

Teranex Express



Designed for broadcast and post production, Teranex Express is the world's first 12G-SDI real time SD, HD and Ultra HD up, down, cross and standards converter. You get an incredible 1,089 different conversion options using patented Teranex algorithms and image processing for the highest quality, visually lossless conversions. Teranex Express features 12G and 6G-SDI inputs, loops, and outputs, along with an optical fiber connection for working with video over massive distances.

\$1,395

Connections

SDI Video Input

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 Loop

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 Output

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 Output

SMPTE 435-1 - Quad HD Split (square division method) only. Utilizes the two SDI outputs for quadrants A and B; reconfigures the two SDI Input Loop connectors as outputs for quadrants C and D.

Optical Fiber Video Input

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

Optical Fiber Video Output

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 Input

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

SDI Audio Output

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

Optical Fiber Connection (optional)

1x SMPTE optical fiber SFP socket.

Optical Fiber Audio Input

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

Optical Fiber Audio Output

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 Input

Support for VITC/ATC. No support for LTC.

Timecode Output

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

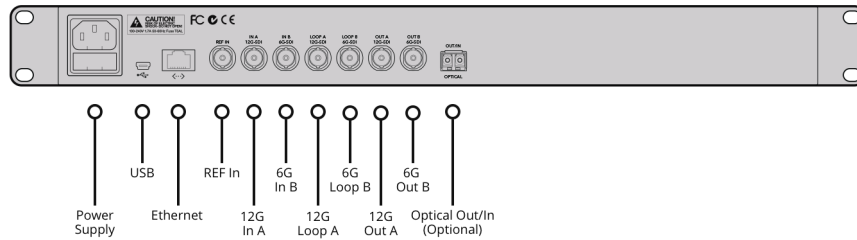
1x BNC - Black Burst or Tri-level sync.

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 Format Support

525i59.94 NTSC, 625i50 PAL

1.5G-SDI HD Format Support

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 Format Support

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

2K Format Support

2K DCI 23.98p, 2K DCI 24p
2K DCI 23.98PsF, 2K DCI 24PsF

Ultra HD Format Support

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 Format Support

525 NTSC, 625 PAL, 720HD, 1080HD,
2K 2048 x 1080 and Ultra HD 3840 x
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
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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

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; multi-burst; black.

Software

Software Control

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

Internal Software Upgrade

Via USB 2.0 using the included Teranex Setup application

Operating Systems



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



Windows 8.1 or Windows 10.

Physical Specifications



Physical Installation

1 rack unit size. Less than 5 inches deep.

Power Requirements

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

5° to 50° C (41° to 122° F)

Storage Temperature

-20° to 45° C (-4° to 113° F)

Relative Humidity

0% to 90% non-condensing

What's Included

Teranex Express

SD card with software and manual

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. 2017, all rights reserved.
All trademarks are property of their respective owners. MSRP excludes sales taxes/duties and shipping costs.

Blackmagic Design Authorized Reseller