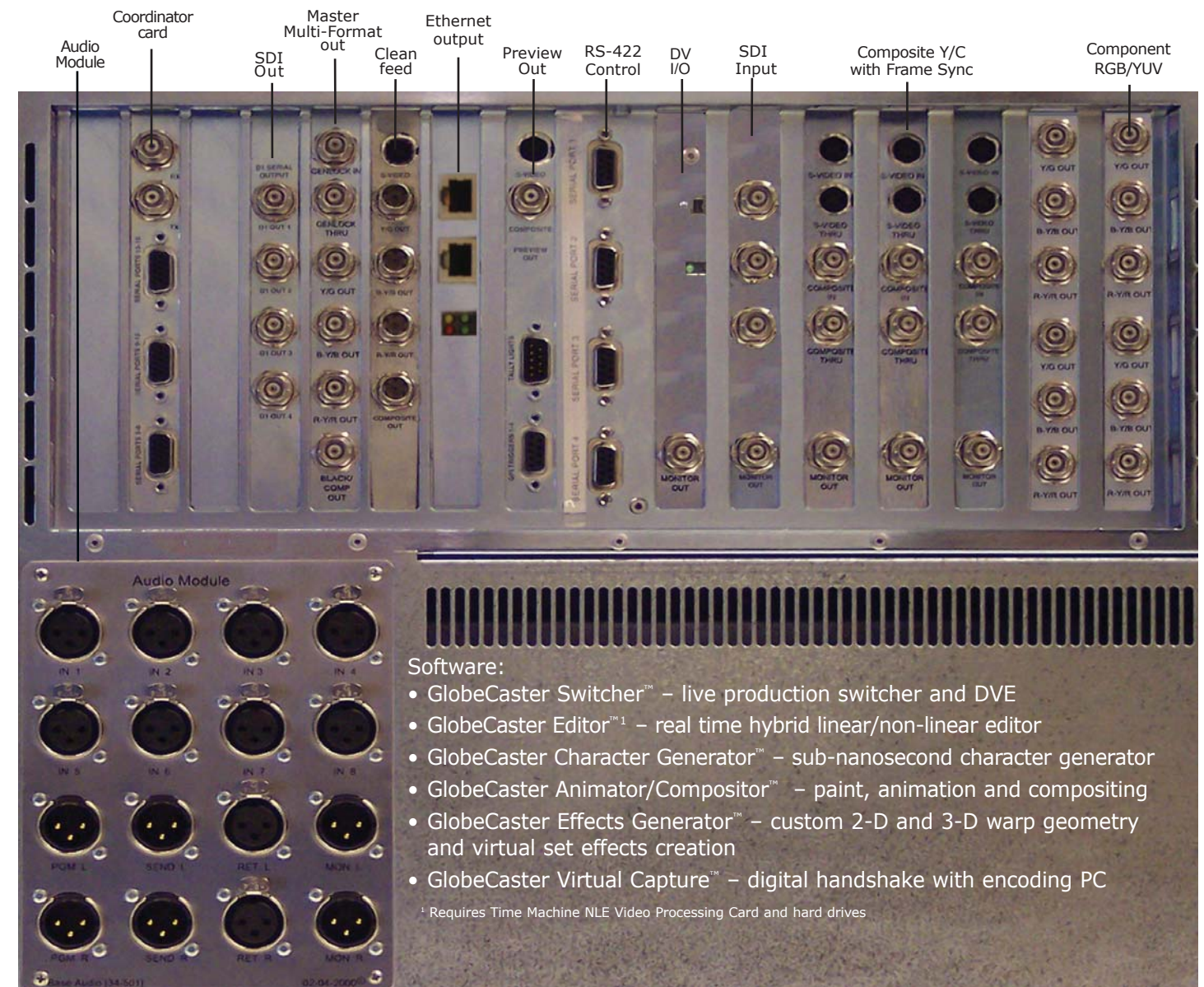


# What is GlobeCaster?

**globe'cast'** (glob-kast') -  
**n. -caster 1.** a multi-functional digital video creation device that integrates a automated Switcher, real time Editor, CG, DVE, DDR, Still Store, Chroma Keyer, animator/paint box, and deck control in one unit; **2.** multi-standards modular tool that grows with your needs and market demands.  
**-casting 1.** a smart and economical way to create professional video content; **2.** the strongest value proposition in the market  
**syn:** easy, versatile, inexpensive, fast



Because of GlobeCaster's modular architecture, every system is built with the inputs and outputs our customers specify. Changing formats? Just change cards.



