



**Broadcast Pix**

**3G  
1080p  
Upgradeable**

**Slate G Series  
Live Integrated Production Systems**



**The Switcher Redefined** ■ ■ ■ ■ ■



**Slate 1000G**

- 1 M/E Switcher with control panel
- Multi-View Monitoring
- HD Clip Store
- HD Still Store, 5 channels
- HD Insciber CG
- AutoAspect 16:9 & 4:3

Slate 2100G and 3000G add more I/O and fail-safe switching



**Slate 5000G**

- 2 M/E Switcher with large control panel
- Multi-View Monitoring
- HD Clip Store, 2 channel
- HD Still Store, 5 channels
- HD Insciber CG
- AutoAspect 16:9 & 4:3

# The Switcher Redefined

## Slate is a Live Integrated Production System

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. It's easy to create high-end live television, even when working solo.

Every Slate system includes and integrates a production switcher, character generator, clip store and monitoring. All use 16:9 and 4:3 content interchangeably, without distorting native aspect ratios. Just add cameras and a monitor. Options extend control to robotic cameras and audio mixers. Choose an HD/SD model, or SD digital only, or analog, or hybrid. All processing is 10 bit quality.

## Integrated Production Workflow for HD/SD Graphics & Clips

Slate uses both video and files to streamline workflow inside the system and with the rest of your studio. HD and SD clips and graphics flow into Slate from edit stations, even during the middle of a production with Watch-folders. Snap-Shot and TimeLine Memories control all studio devices. You can connect the CG to a database, and enable two systems to share one group of sources for multi-mode productions, such as TV and web.

## Upgradeable to 3G 1080p

Slate G Series upgrades easily to 3Gb/s 1080p, the future of video production. Just swap the Slate video processing boards for upcoming 3G boards and enjoy native 1080p processing, for twice the data rate of conventional HD, higher quality pictures and effects, superior multi-definition support, and the addition of 1080p I/O. With Slate you get the best solution today, and the best path to the future.

## Over 1000 Installations in over 50 Countries

Broadcast Pix is based near Boston, Massachusetts, with regional offices throughout North America and in Europe. Join over 1000 broadcasters, webcasters, production houses, stadiums, trucks, schools, churches and towns using Broadcast Pix systems in over 50 countries. It's the new way to switch.



### Slate 100G

- 1 M/E Switcher with custom keyboard
- Multi-View Monitoring
- HD Clip Store, 1 channel
- HD Still Store, 5 channels
- HD Insciber CG
- AutoAspect 16:9 & 4:3



Broadcast



Entertainment



Corporate



Government



Education



Faith



Mobile

# Slate 100G System

In HD/SD, SD, Analog, or Hybrid

## Easy Live TV

The Slate 100G 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 a composition to air.

It's so easy to learn that you can quickly teach a novice to create great looking live TV. And it's upgradeable to 1080p.



## Custom Keyboard

The Slate 100G includes a custom keyboard version of the 1000G'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 1000G's innovative control panel. The same classic switcher layout. The same device control. The same PixButtons. It opens in a web browser, so you can be anywhere.



## Integration of Switcher with...

(Whether you have a 100G, 1000G, 2100G, 3000G or 5000G)

### Multi-View Monitoring

- View preview, program & camera sources, 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 1000G System

In HD/SD, SD, Analog, or Hybrid



The Slate 1000G adds an innovative control panel, shown above.

## 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, which are also shown on the Multi-View. 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 (option 126), which also enables an external video and key input by using two of Slate's keyers. The DVEs can be squeezed, flown in, and have borders. The content of each keyer is shown on a PixButton and on the Multi-View, so you always know what is on each key. Luma keys are also supported. A standard chromakey, for green and blue wall sets,

gives you control over key softness and spill suppression. Combine multiple chromakeys (option 140) with built-in clip or still stores for virtual sets. You can even add keys to the internal auxiliary output with the PowerAux option (option 120).

## 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 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 2100G

## More SD I/O with Analog and Fail-Safe Switching

The Slate 2100G starts with a Slate 1000G 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 an external CG. And it includes tally outputs. For the clip store it adds AES/EBU to the 1000G's analog audio. Add a Slate option card for 4 more inputs in HD, digital or analog.

iBoB on a Slate 2100G



# Slate 3000G

## More HD/SD or SD I/O and Fail-Safe

The Slate 3000G starts with a Slate 1000G and adds an integrated router for more I/O and redundancy. It also includes a second channel of clip store. Broadcast Pix software provides integrated fail-safe switching and display of all sources on the multi-view.

Slate 3016G is available in HD/SD-SDI or SD-SDI only and includes a 16x16 router. It provides 12 live inputs, 2 channels of clips and 5 of graphics, and has 8 outputs for program, preview, clean feed or aux. Slate 3032G is HD/SD-SDI or SD-SDI only, and adds the ability to select up to 18 of its inputs in each show, and has 24 outputs.

