

Logic Lab Trainer

LLT-900



The LLT-900 Logic Lab offers a unique entry into the world of microelectronics. The system combines simple, easy to use, logic gates with a versatile solderless breadboard area.

By using the clearly marked built-in logic gates, students new to digital electronics can implement logic circuits in a matter of seconds. As confidence grows the student will naturally progress to using more complex logic integrated circuits on the undedicated breadboard area.

This unique approach enables the unit to be used by the absolute beginner, yet it may also be usefully employed in advanced project work. The many outstanding features of the Logic Lab, combined with its ease of use and robust housing, make it the first choice for those wishing to introduce students to logic gates for the first time

Specification

DC Power Supply	Fixed Output : -5V/1A, +5V/1A, -12V/1A, +12V/1A Variable Output : -1.2V to -12V/1A, +1.2V to +12V/1A Full short protection with short circuit indicator is provided
Pulse Generator	1Hz, 10Hz, and 100Hz square wave
Logic Switches	Eight robust debounced HI/LO slide switches
Logic Indicators	Eight LED logic indicators
Logic Gates	60 built-in logic gates comprising: eight dual-input AND gates eight dual-input OR gates eight dual-input NAND gates eight dual-input NOR gates eight dual-input XOR gates eight dual-input XNOR gates eight single-input NOT gates two dual-input J-K Flip-Flop two dual-input D Flip-Flop
Solderless Breadboard	1896 interconnected tie points, accepting all DIP devices, components with leads and solid wires of AWG 22 (0.3 to 0.8mm)
Accessories	Power lead and user manual
Power Supply	240VAC, 50Hz
Physical Characteristics	Dimensions: 280mm (width), 240mm (depth), 150mm (height) Weight: 4.5kg

Application

Basic logic functions
Boolean algebra and simplification of logic equations
De Morgans theorem
TTL NAND/NOR gate definitions and the AND gate
The exclusive-OR gate and its application
The full-adder and full-subtractor
The bistable or flip-flop