

**Now in HD and SD**

**Slate  
Switchers**

# The Switcher Redefined ■ ■ ■ ■ ■



■ ■ ■ ■ ■ Slate is an entire Control Room



# Slate is an entire Control Room



PS

Production Switcher

MV

Multi-View Monitoring

CG

Character Generator

CS

Clip Store





## Slate is an Entire Control Room

Live video production used to mean assembling an expensive control room and hiring a team to run it. Now Slate switchers from Broadcast Pix have an entire control room built-in. Slate's file based architecture streamlines workflow.

Now one person can create compelling live television on a switcher with a built-in character generator, clip store and full motion monitoring of outputs and sources. Now clips and graphics can flow into your switcher from your edit bays. Options can extend control to robotic cameras and audio mixers. When you still want a team, it gracefully expands.

Slate combines the human interface and on-air robustness of a switcher with the power of a contemporary workstation. It's so complete that you just add cameras and a monitor.

## HD, SD, Analog or Hybrid

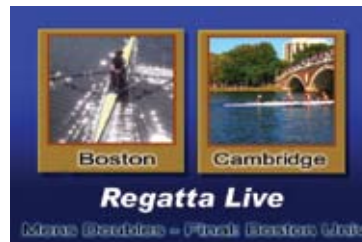
Slate is exceptionally multi-format. Choose an HD/SD model, or SD digital only, or analog, or mixed formats. All processing is 10 bit for pristine quality. HD inputs/output formats include 1080i, 720p, SD, DVI and VGA. And all models can use 16:9 and 4:3 content interchangeably, without distorting native aspect ratios.

## Over 600 Installations in over 50 Countries

Broadcast Pix is based near Boston, Massachusetts, with regional offices in California, Illinois, Texas, North Carolina and The Netherlands. Join the over 600 broadcasters, webcasters, production houses, stadiums, trucks, schools, churches and towns using Broadcast Pix in over 50 countries. It's the new way to switch.



**Broadcast**  
News, sports and events on major networks worldwide



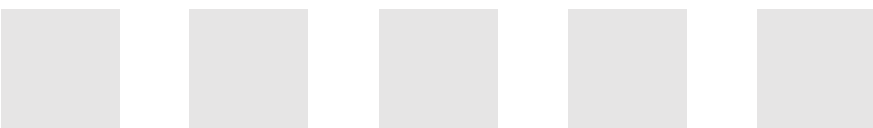
**Entertainment**  
Sports, stadiums and theaters



**Corporate**  
Training, webcasts, presentations and events at leading corporations



**Government**  
From city council meetings to military training



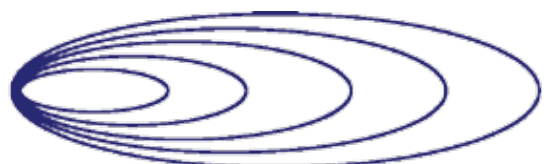
**Faith**  
Projection and cable in all six continents



**Mobile**  
Broadcast vehicles, flight packs and staging.



**Education**  
From distance learning to events and announcements



# Broadcast Pix

# Slate Models

Slate switchers come in four models. Start with a Slate 100, add a panel to upgrade to a 1000. Add an iBoB or router to upgrade to a 2100 or 3000. Choose HD, SD, Analog, or all three. SD models are HD-ready, and can be upgraded to HD.

	Slate 100	Slate 1000	Slate 2100	Slate 3000
	 <p><i>Easy Live TV</i></p> <ul style="list-style-type: none"> <li>- Switcher with 4 to 8 inputs, +1 to 2 clips &amp; 5 graphics, 3 keys/DVEs,</li> <li>- AutoAspect</li> <li>- Multi-View Monitoring</li> <li>- Inscrber CG</li> <li>- Clip Store</li> </ul>	 <p><i>Adds Control Panel</i></p> <p>Adds Fast Action Panel:</p> <ul style="list-style-type: none"> <li>- Classic switcher layout</li> <li>- PixButtons with the exact sources, keys and file names on the buttons.</li> </ul>	 <p><i>Adds more SD I/O and Redundancy</i></p> <p>Adds SD iBoB (intelligent Break-out-Box) for:</p> <ul style="list-style-type: none"> <li>- 8 to 12 inputs (up to 4 HD)</li> <li>- Fail-safe switching</li> </ul> <p>Adds 2nd channel of clips, plus tally, DSK, AES/EBU</p>	 <p><i>Adds more HD or SD I/O and Redundancy</i></p> <p>Adds HD/SD or SD only router and software for:</p> <ul style="list-style-type: none"> <li>- 12 to 18 live inputs</li> <li>- up to 28 aux outputs</li> <li>- Fail-safe switching,</li> <li>Adds 2nd channel of clips</li> </ul>
<b>HD</b>	Slate 100 HD	Slate 1000 HD		Slate 3016 HD Slate 3032 HD
<b>SD</b> HD ready	Slate 100 SD	Slate 1000 SD	Slate 2100 SD	Slate 3016 SD Slate 3032 SD

## HD, SD, Analog, DVI,...

Slate switchers can be ordered with any combination of input format. Mix any formats. Output all formats simultaneously.



1080i  
720p  
HD YPrPb  
486i / 576i  
Analog  
Y/C  
YUV  
DVI  
VGA



1080i  
1080p  
720p  
486i / 576i  
Analog  
Y/C  
YUV  
DVI  
VGA



# Slate 100 Switcher

In HD/SD, SD, Analog, or Hybrid

## Easy Live TV

The Slate 100 is a complete live video production studio that is so affordable and easy to use that anyone can create great looking live television. It includes a switcher, CG, Multi-View and clip store.

