

AUGMENTED REALITY

GRAPHICS

Dynamic control integration layer



MAKE IT. MANAGE IT. SHOW THE WORLD.

CAPTURE > CONTRIBUTION > MEDIA MANAGEMENT > DISTRIBUTION

AUGMENTED REALITY

Give your viewers an awesome experience

We are artists and technicians at the forefront of creating powerful visual experiences. With Augmented Reality we work with broadcasters and transform studio programs with imagination and expertise.

Any studio is now a carte blanche. With Augmented Reality we create a new world, and connect the movement of the studio cameras to a virtual camera in the 3D Augmented environment.

Now you can focus on storytelling and create programmes with real-time AR enrichment elements. For the viewer it becomes one total, believable and compelling experience.

Dynamic control integration layer

Creating sets with virtual reality and augmented reality is boosting the creative pulse of show producers. It's also technically daunting. Until now. How do you manage the numerous dynamic elements, including in-show features and on demand changes in lighting and 3D hyper realistic objects? NEP, the pioneers in VR and AR, developed a dynamic control integration layer.

The graphics operator's customizable dashboard that gives total control over the multiple

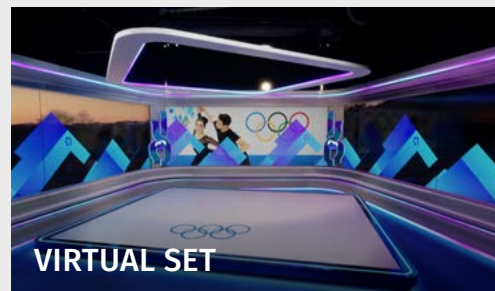
facets of AR. Connecting the real world with the virtual and augmented elements through studio integration, it allows changes to occur in real time during live shows.

This module system allows for rapid feature development, allowing further integration with broadcasting and improving ease of operation. While a virtual set contains numerous elements for the graphics operator to control, this control can be sequenced using the built-in playlist mechanism; allowing preparation of changes to elements in the virtual set inside playlist items, allowing for a more linear approach of storytelling.



WHAT WE CREATE

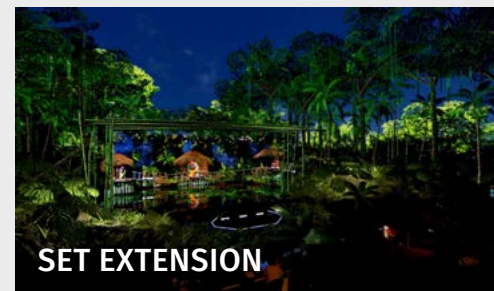
Real-time rendered visuals as convincing as the real thing



VIRTUAL SET

Create any set you can imagine

- ✓ Green screen based or completely virtual
- ✓ Create hyper realistic outdoor and interior decors
- ✓ Instant set changes and virtual led screen options



SET EXTENSION

Expand sets beyond physical studio boundaries

- ✓ Masking of physical environment to enrich the set
- ✓ Sets continue beyond studio boundaries
- ✓ Instantly change the look and feel of the set



HYPER REALISTIC OBJECTS

3D objects enriched with real time statistics

- ✓ 3D models are created in advance
- ✓ Display dynamic objects (like F1 cars) that physically can't be placed in the studio
- ✓ Real-time statistics for visual storytelling



VIDEO

AR Showreel: Set Extensions, Virtual Set and 3D Objects

BEYOND AUGMENTED REALITY

Augmented Reality is so much more than just a physical set replacement

Data connections

The Augmented Reality components can be connected to data feeds to instantly change the component and enrich the virtual environment with data feeds like news, social media and statistics.



Localization of your content

By adding render engines per camera it becomes possible to create multiple localized versions of the same show.

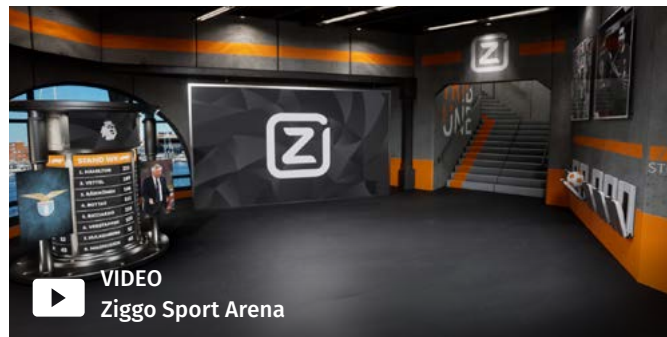
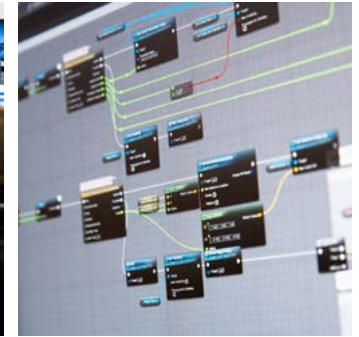
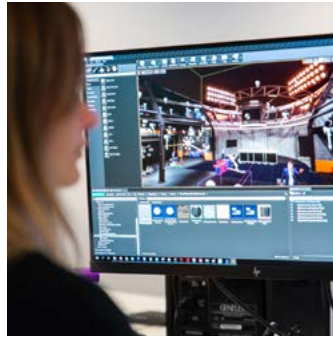


THE TEAM

Work together with the best AR experts

You will work with the world's most advanced team of technology experts, designers and artists embedded in the video and broadcast industry. We are digital natives managing the entire production and broadcast workflow both technically and creatively, for clients all over the world.

- Project managers
- In-house Creative Director
- Lead Technical Unreal artist
- Set designers and Unreal 3D artists
- Technical experts
- AR and Camera Operators
- Keying experts and tracking technicians
- Conceptual designers
- Operational experts



THE PROCESS

We deliver a managed solution and create one workflow for broadcasters, production companies and content owners, and create hybrid teams with our clients customized to needs.



INTAKE

Efficiently defining the scope of the project



CONCEPT DEVELOPMENT

A joint effort in determining the creative direction



AR SET DEVELOPMENT

Agile sprint based development with a focus on rapid prototyping



DEPLOYMENT

Providing clear documentation, training and support for the product roll-out

SHOWCASE

World First Formula1 Pit box AR set, for Ziggo Sport

The visual power of Augmented Reality brings the adrenalin rush of F1 direct to the viewer. The brief was to give F1 fans an awesome experience. So we transported them right to the race team garage, looking onto the pit box. With AR we recreated the F1 pits to make the viewer feel part of the race team. Every detail in photorealistic 3D, following the story of qualifying, and race day.

From the green light to the checkered flag we created instant set changes and real-time rendered AR elements to enrich the race

action. It needed to be visually accurate, detailed, and convincing to make it totally immersive.

We brainstormed the set design(s) with Ziggo Sport (Liberty Global), visualizing and sharing the prototype concept with VR glasses. The build started in advance with all 3D models, including hyper realistic 3D race cars and objects in the pit box. Before the live action began, the green screen set transformed into the pit box, and action was punctuated by real-time statistics, team news and expert analysis.

“An interesting and exciting journey with a R&D component for the editorial, design and technical partners with a great result.”

John van der Putten

Head Production & facilities Ziggo Sport



VIDEO
Ziggo Sport F1 Pit box



Experience Augmented Reality for yourself

The only way to imagine what you could achieve with Augmented Reality, is to experience it yourself. The magic happens at our innovation hub in the Netherlands. Contact our Augmented Reality team today to make an appointment.

Contact us at: info@nepgroup.com

