TEST: Farad Super6

The Super Six!

Review by Neven Kos, www.hifimedia.hr

The Dutch company Farad Power Supplies was founded in 2018 by Mattijs de Vries. From an early age, Mattijs experimented with vacuum tubes and loudspeakers, and by the age of 14, he was building peripherals for the Sinclair ZX Spectrum and learning Z80 machine code. With a bachelor's degree in chemistry and a master's in applied physics, Mattijs began trading NOS military electronic parts, which evolved into Mach-Mat, a company well-known in the global DIY audio community.

The next step, driven by a desire to explore new concepts and techniques, led to the creation of Pink Faun in 2006, a small, exclusive, boutique audio company. In 2018, Mattijs transferred Pink Faun to his long-time employee Jord Groen, while he himself focused on a new venture, Farad Power Supplies, specializing in the production of high-quality linear power supplies.

According to Mattijs's philosophy, a mediocre power supply can degrade the performance of any quality audio device. Believing that a good audio device can only be built upon a high-quality power supply, Farad aims to offer the best linear power supplies. By utilizing proven technology and optimal topology, Farad strives to deliver a natural sound, rich in dynamics and detail, with a completely dark background.

Generally, Farad power supplies feature Furutech rhodium-plated AC connectors at the input, followed by gold-plated fuse holders, which can be upgraded with more expensive fuses. However, the Farad Super6 employs a Thermal Magnetic Circuit Breaker (TMCB) as a replacement for a conventional fuse, for overload protection. According to Farad, the TMCB has proven sonically superior. Custom triple-shielded high-inductance transformers and Schottky diodes feed low-ESR (Equivalent Series Resistance) capacitors for initial filtering. Residual noise in the power supply is than removed using HF Pi-filtering implementing a coil. Their new power supply model, reviewed here, is the Super6 and contains six nanocrystalline Pi-filter sections to minimize HF noise before and after regulation. Low-frequency ripple is completely eliminated by double regulation and supercapacitors.

The supercapacitor battery of the power supply in our review sample Farad Super6 has an output voltage of 15V and a fixed output current of 6A, with a capacitance of 3.6F (3,600,000 uF). It acts as a virtual battery, ensuring an exceptionally low noise floor and stable DC voltage. The output stage features 150uF MKS foil capacitors for high-pass filtration. Mechanical stability is achieved through robust chassis, GX16-4 or GX25-4 DC connectors, rubber or carbon feet, and in some models, maple wood for resonance control.

When ordering the Farad Super6, you can specify the output voltage (5V, 6V, 7V, 9V, 12V (-12V), 15V (-15V), 19V, 24V) and order a DC cable to connect to your device according to your preferences and capabilities, along with the necessary connectors. The unit comes standard with the Farad L1 interconnect DC cable. The manufacturer also included the improved Farad L2-C cable with the review sample, which costs an additional 160 EUR when paired with the Super6 (for a 0.5m length).

The L1 is essentially a basic upgrade cable consisting of four tinned copper conductors, each 1mm in diameter, and comes with gold-plated, carbon-damped connectors.

The L2-C is Farad's best copper cable and represents an improvement over their more affordable DC cables. The manufacturer recommends a break-in period of at least 300 hours.

The price of the tested configuration is 1,689 EUR for the Farad Super6 with the Farad L1 cable, or 1,809 EUR with the Farad L2-C cable, VAT is extra. Shipping is included in the price.

To evaluate the capabilities of the Farad Super6, we used the Innuos ZENmini Mk3, in a configuration with a 2TB SSD (€2,199), alongside which the distributor, Media Audio, supplied the ZENmini LPS (€639). This is a somewhat upgraded version of the same design that we review approximately a year ago. Compared to the previous ZENmini Mk3, we now had an SSD drive and 8GB of RAM, making the entire package slightly more expensive than one we previously tested it. The software has also been further improved, now being even better, clearer, more functional, and more stable. It remains a device that supports Roon, Qobuz, Spotify Connect, Tidal Connect, and Internet Radio. For a more detailed overview, we recommend reading the original review, which focuses on the Innuos ZENmini Mk3 itself and its accompanying power supply.

