



# INDIGO

## A/V Mixer

PRODUCT FACT SHEET

### KEY POINTS

Live seamless switching of video, computer, and audio sources

Mix digital and analog sources

Upconvert/downconvert multiple video channels between HD and SD\*

SD/HD simulcast output\*

Pre-programmable video layouts with keys for picture-in-picture and other effects

Digital effects with 2D and 3D transformations, including page turns, ripples, and swirls

Luminance and chroma keys

Integrated control of the Grass Valley Turbo™ intelligent digital disk recorder (iDDR) and other devices

Stereo analog and AES/EBU audio

SDI and DV audio de-embedding and re-embedding

Four-band parametric equalizer and motor-driven audio faders

Simple audio-follow-video mode

Intelligent audio-delay management for live production lip sync

The Grass Valley™ Professional Line of products is the next generation of solutions for audio/video professionals, helping you create and deliver broadcast-quality presentations while streamlining your investments in personnel and technology.

A key component of this line is the Grass Valley Indigo A/V mixer, a new class of high-quality, multi-format audio/video mixer. Combining features normally found in video production switchers, AV presentation mixers, and audio mixers, it is a powerful, cost-effective, and easy-to-operate platform for live-presentation environments.

### All-In-One AV Mixer

The Indigo platform offers a complete feature set for controlling multiple analog or digital video and audio sources. With a high-resolution card installed, it is designed to simultaneously process 15 sources: 12 SD, one scaled up from SD to HD, and two selected from HD video or computer inputs. It is also designed to upconvert to HD and downconvert to SD—even simulcast live SD and HD output. HD and I/O scaling support are scheduled to be available in Q1 2007.

The Indigo platform also manages the mixing and timing of audio sources, ranging from unbalanced analog to AES/EBU signals. And it seamlessly combines live, high-resolution computer-based media and presentation content with real-time video and audio materials.

### Fits Any Skill Level

The Indigo AV mixer is simple enough for anyone to use. While providing full production switcher capabilities, its menu-driven touch screen interface can access powerful presets to get a new operator up and running in minutes. A senior operator can also customize these presets and save them for recall when needed.

### Video Processing and Effects

The Indigo platform features numerous 2D and 3D transition effects that you can modify and save, along with all other layout data, into its E-MEM preset storage banks. Indigo keys include luminance and chroma keys.

### Advanced Audio Mixing

Supporting eight stereo audio input channels from a selection of digital and balanced or unbalanced analog sources, each Indigo audio channel has a four-band parametric equalizer and may be controlled by a motor-driven fader.

*Combining the power and flexibility of Grass Valley switchers, presentation mixers, and audio mixers into one AV platform*

The mixer also provides phantom power for four microphones. And it can operate in audio-follow-video mode, automatically fading audio up or down when its associated video source is taken to program.

The mixer also features delay tracking, delaying audio automatically to coincide with any delay of video through the switcher, as well as user-defined output delay. These features ensure lip sync in live productions.

### High In Value and Very Affordable

The Indigo mixer offers a number of economic benefits. Its competitive price, expansive functionality, and feature set ensure that you will no longer need separate—and often more expensive—production switchers and audio-mixing devices to get the job done.

\* HD I/O and scaling support scheduled for Q1 2007

Coupled with the platform's ease-of-use features, this high-function design minimizes the number of operators necessary to deliver powerful, highly professional presentations for business, government, religious, and other audio/video productions.

## Automated Playback, Device Control

The Indigo platform's integration of machine control automates functions through memory presets that have previously required a dedicated operator. You can control external devices via RS-422 or Ethernet connections using GPI, BVW, or AMP protocols.

Particularly powerful is the Indigo mixer's ability to control Grass Valley Turbo iDDR's. Menus on the mixer's touch screen emulate those featured within the iDDR's control panel to streamline setup, recording, clip management, and playback directly from the iDDR.



The Indigo platform offers a complete feature set for controlling, mixing, and managing the timing of multiple analog or digital video and audio sources. And it can seamlessly integrate live, high-resolution computer-based media and presentation content with real-time video and audio materials to deliver stunning results.

## SPECIFICATIONS

### Video Standards

- NTSC/PAL: 50/59.94 Hz
- HD-SDI: SMPTE 292M (720p or 1080i)
- SD-SDI: SMPTE 272M (525 lines/625 lines) 10-bit
- Composite: (525 lines/625 lines) 10-bit
- DVI-I:
  - 640x480 up to 1280x1024 @ 60 Hz/75 Hz
  - 1600x1200 up to 1920x1080p @ 60 Hz

### Video Input Connectors

Processes up to 15 channels selected from the following input connections:

- 6 SD-SDI (BNC)
- 6 composite/SD-SDI (shared BNC)
- 4 S-Video (4-pin mini DIN)
- 2 DV25 FireWire (6-pin IEEE 1394)
- 2 HD-SDI (BNC)\*
- 2 DVI-I\*

### Video Output Connectors

All output connections are simultaneously active PGM

- 2 composite (BNC)
- 1 S-Video (4-pin mini DIN)
- 2 SD-SDI (BNC)
- 1 DVI-I\*

### PWV

- 1 composite (BNC)
- 1 S-Video (4-pin mini DIN)
- 1 SD-SDI (BNC)
- 1 DVI-I\*

### AUX

- 3 composite/SD-SDI (BNC pair)

### Audio Input Connectors

A total of 8 stereo channels with up to 6 stereo digital channels may be processed at the same time

- 2 RCA analog stereo pair (unbalanced)
- 6 TRS analog stereo (balanced)
- 4 XLR analog mono (balanced) (microphone option)
- 6 AES/EBU digital stereo channels
- 2 embedded audio within FireWire (IEEE 1394)
- 2 embedded audio within SD-SDI

### Audio Output Connectors

Main

- 1 RCA analog stereo pair (unbalanced)
- 1 XLR analog stereo pair (balanced)
- 1 AES/EBU digital stereo channel

Submix/Delay

- 1 RCA analog stereo pair (unbalanced)
- 1 TRS analog stereo pair (balanced)
- 1 AES/EBU digital stereo channel

Headphones

- 2 TRS analog stereo (unbalanced)
- Located on front and rear panels

### Control and Interface

- 2 ref sync out (BNC)
- 1 analog black burst ref sync loop in/out (BNC)
- 2 RS-422 (9-pin D-sub)
- 1 GPI I/O /TALLY (50-pin D-sub)
- 2 USB (Standard-A) front panel
- 1 USB (Standard-B)
- 1 100Base-T Ethernet

\* Available with high-resolution option

## ABOUT GRASS VALLEY

With Emmy® award-winning products and world-class technical and service expertise, we're the experts in professional video technologies. We also provide best-in-class products and workflow support for the Professional Audio Video market.

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