

How To Use Thermistor Temp Spreadsheet

March 17, 2007 Prepared by Dan Nicoson email: A6intruder@myo-p.com

This article discusses how to use the "Thermistor Temp Spreadsheet.xls". This spreadsheet is intended to allow you to take quick measurements of a thermistor with your digital volt meter (DVM) set on resistance and quickly convert the resistance measurements to a temperature in degrees Centigrade.

This discussion assumes the user has spreadsheet software that can use the Excel file provided (Excel 2000). You are welcome to use the spreadsheet for personal or hobby use, post it on your web site, pass it around as you will.

Be aware this spreadsheet merely calculates a temperature based on the basic equation provided on a Jameco datasheet for the NTC-202. The spreadsheet results in the theoretical temperature from a measured resistance. There are still several errors that could exist depending on the thermistor being used: its accuracy and your implementation of the thermistor. Use at your own risk and expense, I make no warranty of suitability for any use.

PLEASE DO NOT CONTACT ME TO EXPLAIN HOW TO USE EXCEL!!!

I used the following color convention on the spreadsheet: light blue = input data; light brown= calculated data. I have password protected the spreadsheet simply to keep you from mistakenly changing one of the cells that contain an equation. I have noted the password at the top of the page "thermistor" in case you want to remove Protection (select Tools/Protection...). By removing protection you can graph your data or make changes to suit your needs.

You will find there is a section to change the thermistor parameters should you choose to use a different model thermistor. Simply plug in the new parts parameters and go to work.

Column Headings: The column headings were appropriate to my project. You can change them as needed for your project. The intended use was to collect the resistance at each current level and have the spreadsheet output the temperature.

Enjoy! I can normally be contacted on Yahoo Groups "electronics101" discussion group.