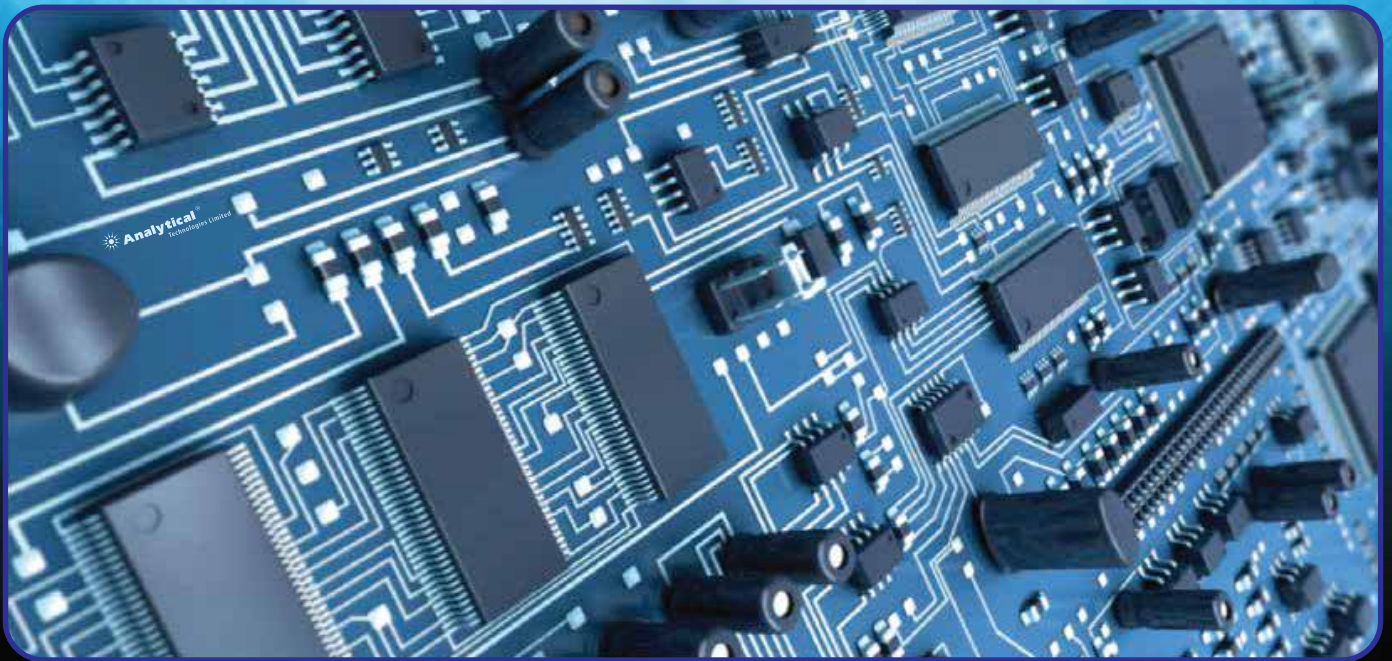


DIGITAL ELECTRONICS



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

Digital Logic Trainer

Our domain expertise has enabled us to come up with Digital Logic Trainer (Logic Gates, Boolean Identities). The offered products are designed and developed by the professionals using high quality raw material and by employing latest technologies. These are stringently checked by the quality analyzers of our firm on varied parameters to ensure their flawlessness before the end delivery.

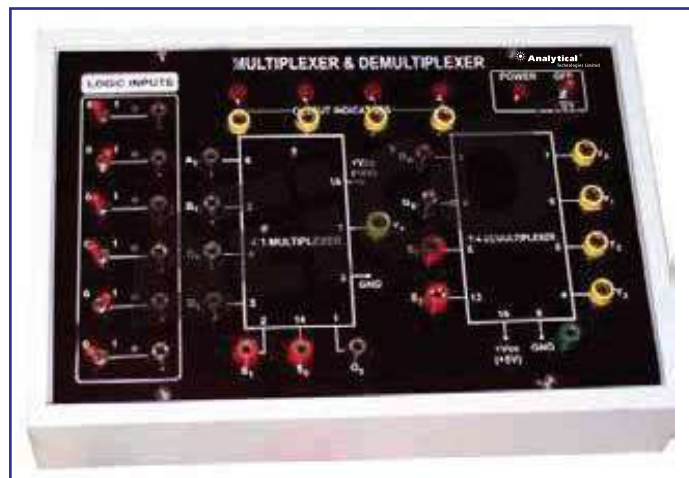
►► Technical Specification:

