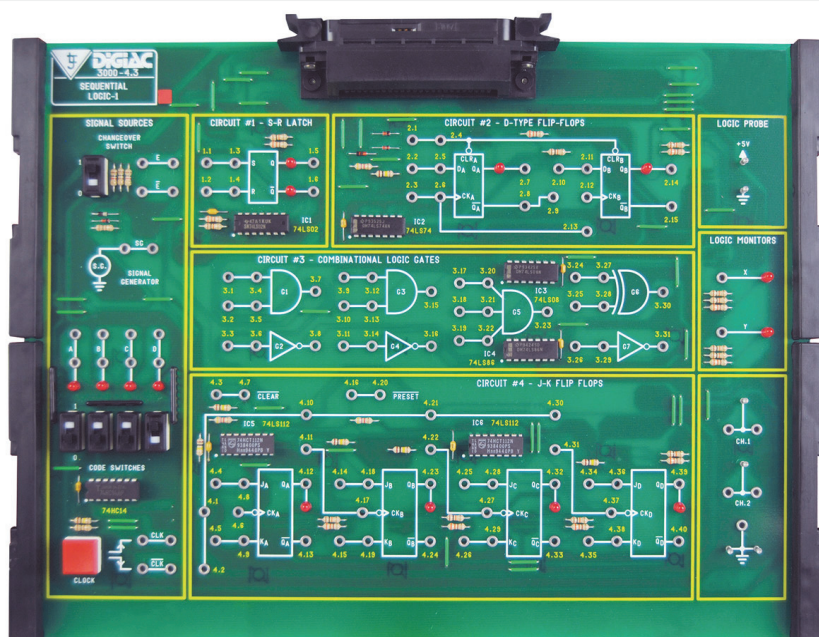


Product Information Sheet

Sequential Logic Study Module



This electronics study module is designed to connect to the Advanced Electronics Experiment Platform (300-01) as part of a modular electronics programme.

The study module is designed to introduce students to sequential logic circuits and their applications through a wide range of practical activities.

Using the Advanced Electronics Experiment Platform, a range of faults to be selected and inserted into the study module circuits to develop electronic diagnostic and faultfinding techniques.

The study module is supplied with PDF manuals that provide theory materials, practical tasks, faultfinding activities, and technical information.

Topics Include the Following:

- The S-R Latch
- The D-Type Flip-Flop
- The J-K Flip-Flop
- Shift Registers
- Binary Counters

Typical Activities Include:

- Recognize the operation of S-R latches based on logic gates
- Determine the truth table of an S-R latch
- Determine the output frequency of Q for a D-type flip-flop
- Determine the operation of the CLEAR input
- Diagnose faults in D-type flip-flop circuits
- Determine the operation of a J-K flip-flop from observations
- Diagnose faults in J-K flip-flop circuits
- Observe the operation of a shift register
- Predict the contents of a shift-right register
- Predict the contents of a shift-left register
- Predict the operation of SIPO and SISO registers
- Recognize the connections required for D and J-K based UP counters

- State the gate connections required for reducing count of a binary UP counter
- State the gate connections required for reducing the count of a binary DOWN counter
- Diagnose faults in J-K based counter circuits

Items Included:

- Circuit Card
- Storage Case
- Curriculum Manual in PDF Format

Other Items Required:

- 300-01 Advanced Electronics Experiment Platform
- Digital Multimeter

General Information:

Dimensions: 81 x 323 x 256 mm (W, H, D)

Shipping Volume: Approx 0.008 m³

Shipping Weight: Approx 2 kg

Order Code: 304-43

P8530-C

For more information visit www.ljcreate.com