

**U.S Customers:**

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**Phone: +1 646-808-0227**

**L e a r n , E x p l o r e , E x c i t e**

**[www.Emerald-Planetariums.Com](http://www.Emerald-Planetariums.Com)**

# EMERALD™ Projectors

Sophisticated software algorithms along with a user friendly remote -touch-console allow you to maintain a wireless operation from any place within the dome.

Using a unique fisheye lens and UHD projectors, the EMERALD™ systems deliver bright and crisp images.

Prepare yourself for amazing digital cinema experiences.

**EMERALD™ LITE** – for portable planetariums

**EMERALD™ FIXED** – for fixed planetariums up to 8K



# Software

# MULTIVERS<sup>2</sup>

Up to 210 million stars - using a Trillion pixels interactive view!

**Emerald™ MV<sup>2</sup> users enjoy free updates and unlimited downloads of virtually any topic of interest.**

**Every EMERALD™ planetarium system includes a full library of shows (ready-to-play scripts) from many fields of interest. A cloud-based user experience employs powerful, everyday tools to analyze and visualize complex datasets.**

**Powerful scripting technology which include audio narrations. This allows users to create their own prerecorded planetarium shows!**

**You can even display highly detailed 3D models of the International Space Station and the Gemini Observatory, or import your own 3D models.**

**The software was made for professional Planetariums.**



# EMERALD™ OPTICS

Discover your place in the universe with superior optics and more from the world's #1 planetarium maker.

## SEE THE UNIVERSE IN HD

The Emerald™ optical system designed to produce aberration-free images with pinpoint stars all the way to the edge of the field of view. Emerald™ optics provide an exceptional-quality system at a fraction of the price of competitors.

