

Superior Sound Made Simple

Summit Wireless® Standard Distance Technology is a robust multichannel wireless audio solution that is optimized for home theater applications and other audio applications demanding wired-quality delivery. This is accomplished using the uncongested U-NII band radio spectrum to provide vastly superior performance and noise immunity compared to solutions using 2.4/5.8 GHz spectrums.

Advantages of USB Audio and Control Interfaces

LGIT WiSA Wireless Audio Tx Dongle provides both an I2C control/I2S audio interface and a USB audio/ control USB interface. While the USB audio functionality was designed into the Summit ASIC, module and firmware support for USB functionality has recently been completed.

Advantages to a USB driven wireless transmit solution include small size, low cost, and simplicity. With a USB input, LGIT transmit modules become an attractive solution for creating audio accessories for new or existing TVs, PCs, gaming consoles, AVRs or STB platforms that deliver WiSA™ multichannel audio support while minimizing development time and product costs.



Product concept for a LGIT Wireless transmitter featuring a USB interface

USB Implementations

LGIT envisions two distinct product categories for USB audio enabled multichannel wireless audio systems. The first is a factory preconfigured, fixed function, bundled product targeting entry-level consumers. The second is a full featured product with interoperability and extensibility and could be completely WiSA certified. The table below highlights the differences between these systems.

Table 1. Comparison between Preconfigured and Full-featured implementations.

Parameter	Factory Preconfigured	Full Featured
System Configuration	Set at factory (Ships as a complete system)	User-managed during set up
Home Theater /Main System	2.0 up to 7.1	
MyZone™ Optimizations	Not supported	Supported, implementation dependent
WiSA™ Compatibility	Speaker certification possible	Host and Speaker certification possible
Target Product Categories	Supplemental TV sound, Media Center PC, PC/Console gaming, Home Theater	Supplemental TV sound, Media Center PC, PC/Console gaming, Home Theater AVR extension
Advantages	Minimal firmware development End-user ease of use Time to market	Rich feature set Interoperability Extensibility

Wireless Audio Tx Dongle

PRODUCT APPLICATION BRIEF



LGIT Tx Dongle attached via USB to an entertainment PC

USB Interface Features



Parameter	Performance
USB Device Type	Audio Device Class 2.0
Power Consumption	2.4 Watts (max), 2.0 Watts (typical)
Power Supply	USB interface from source
Audio Input Format	Up to 8 channels; 24-bit audio at 44.1 kHz, 48 kHz, 96 kHz
Latency (I2S source to RX output)	128 audio samples + (Fixed 5.1 ms @ 48kHz sample rate, 2.6 ms @ 96 kHz sample rate)
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

Ordering Information

Model	Description
TWFD-S001T	Wireless USB Audio Tx Dongle

Contact us

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