Blackmagicdesign

Fall 2010 Catalog

Welcome to the Blackmagic Design catalog! There's been lots of changes in this edition including some exciting new products!

Over the last few months we purchased EchoLab Inc. who design and build some of the world's most exciting production switchers. We have added a whole new section in this catalog showing the amazing features of the EchoLab ATEM range of switchers in both 1 M/E and 2 M/E models.

This edition also includes our new range of Universal Videohub routers that are card based, so you can add cards to custom build a router to your own specification. You can even plug in two cross-point cards and power supplies for full redundancy! There are both BNC SDI and optical fiber SDI cards available.

I hope you enjoy reading this catalog and it helps you build your facility!

Grant Petty
CEO Blackmagic Design

Blackmagic Design has everything you need to build the world's best post production facility!

Client Presentation Room

Machine Room

Color Grading Suite

Edit Suite

CGI Suite

VFX Suite

HDLink Pro

Use low cost televisions for the most amazing client monitoring by using HDLink Pro 3D for SDI to DVI, HDMI or DisplayPort conversion. Includes realtime 3D LUTs, plus supports 2D and stereoscopic 3D workflows. **See page 62**

UltraScope

The world's first technically accurate waveform monitoring designed for editors and colorists!
See page 54

DaVinci Resolve

The world's most advanced color grading system is now available on both Mac and Linux! **See page 40**

DVI Extender

Add DVI Extender to your computer's DVI output to extend your monitor via SDI. Even route your computer monitor! **See page 68**

Videohub Smart Control

Compact control panel for cut-bus or XY style router control. Install on desktops or under each deck or monitor! **See page 84**

DeckLink HD Extreme 3D

The world's highest quality SDI/HD-SDI, HDMI, 2K and analog SD/HD capture and playback solution on Windows™, Mac™ and Linux™ in 4:2:2 or Dual Link 4:4:4 2D, or stereoscopic 3D! **See page 16**

Videohub Routers

Eliminate cable patching with the world's most affordable 3 Gb/s SDI routers. Automatically handles multiple SD, HD and 3 Gb/s video standards and includes RS-422 deck control. **See page 84**

Mini Converters

The widest range of mini converters that automatically switch between SD and HD, and include both AES/EBU and analog audio. Analog, HDMI, SDI, Audio and optical fiber converter models available. **See page 98**

Multibridge Pro

The world's first rack mount external PCI Express SDI, HDMI and analog capture and playback solution that instantly switches between SD, HD and 2K in 4:2:2 or Dual Link 4:4:4 video quality. **See page 32**

UltraStudio Pro

The world's first broadcast quality SDI/HD-SDI, HDMI and analog SD/HD capture and playback solution for USB 3.0 computers! **See page 6**

Blackmagic Design has everything you need to build cutting edge HD broadcast television systems!

HDLink Pro
Use low cost televisions for the most amazing studio monitoring by using HDLink Pro 3D for SDI to DVI, HDMI or DisplayPort conversion. **See page 62**

Universal Videohub 288
Card based router that lets you add BNC SDI and optical fiber SDI interfaces as you need. Automatic redundant cross-points and power supplies can be easily removed and exchanged without interruption for 100% reliability. **See page 88**

Videohub Smart Control
Compact control panel for cut-bus or XY style router control. Install on desktops or under each deck or monitor! **See page 84**

UltraStudio Pro
The world's first broadcast quality SDI/HD-SDI, HDMI and analog SD/HD capture and playback solution for USB 3.0 computers! **See page 6**

UltraScope
Powerful PC based scopes designed for critical technical monitoring **See page 54**

ATEM 2 M/E Production Switcher
Advanced live production switcher with 18 video inputs, 4 upstream keyers, built in DVE, built in multi-view monitoring, SuperSource for multi layer compositing, built in media players and more! **See page 72**

Mini Converter Optical Fiber
Optical fiber Mini Converter allows long SDI lengths of up to 45 km in SD, and 25 km in 3 Gb/s HD. Converts in both directions for a perfect live broadcast solution! **See page 98**

The world's first uncompressed 10 bit editing and design solution for USB 3.0!

The highest quality solution for editing, design and visual effects for your desktop!

The new UltraStudio Pro is the world's first broadcast quality SD/HD capture and playback solution for USB 3.0 computers! UltraStudio Pro combines the latest broadcast technology into an attractive ultra-thin design that looks great on your desktop!

UltraStudio Pro has the power you need for the most demanding broadcast and post production environments. With the incredible speed of the new USB 3.0 interface built-in, running at a massive 4.8 Gb/s, UltraStudio Pro easily has enough speed for the highest quality uncompressed 10 bit HD video with maximum real time effects!

Advanced Broadcast Technology

UltraStudio Pro packs state of the art broadcast technology into an impossibly thin design. You get more video and audio connections, high quality up, down and cross conversion, full 10 bit video, internal SD keying and more!

UltraStudio Pro also includes a massive number of video and audio connections including 3 Gb/s SDI, HDMI, analog component, composite, s-video, 4 channel analog audio, 2 channel AES/ EBU audio, genlock/tri-sync and RS422 deck control connections. UltraStudio Pro even includes a broadcast quality 7 foot/2 meter breakout cable, so you'll save hundreds of dollars on expensive professional cables!

There's even an independent SDI output that's down converted for simultaneous HD and SD monitoring while you work! The built-in up, down and cross converter lets you edit in one format, and then output to any HD or SD format!

Innovative Design

UltraStudio Pro's innovative design looks great on your desktop while hiding the cables behind the unit. With dozens of audio and video connections built-in, you can keep your studio neat and clean! UltraStudio Pro includes audio level meters for accurate audio level calibration.

UltraStudio Pro's chassis is machined from solid metal with high grip silicon feet, so it's strong enough to withstand the most harsh broadcast environments.

UltraStudio Pro
$895
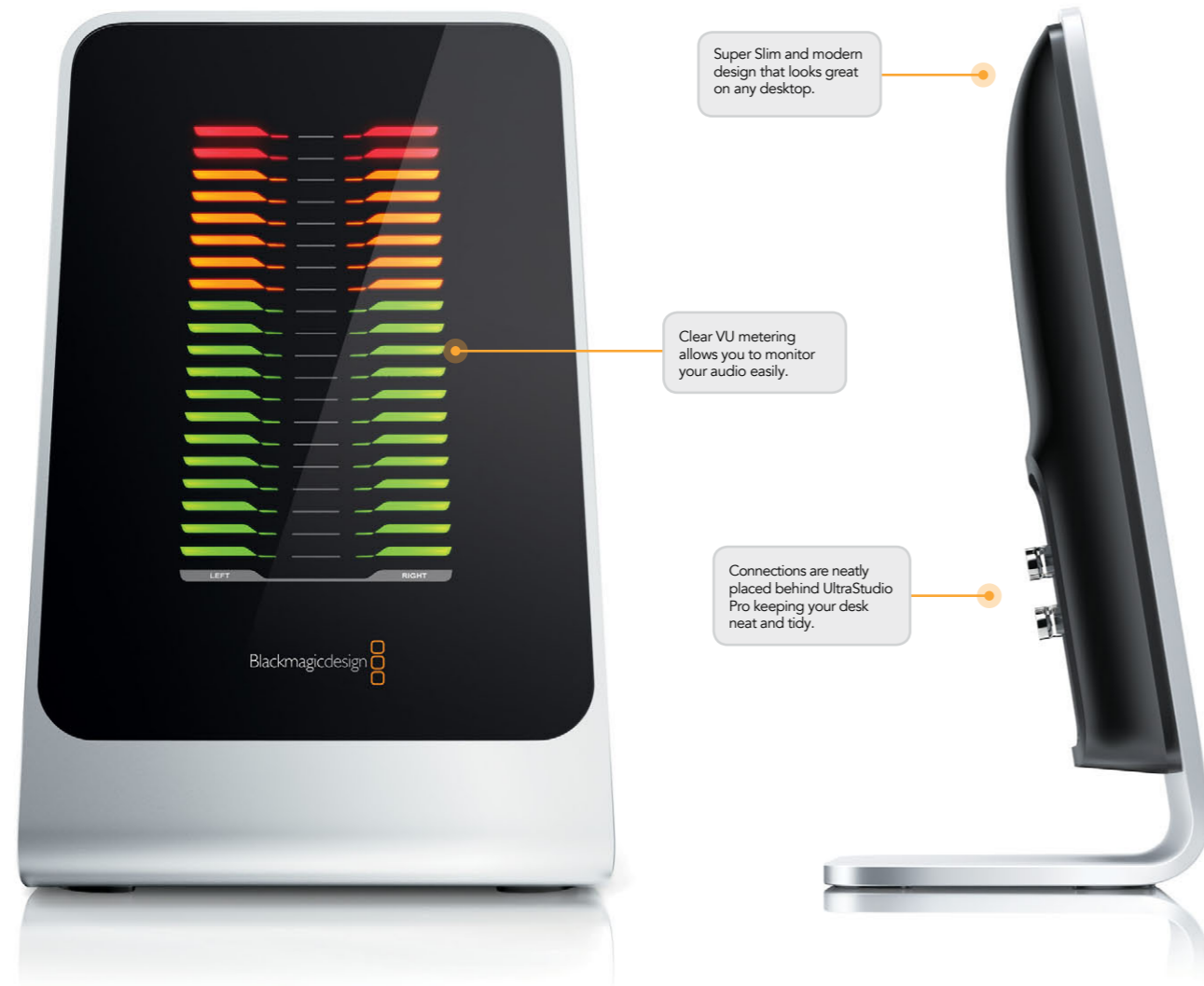
UltraStudio Pro

Super Slim and modern design that looks great on any desktop.

Clear VU metering allows you to monitor your audio easily.

Connections are neatly placed behind UltraStudio Pro keeping your desk neat and tidy.

Blackmagicdesign

3 Gb/s SDI connections for SD and HD. Use with HDCAM SR, Digital Betacam, DVCPro HD, D5 and more!

HDMI connections. Use with cameras for direct CCD capture and televisions for SD/HD monitoring!

SuperSpeed USB 3.0 interface at 4.8 Gb/s!

12 volt power supply connection. Includes universal power supply with international adapters for all countries.

Super long break out cable included with SD/HD component, s-video, composite, 4 ch XLR audio, 2 ch AES/EBU, SD-SDI out, genlock/tri-sync and RS-422 deck control.

Connect to Anything

UltraStudio Pro connects to a massive range of video and audio equipment for capture and playback in SD and HD. You get separate connections for 3 Gb/s SDI, HDMI, analog component, composite, s-video, 2 channels of AES/EBU with sample rate converter, 4 channels of XLR analog audio, down converted SD-SDI output, genlock/tri-sync and deck control. Perfect for HDCAM, HD-D5, HDCAM SR, Betacam SP, Digital Betacam, televisions and more!

Incredible Speed USB 3.0

UltraStudio Pro takes advantage of the new SuperSpeed™ USB 3.0 to allow highest quality 10 bit HD video capture and playback! SuperSpeed USB 3.0 is the new USB connection standard for computers that's 10 times faster than regular USB. That's a blistering 4.8 Gb/s, which easily handles the highest quality 10 bit uncompressed 1080HD video. UltraStudio Pro supports x58 series or better Windows™ computers, and all you need to do is simply plug in to install!

More HD Real Time Effects

UltraStudio Pro lets you create as fast as your mind works, because you get more HD real time effects! Unlike FireWire which is only half the data speed of HD video and needs to use heavy video compression to handle HD playback, USB 3.0 eliminates this bottleneck because at 4.8 Gb/s it easily handles native 10 bit HD video! This means UltraStudio Pro doesn't waste CPU time compressing video just for playback, so all CPU time is dedicated to more HD real time effects.

Powerful Image Processor

UltraStudio Pro includes a fast video processor for incredible 10 bit quality hardware up, down and cross conversion! Now you can edit once and deploy in SD, 720HD or 1080HD while leaving all CPU time dedicated to real time effects. You can also select between letterbox, anamorphic 16:9 and pillarbox 4:3 video! When working in HD video, down conversion lets you monitor in SD and HD at the same time with s-video and composite video outputs active.

UltraStudio Pro

Adobe Premiere Pro

UltraStudio Pro is the highest quality editing solution for Premiere Pro™. Included are a full suite of Premiere Pro plug-ins with deck control and full support for 8 and 10 bit uncompressed AVI and QuickTime files, plus many more. UltraStudio Pro has full support for Premiere Pro's 8 channels of audio, which is great for 5.1 surround sound editing. Blackmagic Design Premiere Pro drivers include advanced features such as Mercury Playback Engine support, RS-422 deck control and frame accurate batch capture!

Adobe After Effects

Adobe After Effects™ is great for broadcast graphics and animation. After Effects works with files captured with UltraStudio Pro. You can open and render Blackmagic's uncompressed 10 and 8 bit AVI and QuickTime files and then drop them directly into the Premiere Pro timeline! UltraStudio Pro provides full RAM preview playback, so you can always see what you're working on. Use Media Express with After Effects for capture and playback in QuickTime, AVI and even DPX files!

Adobe Photoshop

UltraStudio Pro includes special Photoshop™ plug-ins so you can directly capture and output still frames from within the Photoshop application. If you're working with 10 bit SD/HD-SDI you can even import and export 16 bit Photoshop images for full quality. Use UltraStudio Pro's 'keying to export' and live key graphics from the video input using Photoshop alpha channels. Outputting Photoshop graphics from UltraStudio Pro lets you see the correct color and the effects of video interlace and field movement!

Includes Media Express Software

Blackmagic Media Express is free software that comes with UltraStudio Pro. Media Express lets you batch capture and playback DPX, uncompressed YUV and MJPEG files. You can even create your own playlist. Media Express also supports CMX EDL import and export, frame accurate deck control via RS-422 and will even insert and assemble to tape! Media Express is fast, accurate and easy to use. You can even grab still frames from your deck!
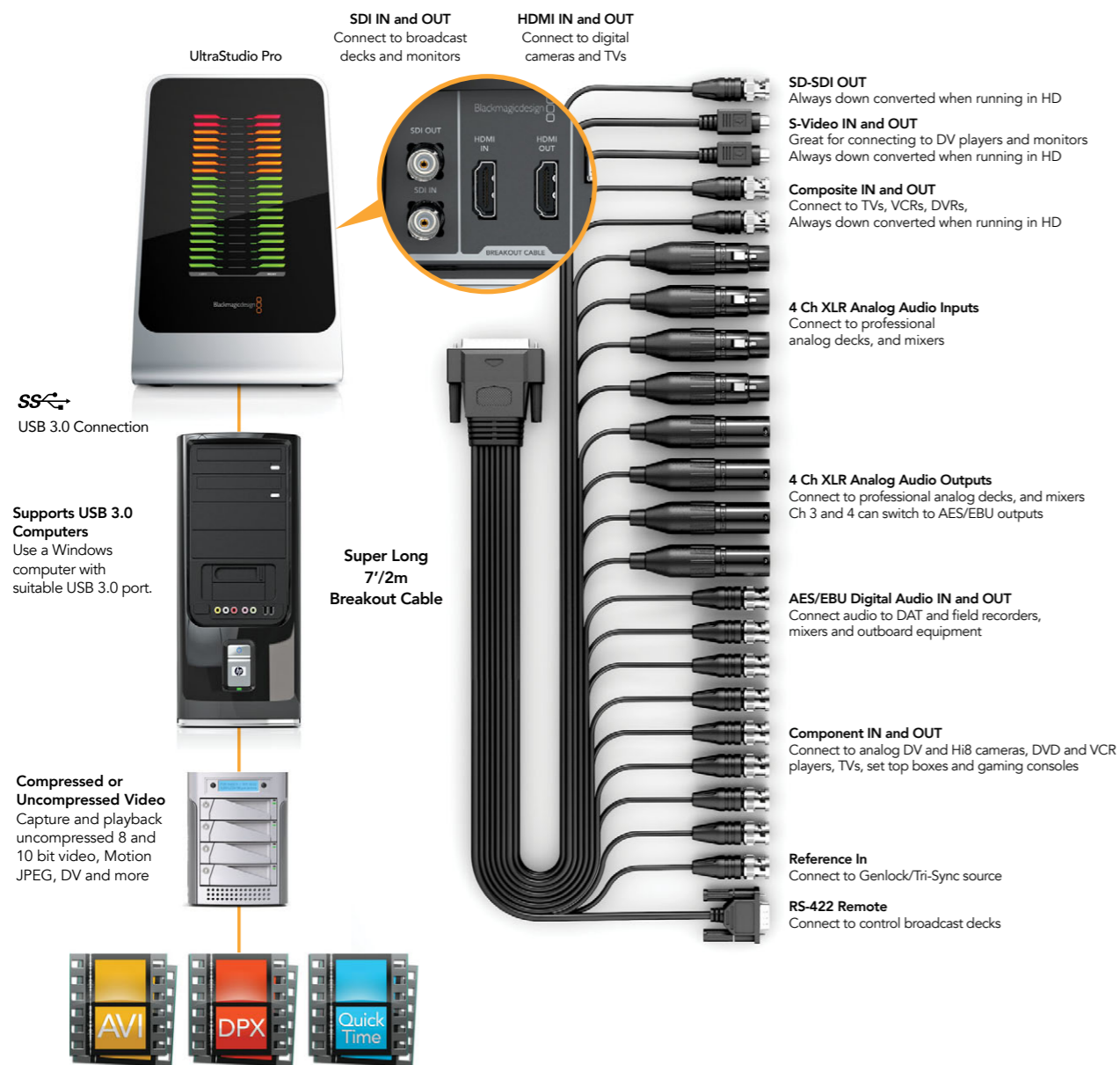
UltraStudio Pro

Direct HDMI Connections

Connect to cameras and digital set top boxes via HDMI for the highest quality. Get incredible quality video from cameras by capturing direct and bypassing the compression chip for professional quality video captured direct from the image sensor. As editing software can't play back to AVCHD and HDV cameras for monitoring, UltraStudio Pro's HDMI output is perfect for monitoring editing with real time effects on the latest big screen televisions and video projectors! That's cinema style monitoring!

Built-in Hardware SD Keyer

UltraStudio Pro includes an amazing quality standard definition digital internal keyer that lets you key RGBA images over the video input. That's a total keying solution built right into UltraStudio Pro. The built-in keyer works great when used with Blackmagic Design's Photoshop plug-ins, or even with RGBA animated video software for keying. Built-in keying is perfect for live events. You can even key over HDMI and analog video!

Capture and Playback to almost anything

UltraStudio Pro

SDI IN and OUT
Connect to broadcast decks and monitors

HDMI IN and OUT
Connect to digital cameras and TVs

SD-SDI OUT
Always down converted when running in HD

S-Video IN and OUT
Great for connecting to DV players and monitors
Always down converted when running in HD

Composite IN and OUT
Connect to TVs, VCRs, DVRs,
Always down converted when running in HD

4 Ch XLR Analog Audio Inputs
Connect to professional analog decks, and mixers

4 Ch XLR Analog Audio Outputs
Connect to professional analog decks, and mixers
Ch 3 and 4 can switch to AES/EBU outputs

AES/EBU Digital Audio IN and OUT
Connect audio to DAT and field recorders, mixers and outboard equipment

Component IN and OUT
Connect to analog DV and Hi8 cameras, DVD and VCR players, TVs, set top boxes and gaming consoles

Reference In
Connect to Genlock/Tri-Sync source

RS-422 Remote
Connect to control broadcast decks

Super Long 7'/2m Breakout Cable

USB 3.0 Connection

Supports USB 3.0 Computers
Use a Windows computer with suitable USB 3.0 port.

Compressed or Uncompressed Video
Capture and playback uncompressed 8 and 10 bit video, Motion JPEG, DV and more

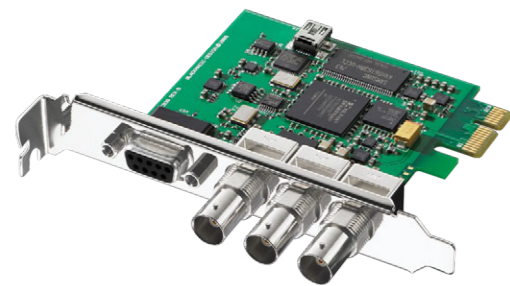| UltraStudio Pro	
Connections	
SDI Video In and Out	SD/HD switchable. Supports 3 Gb/s SDI for future updates.
Analog Video In and Out	Independant connections for component, s-video and composite video. Component SD/HD switchable.
HDMI Video In and Out	SD/HD switchable. Will not capture from copy protected HDMI video sources.
SDI Audio In and Out	8 channels embedded.
Analog Audio In and Out	4 channels balanced. Analog output channel 3 and 4 can switch to AES/EBU digital audio.
HDMI Audio In and Out	8 channels embedded.
AES Audio In and Out	2 ch in and out. Analog output channel 3 and 4 can switch to AES/EBU digital audio for a total of 6 AES/EBU digital audio outputs. AES/EBU digital audio input features sample rate converters.
Computer Interface:	USB 3.0
Device Control:	Sony™ RS-422 Compatible
Processing	
Colorspace Conversion	Hardware based real time.
HD Down Conversion	Built-in, high quality hardware down converter always outputs to SD-SDI, composite and s-video when working in HD video formats. Component output can be switched between HD or SD. Selectable between letterbox, anamorphic 16:9 and center cut 4:3 styles.
HD Up Conversion	Built-in SD-SDI high quality hardware up conversion from SD to 720HD or 1080HD. Selectable between 4:3 pillarbox, 14:9 pillarbox and 16:9 zoom styles. Up converted video outputs to both HD-SDI and component analog video connections.
HD Cross Conversion	Built-in, high quality hardware cross conversion from 720HD to 1080HD and 1080HD to 720HD.
Real time effects	Adobe® Premiere Pro® Mercury Playback Engine effects in DV, MJPEG, DVCPRO HD, DSLR, AVCHD, XDCAM, XDCAM HD and uncompressed.
Standards	
HD Format Support	1080PsF23.98/24, 1080PsF25, 1080PsF29.97, 1080PsF30, 1080p23.98/24, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i59.94, 720p50, 720p59.94 and 720p60.
SD Format Support	625/25 PAL, 525/29.97 NTSC and 525/23.98 NTSC and 480p.
SDI Compliance	SMPTE 259M, 292M.
Video Sampling	4:2:2 10 bit
Color Precision	4:2:2 10 bit
Color Space	4:2:2 YUV
SDI Metadata Support	VITC read for 3:2 pulldown removal. VANC capture and playback using up to 3 lines of video in file. HD RP188.
Audio Sampling	Television rate of 48kHz at 24 bit.
Color Space	4:2:2 YUV
Extras	
Software Included	Media Express, Disk Speed Test, LiveKey, Blackmagic Control Panel, Blackmagic DirectShow Filters and Blackmagic driver on Windows™.
Installation	Requires Intel X58 based motherboard with onboard USB 3.0 or a USB 3.0 PCI Express card. Please check the Blackmagic Design website for full system requirements.
Operating System Compatibility	Compatible with Microsoft Windows™XP Windows Vista and Windows 7.
Product Warranty	3 Year Limited Manufacturer's Warranty.

AVI · DPX · QuickTime

The world's most popular capture cards for post, broadcast and feature films!
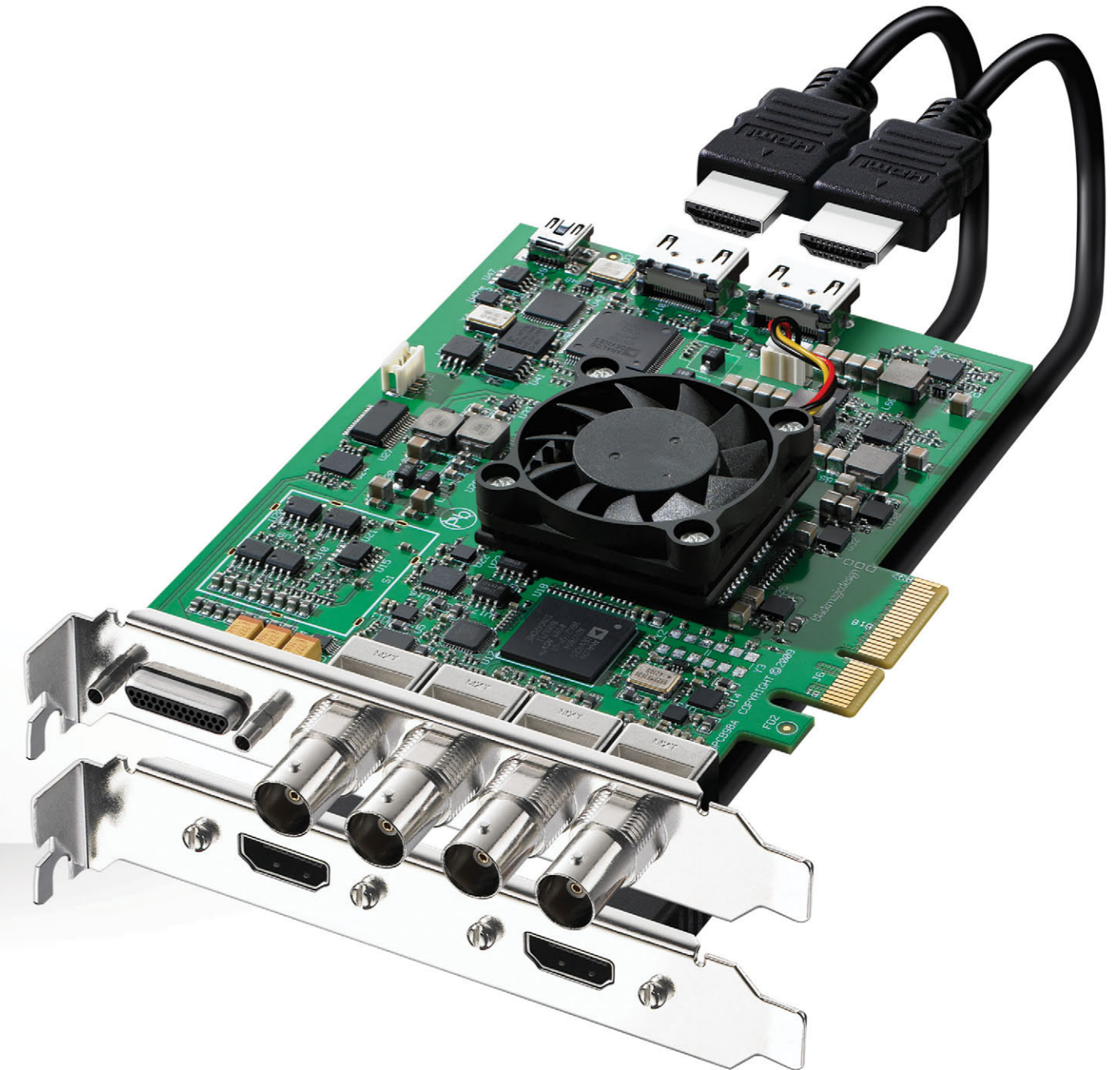
No other capture cards have more video and audio connections than DeckLink!

Now it's easy to connect and to capture and playback SDI, HDMI, analog component, S-Video and composite to your Mac, Windows or Linux computer! DeckLink easily handles SD, HD and 2K video formats and works with popular software such as Final Cut Pro, Premiere Pro, After Effects, Photoshop, Fusion, ProTools and many more!

There are 4 great models of DeckLink, from low cost HD/SD-SDI, right up to dual link 3 Gb/s 2K/HD/SD-SDI models with loads of analog, HDMI and 3D features. For a complete creative workstation solution, all DeckLink cards includes Media Express software for capture and playback of AVI, QuickTime and DPX files on Mac, Windows and Linux.

DeckLink Studio

If you work with a massive range of analog video and audio gear and need to move seamlessly between SD and HD, then DeckLink Studio is perfect! DeckLink Studio includes SD/HD-SDI, HDMI, SD/HD component, composite, s-video, 4 ch balanced analog audio, 2 ch AES/EBU switchable to 6 ch out, black burst and tri-sync reference input, RS-422 deck control connections, keying in SD and a hardware down converter. No other DeckLink card connects to more types of analog video, and DeckLink Studio is perfect when you have a wide range of older analog as well as the latest HD-SDI decks!

$**695**

DeckLink HD Extreme 3D

The new DeckLink HD Extreme 3D features single and dual channel SDI capture and playback for both regular 2D and new 3D stereoscopic workflows! Includes dual link 3 Gb/s SDI, HDMI 1.4 and analog component/composite/s-video connections. Work in SD, HD, 3 Gb/s HD-SDI and 2K in 4:2:2 or 4:4:4. Also includes AES and analog balanced audio, 16 channel SDI audio, genlock and deck control. SDI, HDMI and analog component works in all video formats up to 1080p60. Includes broadcast quality up, down and cross conversion, plus built in SD/HD internal keyer.

$**995**

DeckLink SDI

DeckLink SDI is perfect when you need an SDI only solution but demand high quality 10 bit 4:2:2 based SDI capture and playback. DeckLink SDI plugs into Windows, Mac OS X and Linux computers and features HD/SD-SDI capture and playback combined with tri-sync/black burst reference input and RS-422 deck control. Media Express software is included so you get capture and playback for AVI, QuickTime and DPX on Mac, Windows and Linux. DeckLink SDI is a perfect choice when all your connections are SDI and you don't need analog connections.

