Content Creation Guidelines

Overview

Igloo's 360 projection systems provide the opportunity to display a wide range of content to immerse, entertain, educate, and inspire your audience.
Our media servers and software are designed to maximise immersion and audio-visual quality whilst offering stability and flexibly.

Game Engine Guides

- Unity Game Engine Camera System
- Unreal Game Engine Camera System

Standard Playback

How it works

Content is distributed via five HD streams that are combined to create one seamless 360 display.
Visual content supplied as a single panoramic strip is split into separate channels and delivered to each of the five projectors that make up the 360-projection rig.

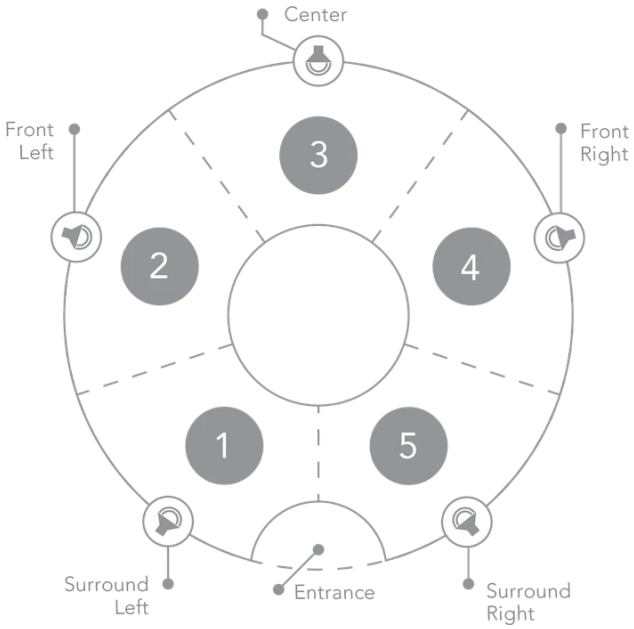
Images

• Image size 8000 x 1000
• Format JPEG
• Image text safe zone – Top region of image

Video

If you are producing content especially for one of our systems, the formatting and configuration below will deliver the best results.
• Video size: 8000 x 1000
• Video text safe zone – Top region of video
• Format: (Quicktime .MOV)
• Video Codec: Please use the HAP video codec for your final export - Use Igloo Encode on the media server https://igloovision.sharepoint.com/:u:/s/ReleasedProducts/EdVz2aBgH-pCvH0SLR6JKcIBmfgxRJyun2P1m8q3sapHew?e=2qKjpP or Free to download here: http://vdmx.vidvox.net/blog/hap
• Please ensure you use HAP, not HAP-Q or HAP

Audio



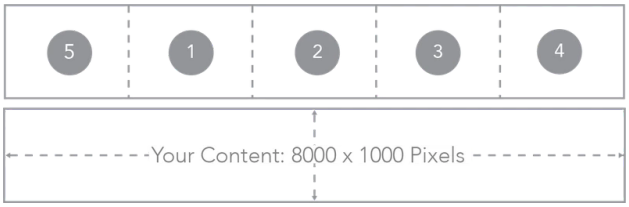
Stereo

• Please ensure your audio is embedded into your final video files.
• Format: Stereo .WAV

5.1 Surround Sound

In a 360 o-projection environment, sometimes viewers need a little guidance to know where to look.
Using surround sound effectively can help to orientate your audience and ensure their attention is drawn to the action.
• Channel Mappings: Left, Right, Center, LFE, Surround Left, Surround Right
• There is a different export process required for

Alpha.
Why? Instead of using the CPU to decode video frames, HAP passes compressed image data directly to the media server's graphics cards to perform hardware accelerated decompression of movies during playback.
By shifting this burden from your CPU to your GPU, HAP makes it both possible to use more movies and work at higher resolutions than typical CPU-bound codecs.



VR - Equirectangular Video

If you're preparing existing equirectangular 360 video to be displayed on our systems, please follow the guidance below:
Unlike VR headsets, our dome and cylinder screens cover a limited vertical field of view, so you won't see the very top or bottom of the content.
Using our software, we can stretch and vertically re-position the content to determine which section of the content is visible.
Our media player will play equirectangular movies provided they are HAP encoded and not excessively large.

• If you have 4k (3840x1920) equirectangular content, just encode it as HAP.
• If you have 8k (8000x4000) equirectangular content, crop it to 8000x1000 and encode it with HAP. Files larger than this will exceed the disk read speed.

Non-360 Content

If you want to, you can show non-360 videos or images as part of your event or presentation.
Our software will display the data at its native resolution, or if it's larger than 1000 pixels high, it'll downscale it so that it fills the screen without cropping from the top or bottom.

5.1 surround sound, please feel free to contact us for further information and guidance, email

support@igloovision.com and one of our technicians will be able to assist.

Tips & Tricks

Over the past 10 years we've seen content from hundreds of producers throughout the world. We've also had the privilege of seeing how audiences react to it. Along the way, we've picked up a few tips and tricks that we're more than happy to share.

• Video / image size (1920 X 1080 or less)

• Format: Quicktime (.MOV)
• Video Codec: Standard .mov encoding is fine

File Delivery

Final content files to be supplied on an exFAT formatted portable HDD at least 1 week prior to event.
If delivery of a physical drive is not possible, a cloud transfer is acceptable, but must be arranged with your account manager in advance.

• Pace: Everything feels a bit faster when it's blown up thousands of times and wrapped around you!

• Rotation: Spinning backgrounds or large objects in the foreground can be slightly nauseating unless the speed is kept very low.
• Colour and contrast: Even the best projectors will struggle to compete with the colour density and contrast of a high-end LCD monitor. Bear this in mind when you are grading your content.
• Blending: Our edge blending software works best when it has something to grab onto. Large expanses of pure black and white are the hardest to work with, so you will get better results if you introduce some colour, texture, or gradient into your background.
• Domes Vs Cylinders: All of our standard systems are designed to accept 8:1 content. The entrances and exits to our domes and cylinders are designed to have minimal impact upon your content. If you would like to factor the doorway positioning into your framing and editing, please consult with your project manager for detailed information on the screen dimensions for each product.