

# Indigo AV Mixer

## A COMPLETE AV CENTER

The Indigo audio/video mixer offers a complete feature set for controlling multiple analog or digital video and audio sources.



The Grass Valley™ Indigo™ AV Mixer is 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 audio/video mixer offers a complete feature set for controlling multiple analog or digital video and audio sources. With a high-resolution card installed, the mixer can simultaneously process multiple sources: 12 standard-definition (SD) sources, one scaled from SD to high definition (HD), and two selected from HD video or computer inputs. It also upconverts to HD and downconverts to SD—and even simulcasts live SD and HD output.

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

### Video Processing & Effects

The Indigo audio/video mixer 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. The Indigo audio/video mixer features more than 100 2D and 3D modifiable transition effects. It also supports two HD and two SD luminance, chroma, or pattern keys. Combining these features with the

basic timeline sequencing in the mixer's E-MEM preset storage banks provides a limitless array of custom effects.

### 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. The mixer also provides phantom power for up to 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 that delays audio automatically to coincide with any delay of video through the switcher, as well as a user-defined output delay. These features ensure lip synchronization in live productions.

## KEY FEATURES

- Live seamless switching of video, audio, and computer 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 keyers
- Integrated control of Grass Valley T2™ intelligent digital disk recorder (iDDR), Acappella™ router, and other devices
- Stereo analog and AES/EBU audio
- SD-SDI 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

\*With optional high-resolution card.

**Large Menu Display**

Touchscreen menu system provides easy and instant access to all settings.

**Joystick Control**

Joystick allows easy size and position control for keys and picture-in-picture function.

**Broadcast-Style Layout**

Mix/effect buttons and layout provide broadcast-style operation and performance.



**Lever-Arm Transition Control**

Lever arm provides user-controlled transitions.

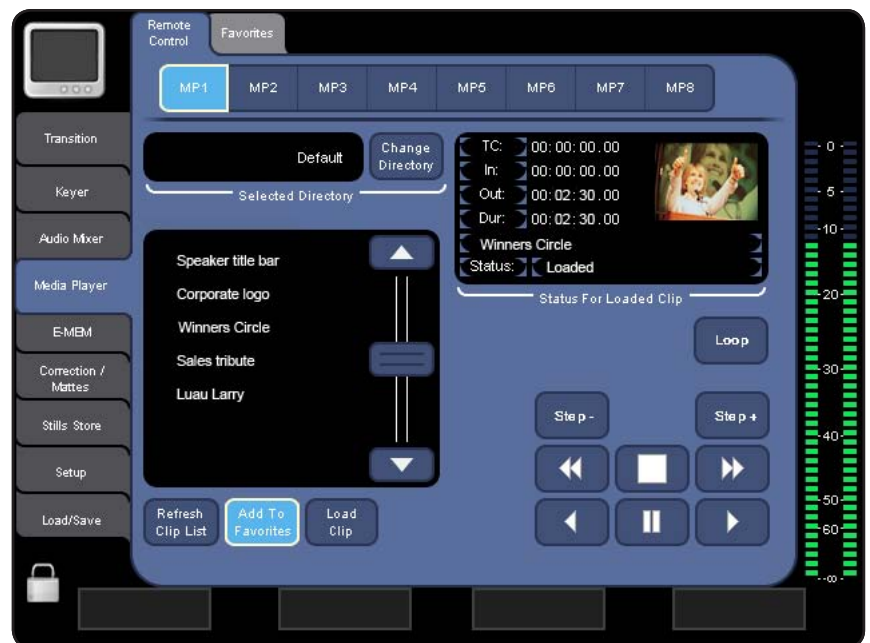
**Audio Faders**

Audio faders support user control or automatic audio-follow-video applications.

**High In Value, Affordability**

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

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 corporate, educational, concert, sporting, convention center, house of worship, and other production events.



**SD Video I/O**

Choose analog or digital formats, including DV25 for mixing 12 channels of 10-bit SD video.

**Control I/O**

GVG 200, AMP, and BVW75 protocols provide multiple communication and control options.



**Optional Hi-Res Card**

Select between computer sources or HD video and seamlessly scale all inputs to a variety of resolutions up to 1080i.

**Audio I/O**

Standard stereo audio inputs include analog, digital, and phantom-powered microphones, along with embedding and de-embedding from SD-SDI.

**GPI/Tally**

Tally and GPI triggers send signals to cameras and third-party equipment.