The switcher is controlled from either the custom keyboard or the multi-view. If you display the multi-view on a touch screen then you can just touch the camera you want to bring it to preview. Touch the keys to add a graphic. Then just touch preview to bring composition to air.

It's so easy to learn that you can quickly teach a novice to create great looking live TV.



### Custom Keyboard

The Slate 100 includes a custom keyboard version of the 1000's panel. It provides the tactile feel and fast-action switching which many prefer in live production. And it can instantly shift into normal keyboard mode for use with the CG and other applications. It's optional on larger Slate models.

### SoftPanel

Any Slate model can also open a SoftPanel, a software version of the Slate 1000's innovative control panel. The same classic switcher layout. The same device control. It even has soft knobs and a 3 D joystick. It opens in a web browser, so you can be anywhere.



## Integration of Switcher with...

(Whether you have a 100, 1000, 2100 or 3000)

### Multi-View Monitoring

- View preview, program & camera sources in full motion, plus thumbnails of keys & libraries
- View tally status, transition rates & key settings

### Clip Store

- On transition to air, auto-start clips & animations
- Use PixPad to view clip content libraries
- See active clip in source & keyer PixButtons

### CG

- Use PixPad to view CG & select from libraries
- See active CG in source & keyer PixButtons
- On transition to air, auto-start roll & crawls
- Change crawl speed, even on-air

### Still Store and Logo Store

- Use PixPad to view still & logo content libraries
- See active still & logo in source & keyer PixButtons
- Freeze an input, program or preview as a still
- Link chromakeys with stills for a virtual set

### Camera Control

- Use joystick for tilt/pan/zoom, & PixPad for presets
- Use knobs for focus, iris & ccu settings

# Slate 1000 Switcher

In HD/SD, SD, Analog, or Hybrid

Panel on Slate 1000, 2100 or 3000



The Slate 1000 adds an innovative control panel, shown above. (see Slate 1000 picture on cover, with custom keyboard option)

## Classic Switcher Layout

The grey portion of the panel has a classic layout, so traditional switcher operators will feel at home. Preview is on the bottom row, then program, then fill and destination. Program uses PixButtons so you always know what is on every source, even the exact name of specific clips or graphic, plus it's shown on the monitor wall. The panel has 9 buttons per row, and you can shift for 18 total sources. A classic next transition section enables 3 keys to be in the transition, using a cut, mix or fade, and many wipes, DVE moves and even animated alpha wipes with audio.

## Pristine Keyers

All Slate switchers feature keyers that are easier to fill with compelling graphics than any other switcher, thanks to tightly integrated graphic and clip systems. Three keyers are standard, each with a DVE for up to 3 picture in pictures. And 6 keyers and DVEs are optional. The DVEs can be squeezed, flown in, and have borders. The content of each keyer is shown on a PixButton and on the monitor wall, so you always know what is on each key. Enjoy the exceptional chromakey, for green and blue wall sets. The single standard chromakeyer gives

you control over key softness and spill suppression. You can combine multiple source based chromakeys (option 140) with built-in clip or still stores for virtual sets. You can even add keys to an aux output with the PowerAux option.

## Device Controls

The black portion of the panel can be assigned to a CG store, clip store, still store, camera control, a keyer, etc. Just press its device control button and the entire bank of controls is assigned, including: a PixPad with 12 PixButtons, 3 knobs, motion controls, a 3-axis joystick and display. These enable you to instantly and intimately control the selected device.

## PixButtons

Unique PixButtons have computer displays built into the button. Each has an icon on top showing the device that is currently assigned to it. The number next to the icon tells you the channel of clip or graphic, or which camera is being controlled. The next two lines show the exact name of the content, which is automatically put on the button from their file names. PixButtons dynamically change during the production. This illustration shows a clip called River on clip channel 1. No other switcher does this. (patent pending)



# Slate 3000 Switchers

## HD/SD or SD Only Maximum I/O and Fail-Safe

The Slate 3000 starts with a Slate 1000 and adds an integrated router for more I/O and redundancy, as well as a second channel of clip store. The routers are manufactured by Harris for Broadcast Pix. We add software to provide integrated fail-safe switching and display all sources on the multi-view.

Slate 3016 is available in HD/SD or SD only and includes a 16x16 router. It provides 12 live inputs, 2 channels of clips and 5 graphic, and has 8 auxiliary outputs for program, preview, clips or any live input.

Slate 3032 is HD/SD or SD only, and adds the ability to select up to 18 of its inputs, and has 24 outputs.

Two switchers can share a central router by adding a Slate 1000 or Slate 100 to a Slate 3000 switcher. For larger facilities, this greatly simplifies wiring, and lowers cost.

Options:

- 2nd SDI I/O card for enhanced multi-view (& DVI in HD)
- Analog I/O card for 4 analog inputs and 1 output
- Remote aux control panel(s) 16x1
- Tally box for all live inputs



16x16 router  
on a Slate 3016



Two Switchers can Share a Central Router



32x32



Slate 1000

Slate 3032

# Slate 2100 Switcher

## SD with Analog and Fail-Safe

The Slate 2100 starts with a Slate 1000 and adds an iBoB (intelligent break-out-box) for more I/O and redundancy. It also includes a second channel of clip store.

The iBoB has 8 SD-SDI live inputs, four of which have built-in converters from analog composite, Y/C and component. Program and preview outputs are also in both SDI and analog. The iBoB also adds a downstream keyer for an external source, like a legacy CG. And it includes tally outputs. For the clip store it add AES/EBU to the 1000's analog audio.

