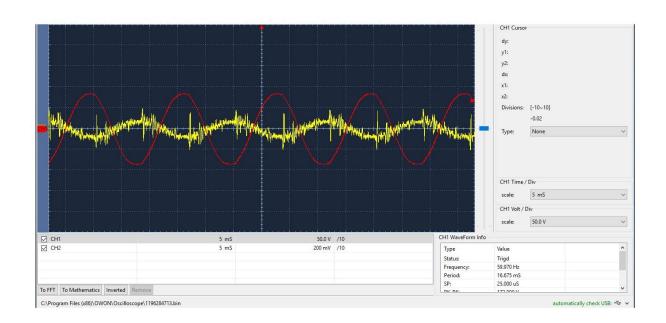
DE Filters LLC Test Report By Bill Bathgate

THIS IS A CONFIDENTIAL REPORT FOR YOUR EXCLUSIVE USE ONLY

Date Test Performed7-10-2019	Date of this Report	9-17- 2019 Post install test on 8-29-2019_
Client Name		
Client Address:		
Client Mobil Phone number(s),		
Client Land Line Phone number(s)		
Client Email address(es)		

Voltage Transients Photo Without DNA or Sine Tamer Filter:



The Frequencies before a DNA or Sine Tamer filter was installed:

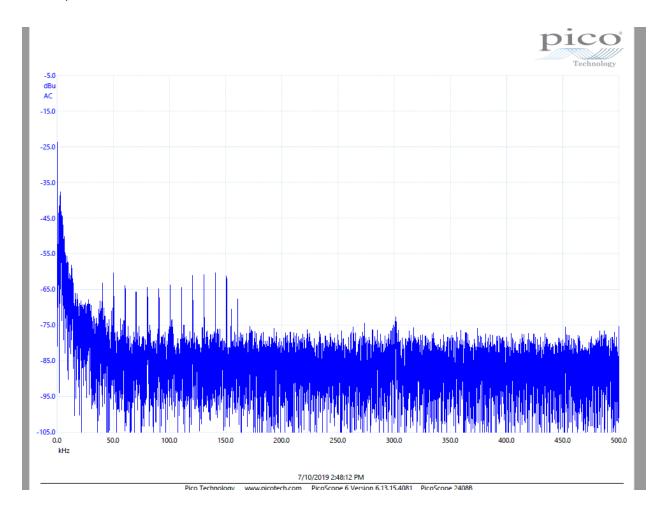
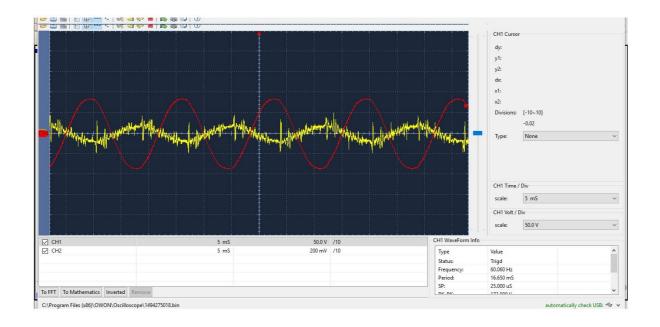
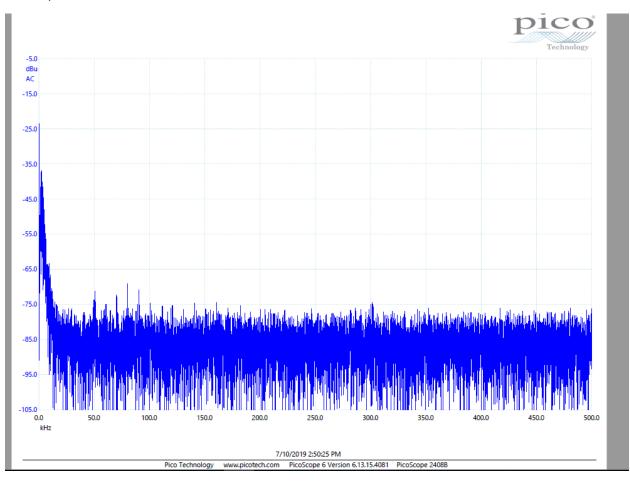


Photo of Transient Voltages with DNA Filter Installed:



The Frequencies after a DNA filter was installed:



1. Conditions of the Tests

a. Electric Field Transients, aka Dirty Electricity (DE). The real technical term is conducted emissions. The slang term is DE. There can be DE from both electrical devices internal and external to the building. In your case, from inside and outside the building, I detected:

The significant Signal of DE were from the grid and shared transformer on your home, which means your neighbors are contributing to the DE inside your home. The reason I can determine this is because of the lower range of signals frequency are on the lower end of the frequency spectrum.

