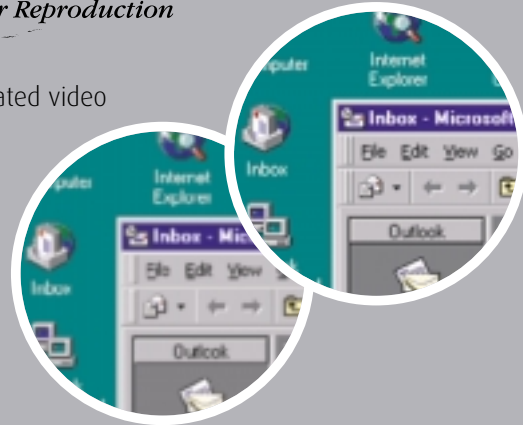
Barco's TCR technology

TCR utilizes Barco's True Color Reproduction feature which provides true-to-life colorimetry and superior color uniformity over the entire screen. Special image enhancement features enable perfect color tracking and superb gamma correction.

The result are razor-sharp graphics pictures and rich, well saturated video images with amazing color depth and clarity.

Sharper picture display

State-of-the-art processing algorithms dramatically improve both sharpness and detail for high-resolution graphics and video images.

Compact size, high light output and exceptional resolution

Technical specifications Helios

Light output
650 ANSI lumen
Brightness uniformity: 90 % for the total screen

LCD panels
3 active matrix Poly-Silicon LCD panels (1.8" diagonal), with a resolution of 1280 x 1024 pixels (aspect ratio 5:4). LCD panels are selected for a minimum of pixel defects.

Contrast ratio
>350 : 1 (full white/full black)
>120 : 1 (5 x 4 ANSI checker-board)

Remote control
All controls are accessible through a soft-touch panel or a new user-friendly backlit IR remote control:
• source switching
• user settings per source
• installations and service adjustments

Scan frequencies
>350 : 1 (full white/full black)
>120 : 1 (5 x 4 ANSI checker-board)

Compatibility
Helios is compatible with:
• all current video sources (PAL, SECAM, NTSC 3.58, NTSC 4.43) in Composite, S-VHS, Component or RGB formats
• all currently proposed HDTV, extended and improved television standards (Eureka 95, Hi-vision, ACTV, IDTV, EDTV,...)
• all computer graphics formats from VGA, S-VGA, XGA to S-XGA
• most Macintosh computers
• electronic workstations with a resolution up to 2000 x 1280 pixels / 76 Hz
• most sources with a pixel clock up to 200 MHz

Easy replacement of older generation projector

Helios has some major advantages, which makes them
the ideal CRT replacement projectors:

- TCR: delivers excellent video images, formerly only achieved by CRT projectors.
- Frame allows easy integration into any existing retro enclosure.

A broad range of lenses

A wide range of lenses has been made available for rear screen
installations from practically any angle and throw
distance. Depending upon the type of
application, the ideal lense will be
selected.

Perfect geometry
*Precision projection lenses provide
superior image quality with an absolute
minimum of geometric distortion*

Lamp
120 Watt UHP lamp pre-aligned for
max. light output
Typical lifetime: 6,000 hours (1).

Inputs
1 x Configurable 5-Wire (BNC) for:
Composite Video, S-Video,
Component Video and RGB
1 x Video (BNC or RCA)
1 x S-Video (4-pin mini-DIN)
1 x VGA (D15 connector)
3 x Configurable Stereo Audio (RCA)

Optional
1 x Serial Digital Input/Output
1 x VGA (D15 connector)
1 x Stereo Audio (RCA)
1 x Trigger Output Mini-jack (e.g. for
motorized screen control)

Communication
2 x D9 connectors for RS232 In/Out
1 x D9 connector for Com 800
1 x Mouse Out (DIN 13)
1 x Mini-jack for Wired Remote Control
2 x IR receivers (front + back)

