

ALLEENVERTEGENWOORDIGING VOOR NEDERLAND:

C. N. ROOD N.V.

POSTBUS 4042 - TELEFOON 985153

RIJSWIJK (Z.-H.)

Redesigned for:

**EASIER OPERATION
GREATER RELIABILITY
HIGHER PERFORMANCE**



TEKTRONIX
TYPES 545A,
541A, 535A,
531A



Type 535A

Function Correlation through **COLOR**

TEKTRONIX TYPES 545A, 541A, 535A, 531A OSCILLOSCOPES

Redesigned for:

EASIER OPERATION

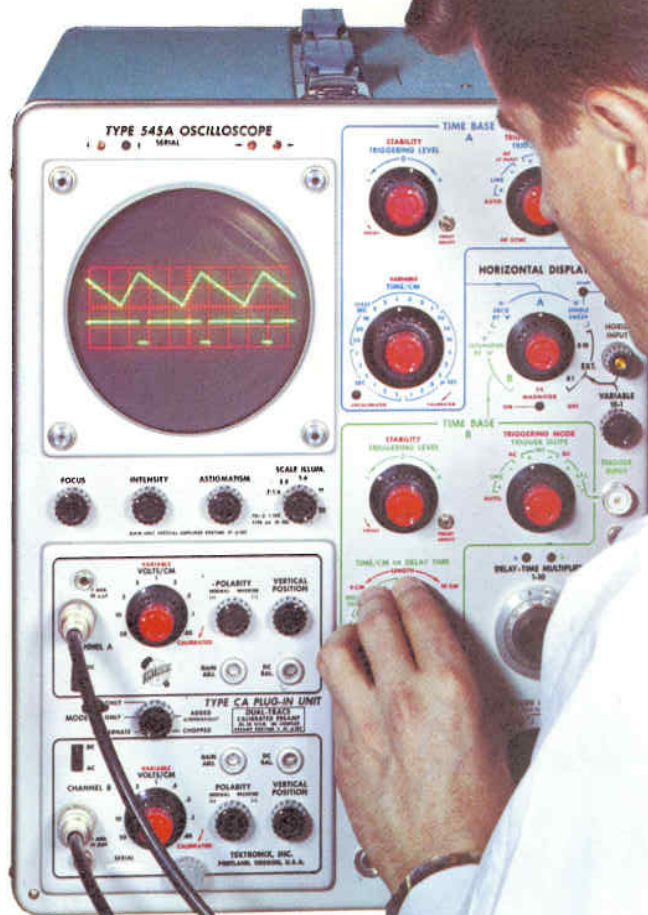
- Simplified Panel Layout.
- Color-Correlated Controls.
- Single-Knob Sweep Time Control.
- Simplified Display Control.
- Internal Triggering for Sweep Delay.
- Single-Knob Calibrator Control.
- Improved One-Shot Sweep Operation in Types 535A and 545A.

GREATER RELIABILITY

- New Frame-Grid Twin Triodes Replace Older Types.
- Silicon Rectifiers Replace Selenium in Power Supplies.

HIGHER PERFORMANCE

- New DC-to-15 MC Vertical Amplifiers in Types 531A and 535A.
- New Wider Sweep-Delay Range in Types 535A and 545A.



Type 541A Fast-Rise Oscilloscope

Same as Type 545A, except that it does not have Time-Base B or provision for sweep delay or single sweeps.

Price—Type 541A, without plug-in units . . . \$1200



Type 535A Wide-Band Oscilloscope with Sweep Delay

Same specifications as Type 545A, except for main vertical amplifier. DC-to-15 MC passband, 23- μ sec risetime, 50-mv/cm deflection factor with Type K Plug-In Pre-amplifier.

Price—Type 535A, without plug-in units . . . \$1400

Type 545A Fast-Rise Oscilloscope with Sweep Delay

VERTICAL SPECIFICATIONS

DC-to-30 MC passband, 12- μ sec risetime, 50-mv/cm deflection factor with Type K Plug-In Pre-amplifier.

