

AUDIO GENERATOR

Audio Generator With Sync Oscillator Function

AG-253

OUTLINE

The AG-253 is a wideband low-frequency signal generator capable of producing low-distortion sine waves and square waves. The oscillation frequency ranges from 10 Hz to 1 MHz, the distortion is held to 0.004% (typical), and the AG-253 features an external sync function, a high-power output to 10Vrms (open circuit), accurate voltage settings by means of a 10 dB-per-step attenuator, and an easy-to-use frequency setting dial, making it extremely versatile and easy to use.

FEATURES

Wide Frequency Range

The signal generation frequency is 10 Hz to 1 MHz, the entire span covered in 5 ranges. In addition, a large, single-scaled dial is used for easy frequency settings.

Flat Output Voltage

Over the frequency range from 30 Hz to 50 kHz, the output voltage deviation is held to ± 0.2 dB, and to ± 0.5 dB over the entire frequency range.

Low Distortion

In the audio band (200 Hz to 20 kHz), the distortion is 0.008% or lower, and the actual measured value is 0.004% at 1 kHz.



Test Equipment Depot
99 Washington Street
Melrose, MA 02176-6024

www.testequipmentdepot.com
800-517-8431
781-665-0780 FAX

Synchronizing to External Signals

The AG-253 can be synchronized to an external signal, enabling its use as a synchronized audio signal generator.

Sine and Square Wave Outputs

Output is possible of low-distortion sine waves or square waves having excellent rise time characteristics.

10 dB-Step Attenuator

The output voltage can be varied continuously from 0 to -50 dB using a 10 dB-per-step attenuator and a fine adjustment.

SPECIFICATIONS

<p>Frequency range 10Hz to 1MHz (5 ranges)</p> <p style="padding-left: 20px;">× 1 ranges 10Hz to 100Hz</p> <p style="padding-left: 20px;">× 10 ranges 100Hz to 1kHz</p> <p style="padding-left: 20px;">× 100 ranges 1kHz to 10kHz</p> <p style="padding-left: 20px;">× 1k ranges 10kHz to 100kHz</p> <p style="padding-left: 20px;">× 10k ranges 100kHz to 1MHz</p> <p>Frequency accuracy ± (3% + 1Hz)</p> <p>Sinewave characteristics</p> <p>Output voltage 5Vrms or more (at 600Ω load)</p> <p>Output voltage deviation 30Hz to 50kHz, ± 0.2dB</p> <p style="padding-left: 20px;">10Hz to 1MHz, ± 0.5dB</p> <p>Distortion characteristics 1kHz Typ 0.004% (at × 100 range)</p> <p style="padding-left: 20px;">200Hz to 20kHz 0.008% or less</p> <p style="padding-left: 20px;">20Hz to 100kHz 0.04% or less</p> <p style="padding-left: 20px;">(100kHz :at × 1k range)</p> <p style="padding-left: 20px;">10Hz to 1MHz 1.5% or less</p> <p>Squarewave characteristics</p> <p>Output voltage 10Vp-p (at 600Ω load)</p> <p>Rise and fall time 200ns max (maximum output)</p> <p>Duty ratio Within 48:52 (at 1kHz, maximum output)</p>	<p>External sync characteristics</p> <p>Synchronous range ± 1%/Vrms or more</p> <p>Maximum input voltage 15V (DC + ACpeak)</p> <p>Input impedance Approx. 100kΩ</p> <p>Output</p> <p>Output attenuator 0dB, - 10dB, - 20dB, - 30dB, - 40dB, - 50dB (6 steps) (at 600Ω load, accuracy: ± 1dB)</p> <p>Output impedance Approx. 600Ω</p> <p>Temperature/humidity for operation 0 to 40 RH85%</p> <p>Temperature/humidity for characteristics in spec. 10 to 35 RH85%</p> <p>Power source 100/120/220 AC, ± 10%, 216 to 250V, 50/60Hz,</p> <p>Power consumption Approx. 48W</p> <p>Case dimensions 128 (W) × 190 (H) × 285 (D) mm</p> <p>Maximum dimensions 128 (W) × 210 (H) × 326 (D) mm</p> <p>Weight Approx. 3.2kg</p> <p>Accessories Instruction manual (1), accessory cable (model: CA-48P)(1), power cord (1)</p>
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