

VERTEX VIOSO

Vertex VIOSO is a very feature-rich AV production suite. Use a single standalone machine or scale up to a multi-system network cluster to playout any resolution needed. From digital signage to complex setups, Vertex VIOSO offers a solution.

Playback & Editing

Combining a flexible editing interface with a high performance, high quality playback engine, Vertex offers the ideal feature set for any application.



Performance and Quality

Uncompressed Playback, 10bit HDR content, photoshop files or just simple clips? Vertex offers support for over 180 video codecs, image formats and much more.



Precise but flexible

Build your show using the ultimate precision of timeline programming while staying flexible in playback by seamlessly fading to any cue.



State of the Art IO

Create innovative screen designs and Integrate Vertex into Broadcast workflows using input cards or streaming protocols such as NDI in or out.



2D or 3D Workflows

No matter if you are using pre rendered 2D content or what to animate 3D objects in real time, Vertex offers both workflows, suitable for any application.



Content Management

As projects grow, the need for content management increases. Use unique tools such as content versioning, remote import or content clean-up to master any production.



Smart Backup

Be ready for any eventuality and let Vertex take care of your backup needs. Create smart backups by allowing any system take over for any other system in your session for the most reliable productions.

Show Control

Control and monitor any device for museums, theme parks, shows and installations. Vertex offers a large tool set for easy and powerful programming for any project. Be it for the creation of touchscreen interfaces or complex logical task programming, Vertex combines the essential functions in one application.



Visual Programming

Create logic programming using the integrated Vertex node framework by simply adding components via drag and drop, without having to write a single line of code



Interface UI Design

Deliver rich interactive digital experiences using our drag and drop based UI editor. Create and adjust your design in real time, "what you see is what you get"



Device Control

Control and listen to projectors, Switchers, Sensors or even frameworks such as Crestron or AMX: Connect Vertex to any number of devices bidirectionally for integrated show control



Decentralized Processing

Scalable performance to match any project: In Vertex, show control can be assigned to a dedicated machine or run in the background on a playout machine



Mobile Device Support

Deploy your own custom interface designs as a webpage to any mobile device for any number of devices. Simple control for users and technicians alike



Common Language API

Vertex features an easy to use integrated scripting language for any automation tasks. Already have programming experience? Use C#, Lua or Python or even write your own custom plugins

VIOSO camera based auto alignment

Thanks to VIOSO, softedge and warping can be set up automatically with a camera. This leads to a more precise setup and automated re-calibration and ensures the sharpest image in every show - even if surrounding conditions would impact the projectors.

VIOSO®

VIOSO auto alignment is included in all Vertex VIOSO products (server + software).

VIOSO provides a large selection of suitable cameras and helps defining the appropriate camera strategy for all kinds of projection scenarios.

Features in Detail

Version 2022 R2

Playback

- **Sequence**
Timeline based show creation with unlimited timelines and no layer restrictions whatsoever. Edit your show in real time in preview or live playback mode.
- **Playlist**
Effortless cue-based playback for any media or even show control, featuring intuitive crossfade and trigger controls.
- **Console Control**
Control via industry standard lighting protocols. Vertex lets you patch dedicated console layers, entire playbacks, or systems to offer a wide control range of Vertex from any light console.
- **Global Layer**
Use a dedicated layer which can be controlled via scripting or the node system or via TCP from any external device.
- **Multiuser Workflow**
Multiuser by Design, Vertex brings collaboration to a new level, allowing users to work together in one project.
- **Adjustment FX**
Over 40 customizable video FX including Image adjustment, Keying, Color Temperature correction or cropping and borders.
- **Generative FX**
Use fully customizable GPU generated backgrounds or image effects in any resolution desired.
- **Keyframe Editing**
Work with the inline keyframe editor of the timeline, or simply add keyframes with a right click on any property in Vertex.
- **Values / NLE**
Choose between working with programmable active values as known from light consoles or with default values as in non-linear editing systems.
- **Multi Programmer**
Use any number of programmers when working with active values for an efficient multi-user programming workflow.

- **Blend Modes**
Use industry standard layer blend mode for advanced real-time compositing effects such as Add, Multiply, Burn, Lighten, ...
- **Opacity Wipes**
Use over 30 Opacity wipes for dynamic transitions. Combine wipes with layer blending to create stunning visual transitions.
- **Templates**
Define Templates for any type of clip to automatically assign properties or even keyframe animations.
- **Subcompositions**
Apply a professional subcomposition workflow by nesting sequences or playlists within each other.
- **Controlview**
Create stunning user interfaces directly within Vertex allowing for simple control even of complex installations.

Processing

- **8K Ultra High Performance**
The highly accurate Vertex render engine supports resolutions up to 8K and beyond while being fully in sync over multiple systems.

Unlimited 3D Pixelspace
Composite your content in an infinite pixel space and arrange your outputs from any connected system.
- **Lighting Engine**
Illuminate 3D models in Vertex with user configurable lights, specular and displacement maps.

Multi-Level Playback mixing Engine
Vertex offers multiple preview layers for editing content in a separate preview window. Various playbacks, timelines or playlists can be individually faded in and out or blended at different times.
- **16bit Deep Color**
Playback videos with 10bit color depth or use image sequences for up to 16bit deep color.
- **Key & Fill**
Send any part of your composition as a key & fill signal to separate outputs to integrate seamlessly into broadcast workflows.