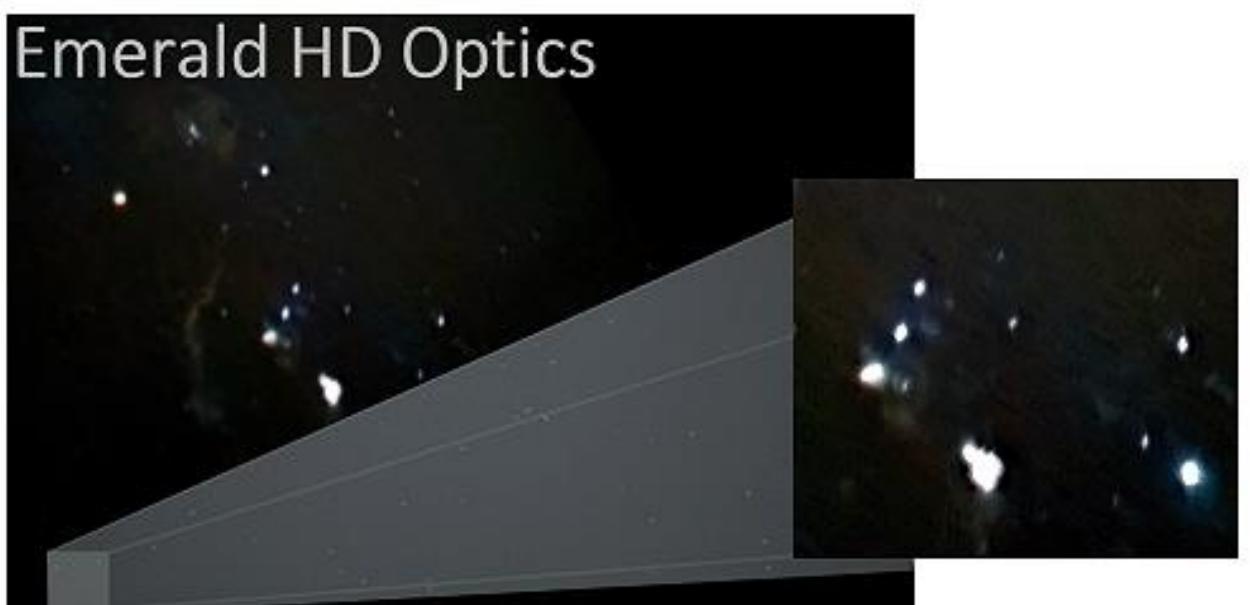
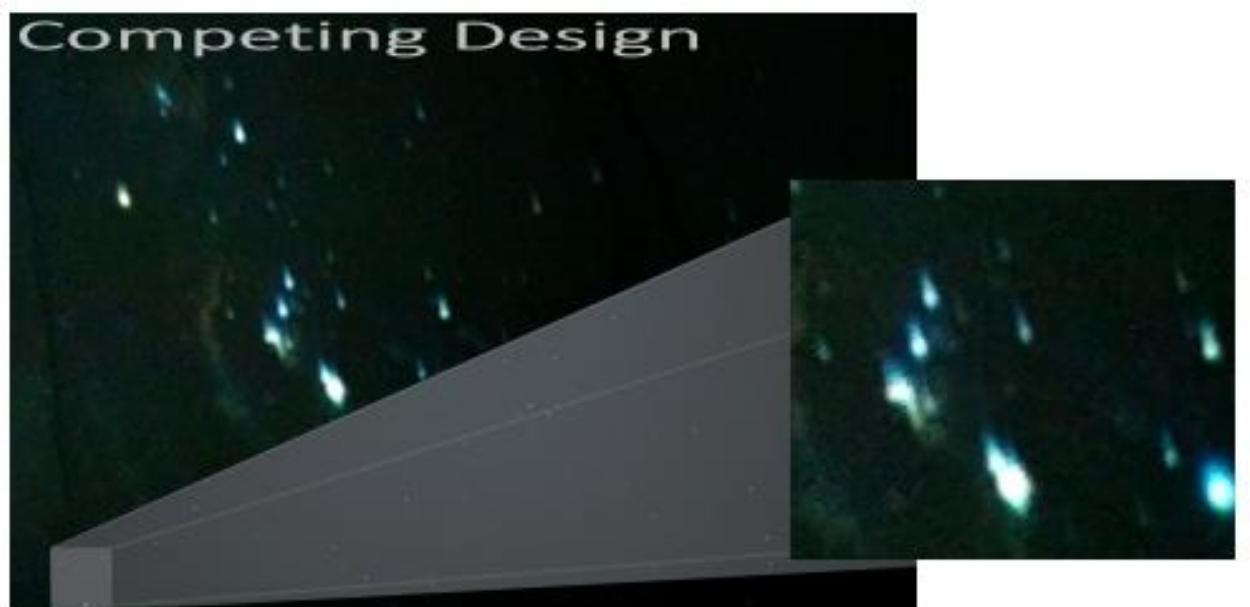
## A DIFFERENCE YOU CAN SEE

Compare the two-images\* of a star field below:

The first was taken with a competing optical design,

The second with Emerald™ optics.

**Superior edge performance** not only creates rounder, brighter & more pleasing stars, but actually improves the resolution and audience experience.



*\*Both images were taken with the same projector's specs under the same conditions*

# EMERALD™ - LITE

**EMERALD™-LITE planetarium projectors were created specifically for portable fulldome projection.**

The remote touch-console (RDC) system will allow you to maintain wireless operation from any place within the dome.

‘Plug-n-play’ turnkey planetarium system!



Planetarium  
shows  
included



Unique  
Fisheye  
lens



Design  
Aesthetics



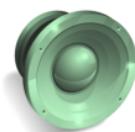
High  
luminosity &  
contrast



Wireless  
remote  
control



Software  
included



HD Stereo  
audio  
output



Three-year  
limited  
warranty



# Why choose EMERALD™ LITE ?

The EMERALD™ LITE is a digital turnkey planetarium system, designed especially for use in mobile planetarium domes.

Portability, ease of use & plug-n-play operation are key elements of the new exciting series.

