

www.wasp3d.com

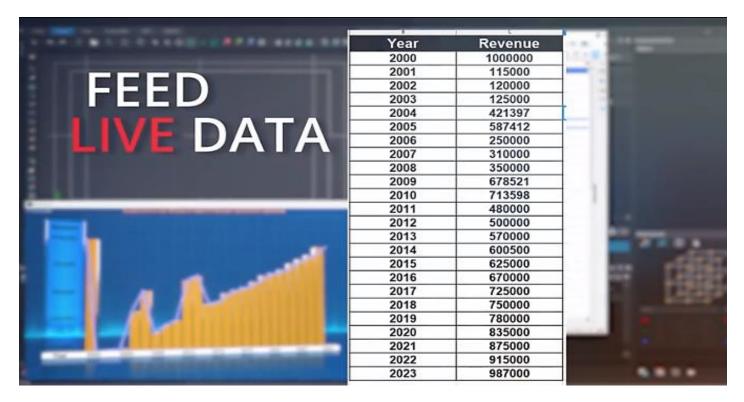
# VISUAL APPEAL SPEED TOOLS VERSATILITY WORKFLOW





# PRO

Live Data Integration in 3D Real-Time Graphics



# **Create Livestreams like a PRO**

- Live Data Integration with Graphics using JSON, XML, SQL, etc.
- Incorporate your applications seamlessly by utilizing the WASP API.
- Create tables for managing complex Live Graphics data using UDT.
- Design and animate visually compelling infographics using AI shapes and 3D models.
- Supports multiple NDI/SDI live video inputs.



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# Create Livestreams Like a PRO

# Live Data Integration with Graphics

Establish connections with real-time data feeds such as XML, RSS, JSON, eSports Game API, and others. Achieve instant on-air graphic updates with live data. Generate data graphics such as bars, pie charts, line graphs, and more.



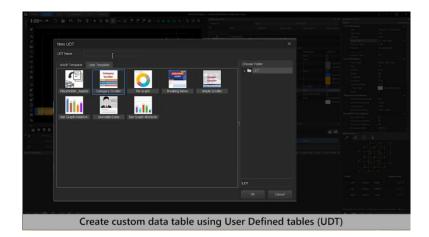


# Integrate with WASP3D API

Empower 3rd party developers to design a control interface for overseeing the play, loading, triggering, and data changes of multiple graphics. Facilitates seamless integration with external applications.

# **User Defined Tables (UDT)**

Generate tables for handling intricate data on Live Graphics with UDT. The interface is user-friendly and easy to navigate, similar to MS Excel or Google Sheets.



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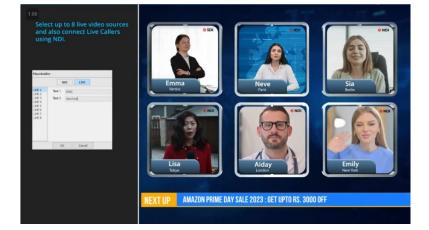




# Graphics with AI shapes and 3D models.

Elevate your designs by importing texture-baked 3D models or Adobe Illustrator vectors. Animate and seamlessly integrate them with data for dynamic on-air presentations.





# **SDI/NDI Live Productions**

Supports multiple NDI/SDI live video inputs. Connect Live video callers using NDI and multi-camera SDI Live Productions simultaneously.

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# **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<sup>™</sup> i5 - i9 / Ryzen 5 - 9 or higher)

#### 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 1050Tl 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

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# **Technical Specifications**

# **PRO DESIGNER**

**Design Tools** 



# 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 PRO like data add-ins that integrate data sources into the PRO 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 & storage interfaces.

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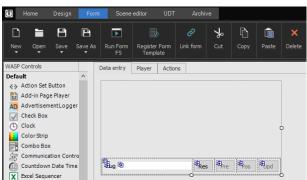
### Import Objects



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 ePROion is compared with the values of each case, if there is a match, the associated set of actions are executed.

# Control Camera & Lighting 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. One 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.

#### Video

Triggers to play, Pause or stop video

**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.

#### Salvo Buttons

An ad-on functionality defined to give one-point control to the producer. Each salvo button as shown in the grid below in red and green can have multiple tasks assigned to it to be used at a certain point in time during the Live Stream.

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## **Events and Controls**

Events or triggers can be assigned to objects On Gesture, On mouse down. It provides access to assign an event to the scene like running sponsored L band Advertisements. Triggers

Loads various Instances in the sting client rundown to Load.

# PLAYOUT CLIENT Design Once – Use Multiple Times

WASP3D PRO Sting Client, is the controlling application to the Sting Server. When it comes to on-air delivery of live graphics on to live streams ranging from lower third tickers, bugs, and crawls, full-frame to on spot analysis, the WASP3D PRO brings its sophisticated, real-time rendering prowess to play and enhances your livestreams look & feel manifold.

Content producers find great agility in WASP3D PRO 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.

# **Database Manager & Playout Interface**

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

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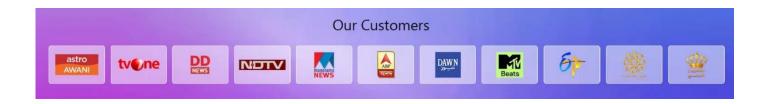


# About WASP3D

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 playout.



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

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