



KarismaCG

Real-Time 3D On-Air Graphics System

Boost your on-air graphics



Overview

KarismaCG is an all-in-one creation and playout system for real-time on-air graphics optimized to the needs of today's broadcasters. It can be utilized not only in a simple 2D and 3D character generator, but also highly advanced real-time 3D graphic and animation creation without rendering time. KarismaCG's enhanced functions and a powerful graphic engine will be ideal for you moving to the next level of broadcast graphic quality and performance.

Benefits

Rich and Sophisticated 3D Graphics

KarismaCG assists users in creating high quality real-time on-air graphics in order to generate a remarkable expression with built-in 2D and 3D objects, realistic materials as well as imported 3D modeling files.



Convenient and Easy Creation

KarismaCG provides a useful toolset and library, and has an intuitive user interface to the designers so they can manage creation work in an easy and simple way. All users, even first-time users, can create better graphics output quickly with fun.

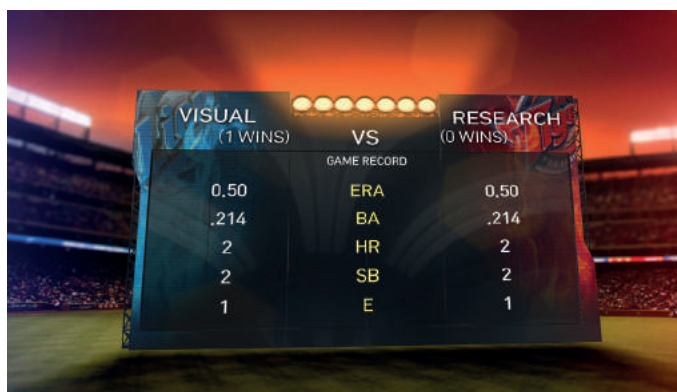


Real-Time Performance and Stability

KarismaCG equips a highly optimized graphic engine that is utilizing up-to-date hardware technology to playout 16 layers of scenes simultaneously and process millions of polygons in real-time without sacrificing stability.

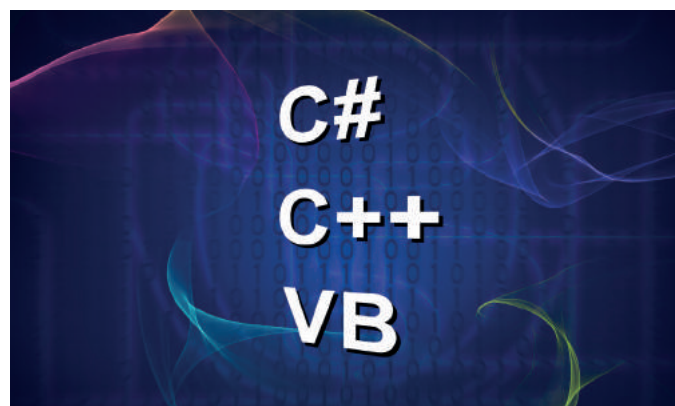
Extreme Efficiency and Productivity

KarismaCG has many useful functions on CG graphics creation with an extensive library of templates, time-saving editing tools, and shortcut keys. For example, KarismaCG's easy batch process helps import of huge text from file, process on multiple project work to edit all the scenes simultaneously.



Maximized Extensibility

More than 20 kinds of add-on solutions for each broadcasting area extend KarismaCG's ability. Most of KarismaCG features can be controlled by programming interface. This SDK includes rich API, sample codes, and documentations so that 3rd party developers make solutions for their own purposes in C#, C++, and VB programming languages.



Features



Built-in 2D/3D Composition

KarismaCG offers the users built-in 2D and 3D composition features. It provides 2D text, shapes, path, and also 3D geometry. 2D objects are decorated with the cool 2D style system or can be converted into 3D objects with bevel, lathe or loft.

