

Keysight U8903B Audio Analyzer

Performance audio analyzer



Quick Start
Guide

Notices

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CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

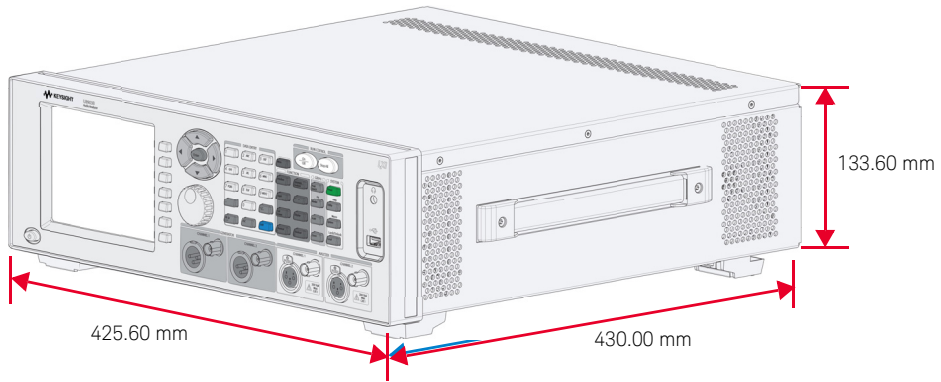
A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

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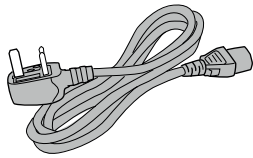
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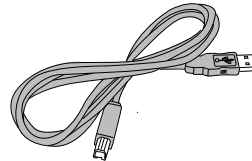
Standard Shipped Items



