



## Compare Teranex Products

	Teranex 2D Processor	Teranex 3D Processor
<b>Connections</b>		
<b>SDI Video Input</b>	1 x 10-bit SD, HD, 3Gb/s HD and 2K switchable.	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. Also usable for dual stream 3D HD-SDI.
<b>SDI Video Loop</b>	1 x reclocked 10-bit SD, HD, 3Gb/s HD and 2K switchable.	2 x reclocked 10-bit SD, HD, 3Gb/s HD and 2K switchable.
<b>SDI Video Output</b>	2 x 10-bit SD, HD, 3Gb/s HD and 2K switchable.	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. Also usable for dual stream 3D HD-SDI.
<b>Analog Video Input</b>	1 x Component YUV on 3 BNCs switchable to Composite. Component supports HD and SD.	1 x Component YUV on 3 BNCs switchable to Composite. Component supports HD and SD.
<b>Analog Video Output</b>	1 x Component YUV on 3 BNCs switchable to Composite. Component supports HD and SD.	1 x Component YUV on 3 BNCs switchable to Composite. Component supports HD and SD.
<b>HDMI Video Input</b>	1 x HDMI type A connector	1 x HDMI type A connector including 3D frame packing support
<b>HDMI Video Output</b>	1 x HDMI type A connector	1 x HDMI type A connector including 3D frame packing support
<b>Analog Audio Input</b>	4 x inputs of professional balanced analog audio on DB-25 for 4 audio channels. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors. 2 x inputs of unbalanced analog audio on RCA connectors for consumer equipment.	4 x inputs of professional balanced analog audio on DB-25 for 4 audio channels. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors. 2 x inputs of unbalanced analog audio on RCA connectors for consumer equipment.
<b>Analog Audio Output</b>	4 x outputs of professional balanced analog audio on DB-25 for 4 audio channels. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors	4 x outputs of professional balanced analog audio on DB-25 for 4 audio channels. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors
<b>AES/EBU Audio Input</b>	8 x inputs on DB-25 for 8 audio channels. Sample rate converted. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors	8 x inputs on DB-25 for 8 audio channels. Sample rate converted. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors
<b>AES/EBU Audio Output</b>	8 x outputs on DB-25 for 8 audio channels. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors	8 x outputs on DB-25 for 8 audio channels. Pinout compatible with Yamaha™, Mackie™, Sony™ and Apogee™ connectors

Connections		
<b>SDI Audio Input</b>	16 channels in SD, HD and 2K. (16 channels in HD and 2K, and 8 channels in SD for capture via Thunderbolt port)	16 channels in SD, HD and 2K. (16 channels in HD and 2K, and 8 channels in SD for capture via Thunderbolt port)
<b>SDI Audio Output</b>	16 channels in SD, HD and 2K. (16 channels in HD and 2K, and 8 channels in SD for playback via Thunderbolt port)	16 channels in SD, HD and 2K. (16 channels in HD and 2K, and 8 channels in SD for playback via Thunderbolt port)
<b>HDMI Audio Input</b>	8 Channels	8 Channels
<b>HDMI Audio Output</b>	8 Channels	8 Channels
<b>Dolby Support Built-In</b>	Dolby® E/AC-3 pass through with same frame rates	Dolby® E/AC-3 pass through with same frame rates
<b>Dolby Support Optional</b>	None	Dolby® E/AC-3 support in frame rate conversions with the optional Dolby® E/AC-3 decode and encode modules. Dolby metadata support using RS-485 on DB-9.
<b>Multi Rate Support</b>	SDI, HDMI 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.	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. HDMI connections are switchable between standard definition, high definition and 3D high definition with frame packing.
<b>Sync Input</b>	Blackburst in SD or TriSync HD.	Blackburst in SD or TriSync HD.
<b>Device Control</b>	Sony™ compatible RS-422 deck control port. Serial ports TxRx direction-reversible under software control.	Sony™ compatible RS-422 deck control port. Serial ports TxRx direction-reversible under software control.
<b>Computer Interface</b>	Thunderbolt port for capture and playback of video and audio. USB 2.0 mini B port for software updates and configuration.	Thunderbolt port for capture and playback of video and audio. USB 2.0 mini B port for software updates and configuration.
<b>Processor Interface</b>	Illuminated pushbuttons, status LEDs and LCD with easy onscreen menus.	Illuminated pushbuttons, status LEDs and LCD with easy onscreen menus.
<b>Power</b>	1 x built-in international AC power supply with IEC C14 inlet. 120-240V, 50-60Hz. 1 x 12V DC military grade port can be used for external battery power and/or failover redundancy with optional "brick" DC adapter.	2 x built-in international AC power supplies with IEC C14 inlets for failover redundancy. 120-240V, 50-60Hz.

