

the ear

HI-FI MUSIC GEAR

hardware review



Farad Super3

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With many of today's audio components requiring external power supplies there is the potential to upgrade performance by replacing these often inexpensive wall-wart style supplies with better quality alternatives made by third party companies. This is nothing new of course but the variety of DACs, headphone amplifiers and other components that have low voltage external supplies is wider than it was and the expense of good quality linear power supplies means that manufacturers often use switching types instead as these both comply with ever stricter regulations and cost less. We have looked at examples from Longdog Audio and sBooster in the past and this review focuses on Farad from the Netherlands.

The Farad Super3 power supply differs from most in being relatively small and attractive, the aluminium case is under 5cm (2") high on its rubber feet and less than 20cm (8") deep yet it can be had in voltages from 5V to 19V with a 3 amp output that seems to be stiff enough to drive some components that are specified as needing 4A. There is no on/off switch on the box just an IEC mains inlet that once connected sets an LED on the front flashing red and blue until all is settled and it sticks to blue. This light might be a little bright for some but the Super3 is so small that there's no need to have it on display.

The tech inside consists of a double regulated 'super capacitor' linear power supply. Farad explains that "Super capacitors combine a very high capacitance with high pulse power capability and low ESR values. In short they act like batteries without their disadvantages". Which is quite a claim given that batteries are on paper at least close to the ultimate power supply, but they have their practical limitations unless you go to extremes, and that's hardly practical itself. Farad also addresses the notion that supercaps have a short lifespan by stating "people confuse the EDCL supercaps with the older gold "super"caps. EDLC supercaps are a new technology made for long life 24/7 operation". Which would explain the absence of a power button, there is a switch on the Super3 however and it's marked 'reset', this is to reboot the microprocessor but also cuts output for a period allowing a cable change for instance. I used it once after swapping around supplies with the power on and upsetting it, yet further similar swaps didn't cause any problems.

While Farad supplies a short power cable to take the DC to the component they also offer upgrade cables to further enhance the benefits of the Super3, these come in two levels simply called level 1 and 2. The latter being notably more beefy than the former, they are

available in 50cm or 1 metre lengths in either silver or copper and with three plug types to suit most components including GX16-4 which is the four pin type with a screw on collar. The Super3 can also be upgraded with fuses from HifiTuning and Synergistic Research and the AC inlet can be a Furutech if you pay the appropriate premium. One potential saving can be made



if you have two components that require the same voltage, which is to use a Y split cable to power both from the same Super3. While the output is stated as 3 amps but Farad's Mattijs de Vries states "they can do 3.5A in practice. With the higher voltages 15 – 19V this 3A current can be held for some seconds (running from the supercaps), with lower voltages (12V and lower) it will be continuous".

Sound quality

I started by using a Super3 in place of the switched mode supply that comes with the iFi Pro iDSD DAC, using the standard cable on the Farad. It proved to be a very worthwhile exercise delivering greater transparency, clarity and particularly openness alongside enhanced kick on the bass drum. It made it easier to hear into the mix and enjoy the quality of musicianship thanks to better timing and an improved realism on the live version of Big Yellow Taxi from Joni Mitchell's *Miles of Aisles*. The timing became better as the supply warmed up with air drumming soon becoming a matter of necessity, a habit that I usually manage to restrain.

Switching to the Level 2 cable (opposite page) further increased the resolution of the system, with vocal clarity, purity and realism clearly going up a notch, a change that meant voices and instruments projected in more three dimensional fashion and the image increased in depth and width. In fact the soundstage expanded in all directions.



I tried a lower voltage Super3 on the Ideon 3R reclocker reviewed recently but on this occasion went from a basic linear wall wart as opposed to the SMP supplied with the unit. With an 8V Farad the upgrade was noticeable as a reduction in noise which increased the perceived depth of image and brought a real sense of ease to the sound. The timing was also improved largely because the bass was quicker and tauter and this meant that there was more energy and life in the Joni Mitchell track, it was almost as if the band had woken up and smelled something more potent than coffee. Changing the supply cable to the Level 2 on the Ideon added depth to every note, which suggests that noise levels had been pushed down to allow quieter sounds to appear. In a way it felt like doubling the resolving power of the reclocker, high frequencies were more substantial which gave notes extra depth of tone, and that in turn reveals subtleties of playing that were previously hidden. It's not an insignificant upgrade given the cost.



I had the English Electric network switch for a while, a device that costs less than a Farad Super3, but as a 5V unit was supplied I gave it a go. Given that this is an audio specific switch I didn't expect a great deal but once again the Farad revealed that clean, linear power is hard to beat by dropping the perceived noise floor so that more contrast and depth of imaging could be heard. It also enhanced timing, something that this switch is particularly good at, and cut through the murk on less pristine recordings. Out of interest I also contrasted the 15V Farad against an sBooster of the same voltage, which is a £330 unit and not the current model so the Super3 needed to better it. It did this with ease by taking the timing up to the next level, opening up the soundstage whilst also providing better image focus. An all round improvement from a box that is half the size if not smaller.

The Farad Super3 is clearly a first rate power supply upgrade, it's built to a higher standard than most and doesn't take up much space which is also a bonus. The price reflects these factors but seems very reasonable given the sound quality upgrade provided, I will carry on using them for as long as I can fend off the distributor.