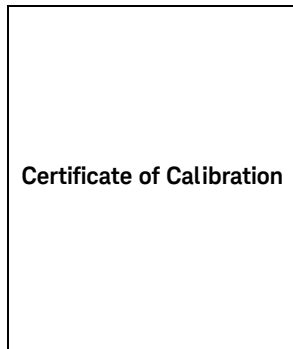
Keysight U8903B Audio Analyzer



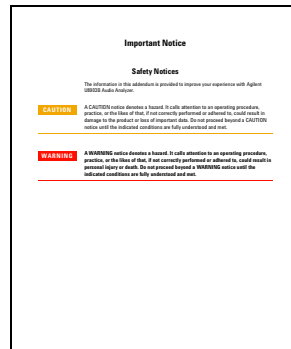
Power cord



USB cable



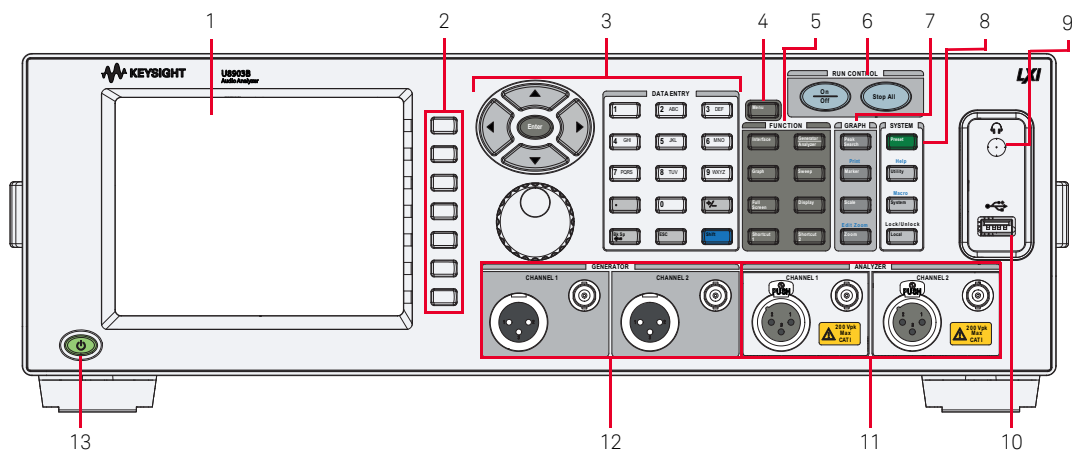
Certificate of Calibration



Safety Notices

Product at a Glance

Front panel

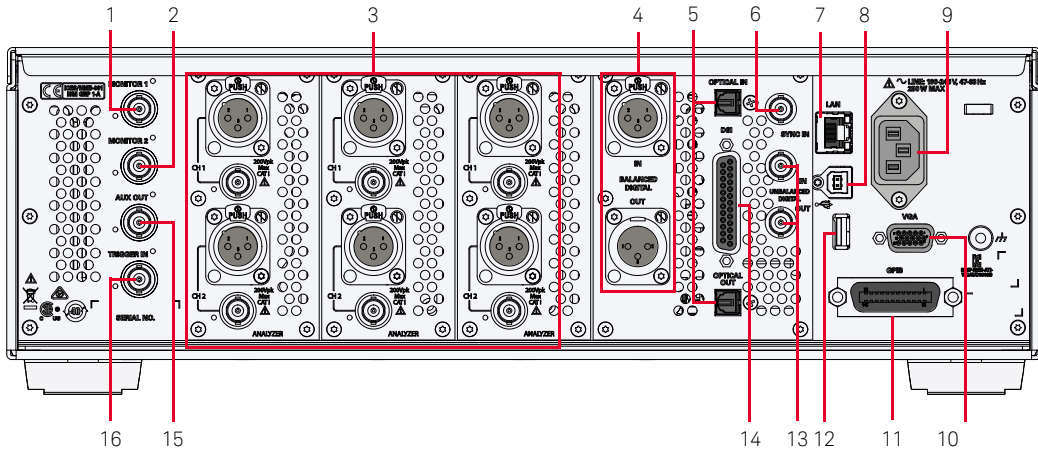


Item	Item
1 LCD display	8 SYSTEM panel
2 Softkeys 1 to 7	9 Headphone jack
3 Navigation and DATA ENTRY panels	10 USB port
4 Menu key	11 Analog analyzer input
5 FUNCTION panel	12 Analog generator output
6 Run Control panel	13 Power key
7 GRAPH panel	

NOTE

For the complete list of all the front panel functions and descriptions, refer to the *Keysight U8903B User's Guide*.

