- Variable threshold levels
- Pulse stretching provides better visibility
- Pulse memory and overload protection add reliability
- CMOS and other logic families operate between 3 and 18 volts.
- A simple TTL/CMOS switch allows selection.
- Stretching slows and lengthens short, fast pulses at the display to make them more visible to the operator.
- Data streams present a similar visibility problem; the 545A blinks at a constant rate (about 10 MHz) to indicate activity.
- Pulse memory ensures that the operator can see intermittent pulses.
- High input impedance is standard and helps avoid circuit loading during measurements.

Like all Agilent probes, the 545A is an automatic, multi-family instrument with standard definitions of HIGH, LOW, and bad level common to both microprocessors and random logic.

The low-cost instrument-on-a-chip 545A requires little operator orientation, no adjustments, and no control setting. Just place the probe tip on a gate, ROM, address bus, or I/O port and read HIGHs, LOWs, open circuits or bad levels, single pulses, or pulse trains. The simple, unambiguous, one-lamp indicator allows 360-degree viewing to clearly and quickly show the state of the circuit under test without time-consuming interpretation.