VECTORWORKS® SPOTLIGHT

IT'S ALL ABOUT YOUR
EXPERIENCE

Designers respond to the world differently. So do we. That's why Vectorworks® software is a response to the way you design. It feels like you think, supporting the creative process instead of replacing it, and enabling great design to materialize from inspiration, exploration, and discovery.

Creative design is in our DNA, so we place a heavy emphasis on the freedom of artistic expression through the development and documentation of each project. Intuitive programming and workflow features make our products a natural extension of the design process, providing the tools to take you from concept to unmatched experience seamlessly.

Start your workflow transformation with Vectorworks Spotlight, the industry-leading design software in the entertainment business. From the beginning, Vectorworks Spotlight has provided 2D drafting and 3D modeling, realistic rendering, and integrated database worksheets. Today, we continue to empower lighting, scenic, and event designers to work the way you want, and facilitate improvisation and creativity.

There's so much more to explore. Take a look and see what you can do with Vectorworks Spotlight.

EXPLORE THE
POSSIBILITIES

Exploration is essential for the evolution of design. Vectorworks Spotlight allows you to bring your design ideas into the virtual world to investigate and discover. With Spotlight, you have an intuitive, flexible suite of resources that encourages you to create and explore any form.

Lighting design by Nick Whitehouse, Illuminate Entertainment Inc.
Photo courtesy of Ralph Larmann.

STELLAR LIGHTING

Experience Spotlight's renowned lighting design capabilities. Quickly create light plots, automate paperwork, and visualize your design in rendered 3D views. For high-end previsualization, use our simple export command to take your lighting plot and model information directly to ESP Vision to cue and program your show.

Lighting design by Nick Whitehouse, Illuminate Entertainment Inc.
Photo courtesy of Ralph Larmann.

CREATIVE MODELING SOLUTIONS

SUBDIVISION SURFACES

Easily create multi-dimensional scenery and forced perspective by pushing, pulling, and molding your model with subdivision modeling. This technique, based on Pixar Animation Studios' OpenSubdiv library, gives designers the ability to transform rigid lines and primitive shapes likes spheres and cubes into smooth, malleable surfaces, opening new workflow avenues across the entertainment industry and giving you the ability to create any form imaginable.

FREE-FORM MANIPULATION

With our intuitive interface, you can design from any 3D view using modes in modeling tools that automatically infer working planes as you move your cursor, and enjoy the superior quality that enables you to manipulate your model with ease. More accurate object information and better snapping make drawing in 3D easy. The SmartCursor™ helps by showing hints, like the angle from the previous segment, as you draw, and our patent-pending X-ray

Select technology lets you see through models to select, move, and modify hidden objects with precision and ease. Plus, an advanced suite of solids and NURBS surface tools lets you create any shape and easily explore organic geometry. Push, pull, blend, twist, sculpt, deform, bulge, taper, or punch holes.