Many other plug-in units available for specialized applications. Signal delay permits observation of leading edge of waveform that triggers the sweep.

HORIZONTAL SPECIFICATIONS

Two Time-Base Generators—

Time Base A—0.1 μ sec/cm to 5 sec/cm in 24 calibrated steps.

Continuously adjustable from 0.1 μ sec/cm to 12 sec/cm. 5x magnifier increases calibrated range to 0.02 μ sec/cm. Single sweep provision for one-shot applications.

Time Base B—Also functions as a sweep delay generator. 2 μ sec/cm to 1 sec/cm in 18 calibrated steps.

Sweep Delay—Two modes of operation

Triggered—Delayed sweep started by signal under observation. Steady display, even of signals with inherent jitter.

Conventional—Delayed sweep started by delayed trigger. Time jitter less than one part in 20,000.

Range of Delay—1 μ sec to 10 sec in 18 calibrated ranges, each range divisible into 1000 parts by 10-turn control with incremental accuracy of 0.2%.

OTHER CHARACTERISTICS

10-KV Accelerating potential.

Built-in blanking for switching transients in dual-trace operation.

Amplitude calibrator—0.2 mv to 100 v.

Electronically-regulated power supplies.

Price—Type 545A, without plug-in units \$1550



Type 531A Wide-Band Oscilloscope

Same as Type 535A, except that it does not have Time-Base B or provision for sweep delay or single sweeps.

Price—Type 531A, without plug-in units \$995

RACK-MOUNTING MODELS

Designed mechanically for mounting in a standard rack. Dimensions: 19" wide, 14" high, 22½" rack depth. Slide-out mounting for servicing convenience.

Type RM45A—electrically identical to the Type 545A Oscilloscope.

Price, without plug-in units \$1650

Type RM35A—electrically identical to the Type 535A Oscilloscope.

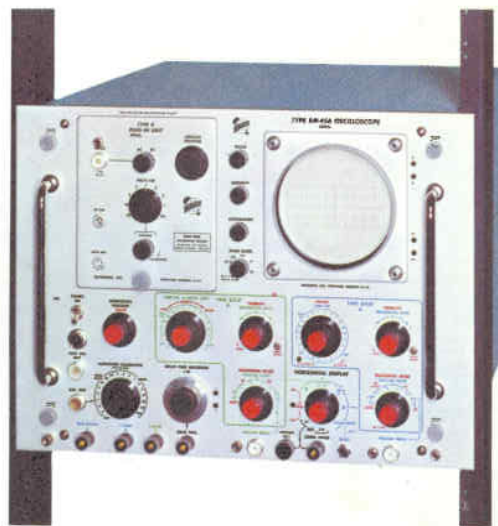
Price, without plug-in units \$1500

Type RM41A—electrically identical to the Type 541A Oscilloscope.

Price, without plug-in units \$1300

Type RM31A—electrically identical to the Type 531A Oscilloscope.

Price, without plug-in units \$1095



Prices f. o. b. factory



Turn page for Plug-In Pre-amplifiers



PLUG-IN UNITS

For types 545A, 541A, 535A, 531A Oscilloscopes

Nine Plug-In Preamplifiers are available for use with the oscilloscopes described on the preceding pages, providing them with an unusually high degree of signal-handling versatility. In addition, a plug-in unit is available for measurement of transistor rise, fall, delay, and storage times.



