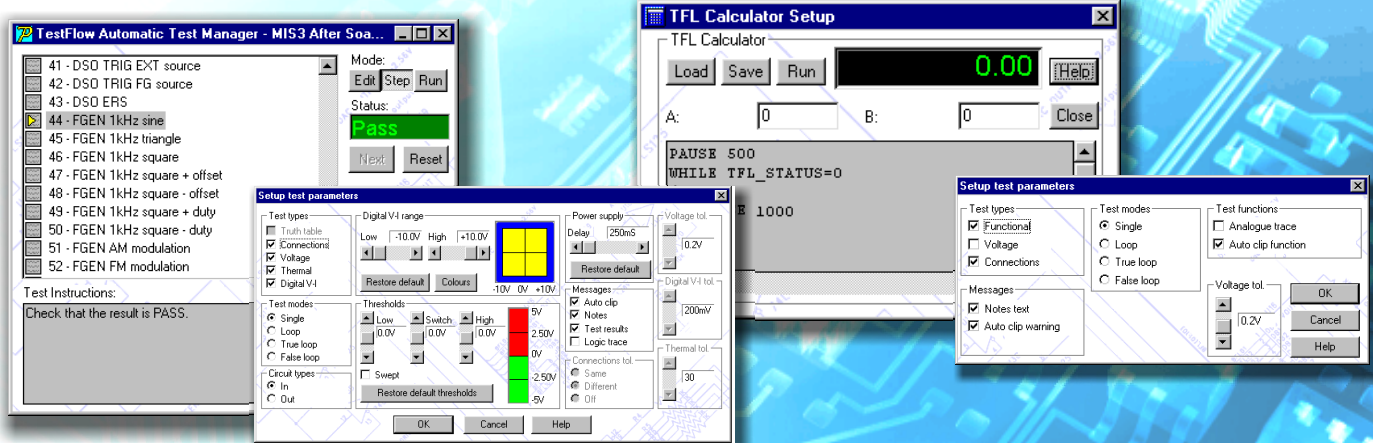


SYSTEM 8 Premier



- User Access Manager
- TestFlow automatic test procedures
- Instrument Design Manager
- Instrument Menu Manager
- Calculator function
- Flexible data logger
- Instrument and procedure control

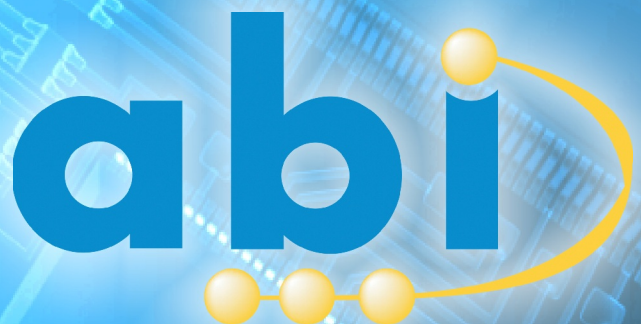
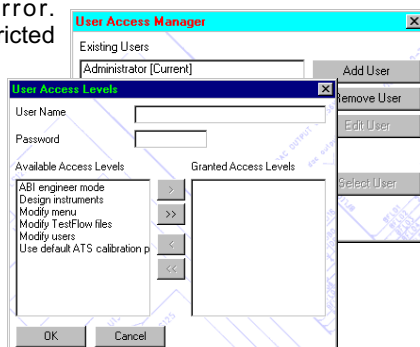
Advanced Control Software

User Access Manager

The User Access Manager allows the system to be configured according to the skill level or job function of the operator, including passwords if required.

Access to instruments can be restricted which avoids confusion and reduces operator error. Access can also be restricted to instrument design and menus, test procedure editing and user configuration.

This prevents authorised operators from changing standard settings and procedures.



Calculator*

More than its name suggests the SYSTEM 8 Premier Calculator features:

- Standard mathematical functions
- Results comparison and statistics
- Data logging
- Automatic control of SYSTEM 8 Premier instruments
- Conditional control of TestFlow automatic test procedures

SYSTEM 8 Premier is supplied with 5 pre-configured Calculators built into standard Multiple Instrument Station instruments. In addition, the user can define a further 4 Calculators to their own specifications using the Instrument Design Manager.

The simple to use, but flexible FormulaPlus control language allows the user to develop application specific formulas for both the pre-configured and custom Calculators. The simple syntax allows powerful formulas to be written quickly.

