Scorpio is a 32 channel, 36 track mixer-recorder and the most powerful product ever designed by Sound Devices. With 16 mic/line preamplifiers, 32 channels of Dante in and out, AES in and out, 12 analog outputs and multiple headphone outputs, Scorpio is well-suited for any production scenario. A fully-customizable routing matrix enables sound professionals to send any input to any channel, bus, or output. Up to 12 buses may be individually mixed. Due to its compact form factor, the Scorpio is equally at home over-the-shoulder or in a mobile rig.

Scorpio incorporates Sound Devices’ most cutting-edge technology. An ultra-powerful engine comprised of three FPGA circuits and six ARM processors deliver the horsepower needed for the most complex tasks. FPGA-based audio processing with 64-bit data paths ensures the highest sound quality and reliability. The Scorpio also features Sound Devices’ latest and best in analog microphone preamplifier design. These preamps have the smoothest sound and lowest noise of any preamp in the company’s 20-year history and include built-in analog limiters, high pass filters, delay, 3-band EQ and phantom power.

The Scorpio has an internal SSD and can simultaneously record to two SD cards for redundancy. For additional flexibility, sound professionals can send different files to their choice of media. The companion SD-Remote Android application allows for control of the Scorpio via a large display.

Great attention to detail has been paid to every aspect of the Scorpio’s design. Most common menus are accessible with only one or two button presses, and many menu shortcuts can be achieved with only one hand. Scorpio features a built-in dual L-Mount battery charger and may be powered with L-Mount batteries or via the TA4 DC inputs using smart batteries, NP-1 batteries, or in-line power supplies. The ultra-accurate, fully-featured timecode generator contains its own battery to hold timecode for up to four hours after power off.
Scorpio Accessories

SL-6
- 6 channel wireless receiver attachment
- Enhances wireless control
- Unifies power and antenna distribution
- Simplifies interconnection

SL-Riser
- Mounted riser required for SL-6 connection

XL-NPTA4
- NP-1 Battery Cup to TA4 female with 25” cable

XL-SmartBattery
- 14.4 V Smart Battery Li-ion 6.8 Ah, 98 Wh.

XL-SmartCharger
- Inspired Energy dual charger for XL-SmartBattery

XL-SmartCup
- XL-SmartBattery Cup to TA4 female connector cable

SD-Remote
- Companion Android application
- Large metering and timecode display
- Transport control
- Metadata editing

XL-TA5XF2
- TA5 female to (2) XLR-Female 25” cable (2 pack)

XL-WPTA4
- Universal 60 W in-line AC to DC Power Supply with T44 DC Plug with detachable IEC power cord 100-240 V, 50-60 Hz *(Included with Scorpio)*

USB Control Surface
- Sound Devices CL-12 Support
- Supports multiple third party controllers via MCU open protocol

Scorpio Specifications

**Freq Response**
- 10 Hz to 80 kHz ± 0.5 dB (192 kHz sample rate, re 1 kHz)

**THD + Noise**
- 0.005% max (1 kHz, 22 Hz–22 kHz BW, trim @20, fader @ 0, -10 dBu in)

**Equivalent Input Noise**
- • -131 dBV (-129 dBu) max (A-weighting, 70 dB gain, 150 ohm source impedance)

**Processing Engine**
- • Highly extensible, full FPGA-based audio processing, 3 FGAs
- • Six-way ARM multiprocessor system
- • 64-bit audio processing precision

**Audio Over Ethernet**
- Dante, 32 channels in, 32 channels out
- AES67 compatible
- 1 Gb/s Ethernet, 2 ports, transformer-balanced

**Inputs**
- • Mic/Line inputs: 16 total, all fully featured; 6 on full-size XLR, 2 on TA3, 8 on TA5
- • Mic-level inputs: (XLR, TA3, TA5): Class-A, discrete differential long-tail pair, 4k ohm input impedance
- • Line-level inputs: (XLR, TA3, TA5): active-balanced, 4k ohm input impedance
- • AES3 or AES42 available on XLR inputs 1 and 6
- • AES42: +10 V, 250 mA available, type-1, auto-ASRC
- • Rtn A, B (3.5 mm/10-pin): unbalanced-2 channel, 4k ohm input impedance
- • Com Rtn 1, 2 (TA3, 3.5-mm): balanced, 1-channel, 8k ohm input impedance
- • External Slate Mic (TA5): balanced, 8k ohm input impedance, menu-selectable 12 V phantom