AC power
Power factor pre-regulated SMPS,
95 - 230 VAC +-10% / 50-60Hz
Power Consumption
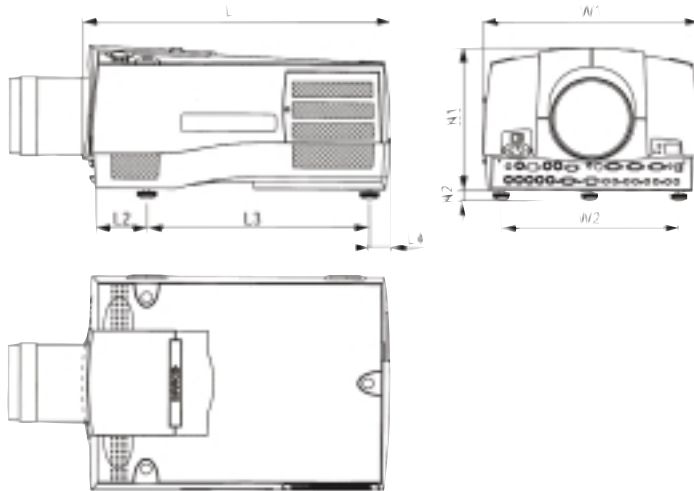Max. 300 Watts
Power dissipation < 1,000 BTU/hour

Safety regulations
Compliant with UL1950 and EN60950
Electromagnetic Interference Helios
complies with FCC rules & regulations,
part 15 Class B and CE EN55022 Class B

Special features
- auto-source recognition and configuration
- extensive geometry adjustments (motorized zoom, focus and lens shift) can also be adjusted through the RS232 communication port
- quick lens and lamp replacement
- adjustable leveling feet
- connectors at the front for almost invisible cable routing
- built-in 2 x 3 Watt stereo audio amplifier and speakers
- color temperature adjustment (Broadcast 3200° K, Film 5400° K, Video 6500° K, Computer 9500° K or Custom)
- external auto-diagnostics with a 2 x 7 segment LED display
- user adjustable Automatic standby (after 5/15/30/60 min. or off)
- easy upgradeable projector firmware via RS232
- optional LCD control software to control up to 256 projectors from one PC

(1) Detailed information on different lamp types is available on request.

Dimensions

L1	527 mm	20.76 inch
L2	87 mm	3.4 inch
L3	381 mm	34.2 inch
L4	37 mm	1.5 inch
W1	371 mm	14.6 inch
W2	306 mm	12 inch
H1	245 mm	9.65 inch
H2	12 - 24 mm	0.47 - 0.94 inch

Shipping dimensions

L	710 mm	28.0 inch
W	550 mm	21.7 inch
H	470 mm	18.5 inch

Multifunctional frame

L	627 mm	24.68 inch
W	471 mm	18.54 inch
H	606 mm	23.85 inch

Warm-up time
Less than 3 minutes to meet full specifications
Noise Level (0-26°C / 32-79°F)
39dB(A) at 39.4" / 1m (3.3 ft)
33dB(A) at 78.8" / 2m (6.6 ft)

Environmental conditions
Temperature:
• Operation 0°– 40°C / 32°– 104°F
• Storage -20°– 60°C / -4°– 140°F
Humidity:
• Operation 35 to 95%
• Storage 10 to 95%

Weight
Net weight:
Body only 17.7 kg / 39.0 lbs
Body + lens (depending on the lens)
21 - 25 kg / 46.3 - 55.1 lbs

Shipping weight
max. 29 kg / 63.9 lbs

Accessories included
• Infrared remote control
• Owner's and installation manual
• Power cord with CEE (7) VII plug

Optional accessories
Flight Case R9829870
Soft Case R9829880
Executive Remote R9829960
Service Tool Kit R9829940

Order information
Helios R9001970
Lenses
- Maverick (0.86:1) R9840491
- QFD (1.27:1) R9840400
Spare lamp kit R9840940

BARCO

Visibly yours

www.barcocontrolrooms.com