



2025 vintageTEK museum tour

vintag**TEK**
museum

vintag**TEK**
museum

13489 SW
Karl Braun DR
503.644.0161

WE OWN IT

vintag**TEK**
museum

Tektronix First Ad Sept 1948 Electronics Magazine



Versatility...Plus

The Tektronix Type 511 is a portable, wide-band oscilloscope providing for many functions previously in very expensive, non-portable instruments.

GENERAL CHARACTERISTICS

Maximum screen size 10" (10" x 10")
Maximum frequency 10 MHz
Maximum input voltage 100 V (100 V peak-to-peak)
Maximum input current 100 mA (100 mA peak-to-peak)
Maximum input power 10 W (10 W peak-to-peak)
Maximum input resistance 100 kΩ (100 kΩ peak-to-peak)
Maximum input capacitance 10 pF (10 pF peak-to-peak)
Maximum input inductance 10 nH (10 nH peak-to-peak)
Maximum input impedance 10 Ω (10 Ω peak-to-peak)

MISCELLANEOUS

Maximum screen size 10" (10" x 10")
Maximum frequency 10 MHz
Maximum input voltage 100 V (100 V peak-to-peak)
Maximum input current 100 mA (100 mA peak-to-peak)
Maximum input power 10 W (10 W peak-to-peak)
Maximum input resistance 100 kΩ (100 kΩ peak-to-peak)
Maximum input capacitance 10 pF (10 pF peak-to-peak)
Maximum input inductance 10 nH (10 nH peak-to-peak)
Maximum input impedance 10 Ω (10 Ω peak-to-peak)

Price \$192.00 U.S. Portland

For more information, contact Tektronix, Inc., 3600 NE Oregon Street, Portland, Oregon 97232

© 1948 Tektronix, Inc. All rights reserved.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.

Type 101 Video Calibrator

This Type 101 Video Calibrator is a very important instrument and one of the most grand instruments in the museum.

In 1948 Howard Vulliamy was finishing up the design of his oscilloscope and the company needed to prepare for manufacturing. This was by no means a simple task as purchasing, assembly, test, and shipping departments all needed to be set up, people had to be hired and trained, and procedures had to be written.

Miles Tipper, one of the three founders of Tektronix and responsible for operations, described setting up manufacturing in his autobiography:

Lowell Hadley was hired and given the assignment of setting up facilities for producing our first batch of oscilloscopes. As it was obviously going to take several months to get these instruments into the production stage it was decided to do something simpler for our first venture into the manufacturing business.

Howard had designed a small calibration instrument to use in connection with perfecting the oscilloscope circuits. He felt that this instrument would have some acceptance for laboratory use and would provide a temporary source of income.

A production run of ten of these instruments was manufactured with the idea that another run would be manufactured if the first ten sold readily. Unfortunately, there was not much demand for an oscilloscope calibrator at this time. Therefore, it would have to be admitted that the first Tektronix venture into the manufacturing business turned out to be a disappointing failure.

Tektronix production oscilloscopes started with serial number 101. Note the unique serial number on the Type 101 of 11481 - which stands for November, 1948, 91. This Type 101 Video Calibrator is indeed the very first Tektronix product.

Type 511 Oscilloscope

The Type 511 was Tektronix first oscilloscope model. It was introduced in 1947 and the first instrument was bought by Dr. Archie Turtur at the University Of Oregon Medical School (later to become OHSU) and was shipped in July.

The 511 initially sold for \$595.00, compared to \$1,800.00 for a two-glass Dumont scope that was mostly pre-war technology. Later the price was raised to \$795.00.

"511" stood for a 5" CRT, 1 channel, 1" model. This nomenclature convention only lasted for a short time being followed by the 512, 513, and 514 oscilloscopes.

The first mention of the 511 appeared in the April 1948 issue of Electronics. It wasn't called the 511, simply the Vulliam oscilloscope.

The first advertisements for the 511 appeared in the September 1948 issues of The Review Of Scientific Instruments, Proceedings of the IRE, and Electronics.

Howard started this oscilloscope design in his parent's basement and later moved to the M. J. Murdock Company on 67th and Foster Road in Portland. That later proved to be too small and eventually Jack Murdock moved his store to 7th and Hawthorne in downtown Portland where manufacturing first began.

Tektronix started the serial numbers at 101. This oscilloscope is serial number 681 so it is the 340th Type 511 oscilloscope manufactured.