**Maximum Input Level**
- • Mic: +48 dBu (2.0 Vrms)
- • Line: +28 dBu (19.5 Vrms)
- • Rtn A, B, C: +18 dBu (6.2 Vrms)
- • Com Rtn 1, 2: +24 dBu (12.3 Vrms)
- • External Slate Mic: +12 dBu (3.2 Vrms)

**High-Pass Filters**
- Adjustable 10 Hz to 320 Hz, 18 dB/oct. 1st stage analog (before preamp), 2nd stage digital

**Limiters**
- Limiters available on all channels, buses, headphones, for all sample rates
- • Analog first stage, all subsequent stages digital
- • Attack time: 1 ms
- • Release time: adjustable, 50 ms to 1000 ms
- • Threshold: adjustable, -25 dBFS to -125 dBFS
- • Selectable knee: hard or soft
- • Selectable ratio: inf:1, 20:1, 16:1, 14:1, 12:1, 10:1

**Delay**
- Channel adjustable 0-50 ms
- Output adjustable 0-500 ms

**Maximum Gain**
- • Trim stage (mic input): 76 dB
- • Trim stage (line input): 50 dB
- • Fader stage: 16 dB
- • Bus stage: 16 dB
- • Headphone stage: 20 dB
- • Mic-to-Line: 108 dB
- • Mic-to-Headphone: 112 dB

**Outputs**
- • XLR (L, R) active-balanced, 250/3.2k/120 ohms (mic/-10/line)
- • Hirose 10-pin (L, R) active-balanced, 250/3.2k/120 ohms (mic/-10/line)
- • TA3 (X1-X6) active-balanced, 250/3.2k/120 ohms (mic/-10/line)
- • 3.5 mm (X7, X8): unbalanced, stereo, 1.8k ohms

**Headphone Outputs**
- • ¼”, 3.5 mm
- • TA5 (along with mic input pins) for single connection to headset + mic
- • High output, 4 ohm output impedance, 400 mW + 400 mW at each connector, all individually driven
- • Compatible with headphones of any impedance

**SD-Remote**
- • USB-C (USB 3.1 type 1) for file transfer of internal SSD, both SD Cards
- • USB-A host for keyboard, external controller, external USB hubs
- • Supports multiple third party controllers via MCU open protocol

**USB**
- • USB-MIDI Control - 3rd party fader controllers
- • SD-Remote Android app
- • USB Keyboard
- • External Timecode Record Trigger

**Timecode and Sync**
- • Modes Supported: Off, Rec Run, Free Run, 24h Run, External, including External Auto-Record and Continuous modes.
- • Frame Rates: 23.98, 24, 25.97, 29.97 ND, 30, 30 ND
- • Sample/Timecode Accuracy: 0.1 ppm (0.25 frames per 24 hours)
- • Timecode Input: 400 ohm impedance, 0.3 V – 3.0 V p-p (-17 dBu – +3 dBu)
- • Timecode Input: 75 ohm impedance, 5 V p-p (+12 dBu)
- • Word Clock Input: 75 ohm selectable impedance, 1:5 V p-p input sensitivity
- • Word Clock Out: 75 ohm impedance, 5 V p-p output, at SR

**Remote Control**
- • USB MIDI Control - 3rd party fader controllers
- • SD-Remote Android app
- • USB Keyboard
- • External Timecode Record Trigger

**Power**
- • External: dual 10-18 V inputs on locking TA4 connectors, pin-4 = (+), pin-1 = (-)
- • Supports Smart Battery telemetry
- • Dual rear-mount Sony-style L mount batteries with chargers
- • Intelligent power-down of unused mic preamps and other internal circuits

**Environmental**
- • Operating: -20° C to 60° C, 0 to 90% relative humidity (non-condensing)
- • Storage: -40° C to 85° C
- • Frame Rates: 23.98, 24, 25, 29.97 DF, 29.97 ND, 30 DF, 30 ND
- • Sample/Timecode Accuracy: 0.1 ppm (0.25 frames per 24 hours)
- • Timecode Input: 400 ohm impedance, 0.3 V – 3.0 V p-p (-17 dBu – +3 dBu)
- • Timecode Input: 75 ohm impedance, 5 V p-p (+12 dBu)
- • Word Clock Input: 75 ohm selectable impedance, 1:5 V p-p input sensitivity
- • Word Clock Out: 75 ohm impedance, 5 V p-p output, at SR

**Dimensions**
- • 5.1 cm x 32 cm x 20.5 cm ( 2 in x 12.6 in x 8.1 in)

**Weight**
- 5.8 lbs (2.63 kg) unpackaged, without batteries