

# Product Line and Comparison

Features	Deluxe	Premium	Supreme	NPS	4K
Built-in 2D/3D Text, Shapes, Path and Geometries	•	•	•	•	•
Clocks(Counter, Timer, Digital Clock)	•	•	•	•	•
Import Images(TGA, JPG, BMP, PNG, AI, PSD)	•	•	•	•	•
2D Styles(Edge, Shadow, Glow, Gradation, Texture)	•	•	•	•	•
Still, Roll and Crawl Scenes	•	•	•	•	•
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	x	•	•	•	•
Import 3D Model Files(DAE, OBJ, 3DS, FBX)	x	x	•	•	•
Particles System and Lens-Flare Effects	x	x	•	•	•
Easy Motion	x	x	•	•	•
Camera Animation	x	x	•	•	•
Multi-Animation for Object and Scene	x	x	•	•	•
External Data-Link (ODBC, TXT, RTF)	x	x	•	•	•
FCP XML Sequence Import/Export	x	x	x	•	x
Timecode based CG Edit and NLE Integration	x	x	x	•	x
VCR Control to Tape-out with Timecode	x	x	x	•	x
Export Video File Format	Sequence Image		AVI, MXF, MOV, Sequence Image		Sequence Image
Video playback (Background, object)	VRV, Sequence Image		AVI, MXF, MOV, MP4, WMV, VRV, Sequence Image		VRV, Sequence Image
Multi-Layer Playback	4	6	16	16	16
Audio Playback (Background, Event)	•	•	•	•	•
Live-In Image Grab	•	•	•	•	•
Live-In Video Capture and Mapping	x	x	•	•	x
Network Automation Server					Option



*Boost your on-air graphics!*



# Technical Specification

CPU	Intel Core i5, i7, Xeon Quadcore 2GHz or higher	I/O	2 x SDI Fill, Key output - 4:2:2 SMPTE 259M/292M 1 x SDI Input - 4:2:2 SMPTE 259M/292M
RAM	4GB or higher	Video Output	1920 x 1080i @ 25, 29.97, 30fps 1920 x 1080p/PsF @ 23.98, 24, 25, 29.97, 30fps 720p @ 50, 59.94, 60fps 576i @ 25fps 486i @ 29.97fps
VGA	nVidia GeForce GTX or Quadro	Genlock	HD/SD input or black burst/tri-level sync
PC Monitor	1280x1024, 1920x1080 or higher	Audio	AES/EBU, Sampling rate@48khz 8 stereo embedded audio I/O
OS	Windows 7 x32, x64		
Video Boards	Matrox DSX mio2, LE2, SD AJA Xena 2K/KONA 3/KONA 3G AJA Xena LH/Kona LH/Kona LHe Plus Blackmagic Decklink CG Extreme 3 BlueFish444 Epoch		

Visual Research Inc. is a specialized manufacturer of professional on-air graphics solutions for the broadcast industry. Established in 1995, VRi is famous for providing high-quality and cost-effective real-time broadcast graphics solutions with convenient production environments.



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For more information visit [www.vricg.tv](http://www.vricg.tv)



## 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 powerful graphic engine will be ideal for 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.

### Real-Time Performance and Stability

KarismaCG is embedded with 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.

### Convenient and Easy Creation

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

### 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

Most of KarismaCG features can be controlled by programming interface. This SDK includes rich API, sample codes, and documentations that 3rd party developers make for their own purposes in C#, VB, C++, and Java programming languages.

### Key Benefits

- Built-in 2D/3D, text, animation, effect creation
- Easy creation of 2D, 3D and animation effects
- Productive and time-saving user environment
- Proven performance and stability
- Creation and playout in one machine
- Wide ranges of hardware compatibility
- Providing SDK
- Various add-on solutions



## Feature

### Built-in 2D/3D Composition

KarismaCG offers the users built-in 2D and 3D composition features. It provides 2D text, shapes, and also path for custom object creation. 2D objects are decorated with cool 2D style system or can be converted into 3D object with bevel, lathe or loft. In 3D, there are built-in 3D text and parametric creation of 3D geometries.

### Import Various File Types

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

### Realistic Material Use

KarismaCG provides the users to set the materials and texture for the 3D elements to give realistic look to the objects, for example, plastic, metal, wood, and glass. Image and video files and also live input video texture mapping are possible to each side of objects.

### 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.

### Various Effects

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

### Playout

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

### Non-Linear Editing Workflow

KarismaCG's NLE integration is suitable to non-linear editing system as it is based on file and time-code use to support CG sequence production workflow.

## Key Feature

- Ease of use 2D and 3D graphic creation tools
- Import of variety of video, and 3D model files
- Vast 2D styles
- Customizable 2D/3D effects
- Key-frame animation and timeline
- Supports SD, HD, 4K and stereoscopic 3D playout
- 16 layers of scene play in real-time
- Supports Matrox, AJA, Blackmagic, Bluefish444 I/O boards

