# TASCAM

# UH-7000

## High-end USB audio interface



The UH-7000 is a pro-level microphone preamp and audio interface designed with a strong focus on low noise and high audio quality. Not only can this unit be used as a 4-in/4-out audio interface in a DAW production environment, but as a standalone microphone preamp and A/D / D/A converter. The built-in HDIA (High Definition Instrumentation Architecture) microphone preamps are newly designed and perform at -128 dBu equivalent input noise, a signal-to-noise ratio of 117 dB and distortion of 0.0009 % or less.

The grand nature of the UH-7000's sound is partially due to the careful attention spent on selecting parts. In addition to Burr-Brown converters and metal thin-film resistors, installed is a powerful TCXO clock generator with a precision of  $\pm 1$  ppm.

The unit's half-rack size makes it easy to install at a studio console or work desk. The thick aluminum panels used on the front and sides of the full-metal body help increase stability. Highly important but easily forgotten about are the smooth-tension aluminum input level knobs for precise level adjustments.

The UH-7000 microphone preamp and audio interface enables composers, musicians and recording engineers to produce music in their private quarters at a level generally reached only in professional studios.

### **Main Features**

- Top-of-the-line two-channel USB audio interface for Windows and Mac computers
- Can be used as a stand-alone high-end AD converter for monitoring or recording to stand-alone recorders
- High-performance mic preamp newly designed for this model reduces influence of impedance mismatch with high accuracy resulting in most accurate audio reproduction at the input stage
- Superb audio quality with samling rates up to 192 kHz at 24-bit resolution
- Ultra-high dynamic range of 123 dB (A/D) and 128 dB (D/A)
- Professional-grade PCM4220 A/D and D/A converters from Texas Instruments
- Selected components like metal film resistors and film capacitors for outstanding sound quality with minimum noise and distortion
- High-precision clock synchronization with sample-accuracy at both recording and

- Mixer panel for intuitive mixing and effects handling on the computer screen
- Dedicated button for opening/closing the mixer panel on the computer
- Two large TRIM knobs for precise level adjustment
- XLR and TRS balanced analogue inputs
- Switchable 48-V phantom power on XLR inputs
- XLR balanced line outputs
- Line output level can optionally be adjusted with the headphones level control
- Output selector allows a source to be output via the unit's mixer or via a computer connected by USB
- Powerful headphones output with dedicated level control
- AES/EBU digital I/O
- Low-latency monitoring
- Easy-to-read 20-dot LED level meter
- Aluminum front and side panels for long durability even under tour conditions

playback

- On-board DSP mixer and effects like EQ, compressor, noise suppressor, de-esser, exciter and reverb (effects up to 96 kHz only)
- Two selectable mixer modes:
  - Multi Track mode for DAW recording and composing: Create a monitor mix independent of the actual recording levels
  - Stereo Mix mode for internet broadcasting and video editing: Create a stereo mix of two different sources plus loop-back signal from the computer

#### Specifications

Maximum output power

Audio resolution	
Sampling frequencies	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Quantization bit depth	24-bit
Analogue audio inputs and outputs	
Line inputs (ANALOG (BALANCED) LINE IN 1/2)	6.3-mm standard TRS jacks
Input impedance	15 kΩ
Maximum input level	+26.5 dBu
Minimum input level	-38 dBu
Mic inputs (ANALOG (BALANCED) MIC IN 1/2)	XLR-3-31 equivalent
Input impedance	2.2 kΩ
Maximum input level	+2 dBu
Minimum input level	-60 dBu
Line outputs (ANALOG (BALANCED) OUTPUT L/R)	XLR-3-32 equivalent
Output impedance	100 Ω
Maximum output level (INPUT knob at minimum)	+24 dBu
Headphones output (PHONES)	6.3-mm standard stereo jack

Digital audio inputs and outputs	
DIGITAL (AES/EBU) IN	XLR-3-31 equivalent
Formats	IEC 60958-3 (S/PDIF)
	IEC 60958 for pro use (AES/EBU)
Sampling frequencies	×1: 44.1 kHz, 48 kHz
	×2: 88.2 kHz, 96 kHz
	×4: 176.4 kHz, 192 kHz
DIGITAL (AES/EBU) OUT	XLR-3-32 equivalent
Formats	IEC 60958-3 (S/PDIF)
	IEC 60958 for pro use (AES/EBU)
Sampling frequencies	×1: 44.1 kHz, 48 kHz
	×2: 88.2 kHz, 96 kHz
	×4: 176.4 kHz, 192 kHz

load)

45 mW + 45 mW or higher (THD+N: 1% or less, 32  $\Omega$ 

Other inputs and outputs	
USB	4-pin USB B-type
Transfer rate:	USB 2.0 High Speed (480 Mbit/s), Full Speed (12 Mbit/s)

Audio performance	
Equivalent input noise (EIN)	-128 dBu (unweighted, 60 dB, 40 Ω)
ADC dynamic range	123 dB (A-weighted)
DAC dynamic range	123 dB (A-weighted)
Frequency response, Mic preamp	20 Hz - 80 kHz, +0.005 dB/-0.16 dB (all Fs)
S/N ratio	117 dB (MIC to AD)
Distortion	0.0009 % (MIC to AD)

Half-rack size

Computer system requirements	
Windows	
Supported operating systems	Windows 10 32/64-bit Windows 8 (including 8.1) 32/64-bit Windows 7 32/64-bit SP1 or later Windows XP 32-bit SP3 or later (Windows Vista and Windows XP 64-bit are not supported)
Computer hardware requirements	Windows computer with a USB 2.0 port CPU/speed: 2 GHz or faster dual core processor (x86) Memory: 2 GB or more
Mac	
Supported operating systems	Yosemite (10.10 or later) Mavericks (10.9.1 or later) Mountain Lion (10.8.4 or later) Lion (10.7.5 or later) Snow Leopard (10.6.8 or later)
Computer hardware requirements	Apple Mac computer with a USB 2.0 port CPU/speed: 2 GHz or faster dual core processor Memory: 2 GB or more
Supported audio drivers	ASIO 2.0, WDM (MME) Core Audio

Power supply and other specifications	
Power supply	AC 100-240 V, 50/60 Hz
Power consumption	15 W
Dimensions (W $\times$ H $\times$ D)	214 mm × 81 mm × 233 mm
Weight	2.2 kg
Operating temperature range	5-35 ℃

Design and specifications subject to change without notice. Last modified: 2018-04-04 16:05:58 UTC