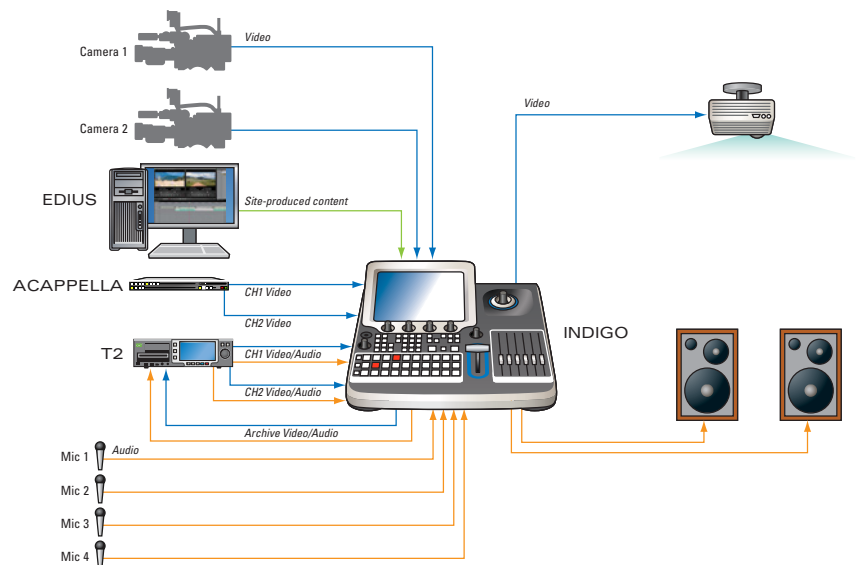
**Indigo AV Mixer in a Live Events Workflow**

**Automated Playback, Device Control**

The Indigo audio/video mixer's integration of machine control automates functions through memory presets that have traditionally 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 audio/video mixer's ability to control our T2 iDDR. 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.

Indigo also has the capability to control an upstream Acappella HD-SDI router. By mapping the router sources to the Indigo M/E buttons, up to eight HD-SDI sources can be preselected from the Indigo control panel for cutting, mixing, or use in keys.



## SPECIFICATIONS

### Video-Standard Support

- NTSC/PAL: 50/59.94 Hz
- HD-SDI: SMPTE 292M (720p or 1080i) 8-bit RGB
- SD-SDI: SMPTE 272M (525 lines/625 lines) 10-bit YUV
- Composite: (525 lines/625 lines) 8-bit YUV
- DVI-I:
  - 640x480 up to 1280x1024 @ 50/60/75 Hz
  - 1600x1200 up to 1920x1080i @ 50/60 Hz

### SD Video Input

Processes up to 12 external sources selected from the following input connections:

- 6 SD-SDI (75Ω BNC)
- 6 SD-SDI or composite (shared 75Ω BNC)
- 4 S-Video (4-pin mini DIN)
- 2 DV25 FireWire (6-pin IEEE 1394)
- 2 internal digital sources downsampled from hi-res\*
- Embedded audio: passed and user-defined de-embedding from SD-SDI
- Ancillary data: blanked
- Max. cable length: 300m using Belden 1694A type cable

### High-Resolution Video Input\*

Processes up to two external sources and one internal source selected from the following input connections:

- 2 HD-SDI (75Ω BNC)\*
- 2 DVI-I\*
- Up to 3 internal digital source upscaled from SD\*
- Embedded audio: blanked
- Ancillary data: blanked
- Max. cable length: 100m using Belden 1694A type cable (HD-SDI) or 15m using DVI-I single link type cable

### SD Video Output

All output connections are simultaneously active

- PGM:
  - 2 composite (75Ω BNC)
  - 1 S-Video (4-pin mini DIN)
  - 2 SD-SDI (75Ω BNC)
- PVW:
  - 1 composite (75Ω BNC)
  - 1 S-Video (4-pin mini DIN)
  - 1 SD-SDI (75Ω BNC)

### AUX

Aux outputs are pairs of SD-SDI and composite connectors

- 3 composite (75Ω BNC)
- 3 SD-SDI (75Ω BNC)

### High-Resolution Video Output

All output connections are simultaneously active. Both PGM and PVW may be scaled to the following resolutions:

- 800x600 @ 50/60/75 Hz
- 1024x768 @ 50/60/75 Hz
- 1280x720 @ 50/60/75 Hz
- 1280x768 @ 50/60/75 Hz
- 1366x768 @ 50/60/75 Hz
- 1280x1024 @ 50/60 Hz
- 1400x1050 @ 50/60 Hz
- 1920x1080i @ 50/60 Hz

### PGM

1 DVI-I\*

### PVW

1 DVI-I\*

### Power Supply

- Line voltage: 100V – 240 VAC ±10% autorange
- Line frequency: 50/60 Hz ±5% power-factor corrected
- Power consumption: max. 220W
- Leakage current: <2.5 mA
- USB power: max 0.5A (all devices)

### Mechanical Data

- Width: 444 mm (17.5 in.)
- Depth: 469 mm (18.5 in.)
- Height: 57-211 mm (2.3-8.3 in.)
- Weight: SD model 9 kg (19.8 lbs.), high-resolution model 9.5 kg (20.9 lbs.)

### Environmental Data

- Storage temperature: -20°C to +70°C (-4°F to 158°F)
- Operating temperature: +5°C to +40°C (41°F to 104°F)
- Relative humidity: ≤90% non-condensing
- Electromagnetic environment: E2 (according to EN55103-1, -2)

### Service & Support

Twelve-month limited warranty with service provided through local resellers. Additional support available on a contractual basis.

\* Available with high-resolution option

## ORDERING INFORMATION

Please contact your authorized Grass Valley representative.

[www.grassvalley.com/sales](http://www.grassvalley.com/sales)

## PROFESSIONAL SERVICES

Our professional services offerings ensure optimal system performance and maximize uptime. These services include call centers staffed around the clock; system planning, design, and commissioning; professional training courses; and technical maintenance programs and service agreements.

[www.grassvalley.com/support](http://www.grassvalley.com/support)