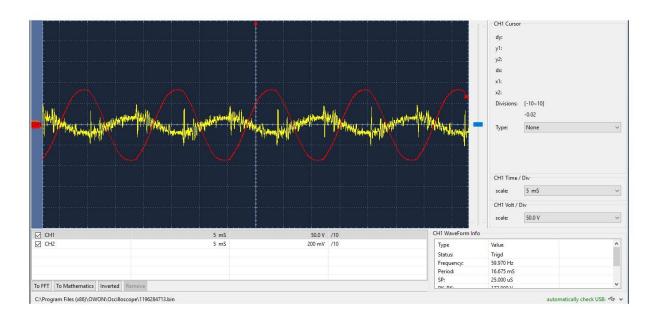
from this (these) possible source (sources) I have seen this effect before and if the signals were at higher frequencies, then these would be more likely be internal sources from your appliances or electronic systems. But that is not what in my opinion is happening it is coming from the grid of "Aliant" and your shared transformer.

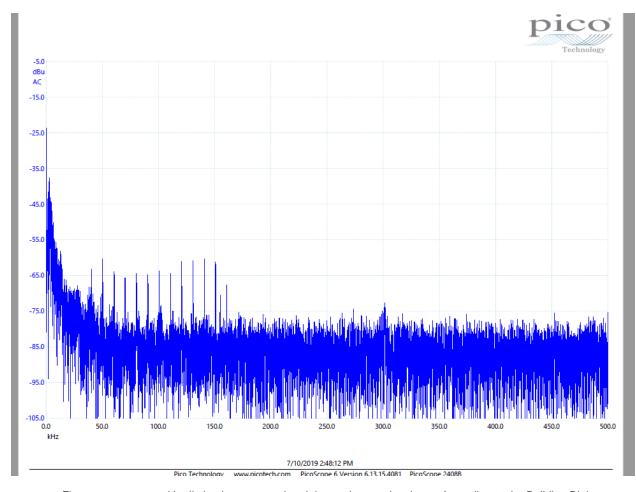
NOTE: The oscilloscope traces I am including here need a little explanation.

You will notice a line trace in RED which is the measured 120-volt AC 60 cycle. This RED trace is the normal waveform I would expect in every building. Notice the scale of the major division (the big black squares) is 50 Volts per division. You will note that 120 volts is actually somewhere almost it is useful to use as a reference when comparing the YELLOW trace waveform.

The YELLOW trace is a measurement of what is called the DE that is actually riding the RED waveform. However, you cannot pick out the frequencies present because the amplitude (signal strength) of the 60 Hz signal is so significant that it obliterates the higher frequencies from the measured values. In order to provide this important measurement, you must add a "High Pass Filter" to block the fundamental 60 Hz signal. I used a "High Pass Filter" to measure the frequencies above 60 Hz. The DE here is all frequencies from 1 to 200 kHz-with biologically active effects starting at about 2-4 kHz and up.

2. Measurements I made (pre-install of any filters)





 First measurement with all circuits measured and the peak to peak voltage. According to the Building Biology Institute, a desired measurement should be between .06 to 0.5 volts.

Notes: Your home measured about .4 volts peak to peak voltage, also notice how spiked the signal path appears. Also, the frequency chart shows very large spikes between 50 and 175 kHz. This reflects the large volume of transient's present.

