

# How to configure a DMM scan using EasyDMM

September 19, 2018

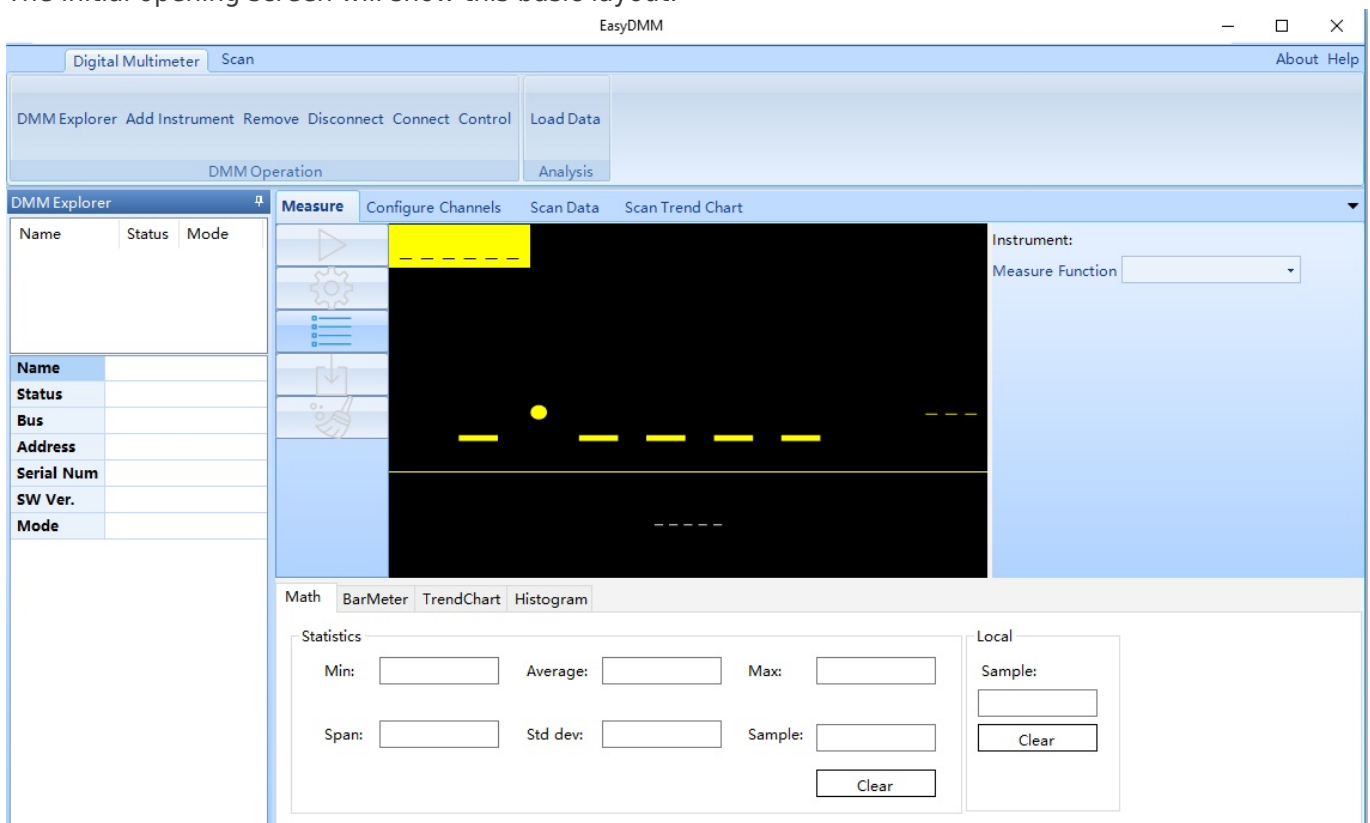
The SIGLENT SDM3055-SC and SDM3065-SC instruments are digital multimeters with switch cards that allow for up to 12 voltage-function measurements (and an additional separate 4 current measurement channels).

SIGLENTs EasyDMM software provides easy instrument control and data collection.

