

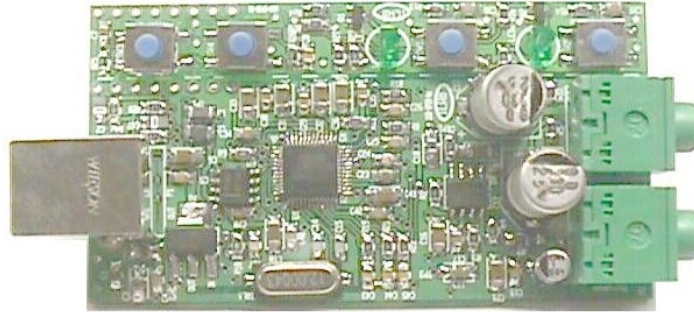


Preliminary Product Definition

USB-SP2

with microphone input and headphone output
USB headphone/microphone Adapter

OEM Series



Key Features

- USB digital stereo, full-duplex enables two-way digital sound with PC or Gaming Console
- USB-IF Certified , can customize USB device and string descriptor
- USB audio controller , audio class encoder/decoder
- USB serial interface engine , USB transceiver, 2 end points (FIFO)
- Automatic detection using standard Windows 2000, Windows XP drivers
- Standard 16 bit USB audio , 8KHz/11.025KHz/22.05KHz/44.1KHz/48KHz
- Mute , Volume control operates PC volume control window
- No sound card required for PC
- No external power supply needed

Description

The USB-SP2 is a USB powered stereo headphone adapter system utilizing a USB audio and control interface. It can be used to adapt standard headphones and microphones to connect to computers via the USB port.

Audio outputs are stereo headphone. Audio inputs are USB and microphone. The microphone input is sent via the USB port to the PC.

Volume and mute control can be operated by either the PC or the optional front panel of the USB-SP2. This allows for central control , avoiding mismatched volume levels in common powered speakers/PC's.

The USB-SP2 uses the standard Windows USB drivers. The identifying code can be easily modified to display any company or brand when the USB driver detects the USB-SP2. Ideal for creating brand recognition for headphone products.

Applications

- Voice recognition
- Voice command and control
- Internet phone and chat
- Videoconferencing
- Speakerphones
- Headphones
- Microphones
- Headsets



Small Size:

- 2.86" x 1.13" without optional switch/LED board
- 2.86" x 1.59" with optional switch/LED board
(picture above shows switch/LED board)

Switch/LED options:

- Volume up/down
- Headphone mute
- Microphone mute

USB-SP2 Specifications

Headphone/Microphone USB adapter Casing Mockup



using USB-SP2 PCB by ILAB America Inc.



Hardwired USB headphone/microphone application

Note: USB-SP2 is a PCB subassembly. Plastic casing shown for example only and not supplied as standard.

Technical Specifications

Standard 16 bit USB audio
Audio Sampling Rates: 8KHz / 11.025KHz / 22.05KHz / 44.1KHz / 48KHz

Frequency Response:
THD+N: -56dB (Headphone), -67dB (Mic)
Signal to Noise Ratio : -75dB (headphone), -69dB (Mic)
Dynamic Range: 76dB (Headphone) , 69dB (Mic)
Output Level Adjustment: Uses Windows USB driver
Input Level Adjustment: Uses Windows USB driver

Inputs:
USB Series B
Stereo microphone, 1/8" mini jack

Outputs
Stereo Headphone, 1/8" mini jack

Power Requirements: USB powered

Operating Conditions
5-45 degrees Celsius , natural convection cooling
0-90% relative humidity (non-condensing)

Regulatory Notices
Complies with FCC Part 15 , class A digital device
UL listed for US and Canada



ISO9002



REGISTRATION NUMBER 013

