KarismaCG 4K HDR

All-in-One Real-Time 3D Graphics System

Visual Research Inc.

KarismaCG 4K HDR

KarismaCG is an all-in-one broadcast graphics solution optimized for live broadcast environment. With 2D and 3D graphics creation tools, you can create a variety of graphics for your broadcast environment and you can playout high-quality 3D graphics in real-time.

Support UHD HDR

KarismaCG's high-performance graphics engine enables real-time 4K playout in as well as 8K. It can playout scenes up to 16 layers simultaneously with millions of polygonal. KarismaCG's performance and stability have been proven in numbers of TV stations for many years.

Various UHD Formats

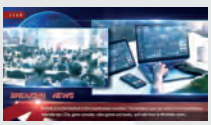
High Dynamic Range (HDR)

4K/HD Simultaneous Playout

Real-Time 3D Graphics Playback

The optimized graphics engine for the latest hardware allows to playout gorgeous 3D graphics in real time in HD, 4K as well as 8K environments.

Multi-Layer Playout



Smooth Video Playback

Live Video Mapping

Real-Time External Data Link

In a live broadcast environment, you can update external data to the scene in real time using ODBC, TXT, or RTF files. Data can be updated by applying a transition effect or scrolled on the screen. Using RTF files, you can change not only text, but also color, font, and size.

Extension API

KarismaCG provides an API that can be controlled remotely through a TCP/IP network, and it can be used to develop various broadcast graphic applications. The API is provided in COM format and can be used in languages such as C#, C++, and VB.

Non-Linear Editing Workflow

KarismaCG integrates sequences with NLE systems, allowing you to quickly create large amounts of graphics. You can immediately check the result of the synthesis of the background image and the graphic, making it possible to produce an accurate graphic.

Timecode Editing

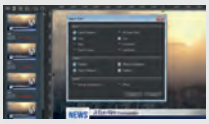
Work with Non-Linear Editors

Productive Creation Environment

KarismaCG has built-in tools to help you quickly and easily create complex and many graphics. Features such as a rich library, batch processing of multiple scenes, and templated text import reduce repetitive tasks and simplify complex tasks to help you complete large-scale tasks efficiently.

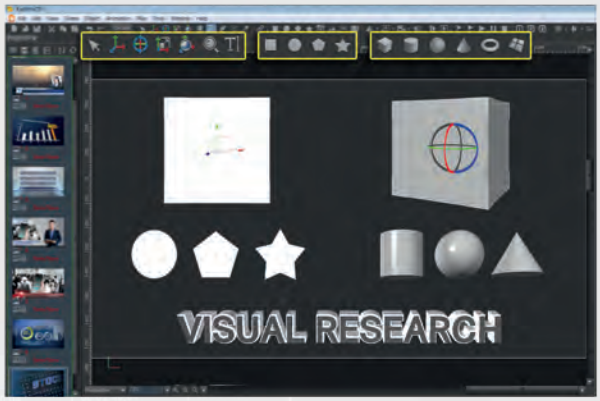
Practical Libraries

Text Import



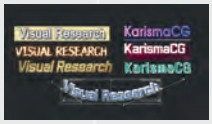
Batch Scene Editing

Built in Creation Tools



Built-in tools for creating text, shapes, paths, and 3D objects, support you to create and edit without any external programs.

Supporting Various Country Characters



Advanced Font Style

Quick 3D Conversion

Realistic Material

3D Chart

Table in Various Styles

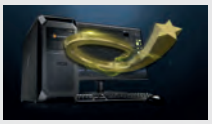
Keyframe Animation

Use advanced keyframe-based animation for motion graphics production. Most object properties, including movement, rotation, and scale, can be animated and previewed on the screen.

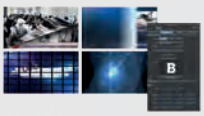
Trigger Animation

Accurate Timeline Editing

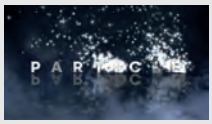
Camera Animation



3D Path

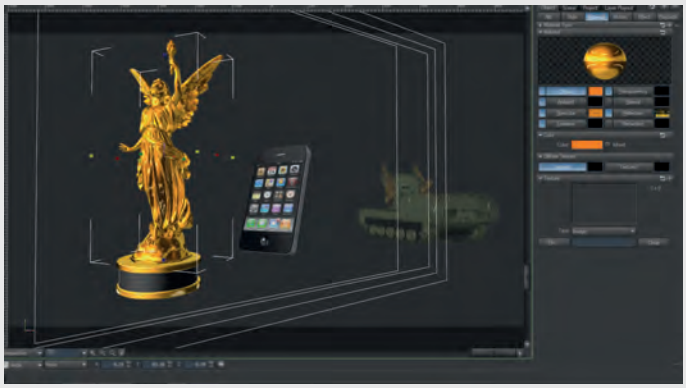


Various 3D Transition Effects

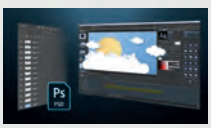


Particle System

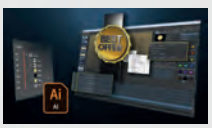
Utilizing External Resources



Importing already generated image files makes the task fast. Also 3D model files created in 3D modeling software can be imported including meshes, lights, cameras and animations, and can be modified.