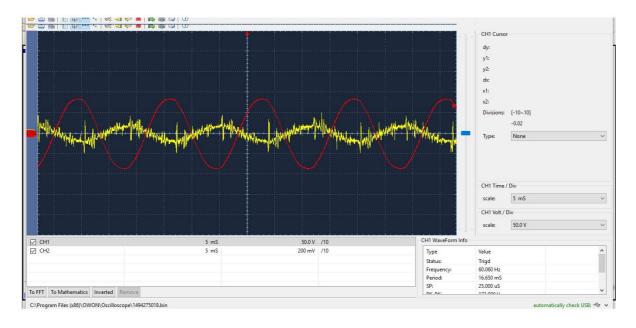
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A Stetzer Micro Surge meter reading below 50 is considered a safe level. In parallel to the oscilloscope I used a Stetzer Micro Surge meter for comparison. Your home measured 87 GS Units. While I normally question a Stetzer Micro Surge meter accuracy because it has bandwidth limitations of 100 kHz maximum frequency. A scope reads up to 100 MHz, which is a much larger range. So sometimes a Stetzer Micro Surge Meter might indicate a good reading, but if the offending signal is above 100 kHz or below 10 kHz, the meter will not give a correct reading. However, an Oscilloscope will be able to provide an accurate reading because the bandwidth is very wide. I believe in your case the Stetzer Micro Surge meter is providing a somewhat fair indication of the general situation within the limitation of the Micro Surge Meter in your home because most of the signals are below 100 kHz. The signals at 100 kHz to 175 kHz is not picked up by the Stetzer Micro Surge meter. So, when the Stetzer meter reads 87, it is likely higher than that. In my experience the Stetzer meter does provide a fair indication of differential of before and after treatment of an environment. So, at least you know something has changed.

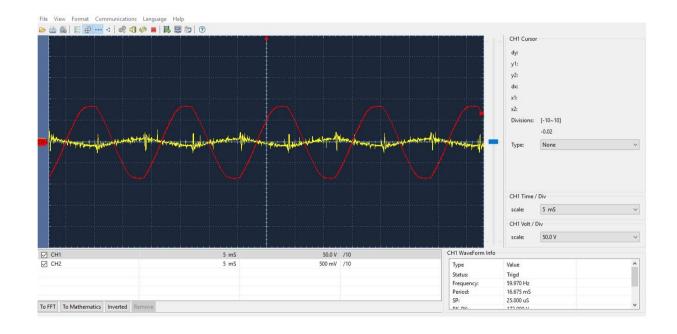
The range of the Stetzer Micro Surge meter is 10 kHz to 100 kHz, so since a lot of the signal frequency is less than 100 kHz, the Micro Surge Meter does register the most of signals present. Also, the Stetzer Micro Surge Meter provides its readings in GS units, not volts. This makes it impossible to equate transients from a Scope reading to a GS unit reading.

A GS unit is not a standard unit, but because this has become such a common device used by consumers many want to understand the measured values

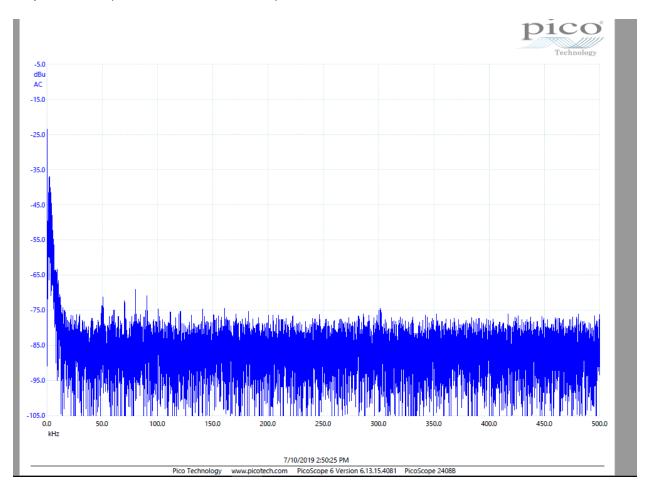
Transient Voltages after the DNA filter was installed



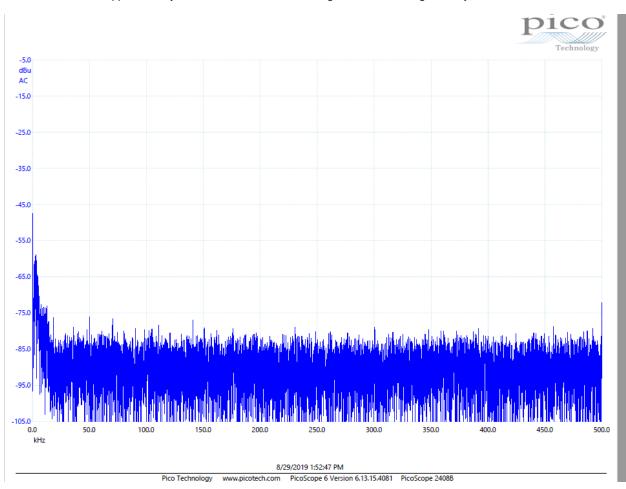
Transient Voltages after the Sine Tamer filter was installed (this even better than the DNA filter trace)



