



Television Laboratory Oscilloscope—Type 404

The Sylvania Type 404 is an exceptionally high-gain, wide-band oscilloscope created especially for designing and servicing television receivers. It displays TV pulses, waveshapes and signals on a large 7-inch screen. The Type 404 incorporates the following features many of which are only found in more expensive oscilloscopes:

Flat response within 3db. from 10 cycles to 2 megacycles.

Extremely sensitive — 0.01 volts (10 millivolts per inch peak to peak deflection).

√ High input impedance of 5meg. and only 26mmf.

√ Hard tube linear sweeps, from 25 cycles to 50 kilocycles. /Positive and negative sync control.

Wide range phasing control.

Vertical and horizontal polarity reversing switches.

Frequency compensated step attenuator.

High voltage and demodulator probes included with instrument.

√ 7-inch cathode-ray tube. Price \$329.50

Television Service Oscilloscope—Type 403

The Sylvania Type 403 designed for excellent low frequency response, is an exceptionally high-gain dc coupled instrument incorporating many of the advanced features of higher-priced models. It is particularly suitable for observing the many complex waveforms in a television receiver and will competently fill many service, production, laboratory and industrial requirements.

✓Identical dc coupled horizontal and vertical amplifiers.

√Vertical sensitivity — 0.01 volts (10 millivolts per inch peak to peak deflection).

✓ Horizontal sensitivity — 0.02 volts (20 millivolts per inch peak to peak deflection).

✓ Horizontal and vertical sine wave responses — flat from 0 to 500kc.
+0-2db.

√ Hard tube sweep circuit, from 5 cycles to 50kc. Two preset television sweeps.

✓ Six volt (rms) and a sawtooth sweep voltage available on the front panel.

Frequency compensated step attenuator.

√7-inch cathode-ray tube. Price \$269.50





Television Oscilloscope—Type 400

The Sylvania Type 400 Oscilloscope is a sensitive, wide band instrument widely used in laboratories and well-furnished service shops. Five-inch oscilloscopes employing the same sensitivity, band width and output impedance as the Type 400, are usually higher in price than this outstanding seven-inch oscilloscope. Here are a few of the fine features of this instrument:

Flat response within 3db. from 10 cycles to 2 megacycles.

Extreme sensitivity — 0.01 volts (10 millivolts per inch peak to peak deflection).

√ High input impedance of 5meg. and only 26 mmf.

High vacuum tube sweep circuit and

✓ Positive and negative sync control.

✓ Wide range phasing control.

√ Frequency compensated step attenuator.

√7-inch cathode-ray tube.

Price \$249.50

General Purpose Oscilloscope—Type 132Z

The Sylvania Type 132Z is designed particularly for use in radio and television servicing. It is also valuable in laboratory, production and teaching applications. The 7-inch cathode-ray tube displays large, clear patterns of response curves and waveshapes encountered in circuit analysis. Here is a listing of a few service features:

Flat response from 7 cycles to 70kc., useful to 250kc.

Sensitivity — 0.1 volts (100 millivolts per inch).

✓ Linear hard tube sweep — 10 cycles to 30kc.

✓ Push-pull deflection.

✓ Safety glass shield.

√7-inch cathode-ray tube.

Price \$169.50







Service Polymeter—Type 301

This new Sylvania Polymeter, designed for laboratory and field measurement, is stabilized against errors in calibration due to normally changing line voltage, or to gas current in tubes. The unusual high input impedance (17 megohm) of the Polymeter makes it ideal for use in high impedance circuits which are encountered in electronic equipment. The Sylvania patented full-wave rectifier circuit gives optimum full scale accuracy necessary on the lower ac ranges. Rapid, accurate service is insured by these features:

√Peak to peak scale.

√17 Megohm effective input resistance. √New Sylvania 7-inch meter movement.

/Sylvania patented linearity circuit.

Shielded AC lead.

✓ Illuminated meter.

/ Screw-on connectors.

Price \$109.50

Deluxe Polymeter—Type 302

This new, rugged, dependable Sylvania Polymeter, designed for laboratory and field measurements, is stabilized against errors in calibration due to normally changing line voltage, or to gas current in tubes. The unusual high input impedance (17 megohm) of the Polymeter makes it ideal for use in high impedance circuits which are encountered in electronic equipment. The RF probe, a Vacuum Tube probe is an integral part of the new 302. It is designed for maximum usefulness at very high frequencies. Rapid, accurate service is insured by the following features:

√Peak to peak scale.

√17 Megohm effective input resistance.

✓ New Sylvania 7-inch meter movement.

√ Vacuum tube RF probe.

Sylvania patented linearity circuit.

Shielded AC and RF leads.

/Illuminated meter.

Screw-on connectors.

Price \$129.50





Polymeter—Type 221Z

The Sylvania Polymeter Type 221Z is an accurate, reliable instrument designed for radio and television service. This instrument comes equipped with a vacuum tube RF probe. Efficient servicing is provided by the following features:

√17 Megohm effective input resistance.

✓ Five tube circuit including two double triodes.

Rugged 1 ma meter movement.

✓ Illuminated meter.

Screw-on connectors.

