Blackmagicdesign

UltraStudio 4K

Rack mount Thunderbolt or Thunderbolt 2 based capture and playback "break out box" with latest high performance technology including 4:4:4 and dual channel 3D stereoscopic, Ultra HD and 4K capture and playback. UltraStudio 4K is the solution you need when doing high performance work that demands quality. Packed with the latest SDI, HDMI and analog video, and timecode connections, as well as AES/ EBU, balanced and unbalanced analog audio. There is no better solution for video capture and playback!

$995

Connections

SDI Video Input
2 x 10-bit SD/HD/2K/4K and 2D/3D switchable. Supports 3Gb/s and 6Gb/s single link and dual link.

SDI Video Loop
2 x reclocked 10-bit SD/HD/2K/4K. Supports 3Gb/s and 6Gb/s.

SDI Video Output
2 x 10-bit SD/HD/2K/4K and 2D/3D switchable. Supports 3Gb/s and 6Gb/s single link and dual link.

Analog Video Input
1 x Component YUV on 3 BNCs.
1 x composite on 1 BNC.

Analog Video Output
1 x Component YUV on 3 BNCs.
1 x composite on 1 BNC.

HDMI Video Input
1 x HDMI type A connector including 3D frame packing and Ultra HD support.

HDMI Video Output
1 x HDMI type A connector including 3D frame packing and Ultra HD support.

Analog Audio Input
2 Channels of professional balanced analog audio via XLR connectors and 2 channels of consumer unbalanced via RCA connections.

Analog Audio Output
2 Channels of professional balanced analog audio via XLR connectors.

AES/EBU Audio Input
2 Channels unbalanced with sample rate converter on BNC connector.

AES/EBU Audio Output
2 Channels unbalanced with sample rate converter on BNC connector.

SDI Audio Input
16 Channels embedded in SD/HD/2K/4K.

SDI Audio Output
16 Channels embedded in SD/HD/2K/4K.

HDMI Audio Input
8 Channels embedded in SD/HD/4K.

HDMI Audio Output
8 Channels embedded in SD/HD/4K.

Timecode Input
1 x XLR for LTC Input.

Timecode Output
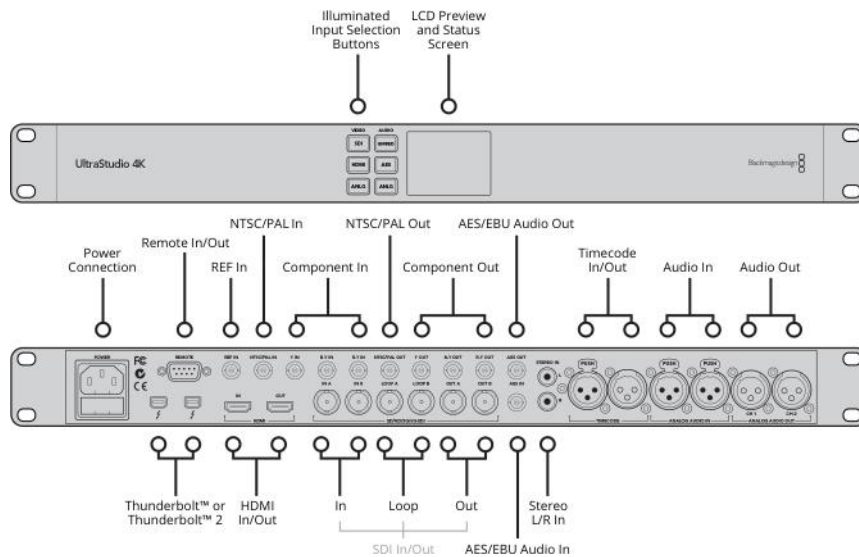1 x XLR for LTC Output.

Sync Input
Black burst in SD or Tri-Sync in HD.

