

SPECIFICATIONS
FOR
SPEAKER TEST OSCILLATOR
Model OG-440

ONSOKU ELECTRONIC CORPORATION

1. GENERAL DESCRIPTION

The OG-440 speaker test oscillator has been designed to test loud-speaker performance. It features provision of manual and automatic oscillation frequency sweeping modes.

A 20W power amplifier is provided in the unit to deliver signals into a load of 2 Ω to 8 Ω .

2. FEATURES

- 1) A 20W power amplifier is provided to test a loudspeaker with an impedance between 2 Ω and 8 Ω .
- 2) Integration of a shorted output protector circuit. If an output voltage of 300mV or greater is shorted, relay contacts work to prevent a failure of the output circuit components.
- 3) Selection from manual and automatic oscillation frequency sweeping modes.
- 4) A unique Onsoku endless oscillation frequency dial is accurately scaled to make manual tests easier with higher fidelity. A noisy click sound which is generated at the ends of the scale with conventional products has been eliminated.
- 5) An auto sweep starting function has been added. Upon completion a test speaker connection to the OUTPUT terminals, an oscillation frequency sweeping automatically starts from the set starting frequency, and the sweeping is repeated until it is disconnected.

Upon removal of the test speaker, the frequency automatically returns to the set starting frequency.

- 6) A digital display is provided to indicate either the oscillation frequency or the output voltage as selected with a switch.

Auto function provides an appropriate range for the input signal.

3. PERFORMANCE

1) Power Amplifier

(1) Max. Output Power·Voltage: 20W·12.65V (into 8 Ω load)

(2) Max. Output Power into A Variety of Load Impedance:

20 W into 2 Ω load (Voltage: 6.33V)

20 W into 4 Ω load (Voltage: 8.95V)

20 W into 8 Ω load (Voltage: 12.65V)

(3) Min. Output Power into A Variety of Load Impedance:

0.3 W into 2 Ω load (Voltage: 0.774V)

0.2 W into 4 Ω load (Voltage: 0.894V)

0.1 W into 8 Ω load (Voltage: 0.894V)

(4) Load Impedance: 2 Ω or greater

(5) Frequency Range: 10Hz to 20kHz

(6) Output Level Deviation:

± 0.5 dB (in the frequency range from 100Hz to 10kHz)

± 1.0 dB (in the frequency range from 10Hz to 20kHz)

2) Oscillator

(1) Oscillation Frequency Range: 10Hz to 20kHz

(2) Distortion (THD): In the output range from 1 W to 20 W

Less than 0.20% (100Hz to 10kHz)

Less than 0.40% (10Hz to 20kHz)

(3) Accuracy of Frequency Dial Scale: Within $\pm(8\% + 2)$ Hz in manual sweeping with one-range logarithmic scale dial.

(4) Sweeping Operation Mode: Repetitive logarithmic sweeping through the said oscillation frequency range.

Provided an auto sweep starting function.

(5) Sweeping Time: 0.5 to 10 sec. (Sweeping over the oscillation frequency range of 10 Hz to 20 kHz)

(6) Pause Time: 140 ms ± 10 ms

(7) Settable Sweep Starting Frequency: 10Hz to 20kHz

(8) Settable Sweep Ending Frequency: 10Hz to 20kHz

(9) Output Voltage for Auto Sweep Start Triggering: 0.1V or greater into a load of 2 Ω to 8 Ω

(10) OSC. Line Output: 3.16V $\pm 10\%$ (into an open circuit)

(11) OSC. Line Output Impedance: 600 $\Omega \pm 10\%$

3) Output Digital Meter

(1) Output Voltage Display: 3-1/2 digits, auto ranging

Accuracy: 19.99V $\pm(3\% + 2)$ digits

1.999V $\pm(3\% + 2)$ digits

Range Selector: $\times 1$, $\times 0.3$, $\times 0.1$, 3 ranges $\pm(3\% + 2)$ digits

(2) Oscillation Frequency Display: 3·1/2 digits, auto ranging

Accuracy: 199.9 kHz $\pm(3\% + 2)$ digits

Accuracy: 19.99 kHz $\pm(3\% + 2)$ digits

Accuracy: 1999 Hz $\pm(3\% + 2)$ digits

Accuracy: 199.9 Hz $\pm(3\% + 10)$ digits

4) Operating Temperature and Humidity

0°C to 40°C in 5% to 90% R.H. (No condensing)

5) Power Requirements:

AC 100, 110, 120, 200, 210, 220 or 240 V 50/60 Hz, approx. 110 VA

Specify one of line voltages when placing your order.

Line voltage setting is done by changing the tap arrangement in the housing which must be done at factory before shipment.

6) Dimensions and Weight

342(W) × 132(H) × 330 (D) mm, excluding extrusions Approx. 7.5 kg

(360(W) × 142(H) × 380 (D) mm, including extrusions)

7) Accessories:

Power cord 1 pc.

Power fuse 1 pc.

4. External View