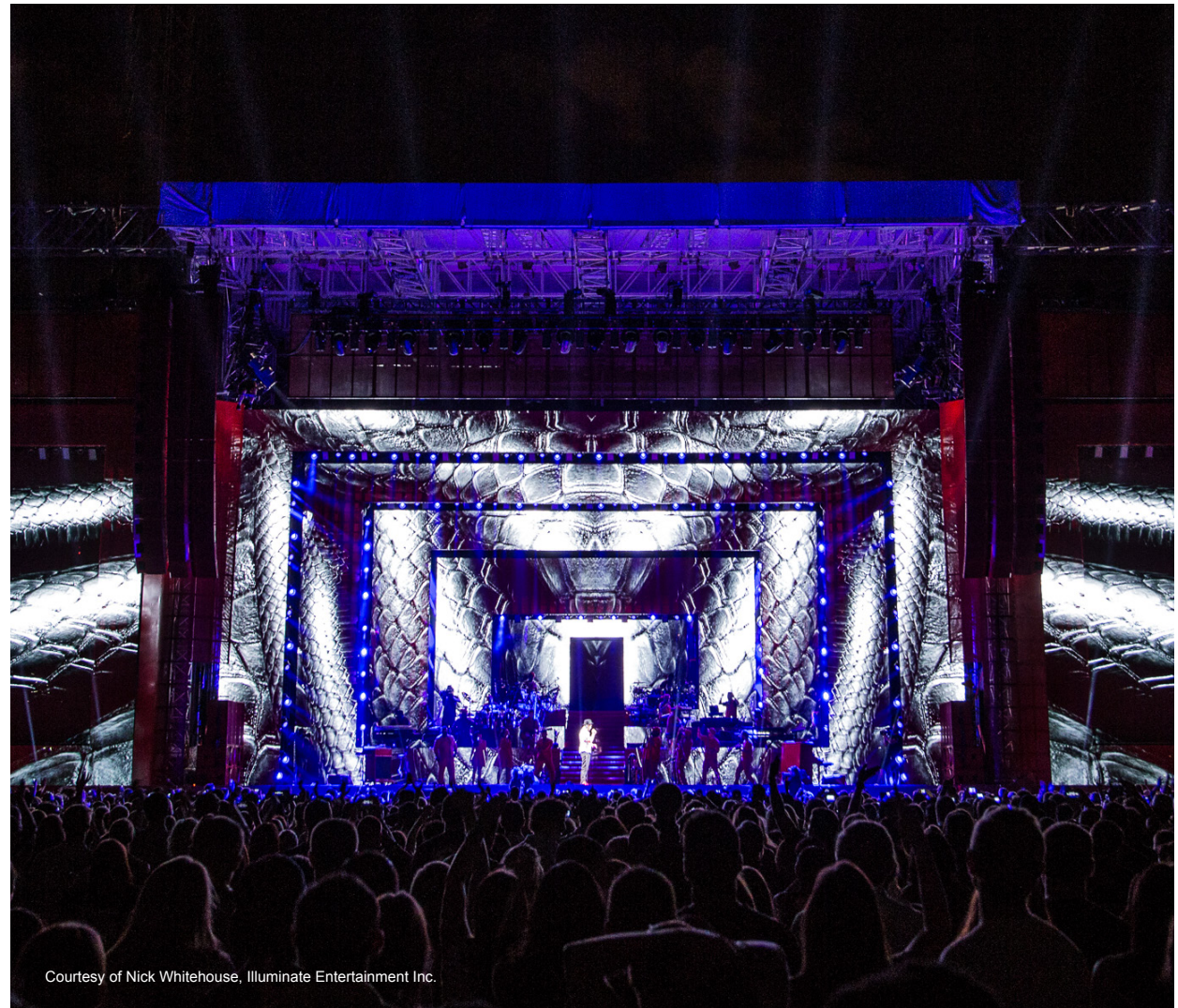Courtesy of Jim Woodward, Exhibit Logic, LLC

Courtesy of Steve Shelley

INNOVATIVE GRAPHICAL SCRIPTING

Graphical scripting will play a significant role in the workflows of the future. These tools, when built into an intelligent information modeling application, present designers with unlimited opportunities to generate, define, build, and explore form and function throughout the design process.

Built directly into Vectorworks Spotlight, Marionette is the first and only cross-platform graphical scripting tool for the AEC, entertainment, and landscape design industries. This Python®-based scripting tool operates within the Vectorworks platform, delivering a robust and scalable way to program well beyond the confines of traditional design software. When you use Marionette, you can create visual scripts that take advantage of the superior 2D interface and robust 3D modeling capabilities that Vectorworks software offers. Usher in a new world of discovery: systemize random effects to create elaborate, constructible, scenic backgrounds; generate organic shapes from truss; explore solutions to complex design challenges; and much more.