- Fundamental of AND, OR, INVERTER, NAND and NOR.
- Basis of AND, OR, INVERTER, NAND and NOR with ICs.
- XOR logic with ICs.
- Practical NAND and NOR gate circuits.
- Active high and active low inputs and outputs.
- Product of sums circuits.
- Sum of products circuits.
- Pulse distortion and propagation delay.
- Schmitt trigger gates.
- Parity circuit.
- Fundamentals of diode and BJT logic.
- Open collector TTL outputs.
- Three state outputs.
- D type latches.
- Introduction to JK flip-flop.
- Serial in shift register.
- Parallel in shift register.
- Fundamental of RS Latches.



Multiplexer & De Multiplexer

We have been successful in catering to the requirements of our esteemed clients by offering quality 8to1 line Multiplexer/De Multiplexer. The offered instruments are stringently checked by the quality analyzers of our firm on varied parameters to ensure their flawlessness before the end delivery.

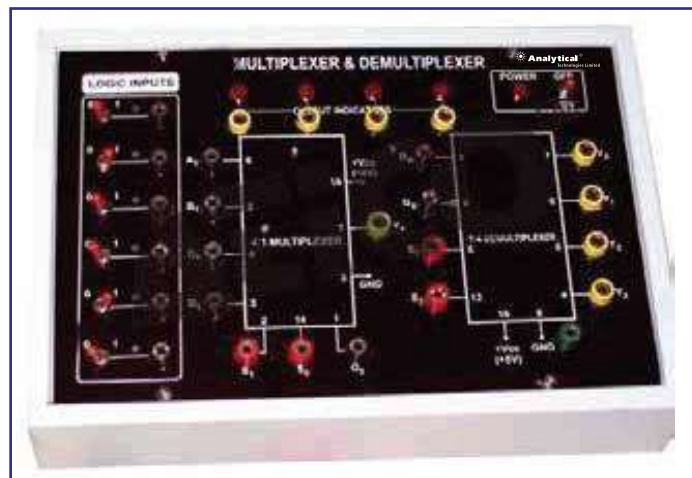


►► Specifications:

- The board consists of the following built-in parts :
- +5v d.c. At 100ma, ic regulated power supply.
- 21 input switches for data input.
- Ic for multiplexing is provided on board with combinational circuit.
- Ic for demultiplexing is provided on board with combinational circuit.
- One not gate is provided on board using
- 16 output leds with driver circuit to observe the output of multiplexer-demultiplexer.
- A pulser to provide the pulses manually for triggering.
- Adequate no. Of other electronic components.
- Mains on off switch, fuse and jewel light.

Multiplexer And Demultiplexer

We strive to design and develop 16 to 1 line Multiplexer & 1 to 6 Line Demultiplexer. These are aesthetically designed and developed by the experts of our firm in different specifications following industry standards. Our professionals ensure that only defect-free range is delivered at the customers' end within the promised time.



►► Features:

- The board consists of the following built-in parts :
- +5v d.c. At 100ma, ic regulated power supply.
- 21 input switches for data input.
- Ic for multiplexing is provided on board with combinational circuit.
- Ic for demultiplexing is provided on board with combinational circuit.
- One not gate is provided on board using
- 16 output leds with driver circuit to observe the output of multiplexer-demultiplexer.
- A pulser to provide the pulses manually for triggering.
- Adequate no. Of other electronic components.
- Mains onoff switch, fuse and jewel light.

Time Division Multiplexer Demultiplexer

We are engaged in offering Time Division Multiplexer Demultiplexer. These devices are designed by the experts of our firm in compliance with the international standards. We offer these devices to the customers at market-leading prices.

