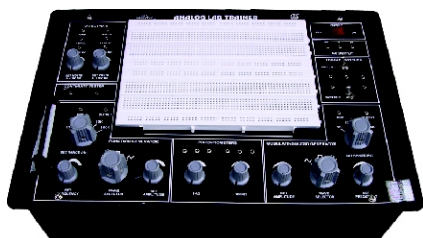


Analog & Digital Electronics Lab Training Modules

ME 1153 - Analog Lab Trainer (Bread Board Model)

Features :

- Advanced lab trainer for students to perform more than 50 experiments of analog electronics
- Compatible with optional ready to use experimental modules
- Glass Epoxy PCB used as front panel of 300mm x 220mm & mounted on light weight shock proof plastic cabinet
- On board power supplies, Function generator, and other input signals
- Bread board provided
- Supplied with connecting wires



Technical Specifications :

DC Regulated Power Supplies

- Output voltages : One fixed DC regulated power supply of +5V/1Amp
: One fixed DC regulated power supply of $\pm 12V/500mA$
: One variable DC regulated power supply of $0-\pm 15V/500mA$
- Load regulation : $\pm 0.2\%$
- Line regulation : $\pm 0.05\%$
- Ripple : Less than 3mV RMS
- Protections : Short circuit & over load protected

AC Supply

- Output voltage : 9-0-9V/500mA

Function Generator

- Operating modes : Sine, Square, Triangular
- Frequency range : 1Hz to 100KHz (with Adjustable Amplitude)

Modulation/AudioGenerator

- Operating modes : Sine, Square, Triangular
- Frequency range : 1Hz to 10KHz (with Adjustable Amplitude)
- **Continuity Tester** : For testing the continuity, provided with beeper sound
- Power requirement : 220 VAC $\pm 10\%$, 50 Hz
- Weight : 3.0Kg Approx.
- Dimensions (mm) : 330 (L) x 225 (B) x 75 (H)

Standard Accessories :

- 5 mtr. hookup wire, 20 nos. Patch Chords with 2mm banana plug on one end, Power Chord & Instruction Manual
- Bread Board Strips 2 Nos vertically common strips (640 Tie points each), 4 Nos horizontally common strips (100 Tie points each)

Optional Accessories :

- Dual Trace CRO 20MHz (ME 3020)
- Digital Multimeter (VC 97)
- 10 Nos. Patch Chords with both side 2mm banana plug (Required only when optional ready to use analog lab modules ordered with ME 1153)

ME 1154 - Digital Lab Trainer (Bread Board Model)

Features :

- Advanced lab trainer for students to perform more than 50 experiments of digital electronics
- Compatible with optional ready to use experimental modules
- Glass Epoxy PCB used as front panel of 300mm x 220mm & mounted on light weight shock proof plastic cabinet
- On board power supplies, Function generator, and other input signals
- Bread board provided
- Supplied with connecting wires



Technical Specifications :

DC Regulated Power Supplies

- Output voltages : One fixed DC regulated power supply of +5V/1Amp
: One fixed DC regulated power supply of -5V/500mA
: One variable DC regulated power supply of $\pm 3 - \pm 12V/500mA$
- Load regulation : $\pm 0.2\%$
- Line regulation : $\pm 0.05\%$
- Ripple : Less than 3mV RMS
- Protections : Short circuit & over load protected

Pulse Generator

- Operating modes : Square
- Frequency range : 1Hz to 1MHz in 6 Steps (Amplitude 3V~15V (CMOS), 5V (TTL))
- Duty Cycle : 50%, TTL/CMOS output

Switches/LED/Display

- 2 nos. Push to on Pulsar Switches
- 8 Nos toggle switches for both TTL & CMOS mode
- 8 Nos. LED Display (TTL/CMOS Mode)
- 3 Nos. Seven Segment Display
- Logic Probe Logic level indicator for TTL/CMOS (7 Seg.)
- Power requirement : 220 VAC $\pm 10\%$, 50 Hz
- Weight : 3.0Kg Approx.
- Dimensions (mm) : 330 (L) x 225 (B) x 75 (H)

Standard Accessories :

- 5 mtr. hookup wire, 10 nos. Patch Chords with 2mm banana plug on one end, Power Chord & Instruction Manual
- Bread Board Strips 2 Nos vertically common strips (640 Tie points each), 4 Nos horizontally common strips (100 Tie points each)

Optional Accessories :

- 20 Nos. Patch Chords with both side 2mm banana plug (Required only when optional ready to use digital lab modules ordered with ME 1154)