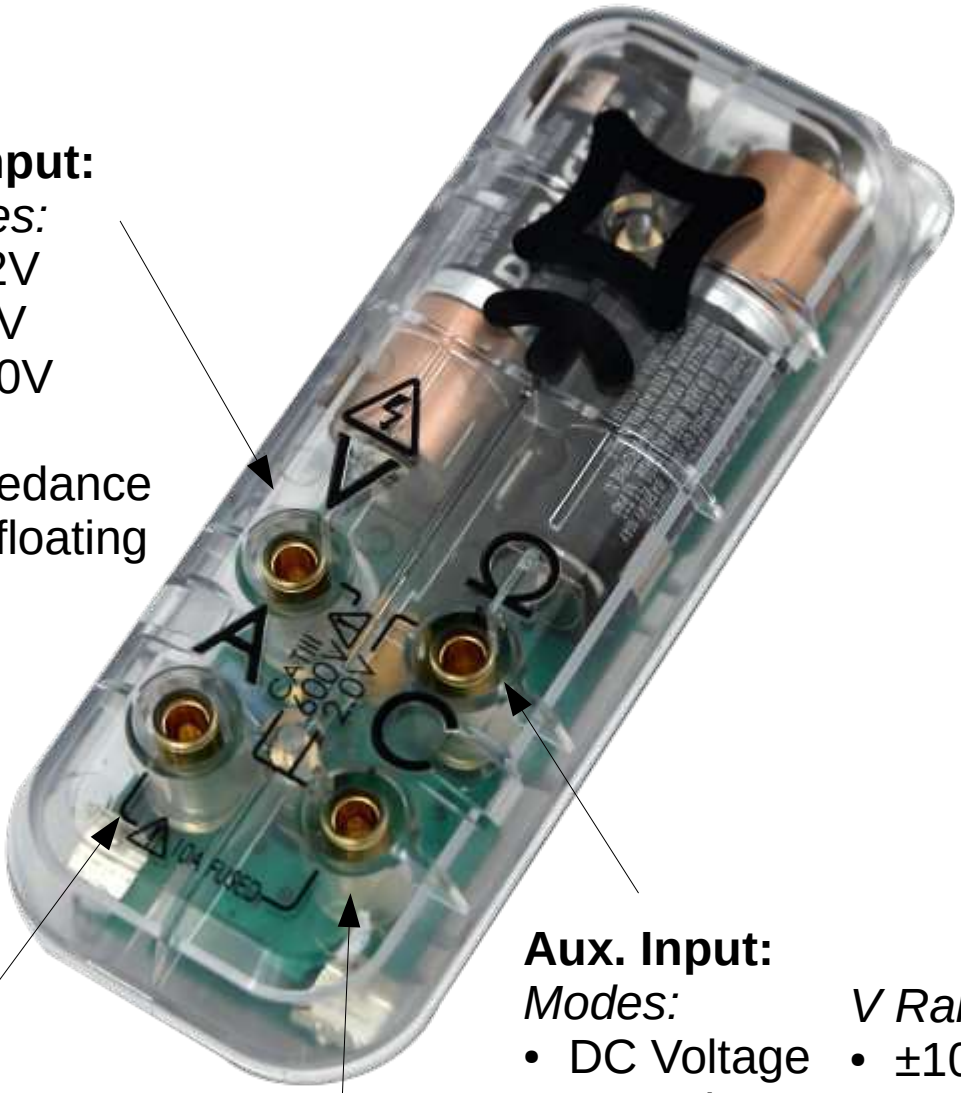
Mooshimeter Cheat Sheet

Version 0
Jan. 29 2015
James Whong

Measurement Overview



High Voltage Input:

Modes:
- DC
- AC

Ranges:
- ±1.2V
- ±60V
- ±600V

10MΩ input impedance
± 1.2V range is floating

Aux. Input:

Modes:
- DC Voltage
- AC Voltage
- Resistance
- Diode Drop

V Ranges:
- ±100mV
- ±250mV
- ±1.2V

Ω Ranges:
- 1kΩ
- 2.5kΩ
- 10kΩ
- 1MΩ
- 2.5MΩ
- 10MΩ

Current Input:

