



WASP3D VIRTUAL

3D Virtual Set Production System



15+
Years



400+
Customers



40+
Countries

REAL-TIME GRAPHICS
SOLUTION FOR LIVESTREAMERS
www.wasp3d.com

VISUAL APPEAL SPEED TOOLS **VERSATILITY** WORKFLOW

VIRTUAL

3D Virtual Set Production System



WASP3D VIRTUAL



Converts to..



Small Chroma Setup



Infinite Virtual Environment



WASP3D VIRTUAL

Small Setups, Big Dreams

- Realistic 3D Virtual Sets
- Turn small Chroma setups into Big Virtual Studios
- Virtual Camera Animations and Oscillations
- Supports multiple NDI/SDI live video inputs
- Create or Import 3D AR models



Small Setups, Big Dreams

Immersive Realism Starts Here

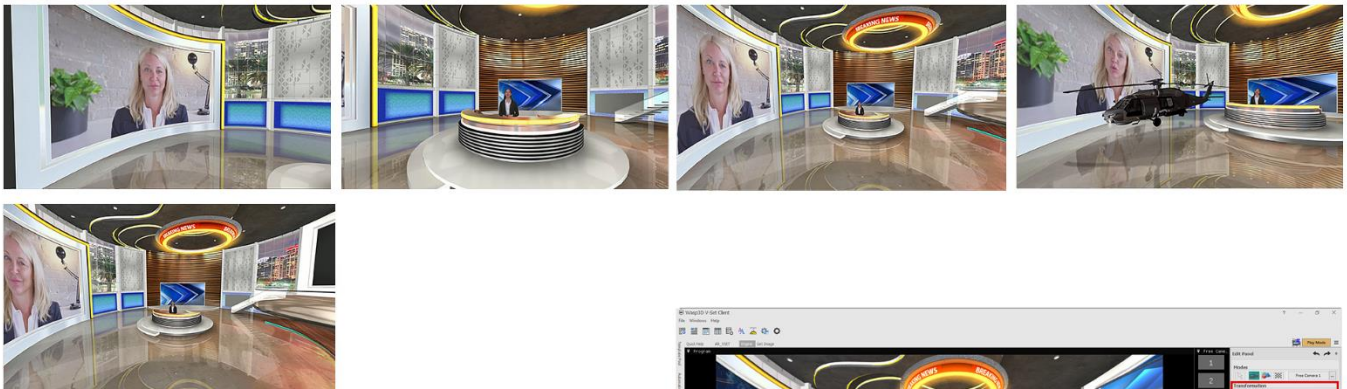
Use Wasp3D CineKeyer for the perfect chroma key. Seamlessly transform small setups into captivating 3D Virtual Sets, even for intricate details like individual hairs.



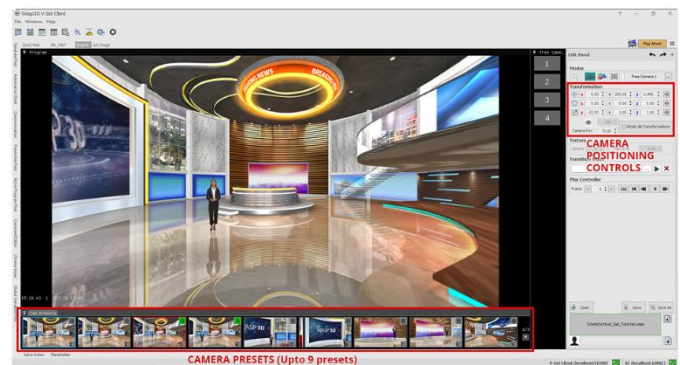
Real World Virtual Camera Animations and Oscillations

Achieve dynamic visuals effortlessly, no extra equipment or personnel required, thanks to Virtual Camera

