



## D56

Dual Beam

DC-15 MHz Bandwidth

Two Independent Time Bases

Sweep Delay

Versatile Triggering Including  
TV Line and Frame Sync

TV Monitor Line Marker

6 cm x 10 cm Display Area For  
Each Beam (4 cm Overlap)

Flat-Face CRT

DC Coupled X Amplifier

ers on upper trace useful for risetime measurements.

### Cathode-Ray Tube

5-inch flat-faced dual-gun CRT with separate deflection systems operating at 6 kV accelerating potential. Viewing area is 6 cm by 10 cm per trace, 4 cm overlap. P31 phosphor normally supplied, P7 optional. Variable illumination graticule.

### Rear Connectors

Z-axis Input—To upper trace CRT grid. (0.01  $\mu$ f and 10 k $\Omega$ )

### Convection Cooling

### Voltage Calibrator

Line-frequency square wave, 0.5 V  $\pm$  2% peak to peak.

### Power Requirements

Wired for 115-V operation—For best performance, rear-panel quick-change connections to the transformer taps should be set to the voltage settings most nearly corresponding to the actual line voltage. Voltage settings are 90, 100, 105, 110, 115, 120, 130, 200, 210, 215, 220, 225, 230, 240 V. 48 to 440 Hz line frequency, 375 VA.

### Dimensions and Weights

Height	17 in
Width	10 in
Depth	20 in
Net weight	59 lb
Shipping weight	74 lb

### Included Standard Accessories

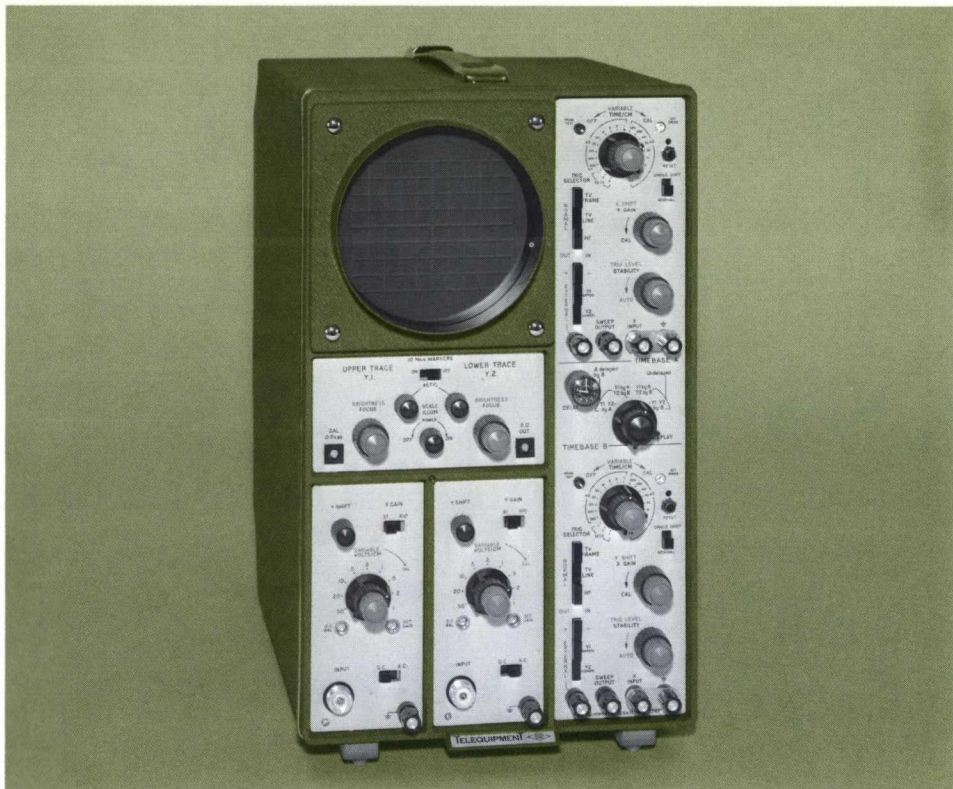
Instruction manual (070-0796-00); two coax reducers (102-0001-00); two UHF coax connectors (131-0058-00); plastic dust cover (016-0252-00).

**Type D56, order TLD56 . \$1075**

### Optional Probe

10X Passive Probe, UHF,  
order 010-0234-00 . . . . . \$9.50

U.S. Sales Prices FOB Beaverton, Oregon



## General Description and Characteristics

### Vertical Amplifiers

Bandwidth—DC to 15 MHz (3-dB down) in 100 mV/cm to 50 V/cm range (X1). DC to 500 kHz in 10 mV/cm to 5 V/cm range (X10). Input can be AC or DC coupled.

Deflection Factor—100 mV/cm to 50 V/cm or 10 mV/cm to 5 V/cm in 9 calibrated steps (1-2-5 sequence), attenuator accuracy within 5%. Front panel control selects (X1 or X10) appropriate range. Uncalibrated, continuously variable deflection factor between steps.

Overshoot—less than 2%.

Maximum Deflection—6 cm.

Input RC—1 megohm paralleled by approx 40 pF.

### Horizontal Amplifiers

Deflection Factor—Uncalibrated, continuously variable from 100 mV/cm to 1 V/cm.

Bandwidth—DC to 500 kHz (approx 3-dB down).

Input RC—1 megohm paralleled by approx 30 pF.

Horizontal Positioning—Positions any portion of expanded trace on screen.

### Time Bases

A and B Sweep Rates—0.5  $\mu$ s/cm to 5 s/cm in 22 calibrated steps (1-2-5 sequence), accurate within 5%. Uncalibrated, continuously variable between steps.

Horizontal Expansion—Approx X5, continuously variable.

Sweep Outputs—Approx 50 V saw-tooth, AC coupled.

### Modes

Undelayed—In position "Y1 Y2 by B" both Y1 and Y2 are swept by Time Base B. In position "Y1 by A, Y2 by B" the upper trace is swept by Time Base A, the lower trace is swept by Time Base B, giving two independent deflection systems.

A Delayed by B—In position "Y1 Y2 by A" two independent but time related signals may be simultaneously viewed with a maximum delay equal to the B sweep. In position "Y1 by A, Y2 by B" with the same signal connected to both Y inputs, Y2 signal will be displayed by B sweep with an intensified portion corresponding to A sweep, starting at a selectable point. Y1 signal will be displayed by A sweep after the delay interval and effectively expanded.

### Triggering Amplifiers

Automatic—Triggers on any signal up to approx 1 MHz.

High Frequency Sync—Synchronizes sweep from 1 MHz to 12 MHz.

TV Sync—Triggers from TV line or frame.

Slope—Plus or minus.

Single Sweep

Source—Internal from either trace for both Time Base A and B and external.

### Markers

TV Line Marker—A 0.5-V gate output from Time Base A useful for line identification in a video monitor.

Marker Pips—Internal 10-MHz mark-