- Software:
- GlobeCaster Switcher™ – live production switcher and DVE
  - GlobeCaster Editor™<sup>1</sup> – real time hybrid linear/non-linear editor
  - GlobeCaster Character Generator™ – sub-nanosecond character generator
  - GlobeCaster Animator/Compositor™ – paint, animation and compositing
  - GlobeCaster Effects Generator™ – custom 2-D and 3-D warp geometry and virtual set effects creation
  - GlobeCaster Virtual Capture™ – digital handshake with encoding PC

<sup>1</sup> Requires Time Machine NLE Video Processing Card and hard drives

"With GlobeCaster, one person can do the work of four, which has enabled us to streamline our process saving time and money."  
 Marc Belmont  
 KLSR-TV

"The interface is incredibly easy to use, and the unit integrates beautifully with our equipment. I can do everything they do in the big studios."  
 Tom Curley  
 CBS

"The quality of the video that comes out of GlobeCaster is as good as any I have seen."  
 John Griffith  
 Dillard's

"GlobeCaster is so easy to use - our students are limited only by their own creativity."  
 Paul Saxton  
 Eagan HS

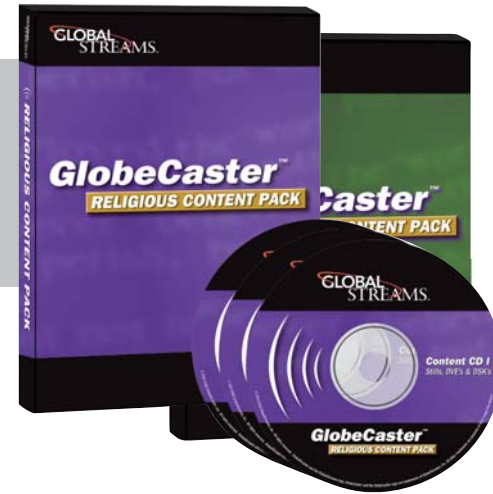
"GlobalStreams' Technical Support is the best I have used. They do not assign blame. They fix the problem."  
 Mike Baker  
 Sacramento Police

<p>Supported Composite Video Standards                  NTSC Version: NTSC In / Out                  PAL Version: PAL, PAL-N and SECAM In / PAL Out</p> <p>Video Input Formats                  DV/IO, Composite, Y/C, Component YUV/RGB, SDI(SMPTE 259M/D1) Each input requires a format adapter. Up to eight input modules are supported inside the GlobeCaster 8000. Up to five input modules are supported inside the GlobeCaster 4000.</p> <p>Sampling Format                  CCIR-601, 4:2:2:4 (D1)</p> <p>Video Timing Requirement                  Most input modules require sources to be synchronous (within + / - 8 lines). Some input modules feature full-frame synchronizers.</p>	<p>Input to Output delay                  Up to 2 Frames (66.6mS NTSC, 80mS PAL)</p> <p>Software Genlock Timing Adjustments                  Horizontal SC Phase, Horizontal Position, Vertical Position</p> <p>Pixel Resolution                  720 x 486 (525 line standards)                  720 x 576 (625 line standards)</p> <p>Reference Video Input                  Composite video or black burst</p> <p>Power requirements                  200 Watts typical, 300 Watts max., fully loaded</p> <p>Reference Video Output                  Black burst</p> <p>Environmental                  15°-40° deg. C operating, non-condensing                  59°-90° deg. F operating, non-condensing</p>	<p>Rack Mount Unit Dimensions                  GC Studio 8000 - 17"W x 17"H x 24"D, 10 rack units                  GC Studio 4000 - 17"W x 10.5"H x 24"D 6 rack units</p> <p>Weight                  GC Studio 8000 - 85 lbs typical, fully loaded                  GC Studio 4000 - 45 lbs typical, fully loaded</p> <p>Hard Drive Storage                  Internal bays for non-linear audio and video storage</p>	<p>Optimal Host PC System Requirements:</p> <ul style="list-style-type: none"> <li>• Windows® 2000 Professional or Windows® XP Professional</li> <li>• 1.5 GHz Pentium IV CPU or faster</li> <li>• One free 32-bit PCI bus mastering slot</li> <li>• 256MB or higher PC100 or faster SDRAM</li> <li>• 20GB or higher Ultra66 7200RPM or faster hard disk</li> <li>• AGP 24-bit graphics board with OpenGL support and 32MB RAM</li> <li>• 32x CD-ROM drive or higher recommended</li> </ul>
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GlobalStreams, Inc. provides accessories to enhance the power of GlobeCaster. From professional hard surface controllers to just the right effect, the purpose is to improve the quality of your video production.

