Using a Digital Multimeter (DMM) with Huntron Workstation

Capture, Store and Compare DMM Measurements

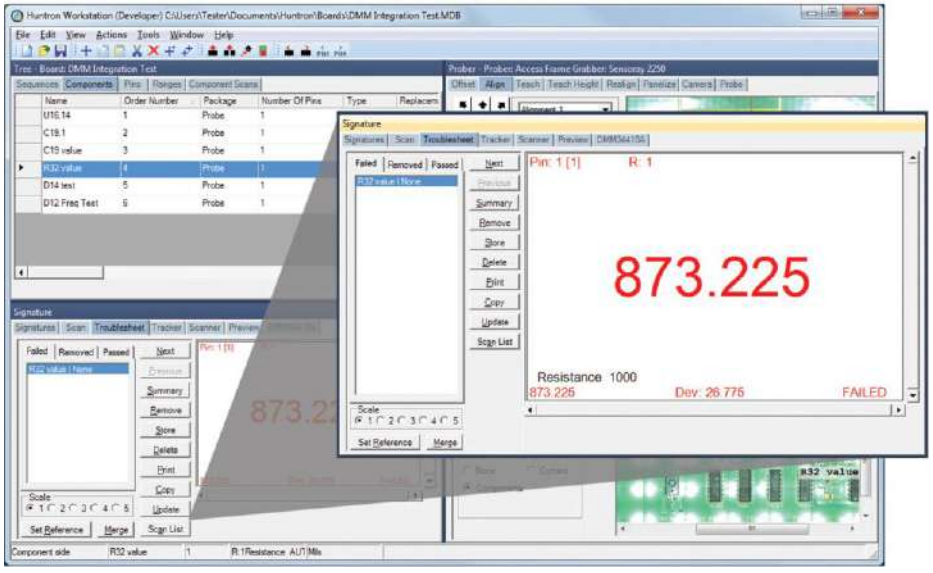
With the release of Huntron Workstation 4.2, the ability of capture, store and compare digital multimeter (DMM) measurements has been added to your arsenal of electronic troubleshooting tools. The structured approach of the Huntron Workstation software is now extended to the automation of benchtop DMM measurements. Huntron Workstation enables you automate DMM tests by creating a predefined test plan, capturing measurements, and comparing to either a stored measurement captured from a working assembly or against a defined value. You can view the results of your test with the software displaying the compared measurements.

The ability to automatically store test measurements and document specific DMM test procedures allows for consistency in how the test performed by your technical staff:

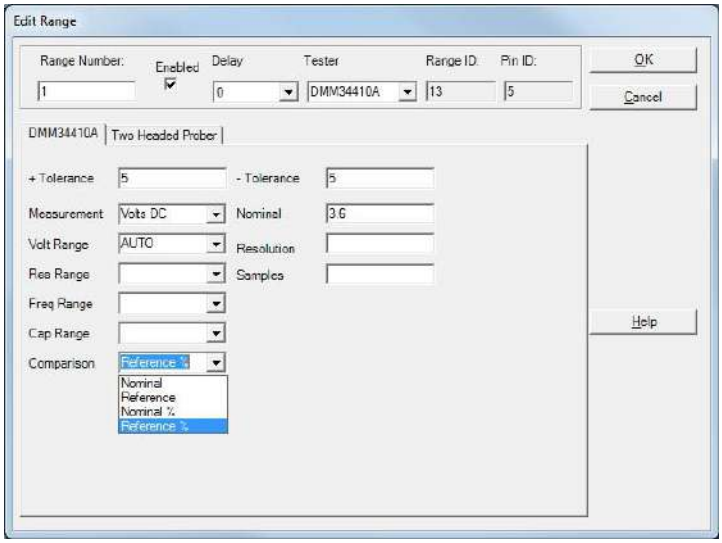
- Results are stored and documented for easy tracking
- Reduces errors from misplaced probes
- Test speed is increased
- Duplication of tests to accommodate PCB revision changes

Huntron Workstation provides test measurement and storage capabilities that no other stand-alone software package offers.