Add a Slate option card for 4 more inputs in HD, digital or analog.



iBoB on a Slate 2100

# Fail-Safe On Air

Broadcast Pix switchers have unprecedented redundancies built in for 100% on-air performance.

## Ride through a Panel Failure

If someone spills a drink on your panel and kills it in the middle of a show, you can still control everything on the included SoftPanel, or from the keyboard shortcuts. No other switcher provides this level of redundancy.

## Ride Through a Workstation Stopping

On the Slate 3000 and 2100 you can still switch your cameras if the workstations should ever stop, thanks to a redundant serial connection from the panel to the router or iBoB. On the Slate 100 and 1000 your most important camera will automatically stay on air.

## Ride Through a Power Supply Failure

The Slate 3000 and 2100 have redundant power supplies for the panel and router or iBoB, which are optional on other models. Redundant power for the slate workstation is optional on all models.

# Multi-View

Included on all models

Custom Layout on Wall Monitor



## Full Motion Monitoring

Every Slate includes on-screen monitoring of preview, program, keys and sources. Live inputs and clips have motion, and other sources use thumbnails. They tally red on air, and orange on preview. Video monitors are not needed but can be added if still desired.

## PixPad Thumbnail Libraries

You can find content easily on the PixPad which shows the library of thumbnails for any selected source, which correspond to the panel's PixPad buttons.

## Use Any Size Monitor

Slate supports a wide variety of VGA monitors. A personal monitor is recommended for the switcher operator with a factory layout of 1280x1024 or 1680x1050. You can also plug in a wall monitor: 1920x1080, 1440x900, 1366x768 or 1680x1050. You can even customize your layout with any monitor layout, clocks, clips counter, PixPads, etc.

## Dual or Quad Monitors for More Operators

All Slate switchers support dual monitors, so when you want a separate graphic station just add a monitor for the CG, and open a SoftPanel, a PixPad library, and even full motion source monitors. The quad-monitor option enables you to connect four monitors, as shown below.

## Integration of Multi-View with...

### Switcher

- Push-buttons for every source & key shown
- PixPad dynamically linked to thumbnail libraries
- Switch on the Multi-View itself with mouse or touchscreen to select keys, sources, take,...

### Clip Store

- View clips in full motion on monitor
- View clip libraries & tally status
- View clip time code, countdown & attributes

### CG

- View CG titles in keys & libraries
- View tally status of CG titles
- Right-click a CG thumbnail to edit "on the fly"

### Still Store and Logo Store

- View loaded graphics, libraries & tally status
- Right-click a still or logo thumbnail to edit "on the fly"

### Switcher



### Wall Monitors



### CG



# Clip Store

Included on all models

## Built-in Clip Stores

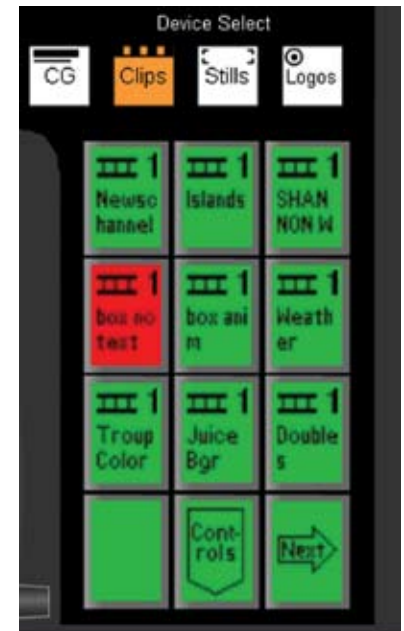
All Broadcast Pix switchers have a built-in clip store, which add QuickTime clips, animations of uncompressed digital clips, or (optionally) MPEG2 clips. The Slate 100 and 1000 include one channel, and the second is optional. Two clip stores are standard on the 2100 and 3000. Clips can have a key channel, that can be used in keyed transitions and animations.

## Easy to Use

The PixPad on the switcher panel shows the names of the clips on the PixButtons, as shown at the right. The monitor wall can show the corresponding thumbnails, and provides full motion monitoring of the active clips in both channels. Selecting a clip is as easy as pushing its PixButton, or clicking on its thumbnail. Use the motion buttons to play.



Thumbnails PixPad



PixButtons on PixPad



Clip modifiers



Play, pause, rewind, scrub and timecode

## Auto-Start

The clip stores are tightly coupled to the switcher so it's easy for a single operator to add lead-ins, bumpers, or any clips. Any clip or animation can be set to automatically start playing at the instant it is taken to air. No more careful cueing. No need for a second operator to insure your clips start when they are supposed to. Just press the controls button on the clip PixPad and the clip modifiers appears. Then select Auto-Start. Also, set it to auto-stop when it comes off air, auto rewind, mark-in, mark-out, loop, or adjust aspect ratio.

## QuickTime or Uncompressed

Load up to 60 hours of QuickTime DV clips onto the clip store over the 1 gigabit network, or from DVD or USB. This streamlines workflow. 15 hrs is standard per channel, 60 with option 318 or record up to fifteen hours of uncompressed clips from any live input. Play MPEG2 clips as well with option 320.

## Audio

All clips can have audio, with 6 XLR connectors for analog stereo audio: one pair for recording onto the clip store, and two pairs for playing out two channels to send to your mixer. All clip stores also accept and play out audio embedded in the SDI stream. The 2100 also adds digital audio AES/EBU.

## Animations

The clip store can instantly access and play spectacular animated titles and logos that were created on the built-in Inscribe CG. Or play animated backgrounds, either full screen or squeezed into a DVE box, such as behind a title. Import animations from all popular systems including Adobe Aftereffects, Artbeats, Apple, Digital Juice, Avid, Motion,... Other switchers either have no support for animations, or limit them in size and loading speed.



