

## 7934 CRT-STORAGE OSCILLOSCOPE

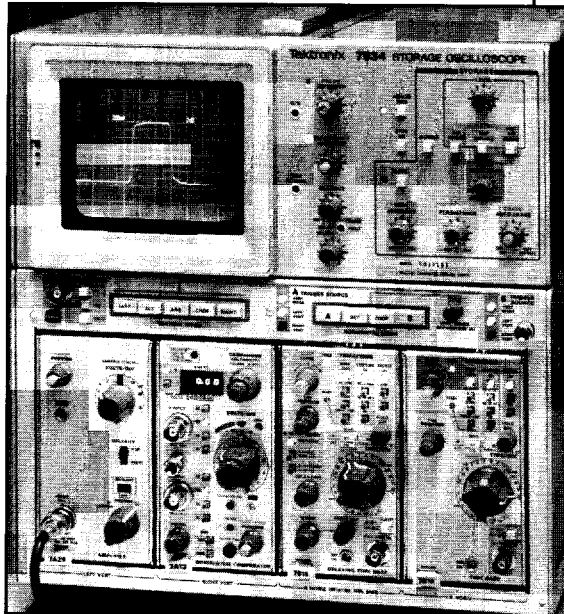
The 7934 CRT-Storage Oscilloscope is used for single-shot and low-repetition rate pulse analysis. Capabilities include storing unexpected transient pulses, high-frequency bursts occurring at low-repetition rates, and fast pulses in applications using high-speed ECL.

A 4000 cm/μs storage writing rate, 700 ps rise time, and 500 MHz bandwidth ensure undistorted capture and clear display of the fastest waveform details. The 7934 can be used as a non-storage oscilloscope as well.

The mainframe bandwidth is 500 MHz. System bandwidth may vary from 80 MHz to 500 MHz, depending on the plug-in used.\*1

The instrument has four storage modes. Bistable mode provides stored displays with long (30 minute) view time. When viewing changing wave-shapes, Variable Persistence mode provides continuous bright displays of new information as old information fades from the crt. Fast Bistable mode increases writing speed to 350 cm/μs (reduced scan). Fast Variable Persistence mode provides the maximum stored writing speed of 4000 cm/μs (reduced scan). View time is at least 30 seconds.

\*1 High-gain differential amplifiers offer very high gain at lower bandwidth.



- Real-Time Storage of Fast Transients for Later Analysis
- Displays Low Repetition Rate Signals
- Wide Selection of Versatile Plug-Ins
- 700 ps Single-Shot Rise Time Storage Capability
- DC to 500 MHz Bandwidth
- 4000 cm/μs Stored Writing Speed
- 500 ps/Div Fastest Calibrated Sweep Rate

## CHARACTERISTICS

### VERTICAL SYSTEM

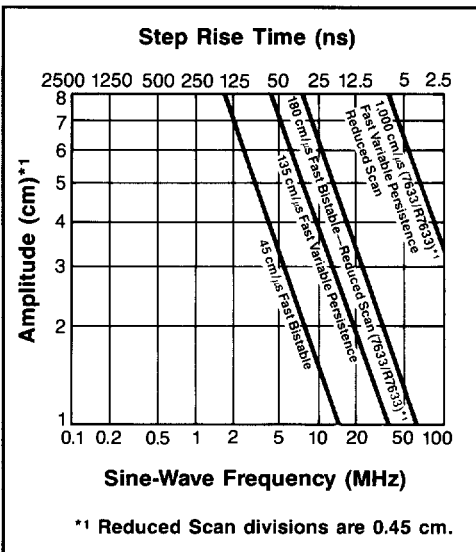
**Channels** – Two left-most plug-in compartments. Compatible with 7000 Series amplifier plug-ins.

**Bandwidth, Rise Time, and Deflection Factor** – Determined by the plug-in unit used. See page 69.

**Display Modes** – Left, Alt, Add, Chop, Right. Chopped-mode repetition rate is 1 MHz.

### HORIZONTAL SYSTEM

**Channels** – Two right-most plug-in compartments. Compatible with most 7000 Series plug-ins.



Graph showing the stored writing speed needed to display a given sine wave or step rise time at a given amplitude.

**Bandwidth** – Dc to at least 1 MHz.

**Display Modes** – A, Alt, Chop, B. Chopped-mode repetition rate is ≈ 200 kHz.

### CRT AND DISPLAY FEATURES

**CRT** – Internal variable illuminated graticule. 8 x 10 divisions (0.9 cm/div) graticule in full scan and 8 x 10 divisions (0.45 cm/div) in reduced scan.

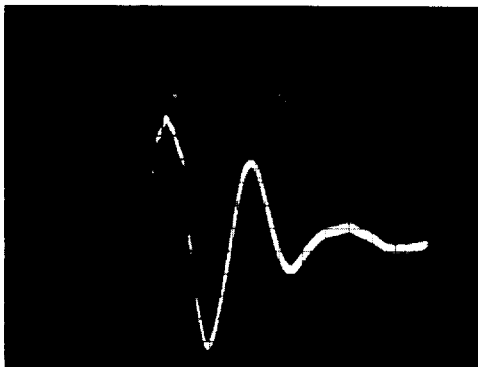
**Beam Finder** – Aids in locating an off-screen signal.

**Autoerase** – Variable from < 1 s to > 10 s.

**Multitrace Delay** – Adjusts the transfer cycle time in the fast transfer modes. Variable from < 1 s to > 4 s.

**Persistence** – (Variable-Persistence Mode only) Controls rate of continuous erasure of the variable-persistence and fast variable-persistence stored displays.

**Save** – Prevents display from being accidentally erased, and provides up to 30 times longer viewing times in variable-persistence modes.



In laser research – the 7934 captures a laser primary and reflected pulse using Fast Variable-Persistence storage (reduced scan) and two 7A29 plug-ins in ADD mode.

## ORDERING INFORMATION

### (PLUG-INS NOT INCLUDED)

**7934 – CRT-Storage Oscilloscope** **\$16,100**  
Includes:  
Installed gray CRT filter (378-0625-02), green CRT filter (378-0625-08), power cord (161-0066-00), Operator Manual (070-5879-00).

### INSTRUMENT OPTIONS

**Opt. 02 – X-Y Mode Phase Correction** **+\$275**  
Adds X-Y delay compensation network to equalize the signal delay between the B horizontal compartment and either vertical compartment.  
**Opt. 03 – EMC capability** **+\$500**

### INTERNATIONAL POWER PLUG OPTIONS

**Opt. A1-A5 Available** **NC**  
See page 374.

### CONVERSION KITS

**X-Y Mode Phase Correction –**  
Order 040-0942-01 **\$255**  
**EMC Modification –**  
Order 040-1195-00 **\$630**

### ACCESSORIES

**Service Manual –**  
Order 070-5880-00 **\$180**  
**Rack Adaptor –** See page 340.  
**Recommended Cameras –** See page 70.  
**Recommended Cart –** See page 306.  
**Recommended Probes –** See page 70.

### PHYSICAL CHARACTERISTICS

Dimensions	mm	in.
Width	305	12.0
Height	345	13.6
Depth	622.5	24.5
Weight ≈	kg	lb
Net	17.2	37.8
Shipping	21.6	47.6