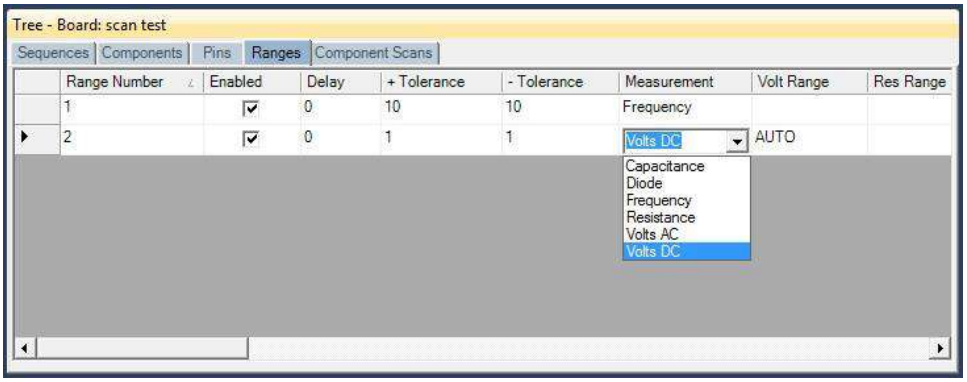
The multi-pane layout of the software allows for quick and efficient editing of the test configuration. You create a Board test that is organized into “Sequences” containing the Components or Nets you wish to measure.



As part of the test Sequence, you have control of the ‘range” parameters used when sampling the DMM measurement. Most of your DMM measurement functions such as DC/AC voltage, resistance, capacitance and frequency are supported.

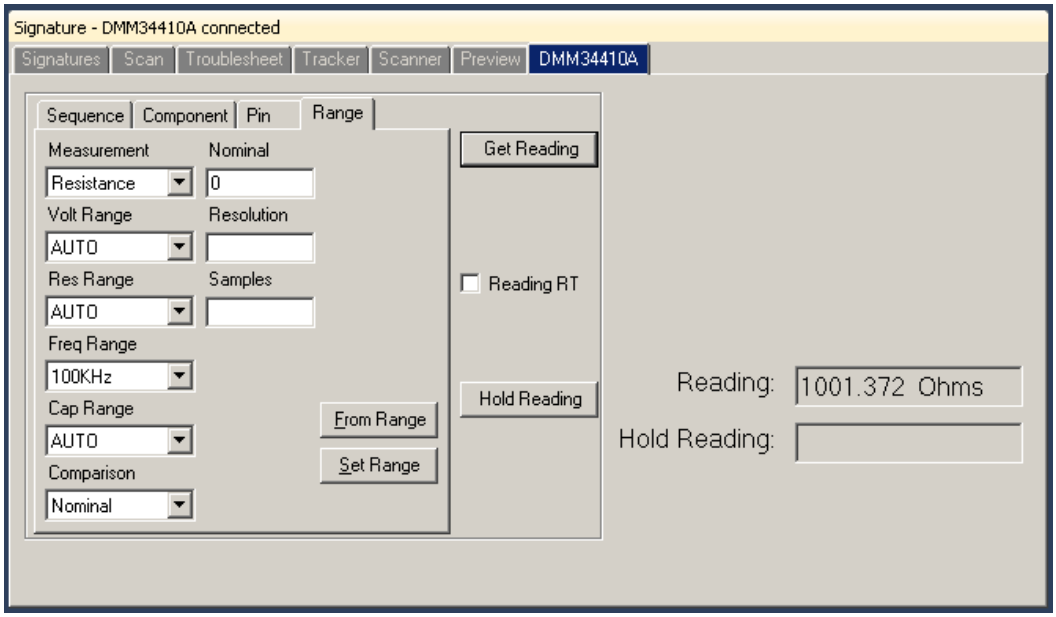


You can set a Nominal value and tolerances to use for when the test is executed. If the measured value matches the Nominal value within the specified tolerances then the test will pass. The Tolerance can be a deviation value in the measurement units (i.e. +/- .1V; +/- 100 ohms, etc.) or a percentage of the nominal value. As an alternative, you can use to a reference measurement that is taken from a functional assembly and stored in the test database. When the test is run, measurements will be compared to the reference measurement and indicate a pass or fail. Tolerance can be value or percentage based. The settings can also be quickly edited directly in the Range tab of the Tree pane.