Basic instrument measurements can be used to perform further calculations including unit conversion and scaling. This means, for example, that the force in Newtons can be derived from the voltage given by a strain gauge. Results from several different instruments can be combined to give more detailed information. For example, use a voltage reading from the Digital Multimeter and a frequency measurement from the Frequency Counter to analyse the performance of a voltage to frequency convertor.

The Calculator can also be used to automatically control the instruments, allowing instruments settings to be changed or automatically trigger other measurements, in response to measured readings. This is particularly useful where a specific condition needs to occur before measurements are taken.

The Calculator enhances the basic instrument functions allowing independent control of the instrument settings. For example, the calculator could be used to control a basic frequency sweep whilst at the same time automatically changing the amplitude and DC offset.

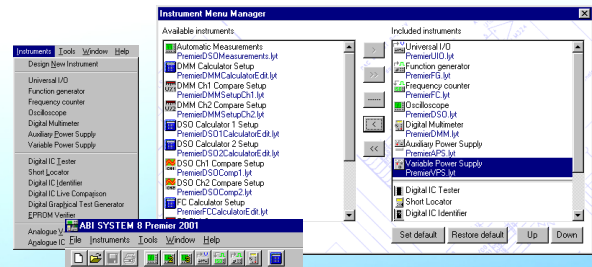
In the same way, the Calculator can conditionally control the order of the steps in a TestFlow to guide the operator to carry out only the relevant tests. Conditions could be a simple Pass/Fail result or dependant on the range into which a particular result value falls.

Each of the Calculators has a readout display, comparison and statistics functions available. Measurements and calculations can be recorded, using the flexible logging function, to a csv file. Although each instrument operates independently, the values taken from the instruments by the Calculator can be synchronised prior to logging.

* Custom instruments are available on the Multiple Instrument Station (MIS3) and Power Supply Unit (VPS) modules.

Instrument Menu Manager

Used in conjunction with the User Access Manager, the Instrument Menu Manager allows the user to customise the work area for each user, showing only the instruments required. The Instrument Menu Manager also allows custom instruments to be assigned to the menus and speedbars with standard or user icons.

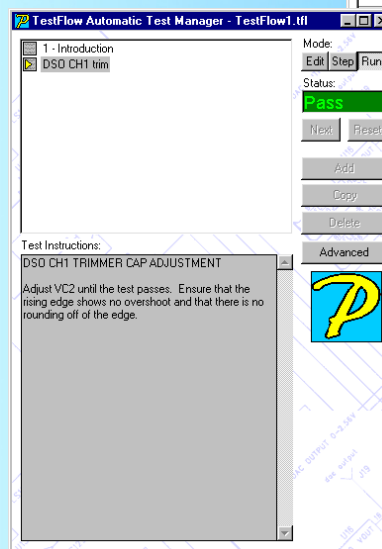
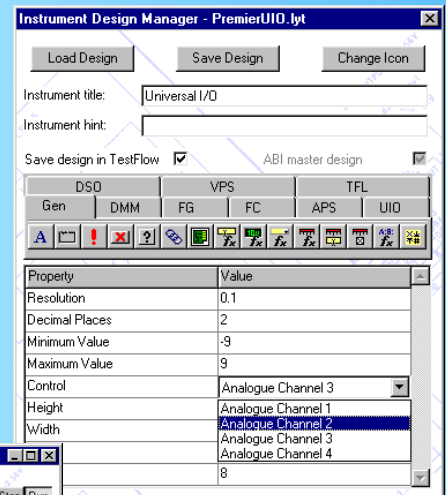


Instrument Design Manager*

Allows custom or hybrid instruments to be created and built-in instruments to be copied and modified to suit the application.

Simple drag and drop editing allows instrument controls, readouts and displays from the extensive library to be quickly added to an instrument layout.

Captions, titles, labels and even bitmaps can be added to aid the application. In the same way, controls can be removed from instruments where needed.



TestFlow

The TestFlow Automatic Test Manager allows test procedures to be built into SYSTEM 8 Premier. Combining either standard or custom* instruments, measurements and waveforms can be compared against target values, with programmable tolerances, and a PASS/FAIL result obtained for the test. On-screen operator instructions, including pictures and circuit diagrams, can be used to guide the operator through the procedure and speed up the test process.

For each step the instrument settings, target measurement values, tolerances, user instructions, pictures and layouts are saved in a single record within the TestFlow file which ensures test results can be consistently repeated, as well as reducing operator errors.

Where customised instruments* are available, they can be modified within the TestFlow to leave only the relevant controls for the test. This simplifies the operation, reduces errors and ensures that procedures are followed.