

DOMES PROJECTION

APPLICATION NOTES

Creating stunning visual experiences for visitor attractions and public spaces, should be creative, not complex.

Hipptizer's 3D Mapping toolset combines immersive visuals with easy 3D Mapping techniques to create the most immersive environments.

WHO USES DOME PROJECTION:



PLANETARIUMS / IMAX

- Migrated from Single source to multi-projector.
- DCI payout (JPEG 2000)
- Multi-Channel Audio (AES/EBU)
- Integrated with Projector (Barco) dedicated hardware or software
- 10/12bit, 60/120FPS, HDCP 2.2.



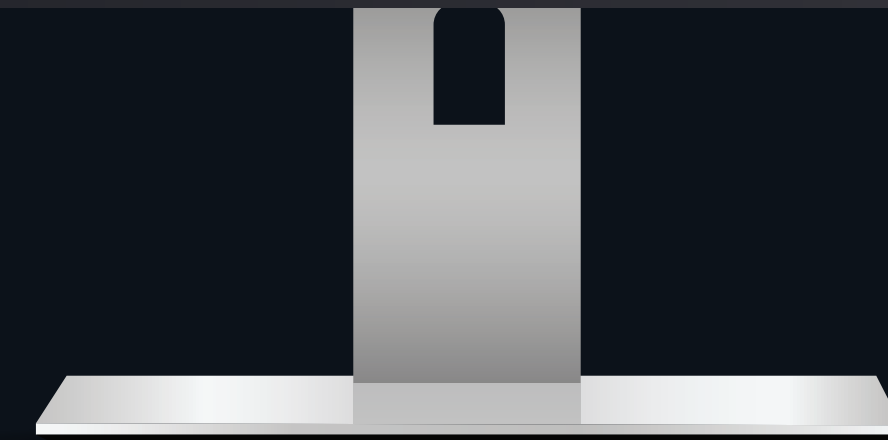
SIMULATION

- Flight Simulators (Commercial and Military)
- Medical
- Generative (Game Engines)
- 60/120FPS



PLANNING / VISUALIZATION

- Education (Higher)
- Engineering / Architecture



WANT TO KNOW MORE ABOUT EXTERNAL CONTROL?

Get in touch sales@green-hippo.com | www.green-hippo.com



KEY TECHNOLOGIES:

- Digital Cinema Package
- DCI playout (JPEG 2000)
 - Encrypted
 - Multi-Channel Audio (AES/EBU)
 - Integrated with Projector (Barco) dedicated hardware or software
 - 10/12bit, 60/120FPS, HDCP 2.2.

- High Resolution Playback
- Square Canvases

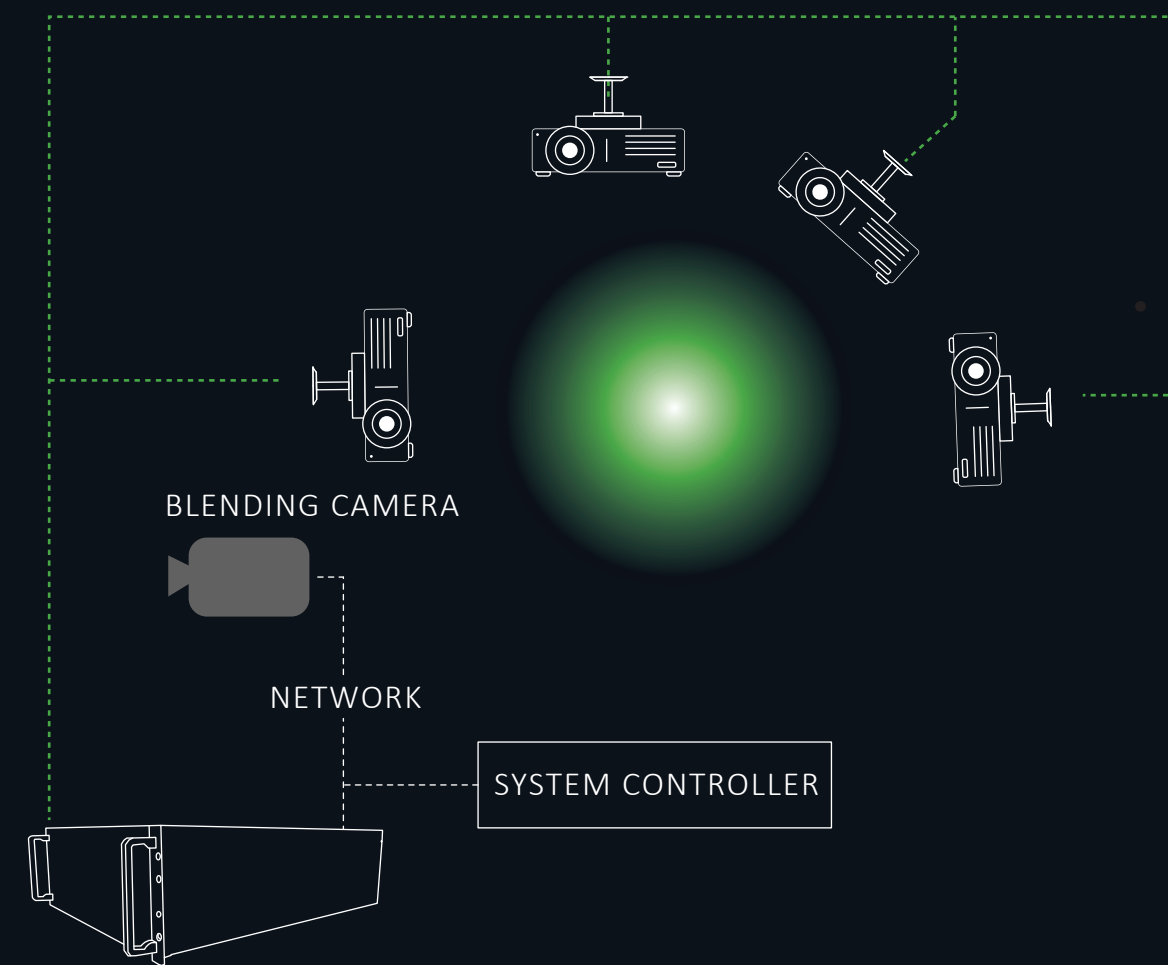
- Generative Content
- Game Engines
 - Interactive