**Content Packs**

GlobalStreams offers a variety of content packs that demonstrate the impressive graphical and effects capabilities of GlobeCaster.

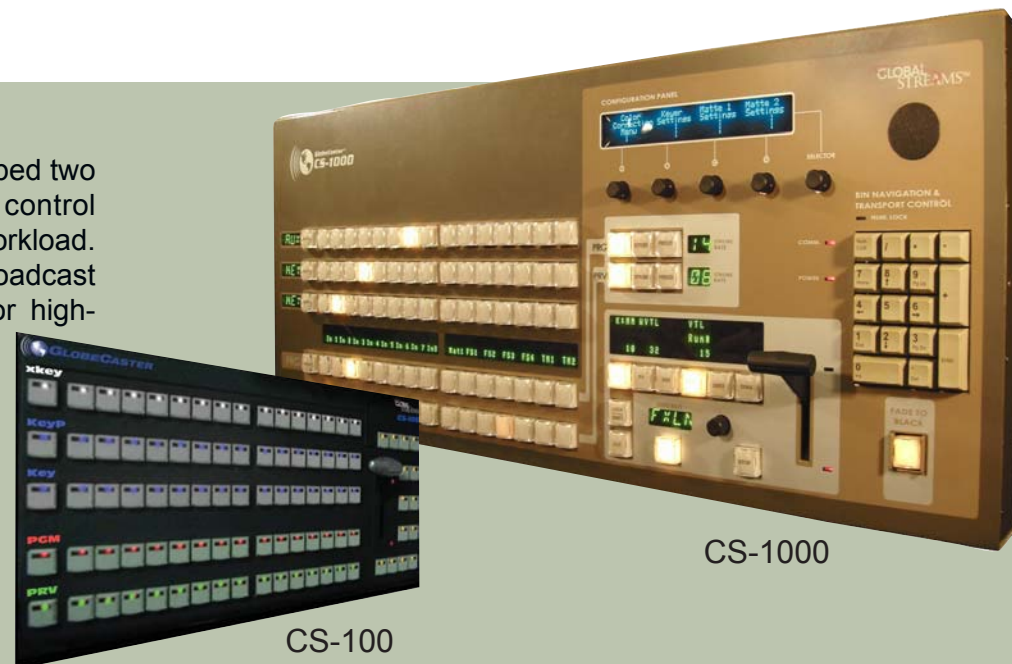


**ACE Seat License**

Adding to the significant value of GlobeCaster, GlobalStreams produces the ACE Seat License. This important software package takes the three key creative applications, Animator/Compositor, Character Generator and Effects Generator and ports them to a separate workstation for additional graphics and effects creation.

