

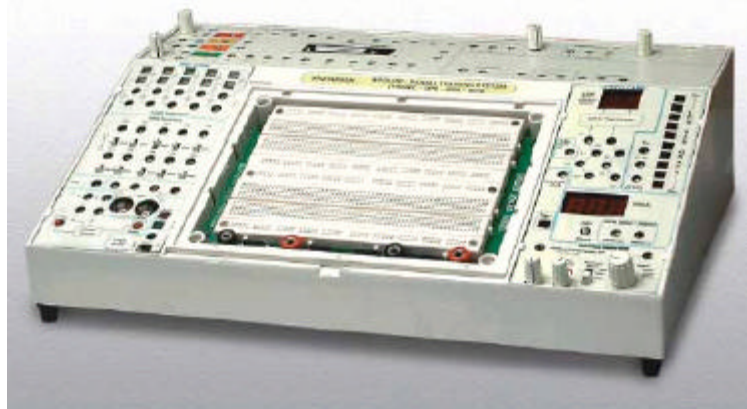
# ANALOG - DIGITAL TRAINER

## MODEL - XPO – ANADIGI



### SALIENT FEATURES

- ? Aesthetically designed injection moulded electronic desk. Master unit carrying useful experiment resources Variable Power supplies/ Status / Pulsar/ Function Generator, DPMs etc. while the central slot will hold various replaceable experiment panels.
- ? Connection through Sturdy 4mm Banana Sockets & Patch Cords.
- ? Hands on learning by constructing circuits using built in power bread board panel as well as optionally using Discrete component panel.
- ? Set of Users Guide provided with each Unit.



### SPECIFICATIONS OF MASTER UNIT

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>? Built in Power Supply<br/>DC. Power Supply : 5V / 1A<br/>± 12V, 500mA<br/>Variable : 0 - + / - 12V 150mA,<br/>AC 12 – 0 – 12, 150mA AC</li> <li>? Built in Function Generator<br/>Output Waveform - Sine, Triangle &amp; Square / TTL<br/>Output Frequency - 1 Hz to 200KHz in 6 ranges, with<br/>amplitude &amp; frequency control pots. O/P Voltage<br/>20V p-p max.</li> <li>? Clock Generator : 10 MHz TTL clock.</li> <li>? Input Data Switches and output LED status indicators for<br/>High/Low indication (15+1) No.</li> <li>? Pulsar switches (2 nos.) With four debounced outputs..2no.</li> <li>? Fixed TTL (5V) clocks : 4 Nos. 1KHz, 100Hz, 5Hz, 1Hz</li> <li>? Logic probe to detect High/Low level pulses upto 1MHz,<br/>With bi-colour LEDs to indicate status.</li> <li>? 2 digit 7 segment display with BCD to 7 segment decoder.</li> <li>? LED BAR graph with 10 LED indicator to display 0-2.5V<br/>or 0-4V input.</li> <li>? Onboard DPM is provided with mode selection.<br/>DC volt / current - 200mA/20V .....1no.</li> </ul> | <ul style="list-style-type: none"> <li>? Onboard speaker - 8 Ohms, 0.5 Watt (1no.)</li> <li>? Onboard POTS.....1K(1no.) &amp; 1M(1no.)</li> <li>? Built in bread board panel with 1280 tie points and 400<br/>distribution points totalling to 1680 points along with 4mm<br/>banana sockets fortapping from the trainer +5V, +12V<br/>GND for the circuits to be assembled on bread board<br/>using single stand (#22/24)wire.</li> <li>? Computer Interface Adapter<br/>Facilitates connecting your trainer to either IEEE 488 or<br/>RS232 com port of PC using 25 pin (male) D connector<br/>through 25 nos. of banana sockets. Optionally a 16 pin<br/>ZIF may be provided in place off 'D' connector.</li> <li>? Mechanical Dimensions<br/>(A) Master Unit : 400mm(W), 125mm(H), 270mm(D)<br/>Net weight: 8Kg. Gross wight: 10Kg.<br/>(B) Panel : 215mm(W), 165mm(H), 40mm(D)<br/>Net weight: 700 gm approx.</li> <li>? Operating Voltage - 230V +/- 10%, 50Hz/72VA.</li> </ul> |
|--|---|