To maximize the effect of the external power supply, it seemed optimal to use the USB output from the ZENmini Mk3, given that it is exactly on this output that we expect the greatest "pollution" caused by the power supply and the PC-like nature of the devices using it. USB is simply not an audio protocol, nor is it primarily designed for audio, and the immense effort that numerous audio designers and manufacturers invest to extract the best from USB is impressive. Most of them focus precisely on powering the USB circuits on both sides of the chain – in the streamer and in the DAC.

Thus, we connected the ZENmini Mk3 to the USB input of the Meitner MA3 streamer/DAC. Although the ZENmini Mk3 also supports a LAN output, we assumed that those who purchase this or a similar device would primarily use its USB or digital output.

Sound

For reference, we first listened to the Innuos ZENmini Mk3 with the ZENmini LPS power supply. This is a power supply that significantly upgrades the sound of the server/streamer compared to the original power supply that comes standard with the ZENmini Mk3. In our original review from March 2024, we wrote the following about that comparison:

"With the linear power supply (ZENmini LPS), Chris Jones and his guitar on 'Thank You' and 'No Sanctuary Here' (Roadhouses & Automobiles, Tidal) sound authoritative and full-blooded, with a convincing presentation, timbre, and transients.

The album 'Dreyfus Night In Paris' (M. Miller, M. Petrucciani, Tidal) can be problematic for many streamers. It proved to be so on the Mk3 with the standard power supply, as only with

the external linear power supply did it successfully recreate space, place the musicians within it, and delineate instruments with accurate timbre. With the standard power supply, the musical stage was reduced to a slightly larger sphere, with poorly defined edges, positioned between and on the speakers plane."

We concluded:

"To summarize: the ZENmini Mk3 with the linear power supply sounds significantly cleaner and more natural, wider, more accurate, more engaging, and easily holds the listener's attention. The upgrade price is not insignificant, but we believe that those who decide to purchase the ZENmini Mk3 should not hesitate. In audiophile terms, this power supply makes a good device significantly better!"

Please, remember the descriptions of these differences and impressions.

We connected the Farad Super6 after an extensive listening session with the upgraded Innuos power supply (ZENmini LPS).

If the differences between the Innuos ZENmini LPS and its standard power supply were significant, with the Farad Super6, they went through the roof!

Listening to the remastered Eva Cassidy's "Autumn Leaves" 24/44 (Tidal), it was immediately clear how the soundstage expanded, primarily in width, and then in depth, with a significant improvement in focus. Eva's voice was firmer, yet at the same time more ethereal, gracefully floating in the space between the speakers, on the verge of materialization. Sibilance was present but significantly softened; however, what was most captivating was the added dose of sonic fluidity, a refined lusciousness that made the emotional performance even more impactful and appealing, at times irresistible. As if that wasn't enough, the occasional muddiness of the upper bass was significantly alleviated, purifying that part of the frequency spectrum considerably.

Given that the Meitner MA3 DAC is not exactly known for inadequate or flawed USB input performance – quite the contrary – these impressions are even more significant. We are convinced that with simpler DACs, or at least those with less elaborate and poorer technically implemented USB inputs, the mentioned differences would be even greater.

To better understand the bass reproduction with the Farad Super6 power supply, we listened to several Brian Bromberg tracks, such as "Straight No Chaser" and "All Blues" (Wood, 24/96, Tidal). The upper bass, and even the lowest octaves, became significantly cleaner, but not just that! Just like with Eva, the soundstage expanded in all directions, with obvious pleasantness and fluidity. Let there be no misunderstanding, the stated sonic improvements were easily audible across the entire spectrum and in all important parameters of sound reproduction. Cymbals resonated in their fullness, and the piano gained dynamics and purity. The midrange opened up like a higher-tier audiophile device, and the speed of detail retrieval held the listener's attention, never detracting from the enjoyment.

As we received two Farad interconnect DC cables with the Super6, it was easy for us to compare and listen to what the more expensive L2-C cable offers compared to the L1,

which comes with the Farad Super6 power supply (69 EUR + VAT for 0.5m, if purchased separately).

For weeks, we enjoyed listening to music via the ZENmini Mk3 with the Super6 power supply and the L1 cable. Music flowed abundantly, details burst forth, finely packed, and we almost forgot that there was a better DC cable in the box – the L2-C. It was time to replace the L1 power cable between the Super6 and the ZEN with the more expensive and advanced L2-C cable (not to be confused with the L2 Classic model), which represents the pinnacle of the offering at a price of 229 EUR + VAT, and comes with a surcharge of 160 EUR + VAT when purchased with the Farad Super6. We left the cable to break in for two weeks, which is slightly longer than the recommended 300 hours.

