

# MODEL LP25A LOGIC PROBE OPERATION INSTRUCTIONS

## INTRODUCTION

The LP25A Logic Probe is a powerful troubleshooting tool. It contains a level detector, a pulse detector, pulse memory and audio tone generator whose tone output is dependent upon the waveform being monitored. The LP25A is compatible with TTL, DTL, RTL, CMOS, NMOS and MOS integrated circuits. The LP25A will detect pulses as narrow as 30ns, at a repetition rate of up to 25MHz.

## SPECIFICATIONS

### A. Maximum Allowable Ratings

Supply Voltage .....	20 volts
Input Voltage .....	50 volts

### B. Operating



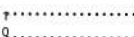




Input Impedance .....	1M $\Omega$
Min. Pulse Width .....	30ns
Max. Frequency .....	25MHz
Logic Thresholds .....	1 0
TTL ( $\pm$ 0.2 volts) .....	2.3 0.8
CMOS (%VCC) .....	70% 30%
Power Supply .....	5-15 volts
Input Protection .....	200VAC/VDC
Size .....	8.2 (210) x 0.7 (18) x 0.7 (18) inches (centimeters)
Weight .....	1.2 (35) ounces (grams)

## OPERATION INSTRUCTIONS

Verify that the supply voltage of the circuit to be tested is not greater than 20 volts. Connect the red and black clips from the LP25A to the positive and negative power supply terminals of the circuit under test, respectively. Set the pulse/memory switch to the desired position. In the pulse position, the logic probe will operate normally. When the switch is set to the memory position, the pulse indicator will illuminate whenever a logic transition occurs and remain on until reset.

### INPUT WAVEFORMS AND LED INDICATIONS

0=LED off;  $\star$ =LED on; F=LED flashing;  $\Delta$ =LED may be on or off

CONDITION	WAVEFORM	LED INDICATION	BEEPER
Logic "0"		R G Y 0 $\star$ 0	Low Freq
Logic "1"		$\star$ 0 0	High Freq
Invalid		0 0 0	No Tone
1 With Neg Pulse		$\star$ 0 F	Pulsing High
0 With Pos Pulse		0 $\star$ F	Pulsing Low
Sq Wave < 200kHz		$\star$ $\star$ F	Pulsing Hi/Lo
Sq Wave > 200kHz		$\Delta$ $\Delta$ F	No Tone

## ONE YEAR WARRANTY

Model LP25A Logic Probe is warranted in its entirety against any defects of material or workmanship which develop for any reason whatsoever, except abuse, within a period of one year following the date of purchase of the logic probe by the original purchaser. This warranty is extended by Wavetek Corporation only to the original purchaser or original user of the logic probe.

In the event a defect develops during the warranty period, Wavetek Corporation will, at Wavetek Corporation's election, repair or replace the logic probe with a new or reconditioned model of equivalent quality. In order to obtain performance of any obligation of Wavetek Corporation under the warranty, the original purchaser or original user must return the defective logic probe, postage prepaid, and proof of purchase to:  
WAVETEK CORPORATION, 9045 Balboa Avenue, Suite A, San Diego, California 92123-1509  
Attention: Instrument Repair. The phone number is (619) 279-2200 ext. 670.

In the event of replacement with a new or reconditioned model, the replacement unit will continue the warranty period of the original logic probe.

ANY IMPLIED WARRANTIES ARISING OUT OF THE SALE OF A MODEL LP25A LOGIC PROBE, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE ABOVE STATED ONE YEAR PERIOD. WAVETEK CORPORATION SHALL NOT BE LIABLE FOR LOSS OF USE OF THE LOGIC PROBE OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES OR ECONOMIC LOSS, OR FOR ANY CLAIM OR CLAIMS FOR SUCH DAMAGE, EXPENSES, OR ECONOMIC LOSS.

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