

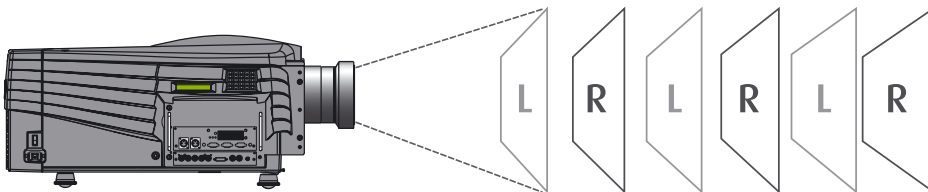
# Screen independent excellent passive stereo from one single projector



## 3 in 1: Passive stereo, active stereo, high-brightness mono with one Galaxy+ projector incorporating active Infitec+ technology

- No demands to screen polarization characteristics
- Proprietary DynaColor color correction
- Excellent stereo separation
- Full freedom of motion
- Lightweight, comfortable glasses

The Barco Galaxy+ stereo 3-chip DLP projector produces high resolution SXGA+ pictures at 110 Hz. With an active Infitec+ filter built in, this high refresh rate sequentially produces a picture for the left eye and a picture for the right eye. Viewers wearing passive Infitec™ glasses benefit from full stereoscopic depth viewing. This innovative Barco technology allows to achieve excellent passive stereo from one single projector.



**BARCO**

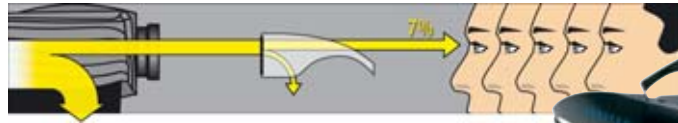
Visibly yours

# 3 in 1: One single Galaxy+ projector with Active Infitec+ technology does it all

The active Infitec+ built-in technology allows to produce excellent stereoscopic images with a single Galaxy+ projector.

As the incorporated active Infitec+ capability can be switched off, this solution offers a high level of multi-functionality. In addition to projecting passive Infitec+ stereo, it can be used for applications where active stereo is preferred, or even to project high brightness images in mono mode.

## 1. PASSIVE STEREO



*GALAXY with active Infitec+: 7% overall efficiency after DynaColor*

Infitec+ delivers breathtaking immersive passive stereo, **also for larger audiences**. Light, easy-to-wear glasses allow **full freedom of motion** as no emitter is used. Infitec glasses don't interfere when looking at LCD monitors and are the ideal solution for applications where interaction and collaboration is needed. Barco positioned the Infitec filters at the optimal location inside its DLP™ projectors. **Active Infitec+** technology inside the 3-chip DLP™ projector is an **exclusive Barco development**.

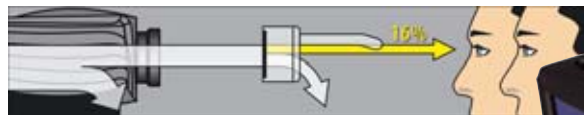


*Barco's deluxe Infitec glasses feature curved Infitec filters for extra wide field of view. Both types of glasses are fully compatible with eye correction glasses.*



*Standard glasses, using flat Infitec filters*

## 2. ACTIVE STEREO



*GALAXY with DLP™ active stereo: 16% overall efficiency*

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



## 3. MONO



Impressive **high bright, high resolution** mono projection. Thanks to the many application specific optimizations for multi-channel configurations, the Barco GALAXY+ with active Infitec+ technology is the ideal tool to create breathtaking panoramic sceneries.

# Screen independent passive stereo with a single projector



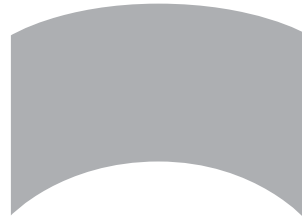
## Flat screens

in auditoriums and design centers



## Curved screens

in analysis and decision centers



## Spherical screens

in planetariums and science centers



## A wide application field Ultimate versatility

As no special polarized screen is required, **planetariums, science centers, research facilities,** or other institutions can now immerse their audience in a breathtaking virtual environment using one and the same projector for mono and stereo content. Designers and scientists using active stereo to analyze complex data can now share their research with larger audiences by simply switching their Barco Galaxy+ system from active stereo to Infitec+ passive stereo viewing.

