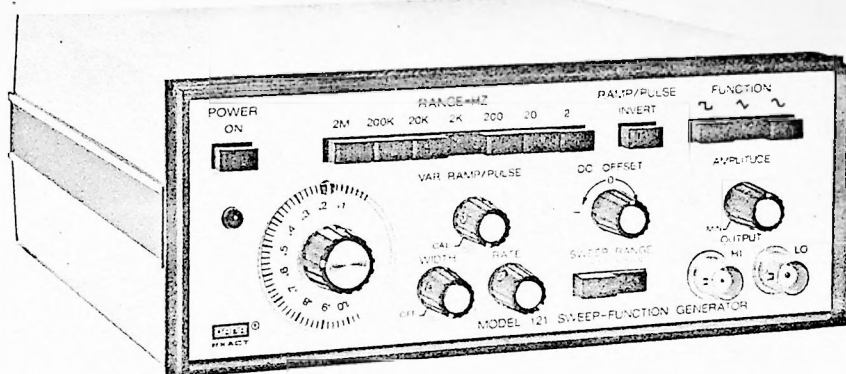


The Model 121 . . .

A New Low Cost 50 ohm Sweep/Function Generator

The Answer to Many of Your Signal Source Requirements



GENERAL

Priced much lower than comparable units, the Model 121 offers you sine, square, triangle, pulse and ramp waveforms over a frequency range of 0.02Hz to 2.2MHz. Signal amplitudes of 20V P-P open circuit or 10V P-P into a 50 ohm load are available from a 50 ohm output. 60db of attenuation is provided using the low output and the 30db variable amplitude control.

The Model 121 is a versatile instrument that can be used in a variety of applications. The low cost makes it an ideal lab instrument for use in technical schools offering basic and advanced electronic training courses. An internal sweep generator allows you to sweep the frequency of the main generator with a variable sweep width up to 3 decades (1000:1). The sweep rate is adjustable from 1msec to 10 secs.

Other features include DC offset, variable ramp or pulse waveform with inverting capability, square/pulse rise time of less than 100 nsec, and a separate TTL compatible output with less than 25 nsec rise time.

SPECIFICATIONS

MAIN GENERATOR:

Frequency Range: 0.02Hz to 2.2MHz (7 ranges)
 Frequency Accuracy: $\pm 5\%$ of full scale
 VCF (voltage controlled frequency: 0 to ± 10 volt input for 1000:1 (3 decades) frequency control. Input impedance approx. 10K Ω .

SWEEP GENERATOR:

Frequency Range: 1ms to 10sec (100:1 variable)
 Frequency Accuracy: $\pm 10\%$ (cal. position)
 Sweep Width: Continuously variable from zero to 1000:1.

MAIN OUTPUT (50 Ω):

Waveforms: Sine, triangle, square, pulse, ramp
Amplitude: High output — 20V P-P open circuit
 10V P-P into 50 ohms
 Low output — 632mv open circuit
 316mv into 50 ohms
 Variable Attenuator (Continuous)
 30db for both hi and lo outputs
 Model 121A — Step Attenuator
 Steps of 20 and 40db with 30db continuously variable (70db total)

DC OFFSET (VARIABLE):

+10 to -10 volts open circuit
 +5 to -5 volts into 50 Ω
 Note: Protection circuit will automatically clip waveform if D-C offset plus signal exceeds maximum peak voltage.

Sine Distortion: 1% 0.2Hz to 100KHz. Typically less than 0.5%
 -30db 100KHz to 2MHz (all harmonics) (measured at full output, between 0.1 and 1.0 on the dial)

Sine Frequency Response: 0.1db 0.1Hz to 100KHz 0.5db 100KHz to 2MHz

Square Wave — Rise Time: 100nsec
 Aberrations: $\pm 5\%$ max pp amplitude

PULSE OUTPUT: TTL COMPATIBLE

Amplitude Fixed: +3V open circuit. 25nsec (typically 10nsec) rise time; will sink 20 TTL loads.

