

PS Audio's PerfectWaveP3

I Bow to a Purer Power

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About a dozen years ago in August of 1999, I fondly recall reviewing PS Audio's first power regenerator, the P300. The P300 was an attractive component with its machined aluminum case and it worked quite well to supply pure AC power to my audio system. The P300 could only manage 300 watts (total) of regenerated power but that was plenty for most sources and a preamplifier.

Over the years I've also reviewed and purchased Monarchy Audio's P100 power regenerator. I've become a firm believer that a power regenerator should be considered standard equipment for every high-end installation that expects to perform to its full potential - while at the same time being protected from potentially damaging AC surges and spikes. Trust me when I say that for me and other regenerator owners, this is a total no brainer.

Compared to the original P300, the new P3 is a more efficient beast and although it is the smallest PerfectWave Power Plant in the PS Audio line, it can provide 1000 watt peaks and up to 750 watts of continuous regenerated power across its 3 sets of isolated AC duplex outlets. In addition to the 6 regenerated-power outlets there is a filtered high-current duplex outlet that provides higher power for amplifiers that draw more than 700 watts of AC power. I arbitrarily say "more than 700 watts" because if your front end gear is like mine it will use about 50 watts of power but of course the actual power draw will vary with the particular gear you use. Since my amplifier is capable of pulling more than 700 watts of power I plugged it into the P3's high-current outlet so that I'd never be limiting dynamics or straining anything. As it is, with the 50 to 75 watts my front end draws the P3 is basically coasting and will not even break a sweat. Those of you with those nice little tube amps that typically draw less than 500 watts should be able to power your entire system from the regenerated-power outlets of the P3.

Features

The P3 is an interesting device. I was surprised to find it came with a remote control because I couldn't imagine why a remote would be needed. But of course once I discovered what it could do and began to use it I was hooked.

The smallish contoured plastic remote is nice and light and fits the hand well. With it, you can switch the master power on or off, switch the Multiwave in or out, return the display to its default position, increase or decrease the AC output voltage to your preference, or use the CleanWave feature to degauss your gear between music selections.



The Birth of MultiWave:

For some reason when I hear the word "MultiWave," I think of Milla Jovovich in the Sci-Fi Adventure flick, *The Fifth Element*, and the photo right of the newly cloned "Leeloo" holding up her hands with her shadow interposed illustrates this concept perfectly (just think of them as intertwined sine-waves).

In the early PS Audio Power Plants like the P300 there was an option to vary the line frequency. This was due to Paul McGowan's experiments with increasing the line frequency in an attempt to electrically allow a given transformer to act like a larger transformer.

McGowan found that by raising the line frequency higher from 60Hz to 90Hz and up to a lofty 400Hz that the imaging and high frequency performance of a given system would improve noticeably. To make a long story short this proved to be a double-edged sword because while the enhanced treble and imaging was both impressive and promising, the bass frequencies appeared to thin out and become more anemic.

The solution was to overlay a higher frequency sine-wave along with the standard 60-cycle wave thus offering the advantage of enhanced high-frequency performance while retaining the better bass performance that 60Hz provides. So with this new MultiWave function, which interweaves 60Hz and 120Hz sine waves, we can enjoy the best of both worlds without any negatives.

Previous to learning about Paul McGowan's foray into line-frequency experimentation I had done some of my own comparisons using the Monarchy Audio P100 regenerator and although the 120Hz frequency decreased the bass slightly, I felt the improved imaging and treble frequencies outweighed the side-effect of slightly decreased bass (especially because this system was bass-heavy to begin with).