Modes:
- DC
- AC

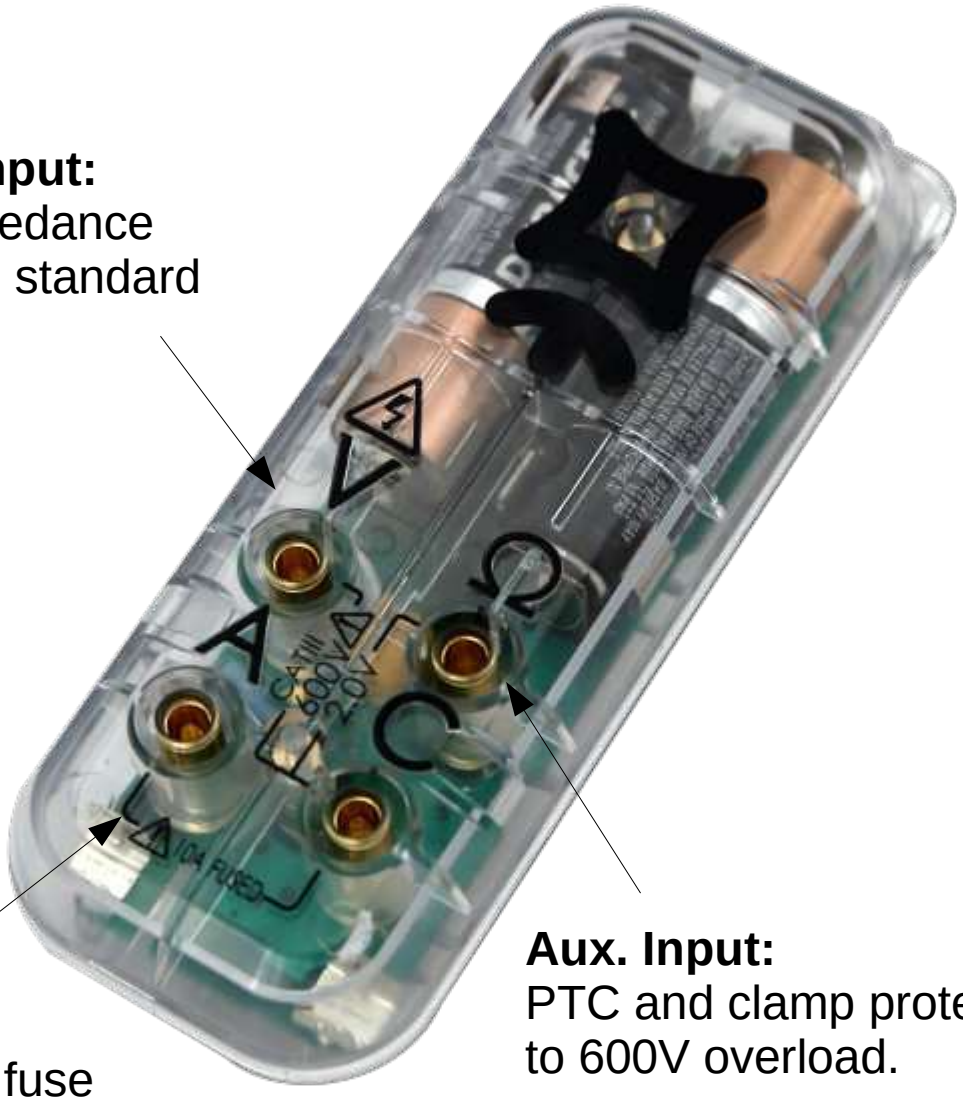
Ranges:
- ±1A
- ±2.5A
- ±10A

Connected to C (Common) input by current sense resistor and fuse.

