

Data Sheet

Audio Generator Model 3001



The model 3001 generates low-distortion sine waves at 46 discrete frequencies. Output impedance is 600 Ω at the dual banana jacks and the output voltage is continuously adjustable up to 1.2 V (RMS) into an open circuit. Output flatness is ± 0.5 dB. A 5 Vpp square wave is provided at separate banana jacks for synchronization. Frequency accuracy is 3% from 20 Hz to 100 kHz. The unit is powered by a 9 V battery.

- 20 Hz to 150 kHz Sine/Square Wave Audio Generator
- Sine and square wave generator
- 20 Hz to 150 kHz in 46 steps
- Low distortion RC oscillator
- Variable output control
- Compact, fully portable, light weight
- Low battery indicator

Specifications	3001
Frequency Range	x1 range 20 Hz to 1.5 kHz (23 steps), x100 range 2 kHz to 150 kHz (23 steps)
Accuracy	20 Hz through 100 kHz ($\pm 3\%$ or less), 120 kHz and 150 kHz ($\pm 5\%$ or less)
Output Control	0 dB/-20 dB attenuator switch and variable amplitude control
Output impedance	approx. 600 Ω
Sinewave Characteristics	
Output Voltage	> 1.2 V rms at max. setting (no load)
Output Flatness	(Short term) 20 Hz to 150 kHz ± 0.5 dB (reference frequency 1 kHz)
Distortion	200 Hz—15 kHz 0.5% (THD) or less, 50 Hz—28 kHz 0.1% (THD) or less, 20 Hz—100 kHz 0.3% (THD) or less
Square wave Characteristics	
Output Voltage	> 5V p-p at maximum setting
Rise and Fall Time	< 0.5 μ s
Sag	< 5% at 20 Hz (DC coupled)
Over Shoot	< 2% from maximum output, to 50 mV p-p
Duty Ratio	50% +5%
Sync Output Characteristics (Other specifications same as sinewave characteristics)	
Output Voltage	> 1.2V rms (no load)
Output Impedance	1 k Ω + 5%
General	
Operating Temperature	0°C to +50°C; specifications apply from 10°C to 30°C, <80% R.H.
Storage Temperature	-20°C to +60°C, without battery
Power Requirements	9V battery NEDA 1604A
Battery Life	35 hours typical with Alkaline
Battery Indicator	LED indicates low battery
Dimensions (H x W x D)	6 x 3.3 x 0.9" (150 x 82 x 21 mm)
Weight	7 oz. (200 g) including battery
One-Year Warranty	
Included Accessories	Two standard banana plug to insulated clip test leads, 9V battery, instruction manual