- Options for Slate 3000G (and 5016G, 5032G):
- Remote aux control panel(s) 16x1 (option 18)
  - Tally box for all live inputs (option 24)



16x16 router on a Slate 3016G



32x32 router on a Slate 3032G



remote aux panel

# Fail-Safe On-Air

Included on all models

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

### Ride through a Panel Failure

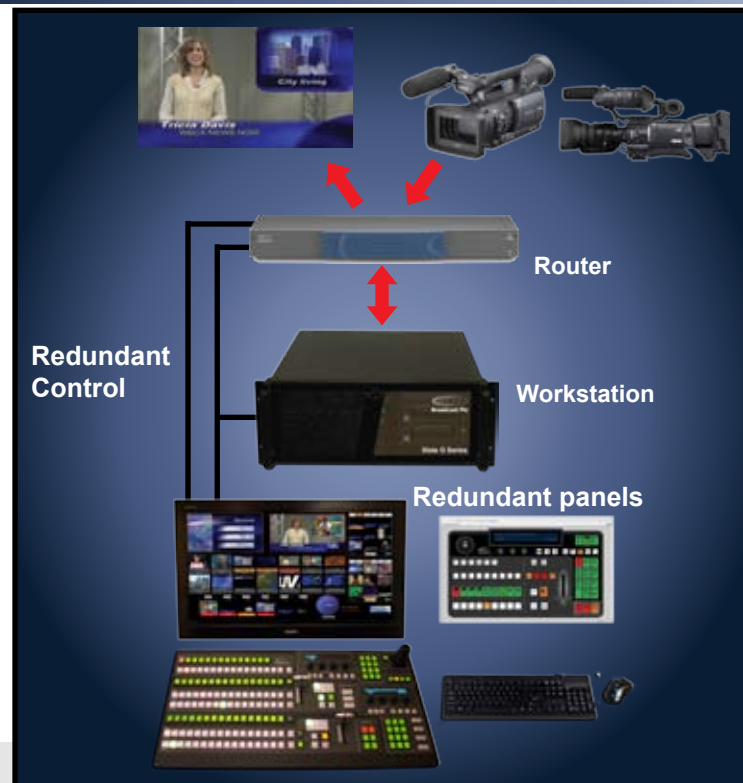
If your panel fails in the middle of a show, you can control everything on the included SoftPanel, or from the keyboard shortcuts, or from the multi-view. Other switchers provide no back-up to a panel failure.

### Ride Through a Power Supply Failure

Redundant power supplies are available for all components of all systems, and are standard on the Slate 5000G for its workstation, panel and any router. Redundant power for the panel and router is also standard on the Slate 3000G and 2100G.

### Ride Through a Workstation Stopping

On the Slate 5032G, 5016G, 3000G and 2100G you can still switch your cameras if the workstation should ever stop, thanks to a redundant serial connection from the panel to the router or iBoB. On the Slate 100G, 1000G and 5008G your most important camera will automatically stay on air. The Slate 5000G also includes a back-up system drive and system recovery software, which is optional on other models (option 230).



# Upgradeable to 3G 1080p

Included on all Models

3G  
1080p  
Upgradeable

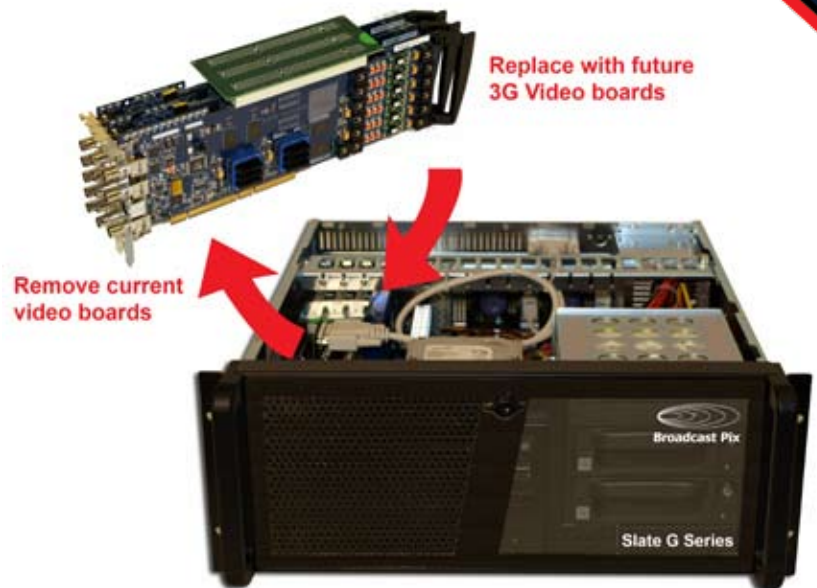
## 3G Upgrade

Slate systems create highly compelling video today, AND are upgradeable to 3G 1080p in the future. The Slate G Series workstation is a high performance Intel® quad-processor that is sized for the demanding environment of 1080p. So an upgrade to 3G will just mean removing the current Slate video boards, and replacing them with new 3G boards now in development at Broadcast Pix.

The upgrade is easy and affordable. It provides native 3Gb/s 1080p processing for pristine picture quality, and adds 1080p I/O to today's 1080i, 720p and SD I/O. And when you upgrade, there is minimal disruption to your workflow, since the Slate G series plays HD clips and graphics, has an HD CG, and HD I/O. Your content is ready to go.

With Slate, you can grow as your needs grow. A Slate 100G can upgrade all the way to a Slate 5032G. Non-Slate systems can upgrade to the Slate G Series, and then on to 3G 1080p.

Conventional HD switchers are not upgradeable to 3G, so someday they will need to be replaced to support the emerging 3G standard. The Broadcast Pix G Series avoids this dead-end.



