

## Aphex 500 Series Processors

Our analog processing aficionado evaluates Aphex's half-dozen 500 Series modules, including unique preamp, compressor and EQ units.



### 1 Dual RPA 500 Two-Channel Tube Preamplifier

**Features:** A two-space, two-channel, transformerless mic pre with solid-state front end and tube amplification stage, inspired by Aphex's Channel and 207D preamps. Includes Aphex's patented Mic-Limiter technology (from its 207D and 1788A) placed prior to the preamp, 10 Mohm quarter-inch instrument DI, 65 dB of gain, -26 dB pad, 20 segment LEDs, three operating levels (+16, +20 or +24 dBu), 75 Hz HPF, phantom power and polarity flip.

**Performance:** The Dual RPA was clean, fast and detailed, without much character other than a light EQ sculpting (slightly lean bottom, flattering dip around 400 Hz, forward upper mids and a

little extra zing around 10 kHz). The instrument DI sounds great, with very high impedance for little loading and transparent top end and a nice tight bottom. The Mic-Limiter works quite well at preventing nasty "overs" prior to them hitting amplification [watching the Mic-Lim engage button for a red LED indicates it's working]. All the switches felt good, are appropriately well lit with LEDs and functioned as expected. The gain trim doesn't feel as good, with a sudden jump at 11:30—right in the "frequently used" gain range. The meters are great, but the lack of any legend on the gain knob is personally frustrating. The RPA doesn't sound particularly "tubey" to me; in fact, it drives two channels of signal through a single 12AX7 (dual-triode, after all). As nice

as the RPA sounds, it was my least favorite Aphex mic amp of the bunch.

**Price:** \$999 list, \$799 street

## 2 A PRE 500 Mono Preamplifier

**Features:** Mono solid-state mic preamp inspired by Aphex's 188 preamp with a custom CineMag input transformer, Jensen JT-11DL nickel output transformer and all the same control features of the above RPA but without the Mic-Limiter.

**Performance:** The A PRE was the most colorful of the three mic amps and in a good way. Its sound shines with some light EQ sculpting; it adds a little more grit, some growl at high levels and the most "vintage" sound of the line. The Mic-Limiter would be nice, but it's not needed as much because of the natural saturation of the transformers. Bass guitar is massaged by those transformers in a very musical way and vocals are much smoother and warmer for the effort. Compared to a world class (and pricier) Millennium Media STT-1 (using its solid-state mic amp and transformer output for relevance), the A PRE had less bottom, less mids and more top, although both pres exhibited very nice character, dynamics and punch. The A PRE sounded excellent on VOs—a lot like the STT-1, actually. This was my personal favorite Aphex mic pre.

**Price:** \$629 list, \$549 street

## 3 J PRE 500 Mono Preamplifier

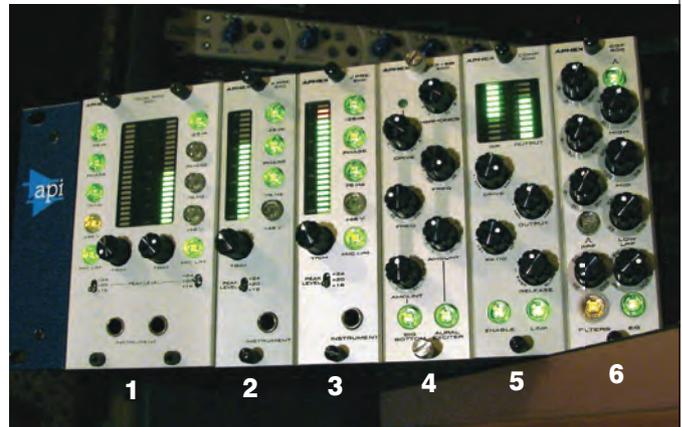
**Features:** A mono mic pre with Jensen transformers at input and output, inspired by Aphex's flagship 1788A with Mic-Limiter and all 500 Series features as listed above.

**Performance:** The J PRE seemed to be the cleanest and most versatile of Aphex's preamps. The J's lack of growl (and that handy Mic-Lim) make it ideal for drum tracking, natural-sounding acoustic instruments and clean vocals. My assistant, Brandon Nater, absolutely loved the J PRE on acoustic guitar for its clarity and exciting hype up top. Bass guitar compared quite favorably to the Millennium STT-1 with a little less bottom, but with excellent definition in the mids and the perfect bite up top. The J PRE sounds very different from the A; together they're complimentary, with their different personalities providing a wide range of options. As much as I liked the A PRE's vintage personality, the J PRE is likely more versatile, a little more pristine, and is ideal for robust stereo techniques (paired with another J PRE, fed with a stereo condenser on a source like drum overheads and hitting that Mic-Lim hard, followed by compression) for density, modernity and clarity.

