

Teranex AV



Teranex AV is specifically designed with new features for live events and professional AV installations, as well as broadcast and post production workflows. You get 1,089 up, down, cross and standards conversions for all formats up to 2160p60, along with Teranex's patented algorithms and legendary image quality. Teranex AV offers low latency, and features a still store for adding logos and graphics, a live freeze frame and can generate a reference signal. You get professional 12G-SDI and quad SDI connections which can be used simultaneously, consumer HiFi, XLR audio, HDMI in, loop and outputs, and more! There are even metal brackets at the rear to prevent cables and connections from getting damaged when installed in tight locations!

\$1,695

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 levels A and B, 6G and 12G Ultra HD auto switching. Usable as 2nd input or for dual link input for 4:2:2 3G or 6G Ultra HD

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, 3G HD, 6G and 12G 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, 6G and 12G Ultra HD auto switching. Usable duplicated output or dual link output for 4:2:2 3G or 6G Ultra HD.

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.

HDMI Audio Input

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

HDMI Audio Output

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

Optical Fiber Connection (optional)

1x SMPTE optical fiber SFP socket.

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.

Optical Fiber Audio Input

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 Ultra HD. 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 in SD or Tri-level sync in HD.

Quad SDI Video Output

4x BNC (Channels A, B, C, D) - 10-bit 3G-SDI Quad Link output when processor output video format is Ultra HD . For other output formats, these connectors will supply four additional replicated SDI outputs.

HDMI Input

1x HDMI 2.0 type A connector.

HDMI Loop Output

1x HDMI 2.0 type A connector.

HDMI Output

1x HDMI 2.0 type A connector.

Optical Fiber Audio Output

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

Analog Audio Input

2x XLR - 2 channels professional balanced analog audio (XLRs are shared with AES/EBU inputs) .
2x RCA - stereo unbalanced analog audio on RCA connectors for consumer equipment.

AES/EBU Digital Audio Input

2x XLR - 2 pairs (4 channels) professional 110Ω balanced digital audio (XLRs are shared with analog inputs)

Reference Output

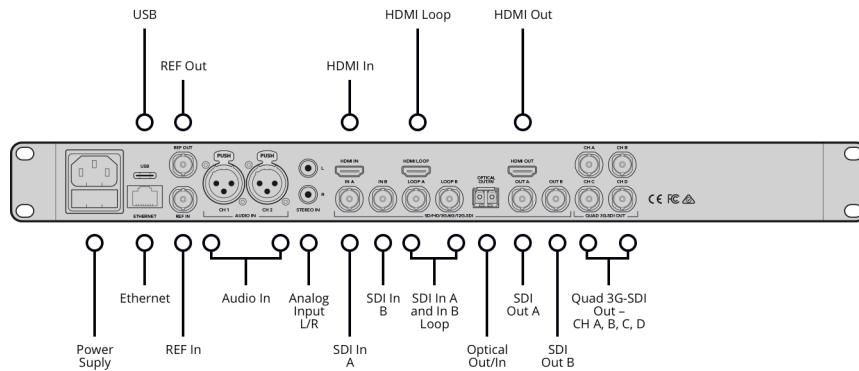
1x BNC - Internal reference generator providing blackburst or tri-level sync output at the current output frame rate.

Computer Interface

1 x USB type C port for software updates.
1 x RJ45 Gigabit 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 HD, 20-bit SD.

Video Sampling

4:2:2

Color Precision

10-bit

Color Space

REC 601, REC 709

SDI Format Support

525 NTSC, 625 PAL, 720HD, 1080HD, 2K DCI and Ultra HD 3840 x 2160 switchable.

Conversions

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

Low Latency Processing

Real time processing with 2 frame latency, available for select format conversions.

Format Conversion

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

Colorspace Conversion

Hardware based real time

Still Store

Capture a video frame into non-volatile memory from the current input signal.

Freeze Frame

Temporarily freeze incoming live video.

Test Patterns

SMPTE 75% Bars; full-field color bars 75%; convergence grid; multi-burst; black.

Output Switching

Output may be switched between the input video, internal black, user still frame or a freeze frame from the input video.

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 type C using the included Teranex Setup application

Operating Systems



Mac OS X 10.10 Yosemite, Mac OS X 10.11 El Capitan or later.



Windows 8.1 or Windows 10.

Physical Specifications



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 AV

SD card with software and manual

2 x Bumper guards with 4x M4 screws

Warranty

12 Month Limited Manufacturer's Warranty.

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