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, 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 Inputs
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 Outputs
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.

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

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

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

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

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

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

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

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

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

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

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

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

Timecode Input
1 x XLR for LTC Input.

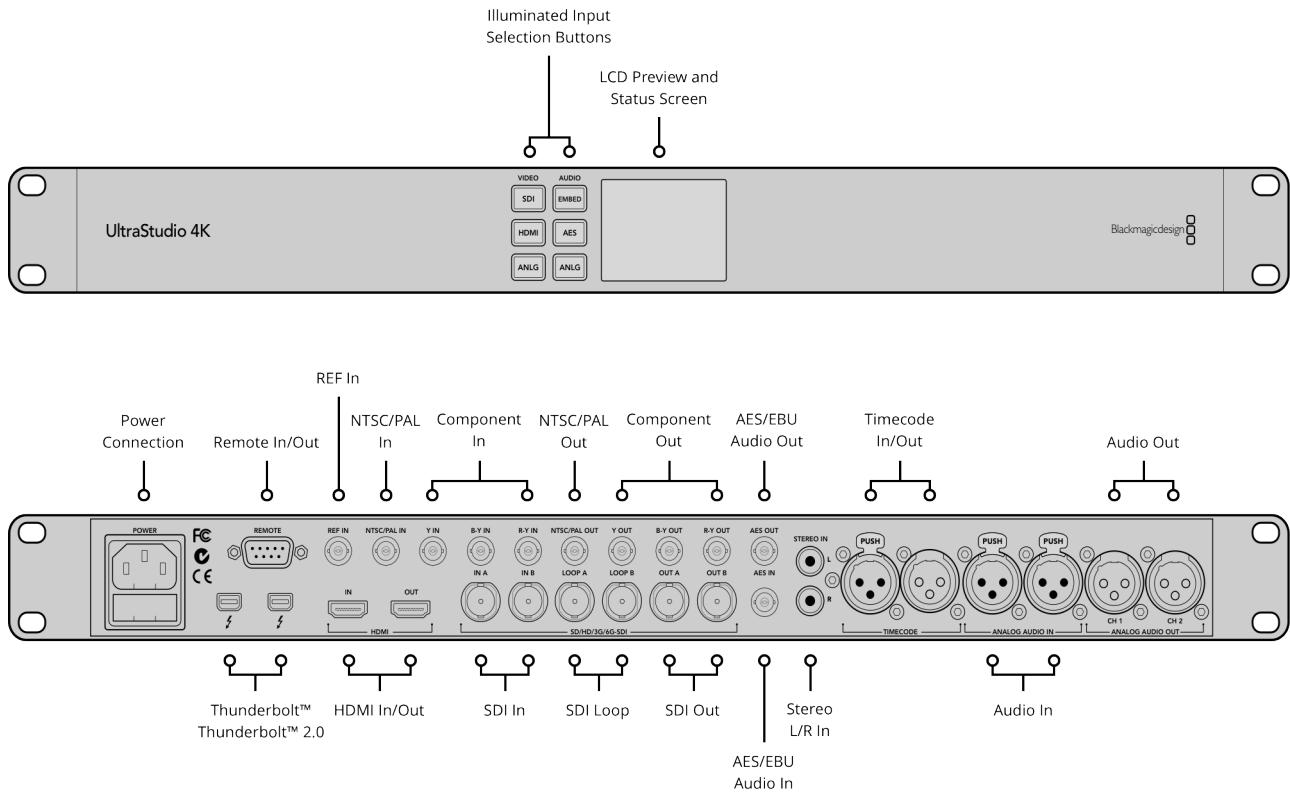**Timecode Output**
1 x XLR for LTC Output.

Sync Input
1 x Reference input. Tri-Sync or Black Burst.

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

Computer Interface
Thunderbolt™ or Thunderbolt™ 2

Supported Codecs

AVC-Intra, AVCHD, Canon XF MPEG2, Digital SLR, DV-NTSC, DV-PAL, DVCPRO50, DVCPROHD, DPX, HDV, XDCAM EX, XDCAM HD, XDCAM HD422, DNxHR & DNxHD, Apple ProRes 4444, Apple ProRes 422 HQ, Apple ProRes 422, Apple ProRes LT, Apple ProRes 422 Proxy, Uncompressed 8-bit 4:2:2, 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 and Windows. Media Express, Blackmagic Desktop Video Utility and Blackmagic driver on Linux.

