

IsoTek EVO3 Mosaic Genesis power regenerator

by Nicholas Ripley

Power regeneration is a big thing among most serious audiophiles, but is quietly all but ignored in the UK. IsoTek's EVO3 Mosaic Genesis is on a one-regenerator mission to prove us Limeys wrong.

The AC power (or 'mains' as we like to call it) is reasonably good across much of the UK. However, 'reasonably good' is not in many audiophile vocabularies, and power conditioning and regeneration are starting to be taken seriously here, thanks in no small part to the work of IsoTek. The EVO3 Mosaic Genesis is a hybrid, with feet in both camps, pulling together some of the technology from IsoTek's top EVO3 Genesis 'generator' and Super Titan conditioner.

A power regenerator essentially takes the waveform of your AC mains, references it against a built-in sine-wave generator, then amplifies that signal to deliver a synchronous, DC-offset-free, 230V AC power, with a voltage variation of just a few per cent. This last point is more important than people often consider: given the best guarantee you can get from the power companies in the UK is 230V is +10% to -6%, which brings the UK in line with EU mains harmonisation legislation, although many power companies still work to the older 240V $\pm 6\%$ standard by default. This variation in power can prove problematic, and with increased demand and competition forcing cost-cutting, the likelihood that the UK retains its 'reasonably good' mains is called into question.

The EVO3 Mosaic Genesis regenerator uses a Class AB amplifier and heavy-weight transformer delivering a 230V $\pm 2\%$ voltage (fed from a 20A IEC input), to five power sockets – three for low-power source components or preamps, and two high-current SuperTitan derived direct-coupled outputs for power amps. If in doubt (say, an integrated

amp), go with the higher-power output sockets. With EVO3, IsoTek developed a technology called KERP (Kirchoff's Equal Resistance Path) for equal resistance and power delivery to all outlets. To minimise the chance of noise from the original mains leaking into the regenerated power, copper foil acts a shield between primary and secondary windings on the transformer. The internal wiring uses IsoTek's new UP-OCC (Ultra Pure Ohno Continuous Cast) high purity copper solid core internal wire, which is silver-plated before being insulated with Teflon.

IsoTek's EVO3 Mosaic Genesis also features 100,000A of instantaneous protection, and a series of voltage-dependent resistors to protect against AC power spikes – this not only protects devices plugged into the EVO3 Mosaic Genesis, but also prevents the regenerator from acting like a big, expensive fuse in times of crisis.

The EVO3 Mosaic Genesis has a handy blue LED read-out, which can be turned off should you so wish. You can monitor input and output voltage and THD (expressed as a percentage), as well as current and mains frequency. ▶



“Play your system at 7pm. Now play it again at 1am. It’s likely the 1am system sounds a lot better than the 7pm system.”



- ▶ The first two are perhaps the most interesting, but need to be handled with care – not because they undermine the sound, and not because they might cause any issue with the IsoTek device or anything connected to it. No, the simple reason is it can become almost a nervous twitch, a visual audiophilia nervosa indicator. You will end up constantly monitoring your AC distortion figure and comparing it to the outputted distortion. That way, madness lies.

Nevertheless, the input voltage and distortion figures do make for some grim reading. You see the distortion shoot up and the voltage go haywire in the early evening, as the world heads home to watch TV or use their iPads wirelessly. In my system, anything above about 2% distortion on the AC could be heard as adding grain and a hard ‘edge’ to the mid and treble, especially on high-performance audio, and anything below about 225V robbed bass of its detail, dynamics, and life. At its worst (7pm–8:30pm, Easter Monday), the figures were closer to 220V and 3.8% distortion, and this was clearly audible. The regenerator got this to a constant 230V and between 0.18%– 0.33% distortion, and this was clearly audible too, putting back what Coronation Street, EastEnders, and FaceBook took away.

How much of an effect will depend largely on the kind of electronics you are using and the demands they place on their AC inputs. This is hard to predict, especially with imported products that might have been tested in 110V environments like the USA and Japan. Of the devices I put through the IsoTek wringer, most benefitted from AC regeneration, while some (my Audio Research preamp for example) were transformed by it. None were ambivalent or were worsened by the presence of a regenerator. Given the price tag of the EVO3 Mosaic Genesis, it’s unlikely to be used with a £150 amplifier

of 25 years ago, but this seems not to be price-related, or quality of power supply related – I used it on a friend’s system who uses an old Sony ES CD player, with Audiolab 8000 pre amplifier and power amplifier and it worked wonders, too.

What does it sound like? That’s simple. Play your system at 7pm. Now play it again at 1am. It’s pretty likely the 1am system sounds a lot better than the 7pm system. The IsoTek EVO3 Mosaic Genesis makes your 7pm system sound more like your system at 1am. It brings out that best in your system, whether that best is cleaner, more extended treble, less hash or grain in the sound, a little more exuberance, or a lot more control.

IsoTek’s EVO3 Mosaic Genesis is the perfect game-raiser for small high-performance audio systems, and one that will become harder to live without over time, because our power is not going to get any better. It’s a one-stop shop of conditioner and regenerator that, once heard in action, it’s hard to live without. Highly recommended. +

TECHNICAL SPECIFICATIONS

Details: IsoTek EVO3 Mosaic Genesis hybrid power conditioner/regenerator

Manufactured by: IsoTek Systems

URL: www.isoteksystems.com