

Thermistor TSP® Application

TSP Application Release Notes

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GENERAL INFORMATION

SUPPORTED MODELS

This application can be used on the following Keithley Instruments product models:

- Model DAQ6510 Data Acquisition and Multimeter System
- Model DMM6500 Multimeter
- Model DMM7510 Multimeter
- Model 7700, 7701, 7702, 7703, 7706, 7707, 7708, and 7710 MUX Modules

INSTALLATION INSTRUCTIONS

From the front panel:

- 1. Copy the application file (.tspa file) to a USB flash drive.
- 2. Verify that the application file is in the root subdirectory of the flash drive.
- 3. Insert the flash drive into the USB port on the front panel of the instrument.
- 4. From the instrument front panel, navigate to **MENU->Scripts->Apps** (or press the **APPS** key if available on your instrument)
- The Local tab shows your installed applications. Select the USB tab to display the applications on your USB flash drive.



- 6. Select an app. You will see a brief description and function of the app as well as instrument compatibility.
- 7. Select the save icon to install the application onto your instrument or select **Run** to execute the application from the USB flash drive. If you are updating an application, you will be prompted to overwrite the existing version.

You can delete an application from the instrument or your USB flash drive by selecting the delete icon.

VERSION 1.2.0 RELEASE

OVERVIEW

Version 1.2.0 is a maintenance release of the TSP Thermistor test application. This release fixes an error where temperature data was assigned incorrect timestamps. There were no enhancements included in this release. See the "Critical fixes" sections for more information about release content.

CRITICAL FIXES

Symptom:	The application did not assign timestamps to calculated temperature values. This resulted in data timestamps being assigned inaccurate default values.
Resolution:	This issue has been corrected and the timestamps for collected data is now accurate within the data buffers and graph view.

VERSION 1.1.0 RELEASE

OVERVIEW

Version 1.1.0 provides enhancements.

ENHANCEMENTS

The following enhancement(s) have been included in this release:

• Temperature readings are now displayed immediately on the app home screen. Previously the operator needed to navigate to the graph and view the temperature as a series trend. Now a region of the screen (lower left corner) provides the real time digital readout of the most recent temperature conversion.

For the latest version of this application and to see other applications, visit https://www.tek.com/keithley/tsp-applications-for-touch-test-invent-models.

VERSION 1.0.0 RELEASE

OVERVIEW

This application script allows you to take automated resistance measurements on a thermistor and store corresponding temperature data. Two resistance-temperature characterization models are available for use: the Beta model and the Steinhart-Hart model. While the script is running, resistance measurements will be immediately converted to corresponding temperature values, which is useful for live monitoring.

The resistance measurements, temperature readings, and coefficient values (if needed) are stored in 3 separate data buffers. Data buffers can be displayed in a table, on a graph, or exported to a USB.

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