## The Emerging 3G 1080p Video Production Standard

Compared to conventional HD switchers, 3G provides higher quality pictures and effects, superior multi-definition support, and adds 1080p I/O. The standard for 3 Gp/sec 1080p is SMPTE 424M. Routers have already transitioned to 3Gb/s because it offers significant advantages over conventional HD that are even more important for production switchers.

### Superior Picture Quality

3G is named for its data rate, 3Gb/s 1080p, which is twice the data rate of conventional HD.

### Superior Multi-Definition Switcher

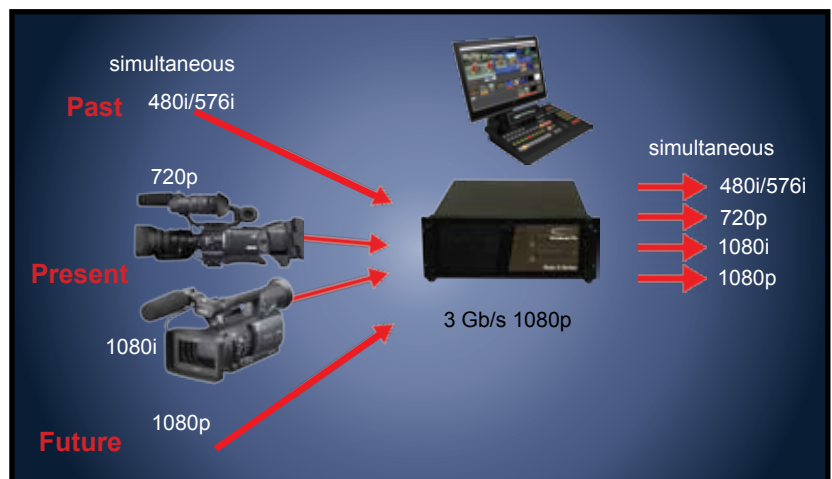
3Gb/s creates a superior "multi-definition" switcher. The fundamental problem with conventional multi-def HD switchers is that they lose image quality, such as when using a mixture of 720p and 1080i cameras and other sources, or providing outputs in different formats. Upscaling 720p cameras to 1080i means the final output will not have all of its spatial resolution. In the other direction, de-interlacing 1080i sources to output 720p creates artifacts. A 3G 1080p switcher solves both of these problems, providing a superior multi-def switcher, with lossless use in both mixing and simultaneous output of 1080p, 1080i, 720p and SD.

### Exploit Emerging 3G 1080p Infrastructure

3G switchers will also take advantage of all the emerging 1080p equipment. In addition to 3G routers and terminal gear, there are now affordable 1080p LCD and plasma monitors, computers with 1080p outputs, projectors with 1080p inputs, and 3G cameras are emerging.

### Superior Mixing, with Progressive

1080p progressive processing is inherently less prone to motion artifacts than conventional interlaced HD switchers, and so progressive processing improves picture quality whenever the switcher processes motion, which includes transitions, picture-in-picture boxes and 4:3 / 16:9 aspect correction. Broadcast Pix is a leader in progressive processing, as all Slate switchers feature progressive processing.



# Slate 5000G Systems

In HD/SD, SD only, Analog, or Hybrid



## 2 M/E Live Integrated Production System

### Sophisticated Live HD/SD Productions at a New Price Point

The Slate 5000G is the industry's only integrated production system with 2 M/E functionality. It allows a single operator to run all aspects of a large, sophisticated 2 M/E live HD production, including complex graphics, animations, clips and effects, as well as control robotic cameras and audio mixers. It is ideal for larger studios with more cameras in broadcasting, webcasting, stadiums, events and other larger venues. Available in HD/SD or SD only, in three I/O configurations, and all are 3G 1080p upgradeable.

The Slate 5000G has the switcher capabilities of the top, established 2 M/E production switchers on the market today. But the Slate 5000G is unique in that it also includes and integrates all of the functionality of an entire live production control room—switcher, CG, clips store, still store, multi-view monitoring, aspect ratio and format conversion, and video routing. It creates a dramatically more cost-effective price point, far lower than any alternative HD/SD or SD live production suite, which makes powerful live video productions suddenly affordable, in both equipment and staffing.



# Slate 5000G Systems

## 2 M/Es for More Powerful Productions

The Slate 5000G control panel has 16 source buttons per row, and can access 32 with a shift function. The Slate 5008G model uses the 16 source buttons for 8 cameras, 2 clip channels, 5 graphic channels and black. The Slate 5016G and 5032G can add more cameras with their integrated routers. The Slate 5016G can support up to 12 cameras and 6 auxiliary outputs while the Slate 5032G can support up to 24 cameras and 22 auxiliary outputs.

Up to 6 keyers provide pristine keying, and each includes a DVE, which can create a box. The keyers are exceptionally easy to fill from internal clip and graphic stores, or 2 keyers can be combined to support an external video and key input, such as an external CG.

The extra M/E is always available to build your next composition. It provides a handy workspace to maximize your creativity. Or use the extra M/E to create a complex composition which you can then embed in the on-air M/E. For example, add a title to a camera in M/E1, and then transition it into a DVE box and show the camera with title composition for an over the shoulder box in M/E2 on air. Or use the two M/Es independently to create two independent shows, such as a live event with two screens.

