

Critical comments made regarding the use of a DC ammeter or voltmeter across the load shunt to determine net battery current, i.e. why the video demonstration was made:

My responses are in [].

Rosemary

- Also - bending my mind is you requirement to introduce an ammeter to measure current here. Not only will it probably interfere with the extraordinary resonance that is evident from the loads but it will NEVER give an accurate number.

[Watch the video. Two meters that had a very slight loading effect were the Fluke 73 and the Fluke 179. The other 3 had no loading effect at all]

- I want to know how a DC voltmeter measurement can be considered more accurate than the Tektronix?

[As demonstrated in the video, a DC voltmeter can be as accurate as a high quality scope such as the Tek. If the Tek is not SPC calibrated with every few degrees variation in ambient temperature, its measurements will not be as accurate as the DC voltmeter. These voltmeters use a "dual-slope integrating A/D converter" which zeros out its own errors for each measurement cycle, so they are not subject to temperature drift errors as many oscilloscopes are. This has been verified in my own tests.]

- I will never be happy about using an ammeter in series...

[You might be happy now :)]

Aaron

- THERE IS NO VOLTMETER THAT WILL GIVE AS CLEAN OF RESULTS AS THE TEKTRONIX 3054C PERIOD END OF STORY.

[Watch the video. If the scope is off calibration even slightly, the meters will be more accurate. For why, read above]

- You [meaning me] would accept a multimeter volt reading across the shunt but not what the scope shows. That is so totally amateurish and shows how much of a wannabe debunker you really are with no qualifications to know anything about this circuit operation.

[Watch the video]

- Again, you [meaning me] are on the fast track to becoming the laughing stock of the free energy world - especially by suggesting the use of a volt meter across a shunt! lol Go tell that to any professional that actually knows what they're talking about and they will simply laugh in your face.

[Watch the video. That is incorrect; voltmeters are placed across shunts all the time.]

- Do the video, I want to see it.

[Watch the video]

jibbguy

- This is the problem: DMM's, and even bench multi-meters, are known to not accurately measure such fast non-sinusoidal and non-repetitive waveforms... Even if they have "True RMS" written on them.

[You are referring to "AC Volts" setting I believe, I am referring to a "DC volts" setting.]

- This is why they [oscilloscopes] are the MOST reliable and accurate method in these situations.

[Watch the video. The scope must be calibrated to be as accurate as the meter. The meter will

always be accurate]

- That goal of a second source may be "worthy", but your suggested methods of accomplishing it certainly are not. Only another scope or sufficiently fast data acquisition system could perform this check. That's not opinion, that is fact. Whether you like it or accept it or not.

[Watch the video, then you may want to re-assess your "facts"]

- YOU [meaning me] do the test yourself, and see the obvious (i don't have to, as 17 years in the test and measurement industry provided me 16.9 years of experience enough to know it would be a worthless proposition):

[Watch the video. Even old Engineers can learn something new ;)]

- Trying to read high F pulses with the "DC" setting will provide a meaningless jumble that changes every single time the display updates... If the DC bias offset was significantly above or below ground (it is not) it might serve as a very rough check.. But there are so many error factors involved that such subjective data from trying to compare how many "plus" and "minus" readings would be instantly discountable... By people like YOURSELF; if they weren't trying to beat a dead horse.

- If you want a better determinant of the "dominant" polarity of the signal, the best method is to Average the raw sample data. This IS THE ESTABLISHED METHOD, and whether you "like" it or not, it is still the proper way it is done in these cases. So it always comes back to the calibration of the Scope...

[Averaging the raw data IS EXACTLY what the meter is doing]

- And i can tell you right now, that Tek's accuracy will defeat anything you could throw at it.

[Not necessarily true, watch the video]

- But i gotta say Poynt, that DMM horse is decomposing; you can stop flogging it now. Please step back a minute and consider how useless it is to do a measurement that is beyond the capability of the device to perform.

[Not beyond the meter's capability at all, watch the video]

- I, and anyone else with half of my background, could give you AT LEAST FIVE reasons off the bat why such readings could be false and completely untrustworthy; and therefor not wise to pursue.

[Watch the video, numbers don't lie.]

FuzzyTomCat

- I'm in total agreement with your [jibbguy's] statement and I think you would agree that one of the best DMM on the market the Fluke 87 cannot in any way capture fast non-sinusoidal and non-repetitive waveforms, this is the one I'm using and this is no "CHUMP" Digital Multi Meter bought from some hardware store. The proposed testing method using the 200ma DC mili-ammeter in the circuit (mine is 400ma) is nothing but a waste of time and effort.

[Watch the video]

Harvey

- Enjoyed Jibbguy's post regarding the internal multimeter functions and have to agree with him there.

[Watch the video]