The D3000 5.1 Analog/Digital Breadboard Module allows students to build a wide variety of electronic circuits using discrete components.

In addition to a large, solderless breadboard patching area, the board provides a range of built-in support circuitry.

The D3000 5.1 board is housed in an injection molded storage case, and is supplied with a set of wire links for circuit interconnections. These links are made from standard 0.6mm wire and are in a range of color-coded lengths to simplify circuit construction.

A user datasheet, providing full specifications for the support circuitry, is also included with the module.

Developed specifically to operate within a DIGIAC modular electronics program, the breadboard module uses the same connector and mounting system as other boards in the DIGIAC 3000 range.

The D3000 5.1 module is ideal for activities requiring students to handle and interconnect real electronic components, such as practical assignments or student project work.

**Built-in support circuitry includes:**
- Logic sources
  - Eight binary switches, two buffered pushbutton switches, two inverters.
- Variable-frequency clock signal.
- Audio amplifier and loudspeaker.
- Variable capacitor.

**Optional set of project kits:**
The following project kit set is available for use with the D3000 5.1:

- **D3000 PK 5.1**
  - Breadboard Project Kit Set
  This set contains a range of project kits that allow students to build five separate circuits:
    - IC regulator
    - Transistor multivibrator
    - SCR trigger
    - Register and memory
    - Transistor oscillator
  Each project kit is supplied with a set of components plus a circuit construction guide.

**Optional teachware packs:**
A range of teachware packs is also available for use with the D3000 5.1.

Each teachware pack contains a set of components in a storage case, plus a comprehensive Laboratory Manual that is fully compatible with the ClassAct computer managed learning system.

The following teachware packs are available:

- **D3000 TP 0.5**
  - Circuit Construction-1
  - Breadboard Teachware Pack
- **D3000 TP 0.6**
  - Circuit Construction-2
  - Breadboard Teachware Pack
- **D3000 TP 5.1D**
  - Digital Electronics
  - Breadboard Teachware Pack
- **D3000 TP 13.1**
  - Test and Measurement
  - Breadboard Teachware Pack

A separate Fact Sheet is available for each Breadboard Teachware Pack.

**Items provided with the module include:**
- Three solderless breadboard panels, plus built-in support circuitry.
- Wire link set.
- User datasheet.
- Storage case.

**Additional items required:**
- D3000 Experiment Platform
  - D3000 Virtual Instrument Platform (VIP)
- Components and test equipment as required for a given assignment or project.*

* Note that separate test instruments are not needed if the D3000 VIP is used, as all required test equipment is provided in the form of on-screen ‘virtual’ instruments.