



# StypeLand

A RENDERING SOLUTION FROM STYPE BASED ON UNREAL ENGINE



PROUD WINNER OF THE ENGINEERING, SCIENCE & TECHNOLOGY EMMY® AWARDS







#### A RENDERING SOLUTION FROM STYPE BASED ON UNREAL ENGINE

stYpe has made its name creating the world's finest camera and object tracking systems, but now it's time to make an even bigger impact by introducing our own rendering solution. To achieve that, our proven R&D team has built a system around the immense rendering capabilities of Unreal Engine and added a framework that's powerful yet simple and ready for action - meet StypeLand!

StypeLand works as a plug-in for Unreal Engine and adds an extremely powerful keyer, the GreenKiller, while supporting all of Unreal's own crucial features, including Depth of Field, Reflections, Shadows, and advanced calibration.

One of the advantages of StypeLand is that it gives you the possibility to use more than one tracking system simultaneously, which means you can have multiple video feeds and tracking systems, all rendered in a single StypeLand engine.

StypeLand was released in 2019, and since then has been responsible for rendering in several high production events, including Chevrolet's unveiling of the 2020 Corvette Stingray, the US Open 2020, the 'Save My Planet' project by Freckled Sky, Tomorrowland - Around the World 2020, the MTV Music Awards 2019, the Dota 2 E-Games Championship, Ford's unveiling of the Mustang Mach-E, and many others.



## €tv+

For Christmas of 2020, Apple TV brought us the warm Christmas vibes of Mariah Carey's "Magical Christmas Special." Groundbreaking VR and AR effects were made possible in this amazing show thanks to StypeLand.

### VIRTUAL EFFECTS TECHNOLOGY USED

- 6x stYpe RedSpy camera tracking systems
- on-set StypeLand Data Recording
- background rendering in Playback mode





Although 2020 forced us to socially distance ourselves, the US Open found a way for TV hosts to interact with tennis stars. Using StypeLand and GreenKiller, TV hosts and tennis players had conversations like they were standing right next to each other.

#### VIRTUAL EFFECTS TECHNOLOGY USED

- 3x stYpe RedSpy camera tracking systems
- GreenKiller ChromaKeying





TOMORROWLAND

Just like 2020 itself, Tomorrowland was also different this year. Yet again, the human spirit proved that obstacles lead to next-level innovation. Check out how StypeLand helped make this year's Tomorrowland memorable.

## VIRTUAL EFFECTS TECHNOLOGY USED

3x stYpe RedSpy camera tracking systems

## TOMORROWLAND - AROUND THE WORLD 2020





For the very first time in 55 years, Ford has expanded the Mustang family, bringing the famous pony into the electric age with the Mustang Mach-E, an all-new, all-electric SUV. We were there to boost this stud's presentation with mesmerising VR effects.

VIRTUAL EFFECTS TECHNOLOGY USED3x stYpe RedSpy camera tracking systems



## freckled sky

Ukrainian artist Ingret performed from within an LED cave using VR. Along with camera tracking, we covered performer tracking and virtual effects rendering. nDisplay was used for rendering of multiple displays.

#### VIRTUAL EFFECTS TECHNOLOGY USED

- 1x stYpe Follower tracking the performer's body and footsteps
- 1x stYpe Spyder tracking the camera



## MY3

The 2019 Russian Music Awards was one of the most memorable award ceremonies that Russian viewers had a chance to see that year. Using our technology to pull off the AR moments, the production team made this award ceremony unforgettable.

#### VIRTUAL EFFECTS TECHNOLOGY USED

• 1x stYpe Encoded Fluid Head - a mechanically tracked PTZ head





The Dota 2 E-Games 2020 Championship managed to deliver a true spectacle thanks to breathtaking AR graphics. Several magical creatures came to life via graphics rendering performed by StypeLand.

#### VIRTUAL EFFECTS TECHNOLOGY USED

- 1x stYpe RedSpy camera tracking system
- 6x StypeKit mechanically tracking cranes on site





General Motors's Chevrolet worked for years to completely redesign the new Corvette Stingray. Combining our technologies, they were able to use AR effects on the moving car, making their unveiling event a spectacle truly worthy of their new machine.

#### VIRTUAL EFFECTS TECHNOLOGY USED

- 1x stYpe RedSpy camera tracking system
- 1x stYpe Follower tracking the moving car







## GREENKILLER STYPELAND'S PROPRIETARY CHROMA KEYER

GreenKiller is ultra-efficient at differentiating subtle color nuances on cycloramas and can thus transfer real shadows, reflections, and hair detail beautifully over to your Virtual Reality set. This never-before-seen level of effectiveness means that even studios with less-than-perfect cycloramas or uneven lighting can achieve absolutely amazing keying!