$**295**
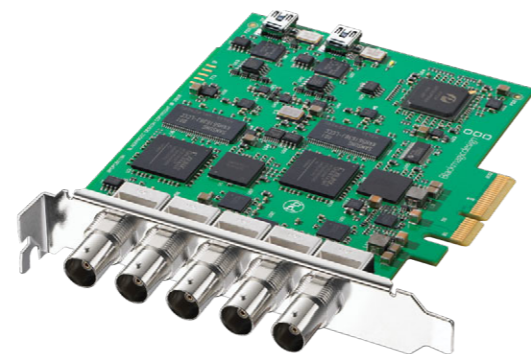
DeckLink Duo

DeckLink Duo is perfect for developers who need two completely independent capture and playback streams in and out of a computer, as both capture and playback channels are completely independent. There are two SDI inputs, and two SDI outputs plus a common tri-sync/black burst reference. DeckLink Duo appears as two independent SDI cards to the computer, but only uses a single PCI Express slot. DeckLink Duo is perfect for servers where there are multiple streams or simultaneous capture and playback per system. DeckLink Duo is compatible with Windows™, Mac OS X™ and Linux™.

$**495**

Connect to Anything

DeckLink HD Extreme 3D connects to a massive range of video and audio equipment for capture and playback in SD, HD and 2K. You get 3 Gb/s SDI, HDMI 1.4, analog component/composite/s-video, 2 channels of AES/EBU with sample rate converter, 2 channels of XLR professional analog audio, genlock/tri-sync and deck control. Work in 2D and 3D dual stream or 3D interleaved. Perfect for HDCAM, HD-D5, HDCAM SR, Betacam SP, Digital Betacam and more!

More Online HD Real Time Effects

DeckLink lets you create as fast as your mind works, because you get more online quality HD real time effects! Unlike FireWire, which is only half the data speed of HD video and needs to use heavy video compression to handle HD, PCI Express eliminates this problem because it's faster than HD video and even 2K film. This means DeckLink cards don't waste CPU time compressing video just for playback, so all your CPU time is dedicated to more HD real time effects.

Mac, Windows and Linux!

DeckLink works with the software you love to use! Use the world's most popular editing software such as Final Cut Pro and Premiere Pro! You also get Photoshop plug-ins to grab and output frames, plus real time preview in After Effects, Fusion and Nuke. No other edit solution supports more software on Windows, Mac OS X or Linux, so now you have the freedom to build your studio your own way!

Hardware Down Converter

DeckLink Studio and DeckLink HD Extreme 3D include a screaming fast video processor for the most incredible quality hardware down conversion. When working in HD video, the hardware down conversion lets you monitor in SD and HD, plus s-video and composite video outputs are always active. For the ultimate in flexibility, the built in hardware down converter instantly switches between letterbox, anamorphic 16:9 and center cut 4:3 video formats.

DeckLink

No other capture cards work with more software than DeckLink

DeckLink cards work with the software you love to use! Use DirectShow™ and QuickTime™ software, or the world's most popular editing software such as Final Cut Pro™ and Premiere Pro™! You also get Photoshop™ plug-ins to grab and output frames, plus real time preview in After Effects™, Fusion™ and Nuke™. No other cards support more software on Windows, Mac OS X or Linux, so now you have the freedom to build your studio your own way!

Final Cut Pro™

Edit in Final Cut Pro™ while using the highest quality 10 bit HD-SDI video connection to HD decks including, HDCAM™ SR, HDCAM™, HD-D5™ and DVCPRO HD™, as well as SD decks such as Digital Betacam™. DeckLink support for Final Cut Pro™ allows you to batch capture from decks and play back the timeline with RT Extreme™ real time effects, all with absolute sample accurate AV sync.

DeckLink cards support more advanced Final Cut Pro™ features such as 10 bit rendering, RT Extreme™, 16 channel audio, deck control, support for ProRes, JPEG, DV, DVCPRO, DVCPRO HD, 8 & 10 bit uncompressed video and more. DeckLink cards are qualified by Apple™ for Final Cut Pro™ compatibility.

Blackmagic Design works closely with Apple on developing our QuickTime drivers, so you know you're getting the best combination for high end editing!

Adobe Photoshop™

DeckLink includes special Photoshop plug-ins, so you can directly capture and output still frames from within the Photoshop. If you're working with 10 bit HD/SD-SDI, you can even import and export 16 bit Photoshop™ images for full quality. Use DeckLink's 'keying to export' and key standard definition graphics from the video input using Photoshop alpha channels.

Outputting Photoshop graphics from DeckLink lets you see the correct color and the effects of video interlace and field movement. DeckLink uses 'unity gain on', so you can't get illegal 100% RGB video levels eliminating surprises when graphics are output to tape!

Fusion™

Fusion is one of the world's most popular effects and compositing software that lets you use node based workflows for both sequential and parallel based effects design and processing. Fusion supports real time out to the video output from any node in the node graph to see live video output from that processing point. Packed with a massive number of powerful features, Fusion is popular with feature film visual effects artists!

Adobe After Effects™

Adobe After Effects is one of the most popular tools for broadcast graphics and animation and DeckLink has special features that take full advantage of this great app! Because After Effects is fully QuickTime™ based, it works with all Blackmagic's media. You can also open and render Blackmagic's uncompressed 10 and 8 bit AVI and QuickTime™ files too. Files can be dropped into Final Cut Pro™ or Premiere Pro timelines without rendering, so you can move media between tools.

DeckLink also provides full RAM preview playback, so you can always see what you're working on. There is no better solution for using After Effects for high end work than DeckLink cards!

Adobe Premiere Pro™

DeckLink is the highest quality editing solution for Adobe Premiere Pro. Included are a full suite of Premiere Pro plug-ins with deck control and full support for 8 and 10 bit uncompressed AVI and QuickTime™ files, as well as Motion JPEG and DVCPRO HD which can all be played back on the same Premiere Pro timeline without rendering. QuickTime™ uncompressed files from Mac OS X™ systems can also be played back for cross-platform media sharing! You can even playback AVCHD, DSLR and XDCAM HD. DeckLink has full support for Premiere Pro's 8 channels of audio capture and playback via HD/SD-SDI, which is great for 5.1 surround sound editing.

Blackmagic Design works closely with Adobe to ensure the Decklink drivers for Premiere Pro include advanced features such as full support for Adobe's Mercury Playback Engine for amazing RT effects, RS-422 deck control, frame accurate batch capture and edit to tape. Our joint development with Adobe guarantees the most professional solution.

Digidesign Pro Tools™

Pro Tools is the world's most popular audio post production tool and now all DeckLink cards support playback of the Pro Tools reference movies out to the video outputs all in real time!

DeckLink

Take a closer look at Media Express

Playlist in Playback Mode
You can load in a huge number of clips for review. Use DPX, MJPEG, uncompressed YUV and RGB, ProRes, DVCPRO HD all in the one playlist.

Realtime Preview
Preview your clips with full frame rate for accurate review.

Audio Metering
With Media Express you can select any of the 16 audio channels. Just simply click on the audio you want to hear.

Capture, Play or Master
Capture on the fly. Play back single or multiple clips. Master to tape via insert or assemble editing.

Dynamic Playlist Search
Organising your playlist has never been easier with Media Express' dynamic playlist search. Even if you have 1,000 clips, you'll always find the right clip.

Clip Information
Now you can see all the important detail information of your clip, including frame size, frame rate, color space, format and codec.

Easy Grab Frame Tool
Media Express makes grabbing frames of your video easy. When the frame you want is displayed in the preview window, just hit Grab Frame.

Blackmagic Media Express 3D Included!

Blackmagic Media Express is free software that comes with every DeckLink card. Media Express lets you batch capture and play back 2D and dual stream stereoscopic 3D in DPX, ProRes, uncompressed YUV and RGB, DVCPRO HD and MJPEG files. You can even create your own playlist. Media Express also supports CMX EDL import and export, frame accurate deck control via RS-422, and will even insert and assemble to tape! Media Express is fast, accurate and easy to use and works on Mac OS X, Windows and Linux. You can even grab still frames directly from your deck and save them as perfect digital quality still images. That's a complete solution for capture and playback!

	DeckLink SDI	DeckLink Duo	DeckLink Studio	DeckLink HD Extreme 3D
Connections				
	SDI Video in and out: SD and HD switchable	SDI Video in and out: 2 x SD and HD independently switchable	SDI Video in and out: SD and HD switchable	SDI Video in and out: Dual Link 3 Gb/s SD, HD and 2K switchable
	Analog Video in and out: None		Analog Video in and out: Component, s-video, composite. Component video is SD and HD switchable.	
	HDMI Video in and out: None		HDMI video in and out: SD/HD switchable	HDMI video in and out: HDMI 1.4 SD/HD and 3D
	SDI Audio in and out: 8 Channels		SDI Audio in and out: 16 channels	
	Analog Audio in and out: None		Analog Audio in and out: 4 channels balanced	Analog Audio in and out: 2 channels balanced
	HDMI Audio in and out: None		HDMI Audio in and out: 2 channels	HDMI Audio in and out: 8 channels
	AES Audio in and out: None		2 ch in and out. Analog output channel 3 and 4 can switch to AES/EBU digital audio for a total of 6 AES/EBU digital audio outputs. AES/EBU digital audio input features sample rate converters.	AES Audio in and out: 2 channels unbalanced. Sample rate converter on input.
	Sync Input: Tri-Sync or Black Burst			
	Device Control: Sony™ RS-422 Compatible	Device Control: None	Device Control: Sony™ RS-422 Compatible	
	PCI Express: 1 Lane	PCI Express: 4 Lane	PCI Express: 1 Lane	PCI Express: 4 Lane
Standards				
	Format Support: 625/25 PAL and 525/29.97 NTSC. 720p50, 720p59.94, 720p60, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i59.94, 1080i60			Format Support: 625/25 PAL and 525/29.97 NTSC. 720p50, 720p59.94, 720p60, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94, 1080p60, 2048 x 1556PsF23.98, 2048 x 1556PsF24 and 2048 x 1556PsF25, 2048 x 1556p23.98, 2048 x 1556p24 and 2048 x 1556p25
Processing				
	Colorspace Conversion: Hardware based real time.			
	HD Down Conversion: Software based down conversion.		HD Down Conversion: Built in, high quality hardware down converter always outputs to SD-SDI, Composite and s-video when working in HD video formats. Component output can be switched between HD or SD. Selectable between letterbox, anamorphic 16:9 and center cut 4:3 styles.	High quality up, down and cross conversion on playback. Choose between Dual Link 4:4:4 or select high quality down converter with HD-SDI on SDI A output, and SD-SDI output on SDI B output. Selectable between letterbox, anamorphic 16:9 and center cut 4:3 styles.
	Up Conversion: SD to 720HD or 1080HD, 720HD to 1080HD on video capture.			Up Conversion: Built in hardware up conversion SD to 720HD or 1080HD, 720HD to 1080HD on playback
	3D processing: None	3D processing: Dual stream YUV 3D capture and playback possible with third party software.	3D processing: None	3D processing: Dual stream capture and playback, side by side, line by line, top and bottom, frame packing supported.
	Real time effects: Apple Final Cut Pro™ RT Extreme effects. Adobe® Premiere Pro® Mercury Playback Engine.			
Test Results				
	Typical HD-SDI Jitter*: 79.0 ps (+0.117 UI) at 100 kHz	Typical HD-SDI Jitter*: 65.8 ps (+0.098 UI) at 100 kHz	Typical HD-SDI Jitter*: 72.4 ps (+0.107 UI) at 100 kHz	Typical HD-SDI Jitter*: 79 ps (+0.107 UI) at 100 kHz
	Typical SD-SDI Jitter*: 325.5 ps (+0.088 UI) at 10 Hz	Typical SD-SDI Jitter*: 325.5 ps (+0.088 UI) at 10 Hz	Typical SD-SDI Jitter*: 361.7 ps (+0.098 UI) at 10 Hz	Typical SD-SDI Jitter*: 253.2 ps (+0.068 UI) at 10 Hz
	SDI Eye Pattern in HD	SDI Eye Pattern in HD	SDI Eye Pattern in HD	SDI Eye Pattern in HD
	SDI Eye Pattern in SD	SDI Eye Pattern in SD	SDI Eye Pattern in SD	SDI Eye Pattern in SD

*Test card was taken from a typical production run. The HD/SD-SDI output from the DeckLink card was connected to a Tektronix WFM-700 HD-SDI waveform monitor and test signal video files were used. Test results can vary slightly from the results above due to component tolerances used in production.
Full technical specifications, including detailed video formats and SDI compliance can be found at Blackmagic Design's website. Please check www.blackmagic-design.com for the latest specifications and updates.

Affordable full resolution SD/HD capture and playback for HDMI and analog video!

Intensity

Capture and play back full resolution HDTV video for true broadcast and feature film quality editing

HDMI   Component   S-Video   Composite   L/R Audio

Intensity Pro and the new Intensity Shuttle with USB 3.0, let you capture and playback in the most incredible quality of HDMI and component analog video in both SD and HD. Smash the quality barrier for your video work because Intensity is not only the highest quality, but also affordable! The new Intensity Shuttle even works on your USB 3.0 based computer for full 10 bit quality even in HD!

Go beyond the limits of your AVCHD or HDV camera! Simply plug in using HDMI or analog and capture direct from your camera's CCD! You get incredible quality that completely bypasses the camera's video compression. Use Intensity for monitoring from your edit software for maximum real time effects! Intensity connects direct to your editing software's real time effects processing!
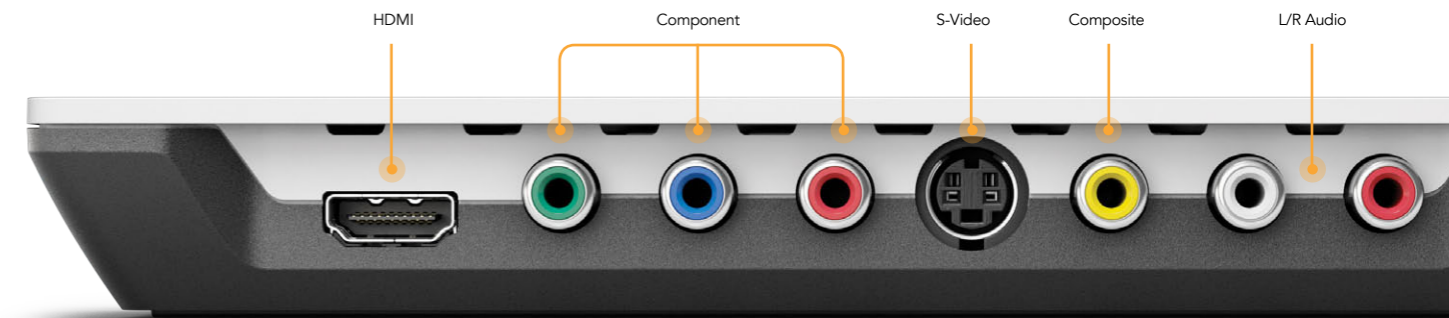
Intensity Pro

Intensity Pro is the world's first HDMI and analog component, NTSC/PAL and S-Video PCIe capture and playback card for Windows, Mac OS X and Linux computers. Intensity Pro is great for HDTV or standard definition editing using big screen televisions and video projectors. Intensity Pro works with uncompressed SD or HD video, and compressed codecs such as ProRes, DVCPRO HD, DVCPRO 50, JPEG, HDV and DV!

Intensity Pro is a professional editing card featuring maximum real time effects in Apple Final Cut Pro™ and Adobe Premiere Pro™, with full support for both uncompressed and compressed AVI and QuickTime files. Intensity Pro also has full integration with Adobe After Effects, Photoshop and Fusion.

$199
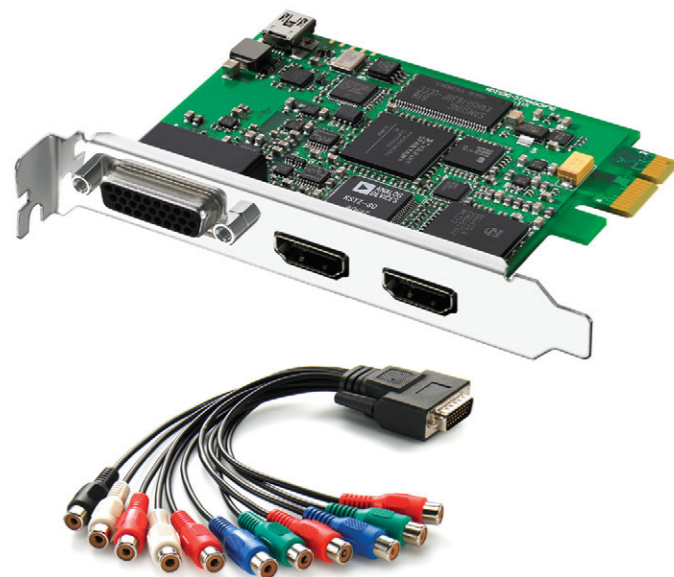
Breakout Cable
Includes component/composite video and audio connections

Intensity Shuttle

Intensity Shuttle, the world's first 10 bit HD/SD editing solution for USB 3.0 computers! Simply plug in Intensity Shuttle and get access to incredible quality 10 bit HDMI, analog component, composite and s-video capture and playback. Intensity Shuttle's innovative design is compact and portable, plus you can plug inline with your cables because input connections are on one side, and output connections on the other!

Intensity Shuttle powers from the USB 3.0 connection so you don't need cumbersome power supplies. Intensity Shuttle comes ready with advanced video technology such as HDMI 1.3 and 1080p electronics, so it will grow as faster high performance USB 3.0 computers are released in the future!

$199

New USB 3.0
For highest quality 10 bit SD and HD!

Direct HDMI Connections

Connecting to cameras and digital set top boxes via HDMI for the highest quality. Get incredible quality video from cameras by capturing direct and bypassing the compression chip for professional quality video captured direct from the image sensor. As editing software can't play back to AVCHD and HDV cameras for monitoring, Intensity is ideal to use for monitoring edits with real time effects on the latest big screen televisions and video projectors by connecting to the built in HDMI out.

Professional Video Standards

Intensity will instantly switch between HD and SD video standards including HDTV 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, NTSC and PAL. Intensity can also capture and play back all professional file formats so you can deliver finished television programs, music videos and other work at broadcast standards. Add broadcast quality to your editing system and move to a new world of video editing where your images always stay absolutely perfect at full resolution HDTV!

More HD Real Time Effects

Intensity Pro and Shuttle let you create as fast as your mind works, because you get more online quality HD real time effects! Unlike FireWire that is only half the data speed of HD video and needs to use heavy video compression to handle HD, PCI Express and USB 3.0 eliminates this problem because it's faster than HD video. This means Intensity doesn't waste CPU time compressing video just for playback, so all your CPU time is dedicated to more HD real time effects.

Use popular Video Software

Intensity Pro works with the software you love to use! Use DirectShow™ and QuickTime™ software, or the world's most popular editing software such as Final Cut Pro™ and Premiere Pro™! You also get Photoshop™ plug-ins to grab and output frames, plus real time preview in After Effects™, Fusion™ and Nuke™. Intensity Shuttle supports Windows USB 3.0 computers and fully integrates with Premiere Pro, Photoshop, After Effects, Fusion, Nuke and more!

Intensity

Adobe Premiere Pro

Intensity Pro and Shuttle is one of the highest quality editing solutions for Premiere Pro™. Included are a full suite of Premiere Pro plug-ins with deck control and full support for 8 and 10 bit uncompressed AVI and QuickTime files, plus Motion JPEG. Intensity Pro and Shuttle have full support for Premiere Pro's 8 channels of audio, which is great for 5.1 surround sound editing. Blackmagic Design Premiere Pro drivers also include advanced features such as RT effects.

Final Cut Pro

Intensity Pro supports more advanced Final Cut Pro features such as 10-bit rendering, RT Extreme, 8 channel audio, support for ProRes, DV, DVCPRO, DVCPRO HD, XDCAM HD, 8 and 10-bit uncompressed video and more. Intensity Pro is qualified by Apple for Final Cut Pro compatibility. Blackmagic Design works closely with Apple developing our Quicktime drivers so you know you're getting the best combination for high end editing!

Sony Vegas Pro

Sony Vegas Pro works seamlessly with Intensity Pro and Shuttle for an incredible SD and HD editing experience! Use powerful video effects and versatile audio editing tools while previewing your work in real time even with full HD projects! Capture up to 10 bit uncompressed so you can start with the best possible image quality for your Blu-ray Disc creation or Windows Media 9 content distribution.

Adobe After Effects

Adobe After Effects™ is great for broadcast graphics and animation. After Effects works with files captured with Intensity Pro and Shuttle. You can open and render Blackmagic's uncompressed 10 and 8 bit AVI and QuickTime files and then drop them directly into the Premiere Pro timeline! Intensity Pro and Shuttle provides full RAM preview playback, so you can always see what you're working on.

Includes Media Express for capture and playback

Playlist in playback mode
You can load in a huge number of clips for review. Use DPX, MJPEG, uncompressed YUV, ProRes, and DVCPRO HD all in the one playlist.

Realtime Preview
Preview your clips with full frame rate for accurate review.

Audio metering
With Media Express you can select any of the audio channels. Just simply click on the audio you want to hear.

Capture or Play
Capture on the fly. Play back single or multiple clips.

Dynamic Playlist Search
Organising your playlist has never been easier with Media Express's dynamic playlist search. Even if you have 1,000 clips, you'll always find the right clip.

Clip Information
Now you can see all the important detail information of your clip, including frame size, frame rate, color space, format and codec.
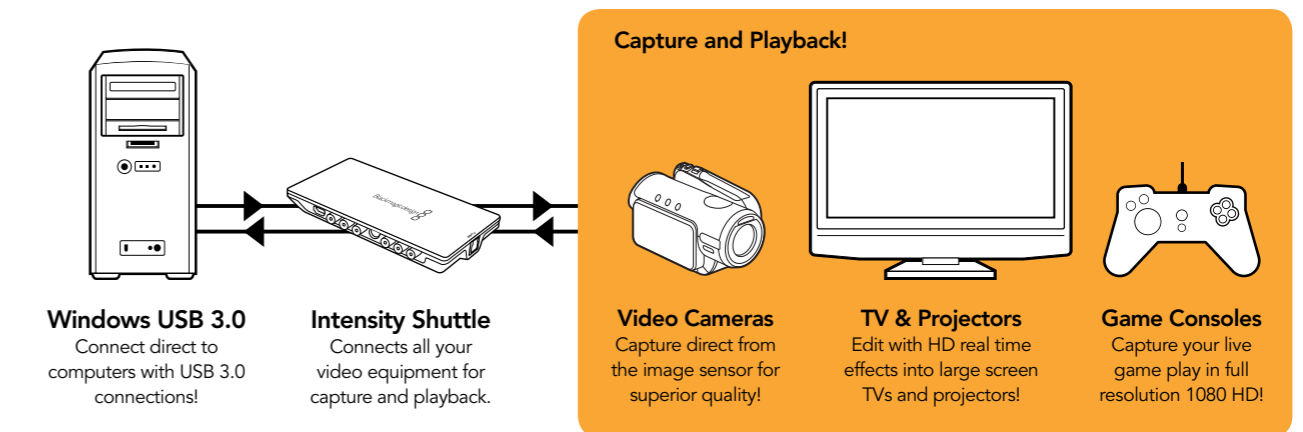
Easy Grab Frame Tool
Media Express makes grabbing frames of your video easy. When the frame you want is displayed in the preview window, just hit grab frame.

Includes Blackmagic Media Express!

Intensity Pro and Shuttle includes Media Express so you can capture and play back video fast! Use Media Express to work with professional file formats for maximum quality. Capture and play back DPX, ProRes, uncompressed YUV, DVCPRO HD and MJPEG files. You can even create your own playlist. Media Express is fast and easy to use and works on Mac OS X™, Windows™ and Linux. Intensity Pro and Shuttle supports Windows™ USB 3.0 computers for uncompressed, compressed and DPX video. You can also grab still frames directly from the Intensity video input!

Intensity Pro	Intensity Shuttle
Connections	
Digital Video Input: 1 x HDMI input. Unable to capture from copy protected HDMI sources.	
Digital Video Output: 1 x HDMI output.	
Supported HDMI formats: 480p NTSC, 525 NTSC, 625 PAL, 720HD and 1080HD switchable.	
HDMI Audio Input: 2 Channels.	**HDMI Audio Input:** 8 Channels.
HDMI Audio Output: 2 Channels.	**HDMI Audio Input:** 8 Channels.
Analog Video Input: Component, NTSC, PAL or S-Video.	**Analog Video Input:** Independent connections for Component and Composite and S-Video.
Analog Video Output: Component, NTSC, PAL or S-Video.	**Analog Video Output:** Independent connections for Component and Composite and S-Video.
Analog Audio Input: 2 Channel RCA HiFi audio in 24 bit.	
Analog Audio Output: 2 Channel RCA HiFi audio in 24 bit.	
SPDIF Audio Output: 2 Channel 24 bit.	**SPDIF Audio Output:** None
Dual Rate support: HDMI and Analog Component switches between high definition and standard definition.	
Sync Input: None	
Device Control: None.	
Computer Interface: PCI Express 1 lane, compatible with 1,4,8 and 16 lane PCIe slots.	**Computer Interface:** USB 3.0
Standards	
SD Format Support: 625i/50 PAL and 525i/59.94 NTSC.	**SD Format Support:** 625i/50, 625p PAL and 525i/59.94, 525p NTSC, 480p29.97, 480p30 and 480p60.
HD Format Support: 1080i50, 1080i59.94, 1080i60,1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 720p50, 720p59.94, 720p60	**HD Format Support:** 1080i50, 1080i59.94, 1080i60,1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 720p50, 720p59.94, 720p60
HDMI Video Sampling: 4:2:2.	
HDMI Color Precision: 4:2:2.	
HDMI Color Space: YUV 4:2:2.	
HDMI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.	
Processing	
Colorspace Conversion: Hardware based real time.	
Real time effects: Apple Final Cut Pro™ RT Extreme effects. Adobe® Premiere Pro® Mercury Playback Engine.	**Real time effects:** Adobe® Premiere Pro® Mercury Playback Engine.
Extras	
Firmware Upgrade: Firmware built into software driver.	
Installation: PCI Express 1 lane, compatible with 1,4,8,16 lane PCI Express slots on Mac, Windows and Linux. Please check the Blackmagic Design web site for system compatibility information.	**Installation:** USB 3.0. Requires Intel X58 or P55 based motherboards with onboard USB 3.0 or a USB 3.0 PCI Express card. Must be used with a USB 3.0 port. USB 2.0 capture and playback is not supported. Please check the support page for full system requirements.
Operating System Compatibility: Compatible with Microsoft Windows XP™, Windows Vista™, Windows 7™, Apple Mac OS X™ and Linux™.	**Operating System Compatibility:** Compatible with Microsoft Windows XP™, Windows Vista™ and Windows 7™
Product Warranty: 12 Months Limited Warranty.	

Windows USB 3.0
Connect direct to computers with USB 3.0 connections!

Intensity Shuttle
Connects all your video equipment for capture and playback.

Capture and Playback!

Video Cameras
Capture direct from the image sensor for superior quality!

TV & Projectors
Edit with HD real time effects into large screen TVs and projectors!

Game Consoles
Capture your live game play in full resolution 1080 HD!

Multibridge

Incredible quality rack mount
editing and design!

Multibridge

Industrial strength SD, HD, 2K editing and design solution for post production and broadcast!

Multibridge is the highest quality PCI Express rack mount capture and playback solution that instantly switches between SD, HD and 2K, in 4:2:2 or 4:4:4 video quality. Connect to your PC or Mac with high speed 10 Gb/s PCI Express for the world's highest quality editing system. With two models to choose from, there is a powerful Multibridge model for every workflow.

Multibridge connects to SDI, HDMI, component analog, NTSC/PAL and S-Video equipment for capture and playback, while instantly switching between SD, HD and 2K. Now you can work with the widest range of equipment, such as HDCAM, HD-D5, HDCAM SR, Betacam SP, Digital Betacam, HD receivers, AVCHD and HDV cameras, televisions, video projectors, mixers and many more!

Multibridge Eclipse

Multibridge Eclipse is the most sophisticated SD, HD and 2K film editing system available. Featuring 32 broadcast accurate VU meters you get dual link 3 Gb/s SDI, HDMI, analog component, composite and S-Video connections, 4 channel balanced analog audio, 12 channel AES/EBU with sample rate conversion, 16 channel SDI audio, reference input and deck control! Instantly switches between SD, HD and 2K, as well as 4:2:2 and 4:4:4!

$2,395

Multibridge Pro

Compact, but packed with powerful features, Multibridge Pro is an advanced editing system in a compact 1 rack unit size. You get dual link 3 Gb/s SDI, HDMI, analog component, composite and S-Video connections, 2 channel balanced analog audio, 8 channel AES/EBU with sample rate conversion, 16 channel SDI audio, reference input and deck control! Instantly switches between SD, HD and 2K, as well as 4:2:2 and 4:4:4! Multibridge Pro is incredible value!