Clip counter on Multi-View

## Integration of Clip Store with...

### Switcher

- On transition to air, auto-start clips & animations
- Use PixPad to view clip content libraries
- See active clip in source & keyer PixButtons

### Multi-View Monitoring

- View clips in full motion on monitor
- View clip libraries & tally status
- View clip timecode, countdown & attributes

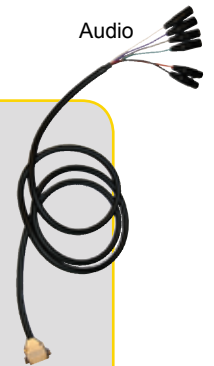
### CG

- Create animated titles in CG, then play on the Clip Store
- Use Clip Store to add an animated background to a title

### Still Store and Logo Store

- Take logo into CG, animate it, & play out on clip store

Audio



# Inscriber Character Generator

Included on all models

## Broadcast Quality

Create broadcast quality graphics with the Inscribe TitleMotion character generator (CG) that is included in every Broadcast Pix switcher. Inscribe from Harris is used worldwide to create stunning graphics in the most demanding broadcast applications. Enjoy superb anti aliased resolution of less than 16nS, sub pixel scrolling, fine transparency, soft edge, shadows and glows, and animated titles.

## Easy to Use

It has never been so easy to add great graphics to your productions. The CG includes templates that make novices look like pros. Just select one from the drop down menu, type in your text and save. Or create your own templates with Inscribe's powerful composition tools, or import one from Photoshop or another system.

## On Air Updates

While a production is on-air you can right-click an existing graphic to edit it on the fly, or add new ones. Great for a surprise guest title, sports or a game show.

## Create Logos, Stills & Animations

TitleMotion is a complete graphics system. Import digital photos and a wide variety of graphic formats, including .tga, .bmp, .gif, .jpg, .tif, and .png. In minutes you can grab a logo off a web site, add a shadow and animate it for a beautiful spinning logo. Create backgrounds and over the shoulder graphics for the still store..



## Integration of CG with...

### Switcher

- Use PixPad to view CG content libraries
- See active CG title in source & keyer PixButtons
- On transition to air, auto-start rolls and crawls
- Change crawl speed on-air with a knob
- Reposition any keyed graphic with a DVE

### Multi-View Monitoring

- View CG titles in keys & libraries, with tally status
- Right-click on a CG thumbnail to edit "on the fly"

### Clip Store

- Create animated titles & play as a clip

### Still Store and Logo Store

- CG creates a still or logo

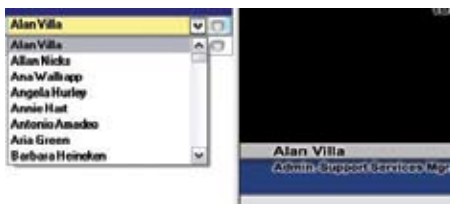
### External Database

- CG Connect option couples an external database to the on-air CG, such as athletes' statistics & pictures.

# CG Connect

Optional on all models, option 120

CG Connect links a CG template to a database. Just create the template you want, and tie its elements to an xml database on the Slate system, or to another computer on the network. Then select the data you want and it will automatically and instantly fill the CG page, even on when on-air. Now when you have a database of names and titles, you do not have to re-key them. It's also great in all live sports applications, to keep score, or select a player and get all their stats and related graphics. You can even insert a clock into a CG page, and it will update on-air automatically.



Automatically fill a CG template from a database. Just click on the name, and both the name and title will fill, even on air.



CG Connect is great for all sports, and can do scores, and graphics.

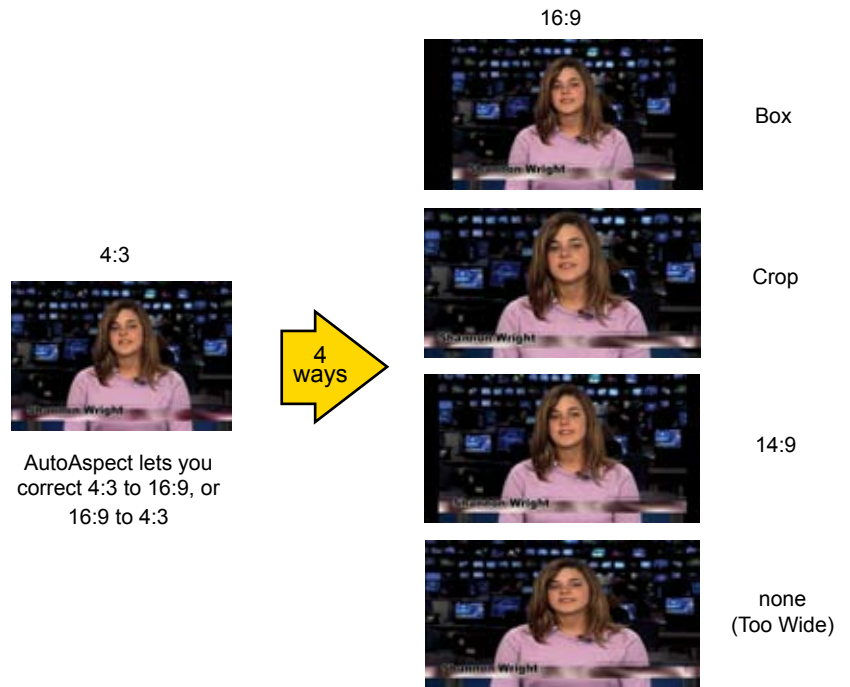
# AutoAspect

Included on all models

Whether you are creating a widescreen 16:9 show, or a traditional 4:3 show, AutoAspect solves the many challenges of mixing 4:3 and 16:9 content in the same production.