## Here are some of the EMERALD™ LITE advantages:

- **Elite performance:** The EMERALD™ LITE is the state-of-the-art projector of portable planetariums, adopting aerospace principals
- **Active cooling systems (primary & secondary)** : Keeps the projection system cooler and enables optimal operation in hot environments as well
- **Super sharp Fisheye lens:** Includes our enhanced *MgF2* optical Coating. Our optics enable a ~180 deg projection angle, a true planetarium experience
- **Fast & powerful integrated server:** Super strong & super fast
- **Sound system:** Blue-tooth-Audio powerful system available
- **Remote-Dome-Console (RDC):** an intuitive and Gesture-Friendly User Interface. You can walk all around the dome while controlling the EMERALD™ computer's powerful features with the tip of your finger. [available separately]
- **Premium quality**
- **Powerful software:** the planetarium software contains spectacular simulations and offers engaging-informative tours of the night sky. The software was made for professional planetariums.

# EMERALD™ - FIXED

**EMERALD™-FIXED planetarium projectors offer the most advanced and innovative technology. Designed and built with emphasis on education as well as entertainment usages, with a plug-n-play approach.**

**--Projection Elevator/pier? - Not necessary!--**

Can operate as 2D, 3D and even 5D fulldome video projections, with moving and vibrating chairs, wind and even special smells (depending on the selected model) at resolutions up to 8K.

The remote touch-console (RDC) system will allow you to maintain wireless operation from any place within the dome.



