USB MATCHBOX II™

Product Description

The **USB Matchbox II** is a professional USB-to-XLR multi-mode stereo audio codec. It provides unparalleled audio performance with the ease of USB connectivity. The USB Matchbox II is ideal wherever computer audio needs to interface with a professional analog or digital audio system. The USB Matchbox II provides balanced analog inputs and outputs, an AES/EBU digital output, plus a Headphone output for monitoring. The USB Matchbox II solves the myriad of problems caused by using common sound cards in a broadcast or professional audio environment.

The Sound Card Problem

Using a PC sound card to interface with a professional audio system usually leads to numerous problems. The inputs and outputs are often at the wrong levels. The unbalanced interface creates ground loops that cause hum and buzz. The "EMI hurricane" within the PC case creates even more noise, and the audio quality of many sound cards is often sub-par, (despite exaggerated claims) with pedestrian design and poor component quality. Although these shortcomings may tolerated by a non-technical user, they are not acceptable in a broadcast station or professional audio installation.

The USB Matchbox II Solution

Henry Engineering's USB Matchbox II has been designed as a true professional product that solves all of these problems. It delivers impeccable audio quality, XLR connectivity, and the convenience of a simple USB connection to the computer.

The heart of the USB Matchbox II is Burr Brown's new generation *phase coherent* Delta Sigma 8X Oversampled codec with SpAct audio clock recovery architecture. The codec's superb performance is further enhanced with proprietary L/C pre-filtering and edge-of-the-art analog circuitry, fine-tuned to eliminate the transient

USB<>XLR MULTI-MODE STEREO CODEC

intermodulation products that plague the typical sound card. Careful attention to component selection and circuit board layout further enhance the design to yield true Audiophile performance: ultra smooth, open and transparent "un-digital" audio with rock-solid bass, crystal-clear highs, and exceptional transparency. The USB Matchbox II will sonically outperform nearly any sound card and even surpass the quality of many 24 bit systems.

For The Professional User

The USB Matchbox II's built-in AC power supply allows operation at true professional levels with liberal headroom. MS-Windows, Mac, and Linux platforms are supported; no special driver or software is needed. The USB Matchbox II will operate with virtually any audio editing, recording, or broadcast automation software that supports a USB sound device at sample rates up to 48 kHz and 16 bit resolution.

The USB Matchbox II provides the quality and facilities that professional users require. Its dual-PLL asynchronous design permits simultaneous record and playback at different sample rates. Front panel trimmers allow precise adjustment of input and output levels. A high performance Headphone output is provided for critical monitoring. Rear panel connections include XLRs for balanced analog I/O and the AES/EBU digital output. The steel chassis provides effective RF shielding. All ICs that connect to the "outside world" are mounted in sockets.

The USB Matchbox II is 1/3 rack width, and can be rack-mounted using the optional rack-mount shelf, or cabinet or wall mounted using optional cabinet/wall mounting brackets. The unit is powered with an internal AC power supply.





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Technical Specifications

Analog Input, X2

Analog Output, X2

Analog I/O Reference AES/EBU Output Headphone Output Balanced, 10K input impedance
-6 to +8 dBu nom. input level
Balanced, 600 ohm load or higher
+4 dBu nom, +24 dBu max. level
+4 dBu = -15 dBfs (user adjustable)
Balanced, transformer isolated, 110 ohms
24 ohms or higher, 3.5mm stereo jack

USB Compliance Sample Rates Bit Depth O/S supported Power requirement Physical USB 1.1 or higher 32, 44.1, 48 kHz 16-Bit Delta-Sigma ADC and DAC MS-Windows, Mac, Linux 115 or 230 VAC, 2W, plus USB 5.7" w x 1.7"h x 6.0"d 3 lbs