Now 16:9 and 4:3 inputs, clips and graphics can be used interchangeably and mixed together in the same live production, while maintaining the native aspect ratio of each element. Conventional switchers can only stretch video when crossing aspect ratios, causing people to look too wide or too thin. Slate enables each input to be set to one of 4 aspect treatments: box, crop, 14:9 or none (anamorphic). And each clip and graphic in the libraries can be separately treated in these four ways.

While aspect treatment of inputs is standard, you can also simultaneously output 16:9 and 4:3 versions of the same show with the DualAspect Output option (option 129).



# Alpha Wipes

Included on all models

Switchers are known for great transitions. Unlike conventional switchers, every Slate switcher can do fades, wipes, DVE moves AND the latest alpha wipes, even with audio. Alpha wipes provide the contemporary look that formerly required a separate box. Alpha wipes are standard, and you can easily customize them, with your own logo, using any popular animation package. Your production will look just as polished as the richest network production. Play them from the built-in clip store using the alpha wipe script memories, so they fire off flawlessly every time. They can be silent, or can even add audio for a swoosh, or other sound effect. Your transitions no longer have to look "so 1990's".



Keyed alpha wipe transitions show the next video through the animation



Customize with your own logo



# Still Stores and Logos

Included on all models

Select stills or logos to assign the device controls to it. And like clips and CGs, the names of the stills and logos show on the PixButtons and their thumbnails show on the monitor wall. Use five channels of stills and logos. Import a wide variety of formats: .tga, .bmp, .gif, .jpg, .tif, and .png. You can import pictures from a digital camera, download them from the Internet, or bring them in from the built-in Inscriber CG, or from other graphics packages like Photoshop.

## Integration of Still Stores & Logos with...



PixPad of Stills

### Switcher

- Use PixPad to see still & logo content libraries & select from them
- Active graphics in source & keyer PixButtons
- Couple stills & chromakeys for a virtual set

### Multi-View Monitoring

- View loaded graphics, libraries & tally
- Right-click on a thumbnail to edit a still or logo "on the fly"

### CG

- Create stills & logos in CG, including importing a wide variety of graphic formats

### Clip Store

- Animate a logo in the CG, & play it out on the clip store

# Camera Control

Optional on all models

Add camera control for the ultimate “one man band”, and further reduce staffing requirements.

Press the Camera Control button on the panel and all of the device controls are instantly assigned to camera control. Use the PixPad to select the camera you wish to control and then to select preset camera positions. Or manually control a camera with the 3-axis joystick for tilt, pan and zoom. Push it a little to move slowly, or harder to move faster. Knobs control focus and iris. CCU (Camera Control Unit) functions, like white balance, can be accessed from the PixPad and knobs.

## Sony Camera Control Option

Controls the Sony VISCA protocol including the Sony EVI HD1, BRC 300 and BRCH700 cameras illustrated at the right. Control up to 9 Sony cameras with 6 preset positions per camera.



Presets and CCU controls on the PixPad



Sony Camera Control



Hitachi Camera Control



Option 800 includes Broadcast Pix software and a cable to connect the workstation's serial output to the VISCA connector on the first camera for a 232 daisy chain. Option 811 (requires 800) adds a serial to 422 converter to increase camera runs from 60 feet (18 meters) to 4,000 feet (1,200 meters). Option 814 and 818 (both require 800) provide 4 or 8 serial ports to simplify wiring in a star configuration, rather than a daisy chain.

## Hitachi Camera Control Option

Control up to 9 Hitachi cameras using their Eagle pan/tilt heads. Control up to 31 preset positions on each camera. Includes Broadcast Pix software and a serial to 485 converter (Option 801).

### Integration of Camera Control with...

#### Switcher

- Use joystick to control tilt, pan & zoom
- Use knobs for focus, iris & CCU settings
- Use PixPad for preset positions & CCU settings

#### Multi-View Monitoring

- View cameras in full motion

#### CG with Script Memory

- Use a script memory to automatically recall a preset position & fade on its title with one button

# Audio Follow - Audio Mixer Control

Optional on all models

Extend the “one-man-band” to audio. Audio-Follow-Video software enables an audio mixer to automatically follow all action on the Slate video switcher. Unlike conventional switchers that utilize antiquated ESAM protocols for Audio Follow, Broadcast Pix uses MIDI (Musical Instrument Digital Interface),

so it works with many audio mixers, and is much more affordable and yet more powerful. As each video source goes to air it triggers commands on the mixer, or even an entire mixer scene memory including volume, fade, pan an effects like echo and reverb. Includes USB cable and USB to MIDI adapter.



### Integration of Audio Control with...

#### Switcher

- Tie each video source to one or more audio sources, or an entire audio scene.

# Teams

Included on all models

Slate is exceptional for solo use, but gracefully expands to team use. Some productions, like live sports, have so much spontaneous graphic action that a separate graphics operator is needed. All Slate systems support two monitors. On Slate 1000, 2100, and 3000 models, the switcher operator can use one monitor for the multi-view with panel, and the graphics operator can use the other with keyboard and mouse. Have more team members by adding the quad monitor option, and more SoftPanels. The physical and SoftPanels can be locked together, or be independent so one person can be on a clip store, while another is on a still store, another on a CG, etc. Operators can be anywhere on the network – in the studio, in the back room, even thousands of miles away, since the softpanel opens in a web browser (patent pending). On the Slate 100, team members can use a SoftPanel on another computer on the network.