Price \$99.50

Sweep Signal Generator—Type 500

The Sylvania Type 500 Signal Generator is designed for Television and FM radio alignment work. It is a companion to the Sylvania 501 marker generator. Its dependability, accuracy, freedom from amplitude modulation and flexibility has made it popular on many of the top TV manufacturers' production lines. Here are some of its outstanding features:

✓ Fundamental frequencies 2 to 230 megacycles.

√Two sweep ranges; 0-600 KC and 0-15 MC.

√Good sweep linearity.

✓ No noticeable amplitude modulation in swept signal output.

√Low leakage obtained by internal shielding.

√Voltage regulated supply to oscillator sections.

√Phasing control.

√100,000 microvolts output on all bands.

✓ Lighted dial.

Price \$139.50





Marker Signal Generator—Type 501

The Sylvania 501 is a highly accurate RF signal generator designed to cover the range of Television IF and VHF channel frequencies. It is a high quality, accurate, rugged instrument which may be used with a sweep generator as a marker or alone as an RF generator. An ideal companion to the 500 signal generator, the 501 has the following noteworthy characteristics:

✓ May be used as a separate RF oscillator.

When used with the Sylvania 500, a high quality sweep-marker combination is obtained.

Two distinct oscillator circuits with outputs available either singly or simultaneously.

A crystal may be used to control frequency of one oscillator within range of

2-20 mc where crystal accuracy is required.

Harmonics of oscillator when crystal controlled may be used for checking calibration of other oscillator.

√A 4.5 mc crystal can be used for aligning intercarrier sound systems.

Large slide rule dial, edge lighted.

Price \$129.50

Tube Tester—Type 620

The Sylvania Type 620 is intended for use by radio and TV service men, equipment manufacturers and others who desire to test with reasonable accuracy the characteristics most directly indicative of the condition of radio and TV receiving tubes and many of the low power industrial tubes. Here are a few of the deluxe features of the Type 620:

√Ohmmeter-type shorts and leakage tests.

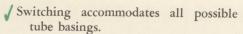
Composite emission and transconductance test.

Gas test.

Sensitive 200 microampere meter movement.

Checks tubes with two top caps.

Blank socket for future tube basings.

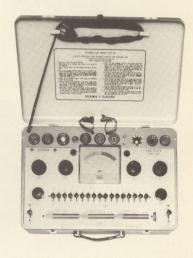


JEasy reading roll chart.

Attractive clear plastic meter case for good visibility.

✓ A tube tester designed and built by a tube manufacturer.

Price \$149.50





Tube Testers—Types 219/220

The Sylvania 219 counter model or 220 portable tube tester simultaneously fill the two most important needs in modern tube application: 1. mutual conductance for voltage amplifiers, 2. high emission for pulse and power applications. Other advantages of the 219 or 220 are:

√Ohmmeter-type shorts and leakage tests.

√Composite emission and transconductance test.

JGas test.

√Rugged one milliampere meter movement.

Switching accommodates all possible tube basings.

√Blank socket for future tube basings.

JEasy reading roll chart.

Price \$114.50

Voltage Calibrator—Type 304

When you check the operation of many television circuits, the peak to peak voltage is apt to be as critical as the waveform. The Type 304 places a calibrated voltage on the oscilloscope, making it possible to accurately establish peak to peak values. Here are distinctive features of this useful instrument:

✓Clipped sine wave output.

No tilt or overshoot.

Single connection for calibration or observation.

√Step attenuated and smooth attenuated output.

√A voltage regulator circuit.

✓ Useful when observing low frequency responses of wide band amplifiers.

√Rugged balanced construction.

Price \$34.50







Color Television Dot Generator—Type 506

The Type 506 Generator is a "Sylvania First" for a new line of test equipment for color television service. It provides a pattern whereby the beams of a color cathode-ray tube, of the three gun type, may be properly converged by the service man. This precision instrument is a "must" for all who wish to expand in this new profitable field. Convergence is easily and accurately accomplished with these features:

- ✓Extreme sync stability.
- √Useful for linerarity adjustments.
- Wide range of dot spacing.
- Positive gating circuit.
- ✓ Practical dot size.
- √Hard tube sync circuit.

- Leads permanently fastened to front panel.
- ✓Special Sylvania output adapter provided.
- ✓ Compact portable unit.

Price \$129.50

Special Accessories Recommended For Use With SYLVANIA TEST EQUIPMENT

TV High-Voltage Probes

New, quality probes that permit measuring high TV anode voltages by increasing the dc range of Polymeters to 30,000 volts. Select correct probe from list below:

Туре	Range	Use with
224	30 kv	Earlier Polymeters, Types 134 and 134Z
225	30 kv	Polymeter, Types 221, 221Z, 301 and 302

Price \$12.50





Cathode-Ray Tube Testing Adapter— Type 228

Use with any Sylvania Tube Tester to check 85% of your picture tube troubles, without removing tube from receiver. Checks electro-magnetic types for emission, shorts, leakage, and open filaments.

Price \$9.50

4.5 MC. Crystal—Type 229

This extremely accurate 4.5 mc. quartz crystal unit is specifically provided for use with the Sylvania Marker Signal Generator — Type 501.

Price \$3.95