The oscilloscope was an instant success and the newly formed company found themselves working three shifts to meet demand. The 511 had a bandwidth of 10 MHz and a vertical sensitivity of 125 mV/cm. Later an "A" revision improved some features including a regulated power supply and a "D" revision added a delay line to be able to view what your triggered on.

SON

1950

512 OSCILLOSCOPE

The 512 is the second oscilloscope sold commercially by Tektronix. Introduced in 1950, it sold for \$950 and last appeared in the Tek Catalog in 1954 when it was replaced by the 530 Series.

The 512 had a DC coupled differential vertical amplifier with a bandwidth of 1 MHz at a sensitivity of 0.005 volts per centimeter and 2 MHz at less sensitivity. These new features made it an excellent instrument for biophysical measurements.

1950

513-D OSCILLOSCOPE

The 513-D has a direct coupled vertical amplifier with a rise time of 0.025 μ sec extending its usefulness beyond the limits any previous general laboratory oscilloscope.

The 513-D has a bandwidth of DC to 20 MHz at a sensitivity of 0.3 volts per centimeter. Its bandwidth is 2 cycles to 18 MHz at a sensitivity of 0.03 volts per centimeter.

The initial selling price was \$1,650.00.

1950

514-D OSCILLOSCOPE

The 514-D has a bandwidth of DC to 10 MHz at a sensitivity of 0.3 volts per centimeter. Its sensitivity is extended to 0.03 volts per centimeter with capacitive coupling only.

Two separate input connectors allows the user to switch between either of two signal sources.

The initial selling price was \$950.00.



32

575 Curve Tracer

The 575 first appeared in the May 1957 Electronic Catalog. The 575 was the first Transistor Curve Tracer and enjoyed an unusually long useful life of 18 years, last appearing in the 1975 New Instruments Brochure.

The 575 actually sold for \$625 and received serious competition from the Fairchild 6200A Curve Tracer during the last couple of years of its life. It was replaced by the Tektronix 576 in 1972.



34



YAMAHA
PERSONAL STUDIO SYSTEM
MS10
MONITOR SPEAKER

30

315D Oscilloscope

The 315D first appeared in the March 1951 Tektronix Catalog priced at \$775. Bandpass was only about 5 MHz, but...

The 315D had a linear, accurate integrating timebase using a new inductive technique triggering method.

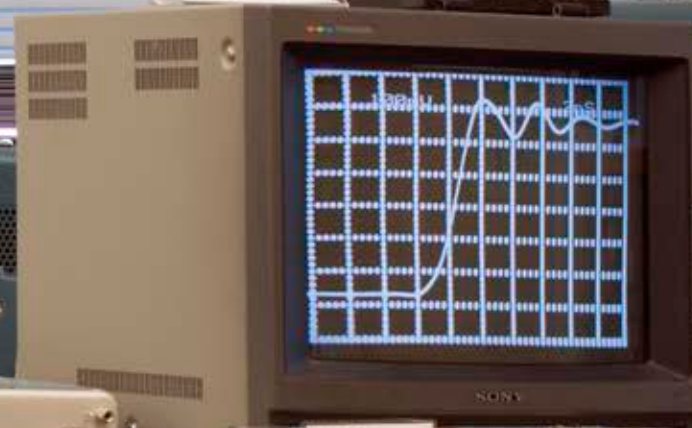
First to use two 5-lamp sockets and lensless strips to mount components.

First Tek scope using a 3 inch CRT and was lighter and smaller than all the previous models from the 3000s.

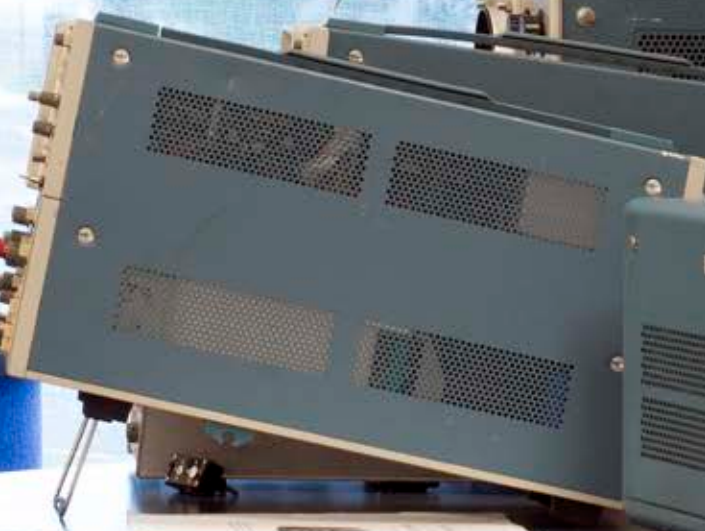
514D OSCILLOSCOPE
The 514D had a bandwidth of 50 MHz and a sensitivity of 10 mV/cm. It was the first oscilloscope to have a built-in storage oscilloscope (BISO) section for recording waveforms.



