



P6401 Logic Probe

TTL/DTL Compatible

Detects Steady Logic Levels

Detects Trains of Logic Pulses

Detects Abnormal Conditions

Strobed Detection of Logic Pulses

Store Mode

Protected against Overvoltage

The small, lightweight, hand-held P6401 indicates the state of logic levels in TTL, DTL, or any other system with threshold between 0.7 and 2.15 volts. A strobe input can be used to detect the coincidence of logic signals at two points. An indication of whether a logic pulse has or has not occurred can be obtained in a "store" mode.

Power may be obtained from the unit under test or any 5 V supply.

Two bright lights in the probe tip indicate condition of the logic signal.

State or Condition	Indication
Steady high state	Steady red light
Steady low state	Steady green light
Pulse trains (normal logic switching)	Blinking red and green light at full intensity
Abnormal state (between high and low)	No lights
Open circuit	No lights
Excessive input voltage greater than 6 V	Both red and green lights lit
Alternating between high state and indeterminate state	Blinking red light
Alternating between low state and indeterminate state	Blinking green light
Single or very low duty cycle logic pulse	Using STORE mode, one light will be on initially. Event has occurred when second light is lit.

SPECIFICATIONS

Low State Input Voltage Range — 0 V to ± 0.7 V ± 0.125 V.

High State Input Voltage Range — 2.175 V ± 0.125 V to V_{cc} .

Minimum Recognizable Pulse Width — 10 ns.

Impedance — ≈ 7.5 k Ω paralleled by ≈ 6 pF.

Minimum Circuit Resistance for Open Circuit Indication — 10 k Ω .

Max Safe Input — ± 150 V (dc or rms).

Minimum Recognizable Strobe Pulse Width — 20 ns.

Max Safe Strobe Input — ± 30 V (dc or rms).

Strobe Input Impedance — 5.6 k Ω within 20%.

ORDERING INFORMATION

P6401 5 ft Probe (010-6401-01) \$90

- Includes: Hook Tip (206-0114-00)
- Strobe Lead (175-0958-01)
- Strobe Lead (175-0958-00)
- Probe Tip to 0.025 in square pin adapter (206-0137-01)
- White Plug (348-0023-00)
- 2 Alligator Clips (344-0046-00)
- Accessory Pouch (016-0537-00) not shown