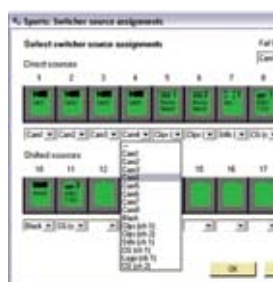
Switcher Operator

Graphics Operator

# PixMaster

Included on all models

Slate switchers include a powerful pre-production tool called PixMaster, which enables a show to be rapidly prepared. PixMaster saves a tremendous amount of time compared to conventional studios where each device must be prepared independently. Assign the sources on the switcher. Open the content library for each source, select the graphics and clips for the show, and arrange their order. Import graphics, and resize and smooth if necessary. Manage Memories. Add devices to the show. Print out a listing of all show content.



Assign sources

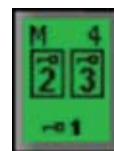


Select the content for a show from the master library and arrange it.

# Memories

Included on all models

Like any professional switcher, Slate has an extensive memory system; but unlike conventional switchers these memories can recall switcher parameters AND the exact content of graphics and clips and their attributes. For example, a single memory can recall a dual box, as shown here, including the key settings for each DVE box, and an animated background from the clip store and a crawl from the CG. The recall also can remember if the animation and crawl are set to auto-start when taken to air, and the speed of the crawl. Powerful script memories recall a sequence of moves. For example, with one press you can select a camera on preview, change its preset position, bring it to air, fade on its specific title from the CG store, and fade off the title.



PixButton on the Mem PixPad



Dual Box Memory

# PowerAux

Optional on all models

Create the most powerful Aux output on any switcher, to essentially give you two different program outputs. On conventional switchers, the auxiliary outputs show only a simple background image. PowerAux enables Slate switchers to produce an advanced auxiliary output with up to six keys applied. This is ideal for producing two simultaneous shows from the same switcher, for two different audiences, without the high cost and complexity of a two M/E switcher.

## Channel Branding



## TV & Internet



## Projector & Cable TV



# Slate Specifications

## Video

- HD I/O: 720p/59.94, 720p/50, 1080i/59.94, 1080i/50
- SD I/O: SMPTE 259M
- DVI I/O: DVI-D, DVI-I, VGA
- DVI I/O formats by adding a DVI cable: HD analog component (input only), 1080p (output only via hdmi)
- Processing: component 10-bit 576p/486p
- Analog I/O has 10-bit conversion
- NTSC or PAL switchable
- 4:3 or 16:9 switchable
- Requires analog reference

## Low Delay

Milliseconds NTSC / PAL

- SD delay through system with genlocked cameras, even inside a DVE box and with AutoAspect on (1 SD frame) 33 ms / 40 ms
- Delay added by an asynchronous source + 33 ms / 40ms
- HD 720p for IMAG delay through system and projector with genlocked cameras 67 ms / 80 ms
- HD with 1080i and 720p for studio delay through system with genlocked cameras 100 ms / 120ms

## Clip Audio

- All models: embedded in the SDI stream SMPTE 272M, and analog stereo audio I/O
- 2100 adds: AES/EBU digital I/O

## Workstation

- Software: Broadcast Pix, Inscraper TitleMotion CG, Windows XP
- Hardware: Slate boards, dual disks, r/w DVD/CD, keyboard, mouse
- Requires Monitor: 1680x1050 or 1280x1024.
- Support second monitor: 1920x1080, 1680x1050, 1280x1024 or 1366x768

## Weight

	100	1000	2100	3000
• Lbs	48	56	68	65
• Kg	22	25	31	30

## Power Watts

	400	450	500	500
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## CG

- Anti aliased resolution <16nS
- Import formats: .psd, .tga, .bmp, .gif, .jpg, .tif, and .png

## Dimensions

Workstation (on all models)	
• rack units	4
• inches	19x16.75x7
• centimeters	48x43x18

Panel (on 1000, 2100, 3000)	
• inches	8.5x12.5x5.5
• centimeters	47x32x14

## iBoB (on 2100)

• rack units	6
• inches	19x10.5x3
• centimeters	48x27x8

## Routers (on 3000)

- 16x16 Router (on 3106) 1 RU
- 32x32 Router (on 3132) 2 RU

# Slate Video I/O

Sources can be synchronous and /or asynchronous, to support a wide range of inputs from broadcast cameras to DVD players.

## Slate 100 and Slate 1000

Live inputs from cameras and other external sources attach to the back of the workstation. Inside, they are combined with clips, animations and graphics playing on the system's disk drives.