R7912 Transient Digitizer
The R7912 first appeared in the 1974 Tektronix Catalog. It is a Transient Digitizer with many different waveform storage options. The selling price was originally \$2,400 which did not include any of the available storage or display options. (Add \$10,400 to \$14,400 depending upon which option you select.)



519 Oscilloscope
The 519 first appeared in the 1974 Tektronix Catalog. It was the first oscilloscope to have a built-in storage oscilloscope (BISO) section for recording waveforms.





PIN: 0161

lenovo









CA Plug-In Unit

The CA plug-in appeared in the May 1973 Tektronix Catalog. The CA is a dual-trace plug-in with 24 MHz bandwidth when used in a 540 Series Oscilloscope.

It brought a slight improvement over the standard and similar type 53/54C plug-ins. The CA allowed the channels to be added algebraically and when channel is inverted, it has limited use as a differential amplifier.

The CA initially sold for \$250.



TYPE 541 OSCILLOSCOPE

TYPE 53A OSCILLOSCOPE

TYPE 53C PLUG-IN UNIT

TYPE 53A OSCILLOSCOPE

TYPE 53C PLUG-IN UNIT

TYPE 53C PLUG-IN UNIT



TEKTRONIX, INC.







1950 1000-Watt Radio Frequency Power Amplifier
This 1000-Watt Radio Frequency Power Amplifier was developed by the Naval Research Laboratory in 1950. It was designed to provide a high-power source for the study of the properties of the ionosphere. The amplifier is capable of operating at a frequency of 100 MHz and has a maximum output power of 1000 Watts. It is a vacuum tube device and is used in a variety of applications, including the study of the ionosphere and the development of radio communication systems.

1950 1000-Watt Radio Frequency Power Amplifier
This 1000-Watt Radio Frequency Power Amplifier was developed by the Naval Research Laboratory in 1950. It was designed to provide a high-power source for the study of the properties of the ionosphere. The amplifier is capable of operating at a frequency of 100 MHz and has a maximum output power of 1000 Watts. It is a vacuum tube device and is used in a variety of applications, including the study of the ionosphere and the development of radio communication systems.

1950
OF-152 Fiber Optic TDR
The OF-152 Fiber Optic TDR was developed by the Naval Research Laboratory in 1950. It was designed to provide a high-precision measurement of the refractive index of a material. The device is capable of measuring the refractive index of a material to a precision of 10^{-6} . It is a vacuum tube device and is used in a variety of applications, including the study of the properties of the ionosphere and the development of radio communication systems.



In this demo the 7220/220 is displaying the wavelength peaks of the emitted light from the lamp. Watch the peaks change with the color of the lamp.

vintage museum

7220/220 Lamp

FRAGILE 1



413 Oscilloscope 1960
The 413 first appeared in the 1960s. It was the first oscilloscope to have a built-in power supply. The 413 has a maximum of 20 volts per division and a maximum of 200 kHz. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply.