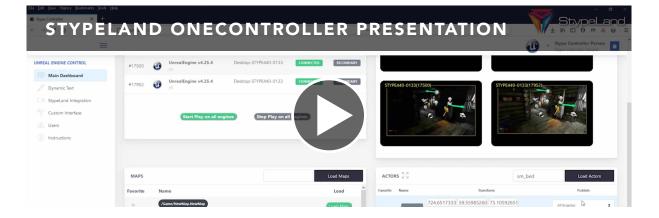
GreenKiller can output a composite image as well as fill and key if required.





### **ONECONTROLLER - REMOTE MANAGING**

One of StypeLand's advantages is its web-based, centralized OneController which enables you to manage multiple StypeLand engines from a single place. It's accessible from desktops, tablets, and smartphones or even stream deck meaning that even your presenters can seamlessly trigger virtual events like animations during a live shoot.







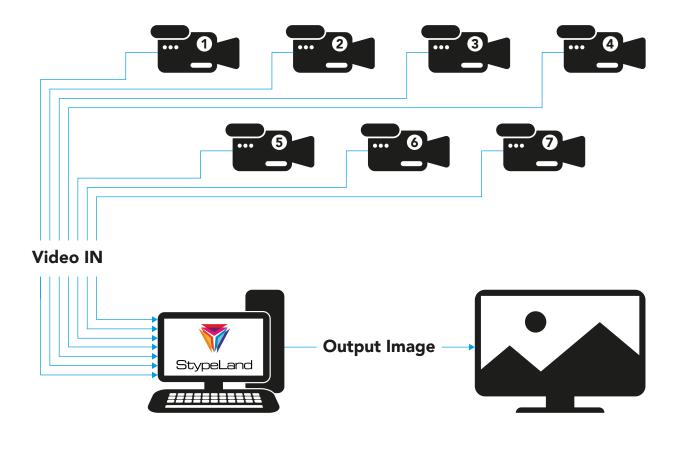
## CINEMATIC PRODUCTION: RECORD+PREVIZ AND PLAYBACK MODE

Along with "Live" mode, which is mostly used in Broadcast, in StypeLand you can record your tracking data while seeing live previsualisation. This way, you can render more demanding scenes in post-production using Playback mode, which will play back the recorded, time-coded data in Sequencer. Experience the power of StypeLand's cinematic workflow, which has proven itself on projects like Tomorrowland and Apple TV's Christmas special.



## SINGLE WORKSTATION FOR UP TO SEVEN CAMERAS

In an ideal scenario, you would use one workstation per camera, so that you can have a live preview of each camera, even if it's not live. However, if you are starting your studio with a limited budget, you can benefit from considerable cost savings by using a single workstation with multiple video inputs to render up to 7 cameras from a single workstation. In this mode, you don't even need a switcher - your workstation will do this task for you.







### **STYPELAND XR**

For an LED stage, you can add vivid foreground and background graphics to make your scene come to life using our **StypeLand XR** solution. It provides superb color calibration between the floor and wall tiles, allowing for a perfect blend between LED panels and virtual AR world! With StypeLand XR there's no need to avoid sharp angles between panels, you can achieve a smooth transition between LED walls as well as seamlessly extend your set beyond the LED wall edge with no distortions to the image.







## **SHADOW CATCHER & REFLECTION CATCHER**

When it comes to AR projects, StypeLand offers you must-use features to make your virtual objects look as real as they can get. Shadow Catcher and Reflection Catcher enable you to project shadows and reflections of virtual objects onto real-life surfaces. Adjust thresholds, blurriness, resolution, and other parameters to get the best results.

### SHADOW CATCHER



STYPELAND UNREAL ENGINE RECOMMENDED HARDWARE	
CPU	AMD Threadripper 3945WX or AMD Threadripper 5945WX (# of PCI Express Lanes: 32 or more, PCIe 4.0, base clock speed min. 3.5GHz, min. 8 cores)
RAM	64 GB ECC RAM
GPU	RTX 3090 or RTX 4090
SSD	512 GB NVMe OS drive (second 2 TB 2.5" SSD recommended for storage)
PSU	1000W
OS	Windows 10 Pro 64-bit or Windows 11 Pro 64-bit
VIDEO I/O card	Supported Video I/O cards: AJA Kona 4 and AJA Kona 5, AJA Corvid 44 and AJA Corvid 88, Blackmagic Design DeckLink 8K Pro, Blackmagic Design DeckLink Duo 2 and Blackmagic Design DeckLink 4K Extreme 12G, Bluefish444 KRONOS   k8, Bluefish444 Epoch   4K Supernova S+ and Bluefish444 Epoch   4K Neutron







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