Like all Slate switchers, a five channel graphic store and HD Inserter CG is standard, as is AutoAspect to use 16:9 and 4:3 content interchangeably. Plus Slate 5000Ghh models can simultaneously produce both 16:9 and 4:3 versions of a show at the same time.

## Integrated Monitoring

The Slate 5000G multi-view shows all sources and keyers, plus dual device control library PixPads, on monitors of 1680x1050, 1366x768 or 1920x1080. Seven sources are shown in full motion. Enjoy unprecedented feedback, with tally, clip and graphic thumbnails, files names, and attributes, clocks, counters, etc. Attach up to 4 monitors and create a custom Multi-View with up to 4 Preview and Program windows and up to 3 versions of your sources all at different sizes.

## Unique Broadcast Pix Capabilities

- Only 2M/E switcher that is a complete live video production system.
- Only 2M/E switcher that enables a solo operator or small team to create compelling live content.
- Only 2 M/E switcher with a real clip store with audio that plays HD ProRes, or H.264 clips, as well as QuickTime clips, and animations with key.
- Only 2 M/E switcher with a built-in HD CG.
- Only 2 M/E switcher with a standard Multi-View.
- Only 2 M/E switcher with streamlined workflow software, like live updates from edit stations, and Integrated TimeLine memories, see page 16-17.
- Fail-Safe with redundant panels, power, and auto-recovery, see page 7.
- Future Proof 3G 1080p Upgradeable, see page 4.



## Slate 5000G Models

All models include a control panel and workstation with Slate boards installed, and provide M/E2 program, preview, M/E1 program, clean feed outputs, and 6 keyers. An internal aux output can be created for an internal device like a clip store by forgoing 1 keyer, PowerAux is standard see page 18. ME/1 foreground may be activated by forgoing 1 keyer. Model 5016G and 5032G add an integrated 16x16 and 32x32 router respectively, for more live inputs, many auxiliary outputs for cameras, and fail-safe switching of cameras. (Monitors not shown, but 2-4 can be added).

Model 8 Live inputs  
 5008Ghh 8 HD/SD  
 5008Ghd 4 HD/SD, 4 SD  
 5008Gha 4 HD/SD, 4 analog  
 5008Gdd 8 SD  
 5008Gda 4 SD, 4 analog  
 5008Gaa 8 analog

Model 12 Live inputs  
 5016Ghh 12 HD/SD  
 5016Gdd 12 SD

Also adds:  
 - 6 aux outputs  
 - fail-safe switching

Model 24 Live Inputs  
 5032Ghh 24 HD/SD  
 5032Gdd 24 SD

Also adds:  
 - 22 aux outputs  
 - fail-safe switching



# Slate 5000G Control Panel

## M/E2

On-Air Program and Preview buses with access to all Keyers.

## M/E1

- Set up your next composition
- Composition keyed into M/E2
- Or control a second output with access to all Keyers

## 16 Buttons per row

For 16 sources, or shift to access 32 sources.

## Destinations

Select a key or aux to fill and to access device controls for them.



## PixButtons

Displays in the buttons show device, file name and tally status at a glance (patent pending).

## Two Source PixButton rows

See source contents, and press to set source's aspect ratio correction and chromakey and trigger integrated SnapShot & TimeLine memories.



Table top or in a cut-out.

# Slate 5000G Control Panel

## Device Control A

Intimately control any clip, graphic, memory, camera or other external device.

## Device Control B

Control a keyer, FX, aux, or use Hold to access any device from Control A.

## Integrated Memories

Recall and record SnapShot or TimeLine memories for ME 1, ME 2 or both, which set-up switcher functions plus file names and attributes.

## 3 Axis Joystick

Use with either device controls for positioning DVE Boxes, keys, Cameras.



## Alpha Wipes

Modern animated transitions with your logo and audio. Also do fades, wipes, DVE pushes.

## Classic Next Transition

Complete control of layers and style.

## 6 Universal Keyers

All keyers are available to both M/Es. PixButtons show contents.

## 12 Device Selectors

Instant access to any clip or graphic store and external devices.

# Multi-View

Included on all models

Custom Layout on Wall Monitor



## Monitoring

Every Slate includes on-screen monitoring of preview, program, keys and sources. Live inputs and clips have motion, and other sources use thumbnails. All live inputs are in full motion on the Slate 100 and 1000, while 7 are in full motion on larger models. They tally red on air, and orange on preview. Video monitors are not needed but can be added.

## 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. On Slate 100G through 3000G models 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. For Slate 5000G monitoring see page 9.

## 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 (option 340) enables you to connect up to 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



Graphics



# Clip Store

Included on all models

## Built-in Clip Stores

All Broadcast Pix switchers have a built-in clip store, which plays HD or SD compressed clips, animations and can record and play uncompressed digital clips. On the Slate 100G and 1000G, the clip store has one channel, and the second is optional. Both are standard on the Slate 2100G, 3000G and 5000G models. Clips can have a key channel (alpha) that can be used in keyed transitions and animations. Clips can move directly from editing systems into the Slate's watch-folders, even during the middle of a show to streamline workflow, see page 17.

## 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 control.

## 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, and set it to Auto-Start. Also, set it to auto-stop when it comes off air, auto rewind, mark-in, mark-out, loop, or aspect ratio.