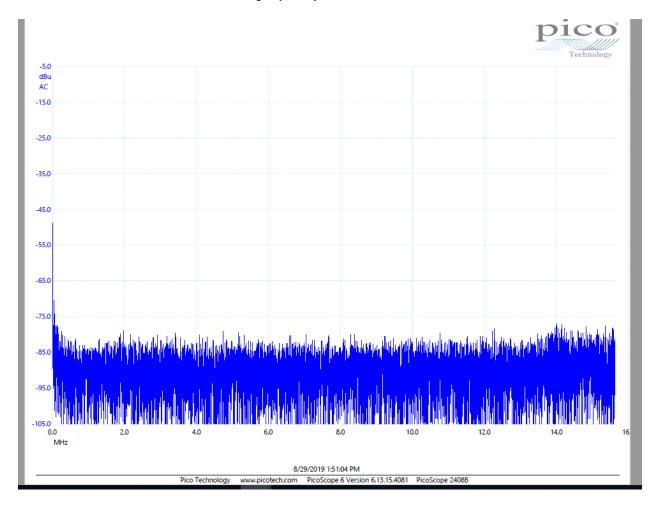
Frequencies found (after the DNA filter was installed)



Frequencies found 0-500 kHz (after the Sine Tamer filter was installed (without any DNA filter installed) This is even better than the DNA filter suppression by about 7 db. In effect it lowering the noise floor significantly.



Frequencies found 0-16 MHz (after the Sine Tamer filter was installed) This is even better than the DNA filter suppression by about 7 db. In effect it lowering the noise floor significantly. You can really see this noise floor reduction in this graph. These are dramatic results and the Sine Tamer is doing its job very well. The Sine Tamer is rated from 1 kHz to 10 MHz



- b. This scope image above is with a filter installed transients are now at about .40 volts with a filter installed. Take a close look at the semicircular wave form and not it is reduced. There are still the spikes from the dimmer switches present but the overall waveform is improved. This is a dramatic change for the good. Now the GS Units are at 49 with the DNA filter and at 45 GS units with the Sine Tamer filter, a dramatic improvement of about 48%.
- c. Also note the dramatic shift in reduction in the frequencies that are now suppressed.

Notes: At a reading of 45 GS your home would now be in the safe status according to the Building Biology Institute____

d. While at your home I tested for AC magnetic fields. Anything less than 2 Mill Gauss is considered safe. The maximum reading, I got was ___1.7_____, and most were at .02 to .09_______ or less. From a magnetic field perspective, I would have no concerns. Since we did find an elevated magnetic field at the dimmer switches in the kitchen, this can be corrected by a wiring change. To understand this subject better read the book "Tracing EMF's in Building Wiring and Grounding" By Karl Riley.

http://www.lessemf.com/book.html



TRACING EMFs in Building Wiring and Grounding

3rd edition, by Karl Riley

A practical guide for reducing AC magnetic fields produced by building wiring and improper grounding practices. Step by step instructions for detecting wiring problems and a full description of common wiring errors and how to correct them. This guide is for anyone who wants to inspect their own home, electricians and electrical inspectors, those starting a new profession in EMF consulting, as well as those involved with the process of building construction such as architects and contractors. Utility personnel involved in EMF measurements can profit from this information. 96 pages, spiral bound book. Completely updated in 2012.

TRACING EMFs (Cat. #A530)......\$28.00 Add to Cart

NOTES:	
e.	The RF fields in your home should be addressed.
	Your router in your home should have a "Signal Tamer" RF absorbing bag placed over it. I see you have done this

Overall Summary and Recommendations:

The combination of electric fields, magnetic fields and RF fields is called EMF (Electromagnetic Frequencies) A typical home should be less than 2 Mill Gauss Max. I used a calibrated Alpha Labs UHS Gauss meter to conduct this test.

