

Data Acquisition with the Rigol DM3058 DMM

Date: 04.21.2016

The Rigol DM3058 series of DMMs can be used to collect CSV data to a USB memory stick. This note covers saving DCV data but the technique is the same for any function.

NOTE: The data does not save timestamp information. You can estimate the elapsed time between points by using the Measurement Rate setting.



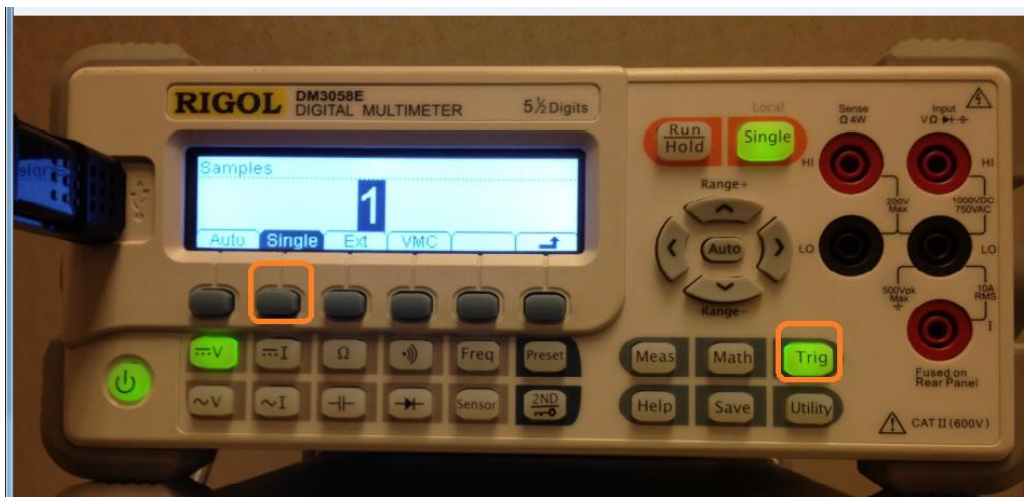
Figure 1: DM3058 with the highlight of the Measurement Rate setting circled in orange.

- 2.5 reading/s with the "Slow" rate; the mark on the instrument Status Bar is "S".
- 20 reading/s with the "Middle" rate, the mark on the instrument Status Bar is "M".
- 123 reading/s with the "Fast" rate, the mark on the instrument Status Bar is "F".

Setup

1. Insert USB stick (Windows FAT32 format)
2. Change the trigger source to single. This mode allows you manual control of the start of the data acquisition as well as allowing you to control the number of samples acquired.

Press TRIG > SINGLE



3. Press DONE and the SINGLE button will become enabled
4. Enter the number of samples.

NOTE: Use the right and left arrows to move the cursor to the decimal place you wish to change and then use the up and down arrows to increment or decrement the value. In this example, we set the number of samples to 1000.

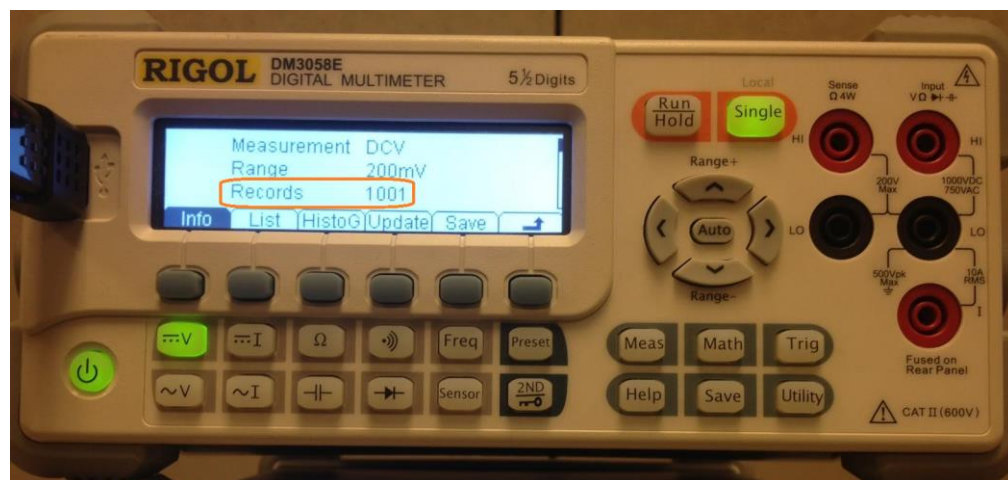


5. Press TRIG to back out of the trigger menu and get back to the measurement display.
6. Clear the memory data by changing functions. In this example, we switch from DCV to ACV and back to DCV.

NOTE: The record number (in HISTORY) is set to 1 after the function change.



7. Select the function that you wish to use during the data acquisition process.
8. Press SINGLE to begin the data acquisition
9. The instrument display will continue to update until the data buffer is filled with the number of samples that were set earlier.



Find more information online [DM3058 Family Information page](#)

For more information on our waveform generators or other products please go to rigolna.com or contact us directly at applications@rigoltech.com or call us toll free at 877-4-RIGOL-1.

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