$1,595

Massive Video and Audio Connections!

Capture and playback from any SDI, HDMI or analog broadcast deck, camera or monitor! SDI, HDMI and analog connections switch between SD, HD, plus all Multibridge models support dual link 3 Gb/s SDI, so you can capture and playback 4:2:2 and 4:4:4 video or even real time 2K film resolution at 24 fps! Nothing else has more audio connections! Multibridge Eclipse supports a massive 16 channel SDI audio, 12 channel AES/EBU audio and 4 channels of balanced analog audio!

World's Highest Quality

Multibridge is the first solution with 3 Gb/s SDI allowing native 2K editing, while retaining full compatibility with HD-SDI and SD-SDI equipment. Both Multibridge Pro and Multibridge Eclipse feature incredible quality Dual Link 4:4:4 SDI and Single Link 4:2:2/4:4:4 SDI in 8 and 10 bit. Dual Link 4:4:4 can be used for connecting to decks such as the Sony's HDCAM SR.
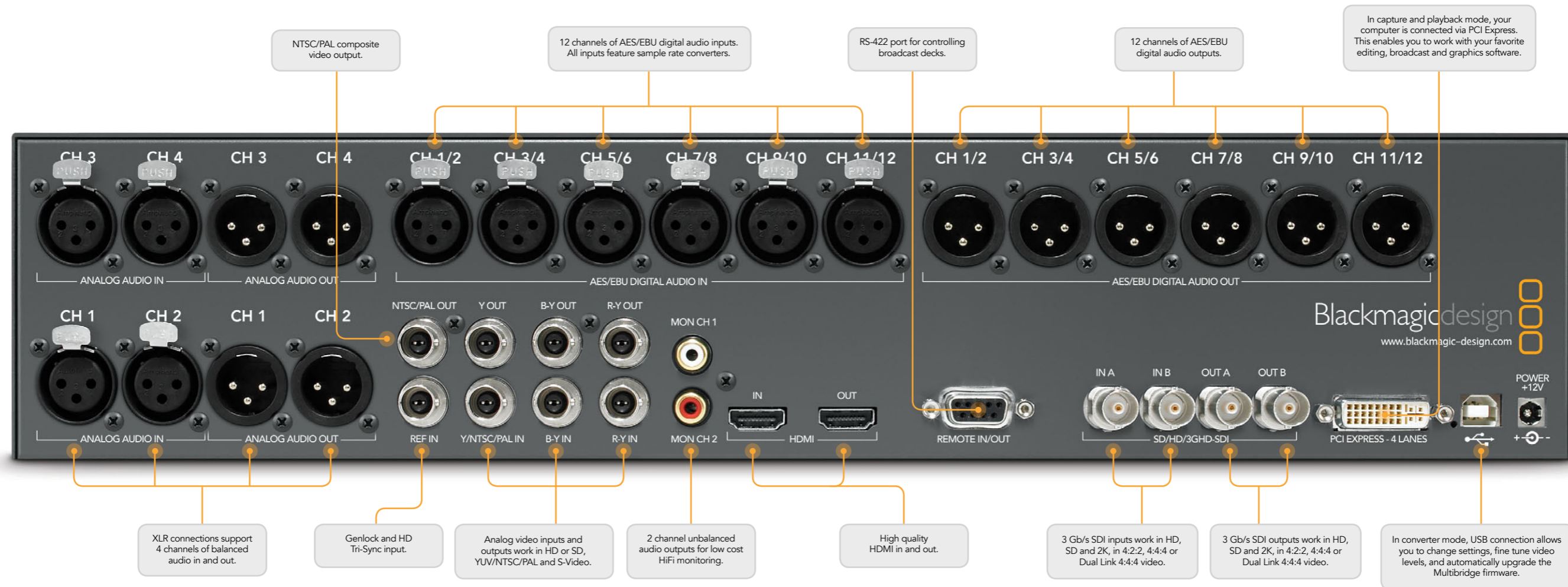
High Speed PCI Express Connection

Both Multibridge Pro and Multibridge Eclipse have a super fast 10 Gb/s connection that plugs directly into the computer's motherboard. Unlike FireWire, PCI Express doesn't suffer latency or require any video compression, so you get the fast-acting and most fluid editing experience at the highest video quality.

More HD Real Time Effects!

Multibridge lets you create as fast as your mind works, because you get more online quality HD real time effects! Unlike FireWire which is only half the data speed of HD video and needs to use heavy video compression to handle HD, PCI Express eliminates this problem because it's faster than HD video and even 2K film. This means Multibridge won't waste CPU time compressing video just for playback, so all your CPU time is dedicated to more HD real time effects.

Multibridge

Take a closer look at Multibridge

NTSC/PAL composite video output.

12 channels of AES/EBU digital audio inputs. All inputs feature sample rate converters.

RS-422 port for controlling broadcast decks.

12 channels of AES/EBU digital audio outputs.

In capture and playback mode, your computer is connected via PCI Express. This enables you to work with your favorite editing, broadcast and graphics software.

XLR connections support 4 channels of balanced audio in and out.

Genlock and HD Tri-Sync input.

Analog video inputs and outputs work in HD or SD, YUV/NTSC/PAL and S-Video.

2 channel unbalanced audio outputs for low cost HiFi monitoring.

High quality HDMI in and out.

3 Gb/s SDI inputs work in HD, SD and 2K, in 4:2:2, 4:4:4 or Dual Link 4:4:4 video.

3 Gb/s SDI outputs work in HD, SD and 2K, in 4:2:2, 4:4:4 or Dual Link 4:4:4 video.

In converter mode, USB connection allows you to change settings, fine tune video levels, and automatically upgrade the Multibridge firmware.

Pr **Adobe Premiere Pro**

Multibridge is the highest quality editing solution for Premiere Pro™. Included are a full suite of Premiere Pro plug-ins with deck control and full support for 8 and 10 bit uncompressed AVI and QuickTime files, plus Motion JPEG. Multibridge has full support for Premiere Pro's 8 channels of audio, which is great for 5.1 surround sound editing. Blackmagic Design Premiere Pro drivers include advanced features such as RT effects, RS-422 deck control and frame accurate batch capture!

AE **Adobe After Effects**

Adobe After Effects™ is great for broadcast graphics and animation. After Effects works with files captured with Multibridge. You can open and render Blackmagic's uncompressed 10 and 8 bit AVI and QuickTime files and then drop them directly into the Premiere Pro timeline! Multibridge provides full RAM preview playback, so you can always see what you're working on. Use Media Express with After Effects for capture and playback in QuickTime, AVI and even DPX files!

Final Cut Pro

Multibridge supports more advanced Final Cut Pro features such as 10-bit rendering, RT Extreme, 16 channel audio, frame accurate capture and playback deck control, support for ProRes, DV, DVCPRO, DVCPRO HD, XDCAM HD, 8 and 10-bit uncompressed video and more. Multibridge is qualified by Apple for Final Cut Pro compatibility. Blackmagic Design works closely with Apple developing our Quicktime drivers so you know you're getting the best combination for high end editing!

Includes Media Express Software

Blackmagic Media Express is free software that comes with Multibridge. Media Express lets you batch capture and playback DPX, uncompressed YUV and MJPEG files. You can even create your own playlist. Media Express also supports CMX EDL import and export, frame accurate deck control via RS-422 and will even insert and assemble to tape! Media Express is fast, accurate and easy to use. You can even grab still frames from your deck!

Multibridge

Works on Mac, Windows and Linux!

Multibridge works with the software you love to use! Use the world's most popular editing software such as Final Cut Pro™ and Premiere Pro™! You also get Photoshop™ plug-ins to grab and output frames, plus real time preview in After Effects™, Fusion™ and Nuke™. No other edit solution supports more software on Windows™, Mac OS X™ or Linux, so now you have the freedom to build your studio your own way!
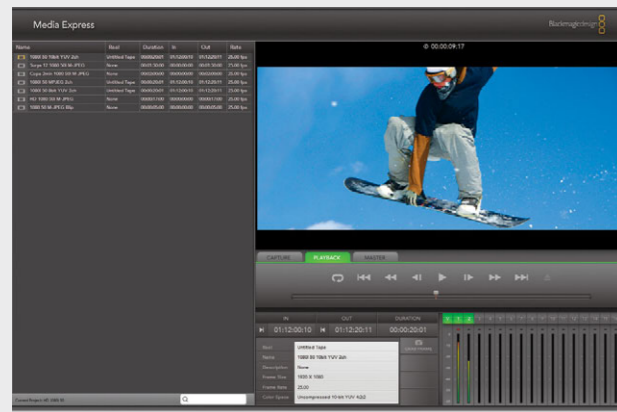
Advanced 3 Gb/s SDI Technology

With the exciting new 3 Gb/s SDI connections built in, Multibridge allows twice the SDI data rate than normal HD-SDI. Use 3 Gb/s SDI for 4:4:4 HD with a single BNC connection, or use Blackmagic Design's new 2K via SDI for high resolution real time 2048 x 1556 feature film editing. Only 3 Gb/s SDI technology provides full compatibility with SD, HD and 2K, in 4:4:4 or 4:2:2, all with a single BNC cable.

Media Express Software Included!

Blackmagic Media Express is free software that comes with both Multibridge Pro and Multibridge Eclipse. Media Express lets you batch capture and play back DPX, ProRes, uncompressed YUV and RGB, DVCPRO HD and MJPEG files. You can even create your own playlist. Media Express also supports CMX EDL import and export, frame accurate deck control via RS-422, and will even insert and assemble to tape!

Media Express is fast, accurate and easy to use and works on Mac OS X, Windows and Linux. You can even grab still frames directly from your deck!

Multibridge Pro	Multibridge Eclipse
Connections	
SDI Video Input: 2 x 10 bit SD, HD, 3Gb/s HD and 2K switchable. Usable as Dual Link HD-SDI for 4:2:2 or 4:4:4 connection or 3 Gb/s for HD-SDI 4:4:4 or 2K.	
SDI Video Outputs: 2 x 10 bit SD, HD, 3Gb/s HD and 2K switchable. Usable as Dual Link HD-SDI for 4:2:2 or 4:4:4 connection or 3 Gb/s for HD-SDI 4:4:4 or 2K.	
SDI Compliance: SMPTE 259M, SMPTE 292M, SMPTE 373M, SMPTE 425M-B, ITU-R BT.656, ITU-R BT.601.	
Supported SDI Formats: 525 NTSC, 625 PAL, 720HD, 1080HD and 2K 2048 x 1556 switchable.	
Analog Video Input: Component YUV, NTSC, PAL and S-Video switchable between SD and HD in Component.	
Analog Video Output: Component YUV, NTSC, PAL and S-Video switchable between SD and HD in Component.	
Supported Analog Formats: 525 NTSC, 625 PAL, 720HD and 1080HD switchable.	
SDI Audio Input: 16 Channels in HD and 2K capture and playback mode. 8 Channels supported in SD. 16 Channels de-embedding supported from SDI input in converter mode.	
SDI Audio Output: 16 Channels in HD and 2K capture and playback mode. 8 Channels supported in SD. 16 Channels embedding supported to SDI output in converter mode.	
Analog Audio Input: 2 Channels of professional balanced XLR analog audio.	**Analog Audio Input:** 4 Channels of professional balanced XLR analog audio.
Analog Audio Output : 2 Channels of professional balanced XLR analog audio. 2 Channels of unbalanced RCA analog audio for monitoring.	**Analog Audio Output :** 4 Channels of professional balanced XLR analog audio. 2 Channels of unbalanced RCA analog audio for monitoring.
AES/EBU Audio Input: 4 x inputs on DB-25 for 8 audio channels. Sample rate converted.	**AES/EBU Audio Input:** 6 x inputs on XLR connectors for 12 audio channels. Sample rate converted.
AES/EBU Audio Output : 4 x outputs on DB-25 for 8 audio channels.	**AES/EBU Audio Output :** 6 x outputs on XLR connectors for 12 audio channels.
HDMI Audio Input: 2 Channels.	
HDMI Audio Output: 2 Channels.	
Audio Capture Support: 16 Channels in HD and 2K, 8 channels in standard definition.	
Audio Playback Support: 16 Channels in HD and 2K, 8 channels in standard definition.	
HDMI Video Input: Direct HDMI connection supports HDMI capture from HDMI compatible cameras, set top boxes, decks and video games.	
HDMI Video Output: Direct HDMI connection supports HDMI digital compatible displays, such as a TV or video projector. Includes both audio and video.	
HDMI Configuration: HDMI automatically configures to connected display.	
HDMI Resolution: Pixel for pixel HD resolution input to connected device.	
HDMI Color Precision: 4:2:2 10 bit.	
Multi Rate Support: SDI and component analog video connections are switchable between standard definition and high definition. SDI switches between 270 Mb/s standard definition SDI, 1.5 Gb/s HD-SDI and 3 Gb/s HD and 2K SDI.	
2K Film Support: 2048 x 1556 at 23.98fps, 24fps and 25fps capture and playback via SDI.	
Sync Input: Blackburst in SD or TriSync HD.	
Device Control: Sony™ compatible RS422 deck control port. Serial ports TxRx direction-reversible under software control.	
Processing	
Colorspace Conversion: Hardware based real time.	
HD Down Conversion: Supports playback from HD to SD. Supports down conversion on capture from HD video input to SD files. Anamorphic and letter box formats selectable.	
HD Up Conversion: Supports capture from SD and 720HD video input to 1080HD files.	
Real time effects: Apple Final Cut Pro™ RT Extreme effects. Adobe® Premiere Pro® Mercury Playback Engine.	
DeckLink Driver Extras	
Configuration Software: Blackmagic Design System Preference and Control Panel.	
Software Included: Media Express, Disk Speed Test, LiveKey, Blackmagic Control Panel, Blackmagic DirectShow Filters and Blackmagic driver on Windows, Mac OS X and Linux.	
Installation: Connected via PCI Express cable and plug in adapter card on compatible PCIe Windows systems and PCIe Apple Mac OS X systems. Requires PCI Express x4 lane slot or faster. Please see the full system requirements for Mac OS X™ and Windows™.	
Extras	
Software Control: Multibridge Utility included free for Windows XP™, Windows Vista™, Windows7™ and Mac OS X™.	
Firmware Upgrade: Automatically upgrades when new software is installed.	
Installation: Rack Mount. Adhesive rubber feet included.	
Product Warranty: 3 Year Limited Manufacturer's Warranty.	

Hollywood's most powerful color correction!

Shown with Blackmagic UltraScope

DaVinci Resolve

The world's most powerful
color correction now on Linux and Mac!

DaVinci color correctors have been the standard in post production since 1984. There are thousands of colorists worldwide who understand the performance, quality and workflow of DaVinci. DaVinci is the name behind more feature films, television commercials, documentaries, television production and music videos than any other grading system.

When you're in a room full of demanding clients with conflicting ideas, colorists know that only DaVinci has the quality, real time performance, creative features, and powerful control panel you need to work fast! DaVinci Resolve upgrades as you grow, and is now available for both Mac OS X and the clustered super computer power of Linux!

Now on Mac and Linux
Blackmagic Design now brings the world's most powerful color correction tools to the Mac. Get an affordable solution with mind blowing power. Then upgrade to Linux if you want unlimited GPU power for 2K and 4K or even 3D!

DaVinci Resolve Software
Software Only

DaVinci Resolve for the Mac is the world's most advanced color correction as a software only solution compatible with high performance GPU cards and off the shelf control panels such as the Tangent Wave™. Includes 32 bit float YRGB processing for all effects, power windows, tracking, primaries and secondaries and 3D object tracker. Great first color correction solution when you are working heavily in SD and HD!

$**995**

DaVinci Resolve
Includes Resolve Control Surface

Upgrade from the software only solution to include the DaVinci Resolve Control Surface. The control surface and Resolve software have been designed by colorists to work together in total harmony. Controls have been placed near your natural hand positions and lift, gamma and gain can all be adjusted at the same time. Each correction control has a separate button or knob so you can instinctively reach out and touch every part of your image. Also includes a full license for DaVinci Resolve software for Mac.

$**29,995**

DaVinci Resolve Linux License
Requires $29,995 Resolve Control Surface above

If you need more power for high resolutions such as 2K or 4K, stereoscopic 3D feature films, or real time grading of raw RED files, then just upgrade your DaVinci Resolve with Control Surface to a full Linux software license. Available from selected DaVinci resellers, adding this software license lets you smash the limitations of a single computer because it allows a cluster of computers with high performance GPU cards, so all processing is always real time. You get the power of a super computer, and the full license means you can just keep purchasing GPUs and CPUs via high speed InfiniBand for as much power as you need at no extra cost! Only DaVinci Resolve scales up as your needs increase!

$**19,995**

Unlimited Power

Computer based solutions are always limited to the single computer you're running on. DaVinci Resolve on Linux smashes this limitation, because it's based on a cluster of Linux computers with high performance GPU cards, so all processing is always real time. This means DaVinci Resolve has all the power of a super computer for the real time performance you need when you're in a room full of clients. Add dozens of primaries, secondaries, power windows, multi point tracking, blurs, and more, then just hit play. It always works!

Unlimited Creativity!

DaVinci Resolve uses node based image processing where each node can have color correction, power windows and effects. Nodes are similar to layers, but much more powerful because you can change the connections between the nodes. Join nodes sequentially, or in parallel to combine grades, effects, mixers, keyers, custom curves in any order for mind blowing creative styles, that are totally unhindered by technical limitations. You can reconnect nodes in any order for all types of exciting and cutting edge creative looks.

Upgrade as you Grow

DaVinci Resolve comes in three powerful solutions. Start out with DaVinci Resolve Software on Mac for powerful color correction with the full DaVinci Resolve feature set. You're only limited by the GPU processing on the Mac! If you need faster workflow, DaVinci Resolve with control surface is ideal. You get seamless control with buttons and knobs for all Resolve features. When you need unlimited real time corrections and layers for 2K, 4K and 3D work, then only DaVinci Resolve on Linux has the performance you need. Add multiple GPUs and CPUs for massive super computer power unmatched by any other color correction solution.

Step up to Unlimited Power
Upgrade in thee easy steps as your needs grow!

1 Resolve Software Only   **2** Resolve Software with Control Surface   **3** Resolve Software Linux License

Step 1. DaVinci Resolve software only is a great starting point with full features for powerful grading on Mac OS X, or even an offline grading solution for offline job setups.

Step 2. Includes the same software for Mac OS X, as well as the incredible DaVinci Resolve Control Surface! Work faster with buttons and controls for all Resolve functions!

Step 3. Adds a Linux software license to the Resolve Software with Control Surface for unlimited grading power. Just keep adding GPUs and CPUs for the world's most powerful grading solution!

DaVinci Resolve

The award winning interface that lets you work faster

Color Page
This is the main page where all color correction is performed, and you get instant feedback on all your creative choices.

Viewer Display
See the current clip with playback controls and cursors for positioning power windows.

Timecode and Transport Control
View your current timecode, shuttle and position your timeline grading position and set the display of the viewer.

Clip Display
See all the clips in your timeline, and automatically cue or jump to clips in your timeline with a simple click!

Primary Color Correction Display
Get precise feedback and control of your primary color corrections with unique YRGB controls for lift, gamma and gain, as well as printer light offsets.

Node Graph Display
Nodes visually represent the processing applied to the current clip in this easy to see display. Nodes let you add processing sequentially or in parallel.

Gallery Display
Stills and memories are stored here for referencing, or recalling previous grades and memory stores.

Project Timeline
Scroll or jump to various clips by moving the cursor across the timeline.

Secondary Color Correction Display
Secondary control of custom curves and hue, saturation and luminance qualifiers for image isolation and correction.

Dynamics Timeline
The Dynamics Timeline shows dynamic transitions of each individual clip in layered form. You can adjust dynamic transitions including dissolve ramps.

Engineered to Perfection

DaVinci's high quality image processing is so revolutionary it won an Emmy™ award for contributions to the television industry! All image processing is the deepest 32 bit floating point and all effects, power windows, tracking, primaries and secondaries operate at the highest bit depths in real time. That's the engineering perfection clients demand.

Optical Quality Processing

DaVinci Resolve supports flat gamma, linear or log images with equal ease and quality. If you need to resize, reposition or zoom any shot, then DaVinci Resolve does it all in real time at full RGB optical quality even when grading mixed formats, mixed pixel aspect ratios and mixed resolutions all on the same timeline. Only DaVinci Resolve uses full YRGB processing.

Get Your Job Done Fast!

DaVinci Resolve handles source material common in busy post production facilities. Automatically link color correction metadata to the master grade. Load an EDL for an instant conform of your timeline and grade multiple versions of the edit all at the same time! The DaVinci Resolve Automatic Scene Detector can even create EDLs fast!

Grade Raw Red Files Realtime

DaVinci Resolve Linux allows full unlimited grading of raw RED files in real time so you're not limited by rendering before grading. Choose from a huge range of file formats such as DPX, CIN, QuickTime, DNxHD and native RED R3D with full de-bayer all in real time. You can even work with TIFF, JPEG, TGA and BMP and multi channel audio!

World's Greatest 3D Tracker

DaVinci Resolve includes the world's most powerful 3D tracker for locking Power Windows™ to on screen objects. No more time wasting on keyframe generation! 3D object tracking automatically follows the objects movement, position and size, even if it's tracking someone's face and they turn their head sideways! Resolve automatically adds up to 99 tracking points!

Innovative Stereoscopic 3D

With the latest feature films in full stereoscopic 3D, DaVinci Resolve on Linux easily handles these new demanding workflows. When running stereoscopic hardware, you can grade and view two eyes at the same time, all in real time with no rendering and no proxies. Each eye can have its own, or a common grade and you can change the position of each eye.

DaVinci Resolve

Introducing the world's most intuitive and elegant control surface for color correction!

High Resolution LCD Displays
5 super bright full color displays show menus and indicators for a massive 62 soft knobs and buttons.

Reference Keys and Fader T-bar
Includes reference frame quick recall keys and the fader T-bar lets you wipe between reference stills.

Soft Knobs
Each soft knob allows super fine parameter adjustment, and with a simple push, you can set each parameter back to the default. Knobs have no electrical contacts, so they don't wear out.

Lift, Gamma and Gain Trackballs
Trackballs provide RGB balance adjustments and gain for lift, gamma and gain.

Illuminated Keys
Custom backlit keys feature RGB color and intensity to suite your mood and taste! No other control surface looks as amazing in a darkened room!

Slide out Keyboard
Slide the keyboard when you need to name files. When you don't need the keyboard, it simply retracts back into the control surface.

Integrated Control Surface

Only the DaVinci Resolve control surface and software have been specifically designed by colorists to work together in total harmony. Controls have been placed near your natural hand positions keeping the on screen software interface clear of clutter for better visual feedback of your work. Trackballs have been placed together so lift, gamma and gain can all be adjusted at the same time. Each control has a separate button or knob so you can instinctively reach out and touch every part of your image.

Let Your Emotions Flow!

Colorists know that color correction is all about reaching into the image and letting your emotions and creativity flow to create the perfect shot. It's just like holding the images in your hands and molding them into absolute perfection!

Heads Up Grading

Buttons can be set to any custom color, and with a huge 38 independent soft knobs with automatic color labels, you'll never have to page through multiple menus for common adjustments. Full deck control buttons with jog and shuttle are built in. All grade memories and gallery still frames can be recalled with a simple press of a button. With the DaVinci Resolve control surface, you can keep your head up viewing your grading monitor while you control your grading at full speed!

Transport Controls
The jog/shuttle knob and transport control keys give you full control of your project timeline or deck.

DaVinci Revival

Incredibly powerful film restoration and repair!

DaVinci Revival

Cutting edge film restoration toolset with network rendering for extreme performance!

DaVinci Revival is the world's best film restoration software with incredible features to repair all types of film damage, as well as powerful network rendering for unlimited speed. Remove problems such as film grain, dust, dirt and scratches, eliminate scratches, kill flicker, fix registration and weave problems, and repair warping from bad film splices. DaVinci Revival comes in two affordable solutions. The powerful DaVinci Revival Pro even includes software render nodes for massive rendering speeds!

DaVinci Revival

Revival is a fantastic entry level linux based software tool that lets you manually restore film originated video files in SD, HD or data up to 4K! Revival has interactive tools for the manual repair or removal of common film based image problems. These include region of interest (ROI) motion compensated dirt and dust removal with a variety of choice for support frames, reveal brush image from any clip or frame, and splice or extreme frame damage repair and frame reconstruction.

$1,495

DaVinci Revival Pro

Revival Pro features powerful automatic film restoration features, as well as interactive workflows! Automatic mode tools include Dirt and Dust, Grain and Noise Reduction, Aperture or sharpening correction, Splice Repair, Vertical Scratch repair, de-flicker, Stain reduction, Stabilization, and Registration of RGB separated images. In addition to the interactive features in Revival, Revival Pro additionally has Interactive Stabilization, Interactive Scratch, deWarp, and Grain Sampling and Addition.

$9,995
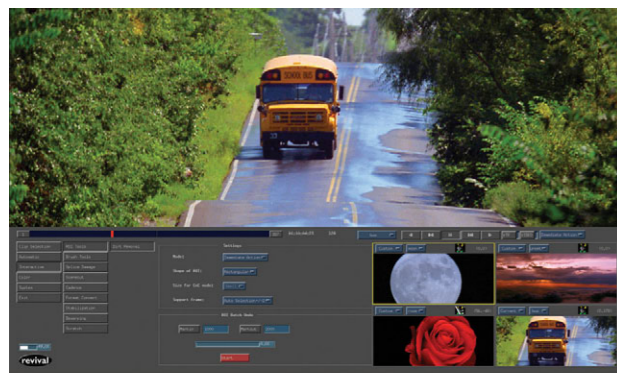
Fastest and greatest film repair tools!

DaVinci Revival works in both manual and automatic modes. You have full control of each individual frame within the region of interest. In automatic mode, DaVinci Revival handles all frames for you, which is ideal when working on large restoration projects. DaVinci Revival allows high performance network rendering for blazing speeds. Remove or sample-and-add film grain, remove dirt and dust, de-warp damaged film, stabilize film that's weaving independently in red, green and blue, repair bad splices or even add and remove cadence! DaVinci Revival does it all!

Network Rendering for Unlimited Speed

If a client arrives with a roll of film that needs cleaning up for their job, then no problem! Use DaVinci Revival Pro's network rendering to blaze through a quick film grain reduction pass, and then, if there is any dust and sparkles, you can remove them too! Network rendering uses multiple computers to get the job done fast! How fast is DaVinci Revival Pro? Standard Definition on an 8 core computer can approach real time, while 2K RGB on a 16 core system can power through at a massive 8 frames per second! Add more computers for more speed!

DaVinci Revival

Breathe new life into priceless film with the world's most incredible restoration tools!

Remove Grain and Noise!

DaVinci Revival has incredible film grain reduction tools with controls for automatic reduction using spatial blending and patch size. Often film scanning can introduce electronic noise on top of the natural film grain, however DaVinci Revival can tell the difference! Noise level and correction range can be quickly set, and all grain and noise reduction is handled independently for each color channel in either RGB or YUV for incredible results. You can choose luminance or full color processing or even sample and add grain!

Fix Dirt, Dust and Scratches!

Fix film dirt and dust speckles, scratches and even video dropouts fast! DaVinci Revival offers interactive dirt and dust removal tools with region of interest reconstruction and repair, with temporal, spatial and median filters to process moving images while cleaning the dirt and dust. Manually touch up dust spots using the Reveal Brush, Offset Clone Brush or luminance densities for extremely accurate repairs. Scratch repair is incredibly powerful and you could easily repair 10 scratches at once! You can even track scratches!

Remove Stains with a Click!

When film has been poorly stored such as in humid environments, it can become the perfect growth medium for bacteria, mould and fungus. This kind of growth on film would normally completely destroy the film and leave it completely useless. With DaVinci Revival, you can use the de-stain tool to remove the stains caused by mould and fungus with the click of a button. Stains caused by mould, damage deep into the film emulsion so there is no way to remove them, but de-stain sorts the problem out quickly and easily!

De-Flicker to Fix Film Damage

Bad telecine transfers, HMI lights, airport x-ray damage, DaVinci Revival can fix these problems and get your film back to looking incredible! Often these kinds of problems cannot be seen until after the film has been developed, scanned and gets into post production! De-flicker works by mapping and balancing out the luminance flicker across many frames to even out all the unevenness. If you're dealing with footage that's been shot using stop motion, then de-flicker can be used to smooth out the variations for a wonderfully smooth shot.

Fix Damaged Film using De-Warp!

Damage to the film sprockets, film shrinkage or bad splices cause film to run through film scanners unevenly causing jumps and warps. From critical shots to priceless archive footage of historical events, sometimes problems in film cannot just be edited out, and every frame needs to be restored! DaVinci Revival has powerful tools for de-warping problematic frames. Use the automatic splice repair tool to fix reels of film with hundreds of splices quickly. De-warp and automatic splice repair will save thousands of hours in film repair!

Stabilize Film Weave!

How many times have you seen a film master weave left to right because of poor quality film to video transfer? DaVinci Revival Stabilization gives you the tools to solve the problem fast. You can set the zoom, crop, horizontal position, vertical position, rotation and zoom with full control of the processing aggression level to get the perfect result. Modern film scanners often scan red, green and blue channels sequentially and can suffer from RGB registration problems. DaVinci Reveals can stabilize the individual color channels and fix these problems!

