

Connections	DeckLink HD Extreme™
SDI Video Input	2 x 10-bit BNC female. Supports single link 3 Gb/s and single link 4:2:2/4:4:4 and dual link 4:4:4.
SDI Video Output	2 x 10-bit BNC female. Supports single link 3 Gb/s and single link 4:2:2/4:4:4 and dual link 4:4:4.
Supported Video formats	525 NTSC, 625 PAL, 720HD, 1080HD and 2K switchable.
Analog Video Input	Component YUV/S-Video/ Composite switchable between SD and HD in Component.
Analog Video Output	Component YUV/S-Video/Composite switchable between SD and HD in Component.
AES Audio Input	2 channels unbalanced AES/EBU digital audio with sample rate converter.
AES Audio Output	2 channels unbalanced AES/EBU digital audio.
SDI Audio Input	16 channels in HD and 2K on Mac OS X™ and Windows™, 8 channels in standard definition.
SDI Audio Output	16 channels in HD and 2K on Mac OS X™ and Windows™, 8 channels in standard definition.
Analog Audio Input	2 channels of professional balanced XLR analog audio.
Analog Audio Output	2 channels of professional balanced XLR analog audio.
HDMI Audio Input	2 channels.
HDMI Audio Output	2 channels.
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
Multiple 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.
Sync Input	Blackburst in SD or TriSync in HD.
Device Control	Sony™ compatible RS422 deck control ports. Serial ports TxRx direction reversible under software control.
Settings Control	DeckLink System Preference (Mac OS X™) and Control Panel (Windows™).
Updates	Firmware for cards built into software driver. Loaded at system start, or via updater software.

Standards	
2K Format Support	2048 x 1556 at 24fps and 23.98fps capture and playback via SDI.
HD Format Support	1080PsF23.98/24, 1080i48, 1080i50, 1080i59.94, 720p59.94, 720p60 and 720p50.
SD Format Support	625/25 PAL, 525/29.97 NTSC and 525/23.98 NTSC.
SDI Compliance	SMPTE 292M, SMPTE 259M, SMPTE 296M, SMPTE 372M, SMPTE 425M-B, ITU-R BT.656 and ITU-R BT.601.

Video Sampling	4:2:2 and 4:4:4
Color Precision	4:2:2 and 4:4:4 10 bit
Color Space	4:2:2 YUV and 4:4:4 RGB
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 standard sample rate of 48 kHz and 24 bit.
Card type	PCI Express 4 lane, compatible with 4,8,16 lane PCIe slots.
Copy Protection	For legal reasons, capture devices from Blackmagic Design are designed not to capture, convert or transmit video or audio from copy-protected sources, e.g. video devices using HDCP.

Processing	
Colorspace Conversion	Hardware based real time.
HD Down Conversion	Select output to use 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. Down Converter is always active when working in HD with the analog output selected to S-Video or composite. Selectable between letterbox, anamorphic 16:9 and center cut 4:3 styles.
HD Up Conversion	Real-time up conversion from 720HD to 1080HD or SD to 720HD or 1080HD during video capture.
Real time effects	Apple Final Cut Pro™ internal effects in DV, ProRes and uncompressed on Intel Mac OS X™. Adobe® Premiere Pro® internal effects in DV, MJPEG and uncompressed.