Inserting the broken-in L2-C cable into the system immediately after the original made it clear why Farad enables a path to sonic improvement through "tweaks" like DC power cables. Indeed, the L2-C on the ZEN sounds significantly more open and detailed, not to mention more beautiful. The sound further opened up, and became more fluid, faster, and more "human," so let anyone tell me that audio "tweaks," even those that cannot be measured, do not affect the final result. If the Farad Super6, compared to the improved Innuos LPS power supply, brought sonic shifts worth every cent, the same can be said for the micro-level shifts brought by this cable. The sound became softer and more listenable precisely where it needed to be, with a more pronounced sense of dynamics and solidity. An interesting phenomenon!

In addition to tonality, the L2-C cable also enhanced the sense of depth and height and provided firmly delineated components of the soundstage and placement of performers in space. The differences may not **actually** be as massive and impressively scaled as described here, but they are certainly significant, easily audible, and in our humble opinion, worth the extra cost, as the overall sound elevates by half a step, perhaps even more.

Out of curiosity, we also connected the Super6 to a small Gigabyte Brix Fanless mini PC, with an Intel Celeron N4500 and 8GB RAM, running Daphile software, which occasionally serves as an auxiliary server/streamer in our home office. If you thought the sonic differences compared to a standard PC power supply were significant – you were not mistaken!

The difference is actually perhaps even greater than with the Innuos, and the sonic improvements are directed in the same way – the space is significantly expanded, the size of the soundstage and individual instruments are significantly enhanced, and as for fluidity, details, and depth, there's no comparison.

Of course, the question is whether it makes sense to buy a power supply costing 2,000 EUR for a 200 EUR PC, which is fundamentally compromised in audiophile terms. However, this experiment showed us two things: first, a high-quality external power supply can improve devices from which we do not expect it, and second, the Super6 is an exceptional device that can make even an ordinary mini PC a completely acceptable audiophile streamer, and even more.

Conclusion

To listen to and perceive the differences that an external power supply brings to the sound of an ordinary computer might seem foolish and superfluous to many. When we add power cables to that, we might appear as misunderstood sound enthusiasts. Recommending an external power supply with a cable at a price of 1,809 EUR + VAT might make us seem like incomprehensible madmen. However, what we heard with the Farad Super6 power supply and the L2-C cable convinced us that even basic devices can be significantly improved by adding an external, high-quality power supply, which ensures the uninterrupted operation of electronic circuits. Therefore, despite everything, if you have audio devices that demand it, we unreservedly recommend the Farad Super6 and L2-C. **In fact, The Super6 power supply impressed us so much that we've decided to keep this review sample in our editorial office, integrating it into our reference Hi-Fi system alongside the Innuos ZENmini Mk3.**

Technical Specifications:

- **Output Voltage:** 15 VDC / 6 A
- **Total Capacitance:** 3.6 F
- **Power Consumption:** 135 W
- **Dimensions (WxHxD):** 215 x 57 x 265 mm
- **Weight:** 3.2 kg
- **Price:**
  1,689 EUR (Farad Super6 + L1, excl. VAT)
  1,809 EUR (Farad Super6 + L2-C, excl. VAT)
- INFO: **Farad Power Supplies**
  email: info@faradpowersupplies.com
  web: www.faradpowersupplies.com

System Used:

- **Source:** Meitner MA3, Chord Qutest + Sbooster BOTW and Sbooster Ultra MkII, NOS DAC
- **Amplifier:** Pass Labs INT-25
- **Speakers:** Davis Acoustics Courbet No. 7, Rogers Studio 1a
- **Interconnect Cables:** Wireworld **Silver** Eclipse 8, Wireworld Eclipse 7, Wireworld Starlight 8, Mundorf Silver/gold
- **Speaker Cables:** Wireworld Eclipse 7, VdH CS122, Anticable, Furutech u-2T, Xindak FS1
- **Power Conditioner/Filter:** PS Audio Quintet
- **Power Cables:** Wireworld Electra 5-2, Aurora 5-2, Supra LoRad 2.5