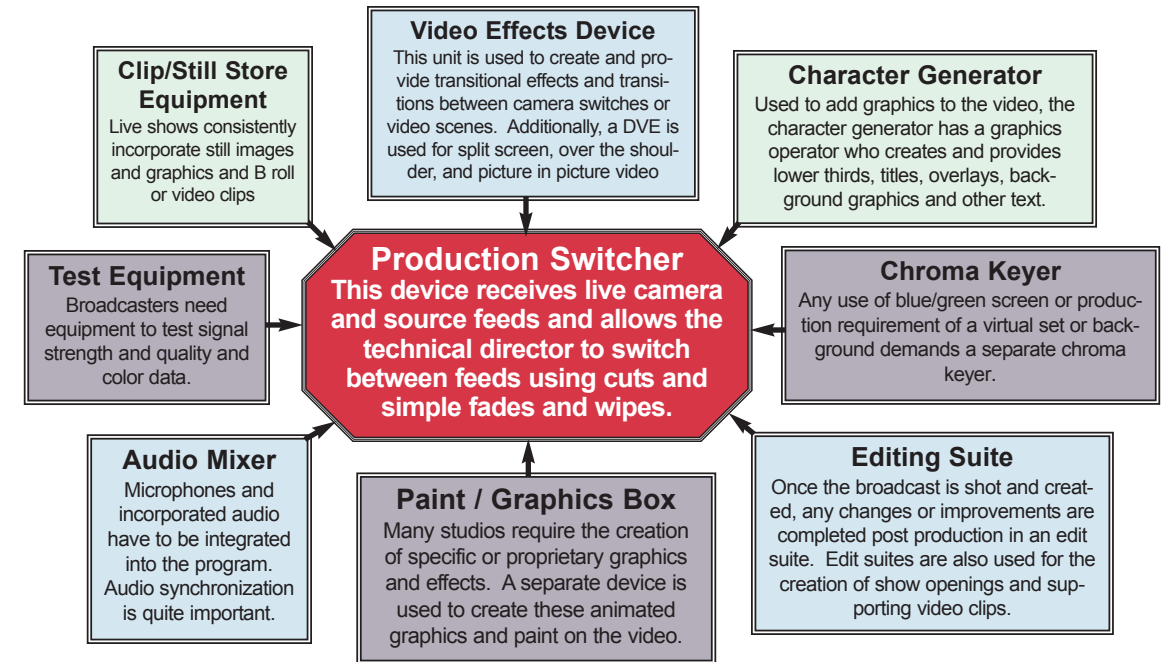
**Switcher Panels**

GlobalStreams has developed two traditional hard surface control switchers to spread the workload. The CS-1000 is a true broadcast quality device designed for high-end production studios. The smaller and less expensive CS-100 mirrors the software interface and offers time saving features.



**The Problem:**

Traditionally, television quality video production is a complex and costly undertaking. To do the job right requires multiple pieces of equipment and numerous operators.



A different manufacturer makes each of these various pieces of broadcast equipment, and each requires significant capital investment - from \$200,000 to \$millions. Also, each piece of equipment requires an experienced operator. Each device and manufacturer has its own training requirement, support organization, and warranty program. Operating and managing this collection of equipment requires significant monthly expense.

**The Solution**

GlobeCaster is the digital convergence of all of this functionality into one versatile video production device. GlobeCaster performs all of the tasks that traditionally require several pieces of expensive production equipment.

One piece of equipment is a multi-format digital video production switcher with a fully integrated premium quality character generator, a powerful animation creation workstation, a dual channel digital video effects processor, a hybrid linear/non-linear real time video editor, and a real time direct to network streaming solution. GlobeCaster is feature rich at a fraction of the investment.

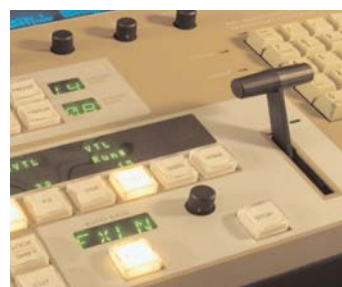
For many professional broadcasters, GlobeCaster is reducing the cost of video production while maintaining the production quality. Not only is GlobeCaster significantly less capital investment, the ongoing operating costs are lower as well. Fewer operators, fewer points of failure, less space required and simpler equipment management spell less monthly spending.





The powerful GlobeCaster Switcher Application is the heart of the GlobeCaster live production and broadcast capabilities. This application includes the traditional features you expect on a high-end production switcher, such as dissolves, fades, real-time DVE, and color correction.

However, the features that really excite video professionals the most are GlobeCaster's real time capabilities, including soft-edged organic wipes, animating graphics, color remapping, real-time warping and video tracing. They also appreciate the way Switcher integrates the other GlobeCaster applications, putting many broadcast tools onto one workstation.