Planetarium shows included



Remote control



Custom Fisheye lens



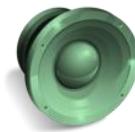
High luminosity & contrast



Safe-Lock design



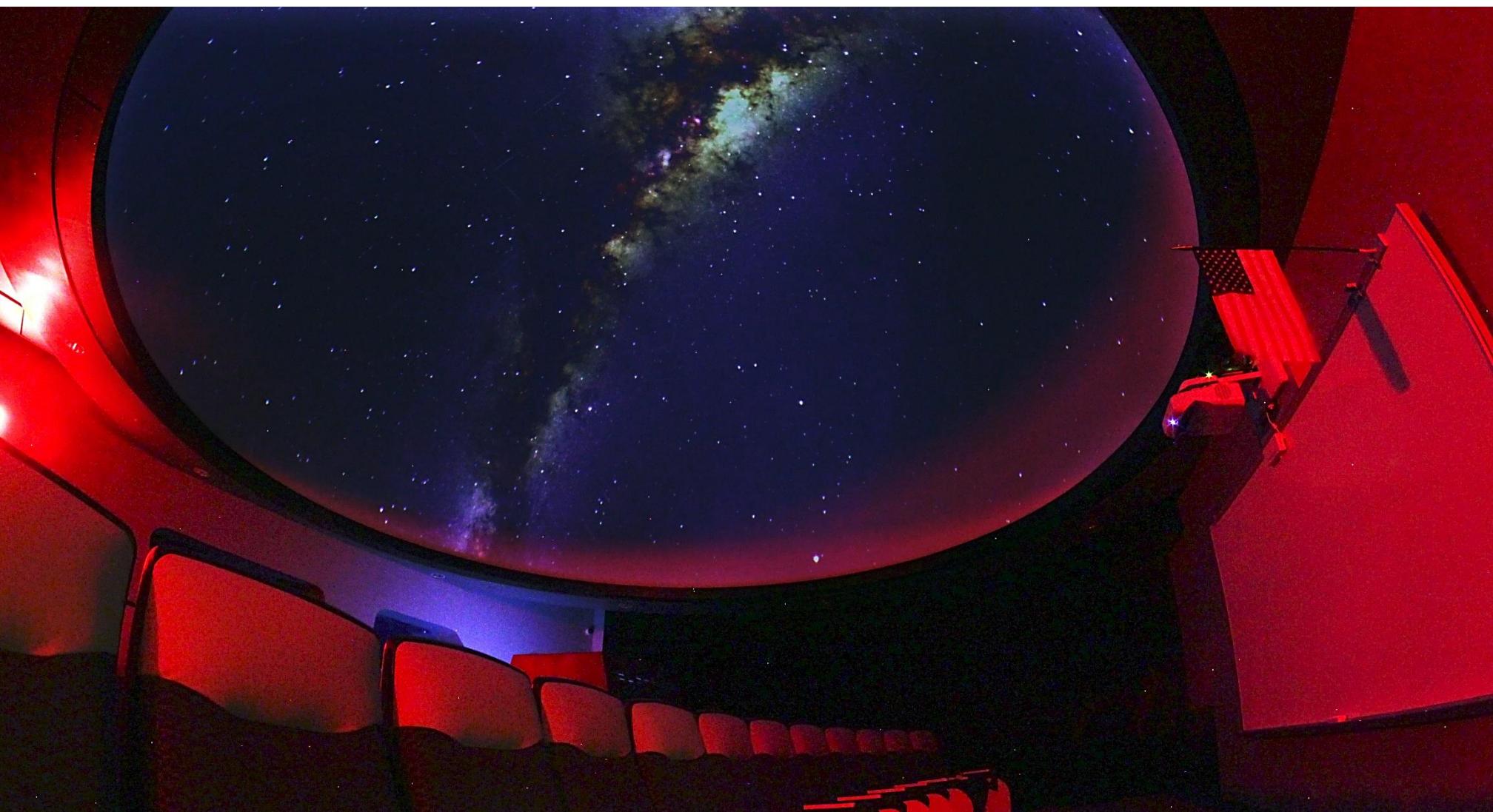
Software included



7.2 Surround audio output (optional)



Three-year limited warranty



# EMERALD™ - FIXED

## Infinity-PRO-8K

Up to 45 Meters domes

Up to 8K resolution with 240,000 Lumens! The EMERALD PRO-CUS is a professional fulldome projection system, suitable for large dome theaters. With super bright and crisp images. Complete planetarium All-sky projection system.

Custom built in order to fulfill the local demands – the unit can operate as a 7D-fulldome-system, with moving and vibrating chairs, wind and special effects.



