

B801/B803 2MHz Sweep Function Generator

- Seven frequency ranges with 100:1 control on each range
- Built-in 2MHz, 4 digit frequency counter (B803)
- Less than 2% sinewave distortion
- Variable symmetry
- DC offset and Voltage Controlled Frequency input
- TTL sync output

B810 10MHz Sweep Function Generator

- Wide (0.01Hz to 10MHz) Frequency Range
- Burst and Triggered mode
- Sweep start/stop capability
- Six digit LED frequency readout
- Log. or Lin. sweep
- Built-in 10MHz frequency counter
- External FM with the VCG input
- Output can be amplitude modulated



SPECIFICATIONS ■

[B801/B803]**Output Characteristics**

Waveforms: Sine, Square, Triangle, Pulse, Ramp

Frequency Range: .02Hz to 2MHz in 7 ranges

Tuning Range: 100:1 on each range

Frequency Accuracy: B801: 5% of FS; B803: $\pm (0.01\% + 1D)$

Frequency Stability: 0.1% after 20 minutes

Amplitude: 2V to 20V P-P open circuit

DC Offset: Variable from $< -10V$ to $> +10V$ open circuit

Output Impedance: $50\Omega \pm 5\%$

Variable Symmetry: 1:1 to 4:1

Output Attenuation: 0 to 40dB

(20dB ± 1 dB step and 0 to 20dB variable)

VCF Input: 100:1 tuning range

with an input voltage level from 0 to -10V

Sine Wave

Distortion: $< 2\%$ from 10Hz to 100kHz

Amplitude Flatness: ≤ 0.3 dB

Square Wave

Rise/Fall Time: < 100 ns at max amplitude

Triangle Wave

Linearity: $> 98\%$ to 100kHz

Sweep Characteristics

Sweep Mode: Linear

Sweep Time: Variable from 20ms to 2s

Sweep Width: Variable from 10:1 to 1000:1

Frequency Counter (B803)

Modes: Internal and External; Display: 4 digit red LEDs

Measuring Range: 10Hz to 2MHz.

Accuracy: $\pm 0.01\% \pm 1$ count; Sensitivity: 50mV RMS

Max Input V: 140V P-P; Input Impedance: $1M\Omega$

General Specifications

Power Requirements: AC Line Voltage: 100/120/220/240V

$\pm 10\%$; Frequency: 48Hz to 66Hz

Power Consumption: Approx. 5VA

Operating Temperature: 0 to 50°C

Size: 3.3" H \times 8.8" W \times 10.1" D; Weight: 8 lbs.

Supplied Accessories: Manual, Line cord, BNC cable

[B810]**Output Characteristics**

Frequency Range: 0.01Hz to 10MHz in 9 ranges

Output Level: ± 10 Volts into 50Ω

Waveforms: Sine, Square, Ramp, Pulse

Attenuator: 20dB, 40dB, 60dB & 20dB variable

Impedance: 50Ω ; DC Offset: $\pm 5V$ in to 50Ω

Sine Wave

Flatness: ± 0.2 dB: 0.01Hz to 100kHz; Distortion: 0.5%

Triangle Wave

Linearity: $> 99\%$

Square Wave

Rise/Fall Time: ≤ 25 ns (into 50Ω)

Pulse

Duty Cycles: 20:80 to 80:20 may be obtained

Operating Modes: CW, Triggered, gated, burst, sweep

Trigger/Gate Input Level: TTL; Burst Time: 1ms to 10s

Trigger/Gate Freq. Range: 0.1Hz to 1MHz

Sweep

Types: Linear and Log

Sweep Time: 1ms to 10s; Sweep Width: Variable to 100:1

Start Freq: 0.01Hz to 10MHz

AM Modulation

Type: Internal

Modulation Level: 0 to 100%; Modulation Voltage: 0 to 5V

Modulation Frequency: DC to 1MHz

FM Modulation

Type: External

Tuning Range: 1000:1 with an input voltage of 0 to -5V (VCG)

Frequency Counter

Measuring Range: 1Hz to 10MHz

Gate Time: 0.01s, 0.1s, 1s, 10s

Accuracy: $\pm 0.01\%$; Sensitivity: 50mV RMS

Max Input V: 250V DC and AC RMS; Input Impedance: $1M\Omega$

General Specifications

Power Requirements: AC Line Voltage: 100/120/220/240V

$\pm 10\%$; Frequency: 48Hz to 66Hz

Power Consumption: 9VA

Operating Temperature: 0 to 50°C

Size: 3.8" H \times 11.5" W \times 12.5" D; Weight: 8 lbs.

Supplied Accessories: Manual, Line cord, BNC cable

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