

Teranex Express



Teranex Express is the world's first real time SD, HD and Ultra HD broadcast standards converter! Featuring advanced patented algorithms, Teranex Express gives you the visually transparent, high-quality conversions that are mandated by major broadcasters and studios worldwide! You get an incredible 1089 SD, HD and Ultra HD up, down and standards conversions in full 10-bit quality! You also get amazing processing with high quality de-interlacing, noise reduction, automatic cadence detection, removal and correction even with edited content, adjustable scaling and aspect ratio conversion, all with full timecode and multi-channel audio conversion.

A\$2.375

Connections

SDI Video Inputs

1x BNC (IN A) – 10-bit SD, HD, 2K, 3G HD levels A and B, 6G and 12G Ultra HD auto switching.

1x BNC (IN B) – 10-bit SD, HD, 2K, 3G HD and 6G Ultra HD auto switching. Usable as dual link input for 4:2:2 3G or 6G UHD.

SDI Video Input Loops

1x BNC (IN A Loop) – Reclocked, 10-bit SD, HD, 2K, 3G HD, 6G and 12G Ultra HD auto switching.

1x BNC (IN B Loop) – Reclocked, 10-bit SD, HD, 2K, 3 Gb/s HD, 6G Ultra HD auto switching.

SDI Video Outputs

1x BNC (OUT A) – 10-bit SD, HD, 2K, 3G HD levels A and B, 6G and 12G Ultra HD auto switching.

1x BNC (OUT B) – 10-bit SD, HD, 2K, 3G HD levels A and B and 6G Ultra HD auto switching. Usable as dual link output for 4:2:2 3G or 6G Ultra HD.

Quad SDI Video Outputs

SMPTE 435-1 - Quad HD Split (square division method) only. Utilizes SDI Out A for quadrant A, SDI Out B for quadrant B; reconfigures SDI In A Loop for quadrant C, SDI In B Loop for quadrant D.

Optical Fiber Video Inputs

1x 10bit SD, HD, 3G HD, 2K, Ultra HD auto switching.

Optical Fiber Video Outputs

1x 10bit SD, HD, 3G HD, 2K, Ultra HD auto switching. Not available while operating in Dual Link or Quad Link output modes.

SDI Audio Inputs

16 channels in SD, HD, 3G HD, 2K and Ultra HD.

SDI Audio Outputs

16 channels in SD, HD, 3G HD, 2K and Ultra HD.

Optical Fiber Connection (optional)

1x SMPTE optical fiber SFP socket.

Optical Fiber Audio Inputs

16 channels in SD, HD, 3G HD, 2K and Ultra HD.

Optical Fiber Audio Outputs

16 channels in SD, HD, 3G HD, 2K and Ultra HD.

Dolby® Support Built In

Dolby® AC-3 pass through in all conversions. Dolby® E pass through except during video frame rate conversions.

Timecode Inputs

Support for VITC/ATC. No support for LTC.

Timecode Outputs

Support for VITC/ATC. No support for LTC.

Multi Rate Support

SDI connections are switchable between standard definition, high definition and UltraHD. SDI switches between 270 Mb/s standard definition SDI, 1.5 Gb/s HD-SDI and 2K SDI, 3G HD, 6G and 12G Ultra HD.

Reference Input

1x BNC - Black Burst or Tri-level sync.

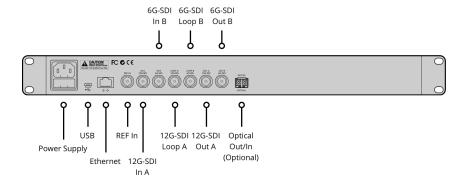
Computer Interface

1x USB 2.0 mini B port for software updates.

1x RJ45 10/100 Ethernet for remote control and configuration.

Processor Interface

Illuminated pushbuttons, status LEDs and LCD with easy to use onscreen menus.



Standards

SD Video Standards

525i59.94 NTSC, 625i50 PAL

1.5G-SDI HD Video Standards

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

3G-SDI HD Video Standards

1080p50, 1080p59.94, 1080p60 levels A and B

2K Video Standards

2K DCI 23.98p, 2K DCI 24p

2K DCI 23.98PsF, 2K DCI 24PsF

Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94, 2160p60

SDI Compliance

SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 425M

SDI Metadata Support

VITC/ATC 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.