Supports Most Popular File Formats!

DaVinci Revival handles open standards such as DPX files and it also connects directly to your network or SAN storage. Save countless hours in media management because DaVinci Revival integrates into your media pool. If you're opening clips that have 3:2 pulldown, then this can be easily removed. Automatic scene detection is more than 5 times faster than real time, so you get started quickly and easily. DaVinci Revival does most of the work for you, so you can always work at maximum speed and more profitably!

Network Rendering for Unlimited Speed

If a client arrives with a roll of film that needs cleaning up for the job, you won't need to stall the whole job. Use Revival Pro's network rendering to blaze through a quick film grain reduction pass, and then, if there is any dust and sparkles, you can remove them too! Network rendering uses multiple computers to get the job done fast! How fast is DaVinci Revival Pro? Standard Definition on an 8 core computer can approach real time, while 2K RGB on a 16 core system can power through at a massive 8 frames per second! Add more computers for more speed!

Blackmagic UltraScope

Incredible broadcast accurate waveform monitoring for your studio!

Blackmagic UltraScope

If you're tired of ugly and hard to use waveform monitoring, you'll love UltraScope!

Blackmagic UltraScope is the first broadcast accurate PC based scopes in a user friendly design! UltraScope includes everything you need for an accurate professional solution you can trust. UltraScope is perfect for master monitoring, edit suites, color correction, equipment rooms and engineering. There are 2 great models of UltraScope for both PCI Express computers or USB 3.0 computers and laptops!

UltraScope is six independent waveform monitors combined into one! Display all six waveforms simultaneously with Parade, Waveform, Component Vectorscope, Histogram, Picture View and Audio Monitoring in an attractive full screen display. Or use the smaller 2-up display to show two waveform views, with selection of the scope display you want to see on each view. That's fantastic for laptop computers!

Simply plug into any compatible Windows™ or Mac OS X™ computer with a 24 inch monitor, and Blackmagic UltraScope will display 6 live scope views simultaneously! UltraScope is engineering accurate and includes the latest 3 Gb/s SDI technology. UltraScope automatically detects between SD, HD and 3 Gb/s SDI video inputs, and switches instantly. Only accurate waveform monitoring helps you correctly align video levels, eliminate illegal colors and detect technical problems.

New USB 3.0
UltraScope is now available in a portable solution for your laptop!

Blackmagic UltraScope

Parade Display for Colorists
When color correcting video, nothing beats the real time RGB parade waveform view. Instantly see your color changes live!
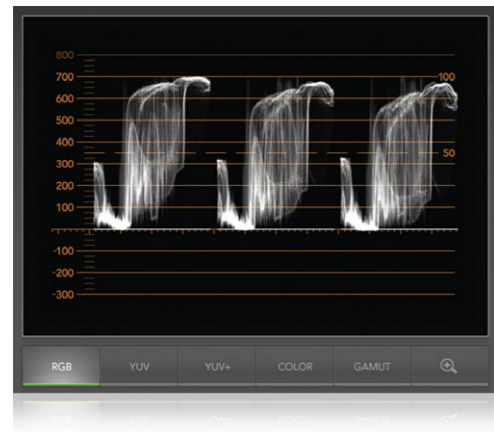
Waveform Display for Alignments
When adjusting video levels or matching black background levels when keying, the waveform display is ideal for the task!

Histogram for Location Shoots
When you're shooting live on set, you don't want to clip blacks or whites. Histogram is perfect to see when you're clipping video.

Component View
A vectorscope is the only way to see what color you have. That's perfect for checking white balance when color correcting!

Audio view for Monitoring Levels
Keep track of your audio levels and use the built in phase scope to check for out of phase audio conditions and audio clipping.

Picture View with VITC Timecode
The picture view lets you keep track of the video input, and displays timecode information and the input video format.

Blackmagic UltraScope

Parade Display for Colorists

When color correcting video, nothing beats the real time RGB parade waveform view. You can see the color balance in blacks, mids and whites, so it's easy to balance colors and get your images looking perfect! RGB Parade lets you check for illegal colors because any video that drops below the black line, or above the 100% line is an illegal RGB color. Parade can also be switched between component and RGB.
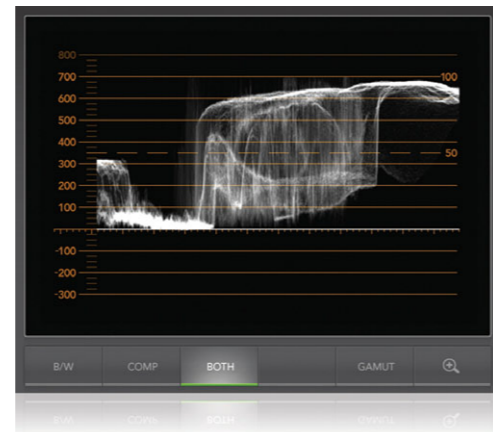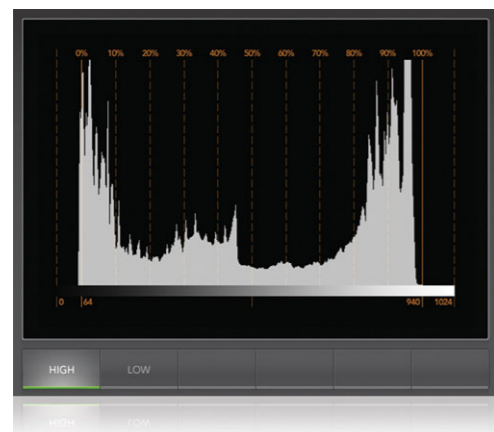
Waveform Display for Alignments

When adjusting video levels or matching black background levels when keying, the waveform display is ideal for this task! Select between component or composite views, and the composite video is digitally synthesized from the SDI input even in HD! Thousands of editors know and understand composite waveform monitors, so even though UltraScope is all digital, the synthesized composite waveform makes life easy!

Component Vectorscope View

A vectorscope is the only way to see what color you have. Vectorscope view is perfect when color correcting video, when you need to know color has been nulled out for accurate white balance. Use the vectorscope to apply tint so you can see exactly how much tint you're adding, and what color it is. Some monitors cannot be trusted, but a vectorscope always shows the colors you have! Aligning hue on decks is also easy with a vectorscope!

Support for Different Monitor Sizes

With support for 1920x1200, 1920x1080 & 1280x800 resolution monitors, Blackmagic UltraScope can now be used with a wide range of monitors, both large and small. Now you can use screen sizes smaller than 24", which is perfect for outside broadcast vans or in-studio rack mounting.

Histogram for Location Shoots

Almost all video needs to be color corrected at some point in the post production process, so you never want to accidentally clip video whites or blacks when on a live shoot. Histogram view lets you see the brightness of the pixels that are in your video, and how they are distributed from black to white. You can see if video is clipping, so it's easy to adjust the camera to keep all black and white detail in the image for later color correction.
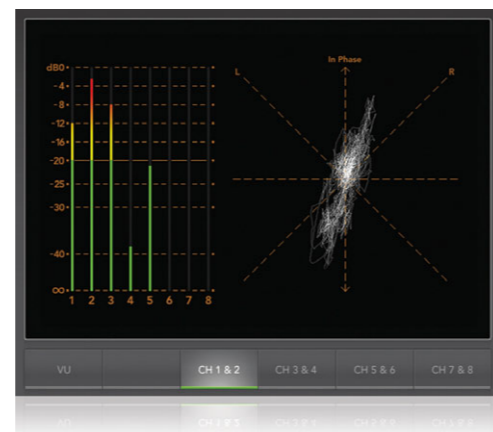
Audio View for Monitoring Levels

Keep track of your audio levels at all times with 8 channels of audio metering, plus a stereo phase meter. The stereo phase meter plots left and right audio, as an XY scope display so you know exactly what your audio is at all times. Audio problems are easily seen such as clipping, and out of phase audio can be seen as a left or right leaning display. If you don't get a vertical oriented waveform, then you know you audio channel balance is misaligned!

Picture View with VITC Timecode

The picture view lets you keep track of the video input. Input video is selected from either the optical fiber SDI or regular SDI inputs. UltraScope automatically detects between SD, HD and 3 Gb/s SDI video standards and the video format is displayed above the video image. If your SDI input has either VITC timecode in SD or RP188 timecode in HD, then it's automatically detected and read into a timecode counter above the video image.

Zoom for Greater Accuracy!

Blackmagic UltraScope now also features a powerful zoom function, with super high-resolution pan and zoom of graticules for the Parade, Waveform, Vectorscope and Picture displays. The zoom feature is perfect for editors and colorists requiring pixel accurate measurements such as matching blacks from different video sources.

Blackmagic UltraScope
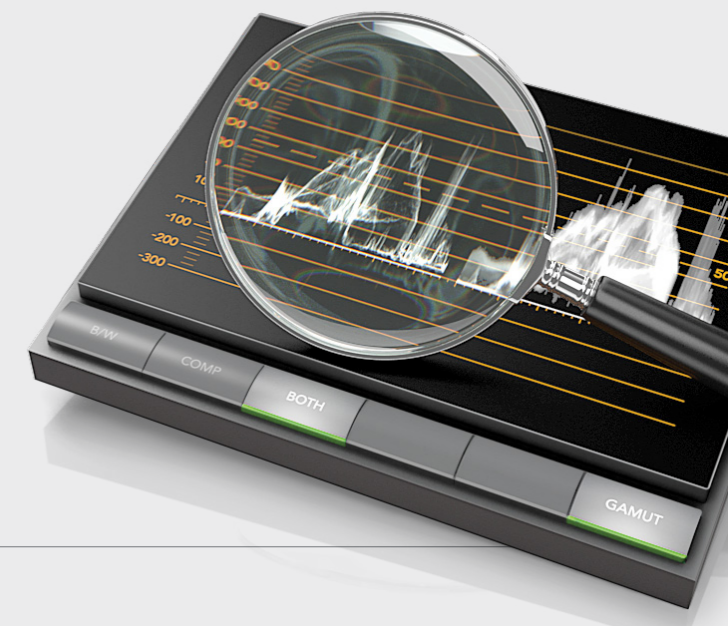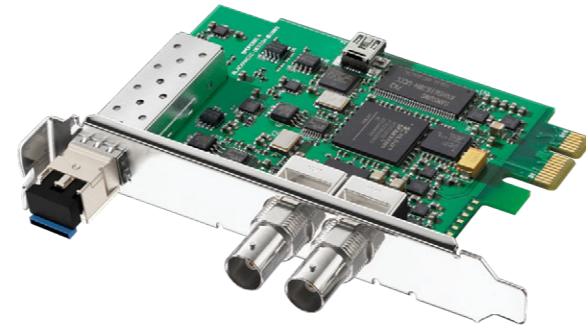
Pocket UltraScope

Get all the incredible features of UltraScope on your laptop! Pocket UltraScope includes the same fantastic UltraScope software combined with a miniature pod that converts 3 Gb/s SDI to the computer's USB 3.0 connection. Pocket UltraScope simply plugs in and is accurate and portable, so you can bring UltraScope to the most remote locations. Pocket UltraScope automatically detects between SD, HD and 3Gb/s HD-SDI video standards, and is powered from the laptop battery via the USB 3.0 port so you don't need a power source when on location!

$595

UltraScope

Blackmagic UltraScope is a combination PCI Express card and software package designed to work with a low cost PC and display. UltraScope automatically detects between SD, HD and 3Gb/s HD-SDI video standards and includes both traditional copper BNC SDI inputs as well as optical fiber SDI inputs. SDI input is available as a relocked SDI loop through on both optical and copper SDI outputs. Blackmagic UltraScope is technically accurate which is perfect for master monitoring and quality control tasks.

$695

Pocket UltraScope is ideal for location shoots!
Use Histogram and never accidently clip your video so all image detail is kept for color correction!

Blackmagic UltraScope	Blackmagic Pocket UltraScope
Connections	
SDI Video Input: 1 x 10 bit SD, HD and 3 Gb/s HD switchable.	
SDI Video Output: 1 x 10 bit loop thru SD, HD and 3 Gb/s HD switchable.	SDI Video Output: None
Optical Fiber Video Input: 1 x 10 bit SD, HD and 3 Gb/s HD switchable via LC connector.	Optical Fiber Video Input: None
Optical Fiber Video Output: 1 x 10 bit loop thru SD, HD and 3 Gb/s HD switchable via LC connector.	Optical Fiber Video Output: None
Supported Video formats: 525i NTSC, 625i PAL, 720HD and 1080HD.	
SDI Audio Input: 8 channel embedded in SD and HD.	
SDI Audio Output: 8 channel embedded in SD and HD.	SDI Audio Output: None
Optical Fiber Audio Input: 8 channel embedded in SD and HD	Optical Fiber Audio Input: None
Optical Fiber Audio Output: 8 channel embedded in SD and HD.	Optical Fiber Audio Output: None
Multiple Rate support: Standard definition SDI, high definition SDI and 3 Gb/s high definition SDI.	
Standards	
HD Format Support: 1080p 23.98/24/25/29.97/30/50/59.94, 1080i50, 1080i59.94, 720p50 and 720p59.94.	
SD Format Support: 625/25 PAL and 525/29.97 NTSC.	
SDI Compliance: SMPTE 424M, 259M and 292/296M.	
Video Sampling: 4:2:2	
Color Precision: 4:2:2 10-bit	
Color Space: 4:2:2 YUV	
SDI Metadata Support: VITC and RP-188 timecode.	
Audio Sampling: Television rate of 48kHz at 24 bit.	
Computer Interface: PCI Express 1 lane, compatible with 1, 4, 8 and 16 PCIe slots.	Computer Interface: USB 3.0. Requires a computer with a USB 3.0 interface. Will not work with USB 2.0 computers.
Processing	
Colorspace Conversion: Hardware based real time.	
Extras	
Software Included: Blackmagic UltraScope.	
Firmware Upgrade: Firmware built into software driver. Loaded at system start or via updater software.	
Installation: PCI Express 1 lane, compatible with 1, 4, 8, 16 lane PCI Express slots. Please see the full system requirements for Mac OS X™ and Windows™.	Installation: USB 3.0. Please see the full system requirements for Windows™.
Operating System Compatibility: Microsoft Windows XP™, Windows Vista™, Windows 7™ and Apple Mac OS X™.	Operating System Compatibility: Microsoft Windows XP™, Windows Vista™ and Windows 7™.
Product Warranty: 3 Year Limited Manufacturer's Warranty.	

Eliminate the high cost of HD and 2K professional monitoring!
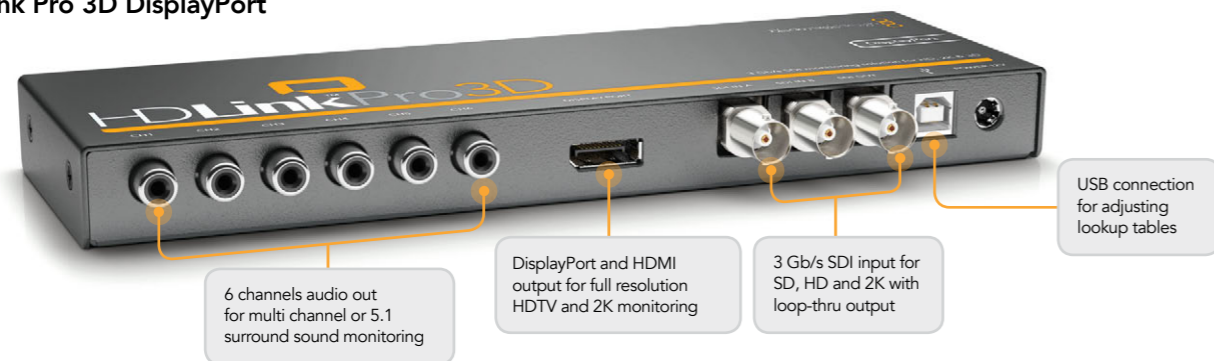
HDLink

Get the world's highest quality monitoring for DVI, HDMI and DisplayPort monitors!
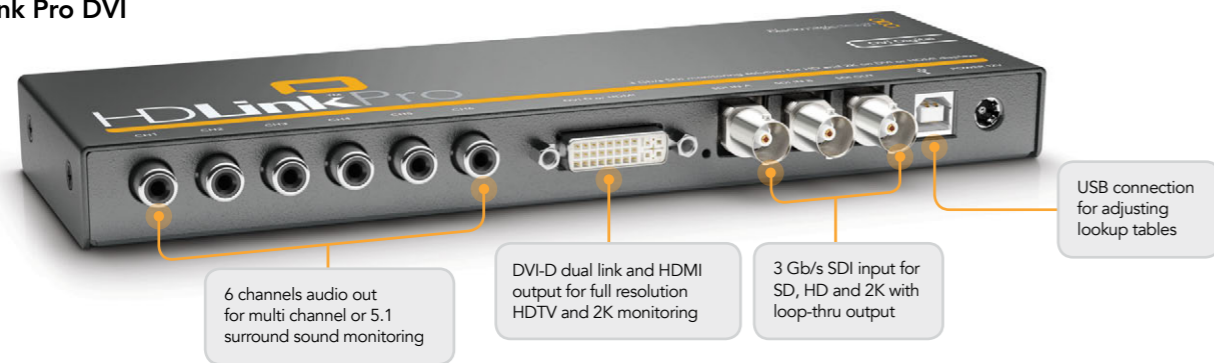
HDLink is the world's first full resolution 2D/3D HDTV and 2K monitoring for DVI, HDMI and DisplayPort monitors. HDLink features 3Gb/s SDI video for 4:2:2, 4:4:4 & 2K. Only HDLink support real time 2K playback at a massive 2048 x 1556 resolution when used with a 30 inch LCD display!

HDLink automatically switches between SD, HD and 2K plus includes 3D lookup tables to accurately simulate film stocks and color calibrate your display. Available in both dual link SDI and optical fiber SDI models, HDLink is the most advanced monitoring available!
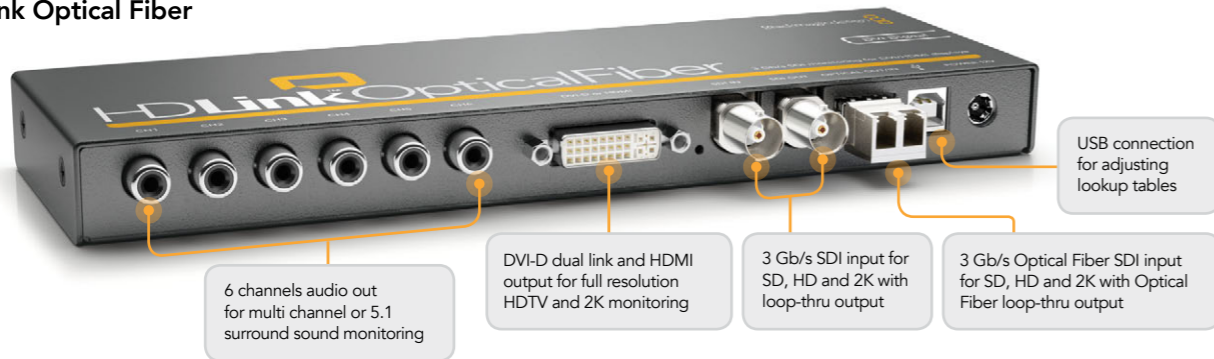
HDLink Pro 3D DisplayPort

6 channels audio out for multi channel or 5.1 surround sound monitoring

DisplayPort and HDMI output for full resolution HDTV and 2K monitoring

3 Gb/s SDI input for SD, HD and 2K with loop-thru output

USB connection for adjusting lookup tables

HDLink Pro DVI

6 channels audio out for multi channel or 5.1 surround sound monitoring

DVI-D dual link and HDMI output for full resolution HDTV and 2K monitoring

3 Gb/s SDI input for SD, HD and 2K with loop-thru output

USB connection for adjusting lookup tables

HDLink Optical Fiber

6 channels audio out for multi channel or 5.1 surround sound monitoring

DVI-D dual link and HDMI output for full resolution HDTV and 2K monitoring

3 Gb/s SDI input for SD, HD and 2K with loop-thru output

3 Gb/s Optical Fiber SDI input for SD, HD and 2K with Optical Fiber loop-thru output

USB connection for adjusting lookup tables

HDLink Pro 3D DisplayPort

The world's first SDI monitoring solution for deep bit depth DisplayPort monitors now supports full 3D stereoscopic and HDMI 1.4! Get the highest quality in both 4:2:2 and 4:4:4.Perfect for SD, HD and feature film 2K monitoring, HDLink Pro supports 1.62 and 2.7 Gb/s DisplayPort monitors with 1, 2 and 4 lanes as well as DVI and HDMI monitors with an adapter.

$495

HDLink Pro DVI

HDLink Pro with DVI-D is the most advanced monitoring solution for DVI and HDMI displays. With dual link 3Gb/s SDI for 2K, HD and SD compatibility, built in 3D lookup table color management, hardware upscaling and 6 channel analog audio outputs, HDLink Pro gives you incredible pixel for pixel perfect monitoring!

$495

HDLink Optical Fiber

HDLink Optical Fiber includes all the same incredible features as HDLink Pro DVI plus adds direct connections for the latest 3 Gb/s optical fiber technology! Connect to either the copper 3 Gb/s SDI input or the 3 Gb/s optical fiber input, and HDLink will automatically detect the correct input to use!

$795

3D Stereoscopic Workflow

HDLink Pro 3D has an advanced 3D stereoscopic processor that can output Side by Side, Line by Line, Top & Bottom and even HDMI 1.4 Frame Packed 3D video. Perfect for on-set monitoring when using a mirrored camera rig as the hardware image processor can flip the video the right way around. The SDI loop out can be set to output 3D video for live captures into your editing system!

Incredible 5.1 Audio

HDLink features a massive 6 channels of SDI audio de-embedded to 6 analog RCA audio outputs which is perfect for cinema style 5.1 surround sound monitoring. The built-in audio monitoring outputs are de-embedded at an incredible 24 bit from the SDI video input, so you get the highest audio quality. Now you can connect to HiFi systems for the perfect audio monitoring solution or use multi channel audio mixers.

Supports Massive 30 Inch Displays!

Connect a 24 inch LCD computer display for true 1920 x 1080 HDTV monitoring, or a 30 inch display for full 2048 x 1556 2K feature film monitoring. HDLink will even scale HD up to fill massive 30 inch displays! Only HDLink gives you pixel for pixel accurate display monitoring for SD, HD and feature film 2K all from a simple to use SDI connection. HDLink gives you cinema style monitoring that's perfect for edit suites, location shoots, client monitoring and more.

Includes 3D Lookup Tables

With 3D lookup tables built in, now you can accurately simulate any film stock, or calibrate the colorimity of the connected display. The included HDLink Utility software for Windows and Mac OS X allows for flexible real time color adjustments. Additional lookup tables and software updates can be easily added via HDLink's fast USB 2.0 connection.
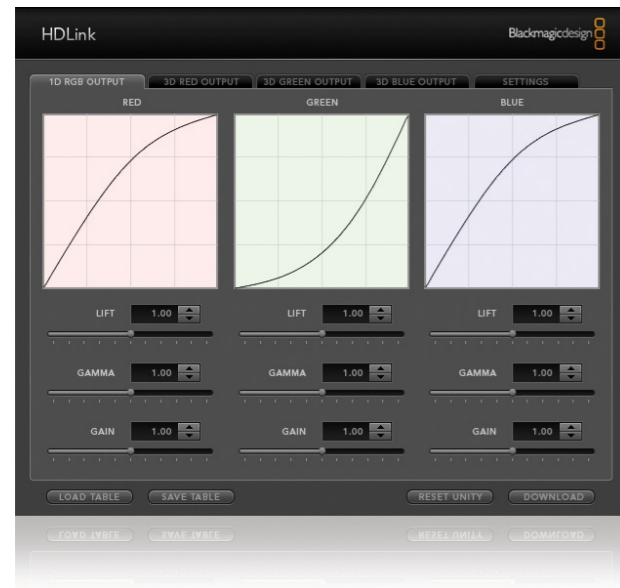
HDLink

3D Lookup Tables

For matching LCD display colorimetry and simulating various types of film stocks, HDLink Pro model features more advanced 3D lookup tables. Advanced 3D lookup tables increase color control because a blend of red, green and blue video can be output to each primary color on the connected display. Only advanced 3D lookup tables can give full color control for accurate simulation of almost any feature film stock.

Lookup tables are fully adjustable via a high speed USB 2.0 host computer connection using the included HDLink Utility software for Windows and Mac OS X. Custom lookup tables also allow film industry log video to be converted to linear for monitoring when used for feature film work. Preset gamma tables for Panasonic™ and Grass Valley Thomson Viper cine-gamma are included.

Affordable 3D SDI Monitoring

Now HDLink Pro supports 3D monitoring for the latest 3D production workflows! HDLink Pro 3D lets you display both dual stream as well as interleaved 3D inputs and then display them on any compatible 3D DVI display or HDMI television. When used with a DisplayPort to HDMI adapter, HDLink Pro 3D DisplayPort also supports HDMI 1.4 for compatibility with the latest full resolution 3D televisions!

Direct Monitor Optical Fiber SDI

Get the world's first direct optical fiber SDI monitoring! HDLink Optical Fiber lets you monitor from both SDI, 3Gb/s SDI via copper BNC connections, or 3 Gb/s SDI using optical fiber. HDLink makes working with optical fiber easy, as your SDI input can be looped out via both the copper SDI and optical fiber SDI outputs. With HDLink there is no need for optical fiber SDI converters because they're all built into HDLink Optical Fiber!

HDLink Pro has 3D monitoring!
Now you can display both dual stream as well as interleaved 3D using HDLink Pro 3D!

HDLink Pro DVI	HDLink Pro 3D	HDLink Optical Fiber
Connections		
SDI Video Input: 2 x BNC inputs switch between SD-SDI, HD-SDI 4:2:2, HD-SDI 4:4:4, 2K via 3Gb/s SDI and dual-link HD-SDI 4:4:4.		**SDI Video Input:** 1 x BNC input switches between SD-SDI, HD-SDI 4:2:2, HD-SDI 4:4:4 and 2K via 3Gb/s SDI.
SDI Video Outputs: 1 x BNC active loop through output switches between SD, HD 4:2:2, 4:4:4 and 2K.		
Display Connection: DVI-D and HDMI via adapter	**Display Connection:** DisplayPort and DVI-D/HDMI via adapters	**Display Connection:** DVI-D and HDMI via adapter
Optical Fiber Video Input: None		**Optical Fiber Video Input:** 1 x LC connector switches between SD-SDI, HD-SDI 4:2:2, HD-SDI 4:4:4 and 2K via SDI.
Optical Fiber Video Output: None		**Optical Fiber Video Output:** 1 x LC connector active loop through output switches between SD, HD 4:2:2, HD 4:4:4 and 2K. Use Single-mode for 25 km output.
Multi Rate SDI Support: 270 Mb/s standard definition, 1.5 Gb/s high definition 4:2:2, 3 Gb/s 4:4:4 high definition and 2K film.		
Analog Audio Output: 6 x unbalanced 24 bit analog outputs on RCA connectors -10db, de-embedded from SDI input.		
DVI-D Video Output: Supports SD, HD and 2K using Dual Link DVI-D displays up to 30 inches 2560 x 1600 in size.	**DVI-D Video Output:** Supports SD, HD and 2K using Dual Link DVI-D displays up to 30 inches 2560 x 1600 in size when used with a DisplayPort to DVI adapter (not included).	**DVI-D Video Output:** Supports SD, HD and 2K using Dual Link DVI-D displays up to 30 inches 2560 x 1600 in size.
DVI-D Audio Output: DVI-D supports video only. Use RCA analog audio outputs for audio monitoring.		
DisplayPort Video Output: None	**DisplayPort Video Output:** Supports SD, HD and 2K using DisplayPort monitors up to 30 inches 2560 x 1600 in size.	**DisplayPort Video Output:** None
DisplayPort Audio Output: None	**DisplayPort Audio Output:** Via DisplayPort output.	**DisplayPort Audio Output:** None
HDMI Video Output: Via DVI-D to HDMI adaptor. Supports HDMI displays, such as a TV or video projectors, up to 1920 x 1080 resolution.	**HDMI Video Output:** Via DisplayPort to HDMI adapter (not included). Supports HDMI displays, such as a TV or video projectors, up to 1920 x 1080 resolution.	**HDMI Video Output:** Via DVI-D to HDMI adaptor. Supports HDMI displays, such as a TV or video projectors, up to 1920 x 1080 resolution.
HDMI Audio Output: Via DVI-D to HDMI adaptor.	**HDMI Audio Output:** Via DisplayPort to HDMI adapter.	**HDMI Audio Output:** Via DVI-D to HDMI adaptor.
HDMI Connection: Via included DVI-D male to HDMI Type A female adaptor.	**HDMI Connection:** Via DisplayPort to HDMI adapter (not included).	**HDMI Connection:** Via included DVI-D male to HDMI Type A female adaptor.
Updates and Configuration: Via USB 2.0 interface.		
Standards		
SD Format Support via DVI-D: 625/25 PAL and 525/29.97 NTSC.		
HD Format Support via DVI-D: 720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94, 1080p60.		
2K Format Support via DVI-D: 2048 x 1556p23.98, 2048 x 1556p24 and 2048 x 1556p25.		
SD Format Support via DisplayPort: None	**SD Format Support via DisplayPort:** 625/25 PAL and 525/29.97 NTSC.	**SD Format Support via DisplayPort:** None
HD Format Support via DisplayPort: None	**HD Format Support via DisplayPort:** 720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94, 1080p60.	**HD Format Support via DisplayPort:** None
2K Format Support via DisplayPort: None	**2K Format Support via DisplayPort:** 2048 x 1556p23.98, 2048 x 1556p24 and 2048 x 1556p25.	**2K Format Support via DisplayPort:** None
SD Format Support via HDMI: 625/25 PAL and 525/29.97 NTSC.		
HD Format Support via HDMI: 720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080i50, 1080i59.94 and 1080i60 , 1080p50, 1080p59.94 and 1080p60.		
SDI Compliance: SMPTE 259M, SMPTE 292M, SMPTE 373M, SMPTE 425M-B, ITU-R BT.656, ITU-R BT.601.		**SDI Compliance:** SMPTE 259M, SMPTE 292M, SMPTE 373M, SMPTE 425M-B, ITU-R BT.656, ITU-R BT.601 and SMPTE 297M for Optical Fiber SDI.
SDI Video Sampling: 4:2:2 and 4:4:4.		
SDI Color Precision: 4:2:2 10 bit and 4:4:4 10 bit.		
SDI Color Space: 4:2:2 YUV, 4:4:4 YUV and 4:4:4 RGB.		
SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.		
3D Muxing modes: None	**3D Muxing modes:** Side by side, line by line, top and bottom, HDMI 1.4 frame packing. Horizontal and/or vertical image flip can be applied to either input. Dual SDI inputs can be muxed to the single 3 Gb/s SDI output.	**3D Muxing modes:** None
Extras		
Software Control: HDLink Utility included free for Windows XP, Windows Vista, Windows 7 and Mac OS X.		
Gamma Correction: Independently adjustable 3D lookup tables per color component. Interactive real time adjustment of lookup tables.		
Firmware Upgrade: Automatically when new HDLink Utility is installed.		
Real Time Processing: Adaptive pull-down processor guarantees smooth motion display.		
Video Scaling via DVI-D: Pixel for pixel display. Scale up SD to fill display. Scale up HD to fill display.		
Power Supply: 12 Volt universal power supply included. IEC power cable required.		
Product Warranty: 3 Year Limited Manufacturer's Warranty.		
Display Requirements		
Interface: DVI-D connection to LCD computer monitor or HDMI Type A connection to HDMI display.	**Interface:** DisplayPort connection to LCD computer monitor or use an adapter to connect to a DVI-D or HDMI display.	**Interface:** DVI-D connection to LCD computer monitor or HDMI Type A connection to HDMI display.

