GlobeCaster Studio™ Data Sheet

The Most Versatile Solution for your Live Broadcast and Post Production Needs

- **Supports output to tape, cable, satellite and the Internet**
- **Easy to transport**
- **One person operation possible**
- **Easy to learn, upgrade and support**
- **No third-party software means no compatibility conflicts**

It's an entire studio in one affordable unit!

GlobeCaster STUDIO 8000™

GlobeCaster STUDIO 4000™

Full Function, Digital-Ready Production Switcher

- Integrates flawlessly with your existing studio environment. Supports Composite, Y/C, Component RGB/YUV, SDI and FireWire in and out. Direct-To-Network streaming media output capability
- On-screen switcher panel provides live access to 8 uncompressed video sources with pro color correction and access to still stores, graphics, animated clips, lower thirds and video clips
- Real time 1 or 2 channel DVE capability
- Includes on-screen Preview, Program, Vector-scope and Waveform monitors
- RS-422 control for up to four outboard playback devices
- Support for up to four simultaneous downstream key sources. Lower thirds, bugs, date stamps and rolls or crawls can be easily accessed and triggered independently or ganged together
- Two-channel digital video playback channels
- On-board digital disk recorder
- Real time pro color correction for each input
- Real time control of transitions, DVE's, animated overlays, title rolls and crawls
- Real time chroma-keying and virtual set composition
- Creates non-linear timeline of a live switch, dramatically reducing turn-around time for post-production fixes

Real-Time Hybrid Linear/Non-Linear Editor

- Supports simultaneous editing of tape based, live source and hard drive clips in the same timeline-edit before you digitize. All real-time, all the time
- 3 video tracks, 3 stereo audio tracks, transition track and up to four tracks of animated or graphic content
- Timeline nesting capability: create individual clips of your timeline to create multi-layered Advanced editing projects
- AVI export enables integration with third party editing and DVD authoring software

Powerful Character Generator

- On-screen user-interface for text layout and font typestyle editing
- Based on a powerful font rasterizing engine, using Windows® True-Type™ font faces
- Independent application of image and transparency maps for face, border, sides and shadow
- Loads most common image formats for backgrounds, textures, images, logos, etc.
- Creates smooth sub-pixel variable-speed rolls and crawls

Real-time 3D Digital Video Effects

- Enables creation of your own custom 2D and 3D effects and transitions
- Supports common 3D file formats
- Allows mapping of live sources or video clips to 3D objects

Integrated Paint & Animation Capabilities

- High-performance object-oriented 2D paint engine capable of nearly infinite layering
- Vector drawing tools including geometry, freehand, particle clouds, and soft airbrushes
- Extensive control over stroke properties such as transparency, soft edges and drop shadows
- Powerful image-processing strokes such as blur, magnify, colorization, posterization
- All properties of all strokes can be animated over time, with both on-screen and time-line control

Virtual Set Creation Tools Built-in

- Virtual camera switching – multiple backgrounds associated with cameras so that you can switch cameras/backgrounds simultaneously
- Background and foreground object layering

GLOBAL STREAMS™

GLOBECASTER STUDIO PRODUCT SPECIFICATIONS

Hardware Configurations:	GlobeCaster Studio 4000			GlobeCaster Studio 8000		
	Base	Inst.	Max	Base	Inst.	Max
Modular Hardware Chassis	•	•	•	•	•	•
Heavy Duty Power Supply	•	•	•	•	•	•
Device Control for RS-422 Serial Ports	•	•	•	•	•	•
Digital Component Production Switcher	•	•	•	•	•	•
Video Preview Module with Tally Light Interfaces	•	•	•	•	•	•
Clip Grab PC Video Display Card	•	•	•	•	•	•
Frame Store Card	•	•	•	•	•	•
9 X 8 Internal Digital Video Router	•	•	•	•	•	•
Audio Module XLR Balanced	•	•	•	•	•	•
Warp Engine Real-Time Video Effects Card(s)	1	1	2	1	1	2
Input Card(s)[1]		2	4		3	8
Master Multi-Format Output Card		1	1		1	1
Slave Output[2]			1			1
Built-in DSK Layer	•	•	•	•	•	•
Downstream Key Cards			1			3
Ethernet Output Card			1		1	1
Time Machine NLE Video Processing Card			1			1
72 GB HDD Video Hard Drive[3]						2
36 GB HDD Video Hard Drive			2			
36 GB HDD Audio Hard Drive						1
18 GB HDD Audio Hard Drive			1			
Host PC (no monitor)			•			•
ACE Seat License		•	•		•	•
CKT Kit			•			•

[1] Composite, DV/IO, S-Video (Y/C), Component RGB/YUV or SDI
[2] Output format options are Composite, Y/C, Component RGB/YUV, SDI, or DV/IO. GlobeCaster Studio must have 1 master output and can have up to 2 slave outputs.
[3] GlobeCaster Studio 4000 can support up to 72 GB HDD Video Hard Drive and up to 36 GB HDD Audio Hard Drive.

Optimal Host PC System Requirements:

- Windows® 2000 Professional or Windows® XP Professional
- 1.5 GHz Pentium IV CPU or faster
- One free 32-bit PCI bus mastering slot
- 256MB or higher PC100 or faster SDRAM
- 20GB or higher Ultra66 7200RPM or faster hard disk
- AGP 24-bit graphics board with OpenGL support and 32MB RAM
- 32x CD-ROM drive or higher recommended

Software:

- GlobeCaster Switcher™ – live production switcher and DVE
- GlobeCaster Editor™[1] – 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

[1] Requires Time Machine NLE Video Processing Card and hard drives

TECHNICAL SPECIFICATIONS

Supported Composite Video Standards
NTSC Version: NTSC In / Out
PAL Version: PAL, PAL-N and SECAM In / PAL Out

Video Input Formats
DV/IO, Composite, Y/C, Component YUV/RGB, SDI(SMTPE 259M/D1) Each input requires a format adapter. Up to eight input modules are supported inside the GlobeCaster 8000. Up to four input modules are supported inside the GlobeCaster 4000.

Sampling Format
CCIR-601, 4:2:2:4 (D1)

Video Timing Requirement
Most input modules require sources to be synchronous (within + / - 8 lines). Some input modules feature full-frame synchronizers.

Input to Output delay
Up to 2 Frames (66.6mS NTSC, 80mS PAL)

Software Genlock Timing Adjustments
Horizontal SC Phase, Horizontal Position, Vertical Position

Pixel Resolution
720 x 486 (525 line standards)
720 x 576 (625 line standards)

Reference Video Input
Composite video or black burst

Power requirements
200 Watts typical, 300 Watts max., fully loaded

Reference Video Output
Black burst

Environmental
15º-40º deg. C operating, non-condensing
59º-90º deg. F operating, non-condensing

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

Weight
GC Studio 8000 - 85 lbs typical, fully loaded
GC Studio 4000 - 45 lbs typical, fully loaded

Hard Drive Storage
Internal bays for non-linear audio and video storage

2003/01