Though GlobeCaster is many tools in one device, video professionals can spread the workload using the optional switcher control surfaces, CS-1000 and CS-100. These separate components allow one person to control the video switching while another prepares and loads graphics. However, even with this panel GlobeCaster remains one complete tool.



Professional broadcasters who use GlobeCaster appreciate the very high signal quality, while many of our other customers enjoy the flexibility and low cost. No other piece of video production equipment does so much.

### Media Companies

*Professional Media appreciates that GlobeCaster:*  
Processes in Serial 601 Digital, high signal quality  
Provides broadcast quality output  
Enables video for internet distribution  
Integrates easily into any studio



### Corporate

*Corporate Broadcasters value how GlobeCaster:*  
Is easy to learn  
Is easy to operate  
Incorporates multiple video standards  
Eliminates production complexity



### Arena / Stadiums

*Big Event Users appreciate that GlobeCaster:*  
Allows pre-production and program automation  
Allows multiple input and output standards  
Requires fewer operators  
Eliminates need for much test equipment



Over 1,500 various organizations in more than 30 countries utilize GlobeCaster for video production needs. From sophisticated media companies to middle schools, GlobeCaster's versatile nature suits a wide spectrum of selective users.



### Local and State Government

Government buyers are grateful that GlobeCaster:

- Requires less space
- Is easy to transport
- Supports output to tape, cable, satellite and the internet
- Provides upgrade opportunities



### Education

Educators enjoy how GlobeCaster:

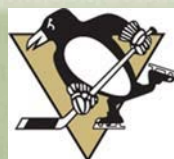
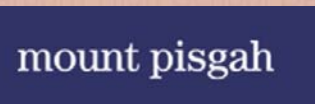
- Streamlines production workflow
- Costs less to operate
- Requires less investment
- Is versatile and flexible



### Religion

Religious Directors welcome how GlobeCaster:

- Works reliably and consistently
- Simplifies ongoing maintenance
- Eliminates production complexity
- Eliminates compatibility conflicts



Switcher has many important features that make GlobeCaster a key component of any live production including newscasts, religious services, concerts, sporting events, corporate presentations and internet broadcasts. These features include:

- The ability to input 8 uncompressed video sources of the same or mixed broadcast standards including SDI, Component, Y/C, and Firewire inputs
- Simultaneous control of up to 4 RS-422 outboard playback decks and other devices
- Integration into an existing studio environment as GlobeCaster supports multiple input and output standards including Ethernet output for network distribution
- Access to still stores, graphics, animations, and video clips stored in the system
- Real-time 1 or 2 channel DVE capability (1 channel standard)
- On-screen Program, Preview, input, Vector-scope and Waveform monitors
- Real-time chromakeying and color suppression for virtual set application
- Control of up to 4 simultaneous downstream key sources (1 layer standard), allowing use of lower thirds, animated overlays, bugs, rolls and crawls
- Time line support allowing preproduction scripting of a live show and creation of a timeline of a live switch, dramatically reducing time of production

### Virtual Set



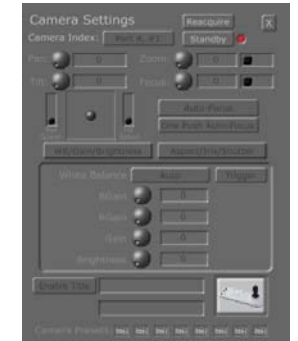
An important feature of the GlobeCaster Switcher is the broadcast quality keyer. A separate application panel allows for the independent management of chroma and luma. The chroma key application is an important tool used for the creation of virtual sets. GlobeCaster enables virtual camera switching - applying different virtual backgrounds to different keyed inputs to switch camera and background simultaneously.

### Integrated Audio



GlobeCaster also allows you to mix up to 16 channels of audio. Of them are 8 channels of balanced XLR production audio as well as 8 virtual channels of audio used for DV and DDR playback inside GlobeCaster. This mixer application provides the ability to adjust high, mid and low bands with a powerful three-band parametric equalizer.

### Camera Control



Control Pan, Tilt, Zoom and focus. You can also store up to 8 presets of camera shots.

Initially this was developed to work with the Sony BRC-300 camera with support for more in the future.

