10MHz Generators

B8110 10MHz Sweep Function Generator

- Wide 0.01Hz to 10MHz frequency range
- Log/Lin sweep
- Burst /gate and triggered modes
- Output may be FM modulated using the VCG input.
- Low distortion Sine wave
- Sweep start and Stop capability

B1990 10MHz Pulse Generator

- 1Hz to 10MHz Frequency Range
- Variable Pulse width and Delay
- Manual and External triggering
- Output amplitude to 5V p-p (into 50Ω)
- May be crystal controlled



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Frequency Characteristics Frequency Range: 0.01Hz to 10MHz

Output Characteristics

Waveforms: Sine, Square Pulse, Triangle α and ramp Impedance: 50 Ω

 $\begin{array}{l} \mbox{Attenuator: 20dB, 40 dB, 60dB and 20 dB variable} \\ \mbox{Amplitude: 0 to \pm10 Volts in to an open circuit} \\ \mbox{DC Offset: 0 to \pm10 V in to an open circuit (0 to \pm5 into 50Ω)} \end{array}$

Sine Wave

 Frequency Range:
 0.01Hz to 10MHz

 Flatness:
 ±3.5% from 0.01Hz to 100KHz

 ±10% 100KHz to 10MHz

 Harmonic Distortion:
 < 0.5 % from 10 Hz to 40KHz</td>

Symmetry: 20:80 to 80:20

Square Wave

Frequency Range: 0.01Hz to 10MHz Rise/Fall Time: < 25ns into 50Ω

Pulse

Frequency Range: 0.01Hz to 10MHz; Rise Time: < 10ns Duty Cycle: adjustable symmetry control from 20:80 to 80:20 Ramp and Triangle

Linearity: > 99%

Operating Modes

CW, Triggered, Gated, Burst Sweep Trigger/Gate input level: TTL Trigger/Gate Frequency Range: DC to 100KHz Burst time: 1ms to 10s

Sweep

Type: Linear and Log Sweep Time: 1ms to 2s in 2 ranges, continuously variable Sweep width: 1:100 continuously variable. Sweep start frequency may be set with the SET/MOD control.

Modulation Type: AM

Input: External Through the MOD input connector Frequency: DC to 1MHz Modulation Range: 0 to 100% Modulation Voltage: 0 to 5V P-P *Type: FM:* Input: External through the VCG input Tuning Range: 1000:1 with an input of 0 to -5V

Outputs

Sync: TTL level GCV: output proportional to the selected frequency, 0 to -5V Sweep: 0 to -5V; Sweep/Burst Gate: TTL level

General Specifications

Operating Temperature: 0 to 50°C (32 to 120°F) Dimensions: 4.3" (H) x 12.5" (W) x 14" (D) Weight: 15 lbs AC line Voltage: 120/220V, 50/60Hz Accessories: Manual, line cord, BNC cable

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Frequency Characteristics

Frequency Range: Internal: 1Hz to 10MHz (100ns to 1s) in 7 ranges Xtal: 10Hz to 10MHz

SPECIFICATIONS

Output Characteristics

Amplitude: 0.5 to 5V p-p (into 50 Ω) Impedance: 50 Ω

Input Impedance: 2KΩ

Rise Time: 10ns (into 50Ω) Output Polarity: Positive or Negative Pulse Width Range: 50ns to 5ms in 5 ranges Pulse Delay Range: 0 to 2μ s in

Trigger

Trigger modes: Internal, Ext (+ or - edge triggered), Xtal and Manual Trigger out:

Width: 20ns; Amplitude: 5V; Impedance: 50Ω External Trigger in:

Input V range: +1.0V to -1.0V P-P (sine or square wave) Repetition Rates: 10Hz to 10MHz; Impedance: $2K\Omega$

General Specifications

Operating Temperature: 0 to 40°C (32 to 104°F) at less than 85% humidty Stability: 0.1% per hour after warm up Dimensions: 4.3" (H) x 11.4" (W) x 10.2" (D) Weight: 6.4 lbs AC line Voltage: 120/220V, 50/60Hz Accessories: Manual, line cord, BNC cable

