

# 833

## Portable Compact Mixer-Recorder



**8** CHANNELS

**12** TRACKS

**6** MIC/LINE PREAMPLIFIERS

**6** BUSES

**2** SD CARD SLOTS

**256** GB INTERNAL SSD

### FULLY ROUTABLE. ULTRA-PORTABLE.

The 833 is the professional's tool for mobile and small productions. Like the popular Sound Devices 633, the 833 is small, lightweight, and compact. A tactile interface with dedicated faders, trim knobs, and PFL switches makes this mixer-recorder ideal for run-and-gun bag use.

The 833 has 6 mic/line preamplifiers, 8 channels, 12 tracks, 6 analog outputs, and ultra-accurate timecode. Many features have carried over from the premium Sound Devices' Scorpio, such as Sound Devices' new preamplifier design, 2 SD card slots, dual L-Mount battery charging and powering, and an internal 256 GB SSD.

Additionally, the 833 shares the same processing architecture and multiple FPGAs as the Scorpio. This enables the 833 to be fully routable, and any physical input can be routed to any track. The 833 features both digital and analog inputs and outputs, and has multiple powering options, so it will fit effortlessly into your existing kit.

A built-in three band EQ may be set to either pre- or post-fade for each channel to tackle any problems directly on-set. Enable Dugan Automixing to automatically attenuate unused microphones in multi-microphone applications. Up to 8 channels can be automixed at a time, and two separate groups can be mixed simultaneously.

Dedicated coms and slate allows for professional bi-directional communication with other crew members. Send customized mixes to the camera or crew with multiple mix buses. With the ability to record to three media simultaneously, you can turn over SD cards to production at the end of the day while keeping a backup on the internal 256 GB SSD.

The 833 may be controlled via the companion Android app, SD-Remote, which features transport controls, metering, and sound reports. For an instant mobile workstation, choose from one of several supported USB control surfaces for remote fader and transport control.



Left Panel



Right Panel



Back Panel

# 833 Accessories

## 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

## XL-B2

- L-Mount Li-Ion V, 5200 mAh battery

## XL-B3

- L-Mount Li-Ion V, 7800 mAh battery

## XL-WPTA4

- Universal 60 W in-line AC to DC Power Supply with TA4 DC Plug with detachable IEC power cord 100-240 V, 50-60 Hz (Included with 833)

## SD-Remote

### SD-Remote

- Companion Android application
- Large metering and timecode display
- Configure and email Sound Reports
- Transport control
- Metadata editing

### USB Control Surface

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

### SAM-32SD

- Approved 32 GB SD media card
- 90 MB/s read and write speeds (620x)

