BRAINSTORM
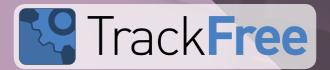
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INFINITYSET

THE MOST ADVANCED VIRTUAL SET SOLUTION

TrackFree

InfinitySet is designed to cope with any requirement from advanced tracked virtual sets to inexpensive trackless environments. With practically infinite cameras and the industry-first TrackFree™ technology which allows combining tracking and trackless environments for further flexibility, Infinity Set is the most advanced solution available today for virtual set production.

InfinitySet can handle multiple input sources, no matter if they are real cameras or video feeds, and the resulting scenes can be as complex as required. In addition, InfinitySet includes a complete real-time 3D graphics toolset, allowing for the seamless integration of 3D objects within the scene, imported from a variety of third-party packages and formats.

RE-DEFINING VIRTUAL SET PRODUCTION

InfinitySet combines the power of the Brainstorm render engine with an easy-to-use interface to create a new environment for next-generation cross-media broadcast requirements.

INTEGRATING ASTON PROJECTS

Now InfinitySet allows the seamless integration of Aston projects within a virtual environment and the ability to modify them directly in Aston, Brainstorm's graphics creation, CG and playout solution. This is possible even with external data sources for data-driven graphics such as bars and pie charts, statistics and many more.

Each project comes with all the Aston capabilities, including Stormlogic, and therefore the interaction between graphics and the capability of being controlled by OnDemand or any other supported control device even though they are within the virtual set. Now that we can embed Aston projects and compositions within Infinity Set, designers do not need to work on large complex projects anymore. This simplified collaborative workflow allows graphic designers to work on separate pieces of the same project and combine them together in InfinitySet without interfering with each other. The creation of

new graphics, or changes to existing graphics, can be performed even at the very last moment.

TRACKFREE

TrackFree™ is a totally new and revolutionary approach to virtual set production. It is a camera-tracking independent technology that enables broadcasters to combine the precision and high quality of tracking systems but at the cost of a trackless system, and with matching flexibility and user-friendliness. The TrackFree™ technology is the culmination of many different R&D projects Brainstorm has

conducted over the last few years, and includes game-changing features such as 3D Presenter, Video TeleTransporter, HandTracking and FreeWalking.

TrackFree™ can be used in combination with the integrated internal chroma key software or external chroma key hardware, even within the same production. The whole composition is created within InfinitySet embedding the keyed feed into the virtual set, as opposed to standard chroma key layering. Combining all the above allows Infinity Set to be used in multiple operational modes. This also makes InfinitySet the ideal product for Augmented Reality applications, taking it to a new level of complexity, realism and data display never seen before.

3D PRESENTER

3D Presenter is a brand-new technology that enhances the realism of the talent inserted within the virtual set, achieved by generating a true 3D representation of the talent from a video feed, creating a real-time 3D volume that is continuously regenerated, repositioned and remapped based on the camera parameters. This means that the presenter is not a simple superimposed 2D sticker over the 3D virtual studio environment, but an actual 3D object embedded within the virtual set. 3D Presenter allows the presenter to be seamlessly inserted within the 3D studio environment and to interact with both real and 3D elements within the scene. For example, shadows over a real desk and simultaneously with reflections on a virtual floor.

TELETRANSPORTER

Brainstorm's unique TeleTransporter allows users to insert a presenter inside a real scenario. This feature seamlessly combines 3D virtual sets with real characters and live or pre-recorded video feeds, all moving accordingly with precise perspective matching. This allows presenters, as well as 3D objects, to be inserted into videos from remote locations. The TeleTransporter not only permits real-time insertions of the live character in a live event or even in an event that happened in the past. It also enables inserting a pre-recorded character even in an event that occurs in the future.

HANDSTRACKING AND FREEWALKING

Our revolutionary HandsTracking technology allows a presenter in a virtual environment to trigger graphics and animations with the simple movement of their bare hands. Of special interest is the FreeWalking feature, which enables talents to freely move about the green screen theatre. Thanks to the FreeWalking feature presenters are allowed to move forward, backwards and sideways even though the real camera is in a fixed position.

Video TeleTransportation to an Augmented Reality Set
Virtual Set, Augmented Reality and On-Air graphics production. Brainstorm launche

INFINITYSET FAMILY	INFINITYSET	+TRACK	LITE
Resolution-independent & 4K-ready graphics	●	●	●
TrackFree™, camera tracking-independent technology	●	●	
3D Presenter - volume extrusion from keyed video feed	●	●	
3D Shadow casting and selective defocus in scene	●	●	
Edit materials of the virtual set	●	●	●
Multiple live input sources and virtually infinite virtual cameras and positions	●	●	●
Compatibility with Aston & eStudio Preparation	●	●	●
Aston compositions overlaid over the virtual graphics	●	●	●
Aston projects embedded within the virtual set	●	●	
Object actions	●	●	
Advanced animation	●	●	
Internal chroma keyer	●	●	●
Software Production Mixer for enhanced production	●	●	
Optional virtual camera controller hardware	●	●	●
External tracking hardware support		●	
TeleTransporter	●	●	
Tracked Augmented Reality		●	
Playlists of movies	●	●	●
Color correction to match live sources with virtual elements	●	●	●

VIRTUAL CAMERA CONTROLLER

InfinitySet also features a software-based production mixer for enhanced production functionality such as full control of all the virtual cameras, with non-linear transitions such as Cut-Fade-Wipes and Flies between 3D cameras, plus controlling actions and objects. InfinitySet also features an optional hardware controller for enhanced program production, including manual control of transitions.