6510 Dual Trace, Dual Timebase, 100MHz Oscilloscope

- Four traces may be simultaneously displayed in ALT-sweep
- Five vertical display modes: CH1, CH2, Dual, Add, Subtract
- Vertical mode triggering for displaying 2 unrelated signals
- Trigger hold-off circuit for synchronizing complex waveforms
- Sweep speeds to 2nS/Div
- 12kV acceleration voltage for bright displays of low duty cycle signals
- Z axis input
- TV Synchronization for either line or field patterns
- 20MHz bandwidth limit switch for triggering signals in a noisy environment

SPECIFICATIONS

Vertical Amplifier
(CH 1 and CH 2)
Sensitivity: 5 mV/Div to 5 V/Div in 7 calibrated steps, (X5 Mag 1mV/Div to 1 V/Div)
Accuracy: ±3% (±5% in X5 Mag)
Bandwidth (-3dB): DC to 100MHz
Rise Time: ≤ 3.5 ns, X5 Mag: 20MHz Bandwidth: ≤ 17 ns
Input Impedance: 1MΩ + 25 pF
Input Coupling: AC-Gnd-DC
Invert Channel: CH2
Display Modes: CH1, CH2, Add, Subtract, Dual (Alt/Chop)
Maximum Input Voltage: 400V (DC or AC peak)
CH1 Signal Output: 20mV into 50Ω

Horizontal Sweep

Timebase A **Sweep Time:** 50ns/Div to 0.2 s/Div in 21 calibrated steps (1-2-5) **X10 Mag:** 5ns/Div to 20ms/Div
Accuracy: ±3% (± 5% in X10 Mag)
Hold Off: Continuously adjustable to > 2X sweep time

Timebase B
Sweep Time: 50ns/Div to 10µs/Div in 8 steps (1-2-5)
Accuracy: ±3%
Delay Time: Continuously variable from 0.2µs to 2s
Delay Modes: Continuous or triggered
Sweep Displays: A, B, A alt B, B triggered, X-Y

X-Y Mode
CH1-X axis, CH2-Y axis Sensitivity: Same as CH1 vertical amplifier
Bandwidth (X-axis): DC to 2MHz
Phase Error: ≤ 3° DC to 10kHz

Triggering
Trigger Modes: Auto, Normal, TV-V, TV-L
Source: Int. CH2, line ext.
Coupling: AC
Slope: Positive or negative
Trigger Sensitivity: Int: DC to 10MHz: 0.5 Div10MHz to 100MHz: 1.5 Div.
Ext.: DC to 10MHz: 200mV; 10MHz to 100MHz: 500mV
TV: Int.:1 Div Min; Ext: 1V P-P
External Trigger Input: Impedance 1MΩ + 20 pF
Maximum Input Volts: 400V DC or AC peak

Z Axis Modulation
Sensitivity: ±5V P-P Intensity increases with a negative going voltage input
Bandwidth (-3dB): DC to 2MHz
Input Impedance: ≈ 2 KΩ

Calibrator Signal
Voltage: 0.5V ±3% P-P 1kHz Square Wave
Duty Cycle: Approx. 50%

CRT
Type: 6" rectangular CRT with internal graticule. (1 Div = 1cm)
Acceleration Voltage: 12 kV

General Specifications
Power Requirements: AC Input Voltage: 100V, 120V, 220V, 240V selectable
Frequency: 50/60Hz
Power Consumption: 55W
Operating Temperature: 0 to 40°C at 35% to 85% relative humidity
Dimensions: 5.3" H × 12.7"W × 14.5" D
Weight: 24 lbs.
Supplied Accessories: Manual, 1 AC Power cord, (2) X10 Probes

Protek Test & Measurement
40 Boroline Road, Allendale, NJ 07401 Tel: 201-760-9898 Fax: 201-760-9888
Website: www.protektest.com E-Mail: sales@protektest.com