

SuperSlot™ Technical Specification

Revision 1.0 March 20, 2015



SuperSlot and the SuperSlot logo are trademarks of Sound Devices, LLC

This document is protected under Sound Devices, LLC non-disclosure agreement. Distribution without the expressed consent of Sound Devices is prohibited.

Introduction

SuperSlot[™] is an electro-mechanical connection, developed and licensed by Sound Devices, to simplify the interconnection of wireless audio systems with audio mixers and cameras. Superslot offers power, signal, and control connections. SuperSlot-compatible products include wireless systems, cameras, and audio mixers.

This SuperSlot Specification identifies the mechanical and electrical specifications of SuperSlot host and client devices. A SuperSlot host is typically an audio mixer/ recorder or camera. A SuperSlot client is typically a wireless receiver or transmitter. The host accommodates SuperSlot-compliant wireless receivers or transmitters from any manufacturer. SuperSlot uses the ubiquitous DB-25 connector for all electrical connections.

The SuperSlot standard is fully backwards compatible with the "Panasonic" slot-type system, popularized by Panasonic cameras and first introduced by Ikegami. Electrical connections in the Panasonic-type slot are a subset of SuperSlot. **Mechanically the two standards are identical.** SuperSlot client products are compatible with Panasonic-type host devices, with reduced functionality. Panasonic-slot-type client products are compatible with SuperSlot host devices.

Electrical Features

Legacy "Panasonic" Slot Feature Compatibility:

- Wireless receiver compatibility
- Power supplied is 12V, unregulated
- Two-channel analog audio connections, variable audio levels

Additional Features Provided in SuperSlot:

- Remote control is via UART so that a SuperSlot host can fully control a connected client.
- Accommodates up to a 4-channel receiver.
- Accommodates up to a 4-channel transmitter.
- AES digital audio connection may be used by receiver for full digital interconnect.
- Compatible with multiple, asynchronous AES audio streams.
- Supports SMPTE Linear Timecode connection.
- Genlock connection can be used by host to synchronize video.
- 6-18 VDC, 5W power is available for client.

Requirements of receiver or transmitter (client):

- Accepts 6-18 VDC input voltage, 5 watts max.
- Client must turn on with application of DC power.
- Analog audio outputs must be configurable (through UART) to fixed output of +2 dBu +/-0.5 dB.
- Standard UART Rx and Tx connections required.

- Recommended UART BAUD rate is 115k, 8n1. Lower rates can be used, but will result in slower communication of data.
- SuperSlot UART signaling is 3.3V but is 5V tolerant on signals from client.
- Transmitters must use AES connection for audio.

Logic Interface

ID Command

The protocol of serial communication is outside the scope of this electromechanical specification. In addition to the sample commands listed below, Sound Devices will work to accommodate manufacturers' existing command sets and protocols.

Sample Receiver Commands

- Frequency
- Scan
- Squelch threshold
- Audio output level
- Pilot tone
- · Battery levels