Planetarium  
shows  
included



Remote  
dome  
console



Super  
sharp  
Lenses



High  
luminosity &  
contrast



Safe-Lock  
design



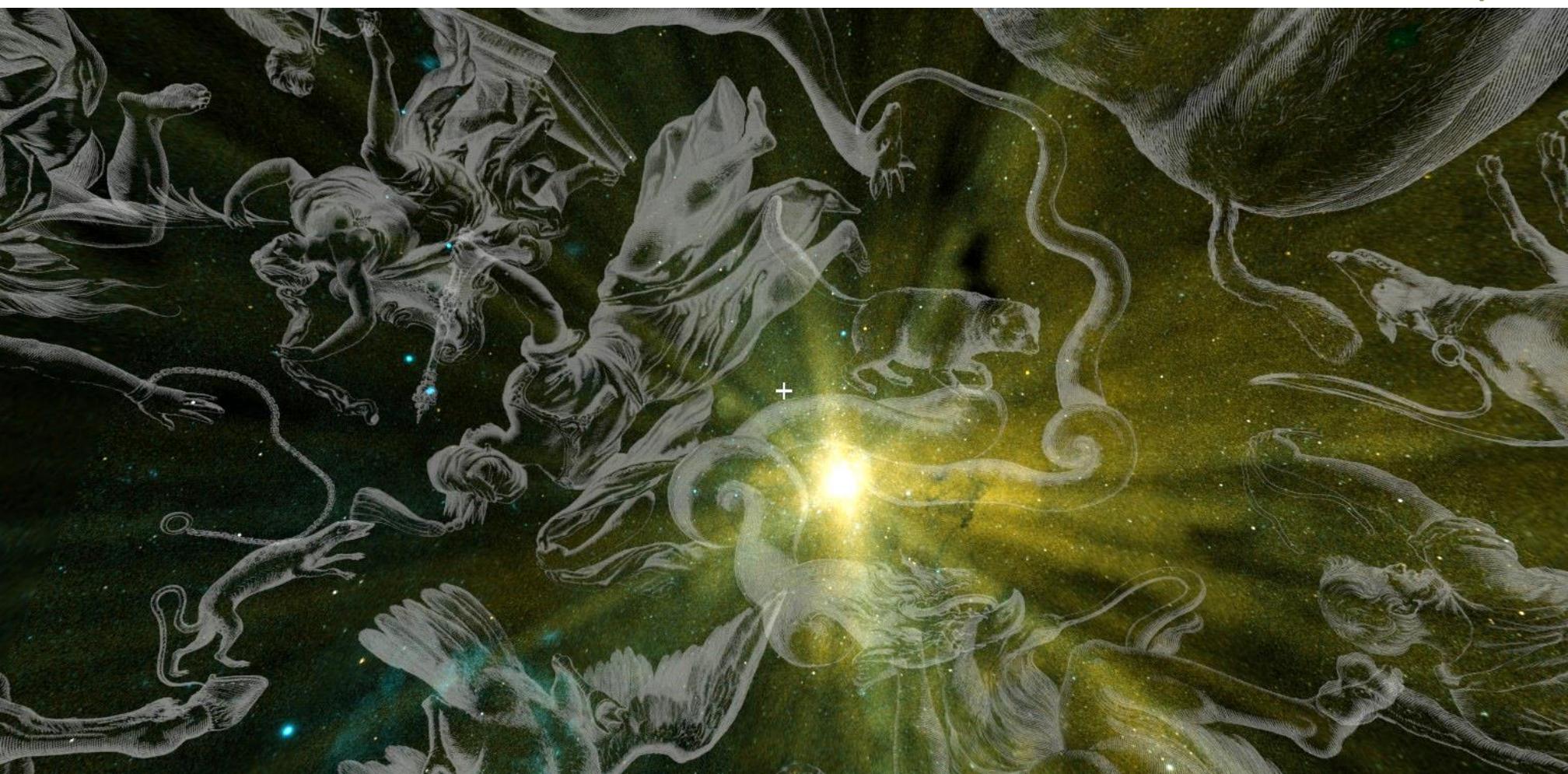
Software  
included



Surround  
audio output



Three-year  
limited  
warranty



# EMERALD™ - Education

The EMERALD™ system is more than a planetarium

**This digital immersive theater is not only an invaluable resource for exploring the night sky, but also transforms learning across disciplines.**