Import PSD Files



Import AI Files

Import 3D Modeling Files

Product Line and Comparison

Category	Features	Deluxe	Premium	Supreme
Creation	Built-in 2D/3D Text, Shapes, Path, Geometries	●	●	●
	Clocks (Counter, Timer, Digital Clock)	●	●	●
	Import Image Files (TGA, JPG, BMP, PNG, AI, PSD)	●	●	●
	VRV and Sequence Image Video	●	●	●
	2D Styles (Edge, Shadow, Glow, Gradation, Texture)	●	●	●
	Roll and Crawl Scenes	●	●	●
	Real-Time External Data-Link (ODBC, EXCEL, TXT, RTF)	●	●	●
	Lights (Point, Directional, Spot)	●	●	●
	Realistic Material Shading (Reflection and Refraction, etc.)	●	●	●
	Key-Frame Animation and Timeline User Interface	●	●	●
	Object and Scene 3D Transition Effects (Wipe, Push, Transform, Curl, Wave, Fade, Particle, Crop, Blur, etc)	●	●	●
Advanced Creation	Table based 3D Chart (Bar, Pie, Area, Line, Bubble, Dot)	-	●	●
	Import 3D Model File (FBX, DAE, OBJ, 3DS, X)	-	●	●
	Particle System and Lens Flare Effects	-	●	●
	Camera Animation	-	-	●
	Multi-Animation for Object and Scene	-	-	●
	3D Bevel Editor	-	-	●
	Multi-Viewport (Perspective Projection, Front, Top, etc.)	-	-	●
	HD Video File Record and Playback (AVI, MXF, MOV, MP4, WMV)	-	-	●
Playout	Multi-Channel Playout	-	-	●
	Live-In Video Capture & Mapping	-	-	●
	Live-In Image Grab	●	●	●
	TriCaster, NDI Playout	●	●	●
	Multi-Layer Playout	6	8	16
	Audio Playout (Background, Event)	●	●	●
	Network Automation Server	●	●	●
NPS (Network Production System)	FCP Sequence XML Import/Export Timecode-based CG Editing and NLE Linkage VCR Control for Tape-Out	Option		
Option	4K UHD	Option		
	Codec Pack	Option		
	DNxHD Codec	Option		

System Requirements

Category	HD	4K
OS	Windows® 10 Pro 64Bit	
CPU	Intel Xeon Silver 4112 2.6GHz or higher	Intel Xeon Gold 6128 3.4GHz or higher
RAM	DDR4 2,666MHz 16GB or higher	DDR4 2,666MHz 32GB or higher
VGA	nVIDIA® Geforce® GTX1660 or higher	nVIDIA® Geforce® RTX2070 or higher
Display	1920x1080 or higher	
Video I/O Boards	Matrox DSX LE4 AJA Kona LHe Plus Blackmagic Design Decklink 8K Pro BlueFish444 Epoch SuperNova CG	Matrox X.mio3 12G, DSX LE5 Q25, DSX LE4 8 AJA KONA 5 12G, CORVID 88 Blackmagic Design Decklink 8K Pro

Video I/O Specification

Category	HD	4K
Video I/O	2 x SDI (SD/HD) fill output 1 x SDI (SD/HD) key output 1 x SDI (SD/HD) input	Quad-link 3G SDI: 1 x fill output, 1 x key output 12G SDI: 1 x fill output, 1 x key output, 2 x input 25G IP (SMPTE 2110): 1 x fill output, 1 x key output, 1 x audio output
Video I/O Format	1920 x 1080p @ 50, 59.94fps 1920 x 1080i @ 25, 29.97, 30fps 1920 x 1080p @ 23.98, 24, 25, 29.97, 30fps 720p @ 50, 59.94, 60fps	3840 x 2160p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60fps 1920 x 1080p @ 50, 59.94fps 1920 x 1080i @ 25, 29.97, 30fps 1920 x 1080p @ 23.98, 24, 25, 29.97, 30fps 720p @ 50, 59.94, 60fps
Genlock	Analog black burst, tri-level or SDI input signal sync	SDI: Analog black burst, tri-level or SDI input signal sync IP: SMPTE 2059-2
Audio I/O	16 channels AES/EBU audio input and output 16 channels embedded audio on each SDI signal	16 channels audio on each audio signal

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