DVI Extender

Route your computer monitor with the world's only 3 Gb/s SDI monitor extender!
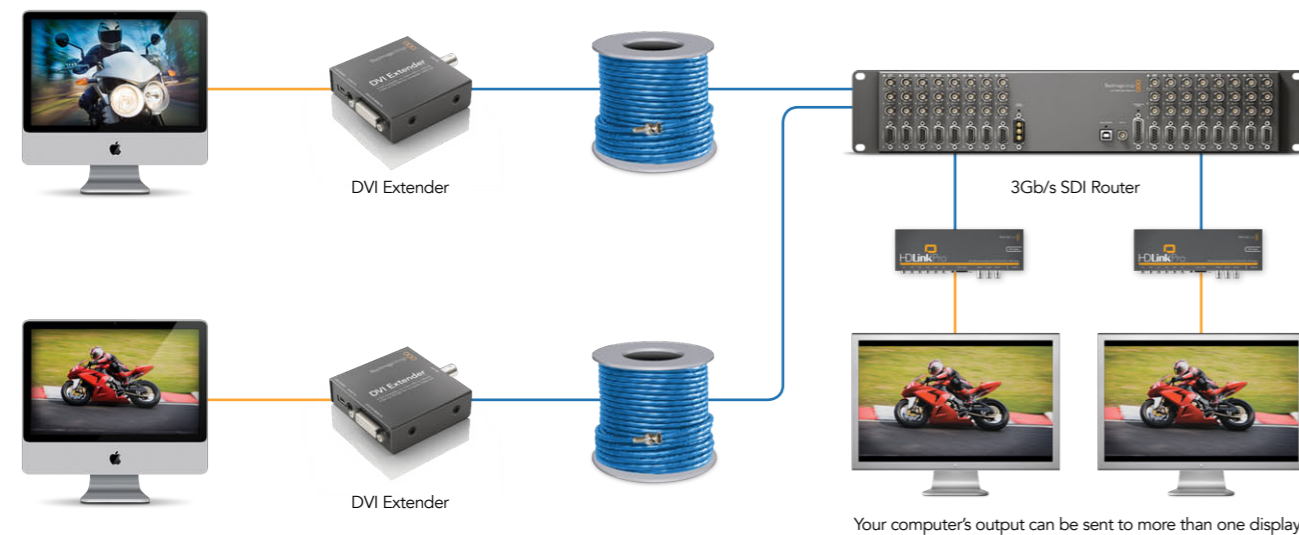
DVI Extender

Imagine the creative freedom to design your facility the way you want!

Now you can route your computer monitor! DVI Extender extends the DVI-D connection on your computer to your monitor via simple SDI cables. This means you can extend your monitor via any 3 Gb/s SDI router! You can even connect more than one monitor to your computer. DVI Extender uses HDLink on the monitor end, so you can route both computer and video to the same monitor.

Move noisy computers out of client rooms into a central location, then you can move between rooms in your facility when you need to! DVI Extender is easy to use and plugs into your computer's DVI-D monitor connection. DVI Extender powers via USB from your computer, and you can even connect direct to the computer audio so you get full computer sound down the monitor extension!

Route your computer monitor anywhere!

DVI Extender

3Gb/s SDI Router

DVI Extender

Your computer's output can be sent to more than one display
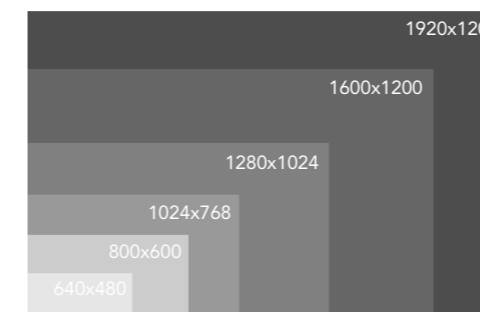
Convert DVI to SDI Video

With DVI Extender, you can harness your computer's built in 3D accelerated display to create realtime broadcast graphics in standard definition and high definition video. Simply set the control panel to Video Mode, and DVI extender will output NTSC, PAL, 720 HD or 1080 HD resolution SDI video with embedded audio from your computer.
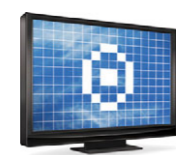
Full Digital Quality

Unlike older scan converters, DVI Extender is a fully digital converter that connects the DVI-D output on your computer to SDI equipment such as HDLink Pro. That's a direct pixel-for-pixel digital connection to SDI, which is the highest quality possible and eliminates all scaling problems!

Take a closer look at DVI Extender

Easy to use Mini USB input for power, updates and configuration

Mini audio jack input for embedding audio

3 Gb/s SDI output compatible with your SD and HD SDI equipment.

DVI-D input for screen resolutions up to 1920 x 1200

For extender mode resolutions, use DVI Extender with HDLink.

DVI Extender

Route your computer monitor anywhere using DVI Extender! Includes USB power, 3.5 mm audio jack input for computer audio, and software control panel for selecting between video and extender modes. Extender mode requires a compatible HDLink for receiving on the monitor side. DVI Extender also operates in video mode so you can convert the DVI output on your computer to regular SD or HD-SDI video.

$395

DVI Extender™	
Connections	
Video Input	1 x DVI-D
Audio Input	1 x 3.5mm stereo mini jack
Video Output	1 x 3 Gb/s SD/HD-SDI
Video Mode Resolutions	When set to Video mode based resolutions DVI Extender will output conventional SDI video to match the selected video standard. Select 720 x 486 for 525i/59.94 (NTSC), 720 x 576 for 625i/50 (PAL), 1280 x 720 for 720HD and 1920 x 1080 for 1080HD video formats.
Extras	
USB	1 x USB 2.0 port and cable
Power Requirements	Requires USB 2.0 connection for power. Compatible with iPod USB power adapter.
Updates and Configuration	USB 2.0 high speed (480Mb/s) interface.
Warranty	12 Months
Extender mode is compatible with the following HDLink models	HDLink Pro DVI, HDLink Pro 3D, HDLink Optical Fiber, HDLink Pro DisplayPort

Production Switchers

The world's most advanced broadcast grade live production switchers!

Only ATEM gives you the professional features you need for live video production!

Introducing the world's most advanced broadcast grade production switchers! EchoLab ATEM includes advanced technology and unique power features all built into a familiar M/E based design that's fast and easy to use. EchoLab has been building production switchers since 1974. Decades of experience combined with the latest cutting edge digital switcher technology make ATEM one of the world's best live production switchers.

Built to Perfom

ATEM is built for reliability because when performing live, your switcher must keep up with you and can never fail. ATEM uses a familiar M/E style of operation so you get an instantly familiar workflow that's fast and easy to use. Even though it's affordably priced, ATEM uses premium quality switches, faders and joysticks that are normally only found on the most expensive switchers. ATEM uses solid industrial strength construction with redundant power supplies and an FAA certified operating system for a true broadcast grade switcher that you can rely on.

Premium Quality

For the highest quality video with extremely low processing delay, ATEM features a fully 10 bit digital design. This means you get the highest quality available from cameras, servers and character generators with true 10 bit video quality maintained throughout the entire signal path. Get better chroma keying and seamless layering from HDMI and SDI sources so all your video maintains that pristine broadcast quality look. Even ATEM's built in analog video inputs and outputs feature low noise AD converters for incredible analog quality.

Creative Power

ATEM is the most creative solution for live switching! All transitions are instantly available with a button push on the control panel and include the same cut, mix, wipe as found on traditional mixers! Plus you get innovative ATEM transitions including dip, DVE, graphic wipe, and Stinger! It's simple to load clips into the 2 built in media players for exciting custom animated Stinger transitions. ATEM features a built in DVE with 3D borders, light source and drop shadow! You can even use the DVE for transitions, or route into any of the 4 built in keyers for incredible multi layer compositions! Then SuperSource provides an extra 4 DVEs and keyers independent of the main switcher!

Incredible Features

You simply get more features with ATEM! You get 4 upstream keyers each with independent chroma, shaped and linear modes plus keying in the transition block, as well as 2 downstream keyers and independent fade to black. You also get the powerful SuperSource™ multi layer engine for 5 independent layers and 4 independent DVEs. Add unprecedented creativity with graphic wipes and Stinger transitions using the 2 built in media players. Use the built in DVE for amazing DVE transitions or key repositioning. Plus the built in multi-view monitoring eliminates monitoring costs because you can see your cameras, program and preview feeds on a single monitor! Nothing beats ATEM for creative features, quality and affordability!

Includes HDMI inputs!
Connect and use your HDV or AVCHD cameras for multi camera production in crystal clear HD!

Production Switchers

More Connections

ATEM features 10 bit SDI, HDMI and analog inputs and outputs that work in SD and HD. Connect to Digital Betacam, HDCAM, HD-D5, routers, computers and HDV or AVCHD cameras! That makes ATEM perfect for broadcasters as well as videographers! The built in multi-view includes an easy to use HDMI output that plugs directly into televisions and displays. You also get separate auxiliary SDI outputs that are fully routable and includes auxiliary effects as well as 2 pre downstream keyer clean feed outputs. ATEM also includes built in media players, black, bars and color generators. When running in high definition, ATEM features up-conversion on inputs, as well as down-converted analog and SDI outputs!

Next Transition and Preview Transition

When you're in the middle of a busy live production, the last thing you need is to make a mistake! ATEM's broadcast design includes easy to use Next Transition and Preview Transition functions, so you can see your transition before committing it to air! Positioned in the transition block of the ATEM control panels, the preview transition and next transition buttons let you see how the transition will look on the preview output of the switcher. This is the only true way to know exactly what your transition will look like before going to air. Next Transition is perfect because even extremely complex multilayer compositions can be viewed virtually, eliminating the possibility of making a mistake!

SuperSource Multi-layering

Add multi-box compositions quickly and easily with ATEM SuperSource! You get a completely separate 5 layer switcher with the power of 4 picture in picture DVEs and 4 keyers connected as an ATEM video input! Position, resize and key up to 4 video sources to create compositions that would normally require a multi M/E switcher! SuperSource adds tremendous power as now even a single M/E ATEM model can compose up to 13 layers in total! Use SuperSource for multi camera interviews or picture in picture production while leaving all your M/Es, keyers and DVE completely free for other tasks. SuperSource compositions can also be quickly saved and recalled in an instant!

ATEM 1 M/E Production Switcher

ATEM 1 M/E is an affordable but powerful switcher that's ideal for tight production environments. ATEM not only has the workflow of a traditional 1 M/E switcher but also has the power to deliver complex productions that would normally require a multi-M/E switcher. Features such as SuperSource, Singer transitions, DVE transitions, 13 key layers, Multi format I/O, built in multi viewer and built in media players all controlled from a high quality broadcast grade 1 M/E panel make ATEM the most powerful 1 M/E switcher on the market today.

$19.995

ATEM 2 M/E Production Switcher

ATEM 2 M/E is the perfect switcher for fast paced productions in both professional and broadcast environments. Direct access macro buttons, RGB mnemonics, and destination buttons enable fast and efficient operation. 18 inputs, 10 outputs, SuperSource, Stinger transitions, DVE transitions, 14 key layers, Multi format I/O, built in multi viewer and Media players are all easily controlled from a premium quality, industrial strength panel with an easy to use traditional layout, all at an incredibly affordable price.

$49.995

Production Switchers

Built in Multi-Viewer

Now you can save thousands of dollars on costly camera monitoring with ATEM's built in multi-viewer. Multi-viewer allows 10 channels of video to be displayed on a single HDMI television or monitor. Views are fully routable so you can select any external video source or internal video source such as media players, color generators, SuperSource, clean feeds and more! You can change the multi-view layout, as well as customizable labels and set safe area markers on the preview display. Multi-view includes tally so on-air sources have red borders and preview sources have green borders. ATEM multi-view is as simple to use as connecting a single HDMI monitor, so you get the perfect portable solution!

Built in Media Players

ATEM includes 2 built in media players so you can save thousands of dollars by eliminating external character generators and servers! Because media players are built into ATEM, you get a fantastic portable solution! Media Players include a massive 2 GB of flash memory for 32 stills and 2 live clips with both fill and key. PC software is included for easy loading of TGA, BMP, GIF, JPG and PNG file formats. Media Players are great for animated logos, backgrounds, lower thirds, bugs, Stinger transitions and more! You can route Media Players into any switcher input, upstream keyer, downstream keyer, background, SuperSource layer and into the transition block for Stinger transitions!

Stinger Transitions

With ATEM you get a truly professional switcher that's got all the features you need for live broadcast production. ATEM includes Stinger for animated transitions and graphic wipes, and because there is a separate keyer for Stingers, all your upstream and downstream keyers are completely free for other use! Stingers include sound effects so you can create exciting custom transitions only limited by your creativity! You can customize the transition point so you get seamless Stinger transitions, plus the animation clip in the Media Player is automatically triggered so you get perfect results every time. You can even trigger an external clip server using the GPIO interfaces!

High Quality DVE

ATEM includes a premium 2D DVE that's perfect for DVE transitions or repositioning elements into the ATEM keyers. The built in ATEM DVE features the highest quality filtering combined with antialiased key channel for true broadcast quality. For full control, the DVE also features x and y position, size and rotation controls, with customizable 3D borders with color and softness settings. DVE light source is also included with customizable softness for amazing looking drop shadows which when combined with push, squeeze and move animation, gives you the perfect solution for DVE transitions! All ATEM control panels include a high quality joystick for full DVE control!

SuperSource™ Multi-layer compositions
Only ATEM includes powerful SuperSource that's perfect for picture in picture compositions!

2 Media Players and 4 Upstream Keyers
Get live graphics and video clips for titles, lower thirds, bugs and more!
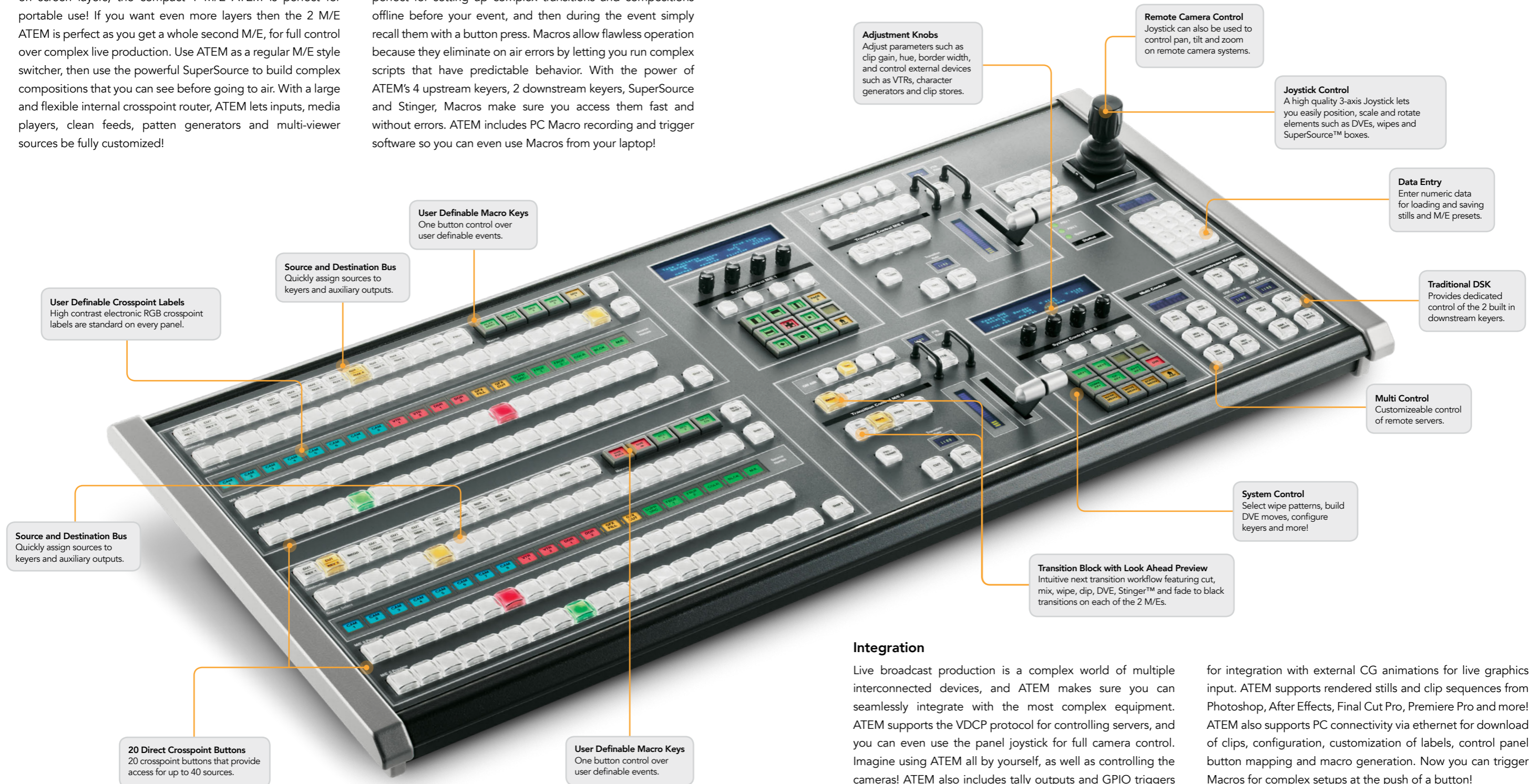
Production Switchers

Massive 13 Layers!

Only ATEM includes as many layers in such an affordable broadcast grade switcher! Even with a massive 13 simultaneous on screen layers, the compact 1 M/E ATEM is perfect for portable use! If you want even more layers then the 2 M/E ATEM is perfect as you get a whole second M/E, for full control over complex live production. Use ATEM as a regular M/E style switcher, then use the powerful SuperSource to build complex compositions that you can see before going to air. With a large and flexible internal crosspoint router, ATEM lets inputs, media players, clean feeds, patten generators and multi-viewer sources be fully customized!

Full Macro Support

ATEM's powerful Macros let you customize switcher setups and then load, save or execute them live on air. Macros are perfect for setting up complex transitions and compositions offline before your event, and then during the event simply recall them with a button press. Macros allow flawless operation because they eliminate on air errors by letting you run complex scripts that have predictable behavior. With the power of ATEM's 4 upstream keyers, 2 downstream keyers, SuperSource and Stinger, Macros make sure you access them fast and without errors. ATEM includes PC Macro recording and trigger software so you can even use Macros from your laptop!

Take a Closer Look at ATEM!

Adjustment Knobs
Adjust parameters such as clip gain, hue, border width, and control external devices such as VTRs, character generators and clip stores.

Remote Camera Control
Joystick can also be used to control pan, tilt and zoom on remote camera systems.

Joystick Control
A high quality 3-axis Joystick lets you easily position, scale and rotate elements such as DVEs, wipes and SuperSource™ boxes.

Data Entry
Enter numeric data for loading and saving stills and M/E presets.

User Definable Macro Keys
One button control over user definable events.

Source and Destination Bus
Quickly assign sources to keyers and auxiliary outputs.

User Definable Crosspoint Labels
High contrast electronic RGB crosspoint labels are standard on every panel.

Traditional DSK
Provides dedicated control of the 2 built in downstream keyers.

Multi Control
Customizeable control of remote servers.

Source and Destination Bus
Quickly assign sources to keyers and auxiliary outputs.

System Control
Select wipe patterns, build DVE moves, configure keyers and more!

Transition Block with Look Ahead Preview
Intuitive next transition workflow featuring cut, mix, wipe, dip, DVE, Stinger™ and fade to black transitions on each of the 2 M/Es.

20 Direct Crosspoint Buttons
20 crosspoint buttons that provide access for up to 40 sources.

User Definable Macro Keys
One button control over user definable events.

Integration

Live broadcast production is a complex world of multiple interconnected devices, and ATEM makes sure you can seamlessly integrate with the most complex equipment. ATEM supports the VDCP protocol for controlling servers, and you can even use the panel joystick for full camera control. Imagine using ATEM all by yourself, as well as controlling the cameras! ATEM also includes tally outputs and GPIO triggers for integration with external CG animations for live graphics input. ATEM supports rendered stills and clip sequences from Photoshop, After Effects, Final Cut Pro, Premiere Pro and more! ATEM also supports PC connectivity via ethernet for download of clips, configuration, customization of labels, control panel button mapping and macro generation. Now you can trigger Macros for complex setups at the push of a button!

Atem 2 M/E Production Switcher	Atem 1 M/E Production Switcher
Chassis	
Video Processing: 10 bit 4:2:2	
External Reference: Analog (NTSC/PAL)	
Size in RU: 3 RU	
Width: 19 Inches, 48.26 cm	
Height: 5.25 Inches, 13.33 cm	
Depth: 16 Inches, 40.64 cm	
Weight: 17 lb.	
Internal Processing Formats (User Selectable)	
525/59.94i (NTSC), 625/50i (PAL), 720/59.94p, 720/50p, 1080/59.94i, 1080/50i	
Input Configuration	
SDI - (SMPTE 259M, 292M, 424M): 15	8
Analog / HDMI - (CVBS, Y/C, YPbPr, HDMI): 2	
SDI / Analog / HDMI - (SMPTE 259M, 292M, 424M, CVBS, Y/C, YPbPr, HDMI): 1	NA
Internal Frame Synchronizers: 18	10
Internal Up/Cross Conversion: 18	10
Processing Delay - (no conversion / no frame sync): 1 Line	
Input "Self-Timing" Window: +/- 3/8 Line	
Auto Equalization: 250 Meters Max @ 270Mbits	
Return Loss: 15dB Minimum	
Output Configuration	
Program Outputs: 2 (SDI in Native Resolution)	
Aux 1, Preview: 1 (SDI in Native Resolution), Aux 2: 1 (SDI in Native Resolution), Aux 3: 1 (SDI in Native Resolution), Aux 4: 1 (SDI in Native Resolution), Aux 5: HDMI & Analog (CVBS, Y/C, YPbPr, RGsB), Aux 6: SDI & Analog (CVBS, Y/C, YPbPr, RGsB), Aux 7: 1 (SDI in Native Resolution), Aux 8: 1 (SDI in Native Resolution)	Aux 1, Preview: 1 (SDI in Native Resolution), Aux 2: 1 (SDI in Native Resolution), Aux 3: 1 (SDI in Native Resolution), Aux 4: 1 (SDI in Native Resolution), Aux 5: HDMI & Analog (CVBS, Y/C, YPbPr, RGsB), Aux 6: SDI & Analog (CVBS, Y/C, YPbPr, RGsB)
Internal Down/Cross Conversion: 2	
Output Signal Levels: Compliant with All World Standards	
Media Player	
Channels: 2 Fill + 2 Key	
Stills: 32 (Fill + Key)	
Clips: 2 (Fill + Key)	
Clip Length in 1080i HD: Maximum 180 Frames	
Clip Length in 720p HD: Maximum 360 Frames	
Clip Length in SD: Maximum 900 Frames	
Audio Interface: AES/EBU 110Ω Twisted Pair	
Audio Format: 8/16bits 48kHz (Stereo/Mono)	
Clip/Still Format: TGA, BMP, JPEG, PNG, GIF	
Multi-Definition Multiviewer	
Number of Windows: 2 x 10	1 x 10
Connector: HDMI + SDI	HDMI
Tally: Yes	
Window Sources: User Routable	
Window Names: 8 Characters	
Features	
Total Number of Keyers: 13	12
M/E Keyers: 4 (2 per M/E)	4
Downstream Keyers: 2	
SuperSource™ Keyers: 5	
SuperSource™ Box Generators: 4 x 2D Picture-in-Picture	
Transition Keyer (Stinger™ / DVE): 2	1
Number of Visible Layers: 14 (13 Keys Over Background)	13 (12 Keys Over Background)
DVE with 3D Borders & Drop Shadow	DVE with 3D Borders & Drop Shadow

Atem 2 M/E Production Switcher	Atem 1 M/E Production Switcher
Supported Computer Resolutions	
720 x 486p @ 60Hz: Input, 720 x 576p @ 50Hz: Input, 1280 x 720 @ 60Hz, 50Hz: Input, 1920 x 1080i @ 60Hz, 50Hz: Input 1920 x 1080p @ 60Hz, 50Hz: Input	
Connectivity	
Edit Port (RS 422): 2	
Serial Port (RS 232): 1	
Ethernet: 100Mbps Full Duplex	
Tally Relays: 16 User Programmable	
GPI: 3 User Programmable	
GPO: 2 User Programmable	
Configuration Interface	
Source Naming: Web-Based	
Source Mapping: Web-Based	
GPIO / Tally: Web-Based	
Multiviewer Labels: Windows-Based	
Graphics Management: Windows-Based	
Macro Editor: Windows-Based	
Chassis Power	
Redundant Power Supply: Factory Option	
Input Voltage: 120-220V~, 500VA, 50-60Hz	
Power Usage: 175W	
Atem Panel	
Direct Cross Points: 20	10
Shifted Cross Points: 20	10
Crosspoint Button Type: NKK Soft Touch, Tri-Color LED	
Crosspoint Display: High Contrast RGB Bitmap	4 Character LED
Next Transition Selectors: BKG, Key1 - Key2	BKG, Key1 - Key4
On-Air Indicator: Yes	
DSK Transition Selectors: Auto, Cut, Tie/Pvw	
Preview Next Transition: Yes	
Transition Rate Displays: Yes	
Panel Display: 4 Line Interactive	
Menu System: Context-Sensitive LED Bitmap Buttons	
Fader Bar: 2	1
3 Axis Joystick: Yes	
Rotary Encoders: Yes	
Numeric Keypad: Yes	
Remote Auxiliary Panel: Optional	
Panel Dimensions	
Width: 37.27" (94.67cm)	17.63" (44.78cm)
Height: 5.12" (13cm)	6.92" (17.57cm)
Depth: 14.14" (35.92cm)	15.08" (38.3cm)
Weight: 33.6 lbs	13.2 lbs
Cutout Width: 36.27" (92.13cm)	-
Cutout Depth: 16.67" (42.34cm)	-
Panel Power	
Redundant Power Supply: Factory Option	
Input Voltage: 120-220V ~, 110VA, 50-60Hz	
Power Usage: 75W	40W

Videohub

Powerful broadcast quality 3 Gb/s SDI routers up to a massive 288 x 288 size!
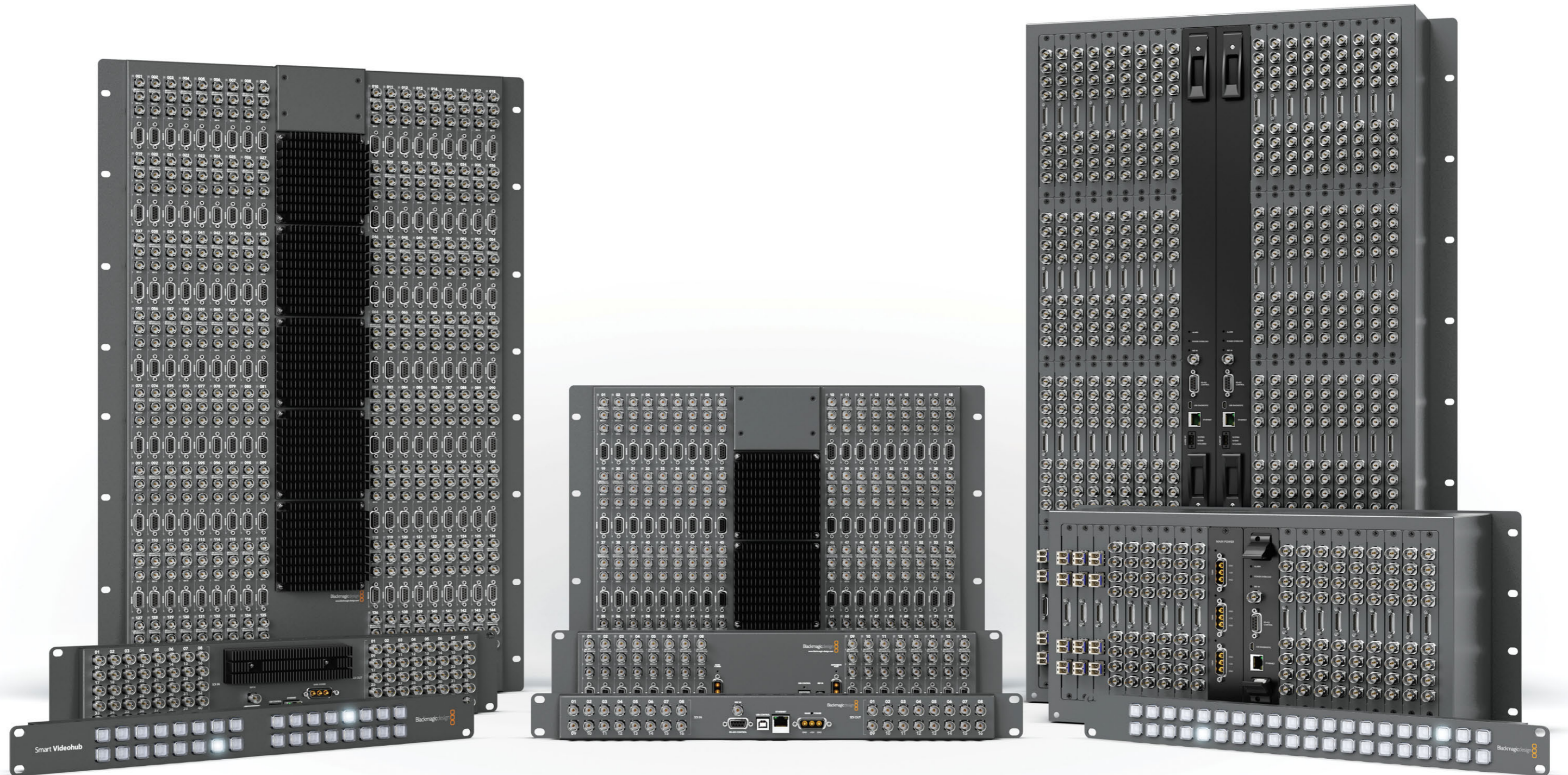
Videohub

Only Videohub routers give you advanced technology 3 Gb/s SDI routing at less than an inch thick!