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

Computer Interface
Thunderbolt™ or Thunderbolt™ 2

Codecs

Supports: AVC-Intra, AVCHD, Canon XF MPEG2, Digital SLR, DV-NTSC, DV-PAL, DVCPRO50, DVCPROHD, DPX, HDV, XDCAM EX, XDC HD422, Apple ProRes 4444, Apple ProRes 422 HQ, Apple ProRes 422, Apple ProRes LT, Apple ProRes 422 Proxy, Uncompressed 8 Uncompressed 10-bit 4:2:2, Uncompressed 10-bit 4:4:4.

Software

Software Included
Media Express, Disk Speed Test, LiveKey, Blackmagic Desktop Video Utility and Blackmagic driver on Mac OS X and Windows.

Internal Software Upgrade
Firmware built into software driver. Software driver loads upgrades at system start or via updater software.

Software Applications

DaVinci Resolve	Fusion	Final Cut Pro X	Premiere Pro CC	Avid Media Composer
After Effects CC	Avid Pro Tools	Steinberg Cubase	Steinberg Nuendo	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.

SDI Video Standards

SD Format Support
525i29.97 NTSC, 625i25 PAL

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

2K Format Support
2K DCI 23.98p, 2K DCI 24p, 2K DCI 25p
2K DCI 23.98PsF, 2K DCI 24PsF, 2K DCI
25PsF

Ultra HD Format Support
2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p30, 2160p50*,
2160p59.94*, 2160p60*
*Output only

4K Format Support
4K DCI 23.98p, 4K DCI 24p, 4K DCI 25p

SDI Compliance
SMPTE 292M, SMPTE 259M, SMPTE
296M, SMPTE 372M, SMPTE 425M
Level A and B, ITU-R BT.656 and ITU-R
BT.601.

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

Video Sampling
4:2:2 and 4:4:4*
*4K is 4:2:2

Color Precision
10-bit YUV up to 4K, 12-bit* RGB in HD
and 2K *Output only

Color Space
REC 601, REC 709

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.

HDMI Video Standards

SD Format Support
525i29.97 NTSC, 625i25 PAL

HD Format Support
720p50, 720p59.94, 720p60
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p30, 1080p50,
1080p59.94, 1080p60
1080i50, 1080i59.94, 1080i60

Ultra HD Format Support
2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p30, 2160p50*,
2160p59.94*, 2160p60*
*Output only

4K Format Support
4K DCI 23.98p, 4K DCI 24p, 4K DCI 25p

HDMI Compliance
HDMI 1.4b

HDMI Resolution
Pixel for pixel up to 4K resolutions.

HDMI Color Precision
10-bit RGB* in HD *capture only,
output available via future software
update. 10-bit YUV in HD and 4K.

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.

3D Processing
Dual stream and frame packed capture & playback.

HD Down Conversion
Built in, high quality hardware down converter outputs HD-SDI on SDI A output, SD-SDI on SDI B output and Composite and S-Video when working in HD video formats on playback. Switch analog video to Component and choose HD or SD output. Selectable between letterbox, anamorphic 16:9 and center cut 4:3 styles.

HD Up Conversion
Built-in, high quality hardware up conversion from SD to 720HD or 1080HD on playback. Selectable between 4:3 pillarbox, 14:9 pillarbox and 16:9 zoom. HD outputs via HD-SDI, HDMI and component analog.

HD Cross Conversion
Built in, high quality hardware cross conversion from 720HD to 1080HD and 1080HD to 720HD on playback.

Real Time Effects
Final Cut Pro X internal effects. Premiere Pro CC. Mercury Playback Engine effects. Avid Media Composer internal effects.

Physical Installation
Requires computer with a Thunderbolt or Thunderbolt 2 port. Please check support pages to see the full system requirement.

Operating Systems

Mac OS X 10.11 El Capitan, macOS Sierra or later.

Windows 7, 8.1 and 10, all 64-bit.

Linux

Power Requirements

1 x built-in international AC power supply with IEC C14 inlet. 120-240V, 50-60Hz.

Physical Specifications

UltraStudio 4K

19 in

1.73 in

5.59 in

3.70 lb

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

Safety Compliance

What's Included

UltraStudio 4K

SD card with software and manual

Warranty

3 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller