# Agilent U8903A Audio Analyzer

## Make an audible difference in analog and digital audio testing

Now, with a two-in-one digital audio interface card that provides AES3/SPDIF and Digital Serial Interface (DSI) digital audio formats, Agilent U8903A offers you the flexibility to measure and quantify both analog and digital audio performance in applications such as analog and digital IC components and module design, wire-less audio and consumer audio.



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#### Easily perform manual and automated tests

- Measure a variety of applications with a wide logic level input range of 1.2 V to 3.3 V  $\,$
- View up to four channels simultaneously on the U8903A's 5.7-inch color display
- Access four main operating modes generator, analyzer, graph and sweep - through the front panel soft keys

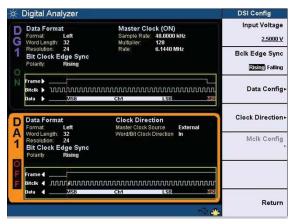


# Cover your application needs with multiple digital audio interface options

- Test digital audio related ICs with AES3/SPDIF and DSI digital audio formats
- Verify digital audio designs with multiple DSI formats: I<sup>2</sup>S, Left Justified, Right Justified and DSP

🔆 Digital Analyzer		Analyzer
DG1 Status Bits ON Mode: Consumer	DA2 Data Bits OFF	Analysis Mode <u>Signal Attributes</u>
Transmit 00 01 02 03 04 05 06 07 08 09 10 11 00 00 00 00 00 00 00 00 00 00 00 00 00	0 0	Function 1+
12 13 14 15 16 17 18 19 20 21 22 23 00 00 00 00 00 00 00 00 00 00 00 00 00	Confidence Parity Coding Validity Lock	Function 2+
DA1 Status Bits OFF	DA2 OFF	Meas. Config
Mode: Professional Receive 00 01 02 03 04 05 06 07 08 09 10 11	Frequency 0.000 Hz Vac	Input Config.
00 00 00 00 00 00 00 00 00 00 00 00   12 13 14 15 16 17 18 19 20 21 22 23   00 00 00 00 00 00 00 00 00 00 00 00 00	0.000 FFS SR 0.000 Hz Avg. 1 LPF: None W None	AES3/SPDIF Config
	HPF: None VV None HPF: None DeEm None	Return

View up to four channels – two for analog, two for digital – at the same time



The new digital audio interface options offer AES3/SPDIF and DSI standard digital audio formats





### **Quick Fact Sheet**

## Agilent U8903A Audio Analyzer

Key Specifications (Digital Audio)

Formats			
AES3/SPDIF		Consumer or professional	
DSI		I²S, Left Justified, Right Justified, DSP	
Generator			
Audio bit	Both formats	8 bit to 24 bit	
Output sampling rate	AES3/SPDIF	28 kHz to 205 kHz	
	DSI	6.75 kHz to 400 kHz	
Input/output level	Balanced	0.3 V <sub>pp</sub> to 5.1 V <sub>pp</sub>	
	Unbalanced	0.3 $V_{pp}$ to 2.5 $V_{pp}$	
Logic level input (DSI)		1.2 V to 3.3 V	
Analyzer			
Analyzer frequency		5 Hz to 0.45 Fs	
Frequency accuracy		±5 ppm (10 Hz to 0.45 Fs)	
Level range	AC	< -120 dBFS to 0 dBFS	
	DC	±1 FFS	

Recommended service options

Additional two years of Return-to-Agilent warranty Additional two years of Return-to-Agilent calibrations For more information go to **www.agilent.com/find/removealldoubt** 

#### **Ordering Information**

Model number	Description
U8903A-200	Analog audio analyzer, two channels
Standard-shipped acc	essories
LAN and USB cables	
Power cord	
Agilent U8903A audio	analyzer Quick Start Guide
Agilent U8903A audio	analyzer Product Reference CD-ROM (contains U8903A User Guide)
USB flash storage dev	ice
Certificate of calibration	on
Digital audio interface	options
U8903A-113	Two channels Analog Audio Analyzer, with AES3/SPDIF and DSI digital audio interfaces
U8903A-114	Two channels Analog Audio Analyzer, with AES3/SPDIF digital audio interfaces
U8903A-115	Two channels Analog Audio Analyzer, with DSI digital audio interfaces
Optional accessories	
U8903A-101	Male BNC to male BNC cable; 1.2 m
U8903A-102	Male BNC to male RCA cable; 2 m
U8903A-103	Male XLR to female XLR cable; 2 m
U8903A-908	Rack mount kit – standard 3U
U8903A-105	Digital serial interface cable
Warranty and service	
U8903A-1A7	IS017025 compliant calibration with test data
U8903A-A6J	ANSI Z540 compliant calibration with test data
R-50C-011-3	Agilent calibration – 3 years
R-50C-011-5	Agilent calibration – 5 years
R-51B-001-3C	Return to Agilent Warranty – 3 years
R-51B-001-5C	Return to Agilent Warranty – 5 years

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