Order Code - 33502
Analog Lab

ANALOG LAB is intended for elementary as well as advance training of analog electronics. The trainer covers regular analog circuits by solderless interconnections on breadboard and as well as compatible with all optional modules, through use of 2mm brass terminals and patch cords. Various DC regulated power supplies, Function Generator, DMM, Continuity Tester etc are in-built. The unit housed in attractive enclosure is supplied with mains cord, patch cords, Instruction manual and **Component Set**.

Experimental Coverage:

001. Study of Diodes in DC circuits
002. Study of Light Emitting Diodes in DC Circuits
003. Study of Half wave rectifier
004. Study of Full wave rectifier
005. Study of Zener Diode as a voltage regulator
006. Study of transistor series voltage regulator
007. Study of transistor shunt voltage regulator
008. Study of Low pass filter
009. Study of High pass filter.
010. Study of band pass filter
011. Study of CE configuration of NPN transistor
012. Study of CB configuration of NPN transistor
013. Study of CE amplifier
014. Study of Monostable multivibrator using transistor
015. Study of Bistable multivibrator using transistor
016. Study of Astable multivibrator using transistor
017 Study of CB Amplifier (PNP)
018 Study of CC Amplifier (PNP)
019 Transistor Audio Amplifier
020 Two Stage R.C. Coupled Transistor
021 Inverting Amplifier
022 Non-inverting Amplifier
023 Integrating Amplifier for A.C input Signal
024 Differentiator Amplifier
025 Square Wave Generator

Features:

Bread Board	:	Unique solder-less large size, spring loaded breadboard consisting of two Terminal Strips with 1280 tie points and 4 Distribution Strips with 100 tie points each, totaling to 1680 tie points. (Size:112mm x 170mm approx)
Regulated DC Power Supply	:	+5V at 1 Amp, -5V at 1Amp, +12V/0 to 20V at 500mA, and -12 V/0 to -20V at 500 mA
AC Supply	:	5-0-5V, 10-0-10V at 100mA. Can be used as 5V,10V,15V,20V and also as center tap
Function Generator	:	Sine / Square / Triangular waveforms frequency 1 Hz to 110 KHz in 5 Steps. Variable in between steps. Sine / Square / Triangular waveform output 50mV ~10Vpp variable
Modulation Generator	:	Sine / Square / Triangular wave forms frequency 1 Hz to 110 KHz in 5 Steps. Variable in between (100 KHz) steps. Sine / Square / Triangular waveform output 50mV ~ 10Vpp variable with 100 KHz Modulation
Digital Meter (3½Digit)	:	Dual range DC voltmeter 0-20 V / Ammeter 0-200mA
Continuity Tester	:	For testing the continuity. Provided with Beeper Sound
Potentiometers	:	3 Potentiometers (1K, 100K and 100K) with terminals
On Board Switches	:	2 Switches Single pole double through
Power	:	230 V ± 10%, 50 Hz
Components Provided	:	Resistance ± 5% 1W 100E/1, ½ W 47E/2,100E/1, 220E/1, 390E/1,1K/1,¼W 100E/1, 220E/2, 270E/1, 330E/, 1K/3, 2K2/2, 3K3/1, 4K7/2, 5K1/1, 5K6/1, 10K/2, 12K/1, 15K/2, 47K/2, 68K/1, 100K/4, 180K/2, 220K/1 Capacitor 0.1uF/1, 0.22uF/3, 10uF/25V/3, 22uF/25V/2, 47uF/25V/2, 100uF/25V/1, Diode 1N 4007/4, LED 5mm Red/1, Zener Diode 5V6/400mW/1, Transistor SL 100/1, SK 100/1, BC 107/2, BC 177/2,IC 741/2
Accessories	:	Mains cord, Operating and Experimental manual, Red & Black patch cords (2mm with Pin) 10 each, Red & Black patch cord (Pin to Pin) 10 each & **Component Set**
Instruction manual	:	Strongly supported by detailed operating instructions
* Weight	:	5 Kg. (Approx.)
* Dimension	:	W 412 x H 150 x D 310

Note: Specifications are subject to change.

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OPTIONAL MODULES:

Apart from above given experimental coverage of 25 experiments on breadboard, customers can purchase these optional modules. These are ready to use modules with wired components & circuit schematic drawn on top compatible to use with Analog Lab.

36001	Study of Diodes in DC circuits
36002	Study of Light Emitting Diodes in DC Circuits
36003	Study of Half wave rectifier
36004	Study of Full wave rectifier
36005	Study of Zener Diode as a voltage regulator
36006	Study of transistor series voltage regulator
36007	Study of transistor shunt voltage regulator
36008	Study of Low pass filter
36009	Study of High pass filter
36010	Study of band pass filter
36011	Study of CE configuration of NPN transistor
36012	Study of CB configuration of NPN transistor
36013	Study of CE amplifier
36014	Study of Monostable multivibrator using transistor
36015	Study of Bistable multivibrator using
36016	Study of Astable multivibrator using transistor
36017	Study CB amplifier (PNP)
36018	Study CC amplifier (PNP)
36019	Study Zener diode voltage regulator
36020	Study power supply having two zener diodes in series
36021	Study dual polarity voltage regulated supply
36022	Plot V / I of LED
36023	To practically understood the operation of a 7-segment LED display
36024	To Study CC characteristics of NPN transistor
36025	To study CE characteristics of PNP transistor
36026	To study CB characteristics of PNP transistor
36027	To study CC characteristics of PNP transistor
36028	Study full wave dual supplies
36029	FET charactersistic
36030	Verify superposition theorem
36031	Verify thevenin's theorem
36032	Verify receprocity theorem
36033	Phase shift oscillator
36034	Verify kirchoff 's law (V& I)
36035	Ohm's law
36036	Ideal resistance
36037	Resistance in series
36038	Resistance in parallel
36039	Verification of maximum power transfer theorem

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