



WASP3D PRO

Specialized Tools for Data Integration & Live Events
+ Xpress Capabilities

Storytelling and "on the spot" Analysis.

Premium graphics for an Upgraded Visual Experience.

REALTIME 3D
BROADCAST GRAPHICS
www.wasp3d.com

VISUAL APPEAL SPEED TOOLS VERSATILITY WORKFLOW

WASP3D PRO

Xpress Capabilities + Specialized Tools for Data Integration and Live Events

WASP3D PRO energises LIVE event hosts, sports broadcasters & federations to design graphics & integrate it with real-time data and deliver broadcast quality content in real-time. Live broadcast production faces some of the greatest challenges in storytelling and "on the spot" analysis.

Being able to react quickly and provide viewers' with fresh visuals is one of the strengths of WASP3D Pro. Integrating live data for sports broadcast from scoring boards and multiple other sources, such as social media, is just the beginning as 3D Sports graphics and requires different ways of presenting the story. Be it sophisticated full frame graphics, comparative sports charts or OTS instant clip presentations, or using interactive graphics through WASPi Mimosa, WASP3D pro addresses Real- time graphics productions within the studio & outdoors.

WASP3D PRO solution offerings range from concept design, planning, graphic creation, database management, graphic and data integration to complete project management and operation. User can create their own custom applications with the help of WASP3D SDK and create custom workflows for data and graphic management.

Design Features

Intriguing graphics

Drone Designer, the designing software unleashes the graphic artist's creative power to generate, manipulate, animate and visualize 3D graphics with great ease. The real-time graphics design software's highly intuitive interface expands the graphical design capabilities of design professionals.

Real time Refractions, Reflections, Colour enhancements

Create mirror reflections and refract objects along with other elements in your scene. Modify the brightness, contrast, hue and saturation of the textures, videos or the entire scene and reduce dependability on third party software.

Rich Text Format

Rich text format (RTF) is the most advanced 3D text feature for speed and quality which aids rapid creation of rich, data driven real-time 3D graphics with complete Unicode support. User can Highlight, Blink, change color or font of specific word(s) within a sentence. One can create a library of favourite text styles and use them in multiple scenes. Change in a text style changes the style in all scenes where it is used. 2

Graph Control

Graph object available as a primitive allows user to create bar and pie graphs. Same data can be used to switch between either. Additionally, user can use Sphere, Ring, Cylinder, Rectangle or other objects to create custom shapes bar, pie graphics.

Adobe illustrator import & Built in polyline tools

Import custom 2D shapes and maps. Modify and animate individual polygons and vertices, apply textures and materials to the outline to create some exceptional animations. Use these shapes with extrude to bring the 3D look to your scenes. The animation applied to polygons and vertices also reflect on the extrude. Apart from importing shapes, user can create Bezier curves using the polyline, freehand or line tool. All lines can be animated from start to end. Offset parameter can be used to create dynamic animations with fast turnarounds.

Data Add in

WASP3D Xpress syncs data from external servers, sports feeds and ODBC integration for quick On-air auto update to handle various live sporting events, financial or election broadcast coverage. Allows user to bind the template data to ODBC data sources without the need to do any programming. Simple drag and drop wiring of changeable fields with external data. Data can be updated on the fly or on demand using specialised action. Animations can be triggered as data updates.

Variables & Triggers

Use data variables for managing data and performing quick calculations for Live Events. One can wire variables with object parameters to show the result. Animations can be triggered on change of data. Users can write simple expressions as well as perform advanced calculations using alias based mathematical formulas or JavaScript. The graphics display content from external data sources and sports feeds using ODBC integration. Real time data Sync and on-air graphic updates make it superior to other offerings in the markets.

Date and Time with Countdowns and Count Up

Displaying simple date & time or event-based countdowns & Count-up timers can be created and controlled easily. A simple button-based control interface can be created to trigger the timers right from the player interface. 3

Animatable 2D Shape vertex manipulation

Xpress features that each point and its Bezier handle in the 2D shape can be moved to modify its shape. These modifications can be animated to create custom or key framed animation and give interesting and more creative animations in the design scene. 2D shape manipulation / Text on path animation is useful

Workflow Features

On the spot analysis

Create visual database tables without the need of any programming. This simple interface of UDT allows users to define structured data and then be able to directly wire (i.e. link) this information to design elements.

Live Data Integration

Pro is equipped with specially designed data addins (Data Types: UDT, JSON, Excel, XML etc) to manage and fetch data for graphic. Being at the heart of WASP3D PRO solution, it ensures the updating of concurrent data in live as well as prepared graphics. Along with communication addin user can trigger events and controls across multiple servers to seamlessly create smooth graphic transitions.