In this note, we will show how to configure EasyDMM to perform a scan

1. Download and install EasyDMM. You can find the download instructions and files here: [DMM Software](#)
2. Connect the SDM to the controlling computer or network. The SDMs have USB and LAN connections. In this note, we are using a USB connection
3. Open EasyDMM by clicking on the desktop icon or running the executable from the start menu.

The initial opening screen will show this basic layout:



4. Now, click on Add Instrument, select the USB device you wish to control (USBTMC as shown), and click OK:

Digital Multimeter Scan About Help

DMM Explorer Add Instrument Remove Disconnect Connect Control Load Data

DMM Operation Analysis

DMM Explorer Measure Configure Channels Scan Data Scan Trend Chart

Name	Status	Mode

Name  
Status  
Bus  
Address  
Serial Num  
SW Ver.  
Mode

Instrument: Measure Function

Math BarMeter TrendChart Histogram

Statistics  
Min: Average: Max:  
Span: Std dev: Sample:

Local  
Sample:  
Clear

Digital Multimeter Scan About Help

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DMM Operation Analysis

DMM Explorer Measure Configure Channels Scan Data Scan Trend Chart

Name	Status	Mode

Name  
Status  
Bus  
Address  
Serial Num  
SW Ver.  
Mode

Instrument: Measure Function

Add Device

USBTMC

Connected devices:

