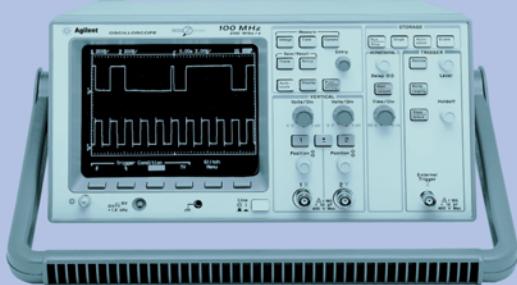


# Know your **Bench** Instruments

## Oscilloscope

An oscilloscope displays voltage waveforms that are present in your circuit. It allows you to measure voltage and frequency of multiple channels and show their phase relationships. Advanced functions include frequency measurement, rise and fall times and even FFT in some oscilloscopes. Mixed signal oscilloscopes additionally add several digital logic channels to the display.



## Function/Arbitrary Waveform Generator

Use this instrument to generate sine, square, ramp and other analog signals at various amplitudes and frequencies to stimulate your circuit. Arbitrary waveform generators allow you to define the shape of the waveform you want to generate for your particular circuit test.



## Power Supply (PSU)

This instrument provides controlled voltage and current to power your circuit. Controls prevent circuit damage by limiting the maximum current or voltage applied to your test circuit.



## Digital Multimeter (DMM)

Need to accurately measure voltage, current or resistance in your circuits? DMMs are highly flexible and can often measure additional parameters, such as dB, dBm, and continuity. When you need high resolution and accuracy, use a DMM.



## Instrument Control Software

A PC running instrument control software can put your test equipment into a pre-defined state and extract data from the instruments via a GPIB or RS-232 interface. The gathered data can then be used to generate informative displays such as graphs, charts and histograms. Software enables the user to perform precise, repeatable measurements and record the information accurately.