## HD, SD or Uncompressed Clips

Depending on your compression settings, play .mov files, including up to 8 hours of HD Apple ProRes clips, over 200 hours of HD H.264 clips or SD Quick-Time clips (DV, DVCPRO or H.264 AVC). Record and play up to 15 hours of uncompressed clips from any live input. Standard removable media drives facilitate handling large files, and more removable drives are optional.

## Animations

The clip store can instantly access and play spectacular animations that are created on the built-in Inscribe CG, or which are imported as sequences from popular animation systems, including Adobe Aftereffects, Artbeats, Apple, Digital Juice, Avid, Motion, etc. Use animations for backgrounds, titles, logos, and transitions, even with audio. Other switchers either have no support for animations, or limit them in size and loading speed.

## 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 SD-SDI stream.



Thumbnails PixPad



PixButtons on PixPad



Clip modifiers



Play, pause, rewind, scrub and timecode



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 HD Graphics

Create broadcast quality graphics with the Inscriber TitleMotion character generator (CG) that is included in every Broadcast Pix switcher. Inscriber 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 Inscriber'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 via watch-folders see page 16. 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.

# Still Store

Optional 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 HD and SD formats: .tga, .bmp, .gif, .jpg, .tif, and .png. Move stills over the network from an edit station, see page 17. Import pictures from a digital camera, download them from the Internet, or bring them in from the 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

# AutoAspect 16:9 and 4:3

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.

On some HD models you can also simultaneously output 16:9 and 4:3 versions of the same 16:9 show. This is included on all Slate 3000G HD, 5016G HD or 5032G HD models, and on any Slate 100G HD, 1000G HD or 5008G HD models on which a second HD I/O board is installed.



# Camera Control

Optional on all models

Add camera control for the ultimate "one man band". Use the Panel's Pix-Pad to select the camera you wish to control and a preset camera position. Manually control 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 also be accessed.

## Sony Camera Control Option

Control up to 9 Sony cameras with 6 preset positions per camera. Option 800 includes software and a serial cable to connect to the VISCA connector on the first camera for a 232 daisy chain. Option 811 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 has 4 or 8 serial ports for wiring in a star configuration.

## Panasonic Camera Control Option

Control up to 12 Panasonic cameras with 99 preset positions per camera. Option 803 includes Broadcast Pix software. Option 811 is a serial to 422 converter. Option 814 and 818 has 4 or 8 serial ports for multi-camera configurations.

## 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. Option 801 includes Broadcast Pix software and a serial to 485 converter.



## 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 Integrated Memories

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

# Audio Follow

Extend the "one-man-band" to audio. Audio-Follow-Video software enables an audio mixer to automatically follow all action on the Slate switcher. Unlike conventional switchers that utilize antiquated audio protocols, Broadcast Pix uses MIDI, so it works with many audio mixers, and is more powerful and more affordable. As each video source goes to air it triggers commands on the mixer, or even an entire scene memory including volume, fade, pan, echo, reverb, etc. Includes USB to MIDI adapter



## Integration of Audio Control with...

### Switcher

- Tie each video source to one or more audio sources or a memory.

### Clip Store

- Tie each channel to the mixer.

# Streamline Workflow

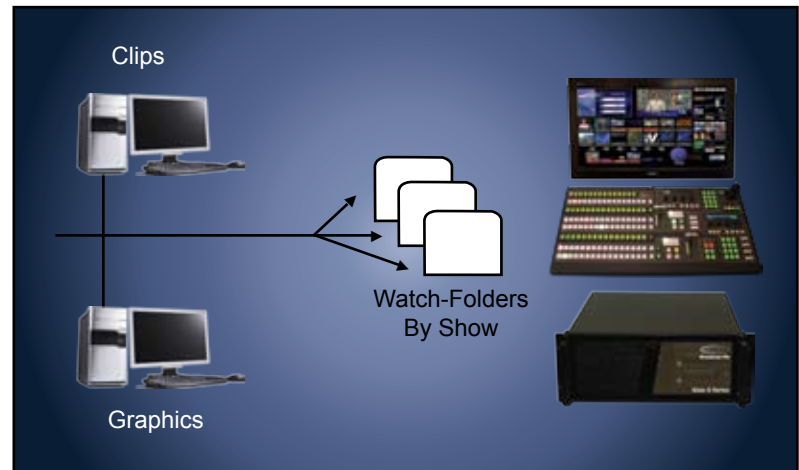
Slate is such an integrated production system, that it streamlines workflow in ways that conventional control rooms cannot.

## Live Edit Watch-folders

Included on all models

Unlike conventional switchers that take only video inputs, Slate systems can input video and files. This greatly streamlines live production workflow, by enabling clips and graphics to be sent over a network from edit stations to the Slate system, even during the middle of a live production. No need to wait to record a clip onto a video server. No need to have separate clip operator cueing the clip. The clip just appears on Slate's multi-view and it's name appears on the control panel's PixButton, and it can be set to auto-start upon going to air.