VXI11

**SDM3065X "USB0::0xF4EC::0xEE38::SDM36FAX1R0084::INSTR"**

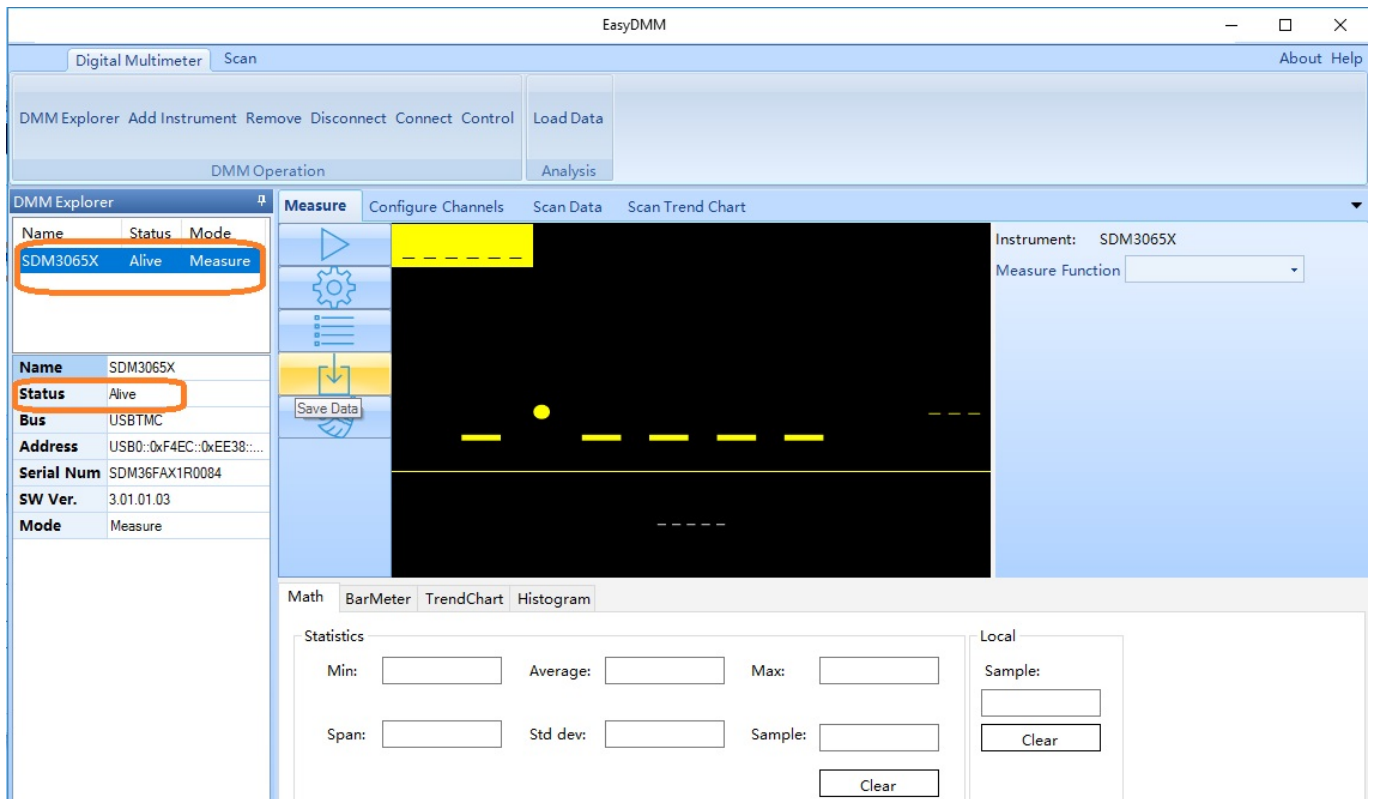
Not Connected Device OK Close

Math BarMeter TrendChart Histogram

Statistics  
Min: Average: Max:  
Span: Std dev: Sample:

Local  
Sample:  
Clear

It's ALIVE!!!!



5. Now, select Scan Mode. Note that the Scanner field appears:

EasyDMM

Digital Multimeter Scan

DMM Explorer Add Instrument Remove Disconnect Connect Control Load Data

DMM Operation Analysis

DMM Explorer

Name	Status	Mode
SDM3065X	Alive	Measure

**Name** SDM3065X  
**Status** Alive  
**Bus** USBTMC  
**Address** USB0::0xF4EC::0xEE38:.....  
**Serial Num** SDM36FAX1R0084  
**SW Ver.** 3.01.01.03  
**Mode** Measure  
 None  
 Measure  
 Scan

Instrument: SDM3065X  
Measure Function

Math BarMeter TrendChart Histogram

Statistics

Min: Average: Max:

Span: Std dev: Sample:

Local

Sample:

Clear

EasyDMM

Digital Multimeter Scan

DMM Explorer Add Instrument Remove Disconnect Connect Control Load Data

DMM Operation Analysis

DMM Explorer

Name	Status	Mode
SDM3065X	Alive	Scan

**Name** SDM3065X  
**Status** Alive  
**Bus** USBTMC  
**Address** USB0::0xF4EC::0xEE38:.....  
**Serial Num** SDM36FAX1R0084  
**SW Ver.** 3.01.01.03  
**Mode** Scan  
**Module** 16 Channel Scanner

Instrument: SDM3065X  
Measure Function

Math BarMeter TrendChart Histogram

Statistics

Min: Average: Max:

Span: Std dev: Sample:

Local

Sample:

Clear

6. Select Configure Channels. Select the channels you wish to control using the checkbox. Also select the function, range, etc...:

The screenshot shows the 'EasyDMM' software interface. The 'Configure Channels' window is open, displaying a table of channels. The 'Configure Channels' tab is highlighted in orange. The table has columns for Channel, Scan, Name, Function, Range, Speed, More, Scaling(KX+B), and Alarm Limit. Channels 101, 105, and 110 are selected with checkboxes.

Channel	Scan	Name	Function	Range	Speed	More	Gain(K)	Offset(B)	Mode	Low	High
101	<input checked="" type="checkbox"/>		DC Voltage	20V	Fast	<input type="checkbox"/>	1	0	Off	0	0
102	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
103	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
104	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
105	<input checked="" type="checkbox"/>		DC Voltage	20V	Fast	<input type="checkbox"/>	1	0	Off	0	0
106	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
107	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
108	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
109	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
110	<input checked="" type="checkbox"/>		DC Voltage	20V	Fast	<input type="checkbox"/>	1	0	Off	0	0
111	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
112	<input type="checkbox"/>		DC Voltage	Auto	Slow	<input type="checkbox"/>	1	0	Off	0	0
113	<input type="checkbox"/>		DC Current	2A	Slow	<input type="checkbox"/>	1	0	Off	0	0
114	<input type="checkbox"/>		DC Current	2A	Slow	<input type="checkbox"/>	1	0	Off	0	0
115	<input type="checkbox"/>		DC Current	2A	Slow	<input type="checkbox"/>	1	0	Off	0	0
116	<input type="checkbox"/>		DC Current	2A	Slow	<input type="checkbox"/>	1	0	Off	0	0

