# 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!

### 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



# GLOBECASTER STUDIO PRODUCT SPECIFICATIONS

Hardware Configurations:	GlobeCaster Studio 4000 Base Inst. Max			GlobeCaster Studio 8000 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) <sup>1</sup>		2	4		3	8
Master Multi-Format Output Card		1	1		1	1
Slave Output <sup>2</sup>			1			1
Built-in DSK Layer	•	•	•	•	•	•
Downstream Key Cards			1			3
Time Machine NLE Video Processing Card			1			1
146 GB HDD Video Hard Drive			2			2
72 GB HDD Audio Hard Drive			1			1
Host PC (no monitor)			•			•
ACE Seat License		•	•		•	•

Composite, DV/IO, S-Video (Y/C), Component RGB/YUV or SDI

#### **Optimal Host PC System Requirements:**

- Windows<sup>®</sup>
- 1.5 GHz Pentium CPU or faster
- One free 32-bit PCI bus mastering slot
- 256MB or higher PC100 or faster

#### Software:

- GlobeCaster Switcher<sup>™</sup> live production switcher and DVE
- GlobeCaster Editor<sup>™1</sup> real time hybrid linear/non-linear editor
- GlobeCaster Character Generator<sup>™</sup> 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<sup>™</sup> digital handshake with encoding PC

# TECHNICAL SPECIFICATIONS

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

**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

Reference Video Output

Black burst

15°-40° deg. C operating, non-condensing 59°-90° 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

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



<sup>2</sup> 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.

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