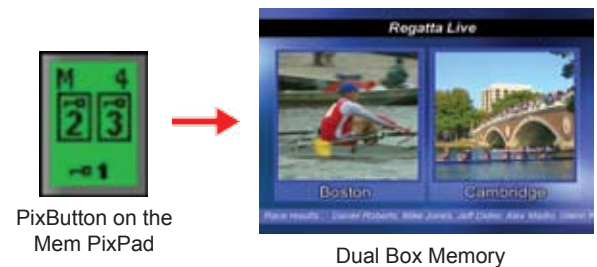
Slate uses innovative watch-folders, which automatically adds content to your show. For example, you might have one watch-folder for the 6 o'clock news program, and one for the 11 o'clock. Editors simply send the content over a network into the correct watch-folder and it is automatically added to that show, even late breaking news that comes in during a news cast.



## Integrated Snapshot 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, 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.



## Animated Transitions

Included on all models

Switchers are known for great transitions. Slate can not only do fades, wipes, and DVE moves, they also do the latest animated transitions. These provide the contemporary look that formerly required a separate box. Customize them with your own logo, using any popular animation package. Your production will look just as polished as the richest network production. They can be silent, or can even add audio for a swoosh, or other sound effect.



## 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 1000G, 2100G, 3000G and 5000G 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. For more team members add the quad monitor option, and more SoftPanels. The panels can 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. On the Slate 100G, team members can use a SoftPanel on another computer on the network.



# Streamline Workflow

## Integrated TimeLine Memories

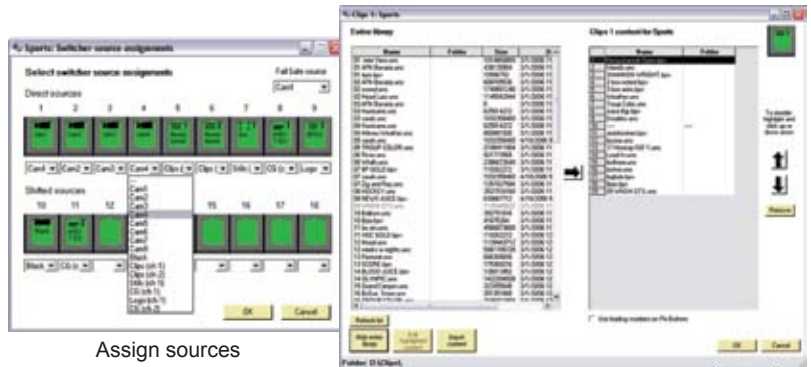
Included on all models

Powerful TimeLine memories recall a sequence of moves, which can include every switcher move as well as all the integrated devices. Slate's TimeLine Memories even remember file names, while conventional switchers cannot remember names of any graphics or clips. 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. Record TimeLines by pressing the sequence of desired buttons, and then fine tune them on the comprehensive graphical user interface.

## 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 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 if necessary. Manage Memories. Add devices to the show. Print out a listing of all show content.



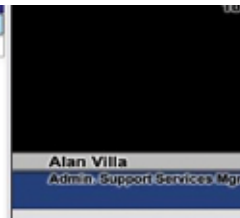
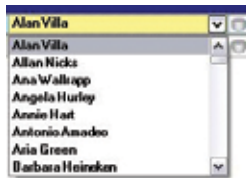
Assign sources

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

## CG Connect

Optional on all models, option 170

CG Connect links an Inscribe 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 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

## Multi-System Control

Optional on Slate 3032G and 5032G, option 150

Two systems can share a central router by adding a Slate 1000G or Slate 100G to a Slate 3000G or 5032G (as shown) switcher, and adding optional software (option 150). For larger facilities, this greatly simplifies wiring and lowers cost.

This workflow configuration provides separate control points with a common group of cameras and other sources, such as for simultaneously producing TV and internet shows. These kinds of multi-mode productions typically create different size shows, which require different graphics approaches. Other examples are TV and projection, and Internet and mobile, and TV and mobile (shown).



# Slate Specifications

3G  
1080p  
Upgradeable

## 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
- 1080p output only via HDMI cable with DVI option
- Slate G processing: component 10-bit 576p/486p
- Slate 3G upgrade processing: component 10-bit 1080p
- Analog I/O has 10-bit conversion
- 60Hz(NTSC) or 50Hz(PAL) switchable
- 4:3 or 16:9 switchable
- Requires analog reference

## Low Delay (Milliseconds for 60Hz/50Hz)

- SD with genlocked cameras, even 33 ms / 40 ms  
inside a DVE box with AutoAspect
- HD with genlocked cameras, even 100 ms / 120ms  
inside a DVE box with AutoAspect
- Added by an asynchronous source +33 ms / 40ms

## Clip Audio

- Analog stereo audio I/O, and embedded in the SD-SDI stream SMPTE 272M (2100G adds AES/EBU digital)

## CG

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

## Workstation

- Software: Broadcast Pix, Inscriber TitleMotion CG, Windows XP
- Hardware: Slate video boards, 2 disks with removable media drive(s), r/w DVD/CD, keyboard, mouse
- Requires Monitor: (1680x1050 or 1280x1024 on 1 M/E models)
- Support second monitor: 1920x1080, 1680x1050, 1280x1024 or 1366x768

Weight	100	1000	2100	3000	5000
• Lbs	48	56	68	65	75
• Kg	22	25	31	30	34
<b>Power</b> (watts)	400	450	500	500	600

## Dimensions

Workstation (on all models)	
• rack units	4
• inches	19x16.75x7
• centimeters	48x43x18
1M/E Panel (on 1000G, 2100G, 3000G)	
• inches	8.5x12.5x5.5
• centimeters	47x32x14
2M/E Panel (on 5000G)	
• inches	15.5x31x8
• centimeters	39x79x20
iBoB (on 2100G)	
• rack units	6
• inches	19x10.5x3
• centimeters	48x27x8
Routers (on 3000G, 5016G, 5032G)	
• 16x16 Router	1 RU
• 32x32 Router	2 RU

# Slate Video I/O

## Slate Video Boards

At the heart of every Slate system is a set of video processing boards made by Broadcast Pix. These use similar components to conventional switchers, but are housed in a workstation to provide tight integration with clips and graphics on the disk drives, and with networking and communications. All layering and keying is done on these boards, which is one reason why Slate is so reliable.

