Specifications For Speaker Fo&Ze measuring instrument

Model OST-828

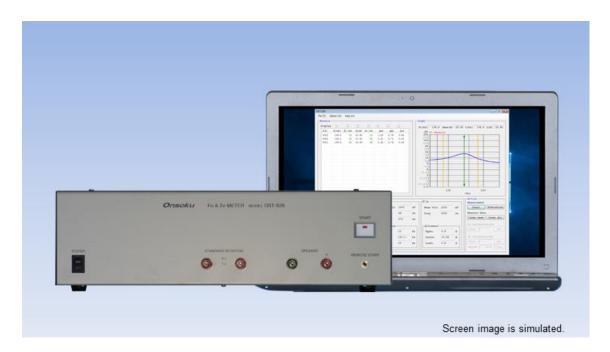
Onsoku electronic corp.

1) Summary

Model OST-828 can measures lowest resonant frequency(Fo) and impedance(Ze) of the speaker by the constant voltage anodizing. This model collects the statistics with plural measurements and calculates and does the standard judgment. All the measurement data can save it. Furthermore, this model calculates the value

of Q(Electrical Q of driver, Mechanical Q of driver, Total Q of driver).

2) System composition



- Measurement unit
- Personal computer (OS : Windows10 64bit version)

3) Specification

- ① Fo measurement range : 10Hz ~ 20kHz (impedance range : $0.9\Omega \sim 254\Omega$) 0.1H z
- ② Ze measurement range : $0.9\Omega \sim 254\Omega$ (at 100Hz ~ 10 kHz 1point) 0.01Ω
- ③ Measurement time : Fo about 3sec Ze about 1sec
- ④ Q measurement : Electrical Q of driver, Mechanical Q of driver, Total Q of driver
 - * The direct current resistance of the speaker measures it with a resistance meter and inputs a key.

(5)Measurement voltage : 100mV ~ 4000mV 1mV step setting

6 Maximum current : 4A

⑦ Measurement precision

Fo: $\pm (2\% + 1\text{Hz}) 15.0\text{H z} \sim 10000.0\text{H z}$ (at Total Q of driver = more than 0.5)

Ze: $\pm (3\% + 0.1 \Omega) 1.00 \Omega \sim 100.00 \Omega$ (at 200Hz ~ 5kHz)

$$\pm (5\% + 0.1 \Omega) \ 1.00 \Omega \sim 100.00 \Omega$$
 (at $100 \text{Hz} \sim 10 \text{kHz}$)

⑧ Measurements compensation function

$$Ze: \pm 9.99 \Omega$$

- (9) Built in standard resistance : $4.00 \Omega \pm 0.02 \Omega$
- 1 Operating temperature humidity range : 5 °C ~ 35 °C 20% ~ 80%

Do not allow to become wet with dew.

- (1) Power source : AC 100, 110, 120, 220, 230, 240V $\pm 10\%$ (internal change) 50/60Hz
- ⁽¹⁾ Power consumption : 100W * Personal computer and printer does not contain.
- ^(I) Dimensions / mass : OST-828 main unit 390(W) x 120(H) x 270(D) mm About 5kg

4) Statistics / tally

Statistics, allowance judgment, sample number, failure number, failure rate, mean value, differences, maximum, minimum, standard deviation

5) Operation item

Condition setting, Auto measurement, tally output, data storage, impedance calibration, Fo impedance characteristic indication, calculation of Q, data reading, CSV form output

6) Others

- All the indication of the OST-828 application screen is English.
- A calibration function of the impedance includes it.
- Remote switch is optional unit.

OST-828 - Test20121206 File (F) Tool (T) Help (H) Graph/Statistics -Measure Fo(Hz) 136.5 Zmax(Q) 24.13 f(Hz) 136.5 Z(Q) 24.13 Display 🔽 V **V** 7 V 7 **V** (Ω) Fo Measure Qts S/N. Fo(Hz) Fo Jud Ze(Ω) Ze Jud Qes Qms 0020 136.5 6.07 0.78 0.65 GO GO 3.90 (32) 128 0019 136.5 GO 6.08 GO 0.77 3.90 0.65 (16) 64 (8) 32 0018 136.4 GO 6.09 GO 0.77 3.90 0.65 0017 136.5 GO 6.07 GO 0.77 3.90 0.65 0016 136.4 GO 0.77 0.65 GO 6.09 3.90 (4) 16 0015 136.5 GO 6.09 GO 0.77 3.90 0.65 0014 136.1 GO 6.07 GO 0.77 3.89 0.64 (2) 0013 136.4 GO 6.06 GO 0.77 3.90 0.65 0012 136.5 GO 6.08 GO 0.78 3.90 0.65 (1) 136.4 0011 GO 6.07 GO 0.77 3.90 0.65 (0.5) 0010 136.4 GO 6.09 GO 0.77 3.90 0.65 0009 136.4 GO 6.10 GO 0.77 3.90 0.65 (0.25) 0008 136.8 GO 6.07 GO 0.78 3.91 0.65 0007 136.4 GO 6.06 GO 0.77 3.90 0.65 (0.125) 0006 136.5 GO 6.09 GO 0.78 3.91 0.65 100 200 0.65 0005 136.5 GO 6.07 GO 0.78 3.90 (Hz) Condition Settings Action -Fo -Ze Ze Measurement Custmer Model New Meas Volt 1000 m∇ Meas Volt 100 mV Start Statistics Freq L 90 500 Hz Hz Freq Model os Measure Data 200 Clear Last Clear All Freq H Hz Sample No. 001 Adjust 0 Hz Adjust 0 Ω 2012/12/06 Fo Calibration(Hz) Date Allowance Allowance Start Set Memo Q 10 Hz Upper 0.8 Upper Ze Calibration(Q) Temperature 20.0 C Humidity 40.5 % 136.5 6 Center Hz Center 2 Start Set Lower 10 Hz Lower 0.8 Ω 4 Ω DCR Adjust Clear

7) The results of the measurement

This model is often modified a part module due to improvement. 2017/11/29 Onsoku Electronic Corporation http://www.onsoku.co.jp