

Greg Graff

Power Distribution System

A Journey To The Dark Side (Electricity)

The Awakening

Introduction

- I need to start the introduction of the Greg Graff Power Distribution System by unequivocally stating that Greg never met a Power Conditioner that he liked. He found two things that all Power Conditioners did to some degree and most did to a very great & detrimental degree:
 - In general, power conditioners compress the sound by limiting available current and ultimately flattening and rounding off the transient attack
 - Power conditioners tended to suck the life out of the music. They not only subtracted noise/hash/grunge/EMI/RFI but they subtracted the life of the music to leave an emaciated outline of the music (think hollow or thin)
- Greg was an endless tinkerer and wasn't afraid to try any idea that crossed his mind to make his audio system sound more like live music

Tribute - Graff Power Distribution System

- Greg spent three years exploring various ways & devices/products to rid our music systems of electrical noise / hash / grunge / EMI / RFI
- When MG Audio developed the Planus IV speaker cable they found that the cable had blacker backgrounds and somehow reduced noise/hash from the musical fabric. The hunt was on to discover what was going on and whether more electrical noise reduction was possible and what products allowed him to accomplish this goal
- The other question to be answered was how much noise reduction was possible without sucking the life out of the music? Could too much of a good thing take us the wrong direction?

Greg Graff on Digital

- Greg moved away from analog and a turntable 5 years ago when he bought the Rowland Aeris DAC. The Rowland Aeris has qualities that Greg felt made it very competitive with analog sound in general
- The addition of the products and methodologies Greg discovered to reduce electrical noise and grunge made digital become much more organic sounding with a significant reduction of the brittleness and harshness associated with digital systems
- Greg truly felt like digital had come of age and that the application of his methodologies and the combination of products applied to the computer, DAC and overall system resulted in a sound that was both engaging, lively, dynamic and extremely quiet

Greg Graff's Own Words

- What was most interesting about this noise reduction was not that it was just quieter, but rather the affect that quieting had on the presentation. What we heard was more - more of everything. We heard more of the subtleties of the performance, the slight inflections of the musicians, the bending of notes or subtle pauses, all of which allows one to more easily hear the musical expression of the musician(s). Also, spatial clues were much easier to hear in live performances. The soundstage dimensionality became more pronounced – instruments/voices took on a more three dimensional aspect. Attacks and decays were more pronounced as well. Overall, it was easier to suspend disbelief and allow yourself to believe you were at/in the performance. Before, many of the subtleties had been lost in the noise floor, but now you get to hear more of it. What was most interesting was the fact we had not noticed the noise until it was gone

Graff Power System Elements/Components

1. Stillpoints ERS Paper – applied to electrical house panel(s) – judicious application is important, a little is good but a lot dulls the sound
2. Bybee filters and Galusha ground filter – as above, judicious use is important, a little is good but too many can suck the life out of the music
3. Power cables - including a Cullen Crossover Series Cable, a 14 guage Furutech NCF Cable, or Van Den Hul power cable – each brought it's own flavor to the sound
4. IEC/AC power cable connectors – either Furutech NCF carbon fiber ends, SonarQuest equivalent ends or Acrolink equivalent ends
5. Two Furutech e-TP60 AC Power Distributor/Strips with 3M GC-303 EMI-Absorbing Internal Coating
6. Furutech NCF duplex GTX-D NCF(R) plugs - Nano Crystal² Formula (NCF) - Nano Crystalline, Ceramic and Carbon Powder
7. Balanced power transformer using the Furutech NCF duplex plugs – 500VA for low level signal audio products

Note that most of these products came from Mike Garner at Tweek Geek with support from Mike Galusha (builder of some of these products). There are some alternatives but frankly, the products Tweek Geek has are the best quality available

Boehler Implementation of Graff Power System

- Dedicated 100 amp sub-panel (only for audio & home theatre rooms)
- Stillpoints ERS RFI Killer (1) – dedicated subpanel and overall house panels (two outside)
- Six dedicated 20 amp lines 10/2 w ground (no daisy chaining only individual runs to duplex outlets)
- Each dedicated 20 amp line has Furutech NCF duplex GTX-D NCF(R) (6)
- Each power cord coming from wall is either a Cullen Crossover Series Cable or a Furutech Alpha Nano-Ag-Au Power Cable (3), each power cord uses the NCF IEC / AC connectors (4)
- Power Amplifiers are plugged directly into the wall outlets (Furutech NCF duplex GTX-D NCF(R)) (6)
 - Sanders Magtech amplifier (same power cord & connectors as above) (3 & 4)
 - MG Audio Monoblock amplifiers (same power cords & connectors as above) (3 & 4)
- Two Furutech e-TP60 AC Power Distributor with Furutech NCF duplex GTX-D NCF(R) (5 & 6)
- Each power cord coming from Furutech e-TP60 is either a Cullen Crossover Series Cable or a Furutech Alpha Nano-Ag-Au Power Cable, each power cord uses the NCF IEC / AC connectors (3 & 4)
- Two Tweek Geek Bybee SE AC adaptors (2) for source component (DBX crossover & computer hard drive)
- Three dedicated 500 VA balanced power transformers also with Furutech NCF duplex GTX-D NCF(R) (7 & 6)
 - One for the Apple MacMini computer and hard drive (same power cord & connectors as above)
 - One for the Schiit Yggdrasil DAC and the DBX Venu 360 crossover (same power cord & connectors as above)
 - One for the MG Audio Preamplifier (same power cord & connectors as above)
- Shunyata Research Venom Defender parallel power conditioner & PS Audio Noise Harvester
 - In open sockets of the three 500 VA balanced power transformers

Blue text are unique to Boehler implementation and red text are items that I still need to get

Red highlighted numbers correspond to slide 6 and elements of Graff Power System Elements/Components

Greg Graff Tribute

- I was friends with Greg Graff for over 35 years. I spent a lot of time with him in audio and trusted his ability to hear things clearly and share his passion for music with others
- Now that Greg is gone I felt it fitting and proper to somehow pay tribute to Greg and his vision and passion for audio and music
- Greg was truly an endless tinkerer and spent the last three years of his life exploring how to reduce noise/hash/grunge/EMI/RFI. He came up with methodologies and products that allowed him and a few of us to suspend disbelief and allow ourselves to believe we were in/at the performance
- I can't think of a more fitting tribute to my friend than to emulate his three year journey and retrofit my system to incorporate his methodologies, products and observations.
- You will be missed dear friend. I thank you for your friendship, vision, passion and desire to explore the limits of what we can accomplish today. This one is for you as my tribute to your tenacity and dedication. Thank You!