7. After configuring the channels, select Scan Data and set the start, interval, stop, and data control values:

EasyDMM

Digital Multimeter Scan About Help

DMM Explorer Add Instrument Remove Disconnect Connect Control Load Data

DMM Operation Analysis

DMM Explorer **Measure** Configure Channels **Scan Data** Scan Trend Chart

Name	Status	Mode	Instrument	Scan Control			Data Control	Start/Stop	Scan Status		
				Start	Interval	Stop	Save Data		Status	Elapsed Time	
SDM3065X	Alive	Scan	SDM3065X	Immediately	1s	2 Scans	None	<input type="checkbox"/> OFF	Stop	0	00:00:00.000

Result										
	Instrument	Channel	Measurement	Data	Min	Max	Average	Total	Alarm	
▶ 0	SDM3065X	101	DC Voltage(V)							
1	SDM3065X	105	DC Voltage(V)							
2	SDM3065X	110	DC Voltage(V)							

DMM Explorer

**Name** SDM3065X

**Status** Alive

**Bus** USBTMC

**Address** USB0::0xF4EC::0xEE38:...

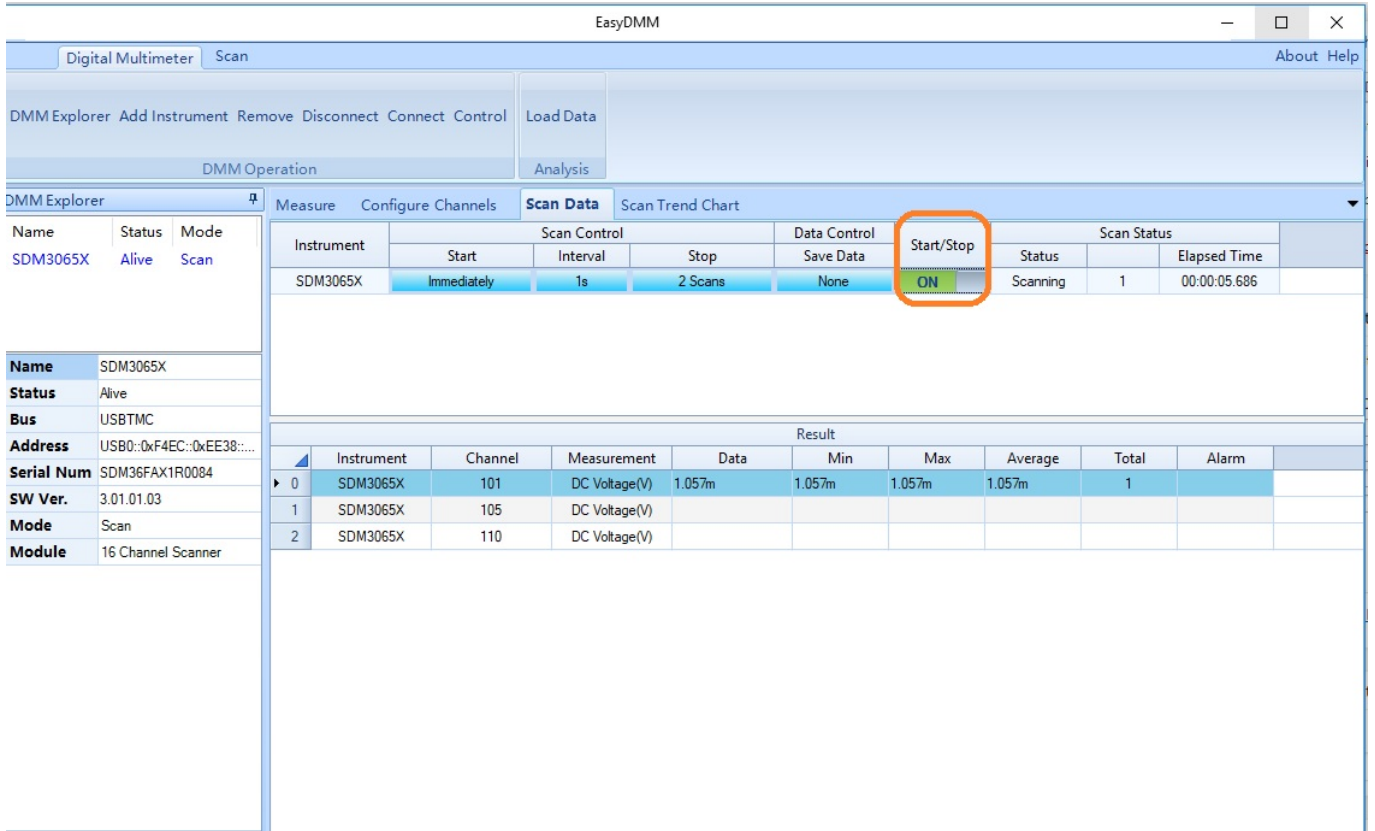