Rear panel

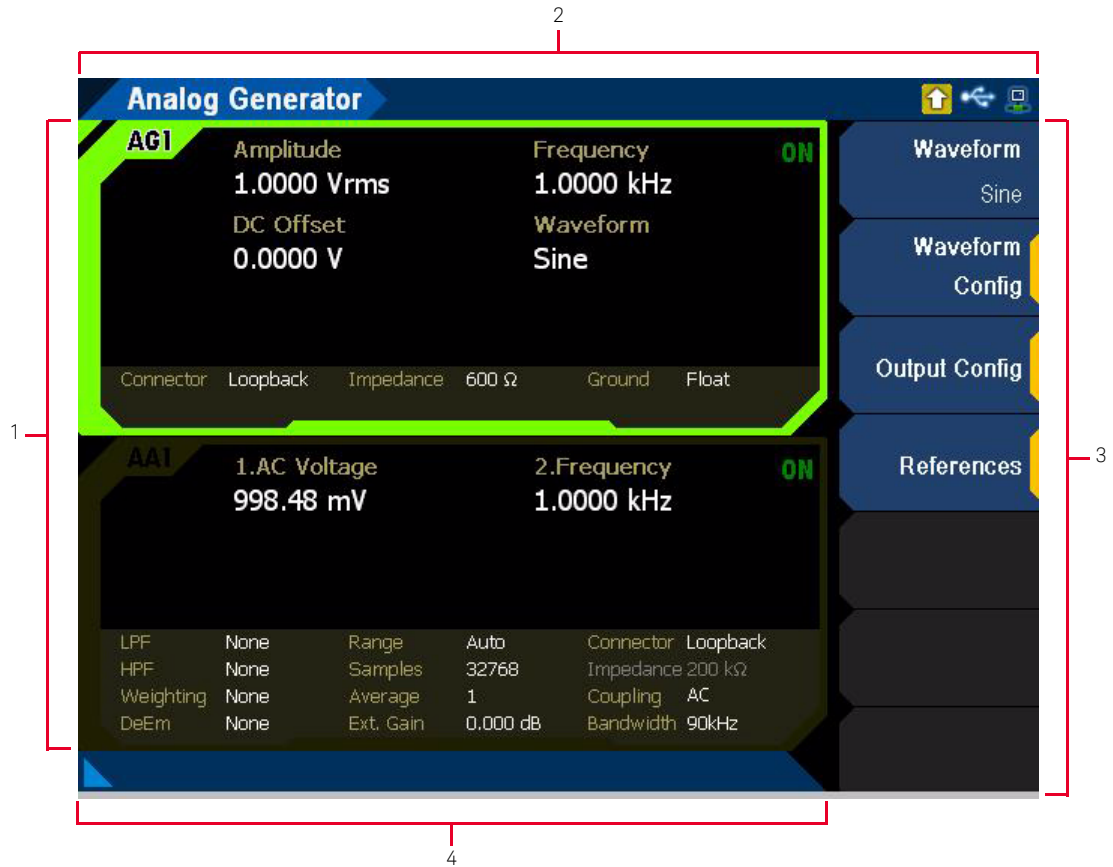


Item	Item	Item	Item
1	Monitor 1	9	AC power port
2	Monitor 2	10	VGA port
3	Analog analyzer input (channels 3 to 8)	11	GPIB port
4	Digital analyzer input and output (AES3)	12	USB port
5	Digital analyzer input and output (SPDIF)	13	Digital analyzer input and output (AES3/SPDIF)
6	Sync in	14	Digital analyzer input and output (DSI)
7	LAN port	15	AUX port
8	USB port (type B)	16	Trigger in

NOTE

For the complete list of all the rear panel functions and descriptions, refer to the *Keysight U8903B User's Guide*.

LCD display



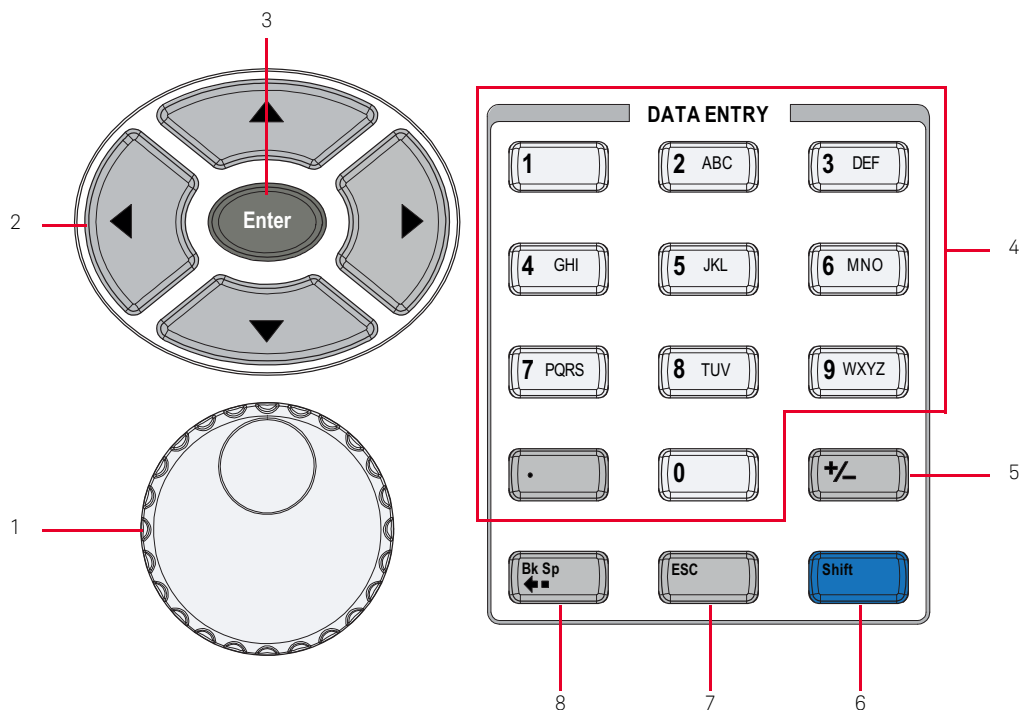
Item	Item	Item	Item
1	Main display	3	Softkeys panel
2	Title bar	4	Status bar

NOTE

For the complete list of all the LCD display functions and descriptions, refer to the *Keysight U8903B User's Guide*.

Navigation and DATA ENTRY Panels

The navigation and DATA ENTRY panels are used to navigate and to set or modify the parameter values.

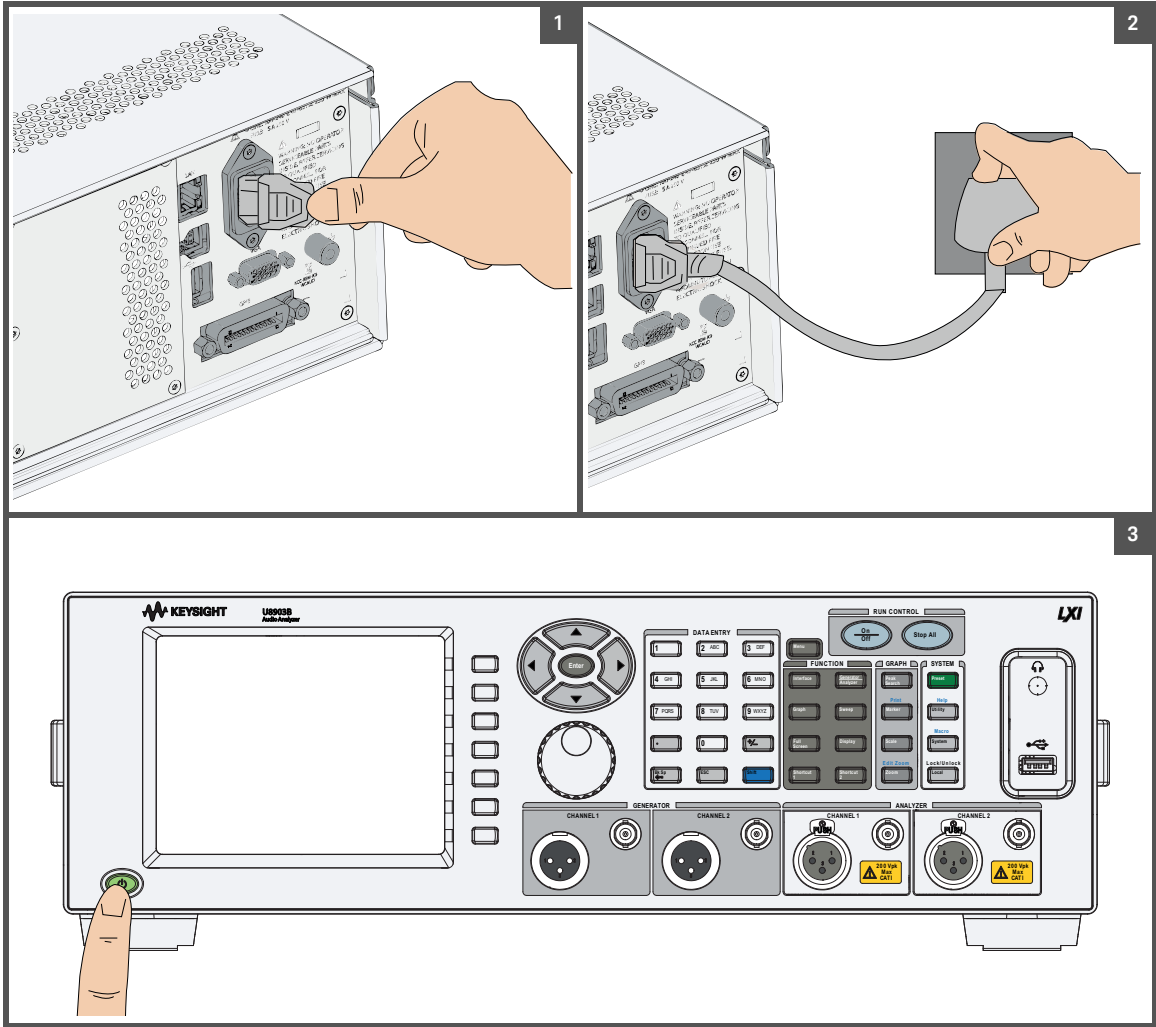


Item	Item
1 Knob	5 Numeric sign key
2 Arrow keys	6 Shift key
3 Enter key	7 Escape key
4 Numeric keys	8 Backspace key

