Description
The Logic Tutor LT345 Mk2 is ideal for introducing logic tuition into a syllabus on a small budget. It is a compact and easy-to-use board for studies of digital techniques and principles. It is supplied with a comprehensive teaching manual which takes the student from the simplest logic operations, up to the applications of counters, shift registers and numeric displays. For ease of interconnection and understanding, all necessary inputs and logic indicators are built-in and all logic elements are shown in mimic diagram form on the panel. Unlike many other logic tutors, there are no confusing cross references to integrated circuit data sheets. The integrated circuits are permanently fitted, which avoids the potential student damage and contact problems normally associated with the ‘breadboard type of tutor employing loose ICs and sockets. The Logic Tutor is robust and fully protected electrically and mechanically against the most common forms of maltreatment. All the workboards in our Electricity and Electronics range use an open printed circuit board construction and can be conveniently housed in the dedicated Systems Storage Rack SSR1000.

Features
- Wide range of combinational and sequential logic studies
- All inputs and displays provided
- Complete with comprehensive instruction manuals
- Reliable and robust
- Economically priced
Logic complement
3 x 4-input AND, 3 x 4-input OR, 3 x 2-input AND, 3 x 2-input OR,
2 x 4-input NAND, 2 x 4-input NOR, 6 x inverters, 4x JK flip-flops with
edge-clocking and d.c. preset and clear.

Inputs
4 x Binary slide switches, 1 x unlatched change-over push-button,
1 x Latched push-button.

Outputs
4 x LED logic state indicators, 1 x 7-segment numeric display with binary-
to-decimal decoder.

Logic levels
TTL, 0V and +5 V nominal.

Construction
Single-sided PWB with logic symbols silk-screened on component side,
mounted in plastic protective box.

Interconnections
By stackable 2 mm leads and sockets. Six 2 mm-to-4 mm transfer points are
provided for connection to external equipment e.g oscilloscopes, meters,
generators, etc. Number of leads supplied - 40 x 2 mm as follows: 15 x 100 mm
(4 in), 15 x 150 mm (6 in), 10 x 300 mm (12 in). 2 x 4 mm: 560 mm (22 in).

Manual Supplied
Logic Tutor LT345
Thirteen Assignments as follows: Binary numbers; Basic Logical Operations;
Combinational Logic; Karnaugh Maps; The simple latch and clocked flip-flops;
The JK flip-flop; Equivalence, Non-equivalence and other circuits; Binary
addition; Registers; Synchronous Counters; Asynchronous Counters; Codes
and Code Converters; 7-segment Display.

Power requirements
Requires 0 V and +5 V at 500 mA maximum. Feedback dc Power Supply,
01-100 is recommended. A 500 mA fuse protects against short circuits on
the board. The circuits are protected against accidental reverse or over-
voltage connection.

Storage
Supplied in a box containing the LT345 Mk2, leads and manual.

Dimensions & Weight
Width: 295 mm (11.6 in)       Depth: 220 mm (8.7 in)
Height: 45 mm (1.75 in)        Weight: 0.25 kg (0.55 lb).

Tender Specification
TTL Logic Tutor to teach combinational and sequential digital circuits and
numeric displays. To provide mimic diagram of all elements. To be
powered from an external +5 V supply. Complete with teaching manual
containing thirteen assignments. If no laboratory power unit is available,
a suitable unit can be supplied by Feedback.

Ordering Information
Logic Tutor (supplied without Power Supply, use 01-100)           LT345 Mk2 d.c.
Power Supply                                                  01-100
System Storage Rack                                          SSR1000

For further information on Feedback equipment please contact ...