Courtesy of Nick Whitehouse, Illuminate Entertainment Inc.
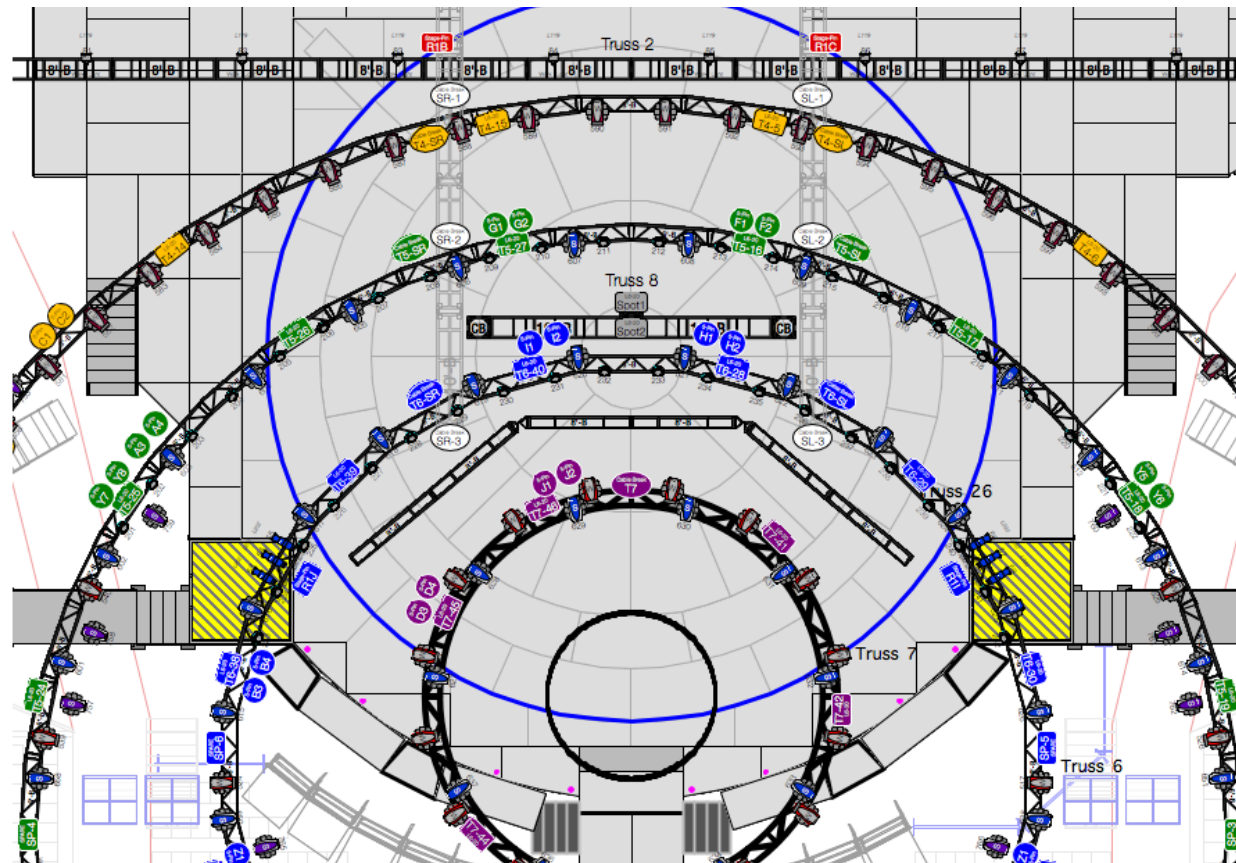
ENHANCE YOUR
WORKFLOW

Vectorworks Spotlight gives you more resources than ever to streamline and optimize your workflows, freeing you to achieve greater creative heights in your designs. With project sharing capabilities, access to reliable cloud-based storage solutions, improved communication and visualization tools, and a responsive, industry-leading development team, you'll design smarter than ever before.

Lighting design by Nick Whitehouse, Illuminate Entertainment Inc.
Photo courtesy of Ralph Larmann.

EFFECTIVE PROJECT COMMUNICATION

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Spotlight's collaborative tools allow you to focus on your individual strengths by giving all contributors the ability to work concurrently on the same design. Whether you work in 2D, 3D, or a combination thereof, Spotlight's Project Sharing capabilities enhance your team's ability to work cohesively and produce incredible results across the design process.