NOTE

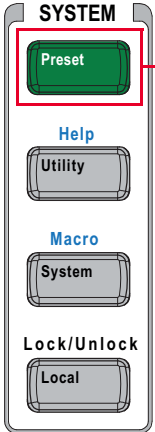
For the complete list of all the navigation and DATA ENTRY keys functions and descriptions, refer to the *Keysight U8903B User's Guide*.

Power On the U8903B



Preset the U8903B


1



SYSTEM

- Preset**
- Help
- Utility
- Macro
- System
- Lock/Unlock
- Local

2



Preset

AG1	Amplitude 1.0000 Vrms	Frequency 1.0000 kHz	ON
	DC Offset 0.0000 V	Waveform Sine	
	Connector	Loopback	Impedance 600 Ω
		Ground	Float

AG2	1.AC Voltage 997.85 mV	2.Frequency 1000.0 Hz	ON
------------	---------------------------	--------------------------	----

LFF	None	Range	Auto	Connector	Loopback
HFF	None	Samples	32768	Impedance	200 kΩ
Weighting	None	Average	1	Coupling	AC
DeEm	None	Ext. Gain	0.000 dB	Bandwidth	90kHz

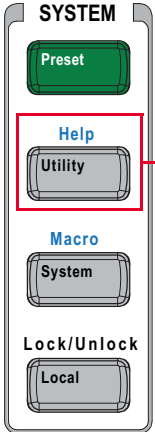
Return

Press **Preset** to set the U8903B to a known state.

It does not affect the I/O configuration, calibration data, or system configurations (time, date, model number, and serial number).

Access the Help System


1



SYSTEM

- Preset
- Help**
- Utility
- Macro
- System
- Lock/Unlock
- Local

2



Analog Generator

AG1	Amplitude 1.0000 Vrms	Frequency 1.0000 kHz	ON
	DC Offset 0.0000 V	Waveform Sine	
	Connector	Loopback	Impedance 600 Ω
		Ground	Float

AG2	1.AC Voltage 998.46 mV	2.Frequency 1.0000 kHz	ON
------------	---------------------------	---------------------------	----

LFF	None	Range	Auto	Connector	Loopback
HFF	None	Samples	32768	Impedance	200 kΩ
Weighting	None	Average	1	Coupling	AC
DeEm	None	Ext. Gain	0.000 dB	Bandwidth	90kHz

Waveform Sine

Waveform Config

Output Config

References

Press **Shift** on the DATA ENTRY panel, and press **Utility** to activate or deactivate the U8903B help mode.

The help mode icon will appear at the top-right of the title bar.

The U8903B help mode provides you quick access to the operating information by displaying the description of all the front panel keys and current softkeys.

Access the U8903B Menu



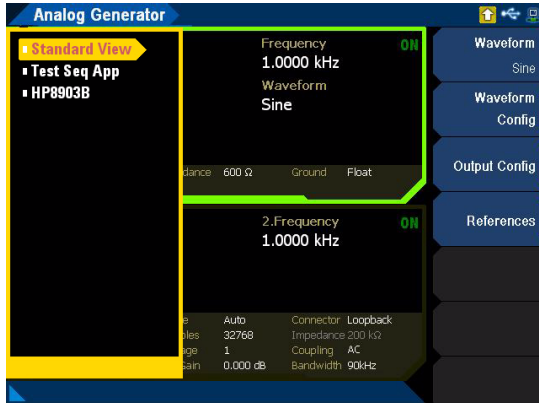
Press **Menu** to display the available U8903B main modes of operation.