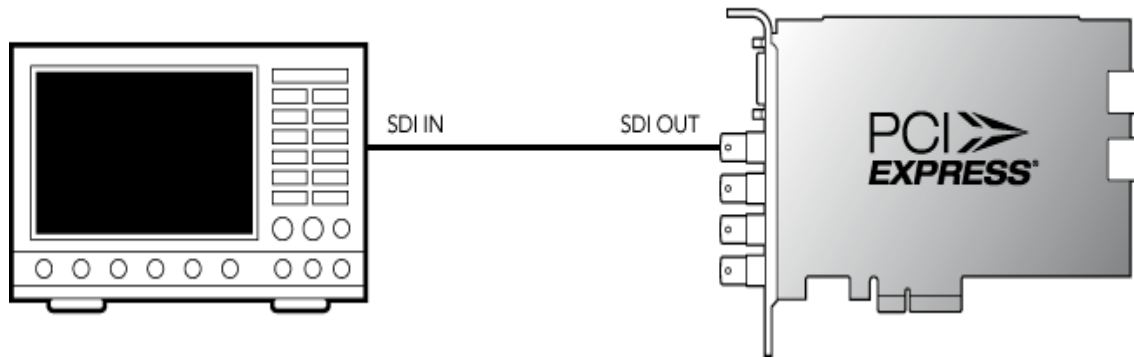
Extras	
Software Included	Deck Control, Disk Speed Test, LiveKey, FrameLink and Blackmagic driver.
Video Desktop	Compatible with Mac OS X™ and Windows XP™.
Firmware Upgrade	Firmware for cards built into software driver. Loaded at system start, or via updater software.
Installation	PCI Express 4 lane, compatible with 4,8,16 lane PCI Express slots. Please see the full system requirements for Mac OS X™ and Windows™ .
Product Warranty	3 Year Limited Manufacturer's Warranty.

Breakout Cable



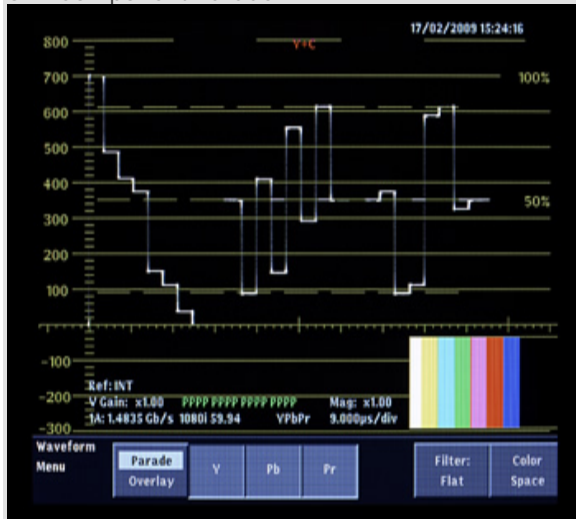
DeckLink HD Extreme Test Results

DeckLink HD Extreme Test Setup

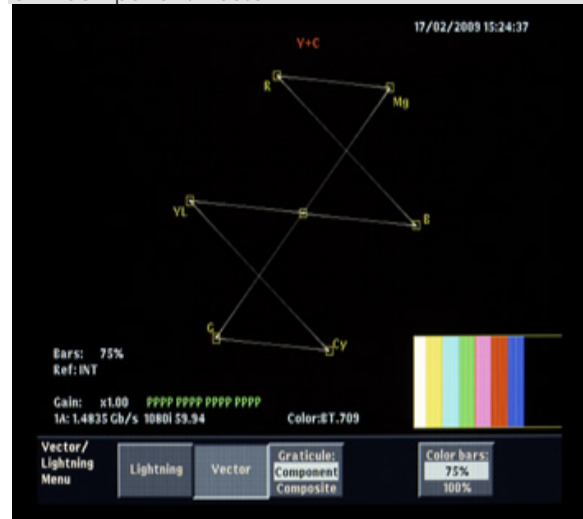


Test card was taken from a typical production run. The HD/SD-SDI output from DeckLink HD Extreme was connected to a Tektronix WFM-700 HD-SDI waveform monitor and test signal video files were used. Test results can vary slightly from these results between different models tested due to component tolerances used in production.