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

Adobe Premiere Pro CC

Avid Media Composer

Adobe After Effects CC

Avid Pro Tools

Steinberg Cubase

Steinberg Nuendo

Adobe Photoshop CC

Other supported applications include:

The Foundry Nuke, Grass Valley Edius, Sony Catalyst Production Suite, Tools On Air Just: Play & Live & In, Softron MovieRecorder & MReplay, Adobe Flash Media Live Encoder, Telestream Wirecast, Livestream Producer, Resolume Arena, Magix Vegas Pro & Movie Edit Pro Premium, Corel VideoStudio Pro, CyberLink PowerDirector, Vidblaster X & Studio & Broadcast, Uniplay One & CG, CasparCG Server, Magicsoft CG, Xsplit Broadcaster, Imagine Communications Velocity & InfoCaster, DevTek Easy Media Suite, Metus Ingest, Boinx Software MimoLive, Cinegy Capture Pro, vMix Live, Renewed Vision ProPresenter, Ventuz Director, Class X Liveboard & Coral CG, Glookast Capturer, Open Broadcaster Software Studio, Nautilus NEMO3D.

SDI Video Standards

SD Video Standards
525i59.94 NTSC, 625i50 PAL

HD Video Standards
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 Video Standards
2K DCI 23.98p, 2K DCI 24p, 2K DCI
25p
2K DCI 23.98PsF, 2K DCI 24PsF, 2K
DCI 25PsF

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

4K Video Standards
4K DCI 23.98p, 4K DCI 24p, 4K DCI
25p

3D Video Standards
720p50, 720p59.94, 720p60
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p30,
1080PsF23.98, 1080PsF24,
1080PsF25, 1080PsF29.97, 1080PsF30
1080i50, 1080i59.94, 1080i60
2K DCI 23.98p, 2K DCI 24p, 2K DCI
25p
2K DCI 23.98PsF, 2K DCI 24PsF,
2K DCI 25PsF

SDI Compliance
SMPTE 259M, SMPTE 292M, SMPTE
296M, SMPTE 372M, SMPTE 425M,
SMPTE 2081, ITU-R BT.656 and ITU-R
BT.601.

SDI Metadata Support
RP 188/SMPTE 12M-2 and closed captioning.

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

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

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

SDI Color Space
REC 601, REC 709

HDMI Video Standards

SD Video Standards
525i59.94 NTSC, 625i50 PAL

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

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

4K Video Standards
4K DCI 23.98p, 4K DCI 24p

3D Video Standards
720p50, 720p59.94, 720p60
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p30,
1080i50, 1080i59.94, 1080i60

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

HDMI Video Sampling
4:4:4, 4:2:2 & 4:2:0

HDMI Color Precision
10-bit RGB in HD, 10-bit YUV in HD and 4K.

HDMI Configuration
HDMI 1.4b. Automatically configures to connected display.

Multiple Rate Support
HDMI and SDI video connections are switchable between SD/HD/2K and 4K. Component analog video connections are switchable between SD and HD.

HDMI Resolution
Pixel for pixel up to 4K resolutions.

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

Processing

HD to SD 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
DaVinci Resolve, Final Cut Pro X internal effects. Premiere Pro CC Mercury Playback Engine effects. Avid Media Composer internal effects.

Colorspace Conversion
Hardware based real time.

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

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

Physical Specifications

Operating Systems

Mac 10.13 High Sierra,
Mac 10.14 Mojave or later.

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

Linux

Power Requirements

1 x Internal 100 - 240V AC

EMC Certifications

FCC, CE and C-Tick.

Environmental Specifications

Operating Temperature	Storage Temperature	Relative Humidity
0° to 40° C (32° to 104° F)	-20° to 60° C (-4° to 140° F)	0% to 90% non-condensing

What's Included

UltraStudio 4K
SD card with software and manual

Warranty

3 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller