

Audio tester Model OAT-901

1. Summary

OAT-901 system is audio tester generating a signal and measuring the captured the signal by digital processing.

This system consists of Windows PC and an equipment measuring the signal by USB interface.

This system is in the configuration of the main unit and the power amplifier unit. Power amplifier unit can be selected from 2W type (AP-1904), 20W type (AP-1902), 100W type (AP-1903).

2. Measurement product

Speaker

3. Measurement item

- Sensitivity
- Impedance
- Total harmonic distortion
- Frequency characteristic
- Fo
- Rub and Buzz
- Impedance frequency characteristic
- Polarity judgment

4. Specifications

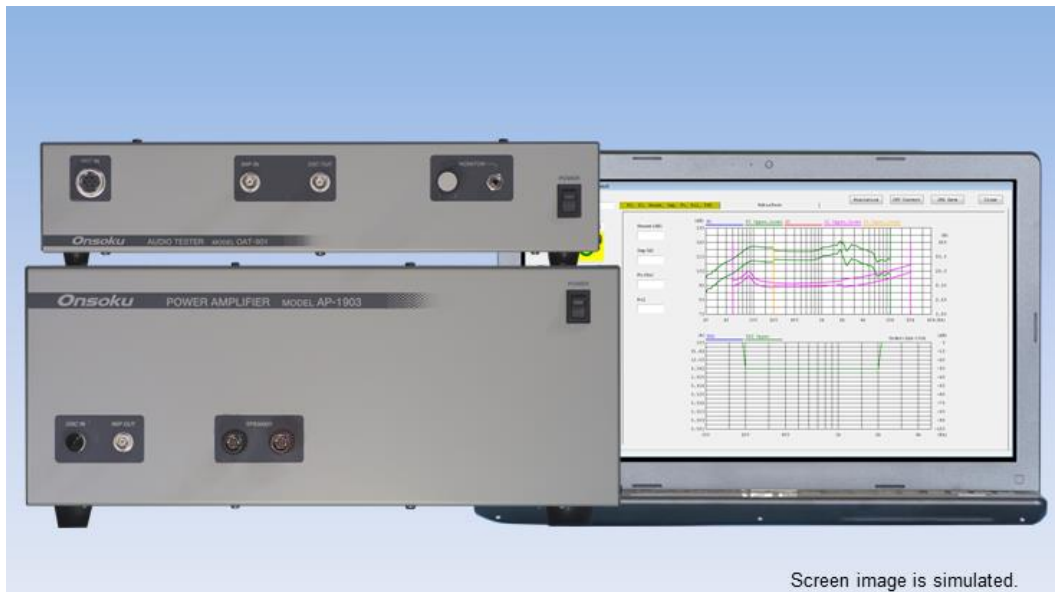
Output part

- Frequency range : 20Hz to 40kHz
- Sweep time : 0.5S to 10S
- Drive signal : Sine wave log sweep
- Out put voltage : 2W type (AP-1904) 0.1V to 4.000V 0.001V step
 20W type (AP-1902) 1V to 13.00V 0.01V step
 100W type (AP-1903) 1V to 30.00V 0.01V step
- Max electric power : 2W / 20W / 100W
- Minimum load impedance : 2W type (AP-1904) 4Ω
 20W type(AP-1902), 100W type (AP-1903) 1.8Ω

Input part	Condenser microphone input
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- Microphone input range : 140, 130, 120, 110, 100, 90, 80dB seven ranges
Frequency range : 20Hz to 40kHz
- Impedance input range : one range
Measurement range : $2\ \Omega$ to $100\ \Omega$
- Fo (Frequency of the peak point of impedance frequency characteristic.)
Measurement frequency range : 25Hz to 20kHz
- Total harmonic distortion
Frequency range : 50Hz to 5kHz (Analysis frequency range : 100Hz to 40kHz)
Harmonic range : The total of 2nd to 10th
Measurement range : 0.01% to 100% 100dB span
- Rub and Buzz measurement
Frequency range : 50Hz to 1kHz (Analysis frequency range : 100Hz to 40kHz)
Harmonics selection range 2nd to 35th setting of 4blocks is possible.

5. System composition



※Photos of the power amplifier unit is 100W type (AP-1903).

- Main unit
- Laptop computer
- Power amplifier unit 2W type (AP-1904) / 20W type (AP-1902) / 100W type (AP-1903)

※Selected from the above three type.

- 1/2inch standard condenser microphone

6. Measurement condition setting screen

Condition Settings

Load Impedance

☐ 2Ω ☐ 4Ω ☒ 8Ω

☒ FC Test

☒ ZC Test

Start Freq(Hz) 20 (20 to 40000)

Stop Freq(Hz) 40000 (20 to 40000)

Sweep Time(s) 1 (0.5 to 10.0)

Vout(V) 3.00 (1.00 to 30.00)

SPL Range (dB SPL) 140 (140 to 80)

Range Confirm

☒ Sense Test

Freq(Hz) 500 (20 to 40000)

Add

Delete

Clear (MAX 5 Point)

☒ Pol Test

Freq(Hz) 200 (20 to 500)

☒ Imp Test

Freq(Hz) 400 (20 to 40000)

Add

Delete

Clear (MAX 5 Point)

☒ Fo Test

☒ THD Test

Start Freq (Hz) 50 (50 to 5000)

Stop Freq (Hz) 5000 (50 to 5000)

Sweep Time(s) 2.5 (2.5 to 10.0)

Vout(V) 3.00 (1.00 to 30.00)

SPL Range (dB SPL) 130 (140 to 80)

Range Confirm

☒ Rub&Buzz1 Test

Start Freq (Hz) 50 (50 to 1000)

Stop Freq (Hz) 1000 (50 to 1000)

Sweep Time(s) 2 (1.7 to 10.0)

Vout(V) 3.00 (1.00 to 30.00)

SPL Range (dB SPL) 140 (140 to 80)

Range Confirm

Lo Order 5 (2 to 35)

Hi Order 7 (2 to 35)

☒ Rub&Buzz2 Test

Lo Order 8 (2 to 35)

Hi Order 10 (2 to 35)

☒ Rub&Buzz3 Test

Lo Order 11 (2 to 35)

Hi Order 15 (2 to 35)

☒ Rub&Buzz4 Test

Lo Order 16 (2 to 35)

Hi Order 35 (2 to 35)

