

# **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.

\$1,395

#### 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.

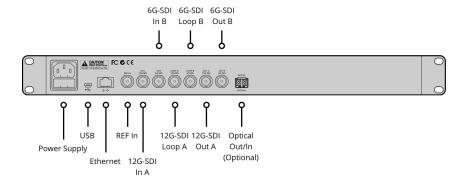
# **Computer Interface**

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	•	•			•	•	•		•		•		•				•						•	•	•		•	•	•	•	•	•	
1080p50																																	
1080i59.94	•			•		•	•		•		•	•	•					•			•				•			•					•
1080p59.94																																	
1080i60	•			•			•		•	•	•	•	•			•		•		•	•		•		•			•		•			•
1080p60																																	
2K DCl 23.98p	•	•			•	•	•	•	•		•		•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2K DCI 23.98PsF	•					•																	•		•		•					•	•
2K DCI 24p	•		•	•			•		•		•	•	•					•			•			•				•		•			
2K DCI 24PsF	•																						•	•				•	•				
2160p23.98			•	•			•		•			•	•															•					
2160p24							•						•										•					•					•
2160p25	•			•			•		•		•	•		•	•				•			•	•	•	•			•	•				•
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 Supply 1 x built-in international AC power supply with IEC C14 inlet. IEC power cable required. 100-240V, 50-60Hz	Typical Power Consumption 42 watts										
Environmental Specifications											
Operating Temperature 0° to 40° C (32° to 104° F)	Storage Temperature -20° to 45° C (-4° to 113° F)	<b>Relative Humidity</b> 0% to 90% non-condensing									
What's Included											
Teranex Express Welcome wallet with QR code for software 2x Bumper guards with 4x M4 screws	e download										
Warranty											
12 Month Limited Manufacturer's Warran	ty										
	website uses remarketing services to advertis	emarks are property of their respective owners. MSRP includes se on third party websites to previous visitors to our site. You can									
Blackmagic Design Authorized R	eseller										

Power Requirements