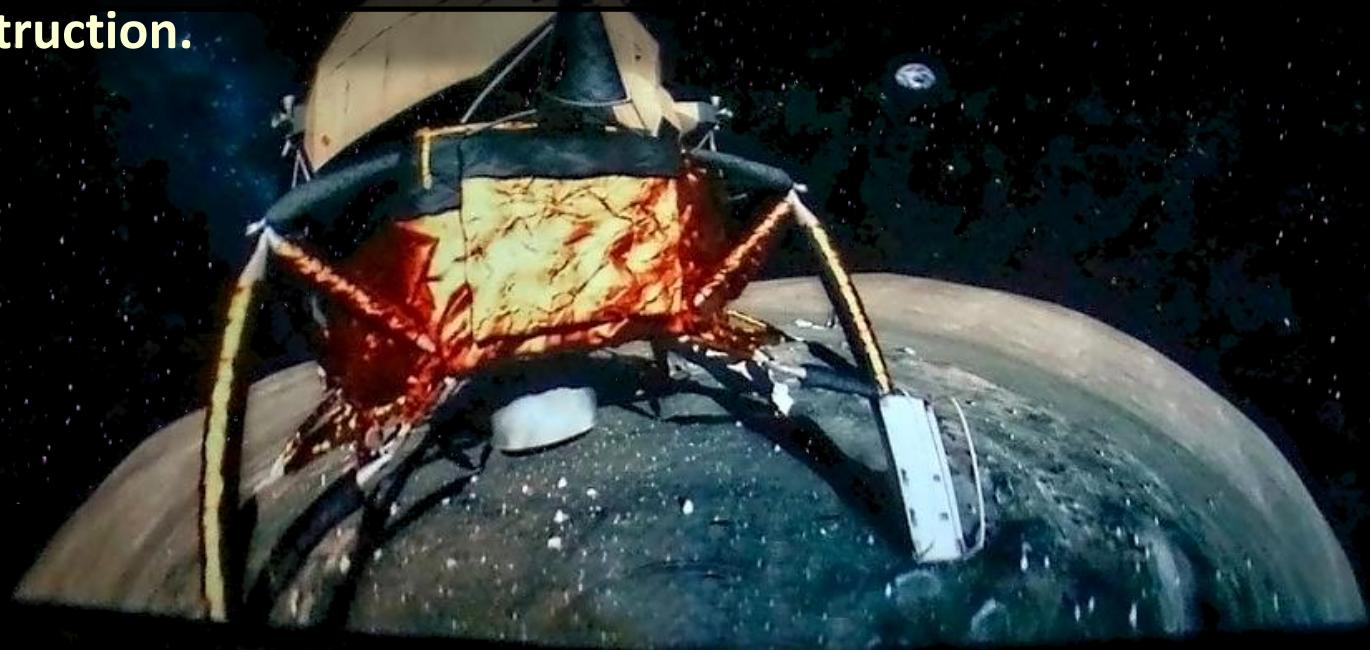
**Classes in Neuroscience can dive into renderings of brain scans. Biology students will be able to 'travel' through the human cells, geology classes could travel over maps and canyons while superimpose updated satellites information.**

**In the humanities and social sciences, students could tour ancient cities or visually display and manipulate large demographic data sets exploring the evolution of trends, such as immigration or housing prices.**

**Music classes will be able to hear translated sound of visual space images, via the sonification process.**

**Art students can explore sculptures and buildings from different perspectives. In astrophysics - a class could 'fly' through the Milky Way, learn about the spectral type of a given star and land on the Lunar surface or instructors could patch in data from space probes and project images from their landing sites on other planets or moons.**

**For archeo-astronomy, the sky could be reconfigured to match positions of the stars and planets at any point in history, to observe how sites like the Egyptian pyramids or Mayan temples were aligned with the stars and planets, at the time of their construction.**



# EMERALD™ - Education

The EMERALD™ system is more than a planetarium

**Export 3D Printing models from Solar System bodies to the space station- great aid for visually impaired planetarium visitors!**



**The atmospheric and lighting controls assist you to visualize Earth and other planets more realistically**



**Highly detailed models of the planets, the Earth and Earth's moon**



# Live Observatory Planetarium-connection

“For the first time - the visitors can make new astronomical discoveries inside the planetarium!”

**Emerald™ planetariums is the only planetarium maker who also offers a complete Live-Observatory-Planetarium-Connection (LOPC).**

**Our complete remote robotic telescope systems can send live deep space images directly into the planetarium dome!**

**Our unique telescopic system serves institutions such as JPL, Berkeley, and NASA.**



# EMERALD™

## Portable-Domes

**NEW feature alert:**

**Emerald-inflatable-Deluxe™ dome models include the exclusive Integrated Secondary Dome Cover for *extra* darkness inside the dome!**

**EMERALD™ mobile-planetariums designed with an emphasis on fast installation, portability and ease of use.**

This durable structure is a perfect fit for remote areas, small classrooms, science fairs and planetariums who have portability in mind. Emerald's Micro-Elements-Fabric [M.E.F] enhances the projected content's contrast and details. Deluxe Ring model.