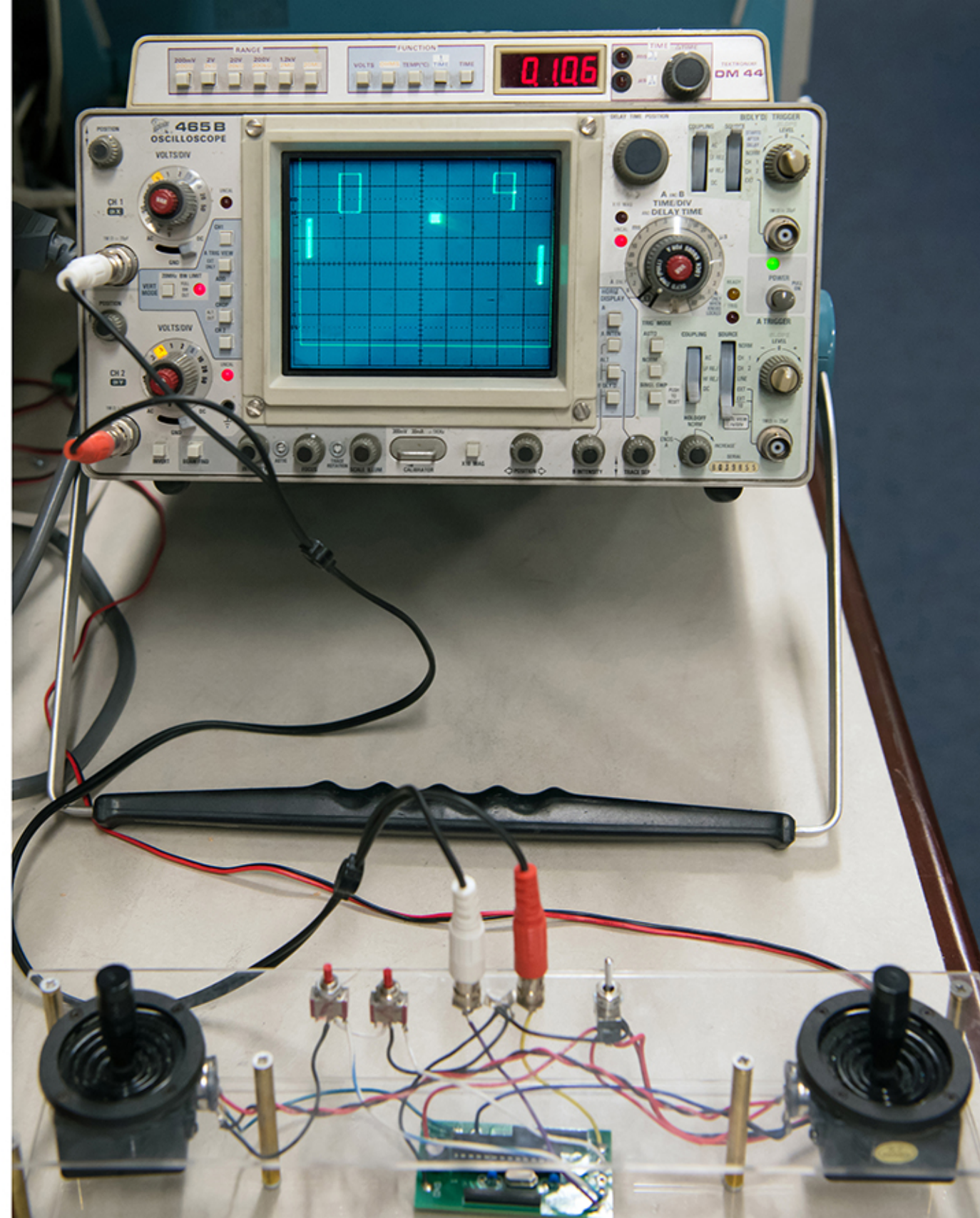
414 Oscilloscope 1960
The 414 first appeared in the 1960s. It was the first oscilloscope to have a built-in power supply. The 414 has a maximum of 20 volts per division and a maximum of 200 kHz. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply.

415 Oscilloscope 1960
The 415 first appeared in the 1960s. It was the first oscilloscope to have a built-in power supply. The 415 has a maximum of 20 volts per division and a maximum of 200 kHz. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply.

tek
The 416 first appeared in the 1960s. It was the first oscilloscope to have a built-in power supply. The 416 has a maximum of 20 volts per division and a maximum of 200 kHz. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply. It was the first oscilloscope to have a built-in power supply.









818 Logic Analyzer - 1984
The 818 is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.

740722 - 1985
The 740722 is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.

740722 - 1985
The 740722 is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.

740722 - 1985
The 740722 is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.

740722 - 1985
The 740722 is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.

Scope Artist
Create your own Scope Art! Turn the scope into a work of art. The Scope Artist is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.

740722 - 1985
The 740722 is a compact 16 channel logic analyzer. It can be used to monitor digital signals in a system, up to 10 MHz. It has a built-in 16 channel logic analyzer. It features a processor which can be used to provide the logic and timing data for a system. It is also capable of being used as a logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer. It is a compact 16 channel logic analyzer.