Common Input:
All other measurements are relative to this terminal

Protection Overview

High Voltage Input:
10MΩ input impedance
Tested to CATIII standard
– 4kV surge



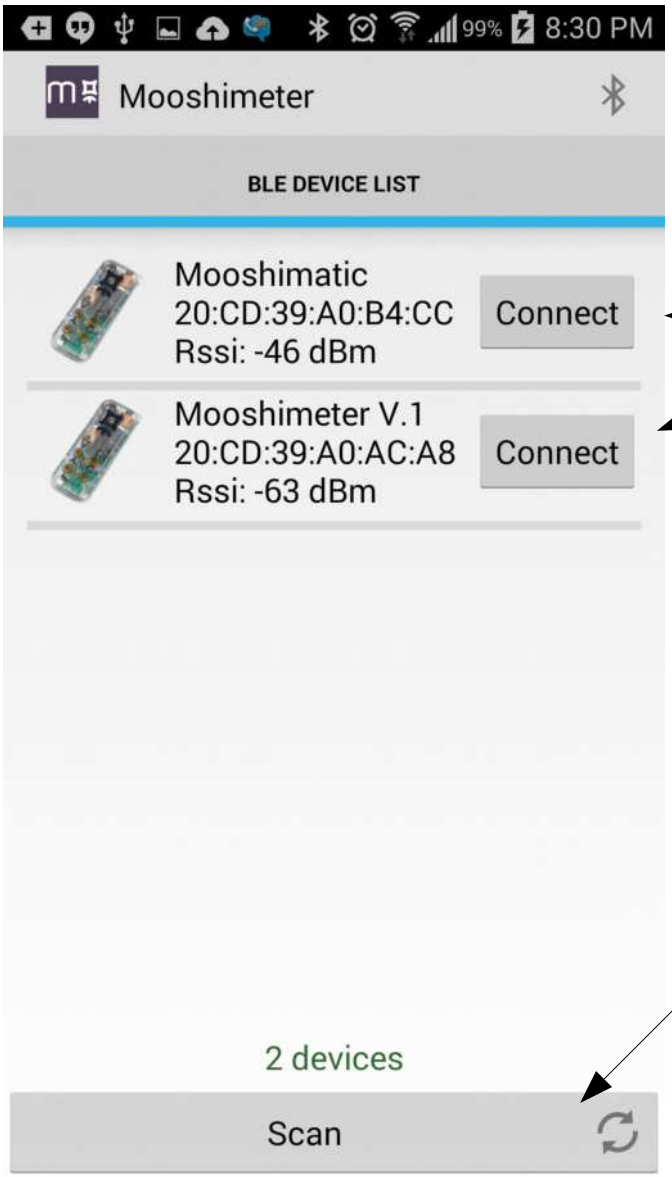
Aux. Input:
PTC and clamp protected to 600V overload.

Readings will be affected for several minutes after overload event (allow protection elements to cool)

Current Input:
Factory installed fuse rated to 10kA breaking at 600V

Polycarbonate Case:
Tested to 4kV sustained from any terminal.