Convenient Key-Frame Animation

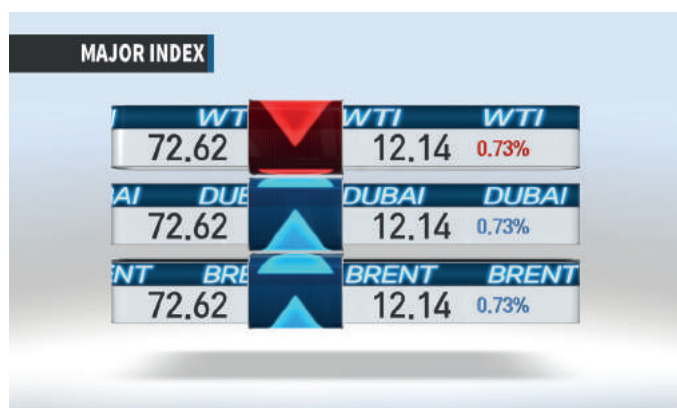
KarismaCG provides a high level customizable key-frame based animation to deliver a powerful motion graphics. Including position, rotation, and scaling. Most of object attributes can be key-framed and controlled on the track-based timeline and spline editor.

3D Effects

KarismaCG has customizable transition effects to scene and object and various effect objects such as particle system, lens-flare, and reflection plane. Especially, the particle system is a great feature to express like a real flame, water, explosion, fireworks, snow, and rain.

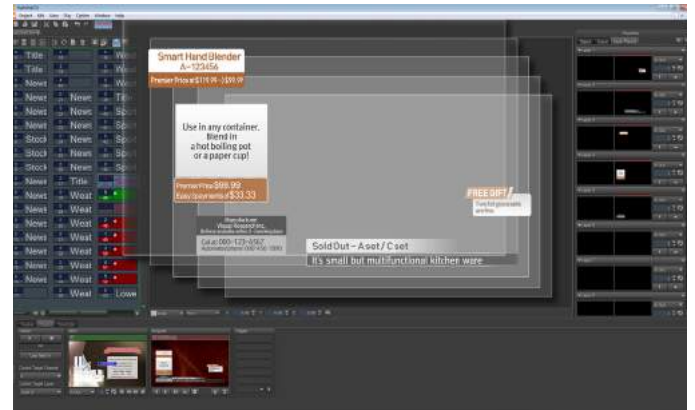
External Data Link

KarismaCG utilizes external data source via ODBC, TXT, RTF to update required data field of designed CG templates in real-time. It also updates text, color, font and size in the scenes from the linked RTF file and the data can be updated with transition effects or scrolled on the screen.



Import Various File Types

KarismaCG imports various image file types such as PNG, JPG, TGA, TIFF, PSD, and AI file. Users can import PSD file by each layer, and can import AI file as vector outline to edit and convert it into a 3D object. Also KarismaCG can import 3D models from 3DS, DAE, FBX, OBJ file with meshes, lights and cameras including materials and animations.

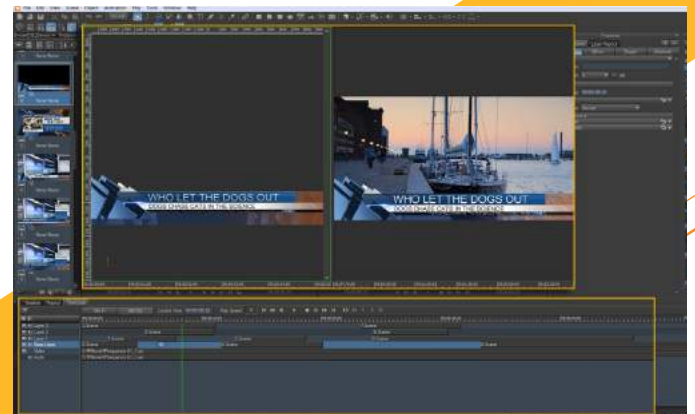


Multi-Layer Playout

KarismaCG not only supports HD formats but also 4K 60p and 3D stereoscopic real-time playout with various video I/O boards. Two channels with 16 multi-layer simultaneous playout is possible, and these layers can be controlled independently and conditionally.

Non-Linear Editing Workflow

In/out timecode edited with in an NLE system can be imported into KarismaCG with XML or EDL file format. Users can design CG easily while watching the original video and the final video with CG that can be rendered to a video file or taped out by VCR where KarismaCG controls.



Product Line and Comparison

Features	Deluxe	Premium	Supreme
Built-in 2D/3D Text, Shapes, Path, Geometries	●	●	●
Clocks (Counter, Timer, Digital Clock)	●	●	●
Import Images (TGA, JPG, BMP, PNG, AI, PSD)	●	●	●
VRV and Sequence Image Video	●	●	●
2D Styles (Edge, Shadow, Glow, Gradation, Texture)	●	●	●
Still, Roll and Crawl Scenes	●	●	●
External Real-Time Data Link (ODBC, TXT, RTF)	●	●	●
Lights (Point, Directional, Spot) and Phong Shading	●	●	●
Realistic Material Shader including Reflection and Refraction	●	●	●
Key-Frame Animation and Timeline User Interface	●	●	●
Object and Scene 3D Transition Effects (Wipe, Fade, Ripple, Particle, Distortion, etc)	●	●	●
Table based 3D Chart Drawing	-	●	●
Import 3D Model File (DAE, OBJ, 3DS, FBX)	-	●	●
Particle System and Lens Flare Effects	-	●	●
Camera Animation	-	-	●
Multi-Animation for Object and Scene	-	-	●
HD Video File Record and Playback (AVI, MXF, MOV, MP4, WMV)	-	-	●
Playout to TriCaster®	●	●	●
Multi-Layer Playout	6	8	16
Audio Playout (Background, Event)	●	●	●
Live-In Image Grab	●	●	●
Live-In Video Capture & Mapping	-	-	●
Network Automation Server	●	●	●
Network Production System FCP XML Sequence Import/Export Timecode based CG Edit and NLE Integration VCR Control to Tape-out with Timecode		Option	
UHD 4K Playout		Option	
Remote Controller Box		Option	

System Requirements

	HD	4K
CPU	Intel Xeon® Quadcore 2.4GHz or higher	Dual Intel Xeon® Quadcore 3.0GHz or higher
RAM	4GB or higher	16GB or higher
VGA	nVidia® GeForce® 1060	nVidia® GeForce® 1080
Monitor	1280x1024, 1920x1080 or higher	1280x1024, 1920x1080 or higher
OS	Windows 7®, 10® (x32, x64)	Windows 7®, 10® (x32, x64)
Video Boards	Matrox® X.mio2™, X.mio3™, DSX LE3™, DSX LE4™ AJA® Kona® LHe+, IoXT Blackmagic-Design® Decklink 4K Extreme™ BlueFish444® Epoch SuperNova CG™, Neutron™	Matrox® DSX mio3 8/X2/12G™, LE4 8/X2™ Blackmagic-Design® Decklink 4K Pro™

Video I/O Specification

	HD	4K
Input/Output	SDI fill, key output - 4:2:2 SMPTE 259M/292M SDI input - 4:2:2 SMPTE 259M/292M	12G SDI or 3G quad-link fill, key output SMPTE 425-5 12G SDI or 3G quad-link input SMPTE 425-5
Video Format	1920x1080i@25, 29.97, 30fps 1920x1080p/PsF@23.98, 24, 25, 29.97, 30fps 720p@50, 59.94, 60fps, 576i@25fps, 486i@29.97fps	3840x2160p@23.98, 24, 25, 29.97, 50, 59.94, 60fps
Genlock Format	HD/SD input or black burst/tri-level sync	HD/SD input or black burst/tri-level sync
Audio Format	8 stereo embedded audio I/O Sampling rate@48khz	8 stereo embedded audio I/O Sampling rate@48khz



© 2017 Visual Research Inc. All rights reserved.

All Page contents including logo and pictures are property of Visual Research Inc.

Other product and company names mentioned herein may be the trademarks of their respective owners.

www.vricg.tv

Phone: +82 70 4700 0983

E-Mail: contact@visualcg.com