



POWER TO THE CREATORS

# Neotopy Studio Focuses on Cinematic VR with a Touch of Magic

The Neotopy Studio's mission is to create cinematic VR content with a magical touch.

The team includes storytellers, filmmakers and sound engineers who specialize in immersive VR/360 cinematic experiences. A recent project is a VR mini-concert that features leading French artist, Yael Naim, for Unibail-Rodamco. The concert was shot specifically for VR viewing and will run as a roadshow throughout Europe. Set up like a movie theater, 30 people will “attend” the concert every hour at a particular venue to experience the show together.

For tour dates, see: [www.bandsintown.com/YaelNaim](http://www.bandsintown.com/YaelNaim)

**Alexandre Regeffe** recently discussed the development of the VR mini-concert and how Neotopy managed the VR post-production process.

“The VR concert is a showcase of Yael Naim produced by Ivan Maucuit, VR Project manager at Neotopy Studio, that features two songs in ten minutes. I was on set for the shoot with Jean Baptiste Villechaize, who worked as both the DP and the director. Often times in VR it's best to have the two functions in one person because the two processes are so inter-dependent.”



Scene from Yael Naim VR mini-concert ▲



◀ Neotopy's customized Hydra rig with four GoPro cameras



◀ SCRATCH VR Suite at work ▼





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### The Shoot

Ivan and Jean-Baptiste used four GoPro cameras on a homemade rig called “Hydra” for the VR shoot. The GoPros are a great camera option for VR because they’re inexpensive and make VR accessible to everyone, but to create a higher-quality, professional-looking result the lowlights require a lot of work in post-production. VR is our raison d’être at Neotopy so we’re fully prepared to take on the complex challenges of VR post.

I was on set for a full day for the shoot of two songs. We worked with Ivan and the DP to get the camera positions right, as well as the lighting. Lighting for VR is challenging as they’re part of the show, but in post you need to manage the flares. There were three takes for each song, so there was a lot of data to resynchronize.

### The Post Production

VR is a new technology so we had to build new pipelines and our own workflows. We did the stitching of the data at Neotopy and sent the ProRes 4k files onto SCRATCH VR. We found Assimilate’s SCRATCH VR Suite to be invaluable as all the color grading and finishing tools are streamlined into a single workflow. It has advanced features like masks automatically repeating on the right or left side to the equirectangular image. SCRATCH also made it easy to manage the highlights and lowlights within the material, drawing out the depth of shadows and softening the glares.

There is so much material in a 360 shoot that more challenges arise. For example, the contextual grading is difficult. We had to avoid seams. Numerous artifacts needed clean up. And while I was working on a powerful MAC workstation with a high-rez monitor, I couldn’t sufficiently view the content via a headset (poor definition, but in real time), so I was continually checking the results and making adjustments.

The target device to be used by the client at the concerts is the Samsung Galaxy s6, plugged into the Samsung Gear VR headset. I didn’t need to be concerned about the color consistency on the various viewing devices because the concert’s soft colors and low lights were like a nightclub scene.

### The Sound

Sound is very important to maximizing the VR experience. Neotopy has developed a unique sound workflow with state-of-the-art Ambisonics microphones combined with head-tracked binaural mixing. This maximizes the natural feeling of presence into the 360-filmed experience.

### Cloud-based Review

I used the SCRATCH cloud-based viewing tool so that the client, DP and several other people could view it simultaneously. That way I could make changes in real time, run another set of reviews, and so forth. I also used it to preview the color grading directly in the Samsung Gear Headset, in a streaming way! It’s a huge time saver.

### Studio Workflow

We have two SCRATCH systems for dailies, conform, color grading, and finishing of music videos, drama and TV episodes. We use only SCRATCH for color grading because it’s so powerful, has advanced features, and it just simplifies the entire post-production process. It’s very important to our business model to have SCRATCH as our primary VR tool.

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