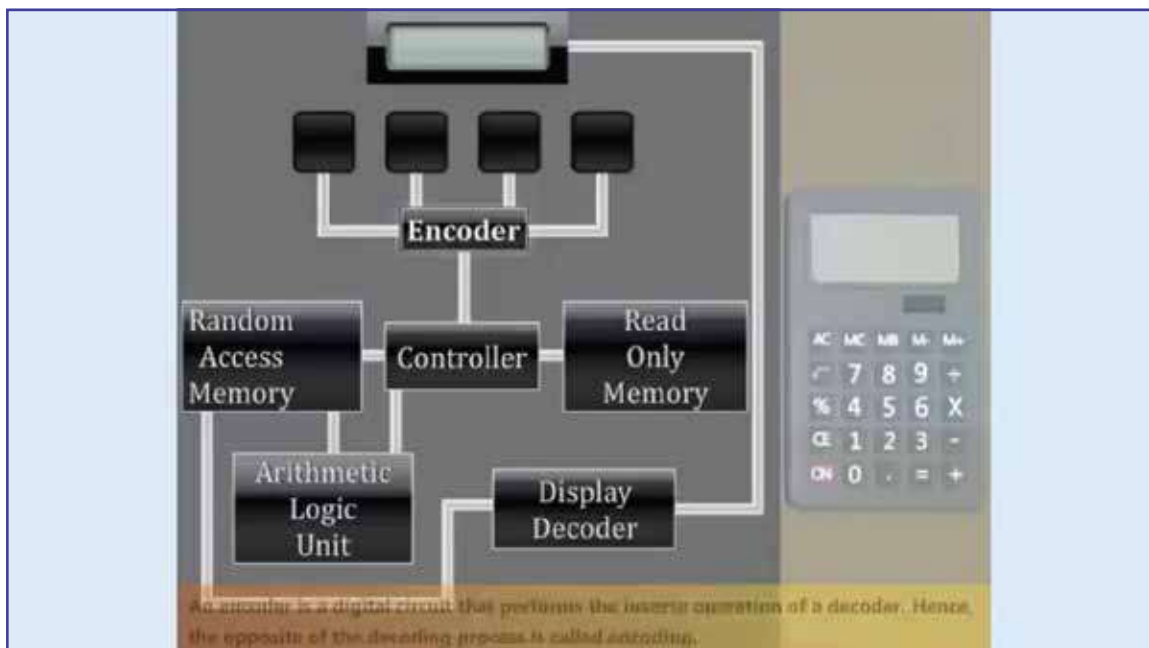


►► Features:

- The board consists of the following built-in parts :
- $\pm 5V$ D.C. at 100mA IC regulated power supply internally connected.
- 8 : 1 Multiplexer.
- 1 : 8 Demultiplexer.
- 8 bit Data Generator.
- Clock & Address Generator.
- Mains ON/OFF switch, fuse and jewel light.
- The unit is operative on 230V $\pm 10\%$ at 50Hz A.C. Mains.
- Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length $\frac{1}{2}$ metre.
- Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections /observation of waveforms.
- Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- Weight : 3 Kg. (Approx.)
- Dimension : W 340 x H 110 x D 210

Encoder And Decoder Circuits

We are offering Encoder & Decoder Circuits. These are fabricated under the surveillance of professionals following international standards. Moreover, we offer these products in various specifications and models in order to meet the needs of varied customers.



►► Objective:

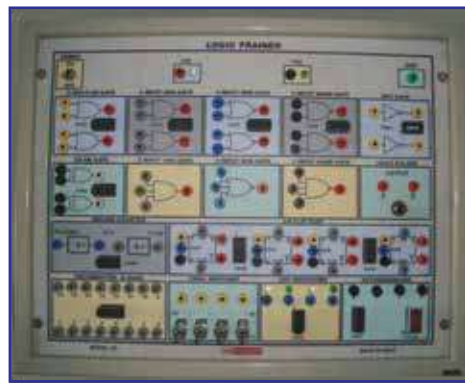
- To construct a π network derived low pass filter
- To observe the frequency response and the cut-off frequency
- To plot the graph between the frequency and the attenuation

►► Specifications:

- +5V SMPS Adaptor provided with the trainer for power supply
- SPDT switches for logic selection
- LEDs for visual indication of inputs and outputs status

Logic Gate Circuit Trainer

We strive to design and offer Logic Gate Circuit Trainer. These are designed and developed by the experts, which are technologically sound. Our offered range is made in adherence with the industry standards. Clients can avail these instruments from us at industry-leading prices.