For your home, I would suggest moving the router, turning it off at night or placing a special mesh bag over it called a "Signal Tamer" which you can buy here at this link. You have already done a lot to improve your home. Moving the water meter is good move. The gas meter near your bedroom is problematic. I will send you a pair of improved gas meter shields for you to try. Your feedback is important.

One other recommendation for your home is to run ethernet cables to all your devices and disable as much of the wireless technology you have in your home. I noticed you removed the DECT portable phone which is a big change. I know that running these cables are disruptive but it is essential to improving your health.

I have had some good success with the Iron Maiden, I have included the feedback from a recent customer that I think you should read.

https://www.defiltersllc.com/the-iron-maiden-i/

The small Signal Tamer unit is https://www.amazon.com/TAMERTM-Shielding-Wireless-Radiation-Emission/dp/B0160AH0YM

The larger unit is https://www.amazon.com/SIGNAL-TAMER-Shielding-Radiation-Exposure/dp/B071Y8LBNH

OR

Alternatively, you could purchase this special bag called the "Signal Tamer" from LessEMF.COM via the following link:

http://www.lessemf.com/computer.html.

Cursor down the page until you see the product, they make two sizes, I think you will need the small size product, but double check for your own measurements.

This special bag should reduce the RF dramatically, yet still permit communications.

Studies:

There are numerous studies on the exposure effects of EMF, check out Dr. Andrew Marino with 50 years of research in this area. He is truly an independent researcher and physician and not typically funded by industry.

Here are numerous studies by Dr. Marino you can browse.

https://www.ncbi.nlm.nih.gov/pubmed/21793784

https://andrewamarino.com/journalarticles.html

If you want to get a filter:

I will only sell the DNA line of filters or the Sine Tamer brand of filters. In your case I strongly recommend: DNA Filter, Model RxDNA V2X

The Sine Tamer filters cannot handle a solar system as well as the DNA, but the DNA filters are designed for solar systems installed on your home or on your neighbor's home.

Go to my web site to place your order at For the Sine Tamer

https://www.defiltersllc.com/our-filters/

For the DNA filters

https://www.defiltersllc.com/how-to-buy-our-dna-filters/

If you have any questions feel free to ask or call me.

I look forward to a next step at your request.

Sincerely Yours, William S. Bathgate DE Filters LLC 10909 Monticello Road Pinckney, MI 48169 256-570-5434 www.defiltersllc.com

Bill Bathgate Client Information Sheet

1.Link for air tube headsets (these prevent the RF that couples to the normal headset wires that wrap right around your thorax and Thyroid) that work for cell phones: https://emfacademy.com/best-air-tube-headset/ Also look at this link regarding the rapid rise of Thyroid cancer linked to possibly the use of cell phone and cell phone headsets, that couple the RF from the cell antenna to the wires of the headset in close contact with the Thyroid and Thorax.

https://pongcase.com/blog/is-there-a-link-between-cell-phone-use-and-thyroid-cancer/

2. Links for rheostats that don't create dirty electricity: https://www.askdifference.com/rheostat-vs-dimmer/

Here is another model but essentially the same thing.

https://www.ebay.com/itm/100Wat100-Ohm-Ceramic-Disk-RheostaVariable-Resistor-I-G8Z1/263335015144? trkparms=aid%3D555018%26algo%3DPL.SIM%26ao%3D1%26asc%3D57475%26meid%3Ddb01e12ef69e4c76887d660f72ed5604%26pid%3D100005%26rk%3D4%26rkt%3D12%26sd%3D262689865270%26itm%3D263335015144& trksid=p2047675.c100005.m1851

3. If a router in your home is causing a problem, you can sometimes relocate it. Alternatively, you could cover the router with a special bag called the "Signal Tamer". You can purchase this special bag from LessEMF.COM via the following link.

http://www.lessemf.com/computer.html Cursor down the page until you see the product, they make two sizes, I think you will need the small size product OR the larger size, but double check for your own measurements.
OR from this link:
The small unit is https://www.amazon.com/TAMERTM-Shielding-Wireless-Radiation-Emission/dp/B0160AH0YM
The larger unit is https://www.amazon.com/SIGNAL-TAMER-Shielding-Radiation- Exposure/dp/B071Y8LBNH
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