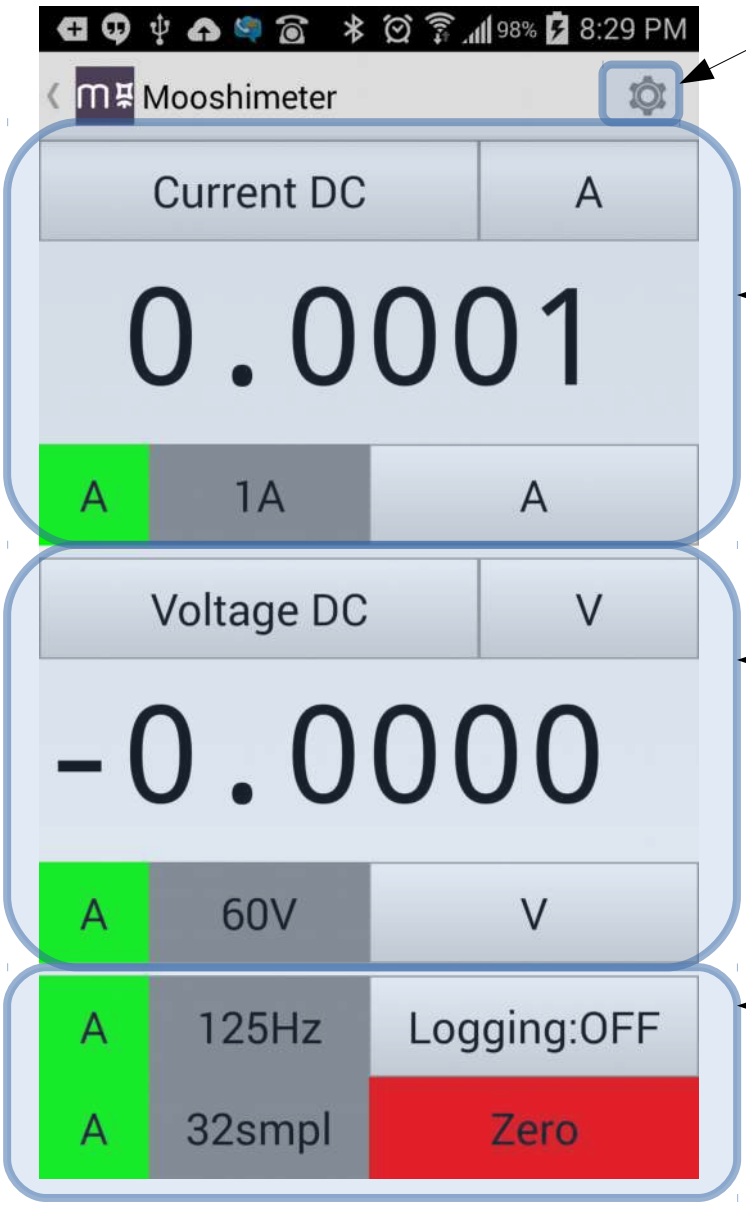
Scan Page



Scan results:
These are meters that were detected in the scan.
Tap one to connect to it.
If the connection is successful, you will be taken to the Meter View Page.

Scan button:
Scan for Mooshimeters within range. Results will appear in the list as they are detected. Scan ends after 10 seconds.

Meter View Page



Preferences
Opens the Preferences Dialog

Channel 1 Control
See “Channel Control”

Channel 2 Control
See “Channel Control”

Sampling Control
See “Sampling Control”



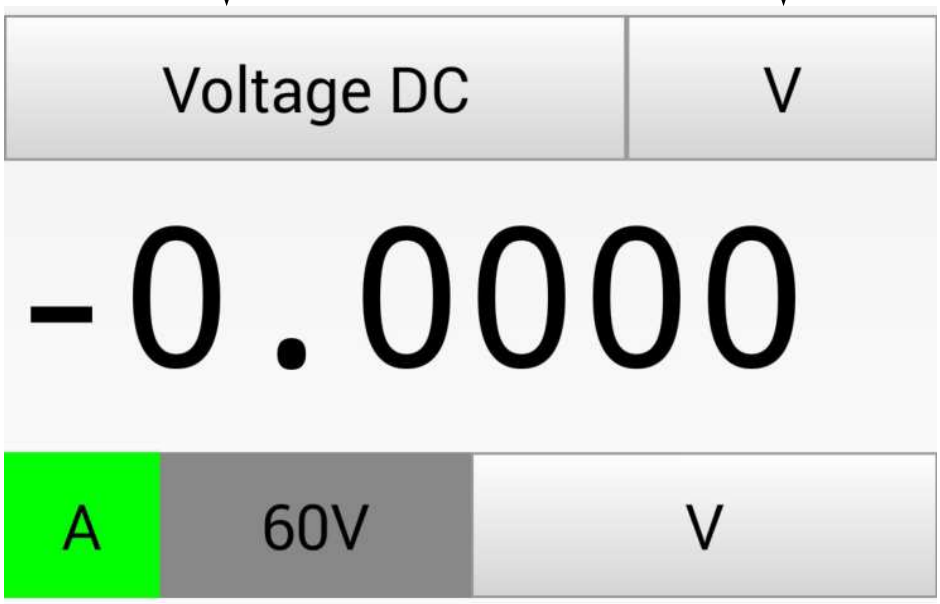
Rotate to Landscape
Will enter Graph View

Channel Control

Measurement Type
On the V and A inputs, tap to cycle between DC and AC.