POWER REQUIREMENTS:

115 VAC $\pm 10\%$ or 230 VAC $\pm 10\%$ 50Hz to 400Hz. Approx. 3 watts. Other voltages available.

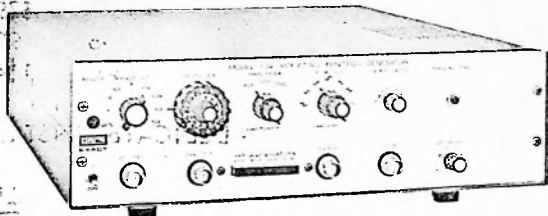
PHYSICAL CHARACTERISTICS:

7 $\frac{3}{8}$ " wide x 2 $\frac{7}{8}$ " high x 8.5" deep.
 Weight — Approx. 2 lbs.

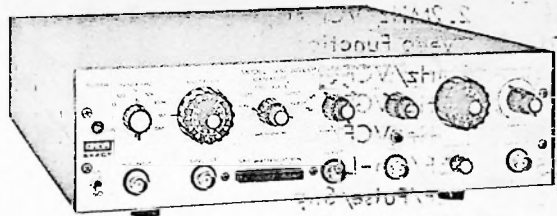
PRICE: (f.o.b. Hillsboro, Oregon)

Model 121 — \$275.
 Model 121A — \$350. (20db Step Attenuator)

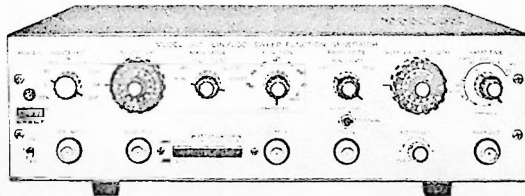
NOTE: (unless otherwise stated). Specifications apply 10% to maximum output voltage terminated in 50 Ω 0.1 to 1.0 frequency dial setting. Specifications are valid at 25°C \pm 5°C after 1 hour warmup time.

DANA EXACT®
500 Series
Low Cost 5 MHz Function Generators
NEW

MODEL 504
\$450

- Low Cost
- Sine, Square, Triangle, Ramp and Pulse
- 0.01Hz to 5MHz dynamic frequency range
- Frequency multiplier - 10 turn type resolution
- Voltage Controlled Frequency 1000:1 manually or externally
- 20Hz to 20KHz range for audio use
- 20V p-p open circuit 10V p-p into 50Ω
- Variable DC offset
- 80db attenuation 10db steps 20db variable
- Floating output provision
- Sync output
- Variable symmetry
- Gate and Trigger mode externally or manually
- Variable start and stop phase

NEW

MODEL 506
\$495

- Low cost
- Sine, Square, Triangle, -Sine, -Square, -Triangle, Ramp, Pulse
- 0.01Hz to 5MHz dynamic frequency range
- Voltage Controlled Frequency, 1000:1 manually or externally
- 20Hz to 20KHz audio frequency range
- Frequency Multiplier - 10 turn type resolution
- Internal sweep generator 100Sec to 10μsec, continuously variable
- Select sweep start and width accurately
- Gate and trigger mode externally or manually
- Variable start - stop phase
- Pulse and burst modes internal
- Variable width and repetition rate pulses
- Variable DC offset
- 80db attenuation 10db steps 20db variable
- Floating output
- Sync output
- Variable symmetry

NEW

MODEL 507
\$595

- Low cost
- Sine, Square, Triangle, -Sine, -Square, -Triangle, Ramp, Pulse
- 0.01Hz to 5MHz dynamic frequency range
- Voltage Controlled Frequency, 1000:1 manually or externally
- 20Hz to 20KHz audio frequency range
- Frequency Multiplier - 10 turn type resolution
- Internal sweep generator 100Sec to 10μsec, continuously variable

- Select sweep start and width accurately
- Linear and logarithmic sweep
- Gate and trigger mode externally or manually
- Variable start - stop phase
- Pulse and burst modes internal
- Variable width and repetition rate pulses
- Variable DC offset
- 80db attenuation 10db steps 20db variable
- Sync output
- Floating output


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