

OMEGA TYPE ANALOG LAB is intended for elementary as well as advance training of analog electronics. The trainer covers regula analog circuits by solder-less 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 Genrator, 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 (3½ Digit) : Dualrange 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 Proded : 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

Contd...

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS

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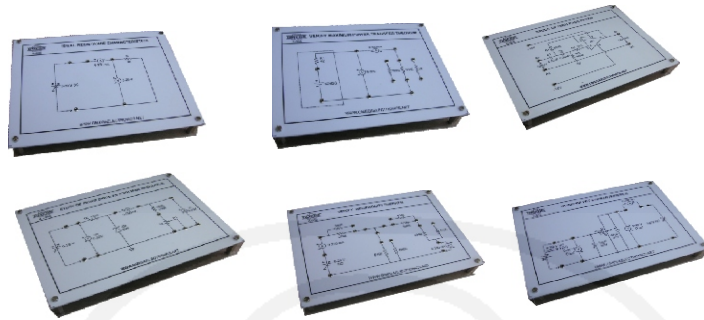
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OPTIONAL MODULES:

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.



- A001. Study of Diodes in DC circuits
- A002. Study of Light Emitting Diodes in DC Circuits
- A003. Study of Half wave rectifier
- A004. Study of Full wave rectifier
- A005. Study of Zener Diode as a voltage regulator
- A006. Study of transistor series voltage regulator
- A007. Study of transistor shunt voltage regulator
- A008. Study of Low pass filter
- A009. Study of High pass filter
- A010. Study of band pass filter
- A011. Study of CE configuration of NPN transistor
- A012. Study of CB configuration of NPN transistor
- A013. Study of CE amplifier
- A014. Study of Monostable multivibrator using transistor
- A015. Study of Bistable multivibrator using
- A016. Study of Astable multivibrator using transistor
- A017. Study CB amplifier (PNP)
- A018. Study CC amplifier (PNP)
- A019. Study Zener diode voltage regulator
- A020. Study power supply having two zener diodes in series
- A021. Study dual polarity voltage regulated supply

- A022. Plot V / I of LED
- A023. To practically understand the operation of a 7-segment LED display
- A024. To Study CC characteristics of NPN transistor
- A025. To study CE characteristics of PNP transistor
- A026. To study CB characteristics of PNP transistor
- A027. To study CC characteristics of PNP transistor
- A028. Study full wave dual supplies
- A029. FET characteristic
- A030. Verify superposition theorem
- A031. Verify thevenin's theorem
- A032. Verify reciprocity theorem
- A033. Phase shift oscillator
- A034. Verify kirchoff's law (V & I)
- A035. Ohm's law
- A036. Ideal resistance
- A037. Resistance in series
- A038. Resistance in parallel
- A039. Verification of maximum power transfer theorem
- * Weight : 0.7 Kg. (Approx)
- * Dimension : W 176 x H 131 x D 37

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