Virtual Camera Animation



No Camera Operator Required With Virtual Set Controller

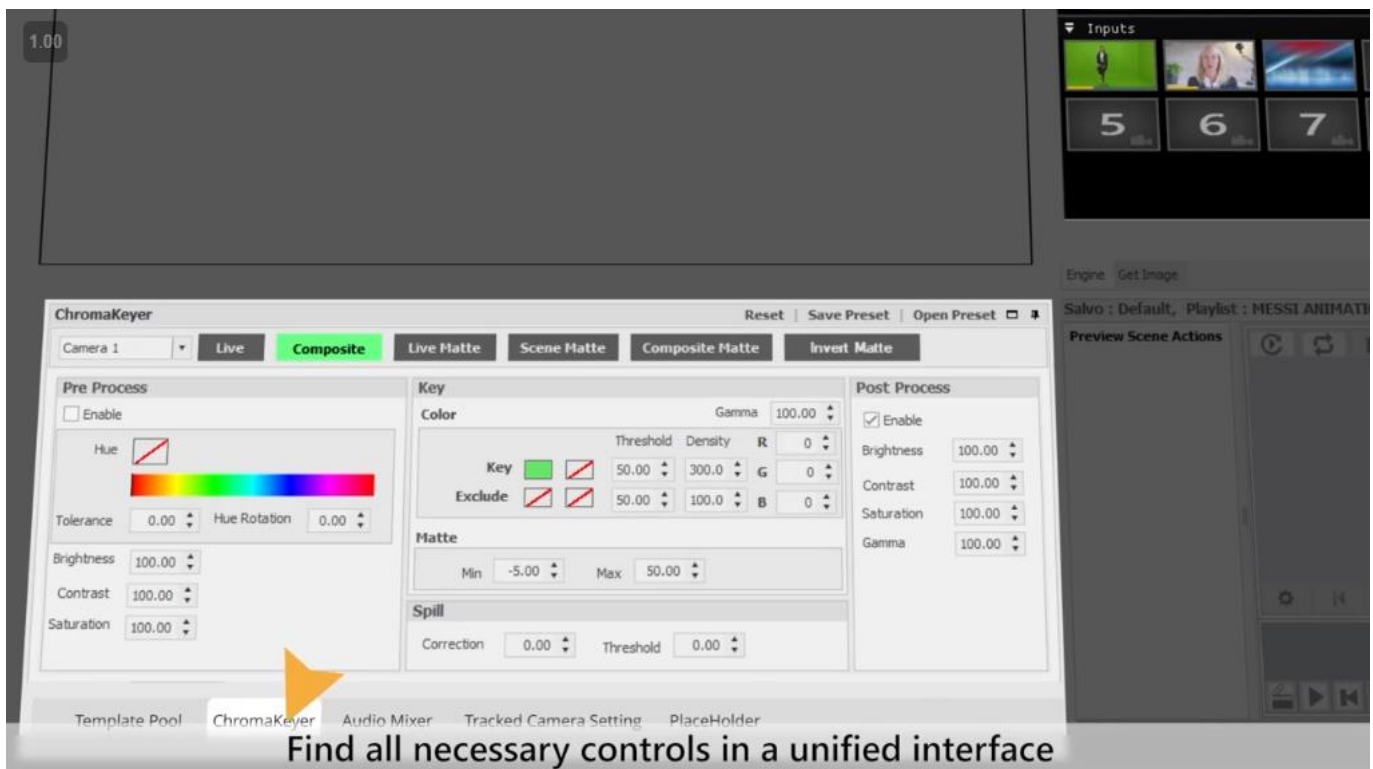




Elevate livestreams with 3D models

Take your livestreams to the next level with animated 3D models. Effortlessly import .FBX files, complete with motion capture (MOCAP) data easily accessible online.

All-in-one Control Interface



One interface for Chroma Keying, audio mixing, playlist management, and seamless incorporation of videos, images, or live feeds into a virtual set. Achieve a polished channel look with AR, CG graphics, and smooth transitions.

Workflow & Hardware Specifications



Desktop PC/ Laptop (System Requirements)

Operating System

Windows 10 (64-bit) / Windows 11 with version 22H2 (or later)

Processor (Latest Generation CPU Recommended)

Multicore Intel® or AMD processors (like Intel Core™ i5 - i9 / Ryzen 5 - 9 or high)

Memory

8 GB of RAM or higher

Graphics Card (Latest Generation GPU Recommended)

DirectX 12 supported GPU with a min. of 4 GB of GPU memory
(Such as Nvidia GeForce GTX 1050TI or higher, with the latest driver)