**Available dome sizes: 4Ø Meters - up to 12Ø Meters in diameter.**



Massive  
Integrated  
spring lines



Screen optimal for  
digital projection



Fast  
evacuation



Wheelchair  
friendly



Air pressure  
inflation



Three-year  
limited  
warranty



**'Double skinned dome'**

# EMERALD™

## LITE-Domes

**The design of Emerald™'s Fabric-LITE domes enables 'semi portable' setups with ease. A perfect solution for production studios, gamers and science centers.**

The Emerald™ Fabric-LITE negative-pressure professional domes - made out of an external 'shell' of aluminum poles, external black cover with internal high performance ("flat") projection screen.

They can be hanged from the ceiling or to be used as an integrated unit with an entrance door.

**Available dome sizes: 3Ø Meters - up to 15Ø Meters in diameter.**



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# EMERALD™

## Fiberglass-Domes

The unique Emerald™ planetarium domes design enables operators to conduct immersive astronomical activities with ease.

The Emerald™ Fiberglass planetarium domes are high quality planetarium projection screens.

The premium package includes:

Emerald™ fiberglass dome as well as the Emerald™ digital fulldome projection system. The operation is as simple as it gets, with a plug-n-play approach, while using cutting edge technologies.

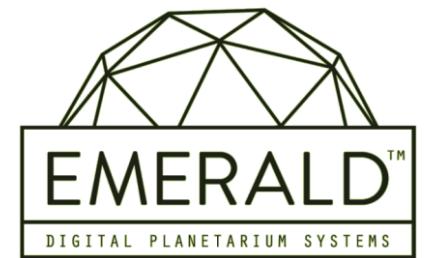
**Available dome sizes: 3Ø Meters - up to 30Ø Meters in diameter.**

We offer perforated domes as well:  
Available in 3.4MØ-25MØ.



# EMERALD™

## Science-on-a-Globe™



### Science-on-a-Globe™

Emerald™ Digital Planetariums offers the unique Science-On-a-Globe™ system, which enables plug-n-play projection of images onto a globe and other spherical surfaces. Analogous to a giant animated globe.

The immersive simulation sphere offers seamless 360° views.

Using a single powerful projector and spherical screens, Science-On-a-Globe™ facilitates interactive geographic & atmospheric teaching without the need for any supporting infrastructure, calibration or tools.

The projected content possibilities are virtually endless, enabling great flexibility for both educational and entertainment uses.



Images: Science On a Dome™ projection on a 3-foot sphere.  
Photographed using a hand held camera.

# EMERALD™ Planetariums

## BRAND STORY

Emerald™ planetariums, the creator of the Original LITE planetarium system, derives its name from the ancient word "Bareket", aptly referencing our skill & expertise in the zones of optical components, immerse systems, and cutting edge manufacturing.

Combining both function, unique education strategies and design, Emerald™ planetariums strives to create the latest technological products that epitomize form, utility, and style.

## PIONEERING EFFORTS

From a humble robotic-observatory-systems manufacturer, we have expanded our reach into a full range of Full-Dome Planetarium systems.

We are always listening to our user needs and always looking to improve ourselves and break into new realms of science and education. From the Original LITE series that incorporates the functions of a professional fulldome planetarium, to the FIXED planetarium projection systems, we have stepped ahead of the game and created the perfect fit for industrial, entertainment and educational uses.

We are keeping the accelerator fully pressed on the R&D to bring more aerospace influences and expand our range of products for variety of users.

# EMERALD™ Planetariums

## INNOVATION, QUALITY AND RESPONSIBILITY

Emerald™ planetariums believes being at the forefront of innovation is the key to the future.

Our dedication to produce quality products is the backbone of our business model, and we work round-the-clock to ensure all our products are up to our rigorous standards.

Using high-performance projectors combined with EMERALD's amazing optics, our systems produce seamless, sharp, and color-rich planetarium images with the easiest-to-use and most reliable operating system.

