

AVATAR dimension

DRIVING THE FUTURE OF IMMERSIVE VIDEO



BY THE NUMBERS

- 70 IO Industries Volucam volumetric cameras
- 4,000 square foot studio
- 30 FPS / 60 FPS
- 2K or 4K surface textures
- Fully customizable RGB lighting
- Sound proof

AT AVATAR DIMENSION we capture and create volumetric video – holograms of dynamic people and performances captured from every angle. We are driving the future of immersive video with one of the most advanced volumetric capture stages in the world. Located in the Washington D.C. area, we are the only Microsoft certified volumetric capture studio on the east coast. Avatar Dimension is comprised of a team of industry veterans focused on creating stunningly realistic virtual experiences to change the face of training and simulation for business, government, institutions, and entertainment.

YOUR AUDIENCES can interact with your holograms in augmented reality, virtual reality, or on TV screens. Training solutions are evolving to meet the requirements of engaging with increasingly digital-savvy users. Avatar Dimension creates immersive virtual training scenarios that match and exceed these the real-world demands.

WE ARE 1 OF 5 STUDIOS in the world certified to use Microsoft's Mixed Reality volumetric capture pipeline. We offer advanced capture solutions and data compression for creating sophisticated immersive experiences. Our technology allows us to record precise body movements and detailed facial expressions, opening radical new content creation opportunities.



PLATFORMS



Native



iOS



Native iOS/Android (Scene Kit, ARKit, ARCore)

PRE-PRODUCTION

Before you even step onto set, our creative and technical experts will work with you to plan every detail of your shoot and help you realize your vision. Good pre-production is critical to getting the

best results from your captures, as many factors play into getting great results. We'll comb every inch of your project to make sure that you get the best content possible for your particular project.

DEVICES



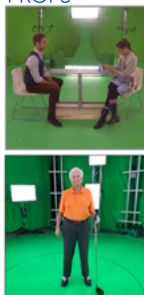
ENVIRONMENT/LIGHTING



MOVEMENT



PROPS



PROXIMITY TO CONTENT



NUMBER OF PERFORMERS



SPEED OF ACTION



WARDROBE
HAIR / MAKE-UP



PRODUCTION

TEST SHOOT We start every project with a half day of test shoots. We test wardrobe, hair, props, lighting, and any other components unique to your project. This crucial step gives you the confidence that the material generated over the course of the production will be exactly what you're expecting.

ON SET Every day begins with a review of result samples. We know the ins and outs of volumetric capture. Our stage crew applies an eagle eye to every detail of your session, keeping quality and schedule on track.



POST-PRODUCTION

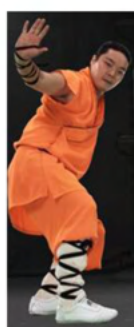
When post-production is required, our technical art team is ready to support you with scripts, tools, shaders, and workflows designed to get the most out of your content. We'll give you preview movies to review performances so that you are involved in every step. Our goal is to provide you with content ready to drop into any device.

OUTPUT

- H264 compressed MP4 3D video file (needs special plug-in for 3D playback)
- Compressed file size: 100-400MB per 30 seconds at 30 FPS
- OBJ/PNG output optional
- 30/60 FPS, 2K/4K textures



CAMERA RESULTS



PREPROCESSED IMAGES



POINT CLOUD



SMOOTH MESH



TEMPORAL MESH



MP4 FILE



- 70 volumetric cameras

- Background masks

- Millions of points

- 100s of thousands of triangles
- Decimated to desired result
- Detail preservation (i.e. face)

- Mesh tracking creates keyframes
- OBJ mesh
- PNG texture

- Compressed file sizes
- Streamable
- Plug-ins for Unity and Unreal
- Use wide variety of shaders
- iOS/Android/Windows support