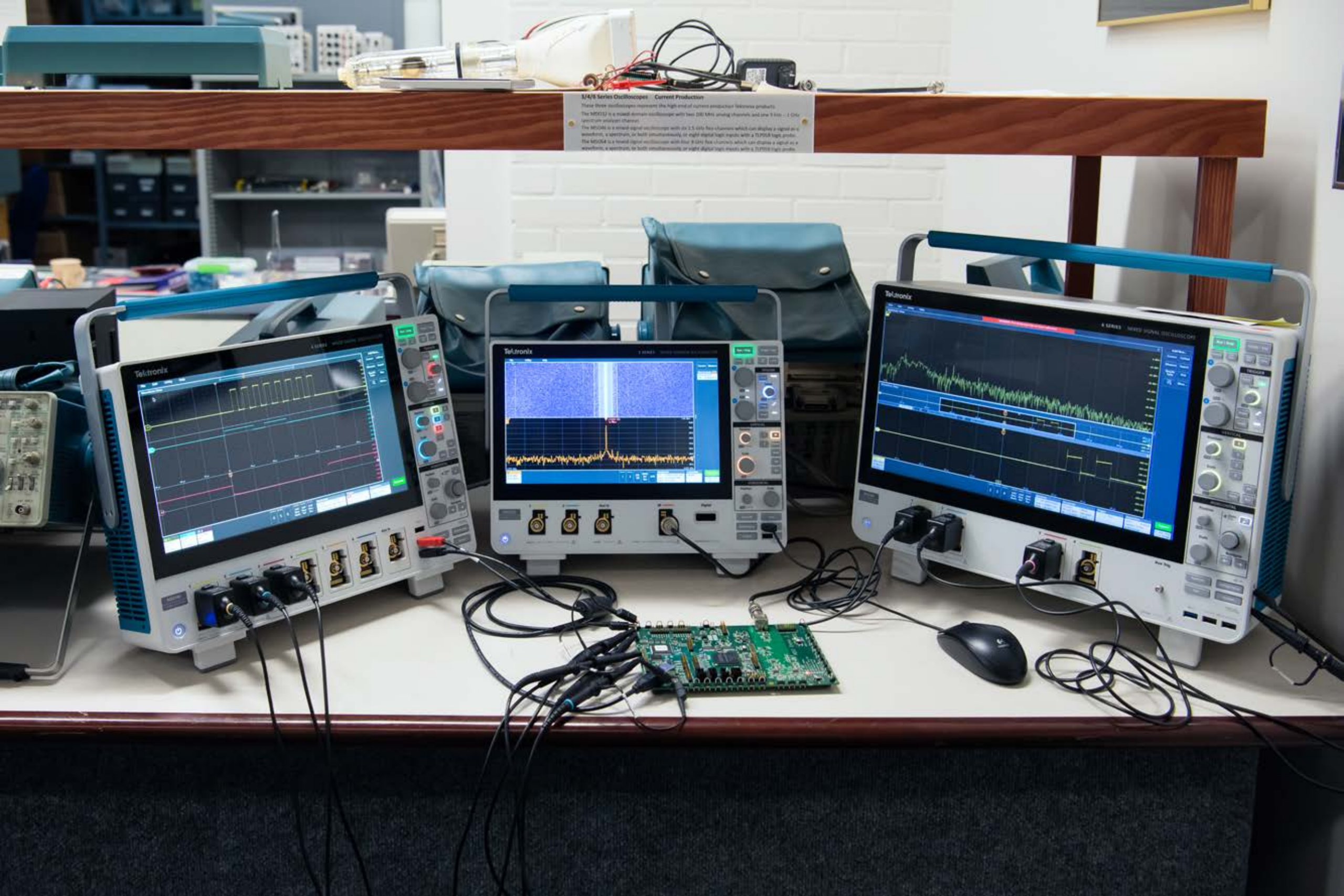
345 Series Oscilloscopes - Current Production

These three oscilloscopes represent the high end of current production Tektronix products.

The MDO112 is a mixed-domain oscilloscope with two 100 MHz analog channels and one 1 GHz spectrum analyzer channel.

The MSO44 is a mixed-signal oscilloscope with six 2.5 GHz real-time channels which can display a signal as a waveform, a spectrum, or both simultaneously; six digital logic inputs with a 10,000 logic probe.

The MSO64 is a mixed-signal oscilloscope with four 9 GHz real-time channels which can display a signal as a waveform, a spectrum, or both simultaneously; six digital logic inputs with a 10,000 logic probe.







SILICON



R A R I

For information call 800-835-6100

Tektronix

TEK
4000 Multi
File Management
The 4000 is an advanced
file management system
that provides a powerful
and easy-to-use interface
for managing files and
directories. It supports
up to 255 files and
directories, and can be
configured to meet your
specific needs.