## OPTIONAL ACCESSORIES :

<b>Discrete Component Panel (DCP)</b>		Panel with following discrete components 7 – Resistors, 5 – diodes, 1 – LDR, 1 – Zener, 3 – NPN transistors, 1 – PNP transistors, 1 – UJT, 4 – Capacitors, 1 – HV Capacitors, 2 – SCR, 2 – FET & MOSFET, 1 – 12v RELAY, 3 – Inductors, 1 – Linear pot, 1 – Triac, 1 – Audio transformer, 1 – PUT, 1 – HW Resistor, 1 – DIAC, 92 – Banana sockets for patch cording to construct various circuits.			
<b>DIP / ZIF panel</b>  (order separate DIP/ZIF panel for each of application)	<b>Model</b>	<b>Digital IC Trainer (DIT I)</b>	<b>TTL CMOS Trainer (DIT II)</b>	<b>Linear IC Trainer</b>	<b>ZIF Panel</b>
	<b>IC used</b>	7400, 04, 08, 32, 86, 76, 90, 76, 95 or 02	74280, 7407, 74HCT14, 4011, 7485, 74191, 4051, 74123	LM339, TL084, 741, 555	40 pin universal ZIF socket, 16 pin socket
	<b>No. of sockets</b>	142	142	142	76
	<b>Discrete component used</b>	10Kx1, 0.1? F x 1, 100K pot	10K x 2, 100K pot, 4K7 x 1, 220K x 1, 0.1? F x 1, 0.047? F x 1	Resistors (15nos), Cap. 15nos), Transistor (2Nos), Diodes(4Nos), Zener (1no.) Regulator (3nos), Pot (1no.)	10Kx2
	<b>No. of Expt.</b>	>50 / TTL characteristics combinational logic, asynchronous, synchr. counters, Flip Flop	>22 / CMOS characteristics, CMOS TTL I/F, Flip Flop, parity, mux-demux, mono-stable, synchronous counter	>40	Various
<b>Overlay Learning System (OLS)</b> Set of Components useful for above OLS		<b>Digital</b> 16 Nos. of tracings supporting 56 Experiments.		<b>Analog</b> 14 Nos. of tracings supporting 39 Experiments.	
		As per your order and specification consisting of Resistor (92 nos.) , Capacitor (43nos.), Inductor (4 nos.), Transistor (11 nos.), Diode (9 nos.) , LEDs (13 nos.), ICs (53 nos.)etc. Supplied with 22 or 24 SWG SS Hook up wires for BB panel 1mtr length & 4mm to 22 SWG SS (300mm) x 10nos.			
<b>Bread Board Trainer (Power Project Board)</b>		Bread board : With 1280 tie points & 400 distribution points totaling to 1680 points with built in power supply : +5V, +/-12V, Variable 0 to +/-12V			

## LABWISE EXPERIMENT PANEL SELECTION CHART

<b>Networks &amp; Fields (3)</b>	<b>Discrete Electronics(13)</b>	<b>Digital Electronics(10)</b>	<b>Opamps / Linear Electronics(8)</b>	<b>Power Electronics(7)</b>	<b>Communication Electronics(5)</b>
Magnetism, Electro-magnetism & Transformer Characteristics (P1)	Semiconductor & Power Semiconductor Devices (P3)	Digital IC Trainer (DIT I)	Linear IC Trainer	Power Semiconductor Application (P20)	Application of Operation Amplifier (P18)
DC/AC & Wave Shaping Circuit (P2)	Silicon Bilateral Switch (SBS) Sensors & Transducers (P4)	TTL CMOS Trainer (DIT II)	Operational Amplifier Circuit (P16)	DC-DC, converters (P21)	AM / FM Transistor Radio kit (P19)
3 Phase Laws (P36)	Rectifier, Filter, Zener Regulator (P5)	Digital Logic Gates (P12)	Advance Operational Amplifier (P17)	Power Semiconductor Application (P22)	FM Transmitter (P23)
	Voltage Regulator (P6)	Flip Flop, Counters & Shift Register (P13)	Application of Operation Amplifier (P18)	Stepper Motor Demonstrator (P25)	Microphones & hand speaker (P27)
	Transistor h-parameters & CB/CC/CE amplifiers (P7)	Multiplexer, Decoder & Encoder (P14)	Analog Multiplexer / Demultiplexer & ADC, DAC (P26)	Switch Mode Power Supply (P29)	Passive / Active / M Derived Filter (P32)
	Transistor Amplifier (P8)	Half/Full Adder, Subtractor, ALU (P15)	Passive / Active / M Derived Filter (P32)	3 Phase sequence indicator and Fault Study (P30)	
	Transistor class A, Class B, Class C Amplifier (P9)	Analog Multiplexer / Demultiplexer & ADC, DAC (P26)	ADC & DAC Circuits (P33)	3 Phase Laws (P36)	
	Transistor / Diode Applications (P10)	Study of Logic Gates & Applications (P28)	Oscillator & Amplifier (P35)		
	Oscillator & Multivibrator (P11)	ADC & DAC Circuits (P33)			
	DC/AC Bridge circuits (P24)	Memory (P34)			
	JFET, MOSFET & IGBT (P31)				
	Oscillator & Amplifier (P35)				
	Discrete component Trainer (DCP)				

### ANSHUMAN Tech Pvt. Ltd.

Plot 13, Sthairya, Behind Tol Hospital  
Near Nav-Sahyadri Society, Karve Nagar  
Pune – 411 052 (MH)INDIA

Tel : (0091)(020)25460892 / 25463052  
Fax : (020) 25463052  
Email : [anshumelectronics@vsnl.com](mailto:anshumelectronics@vsnl.com) / [info@anshumantech.com](mailto:info@anshumantech.com)

Visit us at : [www.anshue.com](http://www.anshue.com) / [www.anshumantech.com](http://www.anshumantech.com)

Specifications subject to change without notice.