The switcher board has 2 SDI outputs, 1 analog output and an analog reference input. There are 2 slots for I/O boards of any combination of HD/SD SDI, SD SDI or analog, each of which adds 4 inputs and 1 output. SDI connections are BNCs, while analog connections accept S and use break-outs to BNCs for composite and component. Sources can be synchronous (genlocked) and /or asynchronous, to support a wide range of inputs from broadcast cameras to DVD players. Outputs can be program, preview, auxiliary or clean feed.

## Slate 100G, 1000G, and 5008G

Slate 100G and 1000G systems include 1 I/O board, so they have 4 live inputs and 4 total outputs. A second I/O board may be added as an option to increase to 8 inputs and 5 outputs. For example, at the right is a system with an HD/SD SDI board and an analog board. Slate 5008G models have 2 I/O boards, as described on page 9.

## Slate 5032G, 5016G, 3000G and 2100G

As described on page 7 and 9, these add an external I/O matrix (either a router or iBoB) to provide more I/O and fail-safe switching. Cameras and other external sources are connected to the matrix and fed into Slate, and outputs return through the matrix. Slate 3000G and 5000G have 2 I/O boards. Slate 2100G has 1 standard.

## Optional DVI I/O, option 50

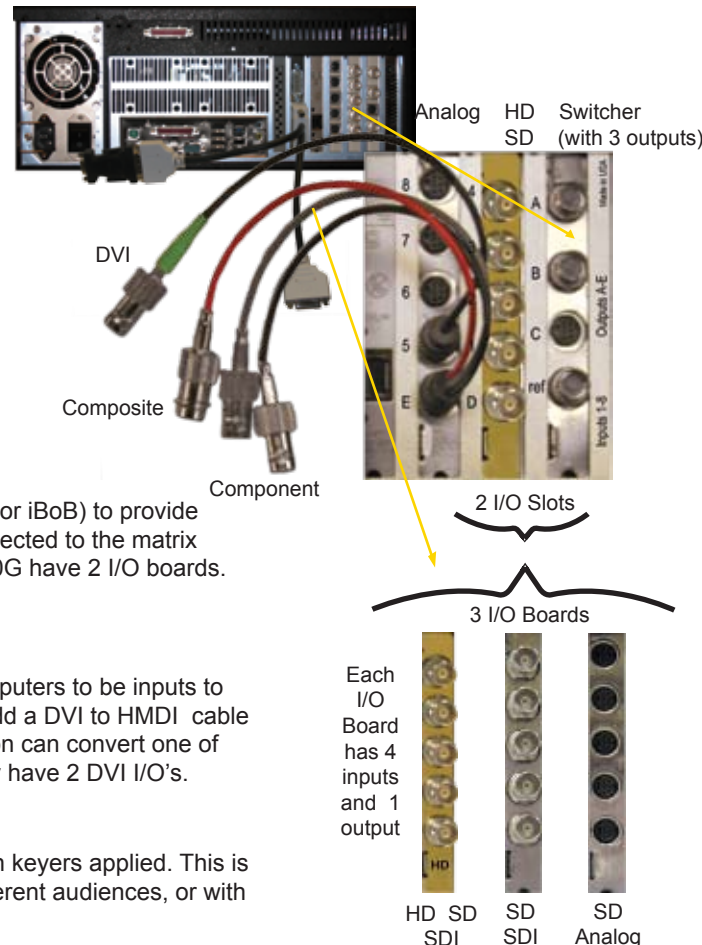
Slate HD models can add a DVI board for DVI and VGA I/O. This enables computers to be inputs to Slate, and the output to feed a projector. DVI to VGA adapters are included. Add a DVI to HDMI cable for 1080p output, option 51. On Slate systems with one HD board, the DVI option can convert one of the HD inputs and the HD output to DVI. Slate systems with 2 HD boards, may have 2 DVI I/O's.

## Optional PowerAux Output, option 120

PowerAux enables Slate switchers to produce an advanced auxiliary output with keyers applied. This is ideal for producing two simultaneous shows from the same switcher for two different audiences, or with two different brandings.



