INSTRUMENTS OF SPEED AND ACCURACY

Wide-Band Voltmeter
Hp. Model 400C Vacuum Tube Voltmeter features both a wide voltage and wide frequency range, with a high input impedance of 10 megohms. The instrument measures from 1 millivolt to 300 volts full scale in 12 ranges. Accuracy is within 2% at 20 cps to 100 kilocycles; 5% at 200 cps to 2 megacycles. The instrument includes a decibel scale (0 db = 1 mw, 600 ohms), making available continuous readings, -72 to +32 dbm. Hp. also makes low frequency and battery operated voltmeters.

Audio Signal Generators
Hp. Model 206A Audio Signal Generator is specially designed for a.m. and f.m. broadcast measurements. Frequency range is 20 cps to 20 kilocycles. Distortion is less than 0.1%. At 0.1% of full scale, 20 to 200 kilocycles; and 0.25% down to 20 cps. Attenuators are adjustable from 0 to 111 db of attenuation in 0.1 db steps. Maximum output is +15 dbm. Balanced center-tapped output system matches 600, 150 or 50 ohm systems. Other hp. audio signal generators provide up to 5 watts power between 20cps to 100 kilocycles.

Distortion Analyzer
This model 330B Distortion Analyzer is Hp.'s newest, finest distortion measuring instrument. It is capable of measuring distortion at any frequency between 20 cps and 20,000 kilocycles. It will make noise measurements of voltages as small as 100 microvolts. A linear r-f detector makes it possible to measure these characteristics directly from a modulated r-f carrier. The high sensitivity, stability and accuracy of the 330B make it extremely valuable for broadcast, laboratory and production measurements.

Additional Instruments on Reverse Side of Page

Wid-Band Amplifier
Hp. 450A Amplifier is a new, versatile, wide-band amplifier designed for general laboratory or production use. It provides exceptional stability at 40 or 100 db gain, and gives freedom from spurious responses. Low phase shift is assured by a straight-forward, resistance-coupled amplifier design, together with inverse feedback. Frequency response is flat within 0.5 db between 10 and 1,000,000 kilocycles. Varying tube voltages or aging tubes have no appreciable effect on the gain or other characteristics. When used in conjunction with hp. 400A Vacuum Tube Voltmeter, it increases voltmeter sensitivity 100 times.

H-F Vacuum Tube Voltmeter
Hp. 410A High Frequency Vacuum Tube Voltmeter combines in one instrument an ac voltmeter covering frequencies from 20 cps to 700 megacycles, a dc voltmeter with 100 megohms input impedance, and an ohmmeter capable of measuring resistances from 2 ohms to 500 megohms. The special probe places a capacity of 1.3 microfarads across the circuit under test. Input resistance for ac measurements is 6 megohms. Six voltage ranges provide full-scale sensitivities from 1 to 300 volts.

Resistance-Tuned Audio Oscillators
Hp. Resistance-Tuned Oscillators are suitable for almost every type of work. Their low distortion makes them particularly valuable in making distortion measurements on audio amplifiers, broadcast transmitters and other equipment. They provide an excellent source of voltage for accurate bridge measurements. The output is sufficient to drive signal generators and other equipment requiring considerable power. Their wide frequency range also makes them suitable for work in the supersonic region.

Harmonic Wave Analyzer
Hp. Model 300A Harmonic Wave Analyzer is an excellent instrument for both laboratory and production work where accurate and rapid measurement of individual components of a complex wave is required. The maximum selectivity is sufficient for measurement of harmonics of frequencies as low as 10 cycles and it can be varied over a wide range. With this variable selectivity feature, measurement at higher frequencies can be made more rapidly, yet with no sacrifice in accuracy.

Audio Signal Generators
Hp. Model 206A Audio Signal Generator is specially designed for a.m. and f.m. broadcast measurements. Frequency range is 20 cps to 20 kilocycles. Distortion is less than 0.1%. At 0.1% of full scale, 20 to 200 kilocycles; and 0.25% down to 20 cps. Attenuators are adjustable from 0 to 111 db of attenuation in 0.1 db steps. Maximum output is +15 dbm. Balanced center-tapped output system matches 600, 150 or 50 ohm systems. Other hp. audio signal generators provide up to 5 watts power between 20cps to 100 kilocycles.

Additional Instruments on Reverse Side of Page
POWER SUPPLY UNIT

- hp Model 710A Power Supply is an excellent source of d-c power for every laboratory and production department use. It is portable and economical. Output is continuously variable between 0 and 500 volts. A special automatic coupling device called "opc" provides a stable, accurate output.