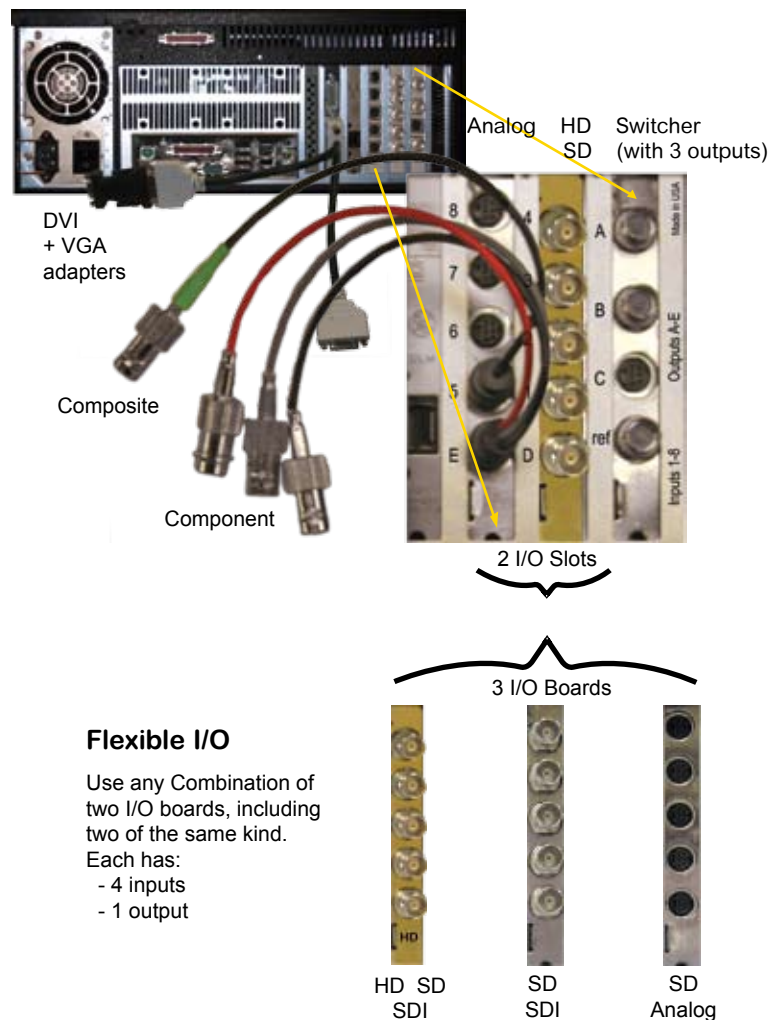
The switcher board on the right, does the processing and contains 2 SDI video outputs, 1 analog video output and an analog reference input. There are also 2 slots for I/O boards, each of which adds 4 inputs and 1 output. The HD/SD board also adds a DVI and VGA converter to convert 1 of its inputs and/or the HD output, if desired. SDI connections are BNCs, while analog connections accept S and use breakouts to BNCs for composite and component.

An optional second I/O board can be installed in any format, to increase capacity to 8 live inputs and 5 outputs. For example, the illustration shows a system with both an HD/SD SDI board and an analog board.

## Slate 3000 and Slate 2100

As described on page 7, the Slate 3000 and Slate 2100 models add an external I/O matrix (either a router or iBoB) to provide more I/O and fail-safe switching. These models include a Slate switcher board and one SDI input board, and the various SDI inputs and outputs on these two boards are connected to the external matrix.

An optional second SDI I/O board can be installed to increase performance of the multi-view, or on the HD/SD board to get better performance when using DVI inputs. Or install the analog board to add 4 analog inputs and 1 more analog output for a hybrid system.



## Flexible I/O

Use any Combination of two I/O boards, including two of the same kind. Each has:

- 4 inputs
- 1 output

# Options

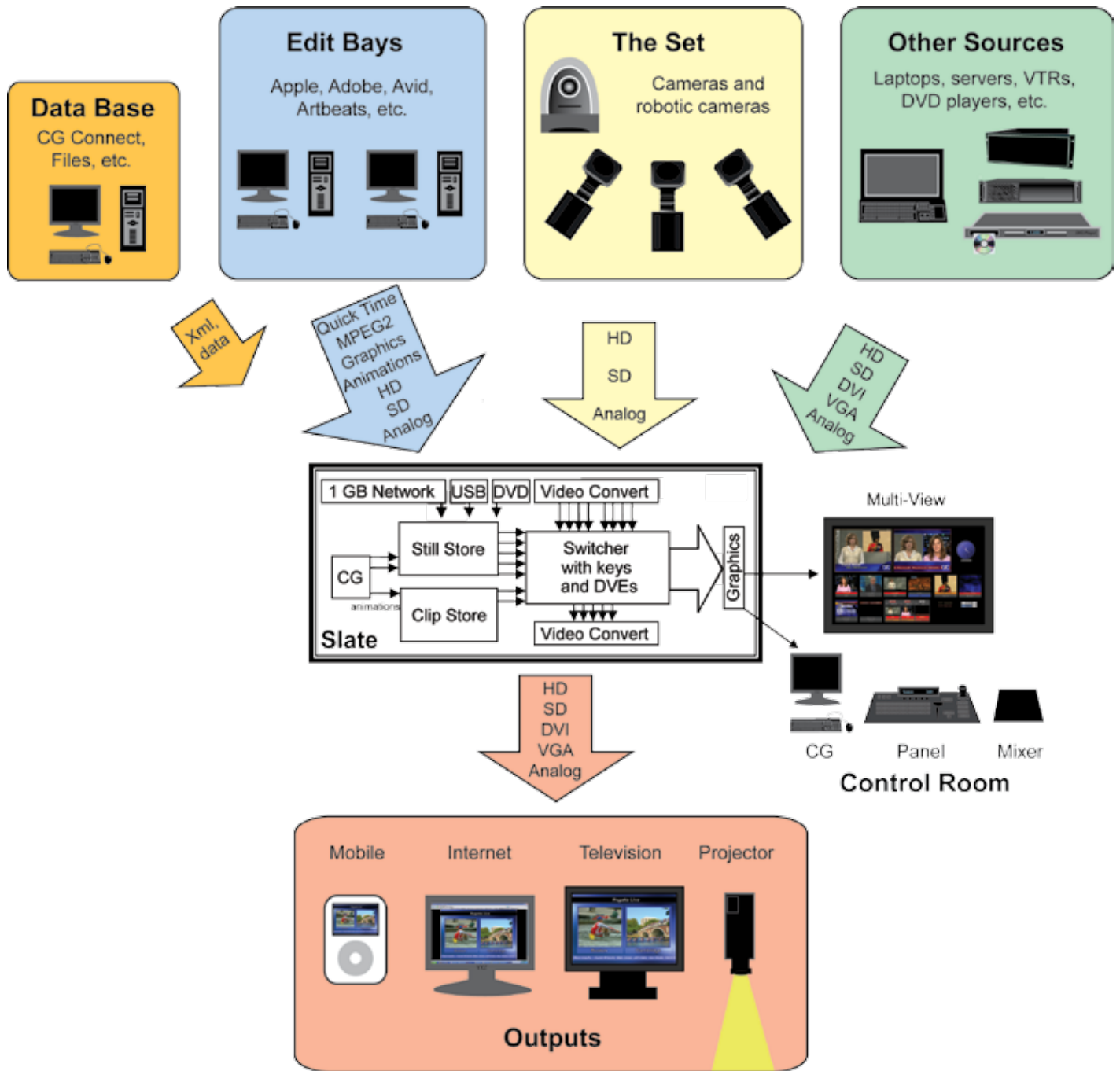
● - included    ○ - optional    1 - one included, more optional