Display

1920x1080 resolution

Technical Specs

Supported I/O card*

BMD DeckLink - Duo 2, Quad 2, 8K Pro, 4K Extreme 12G, Quad HDMI Recorder (only for inputs),
AJA - Corvid and KONA cards support - Corvid 44, Corvid 44 12G BNC, Corvid 88
(*for I/O card installation, check the required PCIe slot and CPU lanes)

Inputs

SDI, HDMI, NDI, NDI|HX, Web Browser, RTSP, RTP, UDP, RTMP, SRT

Outputs

SDI, HDMI, NDI

Video Formats

4K, Ultra HD, HD, SD

Audio Input/ Output

16 channels embedded

Sync Input

Tri-Sync or Black Burst

Media Format

MPEG2, MPEG4 and H.264 containers: (AVI, MPG, MPEG, MP4, MXF, MOV, GIF, WMV)

Image Format

JPEG, PNG, TGA, BMP, DDS, HDR, GIF

Audio format

WAV, MP3

Technical Specifications

WASP3D VIRTUAL DESIGNER

Design Tools

3D Objects



2D Objects



Design 3D Objects like cube, cylinder, sphere, and ring or add 3D text to your designs.

Comprehensive set of vector shapes and 3d mesh primitives that are parametric and key farmable. The 3D Shapes also act as building blocks for complex meshes. Lines with Leader functions, Bezier Spines & Freehand polylines extends the shape functionality.

Extended Objects



Build complex meshes using Extrudes, Lathe, and Bevels. Spline Extrudes using Shapes extruded along a path.

Object Tiling, E-Text and Table Text objects quicken design speed.

Helper Objects



Group of supporting objects which enhance the functionality of the design & scene (Pushpin, UVW text map object, Scrolling tickers, credit rolls and real-time timer & clock for countdown.)

Materials & Textures

Textures



Use texture of images from Formats like BMP, DDS, DIB, PNG, HDR, JPG, JPEG, PFM, PPM & TGA including disk based 24-bit, 32-bit video files - AVI, MPG, MOV, WMV, MP4*, MP3 & WAV.

Apply live video texture - HD/SD SDI I/O or Add a custom texture to create Gradient Snapshot of the entire scene graph as a Texture maps or Display an image /play a series of images as an animation.

Materials



Choose from Standard, Uniform, Chroma Key, Matte, water texture, lens flare and Particle materials for your scene.

User Interface

Dock Windows

Comprises of Inbuilt material editors, to link object in hierarchy. Non Coding based trigger actions & controls for scene play/pause/stop. Key frames to manipulated scene graph. Favourite library with pool of assets. Date entry form design interface including archiving & Unarchiving.

Add Inn

A host of add-ins are available to extend the features of VIRTUAL like data add-ins that integrate data sources into the VIRTUAL graphics from ODBC, Image editor, instance, UDT, Excel, Json, XML & ENUM.

UDT is designed primarily to facilitate functionality like that of a database. It provides users access to a collection of tables that can be customized to create hierarchical, category-based data entry and storage interfaces.

Camera & Lighting Controls

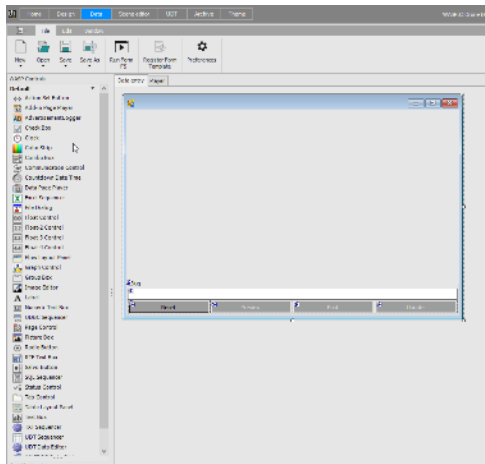
Import Objects



Import Adobe Illustrator (.AI) splines with poly-data. Import ESRI geospatial vector data format and assign colours to the DB associated polygons.

Interactivity & Triggers

Form Controls



Form Controls help define action sets, Colour strip, clock, graph control, Image editing, labelling, Rich text format, and timers and other adjustment during scene runtime. Additionally define and execute data logging tasks. It exports data functions for offline analysis in third party applications like Microsoft Excel. It records and observe real-time data display.