Use the arrow keys or knob to select the desired main mode, and press **Enter** on the navigation panel.

1

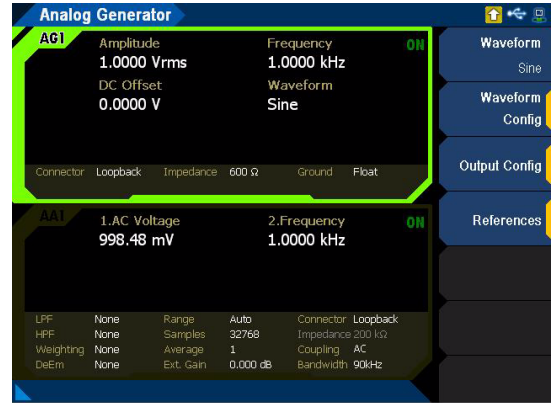
U8903B main mode selection

2



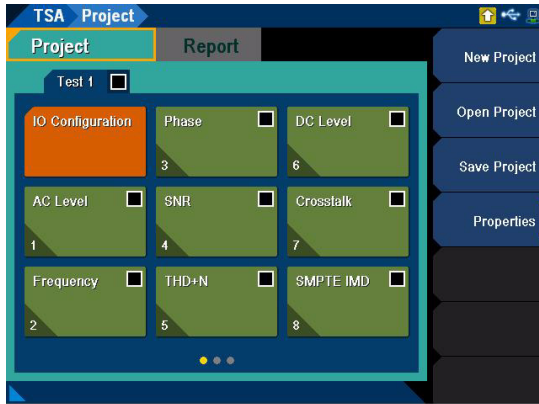
Standard view mode

3



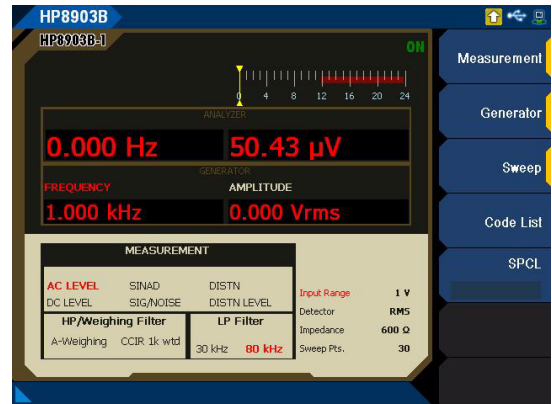
Test sequence application mode

4



HP89U3B mode

5



Switch to 2-Panel, 4-Panel, or 10-Panel View

FUNCTION

Interface	Generator Analyzer
Graph	Sweep
Full Screen	Display
Shortcut 1	Shortcut 2

Press **Display** to switch among the 2-panel, 4-panel, or 10-panel view in the generator and analyzer mode.

2-panel view

4-panel view

10-panel view

U8903B Options

Option	Description
U8903B-STD	<ul style="list-style-type: none">- 2 channels (analog generator)- 2 channels (analog analyzer)
U8903B-AN4	<ul style="list-style-type: none">- 2 channels (analog generator)- 4 channels (analog analyzer)
U8903B-AN8	<ul style="list-style-type: none">- 2 channels (analog generator)- 8 channels (analog analyzer)
U8903B-DGT	Digital audio card
U8903B-AUX	<ul style="list-style-type: none">- 2 monitor outputs- 1 auxiliary output (DC)
N3431A	Wide bandwidth option - 1.5 MHz (fixed perpetual license). This is only available for channel 1 and channel 2 analog analyzer.
N3432A	Perceptual Objective Listening Quality Analysis (POLQA) measurement software (fixed perpetual license).
N3433A	POLQA and Perceptual Evaluation of Speech Quality (PESQ) measurements software (fixed perpetual license).
N3434A	AES3, SPDIF, and DSI digital audio interfaces (fixed perpetual license).
N3435A	AES3 and SPDIF digital audio interfaces (fixed perpetual license).
N3436A	DSI digital audio interface (fixed perpetual license).



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