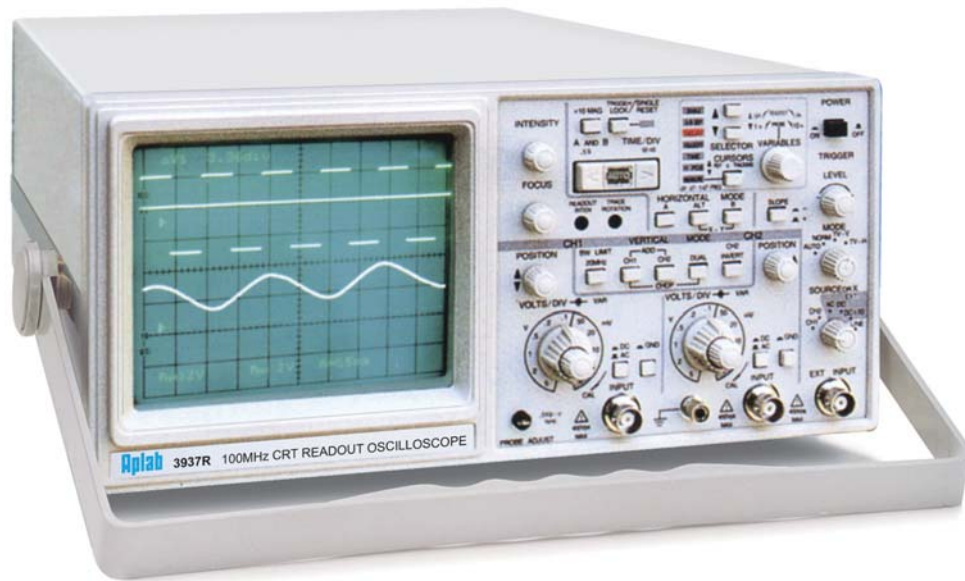


100MHz, 2 Channel, 4 Trace CRT Readout Oscilloscope



Features

- ★ Small Size, Light Weight, Low Power Consumption
- ★ Easy Operation, Quality, Reliability & Stability
- ★ 2mV/div Sensitivity
- ★ Dual Time Base
- ★ 0.5s/div to 50ns/div Main Time Base with 22 Calibrated Steps
- ★ 50ms/div to 50ns/div, Delayed Time Base with 19 Calibrated Steps
- ★ x10 MAG
- ★ Single Sweep
- ★ Auto Ranging Facility - Automatically Optimizes the Sweep Time
- ★ Trigger Lock Facility
- ★ Signal Delay Line
- ★ 17KV PDA
- ★ 150 mm, 8 x 10 cm Rectangular CRT
- ★ A and B Time Bases in ALT Mode
- ★ Variable Hold-off
- ★ Z-axis Input
- ★ EXT X Operation
- ★ CRT Cursor Readout for Amplitude & Frequency Measurement
- ★ Digital Frequency measurement upto 100MHz
- ★ Bandwidth Limiter

Specifications

VERTICAL DEFLECTION

Deflection Coefficient (CH1 &CH2) : 2mV/div to 5V/div in 11 calibrated steps in 1, 2, 5 sequence. Uncalibrated variable control between the steps upto atleast 12.5V/div.

Accuracy : ±5%.

Bandwidth : DC-100MHz (-3dB), dc coupled
 10Hz-100MHz (-3dB), ac coupled.
 DC-20MHz (-3dB) (dc coupled) on 2mV range
 10Hz-20MHz (-3dB) (ac coupled) on 2mV range.

Rise Time : 3.5ns or less, 17.5ns or less on 2mV.

Polarity Reversal : CH2 invert.
Input Impedance : 1M ohms // 25pF.
Maximum Input Voltage : 400V (DC + AC peak) ≤1KHz.

Vertical Modes : CH1, CH2, CH1 & CH2 in dual mode (ALT/CHOP), CH2 INVT, CH1 & CH2 in Algebraic ADD & SUBTRACT.

Bandwidth Limiter : Frequency response can be limited to approx. 20MHz by bandwidth limiter switch.

TIME BASE

Operating Modes : A, A&B ALT, B, EXT X.

Sweep Mode : Auto, Normal, Single sweep & Auto range sweep.

A Time Base : 50ns/div to 0.5s/div (5ns/div to 50ms/div at x10 MAG) 22 steps in 1-2-5 sequence, variable vernier control (range 1:2.5). (UNCAL - CRT Read out indicator) provides fully adjustable sweep time between steps.

Accuracy : ±5%.

Hold-off Time : Variable hold-off.

B Time Base : (Continuous triggered delay) 50ns/div to 50ms/div (5ns/div to 5ms/div at x10 MAG) 19 steps in 1-2-5 sequence.