Eliminate complicated manual video patching forever! Videohub routing switchers let you connect all the equipment in your facility and easily change connections from a range of easy to use control panels! The Videohub family are true broadcast grade routing switchers up to a massive 288 x 288 SDI with 288 deck control ports. Videohub routers feature auto switching SD, HD, 3 Gb/s SDI and SDI re-clocking. You can choose an all in one model, or a card based model that lets you custom build your own router!

Videohub routers completely eliminate the need for manual cable patching because all the equipment in your facility can simply be connected to Videohub and then the connections are changed electronically. Manual cable patching is complicated and often difficult for creative users to understand, plus patch cables can quickly wear out so you get glitches in the video. Videohub routers eliminate these problems because all SDI signals are re-clocked, so you always get crystal clear error free SDI video!

Smart Videohub $2,495

Widest Range of Router Sizes

From 16 x 16 SDI all the way up to a massive 288 x 288 SDI and serial control, there is a model for all your needs! You get the highest quality SMPTE compliant low jitter SDI connections, full SDI re-clocking and auto switching SD, HD and 3 Gb/s SDI connections. Videohub routers feature single board models for affordable and compact routing, as well as card based models that feature full redundant cross-points for the ultimate in flexibilty and broadcast grade reliability.

Smart Control $495

Videohub Smart Control

Add push button routing to your decks and monitors! Smart Control installs under each video device, and each button can be customized to a router input. When you push a button, the router output connected to your deck or monitor changes! You can also have multiple outputs! Buttons illuminate white when set as inputs, gold for outputs, and the lower right button is red if you enable the take button feature!

Micro Videohub $1,995

Compact Videohub $4,995

Broadcast Videohub $14,995
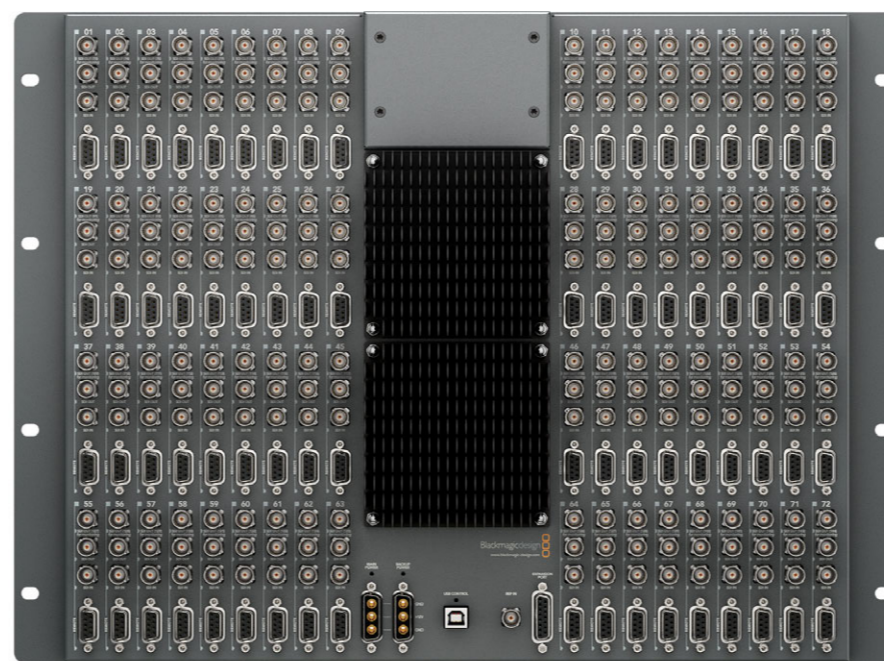
Studio Videohub $2,995
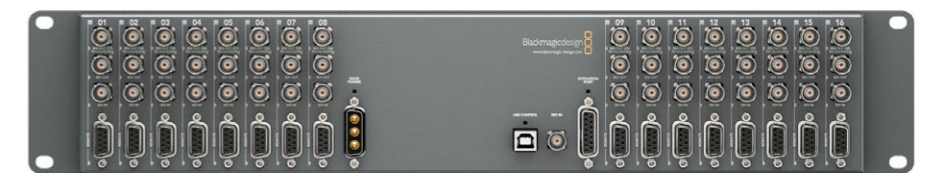
Enterprise Videohub $29,995
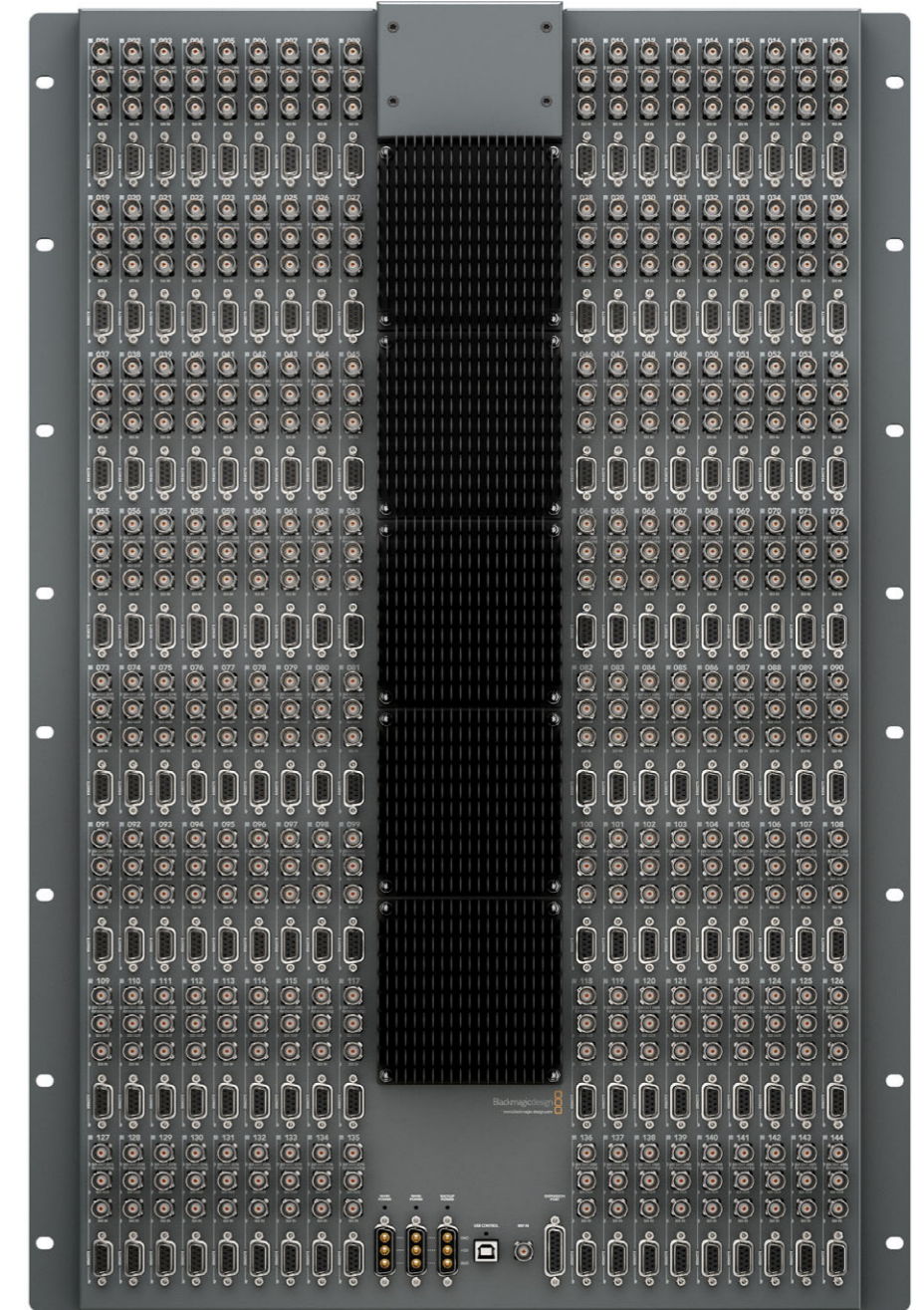
Videohub

Build your own router in SDI or optical fiber with single or redundant cross-points for the ultimate in 24/7 reliability!

Universal Videohub 72

Universal Videohub 72 is a fully scalable 3G/HD/SD and deck control routing switcher. Add either regular copper SDI or optical fiber SDI interface cards as you need, up to a 72 x 72 SDI size router. The Universal Videohub 72 rack frame is only 5 RU and 6 inches deep and can support a single 72 x 72 crosspoint card and a single power supply card.

You get full auto standard detection, re-clocking, 3 Gb/s SDI support, 72 x 72 deck control, ethernet/serial control and more. Universal Videohub 72 is a fantastic medium sized router that lets you grow. When you're ready to upgrade, all SDI interface cards, crosspoint and power supply cards can be installed into the larger Universal Videohub 288 chassis!

1 Universal Videohub 72

Rack frame lets you add up to 18 BNC SDI or optical fiber SDI interfaces plus a single 72 x 72 crosspoint and power card. Includes removable fan tray and fans.

$**3.945**

2 Universal Videohub 72 Crosspoint

Supports up to 72 x 72 SDI and control, ethernet and serial router control, genlock and alarm indictors. Compatible with Universal Videohub 72 and 288 frames.

$**4.245**

3 Universal Videohub SDI Interface

Includes 4 SDI inputs and 4 SDI outputs, plus 4 deck control. Includes full re-clocking and auto switching SD, HD and 3 Gb/s SDI.

$**385**

4 Universal Videohub Optical Fiber Interface

Includes 4 inputs and 4 outputs plus 4 deck control, re-clocking and SD, HD and 3 Gb/s. 1310 nm laser drivers and receivers up to 25 km at 3 Gb/s.

$**995**

5 Universal Videohub 300 Watt Power Supply

Lets you add up to 3 external 12 volt power supply "bricks" (sold seperately) as you need. 3 power supplies gives you enough power for 288 x 288 BNC SDI!

$**295**

6 Universal Videohub Remote Cable

If you need remote control then use this cable to add four independent remote control ports to either the BNC SDI or optical fiber SDI interfaces!

$**75**

Universal Videohub 288

The Universal Videohub 288 is the ultimate 3G/HD/SD and deck control routing switcher. With a choice of 72 x 72 or 288 x 288 crosspoint cards, the frame can be easily upgraded using our hot swappable regular BNC SDI or optical fiber interface modules that also include full deck control. If you need redundancy then simply add a second crosspoint card for true 24/7 reliability!

All inputs have auto standards detection and all outputs are re-clocked. Universal Videohub 288 features an 18 rack unit frame that is less than 6 inches deep. You also get ethernet and serial connectivity, third party control and redundant power supplies. Universal Videohub 288 lets you start small for an affordable cost and then expand its size and even add full redundancy as your needs grow!

1 Universal Videohub 288

Rack frame lets you add up to 72 BNC SDI or optical fiber SDI interfaces plus a single 72 x 72 or dual 288 x 288 crosspoint cards and up to two power cards. Add a single crosspoint for affordability, or add dual crosspoint and power cards for full redundancy. Includes removable fan tray and fans.

$**8.345**

2 Universal Videohub 288 Crosspoint

Supports up to 288 x 288 SDI and 288 x 288 deck control, ethernet/serial router crosspoint control, genlock, alarm GPI and alarm indictors. Compatible with Universal Videohub 288 frame.

$**19.995**

3 Universal Videohub SDI Interface

Includes 4 SDI inputs and 4 SDI outputs, plus 4 deck control. Includes full re-clocking and auto switching SD, HD and 3 Gb/s SDI.

$**385**

4 Universal Videohub Optical Fiber Interface

Includes 4 inputs and 4 outputs plus 4 deck control, re-clocking and SD, HD and 3 Gb/s. 1310 nm laser drivers and receivers up to 25 km at 3 Gb/s.

$**995**

5 Universal Videohub 800 Watt Power Supply

Required when building a fully loaded router with mixed optical fiber and BNC SDI modules. Includes power cards, cables and 1 rack unit power supply with dual redundant 800 Watt 12 volt power supplies.

$**2.995**

Videohub

Control Videohub from your computer's desktop, hardware control panels or even an iPad!

World's Greatest Router Control

Say goodbye to expensive and hard to use custom hardware control panels! Videohub uses software control panels that run on any computer so you can control the router right from your desktop. There's a wide range of control panel styles to suit your workflow. You can even use large touch screen all-in-one computers as a customized router controller with easy to press icon buttons in an elegantly designed layout. Videohub software is easily the world's most beautiful router control!

Network Router Control

Videohub uses software control panels that run on Windows™ and Mac OS X™. This lets you control the router from the same system you edit on. Videohub connects to any computer via USB and is then shared over your local network. Simply connect to the router via the USB 2.0 connection which activates any computer as the host, allowing other computers on your network to connect. You can even use our developer SDK for your own custom software control!

Develop Custom Control

Videohub includes a free software developer kit so you can develop software to talk to all models of Videohub routers. The Videohub SDK works on both Mac and Windows, and lets you change crosspoints, labels, routing, crosspoint locks and more. If you're looking for a more hardware based custom solution, then you can even use the built in serial connector on most models to control using industry standard protocols for a wide range of compatibility with third party router panels.

Videohub

The world's greatest router software control!

Broadcast Videohub

Your destinations are all neatly placed within the lower panel

Your connections are shown when illuminated in gold

Includes a suite of great icons to make navigation quicker

Each button can have its status changed or locked

A grey lock symbol indicates another user has locked this destination

Your sources are all neatly placed within an easy to navigate top panel

World's Highest Quality 3 Gb/s SDI

With new 3 Gb/s SDI connections built in, Videohub allows twice the SDI data rate than normal HD-SDI. Use 3 Gb/s SDI for high resolution real time 2048 x 1556 feature film editing. 3 Gb/s SDI has full compatibility with SD, HD or 2K so you can connect to all your current SD and HD equipment. Videohub lets you connect all this equipment at the same time, as it auto switches the moment any SDI input changes video format.

Connect to Everything

Videohub uses standard SDI connections that auto switch between all SD, HD and 3 Gb/s HD-SDI video formats, so you can connect to virtually any device used in television production. Connect all your editing systems, decks, monitors and anything else you can imagine. If you're working in high quality Dual Link 4:4:4 RGB video, then you can just use two SDI connections for Dual Link routing!

Choose from the world's most advanced technology routing switchers in the size you need!

Micro Videohub

Perfect for locations where space really counts, such as outside broadcast trucks. Micro Videohub is the world's smallest router! Micro Videohub includes 16 x 16 SDI routing, auto standard detection for SD, HD and 3 Gb/s HD-SDI, re-clocking, with built in ethernet, USB and serial router control interfaces.

$**1,995**

Studio Videohub

Studio Videohub is perfect for smaller workgroups who need compact size at an affordable cost. Studio Videohub has the exact same high performance features of the larger models, including 3 Gb/s SDI, auto standard detection for SD, HD and 3 Gb/s HD-SDI formats, re-clocking and more. Features 16 inputs, 32 outputs and 16 deck control ports all packed into a tiny 2 rack unit size less than an inch thick.

$**2,995**

Enterprise Videohub

Enterprise Videohub is a massive size that's perfect for the largest facility or broadcaster. Enterprise Videohub is one of the largest routers available and includes the same advanced technology as the other Videohub models at an affordable price. Enterprise Videohub features a massive 144 inputs, 288 outputs and 144 deck control ports all packed into a 16 rack unit size that's so thin you can install it in the back of a rack!

$**29,995**

Smart Control

Now you can afford a control panel for all your monitors and decks so you can set the input with a single button press! Each button can be set to a different router input and you can set single or multiple router outputs. All buttons include full RGB illumination and Smart Control connects to Videohub via Ethernet and setup software is included!

$**495**

Compact Videohub

Perfect when you need a bigger router in a small size, such as creative post facilities and broadcast trucks! Compact Videohub includes 40 x 40 SDI routing all packed into a 2 rack unit size! You get auto SD, HD and 3 Gb/s HD-SDI detection, re-clocking, with built in ethernet, USB and serial router control interfaces.

$**4,995**

Broadcast Videohub

Broadcast Videohub is an ideal central router for larger post production facilities and regional broadcasters. Broadcast Videohub is the perfect combination of a large size at an affordable price, so you can use it for connecting all your equipment to a central location. Features a massive 72 inputs, 144 outputs and 72 deck control ports all packed into a compact 8 rack unit size!

$**14,995**

Smart Videohub

Smart Videohub includes all the great features of Micro Videohub plus a built in control panel. Now you can change all routing with the push of a button! Smart Videohub includes 16 x 16 SDI, 3 Gb/s SDI, auto SD/HD/3 Gb/s SDI, re-clocking, ethernet, USB and serial router control interfaces. Great first router that's incredibly easy to use. Plus you can expand it's power with all the exciting Videohub control!
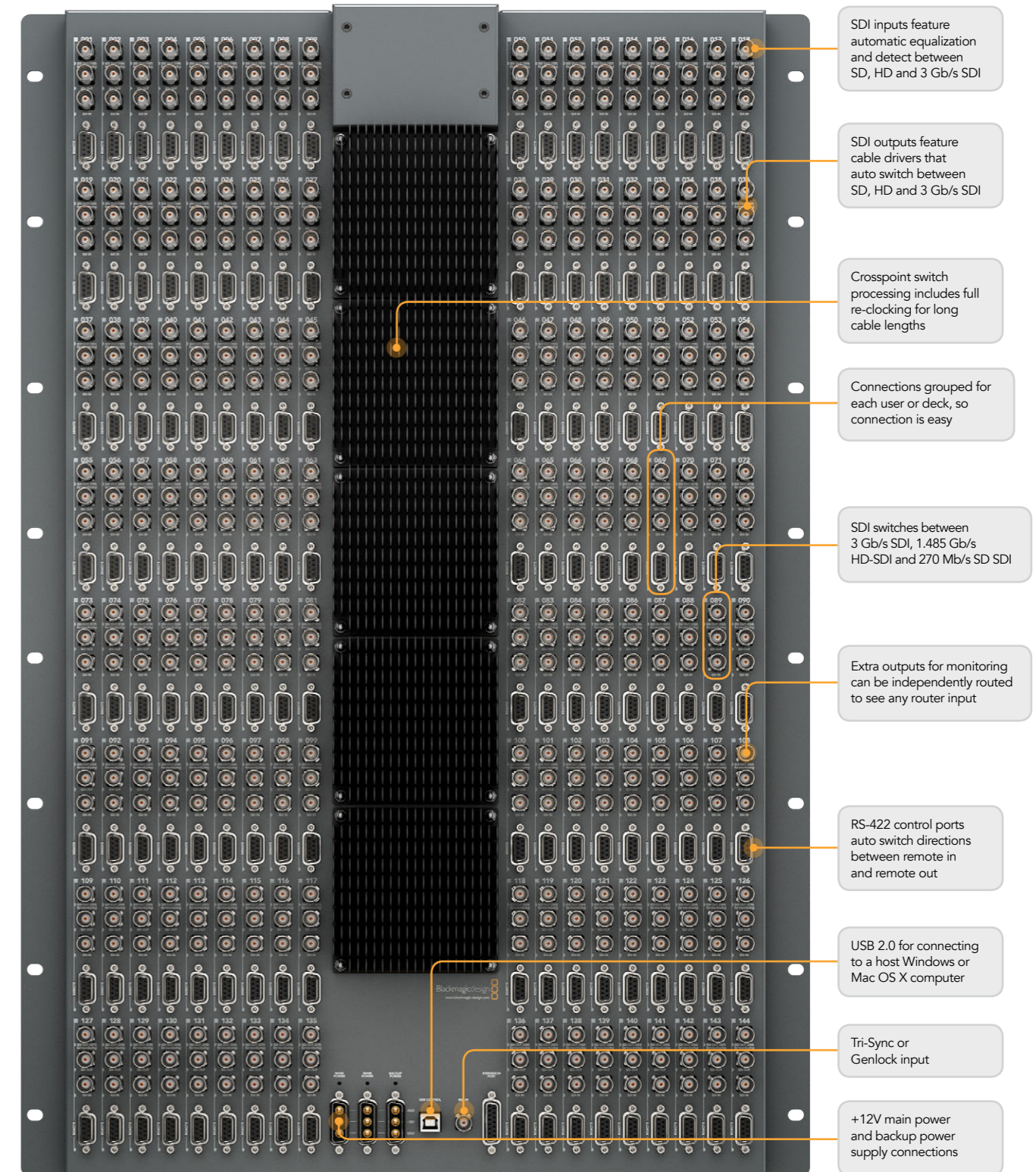
$**2,495**

Universal Videohub

Build your own router! Universal Videohub lets you add SDI interface cards and cross-points for a fully redundant design that keeps working 24/7. With no electronic components on the router motherboard, every single part can be replaced simply by hot-plugging cards. Cross-points are monitored constantly and instantly change when a fault is detected!
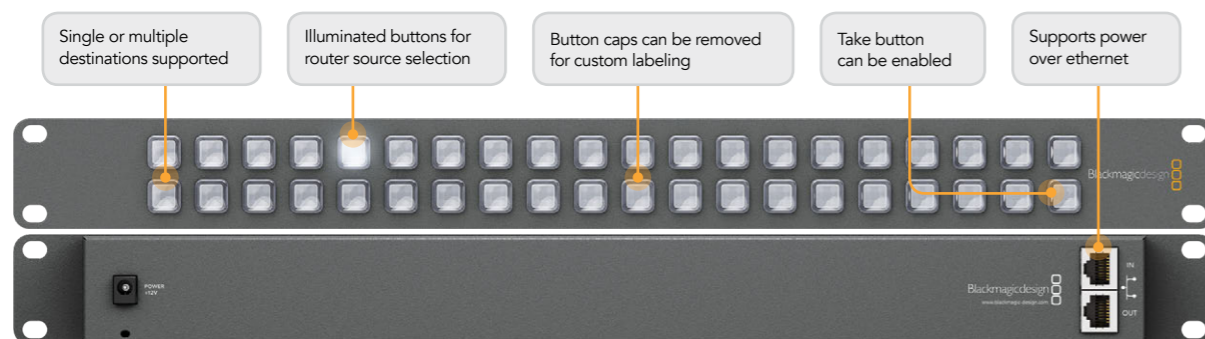
Videohub

Micro Videohub	Compact Videohub	Studio Videohub	Broadcast Videohub	Enterprise Videohub	Smart Videohub
Connections					
SDI Video Input: 16 x SDI/HD-SDI, 3Gb/s SDI and ASI.	**SDI Video Input:** 40 x SDI/HD-SDI, 3Gb/s SDI and ASI.	**SDI Video Input:** 16 x SDI/HD-SDI, 3Gb/s SDI and ASI.	**SDI Video Input:** 72 x SDI/HD-SDI, 3Gb/s SDI and ASI.	**SDI Video Input:** 144 x SDI/HD-SDI, 3Gb/s SDI and ASI.	**SDI Video Input:** 16 x SDI/HD-SDI, 3Gb/s SDI and ASI.
SDI Video Output: 16 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking.	**SDI Video Output:** 40 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking.	**SDI Video Output:** 32 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking.	**SDI Video Output:** 144 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking.	**SDI Video Output:** 288 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking.	**SDI Video Output:** 16 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking.
Multi Rate Support: Auto detection of SD, HD or 3 Gb/s SDI. Simultaneous routing of 2K, HD, SD video and DVB-ASI.					
Device Control: None	**Device Control:** 16 x bidirectional Sony™ compatible RS-422 deck control ports. Serial port directions are reversible.	**Device Control:** 16 x bidirectional Sony™ compatible RS-422 deck control ports. Serial port directions are reversible.	**Device Control:** 72 x bidirectional Sony™ compatible RS-422 deck control ports. Serial port directions are reversible.	**Device Control:** 144 x bidirectional Sony™ compatible RS-422 deck control ports. Serial port directions are reversible.	**Device Control:** None
Router Control: Use either RJ45 Ethernet or USB 2.0 high speed interface or Smart Control shared over IP network.	**Router Control:** USB 2.0 high speed interface or Smart Control shared over IP network.			**Router Control:** 32 buttons for local control of Videohub or use either RJ45 Ethernet or USB 2.0 high speed interface or Smart Control shared over IP network.	
Router Configuration: Use either RJ45 Ethernet or USB 2.0 high speed interface shared over IP network.	**Router Configuration:** USB 2.0 high speed interface shared over IP network.			**Router Configuration:** Use either RJ45 Ethernet or USB 2.0 high speed interface shared over IP network.	
RS-422 Control: 1 x input for controlling router crosspoint switching.	**RS-422 Control:** None			**RS-422 Control:** 1 x input for controlling router crosspoint switching.	
Updates: USB 2.0 high speed (480Mb/s) interface.					
Re-clocking: On all SDI outputs, auto switching between standard definition, high definition or 3 Gb/s SDI video.	**Re-clocking:** On all SDI inputs, auto switching between standard definition, high definition or 3 Gb/s SDI video.			**Re-clocking:** On all SDI outputs, auto switching between standard definition, high definition or 3 Gb/s SDI video.	
Reference Input: Blackburst and TriSync for SD, HD and 2K.					
Standards					
SD Format Support: 625/25 PAL and 525/29.97 NTSC.					
HD Format Support: 1080p23.98, 1080PsF23.98, 1080p24, 1080PsF24, 1080p25, 1080PsF25, 1080p29.97, 1080PsF29.97, 1080p30, 1080PsF30, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94, 1080p60, 720p23.98, 720p24, 720p25, 720p29.97, 720p30, 720p50, 720p59.94, 720p60.					
2K Format Support: 2048 x 1556/23.98/24/25.					
SDI Compliance: SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 310M, SMPTE 425M-A, SMPTE 425M-B, ITU-R BT.656 and ITU-R BT.601.					
SDI Video Sampling: 4:2:2 and 4:4:4.					
SDI Video Rates: SDI video connections are switchable between standard definition, high definition and 2K. SDI switches between 270 Mb/s standard definition SDI, 1.5 Gb/s HD-SDI and 3 Gb/s HD and 2K SDI.					
SDI Color Precision: 4:2:2 and 4:4:4 10 bit.					
SDI Color Space: YUV, or RGB.					
SDI Metadata Support: Video payload identification ancillary data as per SMPTE 352M.					
SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.					
SDI Auto Switching: Automatically selects between SD-SDI, HD-SDI, 3 Gb/s SDI and DVB-ASI on each input so that each input can be running a different television standard.					
Extras					
Software Control: Router control included free for Windows™ and Mac OS X™.					
Firmware Upgrade: Via included firmware updater application.					
Installation: 1 rack unit size. Less than an inch deep.	**Installation:** 2 rack unit size. Less than an inch deep.	**Installation:** 2 rack unit size. Less than an inch deep.	**Installation:** 8 rack unit size. Less than three inches deep.	**Installation:** 16 rack unit size. Less than three inches deep.	**Installation:** 1 rack unit size. Less than an inch deep.
Power Supply: 1 x Universal power supply included. IEC power cable required.	**Power Supply:** 2 x Universal power supplies included. IEC power cables required. The second power supply is permanently connected and works as a redundant power source.	**Power Supply:** 1 x Universal power supply included. IEC power cable required.	**Power Supply:** 2 x Universal power supplies included. IEC power cables required. The second power supply is permanently connected and works as a redundant power source.	**Power Supply:** 3 x Universal power supplies included. IEC power cables required. The third power supply is permanently connected and works as a redundant power source.	**Power Supply:** 1 x Universal power supply included. IEC power cable required.
Power Fail Protection: Router connections preserved and restored instantly at power on independently of host computer.					
Product Warranty: 3 Year Limited Manufacturer's Warranty.					

