



OMEGA TYPE LTB-881 "TTL & CMOS"

Characteristics Trainer" is a simple and compact product designed to explain all the fundamentals of Transistor-Transistor Logic (i.e. TTL) and Complementary Metal Oxide Semiconductor (i.e. CMOS), like voltage Transfer Characteristics, Noise Margin and Gate Delay. Inbuilt Function Generator and DC supply is provided for ease of operation.

The voltage Transfer Characteristics of a logic gate is a graph between gate output voltage and gate input voltage. Noise Margin is the voltage difference by which the signal exceeds the threshold voltage for Logic high. Gate delay is the span of time starting from the instant when the input to a logic gate becomes stable, to the time that the output of that logic gate becomes stable.

FEATURES:

- 01 In built DC Power supply.
- 02 In built Function generator.
- 03 Compact Design.

OBJECTS:

To study voltage transfer characteristics, noise margin and gate propagation delay of :

- 01 TTL NAND Gate.
- 02 TTL Schmitt trigger NAND gate.
- 03 TTL NOT gate.
- 04 TTL Schmitt trigger NOT gate.
- 05 CMOS NAND gate.
- 06 CMOS Schmitt trigger NAND gate.
- 07 CMOS NOT gate.
- 08 CMOS Schmitt trigger NOT gate.

TECHNICAL SPECIFICATION:

- 01 DC Power supply : +5V, +12V
- 02 Variable DC Power supply : 0 to 5V & 12V

PULSE GENERATOR:

- 01 Frequency : 100Hz.
- 02 Amplitude : 0 to 5Vpp
- 03 Mains supply : 230V ± 10% at 50Hz
- 04 Weight : 2.00Kg (Approx.)
- 05 Dimension (mm) : W340 X H125 XD210

LIST OF ACCESSORIES:

- 01 Patch cord 2mm length 50cm Red.....04
- 02 Patch cord 2mm length 50cm Black.....04

OTHER APPARATUS REQUIRED:

- 01 Digital Storage Oscilloscope.

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

OMEGA ELECTRONICS