

# RF / Audio Generators



2005B



3001

## Model 2005B 150 MHz RF Signal Generator

- 100 kHz to 150 MHz on six bands
- Output to 450 MHz on harmonics
- AM modulation, internal or external
- Frequency monitor output for external frequency counter
- Step and variable attenuation

## Model 3001

### 20 Hz-150 kHz Sine/Square Wave Audio Generator

- Sine and square wave generator
- 20 Hz to 150 kHz in 46 steps
- Low distortion R-C oscillator
- Variable output control
- Compact, fully portable, light weight
- Low battery indicator

## Specifications

model  
2005B

MAIN OUTPUT	
Frequency Range	100 kHz to 150 MHz (up to 450 MHz on third harmonics) A) 100 kHz-300 kHz B) 300 kHz-1 MHz C) 1 MHz-3.2 MHz D) 3 MHz-10 MHz E) 10 MHz-35 MHz F) 32 MHz-150MHz (96-450 MHz on harmonics)
Dial Accuracy	±3%
RF Output Level	Continuously variable. Step attenuator provides approximately 20 dB of attenuation
Maximum Output	Approximately 100 mV rms to 35 MHz. Continuously variable in hi or lo step, at least 20 dB range of adjustment
FREQUENCY MONITOR OUTPUT	
Frequency	100 kHz to 150 MHz
Level	50 mV rms min. fixed, unmodulated signal
AMPLITUDE MODULATION	
Internal	Frequency 1 kHz; level continuously variable. Modulation signal available at front panel jack; fixed 1 V rms (min) into approx. 10 kΩ
External	Frequency 50 Hz to 20 kHz
Sensitivity	Approximately 100 mV rms
POWER SOURCE	120/220/240V ±10%, 50/60 Hz
GENERAL	
Dimensions (HxWxD)	5.91 x 9.84 x 5.12" (150 x 250 x 130 mm)
Weight	5.5 lbs. (2.5 kg)

## Accessories

One Year Warranty

SUPPLIED: BNC to Insulated Clip Output Cable, Detachable Power Cord, Instruction Manual

## Specifications

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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 (±3% or less), 120 kHz and 150 kHz (±5% or less)
Output Control	0dB/-20dB attenuator switch and variable amplitude control
Output impedance	approx. 600Ω
SINEWAVE CHARACTERISTICS	
Output Voltage	> 1.2V rms at max. setting (no load)
Output Flatness	(Short term) 20 Hz to 150 kHz ±0.5dB (reference frequency 1 kHz)
Distortion	200 Hz—15kHz 0.5% (THD) or less, 50 Hz—28 kHz 0.1% (THD) or less, 20 Hz—100kHz 0.3% (THD) or less
SQUARE WAVE CHARACTERISTICS	
Output Voltage	> 5V p-p at maximum setting
Rise and Fall Time	Less than 0.5microseconds
Sag	Less than 5% at 20 Hz (DC coupled)
Over Shoot	<2% from maximum output, to 50mV p-p
Duty Ratio	50% +5%
SYNC OUTPUT CHARACTERISTICS	
Output Voltage	> 1.2V rms (no load)
Output Impedance	1kΩ +5%
Other specifications same as sinewave characteristics	
GENERAL INFORMATION	
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 (HxWxD)	6 x 3.3 x 0.9" (150 x 82 x 21mm)
Weight	7 oz. (200 g) including battery

## Accessories

One Year Warranty

SUPPLIED: Two standard banana plug to insulated clip test leads, 9V battery, Instruction manual