On the Ω input cycles between:
- DC Volts
- AC Volts
- Resistance
- Diode Drop

Input Select
Tap to change which input port is being used. This label corresponds to the marking on the case.



Measurement Range
When manual control enabled, tap to cycle between available ranges

Auto-Range Enable
Tap to toggle
“A” means auto ranging
“M” means manual ranging

Units
Displays the units of the reading. Tap to cycle:
- Natural Units
- Raw Hex Codes

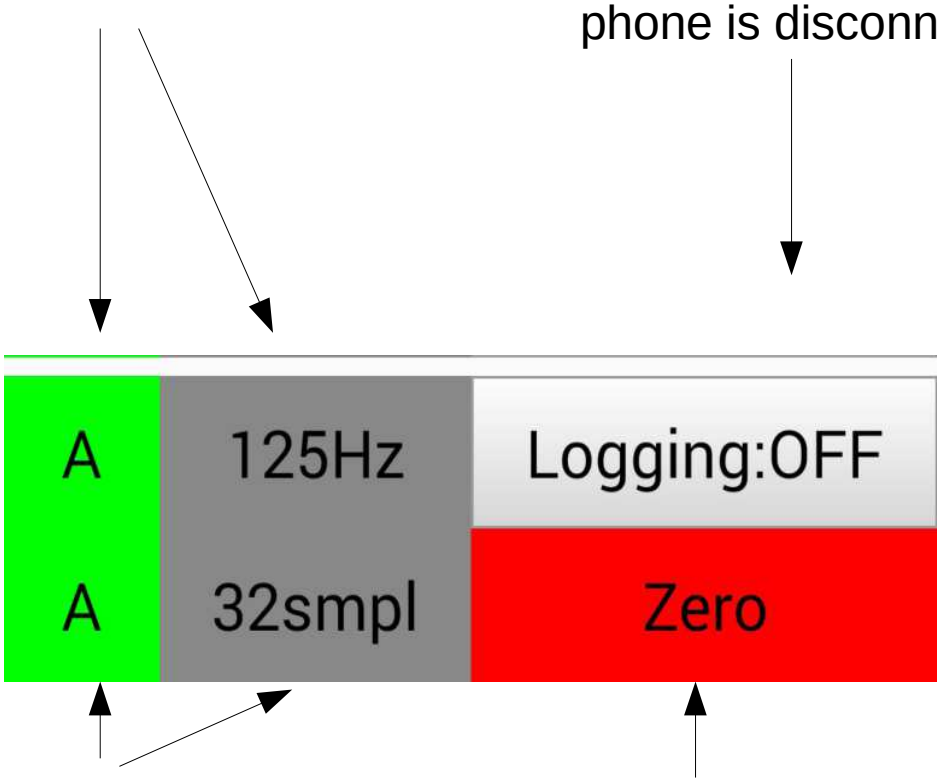
Sampling Control

Sampling Rate
The frequency at which the ADC pulls samples.

The green button enables manual control.

Logging Enable
Tap to enable logging.

With logging enabled, if an SD card is installed, samples will be saved to it when the phone is disconnected.



Sample Buffer Depth
The number of samples the meter takes to perform DC and AC calculations

The green button enables manual control.

Note that AC calculations are inaccurate at buffer depths below 128.

Re-zero
Stores the present reading of both channels and subtracts them from subsequent readings. Useful for seeing changes from a baseline.

Does not affect AC measurements.

Graph View – Trend Mode

All settings from the Meter View are carried over to Graph View

Auto-ranging is disabled in Graph View. To change settings, switch back to Meter View by turning the phone to portait orientation.

Channel 1: Red **Channel 2: Green**



Pause/Play Button
Starts and stops data flow to the chart.