Emerald™ planetariums is an astronomical optical-mechanics company, known primarily for its premium brand of specialty digital planetarium projection systems and planetarium domes. A division of the Bareket observatory, an astronomical research and education center, which is well known in the astronomy community for its products and services.



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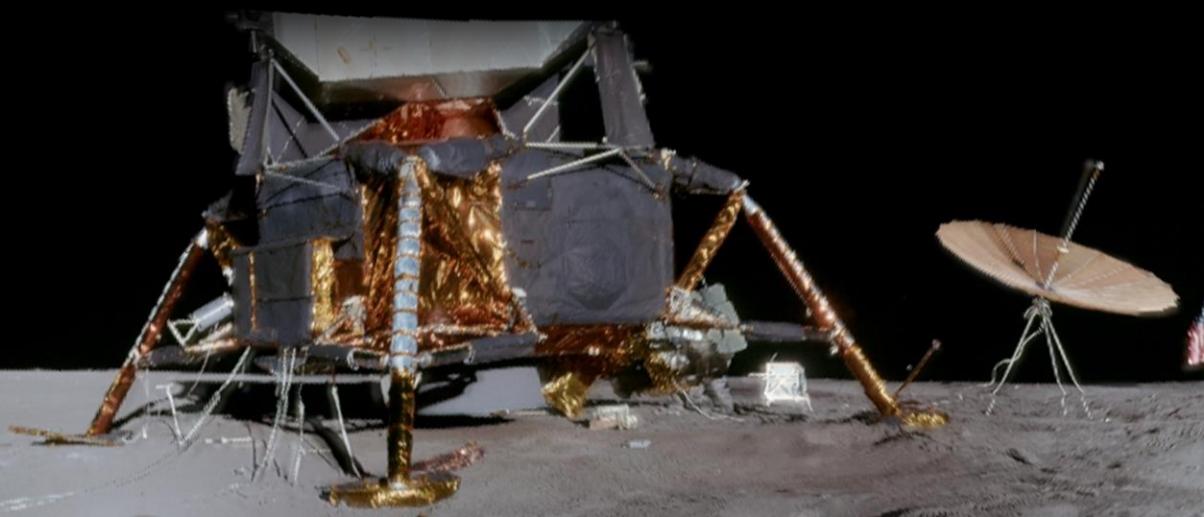
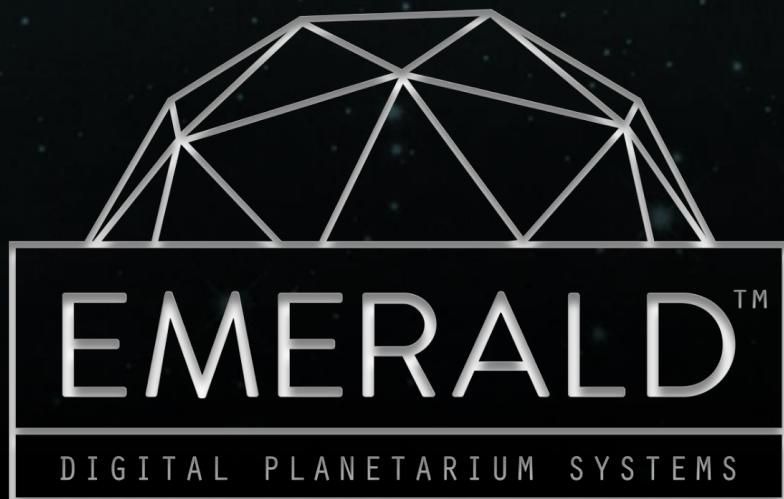
L e a r n , E x p l o r e , E x c i t e

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**State-of-the-art planetariums  
Adopting aerospace principals**

A series of 15 horizontal lines for writing, each consisting of a solid top line, a dashed middle line, and a solid bottom line.



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