

Chapter 6

NS750 Nexus RSM Interface

This section lists the Nexus RSM interface description when connected to different types of Secondary Audio Nexus Accessories.

Figure 12: Nexus Plug

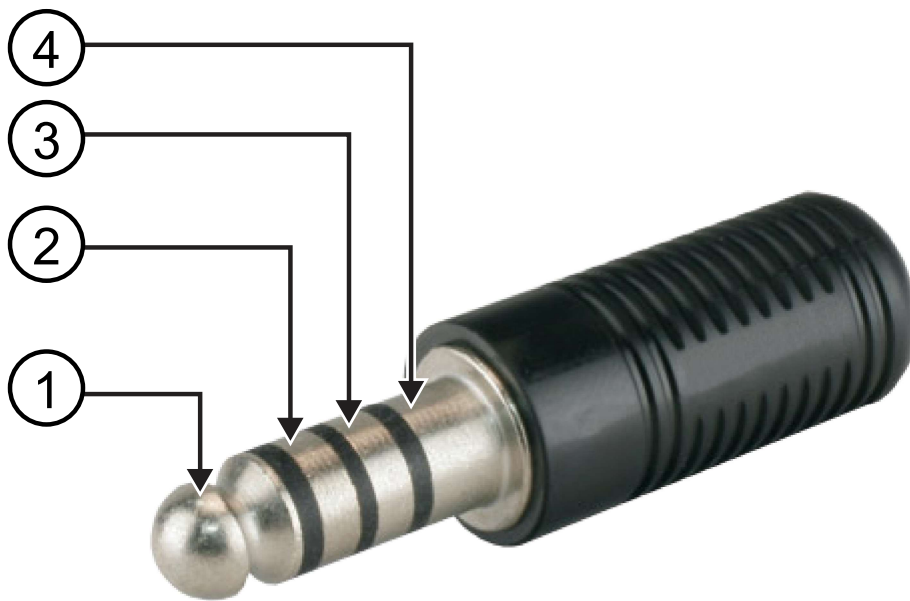


Table 6: Nexus Plug

Annotation	Nexus Plug Description
1	Tip (Pin 1)
2	Ring 1 (Pin 2)
3	Ring 2 (Pin 3)
4	Sleeve (Pin 4)

Table 7: NS750 Nexus RSM Interface

Parameter	Value
Electret Microphone + DSP Processor	

Parameter	Value	
Path	Path 1	
Microphone Impedance	Open	
Voltage for Microphone detect (Pin 2 to Pin 1 versus the Voltage reference (1.1 V))	Higher than Voltage reference at Pin 2	
Pin Out	Pin Out Assignment	Remarks
Pin 1	GND	GND
Pin 2	Microphone+	> 1.1 V (Higher than Voltage reference)
Pin 3	Not Connected	Not Applicable (NA)
Pin 4	Speaker Single-Ended	Single-Ended Audio
Microphone Gain in RSM	+6 dB	
Propose Microphone Component Sensitivity	Electret Microphone with DSP processor	
Speaker Impedance	Supplier to determine	
Audio Safety recommended by Motorola Solutions	≈ <118 dBSPL (peak)	
Electret Microphone		
Path	Path 2	
Microphone Impedance	≈<1 kΩ	
Voltage for Microphone detect (Pin 2 to Pin 1 versus the Voltage reference (1.1 V))	Lower than Voltage reference at Pin 2	
Pin Out	Pin Out Assignment	Remarks
Pin 1	GND	GND
Pin 2	Microphone+	< 1.1 V (Lower than Voltage reference)
Pin 3	Speaker+	Balanced Audio
Pin 4	Speaker-	
Microphone Gain in RSM	+22 dB	
Propose Microphone Component Sensitivity	Electret Microphone (≈ -60dB re 1V/Pa)	
Speaker Impedance	Supplier to determine	
Audio Safety recommended by Motorola Solutions	≈ <118 dBSPL (peak)	
Bone Conduction/Accelerometer		
Path	Path 3	
Microphone Impedance	≈<1 kΩ	

Parameter	Value	
Voltage for Microphone detect (Pin 3 to Pin 1 versus the Voltage reference (1.1 V))	Lower than Voltage reference at Pin 3	
Pin Out	Pin Out Assignment	Remarks
Pin 1	GND	GND
Pin 2	Not Connected	Not Applicable (NA)
Pin 3	Bone Conduction Microphone	< 1.1 V (Lower than Voltage reference)
Pin 4	Speaker Single-Ended	Single-Ended Audio
Microphone Gain in RSM	+29 dB	
Propose Microphone Component Sensitivity	Vibration-sensitive, impedance microphone	
Speaker Impedance	Supplier to determine	
Audio Safety recommended by Motorola Solutions	≈ <118 dBSPL (peak)	