



AD-01 DC Power Supply (optional)

Scientech DB27 Transfer Characteristics (TTL and CMOS Inverters) is a compact, ready to use experiment board for transfer characteristics (TTL and CMOS Inverters). This board is useful for students to study and understand the transfer characteristics of TTL, CMOS, Schmitt trigger inverters and gate delay estimation of TTL & CMOS inverters and verify its truth table.

Scientech Digital Electronics Experiment Boards are designed as a comprehensive Modular solution for beginners to explore the fundamentals of a variety of basic building blocks in Digital Electronics. The boards are very user friendly and support self learning through flexibility of making circuit connections. Logic diagrams on the boards provide easy understating of the concepts. Test points are provided to observe the waveforms/ signals and to measure voltages at different nodes. The boards can be used as standalone unit with external DC Power Supply and logic data switches, or can be used with Scientech Digital Labs; Scientech 2611/Scientech 2614. These labs have built in DC Power Supplies, Pulse Generator, Pulser Switches, Data Switches, Logic Probe, Digital Display, TTL/CMOS Mode Selector, and LED Display. Product Tutorial with theory, description, explanation, procedure, references and results is available online on www.ScientechLearning.com.

Features

- On board test points to observe signals
- On board Logic diagram
- Flexibility of making circuit connections
- Light weight & compact
- Online Product Tutorial

Scope of Learning

- To draw the transfer characteristics of a TTL inverter of 74LSxx series and evaluate
 - ▶ Noise margins/Estimate the Delay Time
 - ▶ Transfer characteristics of a TTL Schmitt Trigger inverter
- To draw the transfer characteristics of a CMOS inverter of CD40XX series
 - ▶ Noise margins/Estimate the Delay Time
 - ▶ Transfer characteristics of a CMOS Schmitt Trigger inverter

Optional

- AD-01 DC Power Supply ($\pm 12V, \pm 5V$)
- Simtel Digital Electronics Software

Online Product Tutorial