Features continued:

The P3 is also equipped with an internal web page that can be accessed by computer via the Local Area Network (LAN). The P3 can be connected to the Internet through a router that has a wired or wireless Ethernet CAT5 connection. I had to buy an inexpensive universal WiFi adapter with the Ethernet connector to use this feature in my home. To do this you will need to register the P3 at PS Audio's Powerplay website and you will need the P3's "Unit ID number", which is on the P3's rear panel. I strongly recommend writing down this number before the P3 is installed in your system. As it happened I had already installed my P3 and had to remove it from the system in order to read the small number on the rear of the unit. When I did so, it slid forward off its shelf and its hefty chassis made a nice bruise on my bare foot as I cushioned it from hitting the floor. Ouch!

The reason to connect the P3 to the Powerplay website is that you can access certain features like setting turn-on/off delays, making some outlets switched and some unswitched, and for data and monitoring purposes. PS Audio recommends that you leave your unit online all the time, but after I configured my outlets the way I wanted I disconnected it from the computer. This way I could turn the P3 off and keep some gear powered on and some turned fully off while also turning off the P3's lit display.

That said, online it was interesting to see that my incoming AC power had 3 percent distortion, which the P3 reduced to under 0.3 percent, plus other things like the power draw of my combined gear, line voltage, and the graphic representation of which outlets were active (green) and which ones I turned off (red). Not all of these things can be seen on the P3's display. Also, by using the GlobalNet website, you can get performance monitoring and network monitoring of different IP addressed devices on your local network, and e-mail alerts when certain system problems arise.

You can also label your outlets to reflect the connected device and avail yourself of web-controlled reboot options in the event of a power failure. All this is really more than I want to concern myself with but those type-A geeks and misunderstood geniuses among you (engineer-types, especially) should be thrilled with this stuff! After all, one can never have too much data and computer-controlled apps!

The rear panel of the P3 also contains the master on/off toggle, a 12-volt trigger in/out for controlling connected gear through wired and IR, and a USB input for future firmware updates if and when they become available.

Set-up

Installing the P3 in my system was relatively easy. I had to reroute some AC cords because I was previously using two different AC filters. And I had to remove one piece of gear (a cassette deck) from my rack to make room for the P3. It was a small sacrifice, I suppose.

I installed most of the power cords in different rows of the P3's regenerated-power outlets, and where I had to double up I stuck to either analog or digital gear on the particular duplex outlet. At first I left my outboard PS Audio UPC-200 AC filter in place for powering the power amp only and it was plugged into the wall outlet. But I found I lost dynamics that way and since PS Audio prefers not to use other

filters before or after the P3 I then plugged my amp into the high-current outlet of the P3. This worked well, and the dynamic range that I had enjoyed came back in full force.

With everything hooked up I threw the rear power toggle On and then pushed the power button on the remote to view the P3's status on the display. At the time, my incoming line voltage measured about 124 volts so I reset the regenerator to provide 120 volts and began playing the system.

Listening impressions

My first off the cuff impressions of the P3 are very favorable. I heard a greater degree of transparency from bottom to top. The bass became more taut and articulate, the midrange had more of a see-through immediacy combined with musical sweetness and the treble was more distinct and less hazy (for lack of a better word). It seemed that selecting the Multiwave function made the system's bass even more solid and improved the holography of the soundstage by increasing its apparent depth. This was a nice surprise and after that I listened mainly with the Multiwave enabled. Curiously, on songs where I wanted to move the vocal a bit more forward I found I could do this by turning the Multiwave off.

I should also note that since my particular Michell turntable has a DC motor the Multiwave worked well to tighten the bass of the turntable and give it a little more dynamic impact. However, turntables that use AC synchronous motors should not be used with the Multiwave feature because motors that synchronize with the 60Hz line frequency will not work properly.

In a way I was just as impressed with what the P3 didn't do as I was with what it did. The P3 did not change the system's dynamic capability (though it appeared a bit more dynamic because it diminished system noise); and it didn't alter the basic system balance or frequency response. However, that being said it seemed that I was hearing deeper, tighter bass from some of my recordings such as Ingrid Michaelson's "Once was Love" from her *Everybody* CD (Cabin CD24-12), where the kick drum really kicked!