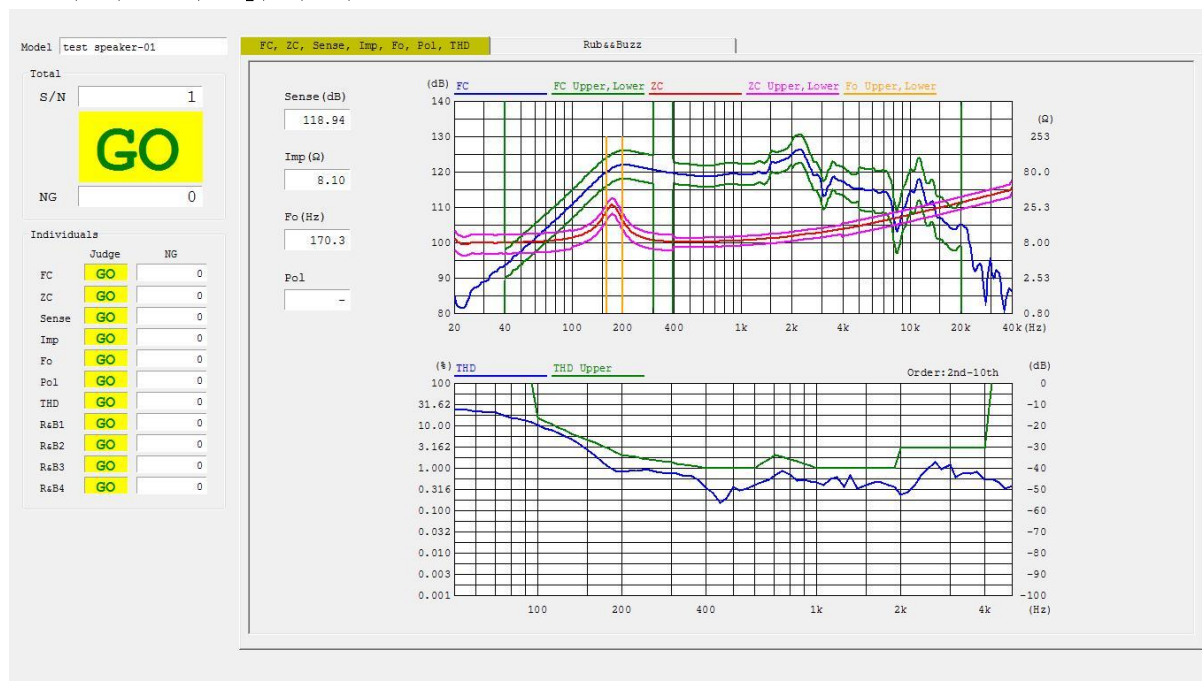
OK

Cancel

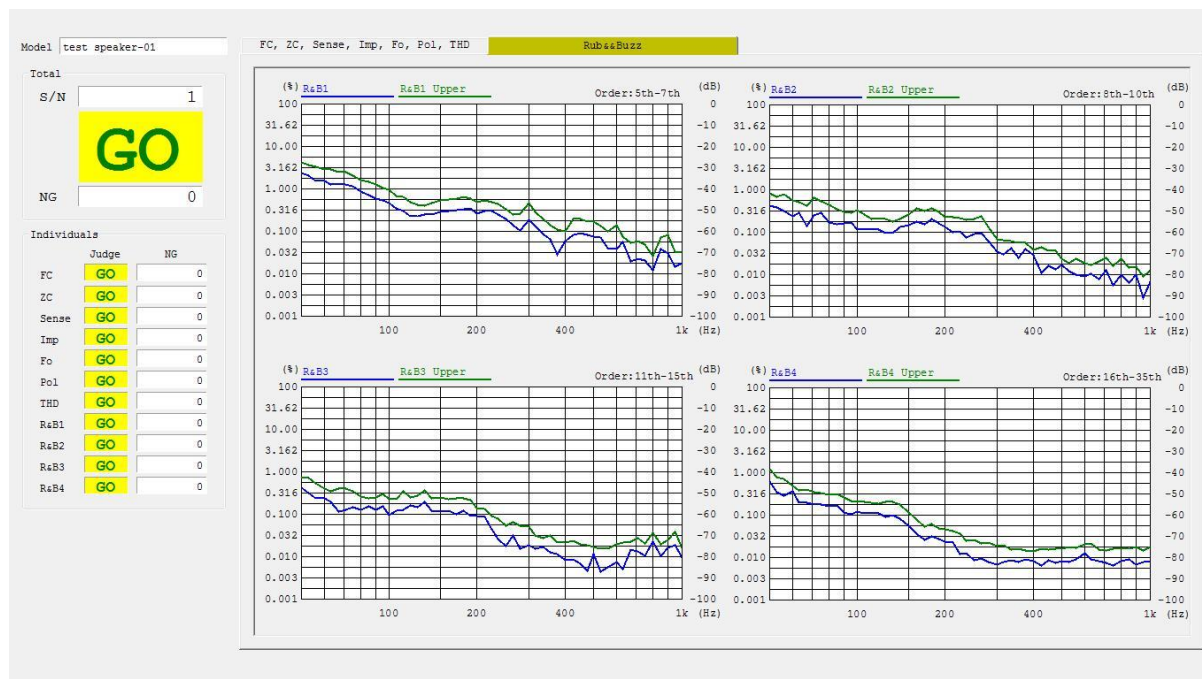
7. Measurement result screen

(Good judgement)

FC,ZC,Sense, Imp,Fo,Pol,THD characteristics screen

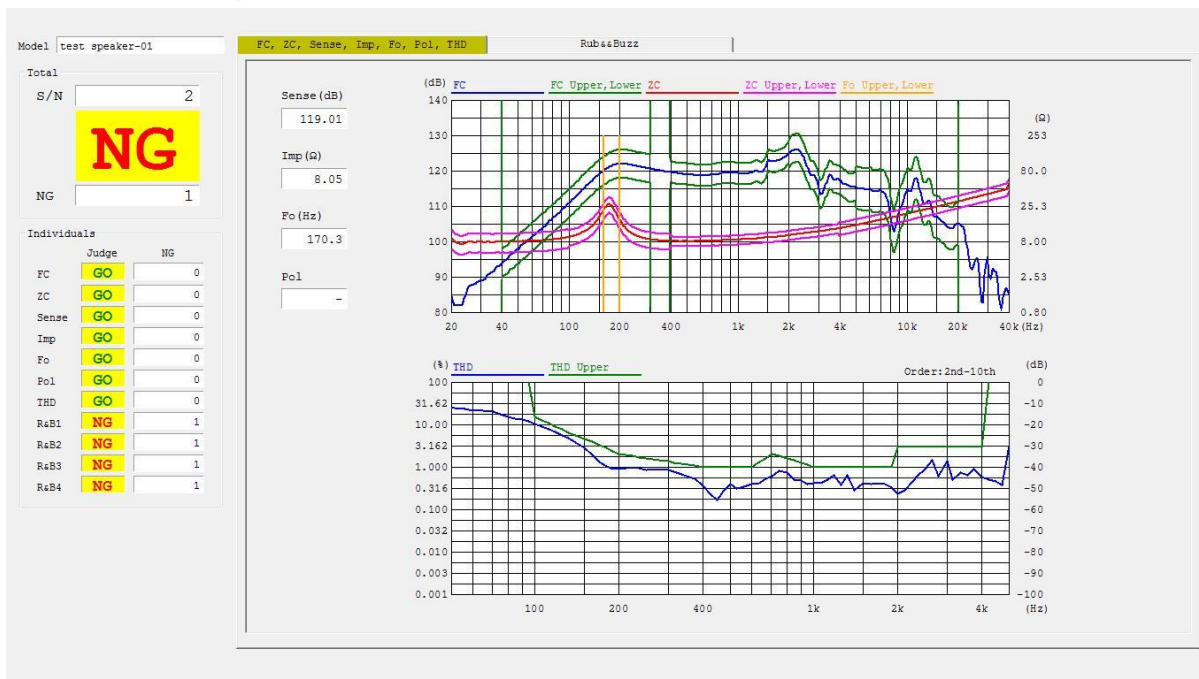


Rub and Buzz characteristics screen



(Rub and Buzz NG judgement)

FC,ZC,Sense,Imp,Fo,Pol,THD characteristics screen



Rub and Buzz characteristics screen



Design and specifications are subject to change with out notice.

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