Multilayer

Channel logo, live bug, exclusive bug, multi-layered scroll tickers, lower third graphics, full frame graphics etc can all be played simultaneously using multi-layered playlist. Each playlist can have multiple players allowing users to play multiple graphics. Customised player configurations can be designed as per user or event requirements. Unified player controller to load, unload, play, stop the graphics in rundown. Rundowns can be triggered using automatic or manual control operations.

WASP3D SDK allows user to create custom playlists and specialised panels for use during live scoring, data entry and graphic payout.

Salvo and Action Set buttons for fast controls

Create buttons of Action sets and commands to control the scene functionality at runtime. Quick OB van, PCR operations for score updates, Name Bands, and other MCR operations like live, exclusive, location bug etc. can be easily managed using the player level action set buttons.

Switch Templates

User can connect multiple templates with one data entry form. This saves time and effort of the designer as well as operator. Change template feature allows user Faster data entry form creation as well as linking similar featured templates to one form helps user to save time and effort as well as help operator to change the look and feel of the template. Using the change template feature, while keeping the posted data of the instance.

Intra-scene communication

A Templates can be designed to automatically animate in/out, move position, scale or rotate when another template is played. This reduces the effort during template triggering as well as make the final output dynamic. Logic driven template positioning as well as in & out animations allows user to show more content on screen effortlessly & without the requirement of multiple controlling interfaces. Trigger can be raised to start / stop template animation on functionalities.

Image editor for on the go image placement

All last moment adjustments to size and position of images in the templates can be made possible using the image editor. Simple mouse controls enable user to do these actions in the Image Editor control even at the last moment.

An Upgrade to Express Pro is an upgrade to Xpress and includes simple data integration controls as well other important features to help you re-create professional broadcast quality designs, animations, integrated with live data. WASP3D PRO is best suited for Live Event hosts, Sports Federations and Hyper local sports hosts uploading content over their own channels or on web based platforms.

Technical Specifications

Video Standards

SDI

- **SMPTE-425M**- 1080p (60/59.94/50/30/25)
- **SMPTE-292M** - 1080p (30/29.97/25)
 - 1080i (60/59.94/50)
- **SMPTE-296M** - 720p (60/59.94/50)
- **SMPTE-259M** - PAL, NTSC

HDMI

- **Video standard** – HDMI

Video Input

- **SDI Video Input** - Up to 6 port x SDI input SD/HD

Video Output

- **SDI Video Output** - 2 x SDI – SD/HD (Fill & Key)

HDMI

- 1 HDMI 1.4 type A connector with support for 1080p60.

NDI

- NDI input: Unlimited NDI Live Stream imports

Audio Input & Output

- 16 channels embedded in SD and HD

Import Standards

Media Format - MPEG2, MPEG4 and H.264 containers: (avi, mpg, mpeg, mp4, mxf, mov)

Audio - .WAV, MP3

Live Video Input Format

- H.264 (.mp4) MPEG-2 (.mpg)
- 1080p 60/59.94/50/30/29.97/25
- 1080i 60/59.94/50
- 720p 60/59.94/50
- H.264 up to 4k 30p

Image Format - .png, .jpg, .bmp, .tga, .dds, .hdr, .ppm, .pfm



HARDWARE RECOMMENDATIONS : PRO

<p>Minimum</p> <p>Hardware</p> <p>Specification # (NDI I/O , RTP workflow based)</p>	<p>Processors: Intel® Core i5 latest generation Or, AMD Ryzen 5 3600</p> <p>RAM: 8 GB</p> <p>Graphics Card: NVIDIA® 2 GB card required to run designer z& playout application</p> <p># Above configuration is without I/O card and only suits for NDI / RTSP /RTP streaming input/output</p>
<p>Recommended*</p> <p>Hardware</p> <p>Specification</p> <p>(SDI, NDI, RTP workflow based)</p> <p>LAPTOP Workflow</p>	<p>Processors: Intel® Core i9 7900X or, AMD Ryzen 7 3700X</p> <p>RAM: 16 GB (minimum 8 GB)</p> <p>Graphics Card: NVIDIA® GeForce RTX 2070 or above</p> <p>HDD: 1st 256 GB SSD (OS) 2nd 1TB SATA (DATA)</p> <p>SMPS: Minimum 800 Watts or above</p> <p>OS: Windows 10 Pro (64-bit)</p> <p>I/O Card: Blackmagic DeckLink Duo 2 (2 SDI input, 2 SDI output -Fill & key) *</p> <p>* To achieve more than 2 windows, a "Blackmagic Multiview 4 HD" can be used as an input source to add up to 8 input</p> <p>A Thunderbolt™ based Windows laptop GPU enabled can be used with AJA Io XT, (https://www.aja.com/products/io-xt). to provide SDI I/O workflow along with NDI/RTP.</p>

Recommended hardware configuration based on the performance benchmark, user may select a higher configuration.

For further quires please write to WASP3D Support:

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