PREAMPLIFIER CHARACTERISTICS

Plug-In Unit	With Types 531A & 535A RM31A & RM35A		With Types 541A & 545A RM41A & RM45A		Calibrated Deflection Factor	Input Capacitance	Price
	PASSBAND	RISETIME	PASSBAND	RISETIME			
Type A Wide-Band DC	dc to 14 mc	0.025 μ sec	dc to 20 mc	0.018 μ sec	0.05 v/cm to 20 v/cm	47 μ mf	\$90
Type B Wide-Band High-Gain	2 c to 10 mc	0.035 μ sec	2 c to 12 mc	0.03 μ sec	5 mv/cm to 0.05 v/cm	47 μ mf	\$135
	dc to 14 mc	0.025 μ sec	dc to 20 mc	0.018 μ sec	0.05 v/cm to 20 v/cm		
Type C-A Dual-Trace DC	dc to 15 mc	0.023 μ sec	dc to 24 mc	0.015 μ sec	0.05 v/cm to 20 v/cm	20 μ mf	\$250
Type D High-Gain DC Differential	dc to 2 mc	0.18 μ sec	dc to 2 mc	0.18 μ sec	1 mv/cm to 50 mv/cm	47 μ mf	\$155
Type E Low-Level AC Differential	0.06 c to 60 kc	6 μ sec	0.06 c to 60 kc	6 μ sec	50 μ v/cm to 10 mv/cm	50 μ mf	\$175
Type G Wide-Band DC Differential	dc to 14 mc	0.025 μ sec	dc to 20 mc	0.018 μ sec	0.05 v/cm to 20 v/cm	47 μ mf	\$185
Type H High-Gain Wide-Band DC	dc to 11 mc	0.031 μ sec	dc to 15 mc	0.023 μ sec	5 mv/cm to 20 v/cm	47 μ mf	\$185
Type K Fast-Rise DC	dc to 15 mc	0.023 μ sec	dc to 30 mc	0.012 μ sec	0.05 v/cm to 20 v/cm	20 μ mf	\$135
Type L Fast-Rise High-Gain	3 c to 15 mc	0.023 μ sec	3 c to 24 mc	0.015 μ sec	5 mv/cm to 2 v/cm	20 μ mf	\$200
	dc to 15 mc	0.023 μ sec	dc to 30 mc	0.012 μ sec	0.05 v/cm to 20 v/cm		



TYPE R Transistor Risetime Plug-In Unit

The Type R supplies a fast-rising pulse and the required supply and bias voltages for measurements of transistor rise, fall, delay, and storage times. Pulse output impedance is 50 ohms, amplitude is ± 10 v dc in 8 calibrated steps, continuously variable between steps. Risetime of the pulse is less than 5 μ sec. Overall risetime with Types 545A and 541A — 12 μ sec,

with Types 535A and 531A — 23 μ sec. The 400-ma collector supply is continuously adjustable from 1 v to 15 v. Bias voltage is available for base or emitter in two ranges, -0.5 v through zero to +0.5 v, and -5 v through zero to +5 v. The base driving resistance can be selected from 9 values, 50 ohms to 20 kilohms. Price **\$300**

Prices f.o.b. factory

Tektronix, Inc.

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TEKTRONIX FIELD OFFICES: Albertson, L. I., N.Y. • Albuquerque, N.M. • Atlanta, Ga. • Bronxville, N.Y. • Buffalo, N.Y. • Cleveland, Ohio • Dallas, Tex. • Dayton, Ohio • Elmwood Park, Ill. • Endwell, N.Y. • Houston, Tex. • Lathrup Village, Mich. • East Los Angeles, Calif. • West Los Angeles, Calif. • Minneapolis, Minn. • Mission, Kan. • Newtonville, Mass. • Orlando, Fla. • Palo Alto, Calif. • Philadelphia, Pa. • Phoenix, Ariz. • San Diego, Calif. • St. Petersburg, Fla. • Syracuse, N.Y. • Towson, Md. • Union, N.J. • Washington, D.C. • Willowdale, Ont.

TEKTRONIX ENGINEERING REPRESENTATIVES: Hawthorne Electronics, Portland, Oregon; Seattle, Washington • Hytronic Measurements, Denver, Colorado; Salt Lake City, Utah. Tektronix is represented in 20 overseas countries by qualified engineering organizations.