

About Brainstorm



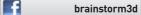


Established in 1993, Brainstorm Multimedia provides industryleading real-time 3D graphics and virtual set solutions for all broadcast graphics types and workflows as well as for feature film production and 3D real-time presentations. Brainstorm customer list include many of the world's leading broadcasters plus a large number of smaller and regional stations.









Affordable, easy-to-use virtual set solution EasySet 3D is an affordable, easy-to-use virtual set solution that provides a comprehensive 3D real-time environment integrating a 3D set builder with multiple real and virtual cameras, integrated chroma keyer and a production mixer for easy transition between 3D cameras, all from just one PC.

Real time 3D videographics











Affordable, easy-to-use virtual set solution

EasySet 3D is an affordable and flexible virtual set solution that allows inexpensive virtual studio facilities and productions thanks to its own builtin chroma keyer and the replacement of real camera tracking through the use of virtual cameras and combined with live talent in a 3D environment.



Easily build your own virtual sets from scratch

EasySet 3D comes with an extensive **library of virtual set elements** that allow the easy creation of virtual sets from scratch: floors, walls, ceilings, screens, furniture, etc.

A new virtual set is created simply by selecting the 3D elements required from the **intuitive user interface**, dragging and dropping them at the desired position on the set. Any element can then be **repositioned**, adjusted or resized,

and all graphics objects can be coloured, textured and positioned in the 3D space as desired.

Users can also import external elements such as image files, movies or live external video feeds in a variety of formats. Those elements can be placed as textures, enhancing the

realism of the set.



Advanced toolset

Objects can be dragged from the expandable EasySet 3D libraries or imported from 3D software packages such as Maya or 3D Max, and further edited if needed inside EasySet 3D. EasySet 3D allows the **integration** of pictures and movies as textures

to place on walls, in screens, or on any other element. And as it works in a real **3D space** with 3D objects, all the objects in the set interact with each other, including the keyed characters. EasySet 3D can handle multiple **3D shaders** at the same time, allowing objects to interact showing reflections, refractions, particles or impostor effects to create **realistic complex scenes**.

EasySet 3D a built-in 2D titling system, enabling the creation and live playout of simple lower thirds in the virtual set.



EasySet 3D users don't have to integrate expensive and complex tracking systems to create a virtual set, nor include external chroma keyers, video delays and mixers, EasySet 3D comes fully configured with all these capabilities already **built in**, which reduces the total cost of the virtual set. The virtual camera technology within EasySet 3D allows the user to define the positions and movements and assign them to any of the multiple virtual cameras available. A real camera then captures the talent within the green screen for compositing the final output. The result is a trackless environment where the talent and virtual set move together in tandem with the virtual cameras movements. totally simulating complex camera tracking shots.

EasySet 3D's trackless environment allow for multiple internal **real-time post-processing** that can then be applied to the final output (keyed character + virtual set). These include such effects as depth of field, selective blurring, complex shaders, reflections, interactions and lens effects that are not possible with camera tracking systems.



EasySet with OnDemand

EasySet 3D in combination with OnDemand, features Brainstorm's StormLogic, which allows full integration and interaction of both the talent and Brainstorm graphic elements such as charts, animated graphics, tickers, etc within the virtual environment, bringing highend simulated 3D Augmented Reality to the affordable EasySet 3D solution.

OnDemand allows data within graphics to be modified and updated manually, even while on-air. This technology also enables the EasySet 3D **software mixer** to remotely control any production or virtual camera in the set, thereby providing live studio capabilities directly to the virtual set environment.



Hardware Controller

EasySet 3D also features the option of an external hardware controller to replicate the capabilities of the integrated software mixer, including enhanced production functionality such as full control of all virtual cameras of the EasySet 3D. This takes full advantage of its 3D features by allowing non-linear transitions such as Cut-Fade-Wipes and flies between 3D cameras. Both features can be timed or manually controlled using the fade arm.

The EasySet 3D virtual set camera controller also allows one preview/ program from any camera plus cut-

fade-wipe editing. Transitions can also be launched manually if desired. All external feeds for the virtual studio can also be easily controlled.

The EasySet 3D virtual set camera controller enables users to easily control EasySet 3D functions in the more familiar **production environment** of an external device. With it, Brainstorm has extended the virtual-studio-in-a box concept to enhance what is already a powerful feature set, taking it to new levels of creativity and control. Now EasySet 3D users will also be encouraged by these new possibilities to further enhance their virtual set.



Key Features

Build virtual sets from scratch

The EasySet 3D built-in libraries allow the creation of virtual sets just dragging and dropping floors, walls, furniture, screens, etc. Complete sets built in 3D software packages can also be imported.

Expandable libraries

EasySet 3D comes with libraries of objects, sets, furniture, etc to build your own scene. And these libraries can be further expanded purchasing elements from Brainstorm or creating your own. Easy Set 3D also imports virtually any image file.

Real 3D environment

EasySet 3D works in a real 3D environment in real time, and all the elements in the set are 3D objects. Therefore, camera movements are real and dedicated 3D effects (shaders, particles...) can be applied.

Built-in advanced chroma key

EasySet 3D has an integrated chroma key with advanced funcionality such as automatic chroma, selective spill and additive functions.

Integration with OnDemand

EasySet 3D partners with OnDemand to provide full interaction between the character and any graphic elements in the set (charts, animated graphics...).

Future proof

EasySet 3D works in PAL, NTSC or any HDTV flavour, and has built-in 3D stereoscopic capabilities.

Hardware

Recommended Graphics Boards

NVIDIA Quadro Family

Recommended Video Boards I/O

AJA Kona 3G, Bluefish Epoch Supernova, NVIDIA SDI Output, NVIDIA SDI Capture.

Virtual Set Camera Controller Specifications

video signals but controls the video feeds and cameras of the EasySet 3D.

Interface

Dedicated RS232

Main features

- PGM/PVW bus with black and 12 crosspoints.
- Joystick to control camera movements (PGM/PVW).
- Cut, Fade and Wipe transitions.
- Internal Chroma keyer and crop adjustments.
- Independent feed position adjustment.
- 16-button shotbox to launch productions.
- 16-button shotbox to launch internal CG pages.

Dimensions and weight

430(W) x 88(H) x 425(D)mm, EIA2RU. Approx. 15kg.

Brainstorm reserves the right to alter any specification, feature or technical requirement without prior notice. Please contact Brainstorm Multimedia or your local distributor for updated information.

