



Sciencetech TechBooks are compact and user friendly learning platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each TechBook is provided with detailed Multimedia learning material which covers basic theory, step by step procedure to conduct the experiment and other useful information.

**Sciencetech 2614 Digital Lab** is used to perform digital circuit experiments. It is very useful in Digital laboratories for performing digital experiments in colleges and universities. It is also useful in testing circuits and making projects related to digital electronics.

**Digital Lab comprises of following blocks**

- ▶ DC Power
- ▶ Pulser Generator
- ▶ Pulser Switches
- ▶ 16 bits Data Switches
- ▶ Logic Probe
- ▶ Digital Display
- ▶ Mode Selector
- ▶ 16 bits LED Display

**Features**

- Self contained & easy to operate**
- Functional blocks indicated on board mimic**
- Solder free breadboard**
- On Board DC power supply**
- Onboard pulse generator with TTL/CMOS mode**
- Pulser switches, 16 bits data switches**
- Bicolor LED display, logic probe, BCD to seven segment display**
- CMOS/TTL output**
- 2 Years Warranty**

**Scope of Learning**

- Study of 8 bit Equality Detector by IC-74HC688 and by Logic Diagram
- Study of 1:16 De-multiplexer using IC-74HC154 and by Logic Diagram
- Study of 16 to 4 Line Encoder
- Study of 8:1 multiplexer using IC-74HC15
- Study of 12 bit Odd Parity Generator and 13 bit Parity Checker

- Study of 12 bit Even Parity Generator and 13 bit Even Parity Checker
- Study of 4-Bit Arithmetic Logic Unit
- Study of data writing in and reading from SRAM memory

**Technical Specifications**

Size of Breadboard	:	172.5 mm x 128.5 mm
Connections on Breadboard	:	1685
DC Power Supply	:	+5 V; I A, -5 V; 500 mA, +3 V to +15 V; 500 mA (variable) -3 V to -15 V; 500 mA (variable)
Pulser Generator	:	1Hz to 1MHz in 6 steps Variable in between steps
Amplitude	:	3 V-15 V (CMOS), 5V (TTL) Duty cycle: 50 %, TTL/CMOS output
Pulser Switches	:	2 nos. (Push to 'On')
Data Switches	:	16 nos (Toggle switches for both TTL & CMOS mode)
LED Display	:	8 nos (TTL/ CMOS Mode)
BCD to Seven Segment Display	:	2 nos
Logic Probe	:	Logic level indicator for TTL/ CMOS (7 Segment)
<b>Power Supply</b>	:	110-220 V ± 10%, 50/60 Hz
<b>Weight</b>	:	3 Kgs. approximately
<b>Dimensions (mm)</b>	:	W 326 x H 52 x D 252
<b>Learning material</b>	:	CD (Theory, procedure, reference results, etc). Online (optional)

**Included Accessories :**

Bread Board	:	2 nos.
Connecting Wire	:	20 nos.
2mm to 1mm Patch cord	:	16 nos.
2mm to 2mm Patch cord 16"	:	16 nos.
Mains Cord	:	1 no
TINA Pro(Demo)	:	1 CD.
Learning Material (CD)	:	1 no

Designed & Manufactured by -

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