

US-1641

USB Audio/MIDI Interface (16 in 4)



The US-1641 is a single-rackspace USB 2.0 Audio/MIDI interface packed with I/O: 16 inputs and four outputs can be used simultaneously, making it ideal for live performance recording.

The US-1641 has eight studio-quality microphone inputs with phantom power and level indicators, two line/instrument switchable inputs on the front, four additional balanced line inputs on the rear, four line-level outputs, digital SPDIF I/O (output switchable to AES/EBU), independent monitor and headphone outputs with separate level controls and 16 channels of MIDI I/O. It offers zero-latency hardware monitoring and sampling rates up to 96kHz at 24-bit resolution. Cubase LE 5 and TASCAM's own Continuous Velocity Piano are supplied as standard.

Main Features

- USB audio interface with 16 inputs and 4 outputs
- 8 mic/line inputs with phantom power and level indicators on front panel
- Two 6.3-mm balanced line/instrument inputs on front
- Four more balanced line inputs on rear panel
- Four line outputs
- Separate stereo 6.3-mm monitor output
- Stereo digital I/O (input: SPDIF, output: switchable between SPDIF and AES/EBU)
- Analogue and digital inputs can be used simultaneously
- 16-channel MIDI I/O
- Separate monitor and headphone level controls
- Zero-latency hardware monitoring
- USB 2.0 interface
- Up to 96 kHz sampling rate at 24-bit resolution without reducing the number of inputs
- Supports Windows XP, Windows Vista 32 and Mac OS X (10.4 and higher)
- Supports Intel Mac
- Includes Steinberg Cubase LE 5 (Mac/PC)
- Includes Tascam Continuous Velocity Piano (PC)
- 1-U rackmount chassis

Specifications

Analogue inputs and outputs

Mic inputs 1–8	XLR-3-31
Type and wiring	Balanced (1: ground, 2: hot, 3: cold)
Input impedance	2.2 kOhm
Input level	–58 dBu (max. Gain) to –2 dBu (min. Gain)
Headroom	16 dB
Line in/Guitar inputs 9–10	6.3-mm phone jack
LINE IN/GUITAR switch set to LINE IN	
Type and wiring	Balanced (Tip: hot, Ring: cold, Sleeve: ground)
Input impedance	10 kOhm
Nominal input level	–42 dBu (max Gain) to +4 dBu (min. Gain)
Headroom	16 dB
LINE IN/GUITAR switch set to GUITAR	
Type	Unbalanced
Input impedance	700 kOhm
Nominal input level	–52 dBV (max Gain) to –6 dBV (min. Gain)
Headroom	6 dB
Inputs 11–14	6.3-mm phone jack
Type and wiring	Balanced (Tip: hot, Ring: cold, Sleeve: ground)
Input impedance	10 kOhm
Nominal input level	+4 dBu or –10 dBV (selectable with the LEVEL switch)
Headroom	16 dB
Line outputs 1–4	6.3-mm phone jack
Type and wiring	Balanced (Tip: hot, Ring: cold, Sleeve: ground)

Output impedance	100 Ohm
Nominal output level	+4 dBu
Maximum output level	+20 dBu
Monitor output (L/R)	6.3-mm phone jack
Type and wiring	Balanced (Tip: hot, Ring: cold, Sleeve: ground)
Output impedance	100 Ohm
Nominal output level	+4 dBu
Maximum output level	+24 dBu
Phones output	6.3-mm stereo phone jack (Tip: L, Ring: R, Sleeve: ground)
Maximum output level	50 mW + 50 mW (32 Ohm, 1 % distortion)

Digital inputs and outputs

Digital input	RCA
Signal format	IEC 60958 Consumer (SPDIF)
Level	0.5 Vpp at 75 Ohm
Digital output	RCA
Signal format	Software-selectable between IEC60958 Consumer (SPDIF) and IEC60958 Professional (AES/EBU)
Level	0.5 Vpp at 75 Ohm

Other inputs and outputs

MIDI input	5-pin DIN connector (standard MIDI format)
MIDI output	5-pin DIN connector (standard MIDI format)
USB connector	USB Series B connector
Format	USB 2.0

Audio performance

Delay (44.1 kHz sampling rate)	0.29 ms (A/D conversion)
	0.20 ms (D/A conversion)
Delay (96 kHz sampling rate)	0.63 ms (A/D conversion)
	0.44 ms (D/A conversion)
Sampling rate (internal clock)	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
Quantization	24-bit
Signal-to-noise ratio (MIX knob set to COMPUTER)	
Mic input 1–8 -> Line output 1–4	–60 dBu (max. Gain)
Line input 9–10 -> Line output 1–4	–55 dBu (min. Gain)
Inputs 11–14 -> Monitor output L/R	–70 dBu (MONITOR knob set to maximum)
Signal-to-noise ratio (MIX knob set to INPUT)	
All inputs -> Monitor output L/R	–60 dBu (GAIN knobs and MONITOR knob set to maximum)
Frequency response (Line output, –10 dBV)	
Normal sampling rate	20 Hz – 20 kHz, ±1 dB
High sampling rate	20 Hz – 40 kHz, +1 dB/–3 dB
Total harmonic distortion (20 Hz – 20 kHz)	0.01 % (all outputs, minimum gain, maximum input level, excluding Guitar input)
Crosstalk (1 kHz)	90 dB

Host computer compatibility

Operating system	Windows XP SP2 (32-bit and 64-bit versions)
	Windows Vista (32-bit and 64-bit versions)
	Windows 7 (32-bit and 64-bit versions)
	Mac OS X Version 10.4
	Mac OS X 10.6 (32-bit and 64-bit versions) or higher
Drivers	
Windows XP, Vista, 7	WDM (KS), ASIO/ASIO2 and GSIF2 interface
Macintosh OS X	Core Audio and MIDI interface

Other specifications

Power supply	USA/Canada: 120 V AC, 60 Hz
	Europe: 230 V AC, 50 Hz
	Australia: 240 V AC, 50 Hz
Power consumption	10 W
Overall dimensions (W x D x H)	483 mm x 280 mm x 44 mm

Design and specifications subject to change without notice.

Last modified: 2010-10-07 14:41:43 UTC