100	1000	2100	3000	Part #		
<b>Switcher</b>						
○	○	○	○	120	PowerAux	Enables 3 keys (6 keys with option 126) to be added to Aux outputs
○	○	○	○	126	Keys 4,5 & 6	Adds 3 more keyers (key 4, 5 & 6), each with a DVE
○	○	○	○	129	DualAspect Outputs	Output 16:9 and 4:3 simultaneously (Uses & includes 120,126)
○	○	●	○	28	Tally box 8	Tally output for 8 live sources
○	○	○	○	29	Tally Box 32	Tally output for all live sources, for Slate 3000
○	○	○	○	140	8 Chromakeys	Increases standard 1 chromakey to 8, for creating a virtual set
●	○	○	○	5	Custom Keyboard	Upgrade standard keyboard to one lettered with shortcuts
○	1	1	1	10	Control Panel	Broadcast Pix physical control panel
○	○	○	○	90	Tower workstation	Change rack-mounted workstation to tower
1	1	○	○	100	SoftPanel/Scripts	License for simultaneous control by a team member
○	○	1	1	103	3 SoftPanels/Scripts	Licenses for simultaneous control by team members, quantity 3
			○	18	Remote Aux Panel	Remote Aux Panel, 16x1, for Slate 3000
<b>More Video I/O</b>						
<i>Note: can add only one of 47, 48 or 49</i>						
○	○	○	○	47	More Analog I/O	4 analog inputs & 1 output (composite, S, YUV) – break-outs included
○	○	○	○	48	More Digital I/O	4 SD SDI inputs and 1 SD SDI output
○	○	○	○	49	More HD SD I/O	4 HD SD SDI inputs and 1 output (720p, 1080i, SD)
1	1	1	1	46	YUV break-out	1 YUV break-out-cables to BNCs, for more component I/O
○	○	○	○	51	1080 HDMI Output Cable	DVI to 1080p HDMI output cable, requires HD I/O
○	○	○	○	52	HD Component Cable	HD analog component (YPrPb) to DVI input cable, requires HD I/O
<b>CG, Clip Store, Multi-View</b>						
1	1	1	1	160	Another Insciber CG	Additional Insciber TitleMotion Pro to create graphics on another PC
○	○	○	○	170	CG Connect	Connects on-air CG to an external database
○	○	●	●	301	Clip channel 2	Adds 2nd channel of clips, plus another 15 hours of storage
○	○	○	○	318	More Clip Storage	Up to 60 hours with larger disk drives - Req 301
○	○	○	○	320	MPEG2 Clip Play	Enables the clipe store to play MPEG2 clips
○	○	○	○	340	Quad Monitors	Upgrade dual monitor support to quad monitors
<b>External Device Control</b>						
○	○	○	○	880	Audio Follow Video	Control most audio mixers via MIDI, so audio follows video action
○	○	○	○	800	Sony Cam Control	Control up to 9 Sony cameras, with VISCA protocol: daisy chain
○	○	○	○	811	422 converter for Sony	Serial to RS422 converter for Sony Camera control – Requires 800
○	○	○	○	814	422 star for Sony – 4	USB to RS422 box with 4 serial ports for Sony star - Requires 800
○	○	○	○	818	422 star for Sony – 8	USB to RS422 box with 8 serial ports for Sony star - Requires 800
○	○	○	○	801	Hitachi Cam Control	Control up to 9 Hitachi cameras: software and serial to RS485
○	○	○	○	823	360/Harris DDR Control	Control a 360 Systems or Harris server (VDCP)
<b>Redundant Power</b>						
○	○	●	●	201	for Control Panel	Adds a second external redundant power supply
○	○	○	○	204	for Workstation	Adds a second internal, hot swappable, redundant power supply
<b>Services</b>						
○	○	○	○	601	On site Training 1	First Day. Includes expenses, with 4 weeks notice
○	○	○	○	602	On site Training	Each additional day, to extend the training session in Option 601
○	○	○	○	620-5	Extended Warranty	Additional year of parts and labor
○	○	○	○	651	Extended Software	Additional year of free software upgrade
○	1	1	1	680	Owner's Manual	Additional Hard-copy of owners manual, 1 is included with system

# Streamline Workflow

**Slate  
Switchers**

Slate streamlines live video production workflow so you save time, save money, and make better television. This illustration shows a Slate 100 or Slate 1000. Slate 2100 and Slate 3000 models add an external switching matrix for more I/O and redundancy.



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