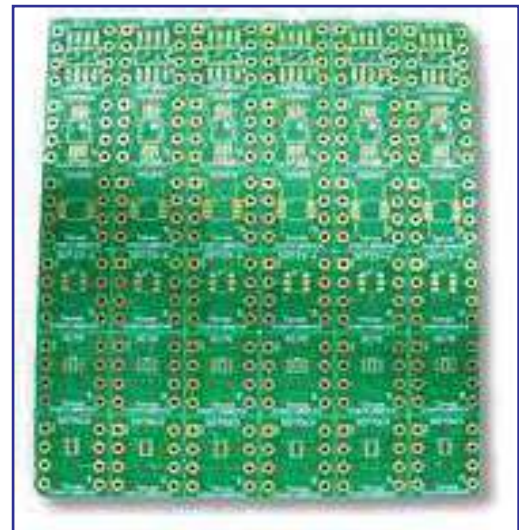


►► Specifications:

- Output D.C. Voltage : Fixed 5V \pm 1%
- Output current : 1 Amp
- Load regulation : \pm 1% of the highest specified output voltage
- (No load to full load)
- Line regulation (For \pm 10% change : less than 50 mV. in mains Voltage i.e. 230V)
- Ripple and noise : less than 5 mV
- Clock input device : Clock pulse of 1 second
- Debounced logic switch (HI/LO) : Four nos. Input voltage of HI level ³ 2.25V. Input voltage of LO level \leq 0.8V
- 4 Bits led output indicator : Maximum input voltage less than or equal to 5V D.C.
- Solder less bread board : Bread Board having one main strip, total interconnected 640 tie points for ICs and half main strip, total interconnected 320 tie points for power supply, Clock, Input and output state. Each strip having length 173mm and accepting dia 0.56mm/24SWG recommended, use only 22-26 SWG wire for interconnections
- Basic logic gates & : Four AND gates, Four OR gates, Four NAND gates, Four NOR gates, Six NOT
- Flip flop units gates, Dual J-K flip-flop, J.K. master/slave flip-flop & Dual D-type flip flop

Study of Various Types of Flip Flops

We have been able to offer Study of Various Types of Flip-Flops. High quality raw material is widely used by the experts in manufacturing these instruments in adherence with the international standards. Further, before the end delivery, these are stringently checked by the quality analyzers on varied parameters to ensure their flawlessness



►► Features:

- The board consists of the following built-in parts :
- +5V D.C. at 100mA, IC regulated power supply.
- Four, 2-input NAND gates.
- Four, 3-input NAND gates.
- One inverter (NOT gate).
- Four LEDs with driver circuit to observe the output of flip-flops.
- A pulser to provide the pulses manually for triggering.
- Adequate no. of other Electronic Components.
- Mains ON/OFF switch, Fuse and Jewel light.

►► Specifications:

- Regulated power supply:
- +5V D.C. at 100mA
- LEDs with driver circuit: Four
- Brand: Atico

Logic Gate Circuit Trainer

We are a prominent firm engaged in manufacturing and supplying Logic Gate Circuit Trainer. These are based on modern technology and are provided with superior features. Our professionals make sure that these are rigorously tested for quality to ensure optimum safety and reliability. The offered range is appreciated among the patrons for its attributes like:

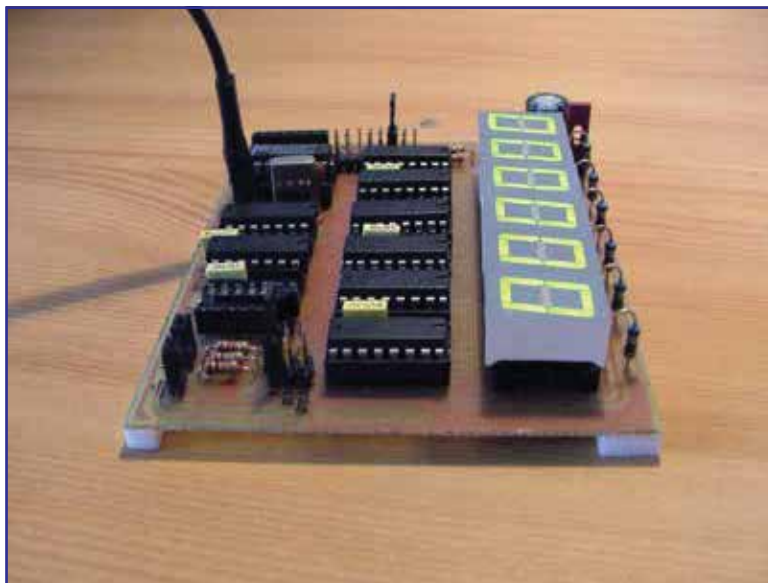


►► Specifications:

- Output D.C. Voltage : Fixed 5V \pm 1%
- Output current : 1 Amp
- Load regulation : \pm 1% of the highest specified output voltage
- (No load to full load)
- Line regulation (For \pm 10% change : less than 50 mV. in mains Voltage i.e. 230V)
- Ripple and noise : less than 5 mV
- Clock input device : Clock pulse of 1 second
- Debounced logic switch (HI/LO) : Four nos. Input voltage of HI level \approx 2.25V. Input voltage of LO level \approx 0.8V
- 4 Bits led output indicator : Maximum input voltage less than or equal to 5V D.C.
- Solder less bread board : Bread Board having one main strip, total interconnected 640 tie points for ICs and half main strip, total interconnected 320 tie points for power supply, Clock, Input and output state. Each strip having length 173mm and accepting dia 0.56mm/24SWG recommended, use only 22-26 SWG wire for interconnections
- Basic logic gates & : Four AND gates, Four OR gates, Four NAND gates, Four NOR gates, Six NOT
- Flip flop units gates, Dual J-K flip-flop, J.K. master/slave flip-flop & Dual D-type flip flop

TTL CMOS

In order to fulfill the ever changing demands of our clients, we are offering TTL-CMOS, CMOS-TTL, Interfacing. Before the final dispatch, these hangers are thoroughly checked by the quality analysts of our firm on varied parameters to ensure their defect-free nature. We offer these instruments to the clients at industry-leading prices.



►► Attributes:

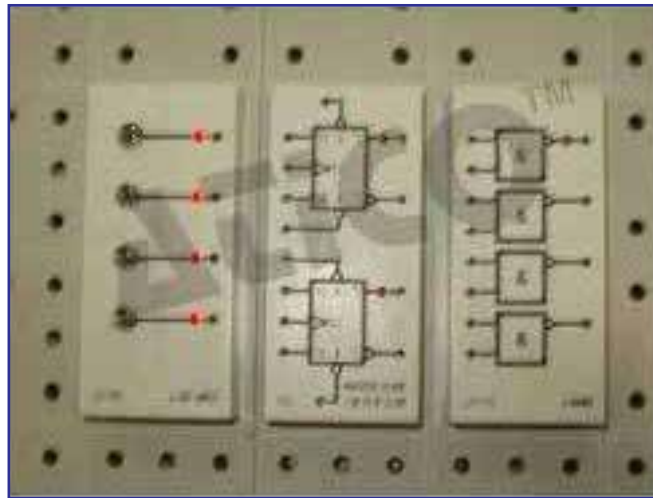
- Elegant designs
- Dimensionally accurate
- Low maintenance cost

►► Specifications:

- Input-Output : (-7v to +12v)
- Adapter Dimensions: 2.4" x 1.3" x 0.7"
- Operation:4 wire full duplex or 2 wire half duplex

Ram Circuit

Ram Circuit Using Ic 7489 With our expertise in this domain, we are able to offer superior quality RAM Circuit using IC 7489. High quality raw material and advanced technology is widely used in developing these circuits. Moreover, we offer these circuits to the clients at industry-leading prices.



Our range is applauded in this competitive market for its attributes such as:

- Elegant designs
- Superior performance
- High durability

► **Specifications:**

- Type: Laboratory Equipment
- Brand: Atico
- Uses: Educational institutes

Circuit Designer Board

Being a customer-focused organization, we are engaged in offering Circuit Designer Board. The offered range of products is developed by the professionals using high quality raw material. These are extensively used to support electrically connect electronic components. Our offered circuit designer boards are applauded in the market for their attributes such.



►► Specifications:

- Type: Laboratory Equipment
- Board: Wooden
- Brand: Atico

Basic Logic Gate

We have been able to offer Basic Logic Gate using Discrete Components (7 in 1). The offered range is developed by the experts following international standards. These are offered by us in both standard & customized specifications in order to meet the requirements of clients.