Courtesy of PEDG LLC

EXTENSIVE AUTOMATED PAPERWORK AND DATABASE SUPPORT

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Stop manually counting items in your drawings. Automatic data tracking does the tedious work for you. Built-in paperwork functions help you to quickly generate customized reports like schedules, inventory or rental lists, and channel and dimmer hookups, as well as magic sheets, color cut lists, and instrument summaries. Take advantage of the two-way link between database worksheets and objects, and gain the power to change object parameters directly from the worksheet. The application goes further than automated schedules and materials take-offs. It provides a user-defined, quick, and accurate way to assign custom data to any object and create unique reports.
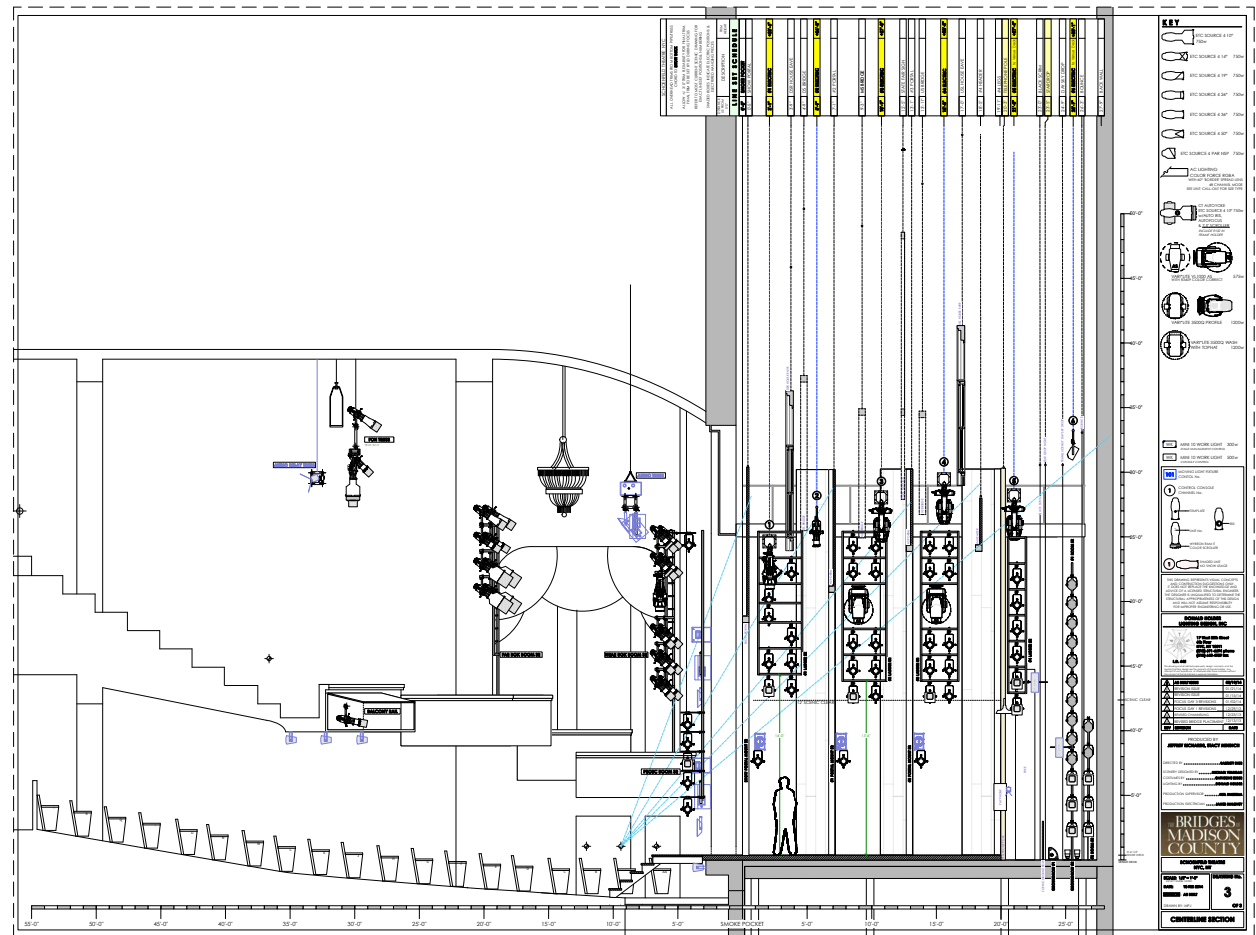
SEAMLESS INTEROPERABILITY

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Get on the cutting edge of collaborative digital practices and share your information fluidly with Vectorworks software's numerous file translators. Exchange lighting data with ESP Vision, Lightwright®, grandMA, and connectCAD. Import concept models from SketchUp®, and access thousands of models from the Trimble® 3D Warehouse and many other content sources that support OBJ, STL, 3DS, SKP, and more. Import, export, or directly reference AutoCAD® 2016 (and earlier) files. Publish drawing sets as multiple page PDFs, DWFs, or DXF/DWGs. Export 3D models to 3D PDF, IFC, DXF, C4D, Rhinoceros, Google Earth®, and Vectorworks Nomad.*

Vectorworks Nomad is an exclusive benefit for Vectorworks Service Select members. Learn more at vectorworks.net/service-select.