# 833 Specifications

<b>Freq. Response</b>	• 10 Hz to 80 kHz $\pm$ 0.5 dB (192 kHz sample rate, re 1 kHz)	<b>Maximum Output Level</b> (all into 10k load)	• Line: +20 dBu (7.8 Vrms) • "-10": +6 dBu (1.5 Vrms) • Mic: -20 dBu (0.078 Vrms) • X3/X4 Out: +6 dBu (1.5 Vrms) • Headphone outputs (¼", TA-5): +14 dBu (4.0 Vrms)
<b>THD + Noise</b>	• 0.005% max (1 kHz, 22 Hz–22 kHz BW, trim @20, fader @ 0, -10 dBu in)	<b>A/D converters</b>	• 32-bit, 120 dB, A-weighted dynamic range typical • Sampling rates 44.1 kHz, 47.952 kHz, 48 kHz, 48.048 kHz, 88.2 kHz, 96 kHz, 192 kHz
<b>Equivalent Input Noise</b>	• -131 dBV (-129 dBu) max (A-weighting, 76 dB gain, 150 ohm source impedance)	<b>Digital Outputs</b>	• AES3 transformer-balanced, in pairs; 1-2 (XLR-L), 3-4 (XLR-R), 110 ohm, 2 V p-p, AES and S/PDIF compatible
<b>Processing Engine</b>	• Highly extensible, full FPGA-based audio processing, 3 FPGAs • Six-way ARM multiprocessor system • 64-bit audio processing precision	<b>Recording</b>	• Internal 256 GB SSD • Two removable SD Cards • Simultaneous recording to internal SSD and the two SD cards • exFAT formatting • 12 tracks (8 iso channels, 4 buses) • Broadcast WAV monophonic and polyphonic file format • 64-bit WAV (RF64) monophonic and polyphonic; support for files > 4 GB • AAC 2 track at 48 kHz, selectable bit rate 32, 64, 128, 192, 256 kbps
<b>Inputs</b>	• Mic/Line inputs 6 total, all fully featured; 3 on full-size XLR, 3 on TA3 • Mic-level inputs: (XLR, TA3): Class-A, discrete differential long-tail pair, 4k ohm input impedance • Line-level inputs: (XLR, TA3): active-balanced, 4k ohm input impedance • 48V phantom: full 10mA to all 6 inputs simultaneously • AES3 or AES42 available on XLR input 1 • AES42: +10 V, 250 mA available, mode-1, auto-ASRC • Aux (3.5 mm/10-pin): unbalanced 2-channel, 4k ohm input impedance • Com Rtn (TA3, 3.5mm) balanced, 1-channel, 8k ohm input impedance • External Slate Mic (TA5): balanced, 8k ohm input impedance, menu-selectable 12 V phantom	<b>Automixing</b>	• Dugan Automixing up to 8 channels on left and right mix bus • MixAssist up to 8-channels on Left and Right Mix bus
<b>Maximum Input Level</b>	• Mic: +8 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)	<b>USB</b>	• 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 supported for connecting multiple devices
<b>High-Pass Filters</b>	• Adjustable 10 Hz to 320 Hz, 18 dB/oct. 1st stage analog (before preamp), 2nd stage digital.	<b>Timecode and Sync</b>	• Modes Supported: Off, Rec Run, Free Run, 24h Run, External, including External Auto-Record and Continuous modes. • 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: 20k ohm impedance, 0.3 V - 3.0 V p-p (-17 dBu - +3 dBu) • Timecode Output: 75 ohm impedance, 5 V p-p (+12 dBu) • Word Clock Input: 10k/75 ohm selectable impedance, 1-5 V p-p input sensitivity • Word Clock Output: 75 ohm impedance, 5 V p-p output, at SR
<b>Limiters</b>	• Limiters available at 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, -2 dBFS to -12 dBFS • Selectable ratio: inf:1, 20:1, 18:1, 16:1, 14:1, 12:1, 10:1	<b>Remote Control</b>	• USB MIDI Control - 3rd party fader controllers • SD-Remote Android app • USB Keyboard • External Timecode Record Trigger
<b>Delay</b>	• Channel Adjustable 0-50 ms • Output Adjustable 0-500 ms	<b>Power</b>	• External: 10-18 V input 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
<b>Maximum Gain</b>	• 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	<b>Environmental</b>	• Operating: -20° C to 60° C, 0 to 90% relative humidity (non-condensing) • Storage: -40° C to 85° C
<b>Outputs</b>	• XLR (L, R) active-balanced, 250/3.2k/120 ohms (mic/-10/line) • TA3 (X1/X2) active-balanced, 250/3.2k/120 ohms (mic/-10/line) • 3.5mm (X3/X4): unbalanced, stereo, 1.8k ohms	<b>Dimensions (H x W x D)</b>	• 5.1 cm x 22 cm x 17 cm; (2.0 in. x 8.7 in. x 6. in)
<b>Headphone Outputs</b>	• 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	<b>Weight</b>	• 2.75 lbs (unpacked, without batteries) 1.25 kg (unpacked, without batteries)

Post Office Box 576  
E7556 State Rd. 23 and 33  
Reedsburg, Wisconsin 53959 USA  
**+1 608.524.0625**  
**www.sounddevices.com**

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