Camera

Multi-camera switching – Multi-Window Video Simulation /3D DVE/ Imports guests from Remote Locations/ Zoom calls

Actions

Facilitates a non-coding mechanism to trigger actions and methods - e.g. Video Playback Actions, Audio Playback, Animation Set Actions, Character Animation, and Data Actions.

Data

Condition based gateway to trigger case commands. The defined icon is compared with the values of each case, if there is a match, the associated set of actions are executed.

Force Dynamics



Planar Deflectors that act as a shield to repel the particles generated by a particle system. Wind & Gravity Forces help simulate real-world physics of particles.

Play Controls

Displays graphic playback controls for each custom controller timeline created within a scene. Each of these controllers can be linked to Scene Controllers in the Data-Entry interface used in the Sting Client.

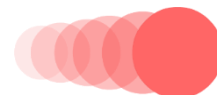
Scene

Scene Command Sends Page-in, Page-out, Play Complete triggers to the scene. Provides a checkbox to enable or disable the rendering of the selected view in Target. VIRTUAL can change the value of a Key frame of an object's translation/parameters or an animation set.

Scroller and Timer

Builds scrolls (tickers) and rolls in a scene like start scroller, Stop Scroller, Set scroller or trigger it based on events with timer.

Motion Trail



Creates a trail of object(s) behind the animated object along its trajectory. Length can be defined using the motion steps and motion frame properties and fade of trail can be defined using the trail transparency graph.

Texture

This is useful to add or remove objects to Back Buffer or Render Target during scene play. User can select the node which needs to be added to remove from the Render texture or Back Buffer by selecting the Checkbox of the respective Render Texture or Back buffer layer.