## Galaxy+ projectors with active Infitec+ technology operate seamlessly together

To ensure the units operate seamlessly together in a multi-channel display system, a range of dedicated functionalities is incorporated in the Barco Galaxy+ projectors: **Dynacolor** eliminates channel-to-channel color variations, and the Constant Light Output ensures all projectors in a multi-channel system maintain the same brightness and contrast, independent of lamp life. Moreover, Proprietary **Electrical & Optical Soft Edge Matching** allows you to achieve truly seamless blends, even in dark scenes, which retain full detail thanks to the unique **Extended Contrast Ratio** capability.

## Wide range of systems available

Active Infitec+ technology is available as an option on Barco's Galaxy+ projectors. Barco Trace and Deuce relocatable stand-alone systems, custom I-Space and Holospace immersive rooms, and MOVE reconfigurable virtual environments now can combine active stereo with the ease of use of passive stereo. This has been made possible through **extensive, patent-pending innovative developments**, which in combination with the high refresh rates of the Galaxy+ projector, deliver high-quality Infitec+ stereo images on a normal screen, eliminating the need for a special polarized screen.

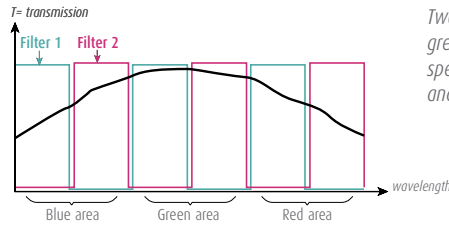


*Thanks to the WARP™ incorporated pre-distortion, all GALAXY projectors can be used in a multi-channel configuration with flat, cylindrical, conical and hemispherical screens.*

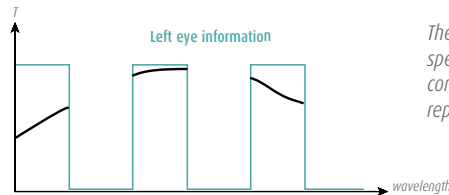
# Proprietary DynaColor delivers unique color corrected Infitec+ stereo separation

## What is Infitec?

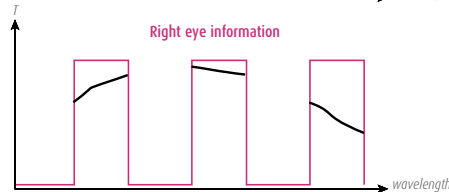
Barco Infitec+ (INTERference Filter TEChnology) uses **high-quality color filtering technology**. It splits up the color spectrum to each eye thereby providing ghost-free passive stereo images without requiring special screens or electronic glasses.



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

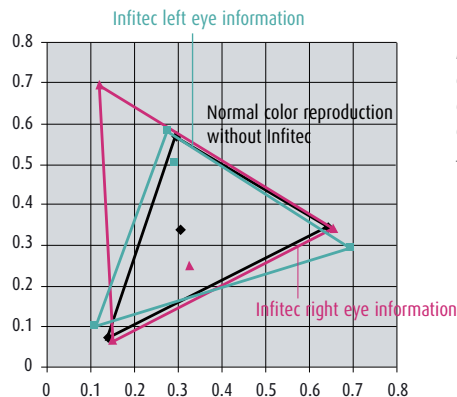


The color gamut is modified due to spectral filtering and needs color correction for optimal color reproduction.

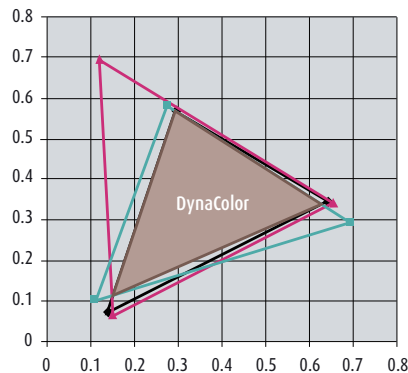


## DynaColor: color corrected Infitec+

The projector's color rendering, which is modified by Infitec's spectral filtering, is fully corrected using **DynaColor**. This proprietary innovative technology is the result of Barco's year-long research and expertise in color calibration for color critical applications as in prepress and medical imaging. DynaColor ensures **superior, color-accurate 3D viewing** without any ghosting and is independent of head-tilt, which gives the user full freedom of motion.



Infitec filtering causes a slight color difference between left and right eye channels (color gamut difference), especially visible in saturated colors.



DynaColor corrects this by creating identical color triangles for left and right eye, very close to the original color triangle.

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