Take a closer look at Enterprise Videohub

SDI inputs feature automatic equalization and detect between SD, HD and 3 Gb/s SDI

SDI outputs feature cable drivers that auto switch between SD, HD and 3 Gb/s SDI

Crosspoint switch processing includes full re-clocking for long cable lengths

Connections grouped for each user or deck, so connection is easy

SDI switches between 3 Gb/s SDI, 1.485 Gb/s HD-SDI and 270 Mb/s SD SDI

Extra outputs for monitoring can be independently routed to see any router input

RS-422 control ports auto switch directions between remote in and remote out

USB 2.0 for connecting to a host Windows or Mac OS X computer

Tri-Sync or Genlock input

+12V main power and backup power supply connections

Videohub

Universal Videohub 72	Universal Videohub 288	Smart Control
Connections		
SDI Video Input: Up to 72 x SDI/HD-SDI, 3Gb/s SDI and ASI. Can be BNC SDI or optical fiber SDI.	**SDI Video Input:** Up to 288 x SDI/HD-SDI, 3Gb/s SDI and ASI. Can be BNC SDI or optical fiber SDI.	
SDI Video Output: Up to 72 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking. Can be BNC SDI or optical fiber SDI.	**SDI Video Output:** Up to 288 x SDI/HD-SDI, 3Gb/s SDI and ASI with SDI re-clocking. Can be BNC SDI or optical fiber SDI.	
Multi Rate Support: Auto detection of SD, HD or 3 Gb/s SDI. Simultaneous routing of 2K, HD, SD video and DVB-ASI.		
Device Control: Up to 72 bidirectional Sony™ compatible RS-422 deck control ports via breakout cable.	**Device Control:** Up to 288 bidirectional Sony™ compatible RS-422 deck control ports via breakout cable.	
Router Control: Use either RJ45 Ethernet or USB 2.0 high speed interface or Smart Control shared over IP network.		**Control:** 40 programmable buttons and RJ45 Ethernet used for remote control of routers over an IP network.
Router Configuration: Use either RJ45 Ethernet or USB 2.0 high speed interface shared over IP network.		
RS-422 Control: 1 x input for controlling router crosspoint switching.		
Updates: USB 2.0 high speed (480Mb/s) interface.		
Re-clocking: On all SDI outputs.		
Reference Input: Blackburst and TriSync for SD, HD and 2K.		
Standards		
SD Format Support: 625/25 PAL and 525/29.97 NTSC.		
HD Format Support: 1080p23.98, 1080PsF23.98, 1080p24, 1080PsF24, 1080p25, 1080PsF25, 1080p29.97, 1080PsF29.97, 1080p30, 1080PsF30, 1080i50, 1080i59.94, 1080i60, 1080p50, 1080p59.94, 1080p60, 720p23.98, 720p24, 720p25, 720p29.97, 720p30, 720p50, 720p59.94, 720p60.		
2K Format Support: 2048 x 1556/23.98/24/25.		
SDI Compliance: SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 310M, SMPTE 425M-A, SMPTE 425M-B, ITU-R BT.656 and ITU-R BT.601.		
SDI Video Sampling: 4:2:2 and 4:4:4.		
SDI Video Rates: SDI video connections are switchable between standard definition, high definition and 2K. SDI switches between 270 Mb/s standard definition SDI, 1.5 Gb/s HD-SDI and 3 Gb/s HD and 2K SDI.		
SDI Color Precision: 4:2:2 and 4:4:4 10 bit.		
SDI Color Space: YUV, or RGB.		
SDI Metadata Support: Video payload identification ancillary data as per SMPTE 352M.		
SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.		
SDI Auto Switching: Automatically selects between SD-SDI, HD-SDI, 3 Gb/s SDI and DVB-ASI on each input so that each input can be running a different television standard.		
Extras		
Software Control: Router control included free for Windows™ and Mac OS X™.		
Firmware Upgrade: Via included firmware updater application.		
Installation: 5 rack unit size. Less than 6 inches deep.	**Installation:** 18 rack unit size. Less than 6 inches deep.	**Installation:** 1 rack unit size. Less than an inch deep.
Power Supply: Redundant power supply options are available. GPI alarm for connecting external alarms.		**Power Supply:** 1 x Universal power supply included with international socket adapters for all countries.
Power Fail Protection: Router connections preserved and restored instantly at power on independently of host computer.		
Product Warranty: 3 Year Limited Manufacturer's Warranty.		**Product Warranty:** 1 Year Limited Manufacturer's Warranty.

Take a closer look at Smart Control

Single or multiple destinations supported

Illuminated buttons for router source selection

Button caps can be removed for custom labeling

Take button can be enabled

Supports power over ethernet

Take a closer look at Universal Videohub 288

SDI inputs feature automatic equalization and detect between SD, HD and 3 Gb/s SDI

SDI outputs feature cable drivers that auto switch between SD, HD and 3 Gb/s SDI

Crosspoint switch processing includes full re-clocking for long cable lengths

Tri-Sync or Blackburst, external reference

RS-422 port for connecting to third party control systems

USB 2.0 for connecting to a host Windows or Mac OS X computer

Ethernet connection to your local network and Videohub Smart Control

GPI Alarm connector

Easy to use handles for removal and insertion of the crosspoint card module

Deck control connector to control up to 4 decks

800W main and backup power supply connections

The most advanced 3 Gb/s
SDI mini converters for SD and HD!

Mini Converters

Build your SDI studio with the world's most advanced and easy to use converters!
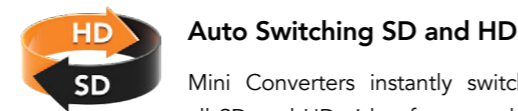
Build your SDI studio with the world's most advanced and easy to use converters. Only Mini Converters include auto SD/HD switching, redundant input, AES/EBU and analog audio on standard 1/4 inch jack connections, combined with

advanced 3 Gb/s SDI technology. There are now 9 great models to choose from. Choose from models with analog, HDMI, audio, optical fiber, up, down, cross conversion and sync generation!

High Quality

Mini Converters are built to the highest quality standards with low SDI jitter. You get the longest SDI cable lengths combined with ultra low noise analog video and audio for a true broadcast quality solution. You also get the latest broadcast technology such as re-clocking and 3 Gb/s SDI.

Super Easy to Use

All Mini Converters are similar, so they're super easy to understand and use. With advanced 3 Gb/s SDI technology, every Mini Converter is fully compatible with your SD and HD equipment, and can be updated via USB. Use our Converter Utility to make adjustments right from your laptop.

Hardware Down Converter

If you connect to analog SD equipment then you'll know how hard it is when modern SDI equipment unexpectedly changes between SD and HD. Mini Converter SDI to Analog includes an automatic high quality down converter that supports letterbox, anamorphic 16:9 and center cut 4:3.

Includes AES/EBU and Analog Audio

Most Mini Converters feature 24 bit analog and 24 bit digital audio and HDMI models support HDMI audio. Unlike other converters you don't need custom audio cables and the standard 1/4 inch audio jacks switch between balanced analog audio or AES/EBU digital audio.

Auto Switching SD and HD

Mini Converters instantly switch between all SD and HD video formats whenever the video input changes. A huge range of standards are supported including NTSC, PAL, 1080i/59.94, 1080i/50, 1080PsF/23.98, 1080PsF/24, 720p/59.94, 720p/50 and new formats can be added via USB.

Redundant SDI Input

Mini Converters feature a unique redundant input for mission critical tasks. Connect a redundant cable to the second input, and if the main SDI input is lost, Mini Converters will automatically switch over in an instant. A loop-through SDI output is also provided for connecting to other devices.

New 3 Gb/s SDI Technology

With the latest 3 Gb/s SDI technology built into Mini Converters you get modern broadcast technology that's future proof. Upgrades can be loaded via the USB connection for future video format compatibility. 3 Gb/s SDI is also fully compatible with all your SD and HD equipment.

International Power Supply

Unlike other converters, a high quality low noise universal power supply is included with international socket adapters for all countries. To stop power accidentally being disconnected, a cable tie point is included to lock down the power connection tight and secure!

Cable tie point to lock down the power connection tight!

Easily change settings using mini switches located on the side

Mini USB for adding new television standards or new features

Easy to use Converter Utility to update and change your settings

SDI loop through output for connecting to other SDI based devices

+12V power connection and includes international power adaptor

Unique redundant SDI input switches automatically when main SDI input is lost

9 Great Converter Models!
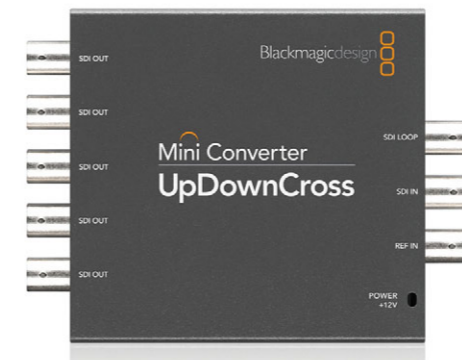
Mini Converter UpDownCross

UpDownCross converter includes both up, down and cross conversion as well as a 4 field standards converter! Fantastic for placement on deck SDI inputs, so you always get NTSC or PAL into the deck. Use the cross converter to convert 720p to 1080i or 1080i to 720p so you can edit once and master in SD, 720p and 1080i video!

$**495**

Functional Diagram
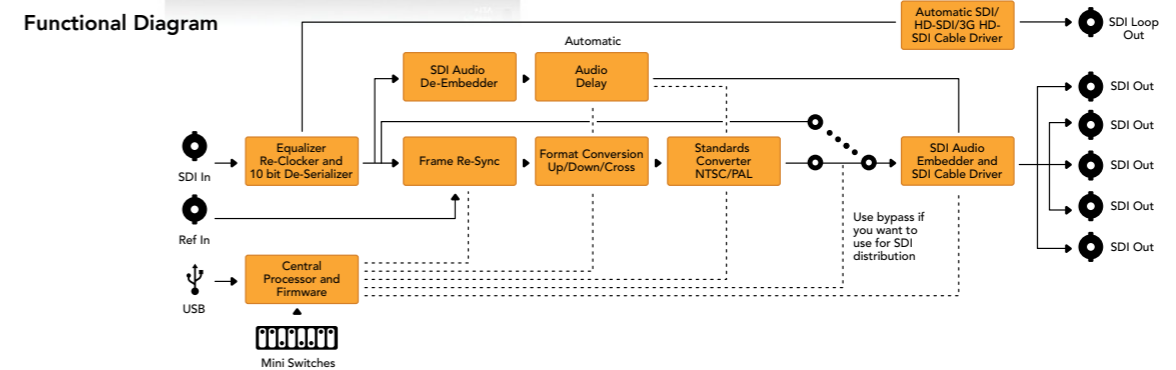
Mini Converters

Mini Converter SDI to HDMI

Converts from SDI to HDMI video out with embedded HDMI audio, plus balanced AES/EBU or analog audio out. Imagine using big screen televisions and video projectors as broadcast video monitors! Now it's incredibly easy to connect a huge range of HDMI displays to SDI based equipment.
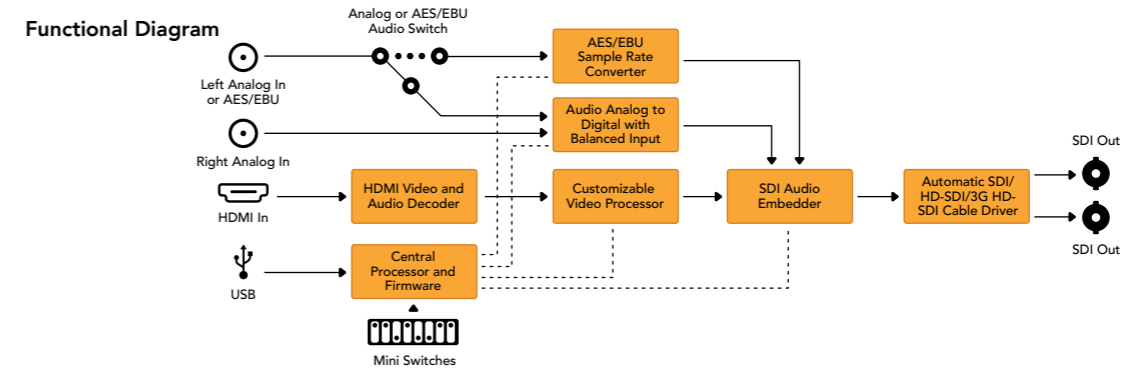
$495

Functional Diagram
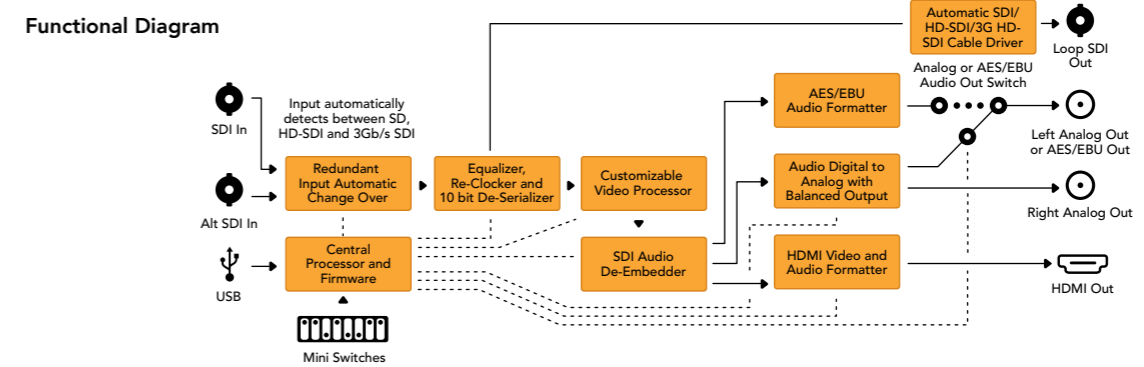
Mini Converter HDMI to SDI

Ideal for converting from HDMI devices to SDI out with the choice to embed SDI audio from the HDMI, AES/EBU or balanced analog audio inputs. Now you can add SDI outputs to video cameras with HDMI connections, or add SDI outputs to computers with HDMI compatibility. Also includes HD to SD down converter.

$495

Functional Diagram

Mini Converter SDI to Analog

Includes everything you need to convert from SDI to analog HD/SD component, NTSC and PAL video out, plus balanced AES/EBU and analog audio out. Easily connect to Betacam SP, VHS and analog video monitors. Features hardware down converter to connect HD-SDI video to SD equipment.

$495

Functional Diagram
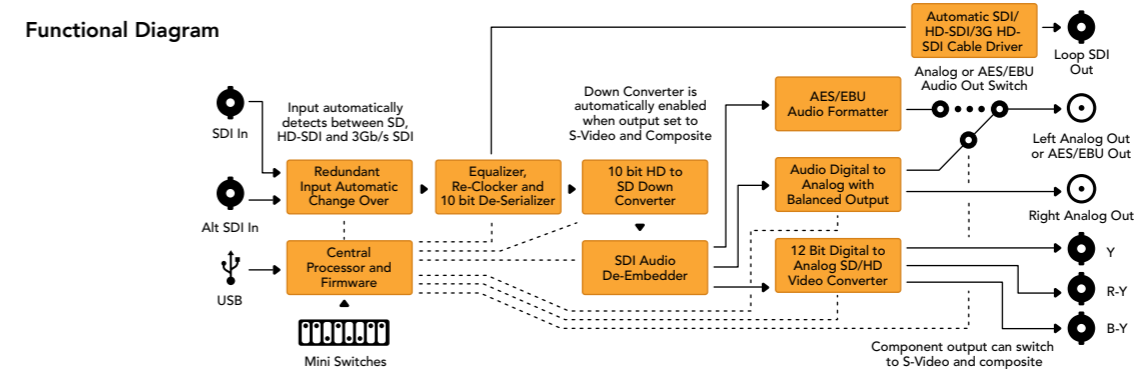
Mini Converter Analog to SDI

Perfect for converting from analog HD/SD component, NTSC, PAL or S-Video to SDI out with balanced jack AES/EBU and analog audio embedding. Now you can convert analog devices such as Betacam SP, VHS, set top boxes, gaming consoles and HDV cameras to incredible quality SD/HD-SDI video.

$495

Functional Diagram
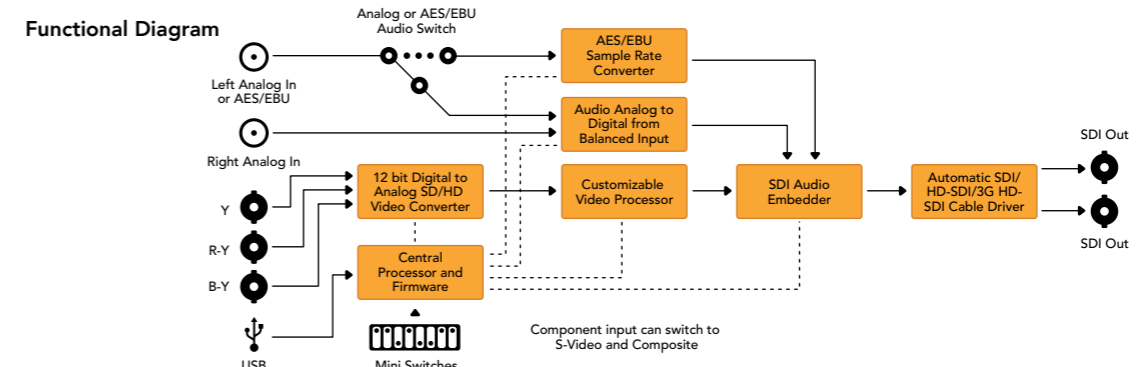
Mini Converter SDI to Audio

Includes everything you need to de-embed 4 channels of analog audio or 8 channels of AES/EBU digital audio from any SDI video connection. Now you can easily access the audio in any SDI video connection for output to audio equipment such as audio mixers, analog broadcast decks, audio monitors and more!

$**495**

Functional Diagram
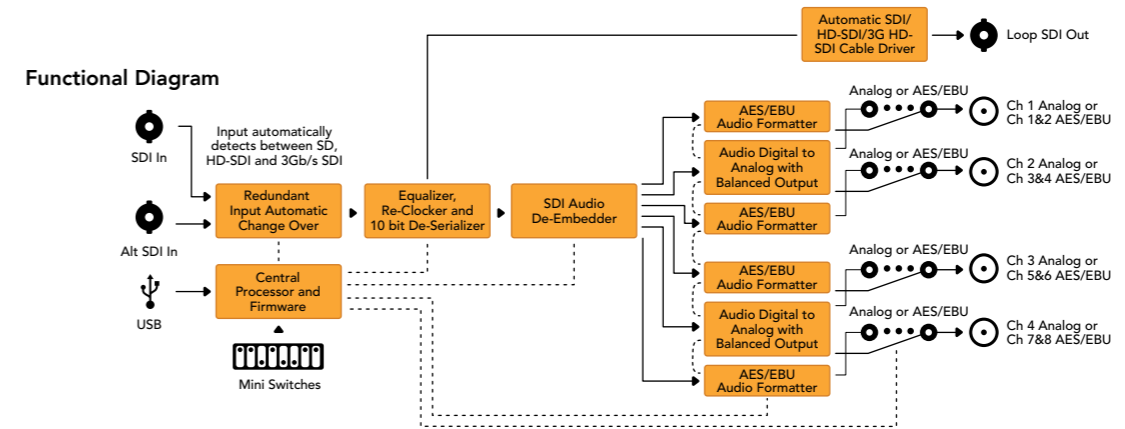
Mini Converter Audio to SDI

Includes everything you need to embed 4 channels of analog audio, or 8 channels of AES/EBU digital audio into any SDI video connection. Embed audio from devices such as audio mixers and analog decks into SDI video connections for use with SDI routers and decks or to add extra audio channels to video converters!

$**495**

Functional Diagram
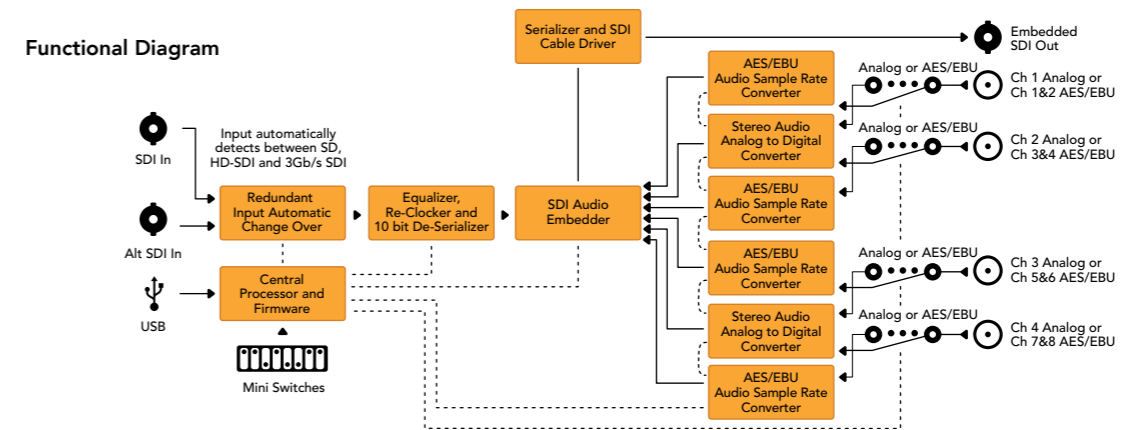
Mini Converter Optical Fiber

Now you can convert SDI to Optical Fiber, and Optical Fiber to SDI simultaneously. Mini Converter Optical Fiber automatically switches between any SD, HD, 3Gb/s HD-SDI video standards and each direction can be completely independent.

$**495**

Functional Diagram
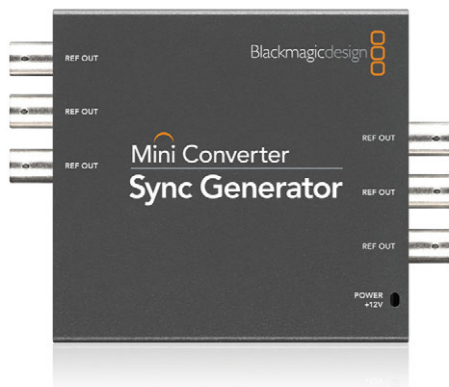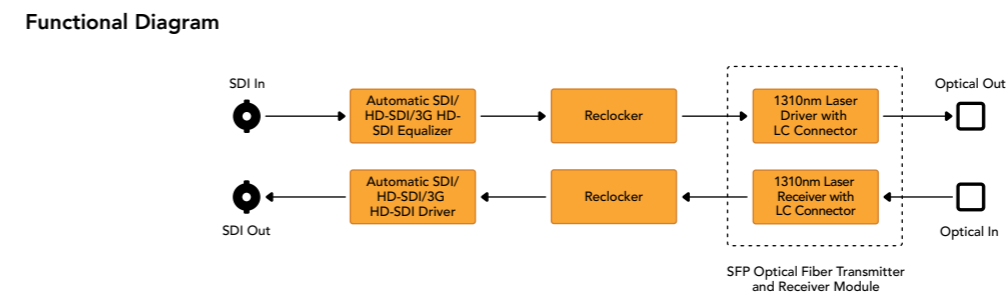
Mini Converter Sync Generator

Includes 6 crystal stabilized video reference outputs for referencing all the video equipment in your studio in either high definition Tri-Sync or standard definition Black Burst television standards. Perfect for small studios and outside broadcasts!

$**295**

Functional Diagram

Connections

SDI to Analog	SDI to HDMI	HDMI to SDI	Analog to SDI	SDI to Audio	Audio to SDI	Optical Fiber	UpDownCross	Sync Generator
SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.		SDI Video Input: None		SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.				SDI Video Input: None
SDI Redundant Input: Automatically switches over if main SDI input is lost.		SDI Redundant Input: None		SDI Redundant Input: Automatically switches over if main SDI input is lost.	SDI Redundant Input: None			
SDI Video Outputs: Automatically matches the SD, HD or 3 Gb/s SDI video input.								SDI Video Outputs: None
Optical Fiber Video Input: None						Optical Fiber Video Input: Switchable between SD, HD and 3 Gb/s SDI.	Optical Fiber Video Input: None	
Optical Fiber Video Output: None						Optical Fiber Video Output: Switchable between SD, HD and 3 Gb/s SDI.	Optical Fiber Video Output: None	
Multi Rate Support: Auto detection of HD or standard definition inputs.								Multi Rate Support: Via mini switches
Updates and Configuration: Via USB 2.0 high speed. (480 Mb/s)								
Re-clocking: Yes								
Optical Fiber Audio Input: None						Optical Fiber Audio Input: 16 channel embedded.	Optical Fiber Audio Input: None	
Optical Fiber Audio Output: None						Optical Fiber Audio Output: 16 channel embedded.	Optical Fiber Audio Output: None	
Analog Audio: 2 channels of professional balanced analog audio with standard 1/4 inch jack connections.				Analog Audio: 4 channels of professional balanced analog audio with standard 1/4 inch jack connections.	Analog Audio: None			
AES/EBU Digital Audio: 2 channels of professional balanced digital with standard 1/4 inch jack connections.				AES/EBU Digital Audio: 8 channels of professional balanced digital with standard 1/4 inch jack connections.	AES/EBU Digital Audio: None			
HDMI: None	HDMI: Output	HDMI: Input	HDMI: None					
Analog Video: Component, NTSC, PAL and S-Video from SD-SDI input. Component HD from HD-SDI input.	Analog Video: None		Analog Video: Component SD/HD, NTSC, PAL and S-Video.	Analog Video: None				
Reference Input: None						Reference Input: Blackburst and TriSync for SD & HD.	Reference Input: None	

Standards

SDI to Analog	SDI to HDMI	HDMI to SDI	Analog to SDI	SDI to Audio	Audio to SDI	Optical Fiber	UpDownCross	Sync Generator

SDI Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.

SDI Compliance: SMPTE 259M, SMPTE 292M, SMPTE 296M, ITU-R BT.656, ITU-R BT.601 and SMPTE 297M for Optical Fiber SDI.

SDI Video Sampling: 4:2:2

SDI Video Rates: SDI video connections are switchable between standard definition and high definition.

SDI Color Precision: 4:2:2

SDI Color Space: YUV

SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.

SDI Auto Switching: Automatically selects between SD SDI, HD-SDI and 3 Gb/s SDI.

Analog Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.

Analog Color Precision: 4:2:2

Analog Color Space: YUV

HDMI Format Support: 625/25 PAL, 525/29.97 NTSC, 625/50p PAL, 525/59.94p NTSC, 1080p23.98/24, 1080i50, 1080i59.94/60, 720p50 and 720p59.94/60.

HDMI Color Precision: 4:2:2 and 4:4:4

HDMI Color Space: YUV and RGB

Content Protection: Mini Converter HDMI to SDI cannot convert from copy protected HDCP encrypted HDMI sources to SDI.

Extras

Software Control: Mac OS X™ and Windows™ software upgrade via USB.

Settings Control: Mini Switches or USB software.