SIMPLIFIED SOLUTIONS FOR COMPLEX DESIGNS

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Delivering accurate information efficiently while remaining true to a designer's vision is the pivotal point of any artistic enterprise. As with all design tools, the fundamental purpose of software is to support and strengthen inspiration. With Spotlight, you can move easily between tasks from design concepts to construction documentation and every phase in between. Create, model, present, and develop your designs easily and precisely with one application. The program boasts a comprehensive set of design development tools to support your entire practice.

Courtesy of Donald Holder Lighting Design, Inc.

RENDERWORKS

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Powered by MAXON's CINEMA 4D® render engine, Renderworks® is an industry-leading rendering application that produces amazing, high-quality renderings directly inside your Vectorworks design files. With new full-screen preview, as well as auto-start and quick-cancel features, our latest release streamlines the production of clear and accurate renderings.

Available as an add-on to the Vectorworks line of software products, Renderworks makes it simple to achieve breath-taking results with a simple drag and drop. Improved camera features allow you to manipulate the depth of field, apply vibrant back lighting, alter exposure, and generate panoramic images, creating striking visualizations and dynamic animations.

Courtesy of Michael Helms

Courtesy of Kevin Lee Allen

Further improvements that add new dimensions to your designs include:

• **Caustics Capabilities —** Refracts light through translucent surfaces like crystal and water

• **Ambient Occlusion —** Adds depth to your designs with more realistic shadowing

• **New Grass Shader —** Makes it simple to render realistic scenes with grass, carpeting, or hair

No matter what your visualization needs are, Renderworks gives you the power to deliver.

Visit vectorworks.net/renderworks to learn more.

CAPTURE YOUR
INSPIRATION

Vectorworks Spotlight allows you to channel your inspiration beyond exploration and into unmatched designs. You'll keep your creative edge with the support from the industry's most powerful partner in the journey from simple sketch to final experience.

Lighting design by Donald Holder Lighting Design, Inc.
Photo courtesy of Joan Marcus, featuring Kelli O'Hara.

Lighting design by PEDG LLC. Photo courtesy of Meteor Tower.

POINT CLOUD SUPPORT

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Field surveys and other manual methods used to capture existing spaces can now be replaced with Point Cloud Support. Using your preferred 3D scanning device, you can scan a physical location and import a 3D point cloud object to Vectorworks Spotlight using PTS, E57, LAS, and XYZ file formats. Capture a perfect, full-color representation of any space to manipulate and measure it.

DEVELOP
YOUR DESIGN

The transition from virtual to actual presents distinct challenges. Vectorworks Spotlight offers first-class tools and customizable workflows to go beyond exploration and into development. The pragmatic issues of materiality, fabrication details, structure, and constructability come into play as your concepts mature into concrete solutions.
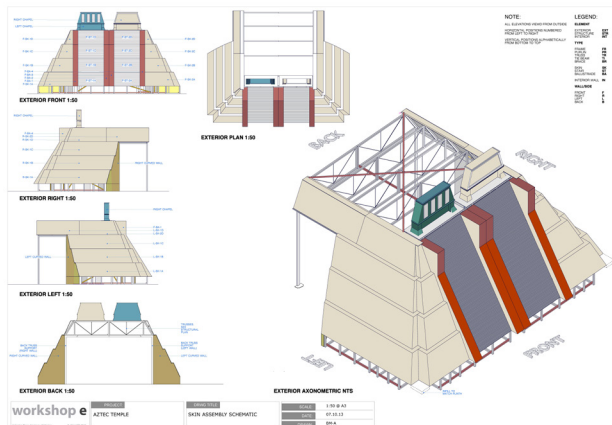
Lighting design by Nick Whitehouse, Illuminate Entertainment Inc.
Photo courtesy of Ralph Larmann.

TAILORED FOR YOUR SUCCESS

Work in tandem with the application. Spotlight is designed to work the way you think. In addition to designing with lines, arcs, and circles, you can design with lighting devices, stage platforms, video screens, speakers, soft goods, trusses, focus points, walls, doors, windows, roofs, and slabs. The building and entertainment objects are easy to edit and display in both 2D and 3D views.

