

WiSA™ USB Transmitter

For use with WiSATM Ready Devices

PRODUCT APPLICATION BRIEF

Superior Sound Made Simple

The WiSA[™] USB Wireless Audio Transmitter that is sold by Summit Wireless for use with WiSA[™] Ready platforms is a wireless multichannel audio receive and transmit solution that removes the need for expensive A/V receivers and vastly simplifies the home theater setup experience. When paired with WiSA[™] Certified speakers and a WiSA[™] Ready TV, PC, game console, Home Theater A/V Receiver, or Set-top Box (STB) with audio decode capabilities, the USB Transmitter becomes a truly plug and play home theater solution capable of up to 8 channels of 24-bit PCM audio at 48kHZ and 96kHz sampling rates with fixed, ultra-low latency. The WiSA[™] USB Transmitter is robust and designed to perform well in congested RF environments, virtually eliminating audio dropouts, clicks, and pops.

Advantages of USB Audio and Control Interfaces

The WiSA™ USB Transmitter provides a USB audio/control interface that allows for I2C control and I2S audio input. The advantages with a USB wireless transmit solution include small size, low cost, and simplicity. By connecting the WiSA USB Transmitter to a USB port on a TV, PC, gaming console, Home Theater A/V Receiver, or STB platform with an integrated WiSA™ Ready user interface, multichannel audio support is achieved with minimal development time and without incurring additional hardware costs.



Product photo for a WiSA™ USB Transmitter

Feature set

Table 1. WiSA™ USB Transmitter Features

Parameter	Feature
System Configuration	Supports both pre-configured and user defined installations
MyZone™ Optimizations	Supports customizable audio sweet spot location with a graphical user interface
Home Theater	Supports 2.0 – 7.1, and Atmos height speakers
WiSA™ Compatibility	Supports the WiSA interoperability standard
Target Product Categories	Supplemental TV sound, Media Center PC, PC/Console gaming, Blu-Ray, Home Theater AVR extension, streaming and set top box applications
Advantages	Low latency, high-fidelity with exceptional ease of use



The decoded audio source sends PCM data to the USB port with the attached WiSA™ USB Transmitter.

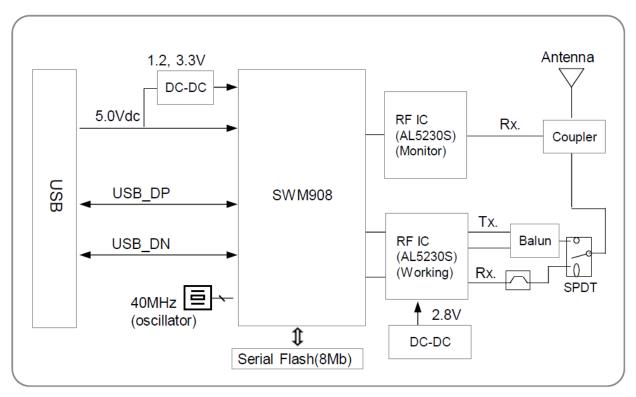
The audio is then transmitted over-the-air to WiSATM Certified speakers.

Summit USB Interface Specs

PARAMETER	PERFORMANCE
USB Device Type	Audio Device Class 2.0
Power Consumption	Max: 440 mA Typical: 400 mA
Power Supply	Input power: +5.0V (VDD) Supply voltage: +5.0V ± 0.25V (5%)
Audio Input Format	Up to 8 channels; 24-bit audio at 44.1 kHz, 48 kHz, 96 kHz
Latency (USB source to RX output)	7.9ms @ 48kHz, 3.4ms@ 96kHz
Inter-channel Delay Error	±1 μs (Speaker-to-speaker timing skew)
Transmit Distance	Designed for use in 9 x 9 m (30' x 30') rooms
Transmit Power	Typical: +8dBm
Ambient Temperature	0 – 50 °C
Operating Frequency	5170-5330Mhz; 5490-5710Mhz; 5735-5835Mhz







WiSA™ USB TX Schematic Diagram

Ordering Information

SKU	DESCRIPTION
444-2269	WiSA USB Transmitter and USB ext. cable
444-2275	WiSA USB Transmitter, USB ext. cable and gift box (black)