Standards		
<b>SD Format Support</b>	625/25 PAL, 525/29.97 NTSC and 525/23.98 NTSC.	625/25 PAL, 525/29.97 NTSC and 525/23.98 NTSC.
<b>HD Format Support</b>	720p50, 720p59.94, 1080PsF23.98, 1080p23.98, 1080PsF24, 1080p24, 1080PsF25, 1080p25, 1080PsF29.97, 1080p29.97, 1080i50, 1080p50, 1080i59.94 and 1080p59.94.	720p50, 720p59.94, 1080PsF23.98, 1080p23.98, 1080PsF24, 1080p24, 1080PsF25, 1080p25, 1080PsF29.97, 1080p29.97, 1080i50, 1080p50, 1080i59.94 and 1080p59.94.
<b>2K Format Support</b>	2048 x 1080PsF23.98, 2048 x 1080p23.98, 2048 x 1080PsF24 and 2048 x 1080p24.	2048 x 1080PsF23.98, 2048 x 1080p23.98, 2048 x 1080PsF24 and 2048 x 1080p24, 2048 x 1080PsF25 and 2048 x 1080p25, 2048 x 1080PsF29.97 and 2048 x 1080p29.97. 2048 x 1556PsF23.98, 2048 x 1556p23.98, 2048 x 1556PsF24, 2048 x 1556p24, 2048 x 1556PsF25 and 2048 x 1556p25.
<b>SDI Compliance</b>	SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 425M	SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 425M
<b>SDI Metadata Support</b>	VITC support, SMPTE 12M. Video indexing support including WSS, RP186 and AFD, SMPTE 2016. Closed captioning support for conversions to and from 608 and 708, SMPTE 334M. (Capture and playback via Thunderbolt port supports RP188, VANC using up to 3 lines of video in file including closed captioning.)	VITC support, SMPTE 12M. Video indexing support including WSS, RP186 and AFD, SMPTE 2016. Closed captioning support for conversions to and from 608 and 708, SMPTE 334M. (Capture and playback via Thunderbolt port supports RP188, VANC using up to 3 lines of video in file including closed captioning.)
<b>Audio Sampling</b>	Television standard sample rate of 48 kHz and 24-bit	Television standard sample rate of 48 kHz and 24-bit
<b>Video Sampling</b>	4:2:2 SDI	4:2:2 and 4:4:4 SDI switchable
<b>Color Precision</b>	10-bit	10-bit
<b>Color Space</b>	REC 601, REC 709	REC 601, REC 709
<b>HD-SDI 3D Support</b>	None	Top and bottom, side by side, dual stream
<b>HDMI Configuration</b>	HDMI automatically configures to connected display.	HDMI automatically configures to connected display.
<b>HDMI Resolution</b>	Pixel for pixel HD resolution input to connected device.	Pixel for pixel HD resolution input to connected device.
<b>HDMI Color Precision</b>	4:2:2 10-bit	4:2:2 10-bit
<b>HDMI 3D Support</b>	None	Top and bottom, side by side, frame packing.

