

The Barco Galaxy Family

Long Life

- GALAXY 4 LL+
- 4000 lumen
 - 1500:1

Classic

- GALAXY 6 Classic+
- 6000 lumen
 - 1500:1

High Contrast

- GALAXY 9 HC+
- 9000 lumen
 - **1700:1**

High Brightness

- GALAXY 12 HB+
- **12000 lumen**
 - 1500:1



Stereo dedicated 3-chip DLP™ projectors with built-in color matching and WARP™ predistortion



The Barco GALAXY family has a proven record for active and passive stereo technology. It is the only 3-chip DLP™ projector offering the unrivaled platform for Infitec+, the superior stereo separation technology combining high contrast with excellent stereo separation. These stereo projectors are also available in mono version.

- SXGA+ resolution 1400x1050 => 12% more pixels
- 4/3 aspect ratio: compatible with all widely used resolutions
- Built-in STEREO-CREATOR™, including DVI sources
- I-Blend™ supports up to three channels



BARCO

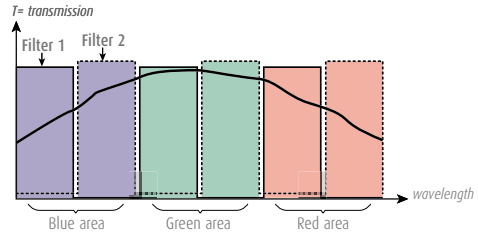
Visibly yours

Unrivaled stereo separation

Barco's optimized Infitec+
Full freedom of motion. No ghosting



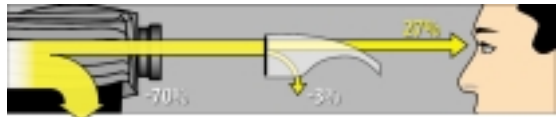
Projection on standard screen, no need for non-depolarizing screen



Two optical filters (illustrated by a thick and a dotted line) split the color spectrum in two parts: one for the left and one for the right eye.

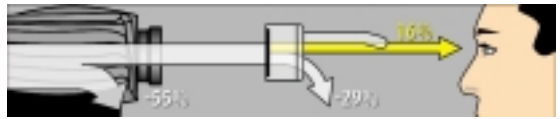
Barco positioned the Infitec+ filters at the ideal location inside its DLP™ and LCD projectors. The matching Infitec+ filters in the pair of Infitec+ glasses make sure the correct information passes through to the corresponding eye.

Infitec+ achieves its optimal performance with 3-chip DLP™, **an exclusive Barco development**. Infitec+ is completely free of flickering.



GALAXY with Infitec+™: 27% overall efficiency

GALAXY with DLP™ active stereo: Extra fast refresh rate (110 Hz) allows for high-resolution active stereo with minimal flicker.



GALAXY with DLP™ active stereo: 16% overall efficiency

Barco GALAXY with passive circular or linear polarization. Especially suited for stereo presentation to large audiences. Different brightness versions depending on room size and environmental lighting conditions.

Barco Galaxy family... One consistent projection platform

Four choices for optimum performance

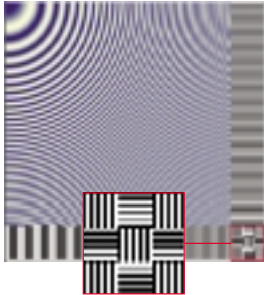


- | | | | |
|--|---|--|--|
| <p>1 Long Life
GALAXY 4 LL+
• 4000 lumen
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|--|---|--|--|

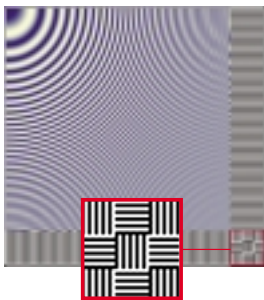
All versions also available in mono.

The Barco Galaxy family: Developed for high-

Warp™ Optimal multi-channel geometry



Test charts scaled using generic bilinear algorithm as used in most common projectors.



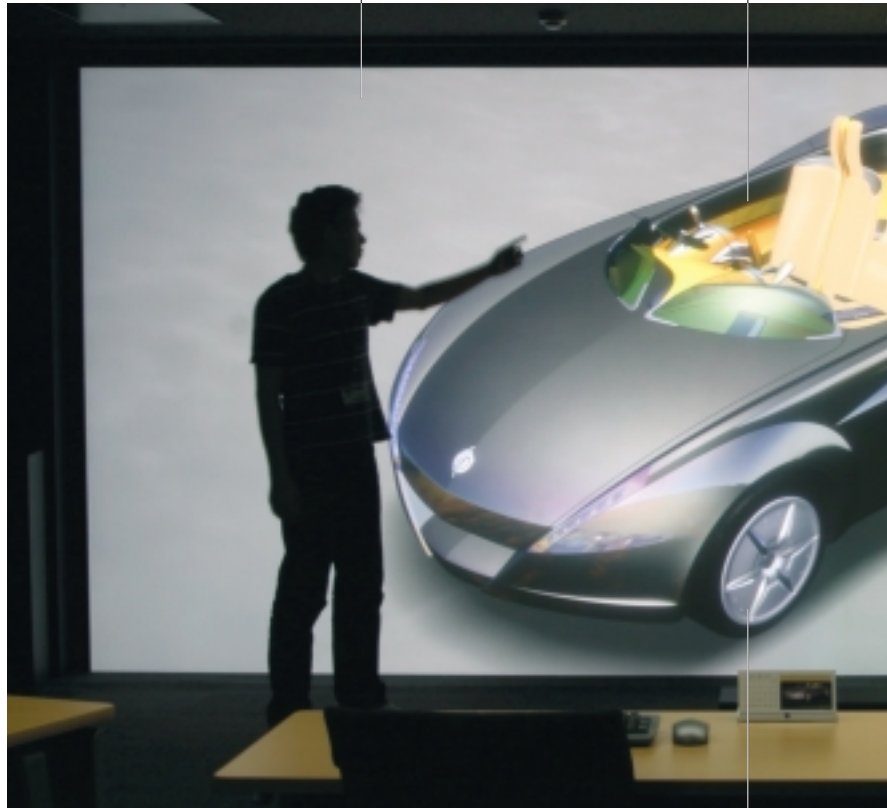
Test charts scaled using WARP™ algorithm with proprietary bi-cubic interpolation to preserve fine detail in the image and suppress resampling artifacts.



Thanks to WARP™, all GALAXY projectors can be used with flat screens (CADWalls) cylindrical and conical screens (e.g. Decision Centers) and hemispherical screens (Dome constructions, planetariums).

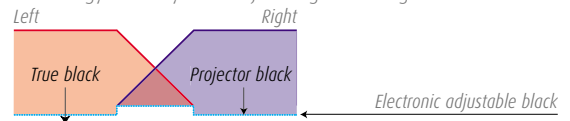
SXGA+ resolution 1400x1050
>12% more pixels

Enhanced contrast ratio
1500:1 and 1700:1

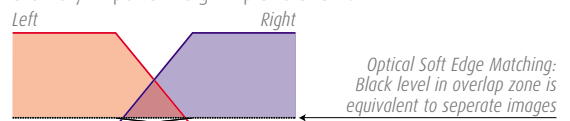


Optimized Soft Edge Matching

Multi-channel setups of light valve projectors lead to brighter overlap zones. Barco's standard **ELECTRONIC SOFT EDGE MATCHING** technology allows you to adjust edge blending to uniform level.



Barco's proprietary **OPTICAL SOFT EDGE MATCHING** blending maintains the black level in the overlap zone to that of the separate images. This solution is preferred when deep blacks are very important e.g. in planetariums.



High-resolution, multi-channel visualization

Light output:
4000, 6000, 9000 or 12000 ANSI lumens

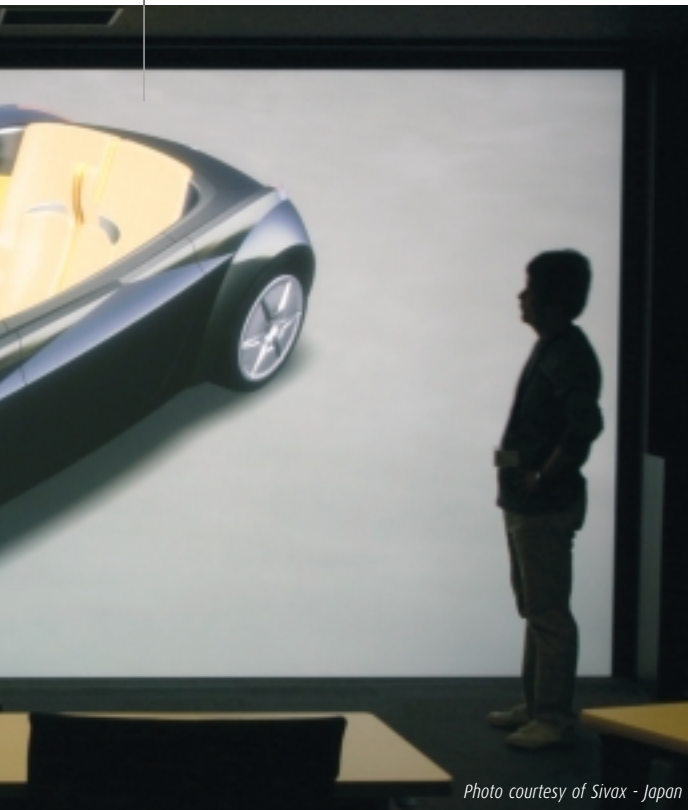
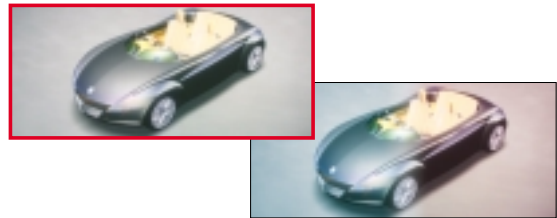


Photo courtesy of Sivax - Japan

DynaColor™ color matching



DYNACOLOR™ provides the ultimate **electronic fine tuning** to digitally set the primary and secondary color coordinates to obtain perfect color matching across a system. Part of DYNACOLOR™ is the **improved grayscale tracking** controlling the black, white and grays across the different channels of the multi-channel setup.

Linked DYNACOLOR™ automatically aligns the projector to a common color triangle. This ensures that all projectors in the entire system have exactly the same primary and secondary color coordinates. The system auto-senses the addition of a new projector to a system and updates the common color triangle as required.

The linked DYNACOLOR™ option is enabled with the linked CLO option

Constant Light Output (CLO) option



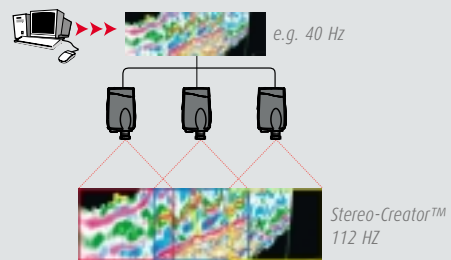
An integrated, calibrated light meter measures and controls the light output. A projector set at e.g. 4000 lumen maintains this brightness over time, independent of lamp life.

- New and used lamps can be mixed, brightness controlled
- Not all lamps need to be changed at the same time

With the **Linked CLO** the brightness of all linked projectors is monitored and adjusted to the lowest value.

Unique visualization system

i-Blend™: Three channels with a single PC



A single high-bandwidth PC or workstation output (>170 MHz) generates a wide high-resolution image, that is fed to all projectors. Each then selects the area to display - including overlap - using the i-BLEND™ functionality. Depending on the application, ELECTRONIC or OPTICAL SOFT EDGE MATCHING can be used. The initial low-refresh rate image is upconverted to 112 Hz using the built-in Stereo-Creator.

GISCU™: Multi-system and multi-site color matching



Barco's Global Inter System Color Uniformity (GISCU™) guarantees that all colors (e.g. sapphire black metallic on a car) are perfectly matched on all Barco systems, even if located in geographically different sites.



As Barco develops and manufactures all of its system components (projectors, screens, mirrors) in-house, products with almost **identical color gamut** can be selected to obtain optimal color uniformity in a single system and even between various systems.

Barco's **Optocolor™ software tool** calculates optimal common color values for multiple systems. Using **DYNACOLOR™** existing color uniformity can then be further enhanced to reach an optimal match between all systems.

A **GISCU™ maintenance contract** covers the multi-system and multi-site color matching, including:

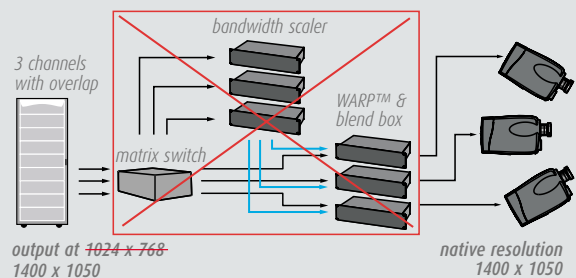
- the Color Gamut Matching of all new systems
- the color matching initialization of all systems
- regular tune-up and color adjustment of all systems

em upgrades

Stereo-Creator™: Three channel stereo with a single-pipe IG. Native SXGA+ resolution

The STEREO-CREATOR™ is a market-leading, patented Barco technology, which enables you to drive up to three blended stereo GALAXY projectors in native SXGA+ resolution with a single pipe image generator, without any need for external equipment.