SUPERIOR 2D DOCUMENTATION

Produce high-quality documentation with ease. In addition to a suite of precision drafting tools, Spotlight gives you access to extensive libraries of lighting instruments, accessories, scenic elements, architectural objects, audio objects, video objects, machine parts, and furniture from leading manufacturers. Just drag and drop them into your projects.

Courtesy of Norman Heke and Museum of New Zealand Te Papa Tongarewa

Courtesy of Workshop e

ENTICING EXHIBITS, PRODUCTIONS, AND EVENTS

Make it an event to remember. Easily import venues from facilities managers and hospitality staff, or build them using Spotlight's easy-to-use tools and pre-drawn resources. With the cutting-edge event-planning suite, you can quickly create rooms, stages, steps, lecterns, video screens, and seating. Plus, you can produce standard views to show to your client and generate reports for the total number of tables and chairs in your room.

DYNAMIC LIGHTING DEVICES

Streamline the virtual-to-built process with object improvements, including the ability to automate how your lighting devices respond to changing focus points in the design, placement of curved trusses by diameter, and improved control over the threshold and slope settings in your photometric objects.

HORIZONTAL SECTIONS FROM THE CLIP CUBE

Explore your design floor by floor, space by space, and section by section with horizontal sections from the clip cube. Use this command to isolate horizontal segments of your models to create conceptual, diagrammatic views, giving clients a deeper understanding of your design throughout the development process.

HOIST TOOLS

For entertainment industry designers, the hoist tool gives you the ability to design and document overhead stage rigging equipment for greater levels of detail.

STAGE IMPROVEMENTS

Produce more accurate rental orders and make final stage assembly easier with Vectorworks Spotlight's improved Create Stage command, which supports the placement of multiple, standard-sized stage deck and stage plug objects to fill your defined stage space.

Lighting design by PEDG LLC. Photo courtesy of Meteor Tower.

TRANSFORM
THE WORLD

The reason you design is to create experiences that shape our world. No matter what type of design, you're creating experiences. From the first flicker of inspiration to the finished product, Vectorworks Spotlight is there to help you transform the world.

Lighting design by Nick Whitehouse, Illuminate Entertainment Inc.
Photo courtesy of Ralph Larmann.

ABOUT
VECTORWORKS

Vectorworks cares about design. Since 1985, we have served the architecture, landscape, and entertainment industries, drawing inspiration from the world around us and encouraging the more than half a million designers who use our software to create experiences that transform the world.

Our commitment to develop the world's best cross-platform CAD and BIM software has taught us a simple truth: great design begins with the inspiration of the designer. Vectorworks supports that inspiration by guiding the exploration of discovery and finding creative solutions. We provide powerful tools to help designers capture ideas, nurture innovation, communicate effectively, and realize their vision.

We serve those who desire to create experiences that are memorable and build things that truly matter. We recognize that great design is about revealing opportunities that explore the unexpected while fully satisfying the demands of an increasingly complex world. We acknowledge the value of a designer's dream and strive to facilitate the creation of something that's truly appreciated and uniquely positioned to express the best in the built environment.

SYSTEM RECOMMENDATIONS

Mac OS X 10.9 or later operating system

Windows 7 SP 1 (64-bit)
Windows 8 (64-bit)
Windows 8.1 (64-bit)
Windows 10 (64-bit)
64-bit Intel Core i5 (or AMD equivalent) or better

RAM
4GB minimum, 8GB highly recommended
8GB — 16GB recommended for large files and complex renderings

Graphics*
A dedicated graphics card is highly recommended.
Open GL 2.1 compatible graphics card
VRAM: 1GB, 2GB-4GB (recommended)

Screen Resolution
1440x900 minimum
1920x1080 or higher recommended

* Like past releases, Vectorworks 2016 added improvements that place still higher demands on graphic hardware. The performance and quality of the graphics provided by the Vectorworks Graphics Module depend directly on the speed, memory, and supported extensions of the graphics card. These new features have the potential to provide a very fast and fluid experience if used on capable hardware, or a noticeably slower experience if used on older or incompatible hardware. Graphic cards should support at a minimum OpenGL version 2.1; cards not meeting this recommendation will have limited functionality and poor performance, particularly when rendering in OpenGL mode. In general, the more powerful your video card is, the better your Vectorworks experience will be.

For the most current and updated technical information, please visit our Knowledgebase at kbase.vectorworks.net.

See vectorworks.net/sysreq/ for updated information.