**Price:** \$749 MSRP, \$599 street

## 4 EXBB 500 Mono featuring Big Bottom and Aural Exciter

**Features:** A mono unit featuring Aphex's most widely known processors: Aural Exciter (released in 1975) and Big Bottom (1992). The inclusion of both processors in one 500 module is nice and easy



on the budget, too. The transformerless Exciter employs Frequency, Harmonics and Amount controls to tune-in and dynamically add even-order harmonics, blending the processed signal "in parallel." The transformerless Big Bottom utilizes controls similar to the Exciter, just down in the depths of bass with Drive (via optical compression), Frequency and Amount. Each process is individually defeatable.

**Performance:** There's not much I can tell that isn't already common knowledge; since I've used the rackmount versions of these processors, I know that they indeed work, adding both life and vibrancy to pedestrian signals rather well, without adding much level, distortion or phase issues. Yes, both have a "sound" that is unmistakable (and not attainable with EQ) and users will either like them or not—the EXBB on bass, VOs, drum submixes (with two) and whole mixes is indeed quite likable.

**Price:** \$299 MSRP, \$249 street

## 5 COMP 500 Mono Optical Compressor

**Features:** A mono, optical compressor with "custom-designed for Aphex" optical element and Jensen transformer at output. Controls include Drive (threshold is fixed, so Drive is used to push signal over threshold level), Ratio ranges from 1.5 to 10:1 (no legend in-between), Output (legend from Min to Max only), Release (from Fast to Slow), Enable and Link (for stereo linking to an adjacent COMP 500). There is LED metering for gain reduction and output level.

**Performance:** The COMP 500 is a stereotypical optical compressor, in a good way, offering compression that is smooth, polite and imparts a flattering signature on the source. The COMP 500 is perfectly gentle and very musical on bass guitar, vocals and even whole mixes (via dual modules) with that Jensen transformer contributing nicely. Who knows what ratios it is using, but expect to dial up higher ones than expected as Drive doesn't always get enough input level over threshold. No worries—high ratios work very nice here and slow releases work well, too (though users never know *exactly* how slow without a legend). Personally speaking, I didn't enjoy operating the COMP 500, but the excellent sound quality makes it a winner, regardless.

**Price:** \$629 MSRP, \$499 street

## 6 EQF 500 Mono Three-band EQ and Bandpass Filter

**Features:** A mono, three-band, semi-parametric EQ with high- and lo-pass filters and a Jensen transformer at output. The EQF offers continuously variable frequency selection on its three bands, but only a filter shape (bell or shelf) on the high and low bands. Boost or cut up to 12 dB with no bandwidth or Q control on any band. The HPF ranges from 20 to 500 Hz (slope unknown) and the LPF from one 1 kHz to 20 Khz, with an Enable switch for the two as a pair. Students of audio production history will appreciate that this unit is a redux of the highly prized EQF-2 500 series EQ designed by Aphex for API's original 500 Series/Lunchbox run in 1976.

**Performance:** I do realize that I may sound like a “whiner on loop” for my frequent complaints about cramming pro-featured EQs into 500 series modules, but I believe it's true: doing so is an awkward arrangement at best. Get out a flashlight and reading glasses, stick out that pinky like when drinking English tea and try to make EQ adjustments on such small knobs—all without single band bypass/enable switches. With patience, users will find the EQF500 sounds great, with fairly narrow bandwidths that are still quite musical, inaudible distortion, smooth bandpass filters and a transformer that is clean enough for the job. Parametric operation, or at least a couple of different Qs per band and/or a two-space module, would make this delightful (even if the price would have to go up).

**Price:** \$629 MSRP, \$499 street

### Summary

This six-unit 500 Series module collection (with more coming, says Aphex) is solid and worthy of investment. Each unit functioned as promised with no operational glitches. Build quality is good across the range with only some of the gain pots being a little loose and/or jumpy. There were no compatibility problems between the Aphex and the API 500 10-space rack I used for this review.

In my experience, each unit exuded a “sound”—a certain classy character that was consistent across the line—and each mic amp brought its own specific character (or lack thereof) that struck me as the result of expert transformer implementations by Aphex engineers. Additionally, Aphex's Mic-Lim is a very useful feature; the design is novel, yet it works cleanly and simply.

The other three processors are all effective and versatile enough to be recommended for both portable 500 racks (where space is at a premium

and performance must be effectively flexible) and those just building their processor collections. For that matter, a pair of EXBBs for \$500 offers some serious mix hype that is uniquely Aphex and quite useful.

There are *a lot of* 500 Series module choices available today, and I cannot possibly supply webclips for all the numerous configurations I auditioned during this lengthy review period. Please visit *Pro Audio Review's* SoundCloud page for examples of Aphex gear on bass guitar, acoustic guitar and vocals [at soundcloud.com/pro-audio-review-magazine—Ed.]. Those still curious before purchasing may want to visit RSPE (rspeaudio.com) and its limited free demo offer to test drive the Aphex modules in the comfort of one's own studio.

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