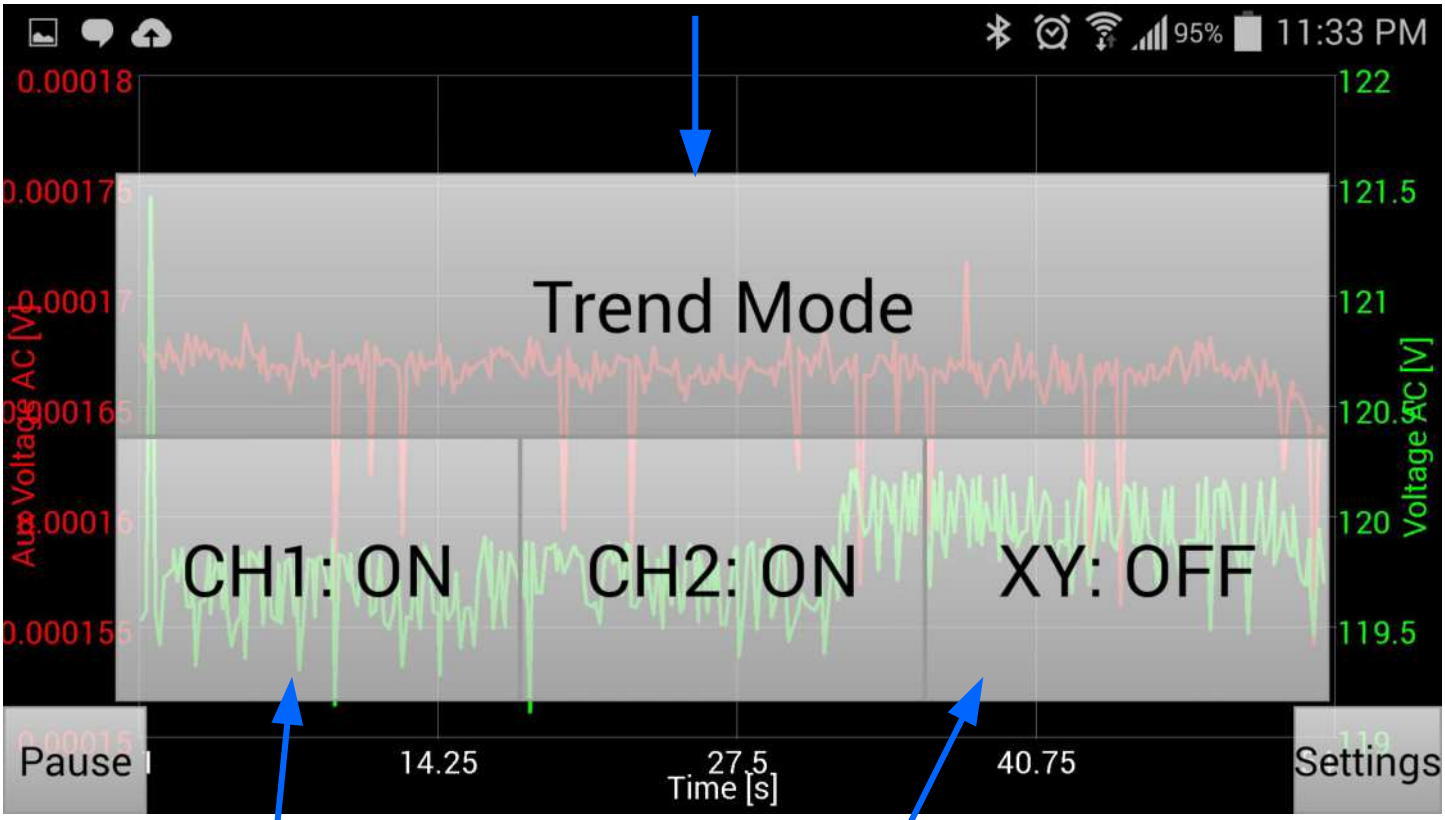
In iOS version this is done by tapping the background.

