DeckLink Studio 4K Technical Specifications

Description

If you work with a wide range of analog video and audio gear, and need to move seamlessly between SD, HD, 2K and Ultra HD, then DeckLink Studio 4K is perfect! DeckLink Studio 4K includes a massive number of analog and digital video connections including SD/HD/Ultra HD 6G-SDI, HDMI 1.4b, SD/HD component, composite, S-video, 4 ch balanced analog audio, 2 ch AES/EBU switchable to 6 ch out, black burst and trisync reference input, RS-422 deck control connections, keying in SD and a hardware down converter. Perform editing, paint and broadcast design and more with the ultimate future proof design!

Connections

SDI Video Input

1 x 10-bit SD/HD/2K/4K. Supports 6 Gb/s 4:2:2 and 3 Gb/s 4:4:4

SDI Video Output

1 x 10-bit SD/HD/2K/4K. Supports 6 Gb/s 4:2:2 and 3 Gb/s 4:4:4

Analog Video Input

1 x Component YUV on 3 BNCs, 1 x Composite, 1 x S-Video. Component supports HD and SD.

Analog Video Output

1 x Component YUV on 3 BNCs, 1 x Composite, 1 x S-Video, 1 x SD-SDI. Component supports HD and SD.

HDMI Video Input

1 x HDMI type A connector

HDMI Video Output

1 x HDMI type A connector

Analog Audio Input

4 Channels of professional balanced analog audio via 1/4" jack connectors.

Analog Audio Output

4 Channels of professional balanced analog audio via 1/4" jack connectors. Channels 3 & 4 can switch to AES/EBU outputs.

AES/EBU Audio Input

2 Channels unbalanced with sample rate converter.

AES/EBU Audio Output

2 Channels unbalanced. Analog outputs 3 and 4 can switch to AES/EBU outputs for audio 3 & 4 and 5 & 6 output. This provides a total of 6 AES/EBU output audio channels when using this feature.

SDI Audio Input

16 Channels embedded in HD/2K/4K. 8 Channels embedded in SD.

SDI Audio Output

16 Channels embedded in HD/2K/4K. 8 Channels embedded in SD.

HDMI Audio Input

8 Channels embedded in SD, HD, 4K.

HDMI Audio Output

8 Channels embedded in SD, HD, 4K

Sync Input

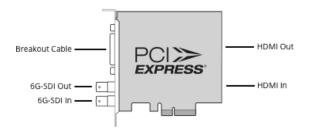
Blackburst in SD, 720p50, 720p59.94, 1080i50 and 1080i59.94 formats or Tri-Sync in any HD, 2K or 4K format.

Device Control

Sony™ compatible RS422 deck control ports. Serial ports TxRx direction reversible under software control.

Computer Interface

PCI Express 4 lane generation 1, compatible with 4,8 and 16 lane PCIe Slots.



Software

Software Included

Media Express, Disk Speed Test, LiveKey, Blackmagic System Preferences and Blackmagic driver on Mac OS X. Media Express, Disk Speed Test, LiveKey, Blackmagic Control Panel and Blackmagic driver on Windows 7 and Windows 8. Media Express, Blackmagic Control Panel and Blackmagic driver on Linux.

Internal Software Upgrade

Firmware built into software driver. Loaded at system start or via updater software.

Physical Installation

PCI Express 4 lane generation 1, compatible with 4, 8, 16 lane PCI Express slots on Mac OS X, Windows and Linux. Please check the Support pages to see the full system requirements.

Software Applications



DaVinci Resolve









Adobe Premiere Pro CC Avid Media Composer



After Effects CC





Steinberg Cubase



Autodesk Smoke



Photoshop CC

Other supported applications include: Nuke, Steinberg Nuendo, Avid Symphony, Avid News Cutter, Tools On Air just:in & live:cut & just:play & just:live, Softron OnTheAir, MovieRecorder and OnTheAir CG, Flash Media Encoder, Wirecast, Livestream Procaster, Resolume Avenue 4, Sony Vegas Pro, Corel VideoStudio Pro X4, CyberLink Power Director, MAGIX Video Pro X4, Vidblaster Pro & Studio & Broadcast, Uniplay, Playbox AirBox, CasparCG, Magicsoft CG, Xsplit Broadcaster, Imagine Communications Velocity & InfoCaster.

Video Standards

SD Format Support

625/25 PAL, 525/29.97 NTSC

HD Format Support

720p50, 720p59.94, 720p60, 1080PsF23.98, 1080p23.98, 1080PsF24, 1080p24, 1080PsF25 1080p25, 1080PsF29.97, 1080p29.97, 1080PsF30, 1080p30, 1080i50, 1080p50, 1080i59.94, 1080p59.94, 1080i60, and 1080p60.

2K Format Support

2048 x 1080p23.98, 2048 x 1080p24, 2048 x 1080p25.

4K Format Support

3840x2160p23.98, 3840x2160p24, 3840x2160p25, 3840x2160p29.97, 3840x2160p30, 4096x2160p23.98, 4096x2160p24, 4096x2160p25.

SDI Compliance

SMPTE 259M, SMPTE 292M, SMPTE 296M SMPTE 372M, SMPTE 425M ITU-R BT.656 and ITU-R BT.601.

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. Closed captioning.

Audio Sampling

Television standard sample rate of 48 kHz at 24 bit.

Video Sampling

4:2:2 and 4:4:4 (4K is 4:2:2)

Color Precision

10-bit

Color Space

REC 601, REC 709

HDMI Configuration

HDMI automatically configures to connected display.

HDMI Resolution

Pixel for pixel up to 4K resolutions.

HDMI Color Precision

10-bit RGB in HD 10-bit YUV in 4K

Multiple Rate support

HDMI and SDI video connections are switchable between SD/HD/2K and UHD. Component analog video connections are switchable between SD and HD.

Copy Protection

HDMI input is unable to capture from copy protected HDMI sources. Always confirm copyright ownership before capture or distribution of content.

Processing

Colorspace Conversion

Hardware based real time.

HD Down Conversion

Built in, high quality hardware down converter outputs HD-SDI on SDI output, SD on SD-SDI, Composite and S-Video outputs when working in HD video formats on playback.

HD Up Conversion

Software based up conversion from SD to 720HD or 1080HD on capture. Selectable between 4:3 pillarbox, 14:9 pillarbox and 16:9 zoom.

Cross Conversion

Software based cross conversion from 720HD to 1080HD and

Real Time Effects

Apple Final Cut Pro™ internal effects. Adobe Premiere Pro CC Mercury Playback Engine effects. Avid Media Composer™ internal effects. DaVinci Resolve.

Switch analog video to Component and choose HD or SD output. Selectable between letterbox, anamorphic 16:9 and center cut 4:3 styles.

1080HD to 720HD on playback.

Operating Systems



Mac OS X 10.9 Mavericks, Mac OS X 10.10 Yosemite or later.



Windows 7 or Windows 8.



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EMC Certifications

FCC, CE and C-Tick

Physical Specifications





Environmental
Specifications

Operating Temperature 5° to 40° C (32° to 104° F)

Storage Temperature -20° to 45° C (-4° to 113° F) Relative Humidity 0% to 90% non-condensing

What's Included

DeckLink Studio 4K

SD Card

Breakout cable for analog and RS-422 control.

HDMI bracket

Warranty

3 Year Limited Manufacturer's Warranty.