Accuracy : ±5%.

Delay Jitter : 1 : 10,000.

Sweep Magnification : x10 ±10%.

Trigger System : Source 1. INT : CH1 or CH2
2. EXT : AC, DC, DC÷10, LINE
Slope : + or -
Mode : AUTO, NORM, TV-V, TV-H, Trigger Lock.

External Trigger

Input Impedance : 1M ohms ±5% // 30pF ±5pF.

Max. Voltage : 400V (DC + AC peak) ≤1KHz.

Trigger Sensitivity

Internal : NORM : DC-20MHz - 1div
20MHz-100MHz - 1.5div
AUTO : 30Hz-100Hz - 1.5div
100Hz-20MHz - 1.0div
20MHz-100MHz - 1.5div
TV : 1.5 div

External : DC - 20MHz : 50mV PTP
20MHz - 100MHz : 150mV PTP
TV : 150mV PTP.

HORIZONTAL DEFLECTION

Sensitivity : 0.1V/div, 1.0V/div (±10).

Bandwidth : DC - 2MHz (-3dB).

Phase Shift : <3° (DC - 50KHz).

Digital Measurement System

Frequency Measure : 20Hz - 100MHz.
Range

Frequency Measure Accuracy

Freq. Range	Display Mode	Resolution	Accuracy
20Hz≤f<100Hz	99.9Hz	0.1Hz	±1 digit
100Hz≤f<1KHz	999.0Hz	1Hz max.	
1KHz≤f<10KHz	9.990KHz	0.02KHz Max.	
10KHz≤f<100KHz	99.99KHz	0.02KHz max.	
100KHz≤f<1MHz	999.9KHz	f<972KHz 0.2KHz f≥972KHz 2.6KHz	
1MHz≤f<10MHz	9.999MHz	0.003MHz max.	
10MHz≤f<100MHz	99.99MHz	0.03MHz	

Cursor Readout

ΔV : 4 digit display Two horizontal cursor lines (ΔV)
effective range : ±3 div
ΔT : 4 digit display
1 / ΔT : 4 digit display Two vertical cursor lines (ΔT, 1/ΔT)
effective range : ±4 div.

CRT Type : 150 mm rectangular with internal graticule.

Display Area : 8 x 10 div (1 div = 1 cm).

Accelerating Voltage: 17KV.

Phosphor : P31.

Trace Rotation : Front panel adjustable.

MISCELLANEOUS

Z-Axis (Intensity Modulation) : TTL level or 5V +ve going signal decreases trace intensity.
Freq. Range : DC - 5MHz.

Input Resistance : 20K ohms ±10%.

Max. Input : 30V (DC + AC peak) ≤1KHz

CAL OUT : 0.5V p-p ±1%, square wave 1KHz ±10%.

TRIG SIG OUT : Output outlet for triggering source or signals selected by X switch.

GENERAL INFORMATION

Power Requirement : 100V - 250V, 48Hz - 440Hz, ±5% 40VA.

Dimensions : 280 (W) x 130 (H) x 370 (D) mm approx.

Weight : 6 Kgs. approx.

Accessories : Instruction Manual, 2 High impedance x1/x10 switchable probe, Mains cord.

WE PURSUE A POLICY OF CONTINUOUS DEVELOPMENT AND PRODUCT IMPROVEMENT. THUS THE SPECIFICATIONS IN THIS DOCUMENT AND THE LOCATION OF CONTROLS ON THE FRONT PANEL MAY BE CHANGED WITHOUT NOTICE.

Aplab Test & Measurement Instruments

APLAB LIMITED

APLAB HOUSE, A-5, WAGLE ESTATE, THANE 400 604. INDIA. TEL : 25821861 FAX : 91-022-2582 3137
EMAIL : tmsales@aplab.com WEBSITE : www.aplab.com

- BANGALORE Tel. : 080-23576001 to 07 Fax : 23576008 E-mail : aplabblr@aplab.com
- CHENNAI Tel. : 044-26680472, 26680477 Fax : 26680473 Email : aplabchn@aplab.com
- KOLKATA Tel. : 033-22455435, 22848834 Fax : 22454294 Email : aplabcal@aplab.com
- MUMBAI Tel. : 022-29201787, 29204642, 29203468 Fax : 29209066 Email : aplabwr@aplab.com
- NEW DELHI Tel. : 011-23515183/86, 23627467 Fax : 23634709 Email : aplabnd@aplab.com
- SECUNDERABAD Tel. : 040-27811012, 27843351, 27720339 Fax : 27897788 Email : aplabsec@aplab.com