**Serial Num** SDM36FAX1R0084

**SW Ver.** 3.01.01.03

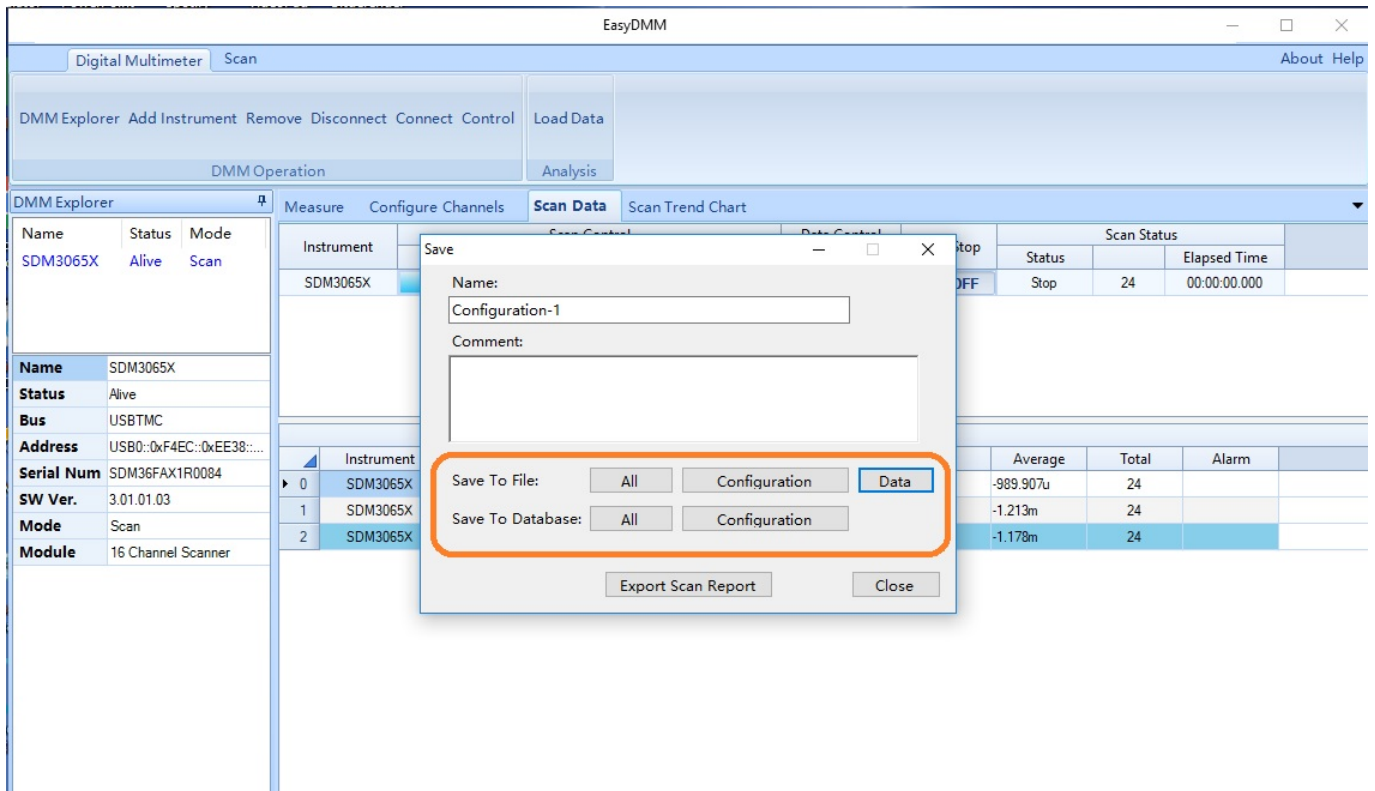
**Mode** Scan

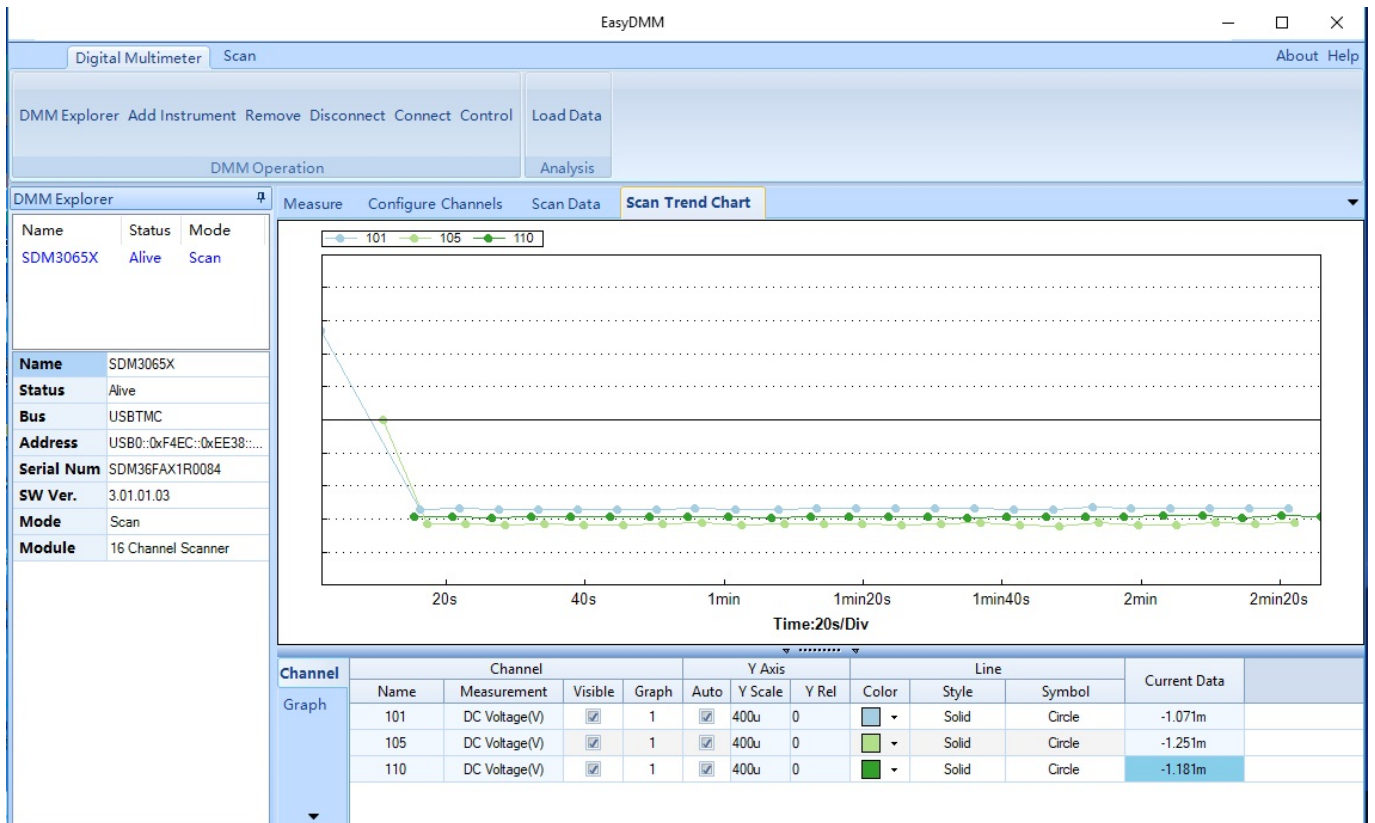
**Module** 16 Channel Scanner

8. When you want to start the scan, click on the Start/Stop slider as shown:



After the scan is complete, you can save the data or view using the Scan Trend Chart:









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