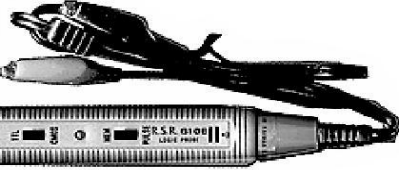


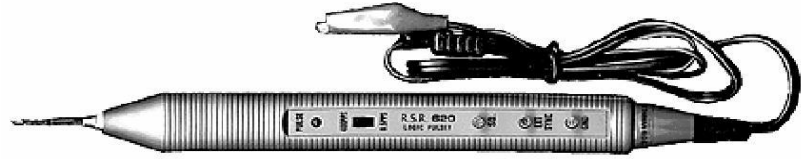
RSR Logic Probes and Pulsers

Part No. 01LP610 Logic Probe With Beeper Tone (20MHz)

Models 610/611



Model 620



INTRODUCTION

Model 625



The Logic Probe is ideal for troubleshooting and analysis of logic circuits. It works as a level detector, a pulse detector, a pulse stretcher, and a pulse memory (*Models 611 and 610B only*). It features include

- Circuit powered
- LED indicators: HI (red LED), LO (green LED) and PULSE/MEMORY (yellow LED) (*Models 611 & 610 only*).
- Logic HI; LO; PULSER with different beeper tone (*Model 610 only*).
- Switch-selectable pulse detection or pulse memory function (*Models 611 & 610 only*)
- Switch-selectable TTL or CMOS circuits. (*Models 611 & 610 only*).

OPERATION

- Attach red alligator clip to positive side of d.c. power supply of printed circuit board under test.
- Attach black alligator clip to negative side of d.c. power supply of printed circuit board under test.
- LED Display pattern:

MODEL	611 & 610			610	625	
	LED			BEEPER	LED	
INPUT SIGNAL	HI	LO	PULSE		HI	LO
Logic "1"				High tone		
Logic "0"			○	Low tone	●	○
Bad Level or Open Circuit			○		○	●
Square Wave < 200KHz			◐	1. Alternate and Intermittently sound 2. Mixed and Intermittently sound	○	○
Square Wave > 200KHz			*		●	●
Narrow High Pulse			*	Intermittently low tone	●	●
Narrow Low pulse		●	*	Intermittently high tone	●	●
LED ON	LED OFF	LED ○ or may not be on			●	●

● ○ ◐

* Blinking LED, intensity is proportional to the duty cycle of the signal observed.

NOTE: If Model 625 LO LED lighted, when power supply voltage is upper 10V.
This is normal condition; will not effect the logic probe features.

- After the PULSE / MEMORY Switch is placed in MEM position, the Pulse indicator (yellow LED) will latch on with the first transition (either rising or falling). Thereafter, as long as the probe is powered, the LED will remain on until reset by switching to PULSE position. (*611 & 610 only*)

GENERAL

Operating Temperature 0°C to 50°C, 80% Relative Humidity
Storage Temperature –20C to 65°C, 75% Relative Humidity
Weight *Models 611 & 610B* 1.6 Ounces (45g) approx.
Model 620 1.4 Ounces (40g) approx.
Model 625 1.76 Ounces (50g) approx.
Dimensions 8.2 Inches (21 cm) Long x 0.7 Inch (1.8cm) Wide x 0.7 Inch (1.8cm) Deep

SPECIFICATIONS

ELECTRICAL (AT 23 ± 5°C, 75% RELATIVE HUMIDITY MAXIMUM):

MODEL	611 & 610B	625
Maximum Input Signal Frequency	20MHz	50MHz
Input Impedance	1MΩ	120KΩ
Operating Supply Range	4V DC Min., 18V DC Max.	4V DC Min., 18V DC Max.
TTL: Logic “1” (HI LED)	> 2.3 ± 0.2V DC	> 3.0 ± 0.25V
Logic “0” (LO LED)	< 0.8 ± 0.2V DC	< 0.75V ± 0.25V
CMOS: Logic “1” (HI LED)	> 70% Vcc ± 10%	> 60% Vcc ± 5%
Logic “0” (LO LED)	< 30% Vcc ± 10%	< 15% Vcc ± 5%
		< 40% Vcc ± 5% For 7-18 Vcc
Minimum Detectable Pulse Width	30 Nanoseconds	10 Nanoseconds
Maximum Signal Input Protection	± 220V AC/DC (15 sec)	± 70V AC/DC (15 sec)
Power Supply Protection	± 20V DC	± 20V DC
Pulse Indicator Flash Time	500ms	

LOGIC PULSER (MODELS 620 & 625)

INTRODUCTION

NOTE: *When supply voltage is 7-18 Vcc Green LED may be light. this is normal condition*

The Logic Pulser is very effective tool for inspecting and repairing the logic circuits. It can be used directly to inject a signal into the logic circuits without removing the IC or breaking the circuits. The 100mA pulse output insures that the device under test will be pulsed while the short 10µs duration of the output pulse makes sure that no damage will be done to the circuit under test. The Logic Pulser output is switchable between 0.5 and 400Hz, making it suitable for use with either a logic probe or with an oscilloscope; also has an external sync input, which enables the user to synchronize the pulse output with an external signal, such as a computer clock circuit.

OPERATION

- a. Attach red alligator clip to positive side of d.c. power supply of printed circuit board under test.
- b. Attach black alligator clip to negative side of d.c. power supply of printed circuit board under test.
- c. Setting the repetition rate switch to 0.5apps or 400pps.

SPECIFICATIONS (MODELS 620 & 625)

Sync Input Impedance1MΩ
Pulse Rate 0.5 / 400 Hz
Pulse Width 10µs
Output Current100mA sink/source
Square Wave Output Current5mA sink/source
Power Supply Range5 – 15 V DC
Power Supply Protection 20V DC (30 second max)
Sync Input Protection 120 V DC (30 second max.)
Test Point Protection35V DC (30 second max.)