I also noticed on the *Everybody* CD that all the instruments sounded more true-to-life. Hand claps were very distinct and clear, the violins were sweet and had natural texture and plucked mandolin and guitar strings sounded totally authentic in their timbre. I think this was because by using the P3 there was no exaggerated overbite or ringing that would have kept the instruments from sounding exactly *right*. I've also got to tell you that Michaelson's vocal and backing vocals on "Locked Up" had me locked up and unable to move — so Siren-like was the sound.

I'm now listening to James Taylor's *Greatest Hits* CD (Warner Bros. 3133-2) as I write this and even from the other room his vocal on "You've Got a Friend" has a few tears welling up—so emotional is its impact. I'm sure that JT himself would be impressed.



The Clincher: What really drove home the P3's impact in my system was the improved fine detailing and sometimes shocking dynamic contrasts coming through on my turntable system. I was playing through some of my classical vinyl and I decided to pull out all the stops and play one of the best recordings in my collection, *Witches' Brew* (RCA LSC 2225).

Playing through *Witches' Brew* opened my eyes to how much of an improvement the P3 was actually making. It also showed me convincingly that going through my custom-built 6SN7 tube buffer offered an improvement in musical smoothness and timbral accuracy over a direct balanced connection between my Lyngdorf preamp and Wyred 4 Sound amplifier. Using the turntable as the source the improvements are obvious.

Suffice it to say that I never heard *Witches' Brew* sound nearly as detailed while actually sounding less harsh at the same time. The focus was superb and the delineation between the individual instruments while playing in mass was simply spellbinding. There was a sound that simulated a whip cracking in both Liszt's *Mephisto Waltz* and Arnold's *Overture to Tam O'Shanter* that came out of nowhere so fast it almost peeled my skin, yet it was neither harsh or grating as one might suspect. The appropriate description would be startling but not strident. And the bass drum crashes and tympani rolls on *Tam O'Shanter* were impressively deep and taut, and they emerged with lifelike presence in the room. It was an extremely convincing and gratifying reproduction.

Caveats

I have no caveats regarding the P3's musical contribution to my system. How can I complain about all the improvements I noted above?

My reservations would have more to do with having to hook the piece up to the Internet in order to configure which outlets stay on and which are switched off by the power button. Because frankly, it was kind of a pain in the neck to have to order the universal Wi-Fi Ethernet adapter and hook it up and then go through the trouble of finding the Unit ID number and registering online so I could access the PS Audio Powerplay website to do these simple things. In this day and age I'm not too surprised that everyone wants to monitor what I'm doing at all times but for something like this I found it a bit tedious.

Some folks may love the interactive web features of the P3, but for me, at the end of the day I just want to push a button and not have to hook up or figure out anything else. While I understand it's a one-time setup procedure I would have preferred to have a couple more of the P3's features accessible on the P3 or its remote control (end of whining).

Conclusion

After living with the PS Audio P3 PerfectWave Power Plant for about 2 months I remain very pleased with its contributions to my system. These include improving its musical presentation in many ways and protecting my system from potentially damaging AC power surges and spikes. The P3 also boasts very low impedance output making it easier for your gear to draw power thus unchaining your system's dynamic capability.

While its \$2495 MSRP might not be in everyone's budget, I consider a quality AC power regenerator to be an essential component for any system that aspires to true High End performance. You'll need to check your system's total power draw, but I believe the P3 will easily work its magic in the majority of home installations. PS Audio offers their P5 and P10 Power Plant models for those of you who own amplifiers with extremely high power demands.

So once again I am living by my own advice and buying the PS Audio P3 Power Plant for use in my large-room reference system. Here is an apt analogy to which some of you may relate: If you owned a Ferrari or a Corvette ZR1, would you fill it up at the Regular pump?



Description

PS Audio P3 PerfectWave Power Plant

Net weight: 35 lbs.

Price: \$2,495 USD