## Standards

<b>SDI Format Support</b>	525 NTSC, 625 PAL, 720HD, 1080HD and 2K 2048 x 1080 switchable.	525 NTSC, 625 PAL, 720HD, 1080HD, 2K 2048 x 1080 and 2K 2048 x 1556 switchable.
<b>Analog Format Support</b>	525 NTSC, 625 PAL, 720HD and 1080HD switchable.	525 NTSC, 625 PAL, 720HD and 1080HD switchable.
<b>Analog Component</b>	NTSC/PAL 10-bit and 16x Over-sampled Output. HD 10-bit and 4x Over-sampled Output.	NTSC/PAL 10-bit and 16x Over-sampled Output. HD 10-bit and 4x Over-sampled Output.
<b>Analog Composite</b>	NTSC/PAL 10-bit and 16x Over-sampled Output.	NTSC/PAL 10-bit and 16x Over-sampled Output.
<b>Copy Protection</b>	HDMI input is unable to capture from copy protected HDMI sources. Always confirm copyright ownership before capture or distribution of content.	HDMI input is unable to capture from copy protected HDMI sources. Always confirm copyright ownership before capture or distribution of content.

## Processing

<b>Colorspace Conversion</b>	Hardware based real time.	Hardware based real time.
<b>Format Conversion</b>	Real time up conversion, down conversion, cross conversion and SD/HD standards conversion on both capture and playback.	Real time up conversion, down conversion, cross conversion and SD/HD standards conversion on both capture and playback. All conversions are also available on 3D formats.
<b>Aspect Ratio Conversion</b>	Real time variable and fixed aspect ratio conversion including proprietary "SMART" aspect.	Real time variable and fixed aspect ratio conversion including proprietary "SMART" aspect.
<b>Real Time Video Processing</b>	Includes noise reduction, cadence detection with insertion/removal and cadence correction, scene cut detection, color correction, and proc amp control.	Includes noise reduction, cadence detection with insertion/removal and cadence correction, scene cut detection, color correction, and proc amp control.
<b>Real Time 3D Processing</b>	None	3D synchronization, patent pending 2D to 3D simulation and 3D camera align.
<b>Real Time Effects during playback on a computer with Thunderbolt™ technology</b>	Apple Final Cut Pro™ internal effects. Adobe® Premiere Pro® Mercury Playback Engine effects. Avid Media Composer 6™ internal effects.	Apple Final Cut Pro™ internal effects. Adobe® Premiere Pro® Mercury Playback Engine effects. Avid Media Composer 6™ internal effects.

## Blackmagic Drivers Extra

<b>Software Included</b>	Desktop Video software installs Media Express, Disk Speed Test, LiveKey, Blackmagic system preferences and Blackmagic driver for video capture and playback via the converter's Thunderbolt port. Blackmagic UltraScope software for waveform monitoring from the converter's Thunderbolt port.	Desktop Video software installs Media Express, Disk Speed Test, LiveKey, Blackmagic system preferences and Blackmagic driver for video capture and playback via the converter's Thunderbolt port. Blackmagic UltraScope software for waveform monitoring from the converter's Thunderbolt port.
<b>Installation</b>	Connected via a Thunderbolt cable (not included) to computers with Thunderbolt technology for video capture and playback.	Connected via a Thunderbolt cable (not included) to computers with Thunderbolt technology for video capture and playback.

## Extras

<b>Software Control</b>	Software control utility included free for changing settings via Windows 7 and Mac OS X.	Software control utility included free for changing settings via Windows 7 and Mac OS X.
<b>Internal Software Upgrade</b>	Automatically upgrades when new software is connected via USB 2.0.	Automatically upgrades when new software is connected via USB 2.0.
<b>Physical Installation</b>	1 rack unit size. Less than 6 inches deep.	1 rack unit size. Less than 8 inches deep.
<b>Product Warranty</b>	12 Month Limited Manufacturer's Warranty.	12 Month Limited Manufacturer's Warranty.



Prev: Users

## Teranex Family

<b>Teranex 2D Processor</b>	De-interlace, up/down/cross/standards conversion, cadence detection/removal, noise reduction and more.	\$1,995	Shipping in June.
<b>Teranex 3D Processor</b>	Includes Teranex 2D Processor features plus dual stream 3D and 4:4:4 format and frame rate conversions.	\$3,995	Shipping in July.