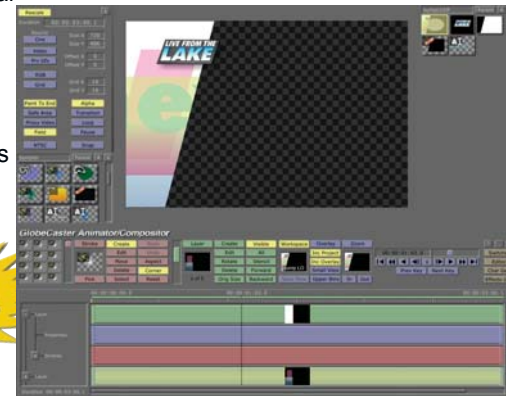
## Animator Compositor

An object-oriented paint, animation and compositing system, Animator/Compositor allows the GlobeCaster user to produce high end, animated and moving graphics and overlays. Originally designed for advanced special effects, Animator/Compositor paints in real time directly onto the live video to be saved as real-time video effects. Users can easily create over the shoulder graphics, corner bugs, motion backgrounds, openings and other graphic effects, transitions and overlays.

The combination of GlobeCaster's real time compositing hardware and Animator/Compositor advanced software, lets the user turn full motion graphic sequences into video effects. This work is easily integrated into the GlobeCaster Switcher application or dropped onto a GlobeCaster Editor timeline, where the effect animates over live video in real time with alpha channel transparency, anti-aliasing, shading and highlights.

Additionally, Animator/Compositor offers:

- Vector drawing tools including geometry, freehand and soft airbrushes
- Extensive control over stroke properties such as transparency, edges and shadows
- Unlimited undo and redo of any stroke, color or other setting
- Ability to animate all strokes over time with on-screen and time-line control
- Ability to save layers and strokes to make animation templates



## Character Generator

One of GlobeCasters greatest features is the production and use of quality graphics. The advanced Character Generator Application creates, animates and composites high-resolution graphics onto live video.

More and more the definition of production quality includes the incorporation of graphics and motion with video quality. With the Character Generator and high quality Serial 601 Digital Video processing, GlobeCaster enables both. Vector based graphics provide anti-aliased (sharp edge) text, and supports thousands of TrueType fonts, color gradients, 24-bit textures, and common graphics features. The hardware and software solution provides sub-nanosecond refresh rate, and enables compositing of high-end content in very little time.



Additionally Character Generator offers:

- On-screen user-interface for text layout and font tpestyle editing
- An ability to import most common graphic formats for textures, images, backgrounds and logos
- Free form layering and positioning of text and graphics
- The creation of smooth, sub-pixel variable-speed rolls and crawls
- Independent application of image and transparency maps for face, border, sides and shadows
- Complete integration with GlobeCaster Animator/Compositor application so that project and work files can be easily moved

## Effects Generator

This essential tool makes it easy to create any type of wipe or 3D warp effect, for transitioning between live sources and/or video clips. With this application, the program can include effects that are proprietary and meaningful. Existing graphic elements in almost every file format can be imported and incorporated into unique transitions and wipes and other warp effects.

GlobeCaster Effects Generator allows:

