



DM3058 Scan Excel/VBA Example

*Date:*08.15.2012

Solution: We have built a short example that allows customers that have a Rigol DM3058 Series of DMM and Microsoft Excel © to perform a simple data logging procedure.

The program allows users to select the measurement function, number of samples, and delay between samples.

It then uses a Sample-Delay Loop method to return data to the spreadsheet.

All ancillary measurement settings (NPLC, Range, Autozero) are configured manually on the instrument front panel.

Requirements:

- PC running Windows and Microsoft Excel version 2010 or later
- National Instruments VISA Runtime Engine (www.ni.com Search VISA Runtime and pick the appropriate runtime engine for your Operating System)
- A copy of the file 'SimpleControl_DM3058.xlsm' which can be downloaded from the software tab here: <http://www.rigolna.com/products/digital-multimeters/dm3000/dm3058/>
- A Rigol DM3058 DMM
- A USB cable to connect the PC with the DMM

rigolna.com

Rigol Technologies USA, Inc.
Phone/Fax: 440-232-4488

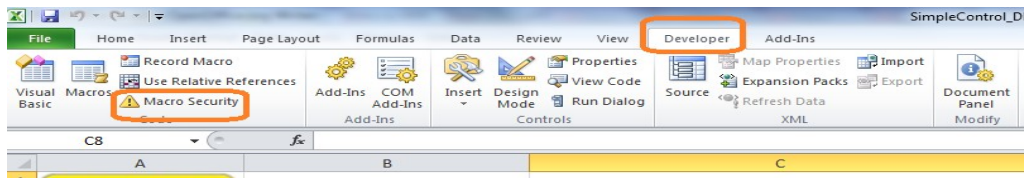
Toll Free: 877-4-RIGOL-1

7401 First Place, Ste. N Oakwood Village, OH 44146 USA



Instructions:

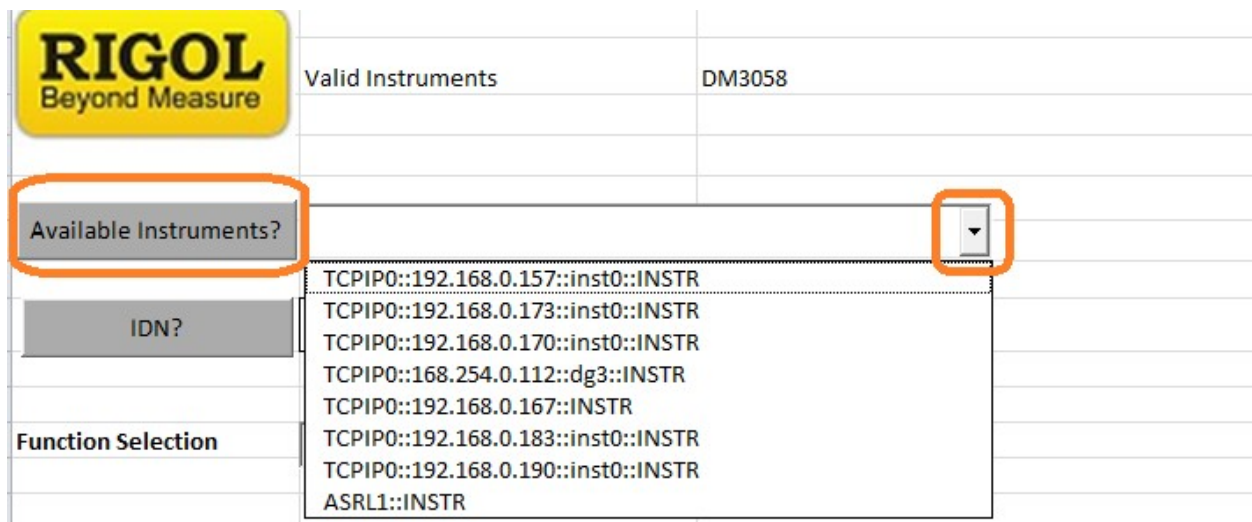
1. Power On the DMM and manually configure the range, NPLC, and Autozero. Also connect the instrument to the circuit or device you wish to measure
2. Connect the DMM to the PC using the USB cable
3. Open the file 'SimpleControl_DM3058.xlsm'
 - NOTE: You need to configure Excel to enable Macros.



4. Enter the Press the Available instruments button to retrieve a list of connected instruments. Use the drop down to select the instrument ID for the DMM you wish to control.

NOTE: A Rigol DMM connected over USB will have an address like below:

“USB0::0x1AB1::0x0588::DM3L124400469::INSTR”



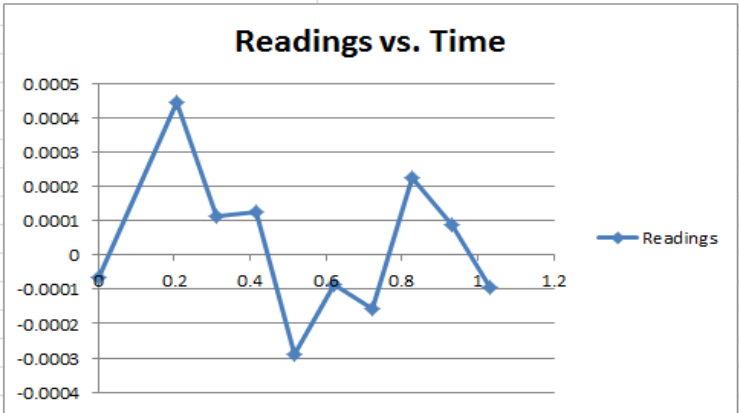


5. To check communications, you can press the *IDN? Button. This will request the instrument identification string, which includes the instrument model and serial number.

| | | |
|------------------------|--|---|
| | Valid Instruments | DM3058 |
| | | |
| Available Instruments? | USB0::0x1AB1::0x0588::DM3L124400469::INSTR | |
| IDN? | Instrument Identification response | Rigol Technologies,DM3058,DM3L124400469,01.01.00.01.05.01 |

6. Select the measurement function, Sample count (from 1 to Excel's max limit of rows), and Sample Delay (in seconds).
7. When you want to begin measurement, press the Read button. The program will then set the instrument to perform a sample-delay process that will execute the number of Sample settings.

The graph will show readings vs. time



NOTE: Clear will clear all available fields.