When it comes to premium content such as Virtual Reality or native 3D/360° footage mastering the immersive dimension from a production-point of view means handling the fine line between new recording technology, complex post-production processes and specific restrictions that impact ways of 3D media production.

At PRG Lab we develop customized interactive and immersive solutions for the entertainment and event industry. We are jumping into exiting 360° productions and immersive VR experiences using brandnew 3D & VFX tools.

Are you thinking about producing VR content? In addition to our broad experience in 3D production you can also benefit from both, our 3D/360° post production know-how and our stress-tested inhouse facilities. Working across the fields of entertainment, special events, advertising, sports and exhibitions, we’re not only experts in 3D video but also in spatial audio. Make sure your VR production request is managed in the most efficient way - in a single, integrated environment.

PRG Lab services

We offer a full service in digital VR production and postproduction:

Consulting
• Supervision and direction for VR experiences 3D/360°
• Pre-production, production, postproduction
• Technical consulting, content-related consulting, workshops

Creation
• Conception – fictional/ non-fictional
• Pre-Visualization
• Treatment
• 360° Storyboarding
• Asset Creation
• Scripting
• Animation

Production
• 3D/360° Recording incl. Operator
• Ozo Mobile Set
• Ozo Longtime Capturing Set
• Ozo Multicam Set
• VR live streaming

Postproduction
• Editing
• Grading, Denoising, Color Correction
• Stitching
• 3D Audio Mastering
• 3D Audio Multitrack Editing & Mixdown
• 3D Motion Design & VFX
• Stereosopic Rendering

In order to expertly experience the final 3D/360° content PRG Lab transforms the processed footage for multiple platforms and devices, e.g. for HMD's such as Oculus Rift, Samsung GearVR, HTC Vive or Youtube.

PRG Lab
A division of Production Resource Group
PRG Lab offers its Ozo camera systems for your Virtual Reality production.

1. Production - OZO Camera System

Each OZO Camera System consists of eight 2K x 2K sensors that provide an output resolution of 4K per eye (left and right). The OZO camera is new and different from multi-camera rigs: 8 sensors, 9.3 pounds incl. battery – a compact and lightweight device to capture 360° spherical video and 360 x 360 surround sound.

There are three production scenarios/rental options:

OZO Mobile Set:

- Nokia Ozo 360° 8-lens Camera System
- Stand/ tripod
- Nokia OZO Media Bundle: 2 x 500GB SSD + 2 x Battery (2 x 50 min recording time)
- Dockingstation / Charger
- 3G-SDI Adapter for Live Preview
- VR Microphone
- Portable Audio Multichannel recorder
- Mac Book Pro with OZO Software Package: OZO Remote, OZO Preview

- Price incl. operator: from 3.100€/ day

OZO Video Workflow | Mac Book Pro Mobile Recording
OZO Longtime Capturing Set:

- OZO 360° 8-lens Camera System
- Stand/ tripod
- Media Bundle for unlimited recording time
- 3G-SDI Adapter for Live Preview
- VR Microphone, e.g. Sennheiser Ambeo VR Microphone
- Audio interface
- Mac Pro with OZO Software Package: OZO Remote, OZO Creator, OZO Preview
- Capturing System
- Multidock Storage Solution
- Time code generator/reader/re-clocker
- VR Set: Oculus Rift, headset

OZO Video Workflow

OZO CAM

OZO Multicam Set (Mobile & Longtime Capturing Set):

- Upon request: up to three OZO 360° 8-lens Camera Systems
- Upon request: including optional live-streaming solution

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2. Postproduction

The Ozo Software Package enables you to control camera functions and preview and process the captured content. It consists of three core modules:

**OZO Remote**

OZO Remote is an application that allows you to remotely and wirelessly control the OZO Camera and live preview captures. It is needed, for example, to set and monitor the exposure of the OZO Camera. The control of the Camera happens via WiFi, while the preview is done via SDI cables. The intended setup is to connect WiFi and SDI both to the same OZO Camera. OZO Remote supports interactive Live Virtual Reality Preview with an Oculus Rift headset.

**OZO Creator**

The OZO Creator Application is used to process and deploy the captured content for the post production process. OZO Creator uses a project-based approach that allows the user not only to import, preview and export assets but also to cut and render simple compositions for the purpose of previewing content in production. The basic OZO Creator workflow of managing assets covers: import, export, preview & analysis, editing, stitching, rendering. Supported resolutions are 4K, UHD, 3K and HD. Supported audio format layouts vary from 4.0 to 8.0, Mono and Ambisonics.

**OZO Preview**

OZO Preview is a simple application that allows you to play previews rendered by OZO Creator. OZO Preview can play one preview file at a time and supports Virtual Reality Preview with an Oculus Rift headset. Preview can be toggled between the computer display and the VR headset. Basic playback controls are: Stop, Play, Progress. You can change the viewing direction by panning the content of the preview window or by moving the headset.

**OZO Live**

OZO Live is a real-time 3D 360 stitching software that delivers live virtual reality broadcasting at scale. Ozo Live integrates with standard 4K (UHD) broadcast equipment and workflows. Switchers, color correctors, and other gear for a full production workflow can be used. OZO Live functionality includes:

- Real-time 3D 360 video stitching
- 5.0 surround audio with head tracking
- UHD frame via quad-link HD-SDI
- Convenient web-enabled GUI
- Digital panning
Compressed OZO RAW Footage

OZO Creator Software
Decode ozo raw footage

8x dpx image sequence
separately for each camera stream

Postproduction Software
Colour Correction, Grading & Denoising

Merge left and right eye video to 3D 4K video

OZO Creator Software
High Res Stitching

Postproduction Software
Final Colour Correction, Grading & Denoising

Final Colour Correction, Grading & Denoising

VR Encoder Software
For different VR playback device standards

HMD's

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