PLAYOUT CLIENT

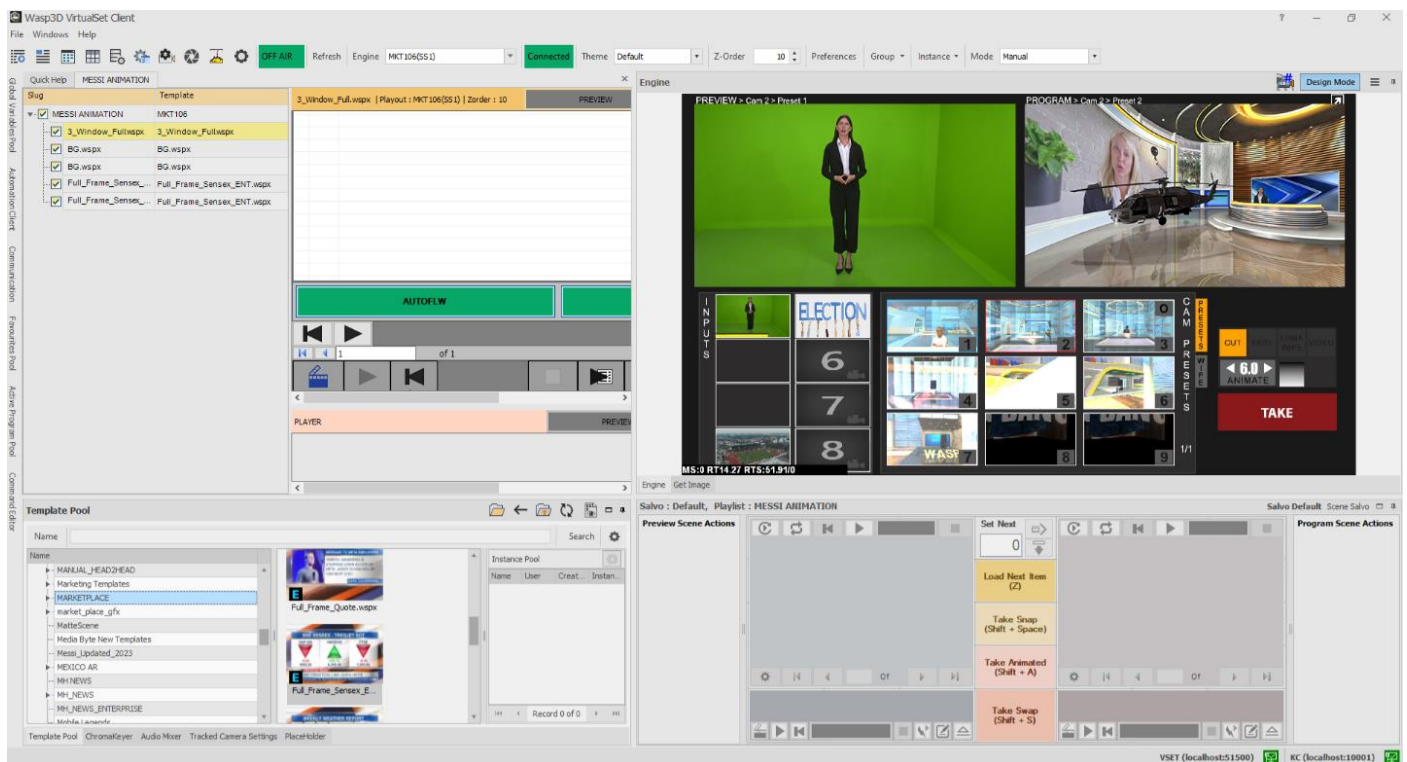
Design Once – Use Multiple Times

WASP3D VIRTUAL Sting Client, is the controlling application to the Sting Server. When it comes to on-air delivery of live virtual graphics on to live streams ranging from lower third tickers, bugs, and crawls to full-frame or even graphically intense AR data-graphics, the WASP3D Virtual brings its sophisticated, real-time rendering prowess to play and enhances your livestreams look & feel manifold.

Content producers find great agility in WASP3D VIRTUAL template based workflow to deliver visually engaging graphics quickly. Users can design once and use the templates multiple times for various use cases. The solution is designed for performance. The broadcast playout software delivers real-time 3D graphics in either of two modes: automated triggering of graphics for unattended operations & manual triggering for production control based delivery where the playout engine recognizes defined user actions (pause points, continue, play etc.) to proceed.

Playout Interface

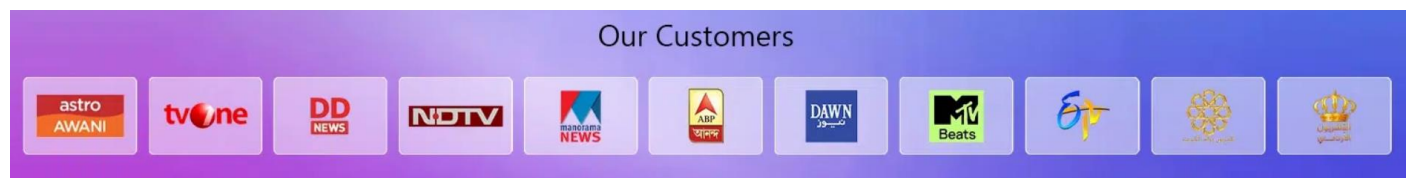
Manage, maintain & deliver data driven graphics. It is a repository of all templates user creates with MS - SQL data base server that synchronises data to graphics within the interface.



About WASP3D

WASP3D offers a broad range of real-time 3D broadcast graphics software solutions for Television Broadcasters & Live Streamers, eager to enhance their creativity and simplify their production workflow.

WASP3D's end to end broadcast TV Graphics workflow enables quick on-air delivery of content. It is designed to streamline production & enhance visual quality to publish across all media platforms. With 400+ installations in more than 40 countries, our dedicated team provides round the clock support to customers for Election Broadcast Services, Sports Presentations, eSports Live Production, News Telecast & Business Graphics. Our tools offer journalists the ability to design TV broadcast 3D graphics right from the newsroom and manage multiple media files with real-time layout.



We provide the necessary tools, every Live content producer requires to create visually engaging content. Our advanced software includes Virtual Set Solutions, Data Integrated AR Graphics, API Integrated eSports game graphics, 3D Character generators (Channel Logo, Lower thirds, L bands, Tickers, Live Bugs) for an engaging storytelling experience. WASP3D supports NDI (Network Device Interface) Integration, IP Based Cameras, Multi-Camera Switching, Multi-Video Window Simulations/ SIMSAT (Zoom Calls) & Filtered Social Media Feed Integration.

The company is headquartered in New Delhi, India.

Need Broadcast Quality 3D Real-time Graphics?

Connect with us at www.WASP3D.com

Or, email us at getinfo@wasp3d.com