Content Management

- **Watchfolders**
Add watchfolder for automated content import or automatic sequence or playlist generation. Offer your clients an easy way to ingest content into your av installations.
- **Transcoding**
One-Click encoding for any video file with the best settings preset for the most common codec families such as HAP or ProRes.
- **Encryption**
Protect your content from unauthorized playback by locking any video file to a specific license or dongle. Expiry dates can be set to unlock files only for specific timeframes.
- **Versioning**
Import multiple versions for any content and manage versions inside Vertex. Switch between versions for content screening or last-minute content changes.
- **Notch Blocks**
Full NOTCH support to playback and control Notch-blocks and build your own hardware to support even the most challenging Notch projects.
- **Video Codecs**
Use the most popular codecs such as HAPQ, ProRes, H264/H265, Notch LC 12bit, MPEG and over 100 additional codecs.
- **Image Sequences**
Import image sequences as tiff, png, dpx or bmp in 8bit, 10bit or even 16bit for highest quality uncompressed playback.
- **Still Images**
Vertex supports a variety of image formats such as: png, tiff or jpg, as well as Photoshop files while maintaining the psd layers as separate assets for further editing.
- **Audio Files**
ASIO audio devices can play back with up to 128 channels per interface. This offers the possibility to playout audio via Dante Virtual Sound Card or a PCI card. All audio channels can be individually routed.
- **PPT Import**
Vertex supports a variety of image formats such as: png, tiff or jpg, as well as Photoshop files while maintaining the psd layers as separate assets for further editing.
- **HTML 5**
Display or interact with web-based HTML content through our video rendering engine. A video URL or image URL will be displayed directly in Vertex's video engine while keeping transparency.
- **3d Models**
Import a variety of 3d models such as obj, 3ds or fbx models. Vertex supports multiple texture channels, including normal maps.

- **Generative Assets**
Generate Testpatterns, gradients or solid colors directly on the GPU in any resolution required. Vertex also includes live text assets with various styling options.

Show Control

- **Scripting**
Automate playbacks or generate customized control scenarios. Vertex offers a built-in scripting language with access to all settings & properties. Scripts can be used everywhere: in Cues, Clips, trigger they can even be sent from external devices.
- **Full API**
Control Vertex from any external system directly via TCP, UDP, HTTP requests via JavaScript or AJAX are supported as well.
- **Device Model**
Vertex comes with an extensive device library allowing the user to control projectors, production switchers and light fixtures sensors and kinetic solutions.
- **C# Plugin**
Write your own C# plugins with direct access to the Vertex objects. Multiple plugins can be managed and integrated into Vertex with custom properties and functions.
- **Scheduling**
Featuring a calendar style interface, Vertex offers simple scheduling of tasks with customizable repetition patterns.
- **Triggering & Wiring**
An Excel styled interface allows for fast interaction setups such as setting up a trigger for an action or having one value control another.
- **Node Interaction**
Vertex next generation show control node system will bring show control programming to the next level.
- **Full screen Interaction**
The Vertex full screen renderer is fully interactive, allowing for click or touch events from touchscreens or any other device directly within in the renderer.
- **Timers & Counters**
Automate countdowns and timers to trigger events on completion or loop. Display the time information in labels or text assets anywhere in Vertex.
- **TCP UDP**
Communicate bidirectionally with third party devices or parse incoming data. Vertex supports a variety of parsing options to decode or send binary data.
- **OSC**
Link any property device in Vertex to an OSC value ad communicate bidirectionally with any device which supports OSC.

- **KNX**
Send and receive KNX group values to listen for events on the KNX bus system, or send any common group value to automate your installation.
- **ArtNet**
Receive or send ArtNet to control light devices or receive commands from light consoles.
- **sACN**
Receive or send sACN to control light devices or receive commands from light consoles.
- **Midi**
Map midi notes or values sent from midi hardware controllers to actions or even fadeable properties in Vertex.
- **MQTT**
Integrate with any sensor or device with MQTT support for simple and cost-effective integration of sensors and motor control.
- **JSON**
Send and receive json formatted data. Parse individual json member values into Vertex variables for further processing.
- **Tracking**
Connect to a variety of tracking systems via SP a unique software solution which keeps track of all position- control- and camera-data involved in your production.
- **SMPTE**
Using the proprietary SMPTE io interface from ioversal you can send and receive timecode or event use multiple interfaces to generate multiple timecodes from the same show.
- **DMX**
Using the proprietary DMX 512 io interface from ioversal, send or receive DMX Data. Dmx data can be mapped and patched to internal universes for further processing.
- **REST API Client**
Setup custom webqueries to access any restbased webservice. Retrieve data and pass it on to the Vertex scripting engine.
- **PPT Remote**
Connect to a Powerpoint instance running on any pc, to control PowerPoint from Vertex or use PPT Slide changes as triggers in Vertex.
- **C#, Python & Lua**
Modern Scripting Languages are natively supported in Vertex. Create custom data and control flow logic with custom code with an integrated scripting editor.

Video IO

- **Input Cards**
Support for the industry leading capture cards for SDI, HDMI from known brands such as Blackmagic Design, Magewell, AJA, Deltacast or Datapath.
- **NDI Output**
Output multiple parts of your composition as a NDI Streams with alpha channel support.
- **NDI input**
Process any number NDI and NDI HX inputs with automatic NDI stream distribution over all connected vertex systems.
- **SDI Output**
Send key and fill signals from Vertex or output any part of your composition to a SDI output card.
- **Spout**
Grab textures in real-time from local applications supporting spout and mix these into your Vertex composition.