

Specifications

Audio Tester

Model OAT-900



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1. Product overview

OAT-900 consists of Windows PC and an instrument processing the signal by USB interface. It is designed to test the six kinds of products by one unit.

2. Products to be tested and measuring items are as follows: ○: Measuring, –: Not Measuring

Measuring Item \ Product to be Tested	Stereo Headphone	Stereo Handset		Handset		Receiver Unit 2 ch and L ch only (Micro Speaker included)	Microphone	Directional Microphone
		Stereo Headphone Side	Microphone Side	Receiver Side	Microphone Side			
Frequency Characteristics	○	○	○	○	○	○	○	○
Sound Pressure Sensitivity Level	○	○	○	○	○	○	○	○
Frequency Characteristics L/R Difference	○	○	–	–	–	–	–	–
Sound Pressure Sensitivity Level L/R Difference	○	○	–	–	–	–	–	–
Pointed Frequency Characteristics L/R Difference (5 points)	○	○	–	–	–	–	–	–
LR Reversed	○	○	–	–	–	–	–	–
Polarity	○	○	–	–	–	○	○	○
Impedance	○	○	–	○	–	○	–	–
Total Harmonic Distortion	○	○	–	○	–	○	–	–
Rub and Buzz	○	○	–	○	–	○	–	–
Fo	–	–	–	–	–	○	–	–
L R Fo Rank	–	–	–	–	–	○	–	–
L R Sound Pressure Sensitivity Level Rank	–	–	–	–	–	○	–	–
Microphone Sensitivity Rank	–	–	–	–	–	–	○	○
Directional Frequency Characteristics (Angle: F1 = 0° , F2 & F3 = 0° ~ 360°)	–	–	–	–	–	–	–	○
Directional Frequency Characteristics Difference (F2 & F3 on the basis of F1)	–	–	–	–	–	–	–	○
Directional Sound Pressure Sensitivity Level (F1, F2, F3: Each position has ten pointed frequency.)	–	–	–	–	–	–	–	○
Directional Sound Pressure Sensitivity Level Difference (F2, F3: Each position has ten pointed frequency on the basis of F1)	–	–	–	–	–	–	–	○
Consumption current of ECM (Option) *	–	–	○	–	○	–	○	○

* If an optional adapter (model AP-1900) is connected, consumption current and judgment of ECM can be gotten on four models, namely Stereo Handset, Handset, Microphone and Directional Microphone.

3. Main specifications

[Output Part]	
Frequency range	20Hz~20kHz
Sweeping time	0.5 s ~ 10 s
Signal	Sine wave logarithmic sweeping
Receiver drive voltage	100mV ~ 4000mV 1mV step
Microphone measurement standard speaker drive voltage	100mV ~ 4000mV 1mV step
Maximum power	2W (minimum load: 8Ω)

[Input Part]	
Directly inputting signal from LR microphone and standard microphone	BNC connector Input impedance: 100kΩ
Inputting signal from LR condenser microphone and standard microphone	TAJIMI connector (PRC03—23A10—7F) Polarized voltage: 200V, Circuit voltage: 28V
LR microphone input range	7 range (80dB, 90dB, 100dB, 110dB, 120dB, 130dB, 140dB) Frequency range: 20Hz~20kHz
LR impedance input range	1 range 5Ω~100Ω Frequency range: 20Hz~20kHz, 1 point

[Measurement]	
Total Harmonic Distortion	Frequency range: 50Hz ~ 5kHz Harmonics order: 2nd - 10th Indicated rate: 0.001% ~ 100%
RUB & BUZZ	Frequency range: 50Hz ~ 1kHz Harmonics order: 2nd - 35th Indicated rate: 0.001% ~ 100%

[Other Part]	
Temperature/ Humidity range	5°C to 35°C / 5% ~ 90% (No condensation)
Power source/Consumption	100VAC, 110VAC, 120VAC, 200VAC, 220VAC, 240VAC (internal conversion), 50Hz / 60Hz, Specified by user when shipped, / Approx. 20W
Main hardware unit Dimensions and Mass	350mm(W) × 75mm (H) × 310 mm(D) (Excluding projections) Approx. 5.2 kg
Accessories	Power cord 1pc. USB cord 2pcs. General instruction manual & Operation manual (PDF)
Optional instruments	Artificial ear based on IEC60318-1 (IEC60318) standard (Model OAE-260) Artificial ear based on IEC60318-4 (IEC60711) standard (Model OAE-262) Condenser microphone 1/2" sound pressure type (Model OMC-58) Adapter for measurement of ECM consumption current (Model AP-1900)

※ Some specifications may be changed without notice due to improvement.

4. Displayed examples: Measuring results of the stereo headphone

The screen of "Frequency Characteristic", Passed the test

General judgment
 GO : Pass the test
 NG : NO GO
 (Don't pass the test)

Individual judgment
 The accumulative value of NG is indicated every measurement items.
 If a judgment is OK, color of the column is green, and if a judgment is NG, color of the column is red.

The screen of "Frequency Characteristic L/R Difference", Passed the test

The screen of "Total Harmonic Distortion", Passed the test



The screen of "Rub and Buzz", Passed the test