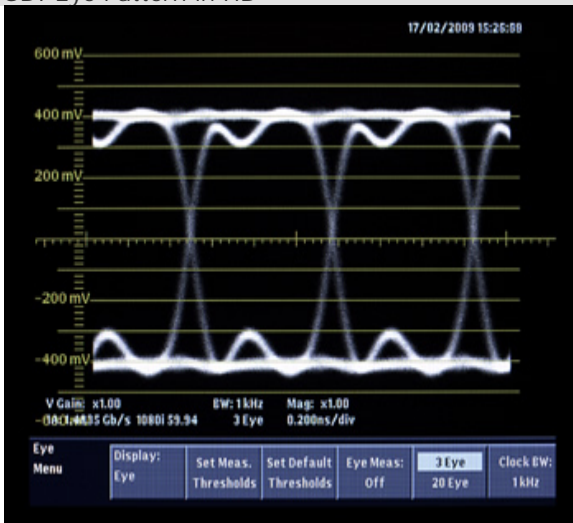
SDI Component Parade



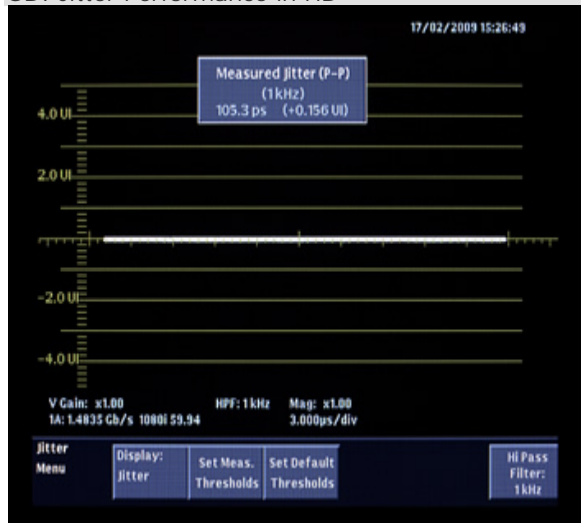
SDI Component Vector



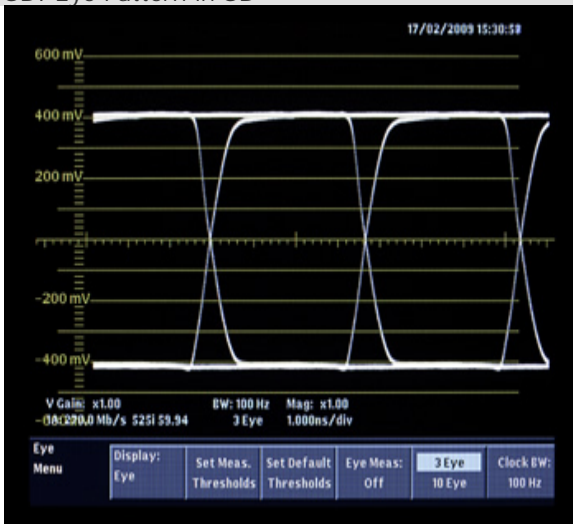
SDI Eye Pattern in HD



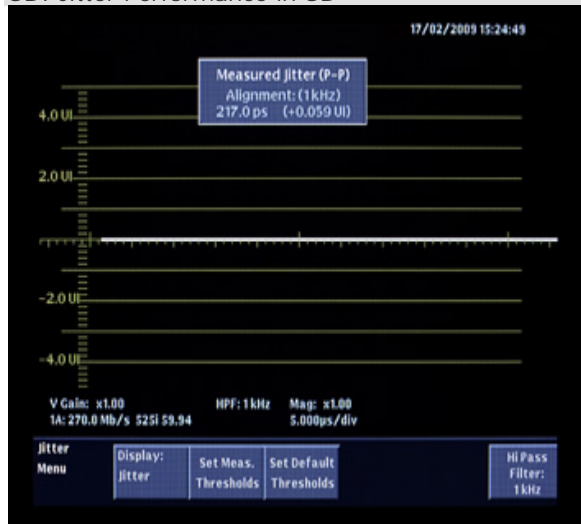
SDI Jitter Performance in HD



SDI Eye Pattern in SD



SDI Jitter Performance in SD



SDI Channel Status



SDI Arrowhead