Audio Sampling

Television standard sample rate of 48kHz and 24-bit

Video Sampling

4:2:2 SDI

Color Precision

10-bit

Color Space

REC 601, REC 709

SDI Video Standards

525 NTSC, 625 PAL, 720HD, 1080HD, 2K 2048 \times 1080 and Ultra HD 3840 \times 2160 auto switching.

Conversions

	525i59.94 NTSC	625i50 PAL	720p50	720p59.94	720p60	1080p23.98	1080PsF23.98	1080p24	1080PsF24	1080p25	1080PsF25	1080p29.97	1080PsF29.97	1080p30	1080PsF30	1080i50	1080p50	1080i59.94	1080p59.94	1080i60	1080p60	2K DCI 23.98p	2K DCI 23.98PsF	2K DCI 24p	2K DCI 24PsF	2160p23.98	2160p24	2160p25	2160p29.97	2160p30	2160p50	2160p59.94	2160p60
525i59.94 NTSC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
625i50 PAL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
720p50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
720p59.94	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
720p60		•	•	•	•	•	•	•			•	•	•							•			•					•		•		•	
1080p23.98	•		•		•	•	•	•	•								•				•	•	•	•			•	•	•		•	•	•
1080PsF23.98	•	•	•	•	•	•	•	•			•	•	•										•	•		•	•	•	•	•	•	•	•
1080p24			•		•	•	•	•	•								•				•		•	•				•	•		•	•	
1080PsF24			•			•																	•	•				•	•		•	•	
1080p25			•			•	•	•	•								•				•	•	•	•	•	•	•	•	•		•	•	•
1080PsF25			•			•																	•	•							•	•	•
1080p29.97			•					•																				•					
1080PsF29.97																												•					
1080p30		•	•	•	•			•		•	•	•	•			•	•			•								•		•		•	•
1080PsF30																																	
1080i50		•	•	•	•	•		•									•				•		•	•		•	•	•	•		•	•	•
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1080p59.94																																	
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1080p60																																	
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2K DCI 23.98PsF																																	
2K DCI 24p			•			•																	•	•		•		•	•	•	•	•	
2K DCI 24PsF																																	
2160p23.98																																	
2160p24																																	
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2160p29.97																																	
2160p30			•			•			•															•				•	•		•	•	
2160p50																																	
2160p59.94		•						•									•						•			•	•	•		•		•	•
2160p60	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•	•	•

Processing

Aspect Ratio Conversion

Real time variable and fixed aspect ratio conversions.

Real Time Video Processing

Includes noise reduction, cadence detection with insertion/removal, scene cut detection, color correction and proc amp control

Format Conversion

Real time up conversion, down conversion , cross conversion and SD/HD/UHD standards conversion.

Colorspace Conversion

Hardware based real time

Test Patterns

SMPTE 75% Bars; full field color bars 75%; convergence grid; multiburst;

Software

Software Control

Teranex Setup software control application included free of charge for changing settings via Windows 8.1, Windows 10 and Mac.

Internal Software Upgrade

Via USB Type-B 2.0 using the included Teranex Setup application

Operating Systems



Mac 10.15 Catalina, Mac 11.1 Big Sur or later.



Windows 10, 64-bit.

Physical Specifications



Physical Installation

1 rack unit size. Less than 5 inches deep.

Power Requirements **Power Supply Typical Power Consumption** 1 x built-in international AC power 42 watts supply with IEC C14 inlet. IEC power cable required. 100-240V, 50-60Hz **Environmental Specifications Operating Temperature Relative Humidity Storage Temperature** 0° to 40° C (32° to 104° F) -20° to 45° C (-4° to 113° F) 0% to 90% non-condensing What's Included **Teranex Express** Welcome wallet with QR code for software download 2x Bumper guards with 4x M4 screws Warranty 12 Month Limited Manufacturer's Warranty All items on this website are copyright Blackmagic Design Pty. Ltd. 2022, all rights reserved. All trademarks are property of their respective owners. MSRP includes GST and excludes shipping costs. $This website uses \ remarketing \ services \ to \ advertise \ on \ third \ party \ websites \ to \ previous \ visitors \ to \ our \ site.$ You can opt out at any time by changing cookie settings. Privacy Policy Blackmagic Design Authorized Reseller