►► Features:

- Optimum performance
- Precisely engineered
- Operational fluency
- Technical Specifications:
 - Four Input Switches
 - Four Line Driver
 - One LED indicator to indicate Power input
 - On-board Circuits
 - AND Gate
 - NAND Gate
 - OR Gate
 - EX-OR Gate
 - Variable DC power supply: 5
 - All interconnections are made using 2 mm banana Patch cords
 - Bare board Tested Glass Epoxy PCB is used
 - Set of 2 mm Patch cords for interconnections



Basic Logic Gates

With firm commitment to quality, we are manufacturing and supplying Basic Logic Gates Using Six TTL IC's (6 in 1). Advanced technology is widely used by the experts of our firm in developing these instruments. Moreover, we offer these instruments to the clients at industry-leading prices.



► Features:

- Optimum performance
- Precisely engineered
- Operational fluency
- Technical Specifications:
- Four Input Switches
- Four Line Driver
- One LED indicator to indicate Power input
- On-board Circuits
- AND Gate
- NAND Gate
- OR Gate
- EX-OR Gate
- Variable DC power supply: 5
- All interconnections are made using 2 mm banana Patch cords
- Bare board Tested Glass Epoxy PCB is used
- Set of 2 mm Patch cords for interconnections

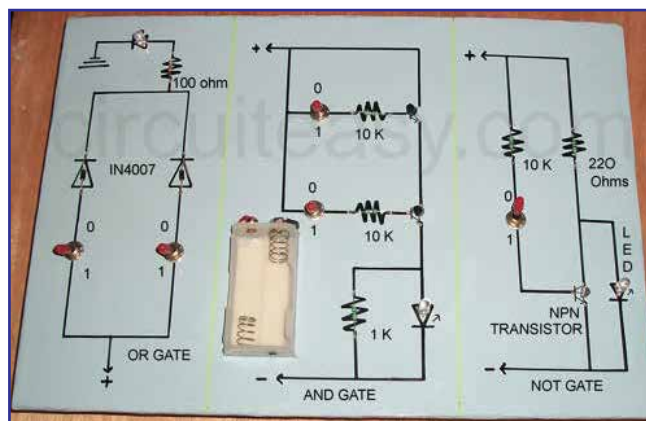
►► Specifications:

The board consists of the following built-in parts:

- + 5V D.C. at 500mA, IC Regulated Power Supply internally connected.
- Two, 3-input NAND gates followed by an inverter to give 3-input AND/NAND gates.
- Two, 3-input NOR gates followed by an inverter to give 3-input OR/NOR gates.
- Two, NOT gates followed by another NOT gate to give BUFFER outputs.
- Switches for logic selection.
- LEDs for visual indication of status.
- Adequate no. of other Electronic Components.
- Mains ON/OFF switch, Fuse and Jewel light.
- The unit is operative on 230V \pm 10% at 50Hz A.C. Mains.
- Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length ½ metre.
- Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections / observation of waveforms.
- Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

Logic Gates

Backed by the profound industry experience, we are presenting Verification of Truth Tables of Logic Gates. These are designed and made under the surveillance of professionals following international standards. The offered instruments are widely used to verify the truth table of AND gate.



►► Features:

- The board consists of the following built-in parts :
- +5V D.C. at 100mA, IC Regulated Power Supply internally connected.
- Ten, 2-input NAND gates.
- Sixteen, 2-input NOR gates.
- Switches for logic selection.
- LEDs for visual indication of status.
- Adequate no. of other Electronic Components.
- Mains ON/OFF switch, Fuse and Jewel light.
- The unit is operative on 230V $\pm 10\%$ at 50Hz A.C. Mains.
- Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length $\frac{1}{2}$ metre.

►► Specifications:

- Power Supply: +5V D.C. at 100mA
- Input NAND gates:10,
- operative on 230V $\pm 10\%$ at 50Hz A.C.

▶▶ **Regulatory compliances**



▶▶ **Corporate Social Responsibility**

Analytical Foundation is a Nonprofit Organization (NGO) found for the purpose of:



**Analytical
Foundation**

1. Research & Innovation Scientist's awards / QC Professional Award: Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops / Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

▶▶ **Reach us @**



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