Graph Settings Button
Brings up Graph Control

Graph Control

Trend to Buffer Mode Toggle
Trend Mode displays data aggregated slowly over time

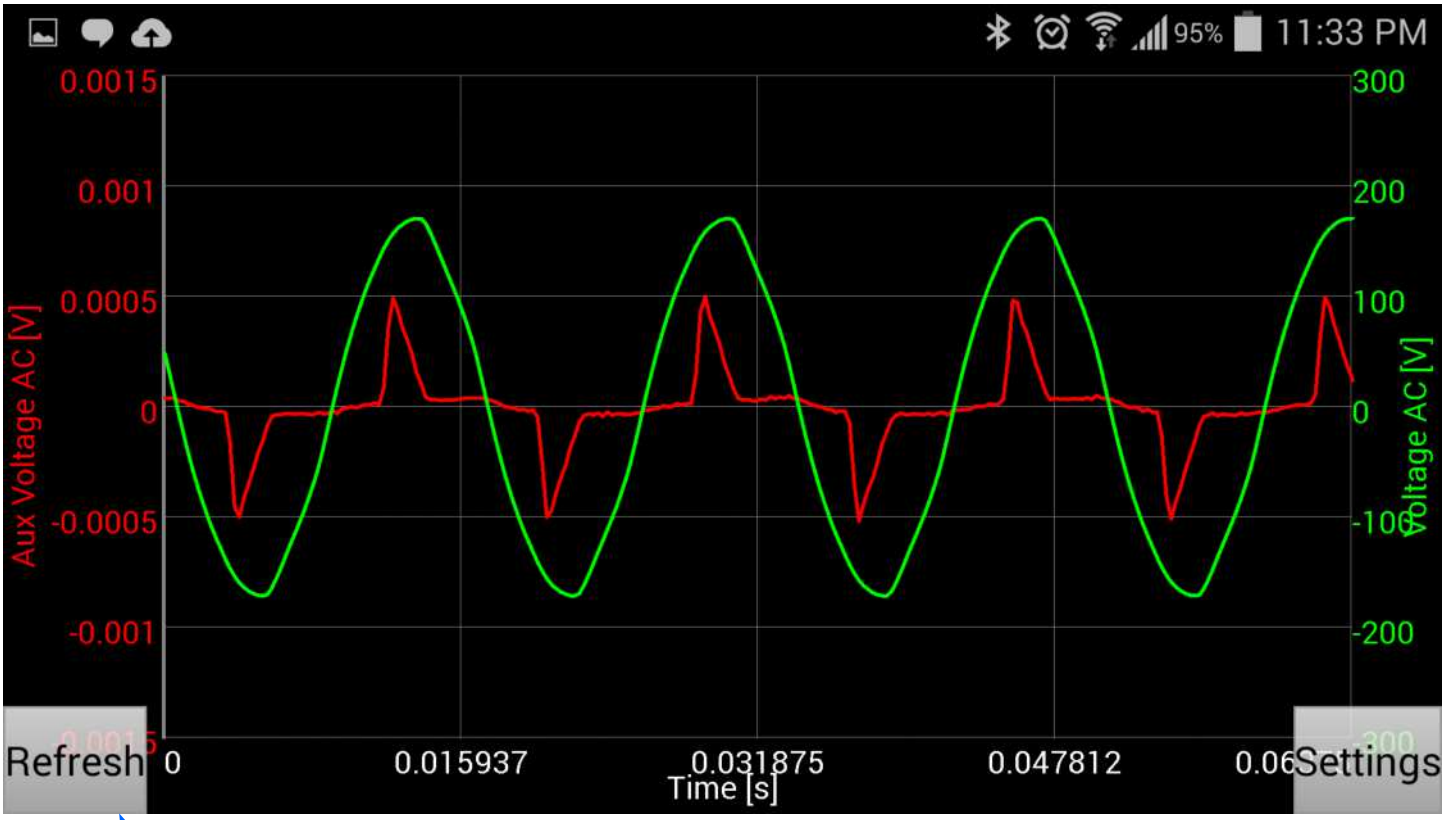
Buffer view grabs a single sample buffer from the meter for closer analysis (useful for AC)



Channel Toggles
Toggles the display of Channel 1 and 2.

XY Mode
Instead of Time being plotted on the X axis, Channel 1 is plotted on the X axis and Channel 2 on the Y

Graph View – Buffer Mode



Refresh
Samples and download a new buffer from the meter