

LOGIC PROBE OMEGA TYPE LP-002/PS with Power Supply is an indispensable and very useful, handy and in-expensive tool, for any one concerned with digital circuit. In some cases it is even better than a costly oscilloscope. For example if it is required to observe a pulse of very short duration, as narrow as 40 nano sec. and which repeats after a long duration. It will be difficult to detect it even with a costly oscilloscope unless it has storage facility and this type of situation is not very uncommon in digital circuits. Logic Probe can easily detect this type of pulse and the pulse is stretched upto about 1 sec. for case of observation. Exact voltage levels are not of much interest in digital circuits. It is only to be known whether the level is within the reliable operation of the system. The logic probe detects the level and indicates by the letters H, L, P, & O for High, Low, Pulse & Open respectively and thus makes it easier and faster in trouble shooting. The logic levels indicated are compatible with the most popular TTL/CMOS ICs.

The old age concept of signal injector and tracer in trouble shooting of electronic circuit can be applied to digital systems too, with the Logic Probe as per the tracer and logic pulser (OMEGA TYPE LPR-003) as signal injector. They both make an excellent pair in trouble shooting of digital systems.

SPECIFICATIONS

- 01 OPERATING VOLTAGE : 5V ± 3% regulated DC at 150mA, Ripple < 3mV.
- 02 LOGIC STATE INDICATIONS
 - 2.1 High Level '1' : 'H' (HIGH).
 - 2.2 Low Level '0' : 'L' (LOW).
 - 2.3 Open / Floating state : 'O' (OPEN).
 - 2.4 Pulses : 'P' (PULSES).
- 03 LOGIC FAMILIES : TTL / CMOS.
- 04 FREQUENCY : Upto 50MHz for TTL/CMOS.
- 05 RECOGNISED VOLTAGE LEVELS BY LOGIC PROBE AT AN OPERATING VOLTAGE OF 5V ±3% RIPPLE < 3mV
 - 5.1 High Level Threshold : > 3.0V
 - 5.2. Low Level Threshold : < 0.8V
 - 5.3 Open/Floating Level : 0.8V to 3.0V (Approx.)
 - 5.4 Over Load Protection : Upto 25V source
 - 5.5 Sink Current : Less than 15mA
- 06 SUPPLY CURRENT TAKEN BY THE PROBE : Less than 150mA
- 07 SHORTEST PULSE WHICH CAN BE DETECTED BY THE PROBE : 40 nano Sec.
- 08 Pulse detection is retriggerable and hence continuous pulses or clock will be indicated by 'P'.
- 09 Positive going pulse will be indicated by letter 'L' followed by letter 'P' and then 'L' again.
- 10 Negative going pulse will be indicated by the letter 'H' followed by letter 'P' and then 'H' again.

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THE INDICATOR 'O' OCCURS IN TWO SITUATIONS
 11.1 When the probe tip is not connected to a test point
 11.2 When the test point is floating with a level lying between about 0.8V to 3V

12 SPECIFICATIONS OF POWER SUPPLY

- 12.1 INPUT : Switch selectable Mains / Battery input of 230V ± 10% 50Hz or 6V D.C. (Using 4 x 1.5V cell type 1050 Eveready)
- 12.2 OUTPUT VOLTAGE : 5V ± 3% regulated D.C.
- 12.3 RIPPLE LEVEL : Less than 3mV R.M.S.
- 12.4 OUTPUT CURRENT : 150mA CAPACITY

LOGIC PROBE OMEGA TYPE LP-002

All specifications are same as given above except Power Supply

- 01 Weight : 0.2 Kg. (approx) For Lp-002
- 02 Dimension : W 255 x H 22 x D 22 (for LP-002)
- 03 Weight : 2 Kg. (approx) For LP-002PS
- 04 Dimension : W 145 x H 140 x D 200 (for LP-002PS)



We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

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