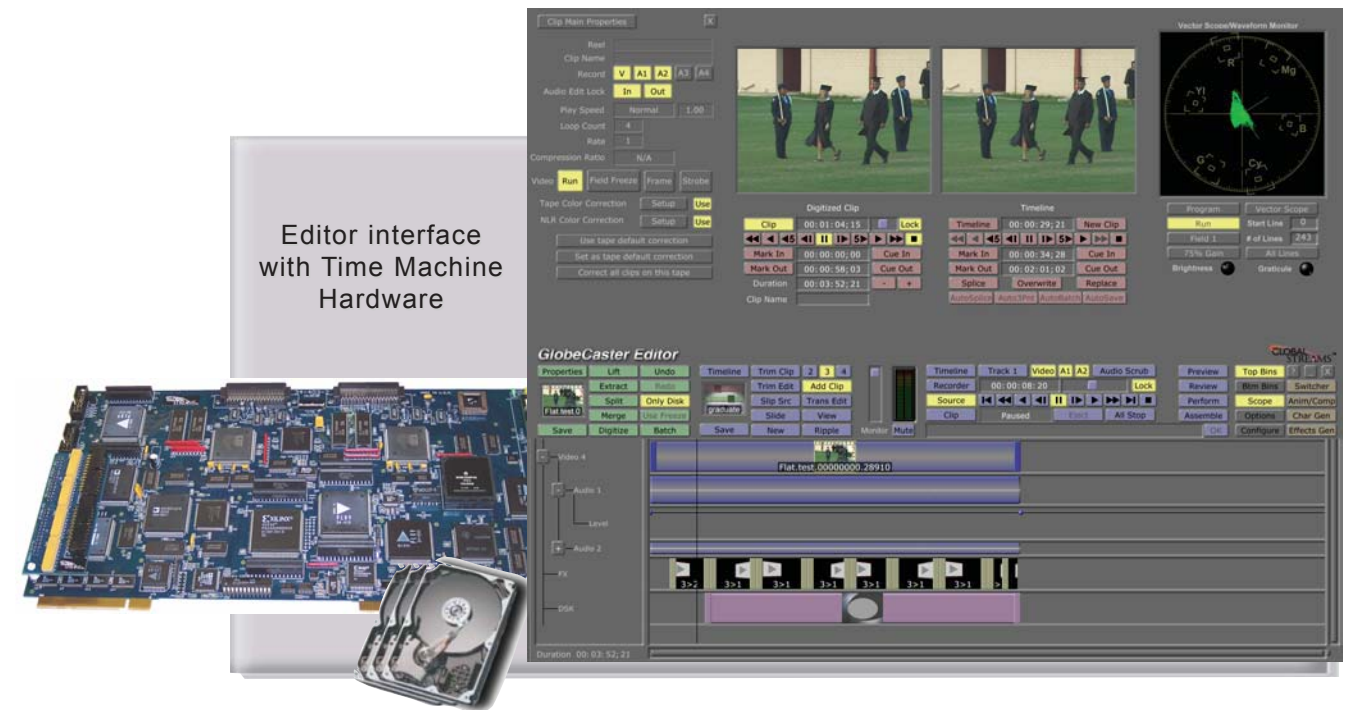
- Creation of real-time 3D effects with unique animated logos and text
- Mapping of live sources or clips to 3D objects
- Application of live distortions including waves and ripples
- Integration and importing of common 3D file formats



## Editor

This multi-generational edit tool designed for speed and ease of use. The combination of the Editor software (standard) and the powerful GlobeCaster hardware card Time Machine (optional) results in a unique video production aid that is both an editing solution and a digital disk recorder. While most editors are used in post production, GlobeCaster Editor can be both a post production and live production tool.

The optional Time Machine component is aptly named as it helps you to manufacture time. All of the operations are performed in real-time, no rendering required. The user creates it and sees it - every dissolve, wipe video effect, graphic and still store - all in full D1 resolution.



### It's a DDR

In Live production, Editor with Time Machine becomes an onboard DDR for your GlobeCaster with simultaneous record and playback capability.

- 2 Channels of video (record and playback) available at all times
- Queue and Play stored clips and B-Roll to be mixed with live sources (Possible to store up to 1 terabyte of video and audio data)
- Capture Program Out to a digitized file and non-linear project that can be immediately edited (Creates Time)
- Allows for enhanced scripting of show openings and lead-ins
- Supports automatic live video source switching and pre-production timeline development (Creates Time)
- Provides audio-linked video effects and transitions
- Supports TMX portable clip storage devices

### It's an NLE

In Post Production, Editor with Time Machine is a full feature, real time, hybrid Linear/Non-Linear Editor.

- No Render Time. All of the digitizing is done in hardware in real time (Creates Time)
- Supports simultaneous editing of new digital media, DDRs, tape based, live sources and digital clips in the same time-line edit before you digitize (Creates Time)
- Supports RS422 deck control (up to four decks)
- Allows Flattening for unlimited graphics, framestores and effects
- 3 Video tracks, 8 audio tracks, transition track and up to 4 tracks of animated or graphic content
- Wavelet Compression produces crystal clear digital video
- Import Digital Files and Export AVI