Automatic Alignment / Blending

ROUTE TO MARKET:

- Specialist Integrators deploying solutions:
- ANTYCIP
 - VIOSO
 - VR
 - Simulation Software

Integrators selling 'home cooked' Igloo



SIGNAL FLOW / CONTENT CREATION

Where is the Distortion?

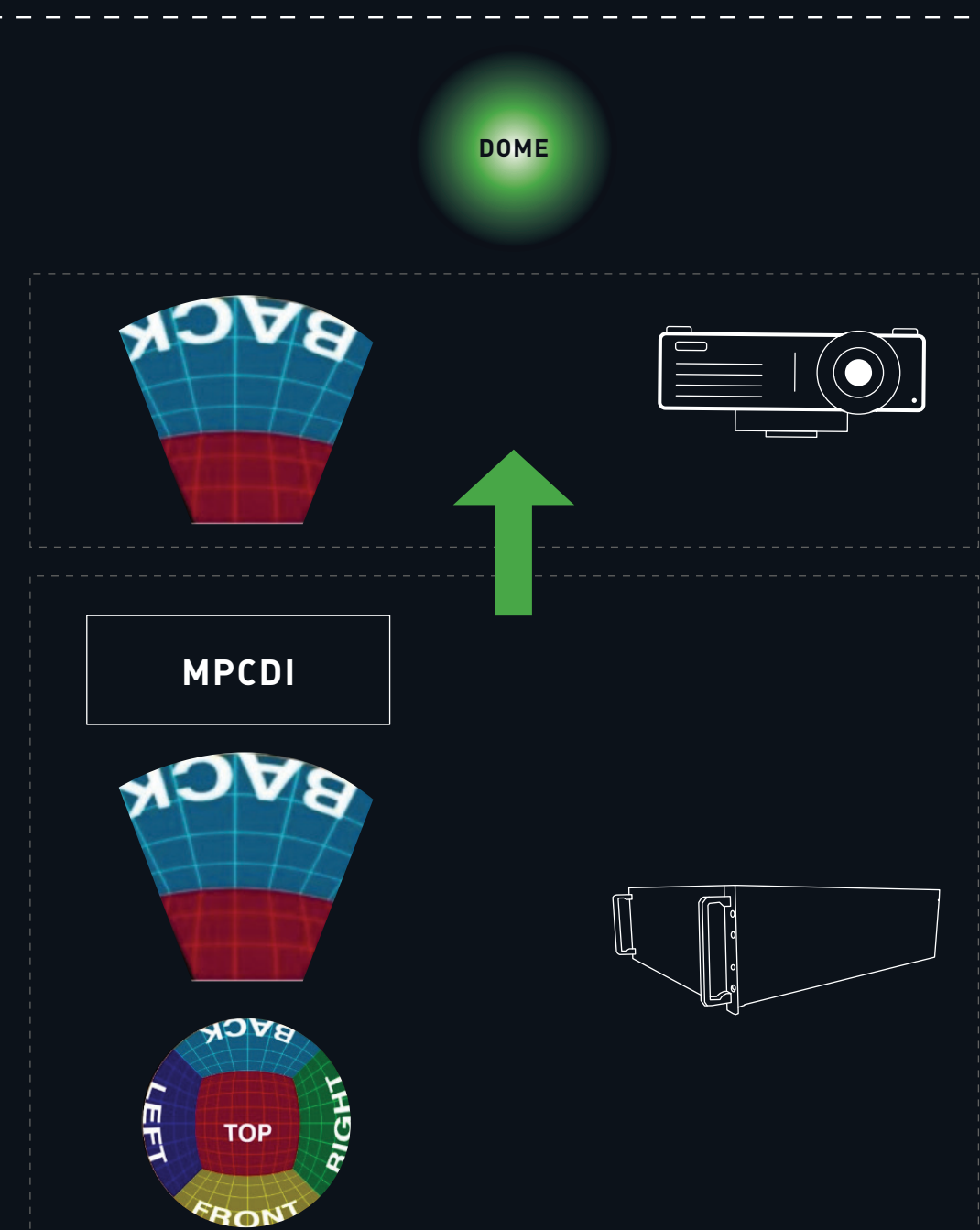
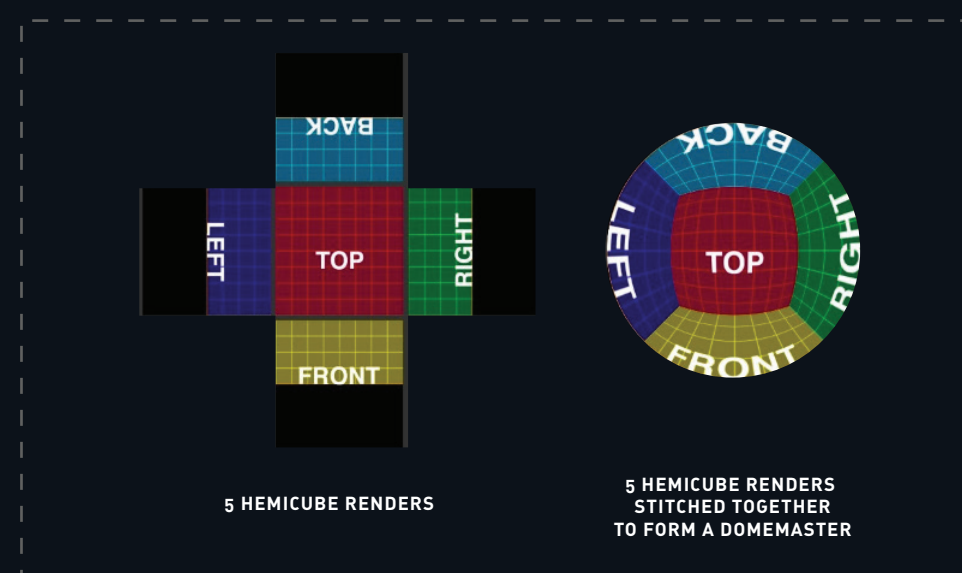
- Projector
- very complex and difficult to manage.

- Switcher
- ?

- Media Server / Playback
- Most flexible
 - Dome Master

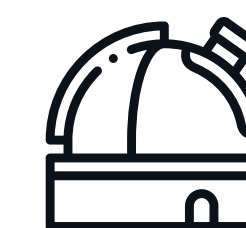
- Content
- Not Flexible

- Content Creation:
- Dome Master



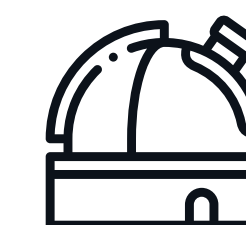
AUTOMATIC WARPING AND BLENDING

- 3rd party camera system (eg. Dome Projection or Vioso) are ideal.
- Do not require a 3D model
- Gives the data (Warp and Blend) to Hippotizer over MPCDI
- Makes re-alignment easier.
- Requires Camera(s) from a known location that can see the whole surface.
- Additional licensing costs (Up to \$6K / Output one-off and ongoing).
- Green Hippo has validated two providers:



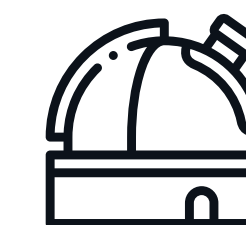
VIOSO

- Cheaper
- Easy to use software for un-trained
- Requires user intervention to run alignment



DOM PROJECTION

- More expensive
- Training required to use software.
- Media Server independent
- Can be run completely hands-off even if the camera moves.



AXIS

- Green Hippo's Sensor based alignment system.
- Requires an accurate 3D model. (LiDaR Scan)
- Does not need a camera.
- Does not blend
- Requires installing fibre sensors in the dome

CONCLUSIONS

Hippotizer supports domes.
We recommend using camera based automatic alignment.
If the blend / warp is done in the media server then all down-stream equipment is simplified.