A major advantage for the user is **the GALAXY SXGA+ projectors' direct feed of native SXGA+ high-resolution information**. It contains far more detail while omitting possible artifacts and delays caused by external scalers, warping or blending boxes.



Specifications

	GALAXY 4 LL+	GALAXY 6 Classic+	GALAXY 9 HC+	GALAXY 12 HB+
Light output (ANSI lumens)	4000	6000	9000	12000
Brightness uniformity (for the total screen area)	>90%	>90%	>80%	>90%
Contrast ratio (full white/full black)	1500:1	1500:1	1700:1	1500:1
Lamp (Xenon illumination system)	800 W	1.2 kW	2.2 kW	2.2 kW
• Typical lifetime	1700 hours	1200 hours	800 hours	800 hours
• Max. lifetime	2000 hours	1500 hours	1200 hours	1200 hours
CLO/Linked CLO	no	yes	yes	yes
Power consumption	1400 Watts	1700 Watts	2750 Watts	2750 Watts
Ambient temperature	Max. 35°C	Max. 35°C	Max. 35°C	Max. 35°C
Order number	R9040355	R9040360	R9040365	R9040370

Digital Micromirror Device™
3 high-resolution SXGA+ active stereo DMD™'s

Native resolution
1400 x 1050 (SXGA+)

Standard features

- Bi-cubical WARP™
- Synchronous and asynchronous active stereo display
- DYNACOLOR™/ Linked DynaColor™
- STEREO-CREATOR™ on RGB and DVI
- i-Blend™ (three-channel)
- Economy mode
- Shutter

Optional features

- OPTICAL SOFT EDGE MATCHING (OSEM)
- Mono mode
- INFITEC™ (switchable)
- External polarization (linear or circular)
- GISCU™: multi-system and multi-site color matching

Compatibility

- Active Stereo capabilities up to SXGA+ at 110 Hz
- WARP 6™ based pixel map processor using bi-cubic interpolation algorithms for advanced geometry correction up to a pixelclock of 205 MHz
- All current video sources in RGB or DVI

Noise level

< 60 dBA at 40°C
< 54 dBA at 20°C



Fixed analog inputs

1 multifunctional 5-Cable input (high band width) for the connection of:

- RGB analog signals with standard sync (BNC connectors), sync on green or separate sync
- 1 Stereo sync input (mini din)
- 2 Stereo sync outputs (coax)
- 1 DVI input

Communication

- RS232 or RS422 loop-through input (D9-connector) for PC-based projector control
- Communication input (D9 connector) for peripherals

Lens type

Fixed Lens (Manual Focus)

TLD (0.8:1) HB* - 9842040 0.75
TLD (1.2:1) - 9840770 1.1

Motorized Zoom and Focus

TLD (1.6-2.0:1) HB* - 9842060 1.5 to 1.8
TLD (2.0-2.8:1) HB* - 9842080 1.8 to 2.6
TLD (2.8-5.0:1) HB* - 9842100 2.6 to 4.6
TLD (5.0-8.0:1) HB* - 9842120 4.6 to 7.3

* High brightness lens

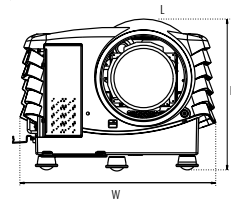
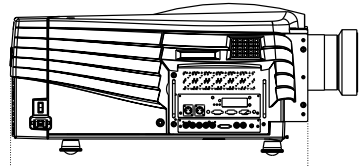
Shift

Motorized V shift: up to 100%
Motorized H shift: up to 65%

AC Power

230V (tolerance 180V - 255V)

Weight	lbs	kg
Net weight	124	56
Shipping weight	210	95



Dimensions	Inch	mm
W	20.84	529
L	31.29	795
H	16.05	408

Shipping dimensions	Inch	mm
W	31.50	800
L	47.24	1200
H	29.52	750

Ref.no. R599785 July 2005



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