Slate Video Boards

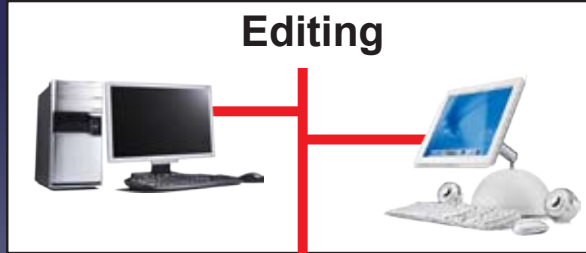


# Options

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

100G	1000G	2100G	3000G	5000G	Part #	Switcher	
○	○	○	○	●	120	PowerAux	Enables 3 keys (6 keys with option 126) to be added to an Aux output
○	○	○	○	●	126	Keys 4,5 & 6	Adds 3 more keyers (key 4, 5 & 6), each with a DVE
○	○	○	○	○	28	Tally Box 8 and GPI box	Tally output for 8 live sources, plus 8 GP inputs
○	○	○	○	○	24	Tally Box 24	Tally output for all live sources, for Slate 3000 and Slate 5000
○	○	○	○	○	140	Additional Advanced Keys	Increases standard 1 chromakey/luma key to 8, for creating a virtual set
○	○	○	○	○	940	3G Upgrade 1 M/E	Upgrade to 3G 1080p processing & I/O, Slate 100G, 1000G, 2100G, 3000G
○	○	○	○	○	941	3G Upgrade 2 M/E	Upgrade to 3G 1080p processing & I/O, Slate 5000G
<b>Panels</b>							
●	○	○	○	○	5	Custom Keyboard	Upgrade standard keyboard to one lettered with shortcuts
○	●	●	●	●	10	Control Panel 1M/E	Broadcast Pix physical control panel 1 M/E
○	○	○	○	●	12	Control Panel 2M/E	Broadcast Pix physical control panel 2 M/E
○	○	●	●	●	201	Redundant Power	Redundant Power for physical control panel
○	○	○	○	○	18	Remote Aux Panel	16x1 Aux Panel, 1RU, for Slate 3000G, 5016G or 5032G
<b>Video I/O</b>							
○	○	○	○	○	47	More Analog I/O	Note: can add only one of 47, 48 or 49 to a 100G, 1000G or 2100G. 4 analog inputs & 1 output (composite, Y/C, 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 (1080i, 720p, SD)
●	●	●	●	●	46	YUV/ composite cable	1 YUV/composite break-out-cables to BNCs
○	○	○	○	○	50	DVI I/O	Up to 2 DVI-I inputs and 2 outputs (VGA adapters incl.) Requires HD I/O
○	○	○	○	○	51	1080p HDMI Output cable	DVI to 1080p HDMI output cable. Requires DVI I/O
<b>CG, Clip Store, Multi-View</b>							
○	○	○	○	○	160	Another Insciber CG	Additional Insciber TitleMotion Pro to create graphics on another PC
○	○	●	●	●	301	Clip channel 2	Adds 2nd channel of clips, increase storage to up to 500GB
○	○	○	○	○	318	More Clip Storage	Up to 1TB of clip storage - Requires 301
○	○	○	○	○	340	Quad Monitors	Upgrade dual monitor output to quad monitors
<b>Workflow Software</b>							
○	○	○	○	○	170	CG Connect	Connects on-air CG to an external XML database
●	●	○	○	○	100	SoftPanel	Another panel license for another SoftPanel
○	○	●	●	●	103	3 SoftPanels	3 more panel licenses for more SoftPanels
○	○	○	○	○	150	Multi-System Control	Software for 2 Slate switchers sharing a 32x32 router
<b>External Device Control</b>							
○	○	○	○	○	880	Audio Follow Video	Software to control audio mixers, USB-MIDI adapter
○	○	○	○	○	800	Sony Camera Control	Control up to 9 Sony cameras (VISCA), RS232 cable
○	○	○	○	○	802	Panasonic Cam Control	Control up to 12 Panasonic cameras: software only - Requires 811, 814 or 818
○	○	○	○	○	811	422 converter - 1	232 to 422 converter for 1 camera - Requires 800 or 802
○	○	○	○	○	814	422 star config - 4	USB to RS422 box for 4 cameras - Requires 800 or 802
○	○	○	○	○	818	422 star config - 8	USB to RS422 box for 8 cameras - Requires 800 or 802
○	○	○	○	○	801	Hitachi Camera Control	Control up to 9 Hitachi cameras: software and serial to RS485
○	○	○	○	○	823	DDR Control	VDCP Control a 360 Systems or Harris Nexio servers
<b>Workstation</b>							
○	○	○	○	●	210	Premium Workstation	Adds redundant power, recovery system, and rack rails
○	○	○	○	●	230	Recovery System	Redundant system drive with auto-back up and cd
○	○	○	○	●	240	Rack Rails	Sliding rack rails for workstation
○	○	○	○	○	250	Router accessory pack	(3) 6' Slate to Router BNC cable bundles of 4
<b>Services</b>							
○	○	○	○	○	601	On site Training - 1 day	First Day. Includes expenses, with 4 week's notice
○	○	○	○	○	602	On site Training - more	Each additional day, to extend the training session in Option 601
○	○	○	○	○	605	Commissioning	1 day of Broadcast Pix system commissioning
○	○	○	○	○	621-30	Extended Warranty	Additional 1 year of parts and labor
○	○	○	●	●	680	Owner's Manual	Additional hard-copy of owner's manual, 1 is included with system

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Graphics & Clips**



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**Studio**



**Video  
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1080i, 720p,  
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DVI, VGA,  
16:9 & 4:3

**Watch-  
folders**

**Clip Graphics**

**Switcher**

**Multi-View**

**CG**

**Slate**



**Video  
Outputs**  
1080i, 720p,  
SD, Analog,  
DVI, VGA,  
16:9 & 4:3



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