Manual Control

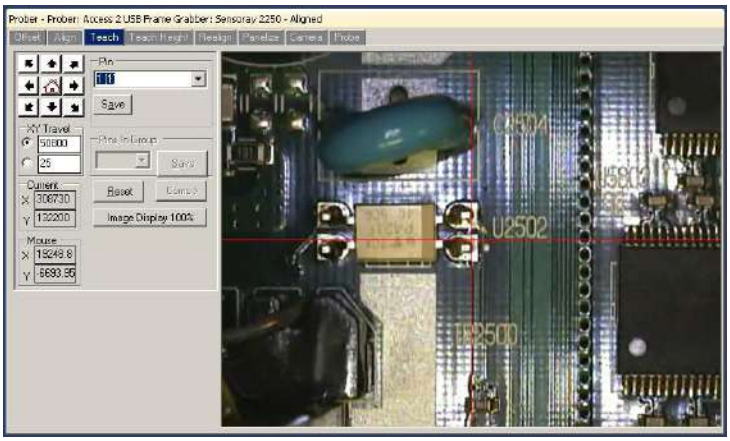
Manual Control is possible using the Workstation Signature pane where you have full control of the DMM functions. This can be useful to help determine range settings used when creating your test.



Speed and Dexterity with Automation

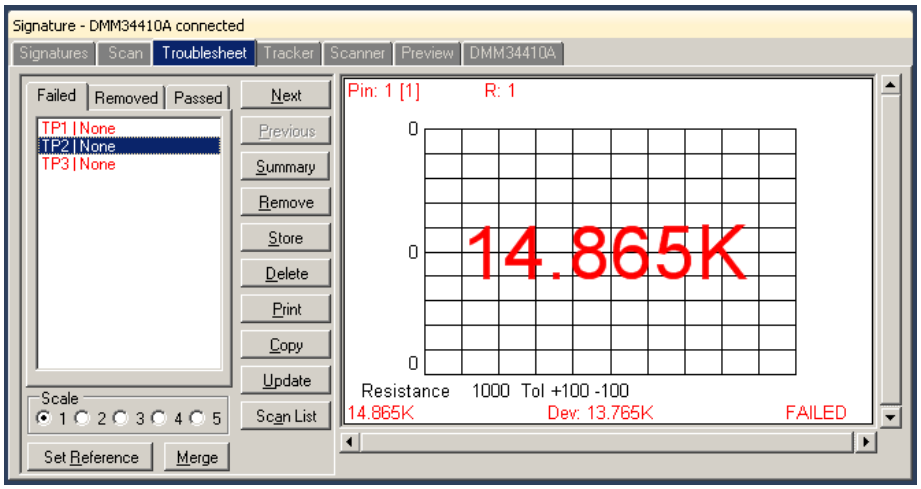
Adding a Huntron Access Prober allows you to fully automate the probing of the test points created in your Workstation test Sequence.





The software uses the Access Prober's high resolution camera to target the points on an assembly where the guided test probe is to be placed. Once the locations of all the test points are saved, the test can be executed and the Prober automatically places the probe and captures the measurements.

The test results are displayed in the Troublesheet when the scan is complete. The test result displayed below shows an expected measurement of 1000 ohms but the actual measurement was 14.865K ohms for a deviation of 13.765K ohms with the tolerance of +/- 100 ohms taken into account.



A Troublesheet report can be generated and saved for further evaluation.

Supported DMMs

There currently are three DMMs supported by Huntron Workstation – the **Agilent 34461A**, **Agilent 34410A** and the **Tektronix 4050**.

