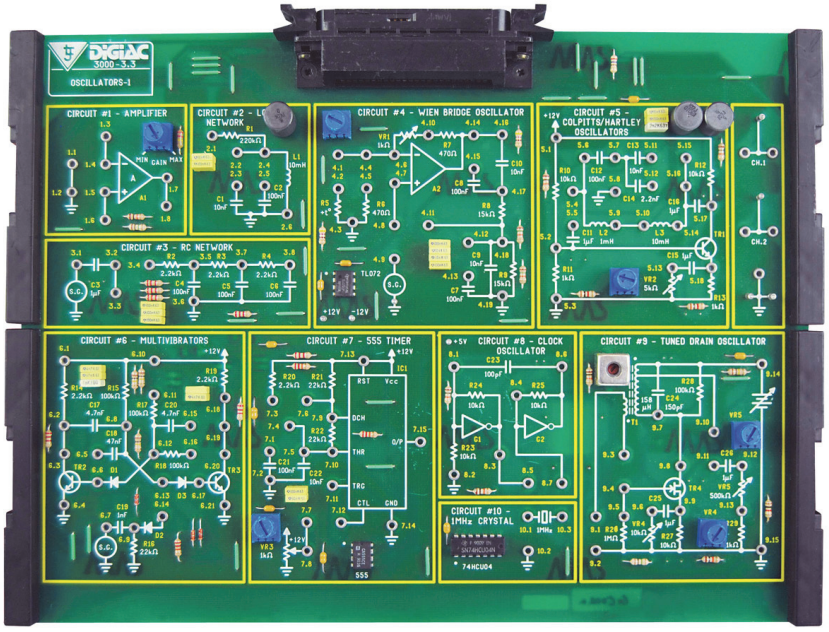
Product Information Sheet

Oscillators 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 oscillators 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:

- Oscillator Requirements
- Fault Diagnosis Techniques
- Wien Bridge Oscillator
- LC Oscillators
- Tuned Drain FET Oscillator
- Astable Multivibrator
- Monostable Multivibrator
- 555 Timer
- Clock Oscillator

Typical Activities Include:

- Measure the oscillation frequency for RC and LC oscillators
- Measure the signal amplitudes present in RC and LC oscillator circuits
- Diagnose faults in RC and LC oscillator circuits
- Measure the amplitude and phase relationship from waveforms for a Wien Bridge Oscillator
- Measure voltages in a working Hartley oscillator circuit
- Make voltage measurements around a tuned drain FET oscillator circuit
- Make voltage measurements around an astable multivibrator circuit
- Determine by calculation and measurement the duration of the unstable state for a monostable multivibrator
- Measure capacitor charging time
- Make voltage measurements around a clock oscillator circuit based on digital inverters
- Faultfinding oscillator 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:

Weight: Approx 1.8 kg
Dimensions: 81 x 323 x 256 mm (W, H, D)
Shipping Volume: Approx 0.008 m^3
Shipping Weight: Approx 2 kg

Order Code: 303-33

P8628-C

For more information visit www.ljcreate.com