Firmware Upgrade: Via included firmware updater application.

Power Supply: +12V universal power supply included with international socket adapters for all countries. Cable tie point.

SDI to Analog	SDI to HDMI	HDMI to SDI	Analog to SDI	SDI to Audio	Audio to SDI	Optical Fiber	UpDownCross	Sync Generator
HD Down Conversion: Included	HD Down Conversion: None	HD Down Conversion: Included	HD Down Conversion: None			HD Down Conversion: Included		HD Down Conversion: None
110 Volt Power Consumption: 83 mA	110 Volt Power Consumption: 82 mA	110 Volt Power Consumption: 60 mA	110 Volt Power Consumption: 67 mA	110 Volt Power Consumption: 53 mA	110 Volt Power Consumption: 82 mA	110 Volt Power Consumption: 34 mA	110 Volt Power Consumption: 88 mA	110 Volt Power Consumption: 36 mA
220 Volt Power Consumption: 42 mA	220 Volt Power Consumption: 41 mA	220 Volt Power Consumption: 30 mA	220 Volt Power Consumption: 34 mA	220 Volt Power Consumption: 27 mA	220 Volt Power Consumption: 41 mA	220 Volt Power Consumption: 17 mA	220 Volt Power Consumption: 47 mA	110 Volt Power Consumption: 18 mA

Product Warranty: 3 Year Limited Manufacturer's Warranty.

OpenGear Converters

The world's greatest converters now available in OpenGear rack mount cards!

OpenGear Converters
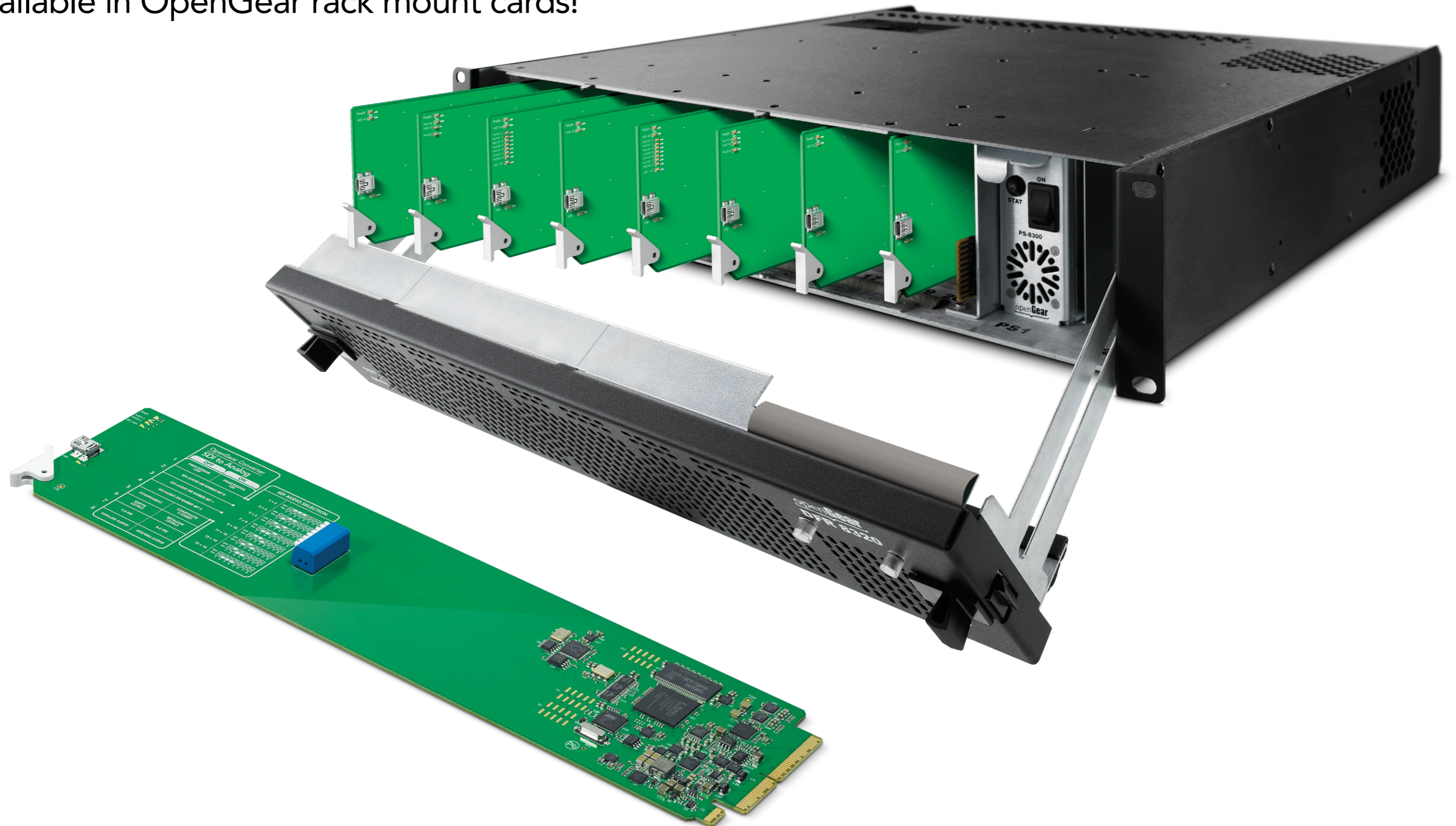
Build your SDI studio with the world's most advanced and easy to use converters!

The new Blackmagic OpenGear Converters give you a great range of conversion, all packed with the latest video technologies at an affordable price! OpenGear is the television industry's open standard for rack based conversion and processing. Get the freedom and cost savings of an open standard combined with centralized network control and monitoring using the OpenGear DashBoard software for Windows™, Mac OS X™ and Linux™!

Blackmagic OpenGear Converters switch between all SD and HD video formats the instant the video input changes. A huge range of standards are supported including NTSC, PAL, 1080i/59.94, 1080i/50, 1080PsF/23.98, 1080PsF/24, 720p/59.94, 720p/50 and new formats can be added via USB. Choose from analog, HDMI, audio, optical fiber, and sync generator models! There's a single card model for each type of video conversion.
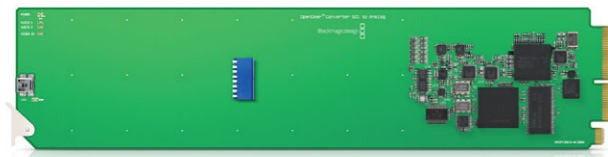
OpenGear Converter SDI to Analog

Includes everything you need to convert from SDI to analog HD/SD component, NTSC and PAL video out, plus balanced AES/EBU and analog audio out. Easily connect to Betacam SP, VHS and video monitors. Features a built in hardware down converter to connect HD-SDI video to SD equipment!

$**495**
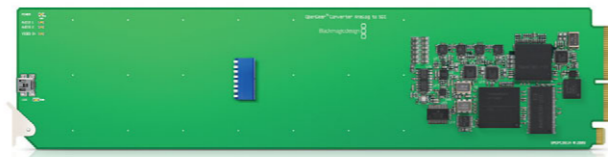
OpenGear Converter Analog to SDI

Perfect for converting from analog HD/SD component to SDI out with balanced AES/EBU and analog audio embedding. Now you can convert analog devices such as Betacam SP, VHS, set top boxes, gaming consoles and HDV cameras to incredible quality SD/HD-SDI video.

$**495**

OpenGear Converter SDI to Audio

Includes everything you need to de-embed 4 channels of analog audio or 8 channels of AES/EBU digital audio from any SDI video connection. Easily access the audio in any SDI video connection for output to audio equipment such as audio mixers, analog broadcast decks, audio monitors and more!

$**495**
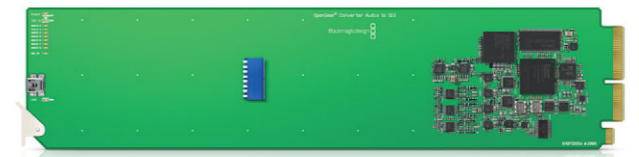
OpenGear Converter Audio to SDI

Includes everything you need to embed 4 channels of analog audio or 8 channels of AES/EBU digital audio into any SDI video connection. Embed audio from audio mixers and analog decks into SDI video for use with SDI routers and decks, or to add extra audio channels to video converters!

$**495**

OpenGear Converter SDI to HDMI

Converts from SDI to HDMI video out with embedded HDMI audio. Imagine using big screen TVs and video projectors as broadcast video monitors! Now it's incredibly easy to connect a huge range of HDMI displays to SDI based equipment!
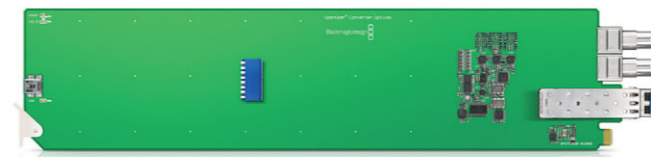
$**495**

OpenGear Converter HDMI to SDI

Ideal for converting from non copy protected HDMI devices to SDI out with embedded SDI audio from the HDMI input. Now you can convert HDMI video devices to SDI, or add SDI outputs to computers with HDMI compatibility.

$**495**

OpenGear Converter Optical Fiber

Convert SDI to Optical Fiber, and Optical Fiber to SDI simultaneously. Blackmagic OpenGear Optical Fiber auto switches between any SD, HD, 3 Gb/s HD-SDI video standards and each direction is completely independent.
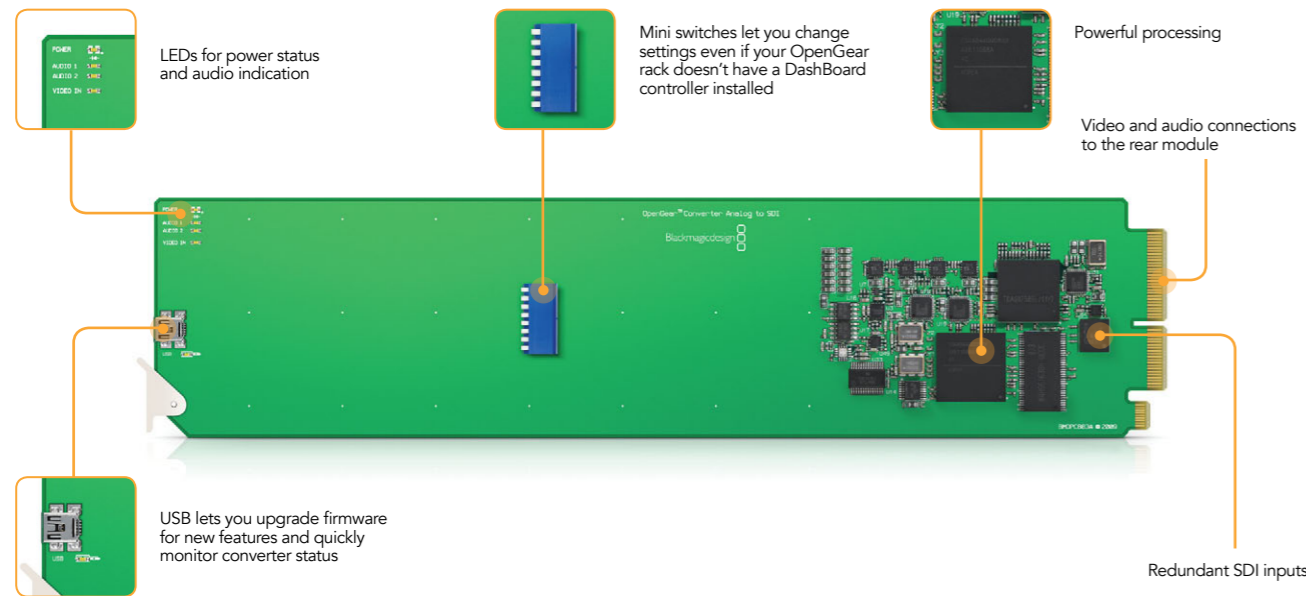
$**495**

OpenGear Converter Sync Generator

Includes 10 crystal stabilized video reference outputs for referencing all the video equipment in your studio with either high definition tri-sync or standard definition black burst. Perfect for small studios or outside broadcasts!

$**495**

OpenGear Converters

OpenGear converters at a glance!

LEDs for power status and audio indication

Mini switches let you change settings even if your OpenGear rack doesn't have a DashBoard controller installed

Powerful processing

Video and audio connections to the rear module

USB lets you upgrade firmware for new features and quickly monitor converter status

Redundant SDI inputs

Redundant SDI Input

Blackmagic OpenGear Converter models, SDI to Analog, Audio to SDI and SDI to Audio, feature a unique redundant SDI input for mission critical or live broadcast tasks. Simply connect a redundant cable to the second input and if the main SDI input is lost, Blackmagic OpenGear Converters will automatically switch over in an instant. A loop-through SDI output is also provided for connecting to other devices. You can also loop to other Blackmagic OpenGear Converters when de-embedding more audio channels.

Includes AES/EBU and Analog Audio

Blackmagic OpenGear Converters feature 24 bit analog and 24 bit digital audio. You can select either analog or AES/EBU digital audio via mini switches, or remotely via the DashBoard network control software. Blackmagic OpenGear Converters will then switch to use either analog or AES/EBU digital audio. Blackmagic OpenGear Converters support the standard 2 ch and 4 ch audio rear modules, so they can be used with other brand OpenGear products.

High Quality

Blackmagic OpenGear Converters are built to the highest quality standards with low SDI jitter. You get the longest SDI cable lengths combined with ultra low noise analog video and audio for a true broadcast quality solution.
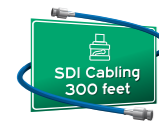
Hardware Down Converter

If you have older standard definition analog equipment in your facility then you'll know how hard it is when modern SDI equipment unexpectedly changes between SD and HD. Blackmagic OpenGear Converter SDI to Analog includes an incredible quality HD down converter that automatically adapts to the input video format and outputs standard definition video in letterbox, anamorphic 16:9 or center cut 4:3.

Easy to Use

Blackmagic OpenGear Converters are similar, so they're easy to understand. With advanced 3 Gb/s SDI technology, every card is fully compatible with all your SD and HD equipment, plus you can update new formats via USB. Blackmagic OpenGear Converters can be set up via mini switches, DashBoard, or via USB using Blackmagic Design's Converter Utility. That's three completely different ways to configure, so you're never stuck in a critical live situation.
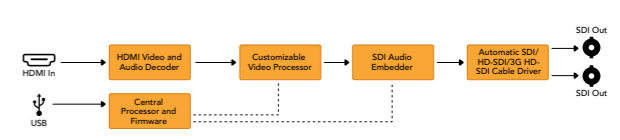
New 3 Gb/s SDI Technology

With the latest 3 Gb/s SDI technology built into Blackmagic OpenGear Converters, you know you're getting the latest technology. New standards can be uploaded via the USB port. 3 Gb/s SDI is also fully compatible with all your SD and HD equipment.
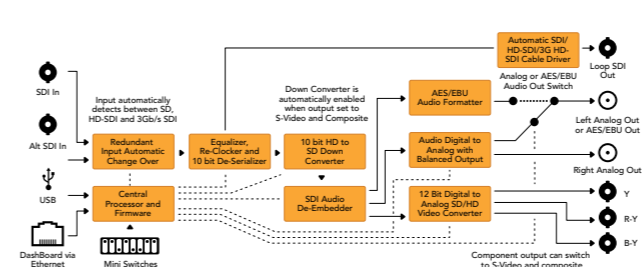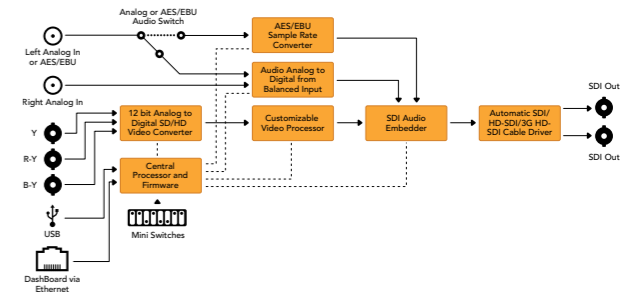
OpenGear Converter SDI to HDMI
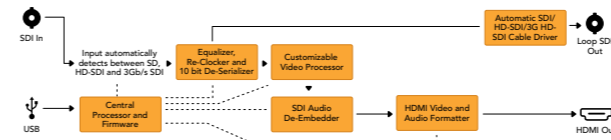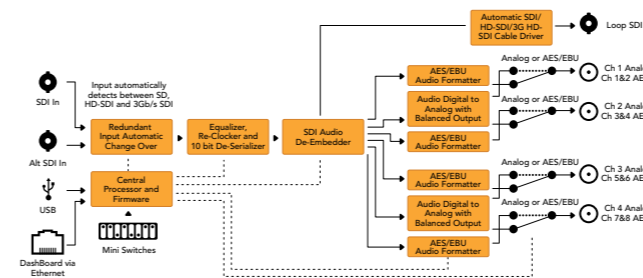

OpenGear Converter HDMI to SDI

OpenGear Converter SDI to Analog
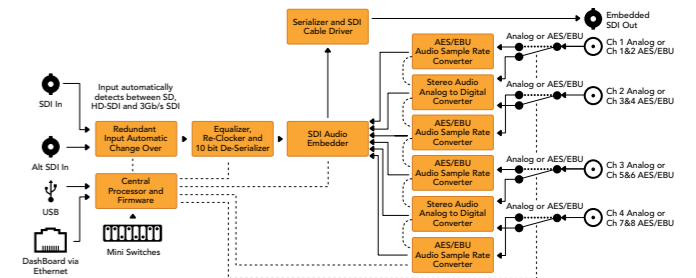

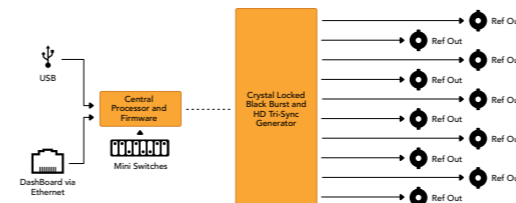## OpenGear Converter Analog to SDI

OpenGear Converter SDI to Audio

OpenGear Converter Audio to SDI

OpenGear Converter Sync Generator

## OpenGear Converter Optical Fiber

OpenGear Converters
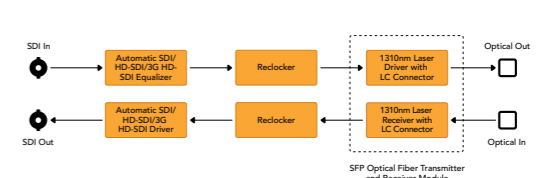
About OpenGear™

OpenGear is an open standard for rack mount converters and processing for television broadcasters. OpenGear uses a 2 rack unit rack frame that normally holds up to 10 plug in cards, or when using simpler cards, a double density frame can be used to hold up to 20 cards. Many manufacturers develop OpenGear cards and frames that can be mixed and matched. This gives you the freedom to build your facility without being locked into a proprietary rack standard.

Whatever unique or custom need you have, there will most likely be an OpenGear partner who makes it! OpenGear cards are hot swappable and can be controlled by the same java based DashBoard network control and monitoring software. DashBoard automatically checks the plugged in card's function without any complicated driver loading. Because DashBoard is TCP/IP network based, you can monitor from remote sites, or monitor centrally within massive installations consisting of hundreds of OpenGear cards and rack frames.
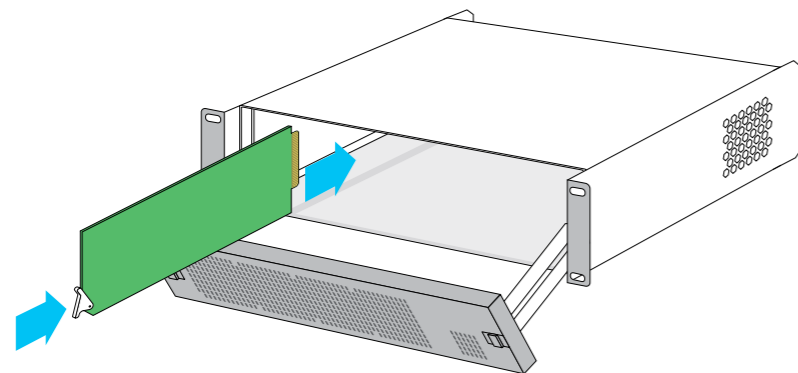
Broadcast Strength Conversion!

Engineers love rack mounting converters because it's the only way to make sure you can instantly change the converter in case of a break down.

SDI to Analog	Analog to SDI	SDI to HDMI	HDMI to SDI	SDI to Audio	Audio to SDI	Optical Fiber	Sync Generator
Connections							
SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None	SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None	SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None	SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None
SDI Redundant Input: Automatically switches over if main SDI input is lost.	SDI Redundant Input: None			SDI Redundant Input: Automatically switches over if main SDI input is lost.		SDI Redundant Input: None	SDI Redundant Input: None
SDI Video Outputs: Automatically matches the SD, HD or 3 Gb/s SDI video input.							None
Optical Fiber Video Input: None						Optical Fiber Video Input: 1 x 10 bit SD/HD/3 Gb/s SDI switchable.	Optical Fiber Video Input: None
Optical Fiber Video Output: None						Optical Fiber Video Output: 1 x 10 bit SD/HD/3 Gb/s SDI switchable.	Optical Fiber Video Output: None
Multi Rate Support: Auto detection of HD or standard definition inputs.							Multi Rate Support: Manually set.
Updates and Configuration: Via USB 2.0 high speed. (480 Mb/s)							
Re-clocking: Yes							
Optical Fiber Audio Input: None						Optical Fiber Audio Input: 16 channel embedded.	Optical Fiber Audio Input: None
Optical Fiber Audio Output: None						Optical Fiber Audio Output: 16 channel embedded.	Optical Fiber Audio Output: None
Analog Audio: 2 channels of professional balanced digital with OpenGear standard 3 pin connections.	Analog Audio: None			Analog Audio: 4 channels of professional balanced analog audio with openGear standard 3 pin connections.		Analog Audio: None	
2 channels of professional balanced digital with OpenGear™ standard 3 pin connections.	None			8 channels of professional balanced digital with openGear™ standard 3 pin connections.		None	
None		HDMI out	HDMI in	None			
Component, NTSC, PAL and S-Video from SD-SDI input. Component HD from HD-SDI input.	Component SD/HD.	None					
Standards							
SDI Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.							None
SDI Compliance: SMPTE 292M, SMPTE 259M, SMPTE 296M, ITU-R BT.656, ITU-R BT.601 and SMPTE 297M for Optical Fiber SDI.							None
SDI Video Sampling: 4:2:2							None
SDI Color Precision: 4:2:2							None
SDI Color Space: YUV							None
SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.							None
SDI Auto Switching: Automatically selects between SD SDI, HD-SDI and 3 Gb/s SDI.							None
Analog Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.							625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080i50, 1080i59.94, 720p50 and 720p59.94.
Analog Color Precision: 4:2:2							None
Analog Color Space: YUV							None
HDMI Format Support: 625/25 PAL, 525/29.97 NTSC, 625/50p PAL, 525/59.94p NTSC, 1080p23.98/24, 1080i50, 1080i59.94/60, 720p50 and 720p59.94/60.							None
HDMI Color Precision: 4:2:2 and 4:4:4							None
HDMI Color Space: YUV and RGB							None
Content Protection: OpenGear Converter HDMI to SDI cannot convert from copy protected HDCP encrypted HDMI sources to SDI.							
Extras							
Software Control: Mac OS X™ and Windows™ software upgrade via USB.							
Settings Control: OpenGear DashBoard network control software, Mini Switches or USB software.							
Firmware Upgrade: Via included firmware updater application.							
Product Warranty: 3 Year Limited Manufacturer's Warranty.							

H.264 Encoding

The easiest way to capture to H.264 video
files for iPod, iPad, the web and more!

Distribute your client's H.264 video files to websites, YouTube and now iPad

Capture video direct to H.264 video files for the web, iPod, iPad, iPhone, Apple TV, YouTube and even full resolution video backups! Blackmagic encoders come in two fantastic models. Video Recorder for home use to capture priceless memories in high quality SD component and composite. Video Recorder includes easy to use Mac software.

H.264 Pro Recorder is for the industry professional who needs professional encoding from SDI, HDMI, analog component/composite and balanced audio! H.264 Pro Recorder includes Blackmagic Design's powerful Media Express for frame accurate deck control with EDL import! Media Express lets you encode on Mac, Windows and Linux!

H.264 Pro Recorder

The perfect low cost way to capture from professional broadcast decks directly to SD and HD H.264 files! With new ways of delivering content to consumers, now it's easy to capture old or new programming content into the same file format used on the web, iPad™, iPod™, iPhone™, Apple TV™, YouTube™ and more! Capture directly from SDI, HDMI and component analog video with embedded SDI, HDMI and balanced analog audio inputs. RS-422 deck control is included with software for Mac, Windows and Linux!

$349

Technical Specifications

Video Input: SDI, HDMI, YUV Component, NTSC, PAL and S-Video. **Audio Input:** Supports SDI, HDMI and balanced analog audio. **Updates and Configuration:** USB 2.0 high speed (480Mb/s) interface. **Standards:** Supports both SD and HD video capture. **HDCP Support:** Unable to capture from copy protected HDMI sources. **Extras:** Media Express software is included for Mac, Windows and Linux. **Installation:** Connect to your computer's USB port and run Media Express. **Warranty:** 12 Months

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Take a closer look at Media Express

Playlist in playback mode
You can load in a huge number of clips for review. Use DPX, MJPEG, uncompressed YUV and RGB, ProRes, DVCPRO HD all in the one playlist.

Realtime high quality preview
Preview your clips with full frame rate for accurate review.

Audio Metering
With Media Express you can select any of the audio channels. Just simply click on the audio you want to hear.

Capture and Preview
Capture on the fly. Play back single or multiple clips.

Dynamic Playlist Search
Organising your playlist has never been easier with Media Express's dynamic playlist search. Even if you have 1,000 clips, you'll always find the right clip.

Clip Information
Now you can see all the important detail information of your clip, including frame size, frame rate, color space, format and codec.

Easy Grab Frame Tool
Media Express makes grabbing frames of your video easy. When the frame you want is displayed in the preview window, just hit Grab Frame.

Encode to iPhone, iPad and iPod!

Now it's easy to encode video for new portable devices! Video Recorder and H.264 Pro Recorder can resize content as you record and encode directly into the format for each one of these devices!
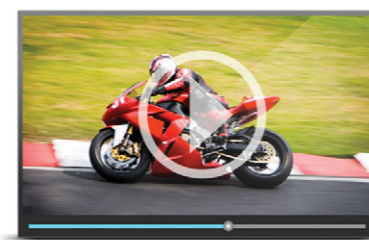
Perfect for Online Content

Use Video Recorder and H.264 Pro Recorder to encode for the web! Now encode the millions of hours of content into online formats for fun or profit! Save time by direct resize and encoding all in one step!

Preserve Archive Footage

Old videotapes are delicate and have a limited life. With old videotapes deteriorating and decks that can play them getting rare, encoding video is the only way to preserve valuable footage!

Capture home movies to your iPod, iPhone, iPad, Apple TV and even YouTube!

Video Recorder

Get fantastic H.264 encoding for the home! Video Recorder is the only consumer encoder that captures the high quality of component video, as well as composite and s-video. Perfect for capturing old videotapes and family memories to disk, preserving valuable video before the tapes degrade. Video Recorder plugs directly into your computer's USB and includes software for capturing video directly to the H.264 format used on iPod™, iPhone™, iPad™, Apple TV™ and YouTube™ formats. Included Mac software also lets you crop and resize before capture!

$149

Technical Specifications

Analog Video Input: YUV Component, NTSC, PAL and S-Video. **Analog Audio Input:** Stereo Hi-Fi audio.
Interface: USB 2.0 high speed (480Mb/s) interface. **Standards:** SD Format Support: 625/25 PAL and 525/29.97 NTSC.
Includes: Video Recorder software for Mac OS X™. **Warranty:** 12 Months

Capture Direct For Your Mobile Device.
To make capture easy, simply select the device you want to capture. The Video Recorder software will automatically set the size and quality for you!

Highest Quality Video Capture
Regular video input is included, plus you can select super high quality component video for incredible quality movies.

Easy Cropping Tools.
Sometimes analog video has black borders, or VHS switching at the bottom of the picture. Easily adjust the cropping to make perfect movies every time!

Video Recorder Software

Exciting Recording Options
For recording videos automatically, you can set the recording time, plus you can segment movies into multi files for storage on CDs or even YouTube!

Stereo Audio Metering
Video Recorder features digital style VU meters for audio monitoring.

Timecode Display
Easy to see timecode counter allows you to make accurate captures of our video.

Save your favorite home videos to your iPhone

Capture your home videos and take them on the go with your iPhone. Show everyone your videos anytime on your iPhone.

Archive those old video tapes

Convert all those old dusty video tapes and memories to H.264 file format. Now you can protect your memories on ageing VHS tapes as a digital file on your computer.

Save precious memories for all time to your computer

From camera to computer to your family and friends, you can now save those precious memories forever.

Share your gameplay instantly!

Record your own gameplay or share with friends your ultimate gaming moment in an instant!

www.blackmagic-design.com

Blackmagicdesign