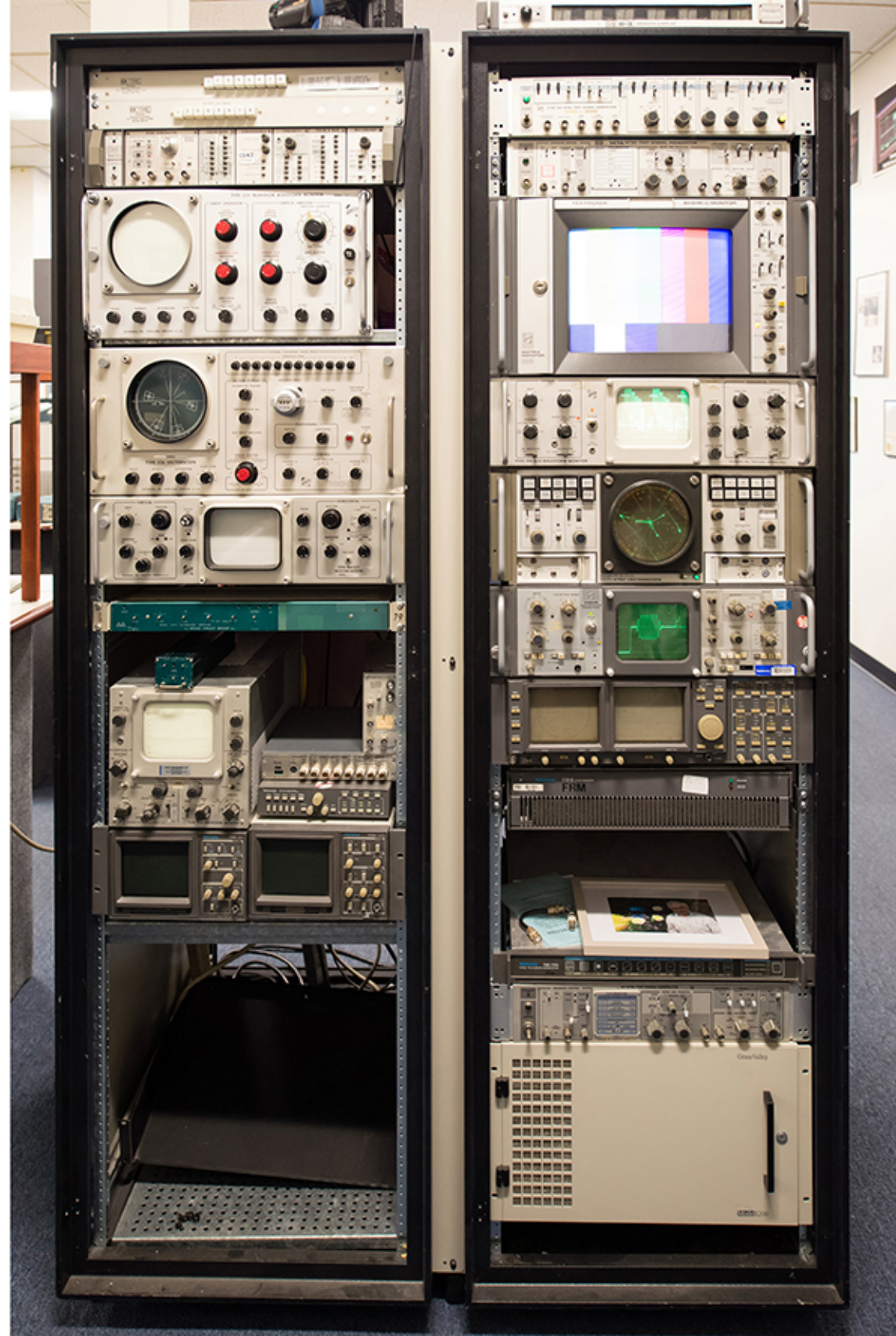
vintage **tek** museum
Restoration Room
No Public Access







MODEL 100
SPARE PARTS KIT











TEKTRONIX

Tektronix "bling"

Technology
Appreciation for your
service technicians
Tektronix
Laboratory

MASTERS 85





INTRODUCING

Tektronix K415

Tektronix®



SOUNDS
UNLIMITED
MARTY GOLD
and His Orchestra

119370
531A Sweep Lee Vout

26

Tektronix Phasor