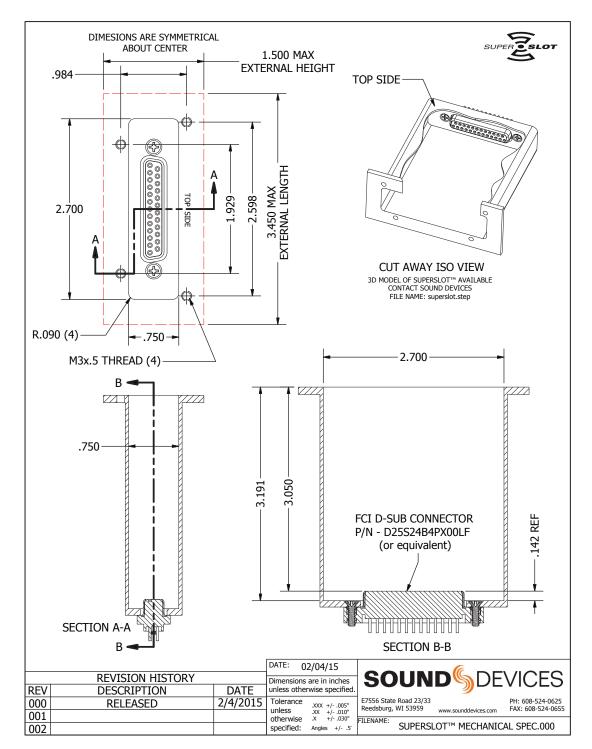
Sample Transmitter Commands

- Frequency
- Output Power
- Audio Level
- Mute
- Battery levels

SuperSlot DB-25 Pin Assignments

			required for		
DB-25 Pin	SuperSlot Name	Description	Rx	Тх	TC Gen
1	Gnd	Ground	Х	X	Х
2	Ch 1+ analog / Ch1,2 AES +	Ch1 + analog audio out of Wireless Rx into SuperSlot, +2 dBu level (+/- 0.5 dB), balanced. Alternately, Ch1 and Ch 2 AES3+ (balanced, 110 ohm, transformerless).			
3	Ch 1 - analog / Ch1,2 AES -	Ch1 - analog audio out of Wireless Rx into SuperSlot, +2 dBu level (+/- 0.5 dB), balanced. Alternately, Ch 1 and Ch 2 AES3- (balanced, 110 ohm, transformerless).	х		
4	Gnd	Ground for power	Х	X	Х
5	6-18 VDC	Power from SuperSlot into Wireless Rx or Tx. 6.0-18.0 V, 5W max.	х	x	х
6	No Connect - Float				
7	No Connect - Float				
8	No Connect - Float				
9	LTC to Tx	Linear Timecode from SuperSlot to Wireless Tx. $LTC = 0/3.3V$ level.			
10	LTC from Rx to Camera	Linear Timecode from Wireless Rx to Camera (compatible camera needed). $LTC = 0/3.3V$ level.			
11	Genlock from Rx to Camera	Genlock signal from Wireless Rx to Camera (compatible camera needed)			
12	No Connect - Float				
13	Gnd	Ground	Х	x	х
14	Gnd	Ground	Х	X	Х
15	Ch 2+ analog / Ch3,4 AES +	Ch2 + analog audio out of Wireless Rx into SuperSlot, +2 dBu level (+/- 0.5 dB), balanced. Alternately, Ch3 and Ch4 AES3+ (balanced, 110 ohm, transformerless).			
16	Ch 2- analog / Ch3,4 AES -	Ch2 - analog audio out of Wireless Rx into SuperSlot, +2 dBu level (+/- 0.5 dB), balanced. Alternately, Ch3 and Ch4 AES3- (balanced, 110 ohm, transformerless).			
17	No Connect - Float				
18	Ch1,2 AES + out	AES3 + (balanced, 110 ohm, transformerless) from SuperSlot to Wireless Tx		x	
19	Ch1,2 AES - out	AES3 - (balanced, 110 ohm, transformerless) from SuperSlot to Wireless Tx		x	

			required for				
DB-25 Pin	SuperSlot Name	Description	Rx	Тх	TC Gen		
20	Ch3,4 AES + out	AES3 + (balanced, 110 ohm, transformerless) from SuperSlot to Wireless Tx					
21	Ch3,4 AES - out	AES3 - (balanced, 110 ohm, transformerless) from SuperSlot to Wireless Tx					
22	UART Receive (0/3.3V)	UART from Wireless Rx to SuperSlot. 0/3.3V signaling. Superslot is 5 V tolerant; high >2 V, low <0.8 V.	х	х			
23	UART Transmit (0/3.3V)	UART from SuperSlot to Wireless Rx. 0/3.3 V signaling.	х	х			
24	No Connect						
25	Gnd	Ground	Х	Х	Х		
		 Notes: "Wireless Rx" indicates wireless receiver. "Wireless Tx" indicates wireless transmitter. The "Wireless Rx" can also be a timecode generator or similar product. All ground connections are required on both Tx's and Rx's. 					



SuperSlot Mechanical Specification