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HOT NEW GEAR FROM THE
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AUDIO FEST!

A 21ST
CENTURY
PREAMP

Classé's CP-800
Does it All



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Music from

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Esoteric's K-01 Disc Player

Classé Audio CP-800

by Jacob Heilbrunn, [photography by Cody Hamilton](#)

ON A VISIT TO CHICAGO THIS FALL, I HAD THE GOOD FORTUNE to attend a concert at Orchestra Hall given by the marvelous pianist Murray Perahia, whose performances over the decades are being released by Sony in a special box set called *The First 40 Years*. While I was listening to Perahia, the importance that ambience makes for a performance came home to me once more as Perahia stamped his right leg when playing especially dynamic passages from Beethoven and Schumann. With those thumps came a thrilling sense of visceral excitement from hearing a performance that was not simply live but also lively, one that swept along the audience with its intensely intellectual and physically powerful approach to these great piano works.

Isn't it also the case that the extent to which an audio system can lull, or, if you prefer a more pejorative term, fool us into believing that we are hearing the original concert hall

is an important element of creating a sense of realism about a recording? This isn't simply soundstaging, but the perception of an instrument performing in a natural space, an acoustic envelope that has widened to include the entire hall.

Enter the Classé Audio CP-800. The dominant virtue—and it has many—of this new \$5000 solid-state preamplifier from Canada is that it is a champion at transporting a concert hall into your room. To call the images created by the Classé “large” would be something of an understatement. They are towering. This is a preamp that is a technological marvel, offering both flexibility of operation and excellent sound. Its noise floor is crazily low, translating into a spooky sense of transparency.

The multiplicity of design features of the Classé are so numerous that they almost threaten to overwhelm a description of its performance. You practically need an engineering Ph.D.

A Preamplifier for the 21st Century

to get the most out of this nifty piece. The CP-800 can be run either balanced or single-ended. It has multiple inputs and outputs, including a bass-management system and the ability to use a parametric equalizer (anathema to some, heaven to others). But the goodies don't end there. On the front of the preamp is a nifty little logo of headphones, which is where you can plug your pair in if you're into solitary listening. The front also has a USB port dedicated to Apple portable devices.

The power supply is a switching type with power-factor correction. The switching supply monitors the supply's output voltages more than 100,000 times per second, resulting in lower ripple (vestiges of the AC on the DC supply) than from a conventional linear supply. The supply's power-factor-correction circuit phase aligns the voltage and current from the AC outlet, making the supply more efficient and quieter. The preamp also

boasts symmetrical left and right channels that are fully isolated from each other and an analog bypass for what Classé rather quaintly terms “legacy” sources to ensure absolute signal purity.

The preamp, however, sounds anything but legacy. It has a crisp, galvanic, and powerful presentation that was immediately apparent upon spinning a new CD by British trumpeter Alison Balsom, *Sound The Trumpet* [EMI]. On a track with the counter-tenor Iestyn Davies, Balsom's trumpet rang out resoundingly. The Classé provided a transparent window into the recording, allowing the interplay among Balsom, Davies, and the orchestra, conducted by early-music specialist Trevor Pinnock, to emerge with great clarity. It was also the case that the unique sound of the natural trumpet, which was used in the baroque era and possesses no valves (the keyed trumpet was a modern innovation that first came into vogue with the Haydn Trumpet



Classé Audio CP-800 Preamplifier

Concerto), shone through beautifully. One of the nice features of the natural trumpet is that, as the name suggests, it has a more resonant and burnished sound than its more recent descendants. The CP-800 did a fine job of capturing its resonant overtones rather than homogenizing or glossing over them as a lesser preamp might have done. It possessed tremendous control and grip at any volume level. It never became distorted or distended at the highest SPLs, displaying prodigious power in the bass regions. On the deepest piano notes a kind of resonant growl emerged as each overtone lingered on. On the Chicago Symphony Brass' live performance of Percy Grainger's *Lincolnshire Posy*, which the orchestra released on its own CS Resound label, the percussion section came through with tremendously powerful and crisp whacks. The CP-800 started and stopped on a dime so that there was not the slightest sense of overhang. The tuba sounded like a foghorn emanating from the distant right corner of the hall.

It was also very hard to fault the preamplifier's image stability. The more an instrument appears to be anchored in the soundstage, the greater the sense of verisimilitude. Fuzziness or a slight haziness can translate into a smearing of the sound or the burying of small but important details. On a riveting performance of Mozart's Sonata for Piano and Violin in A Major by Mitsuko Uchida and Mark Steinberg on the Philips label, I was pleasantly surprised to hear that there did not seem to be any diminution of precision imaging compared to the much-pricier Ypsilon PST-100, Mk. 2 preamplifier. Nope, the Classé has what might be termed a placid authority, calmly rendering the finest shadings with great delicacy and refinement—the subtle bowing movements, the languorous ease of the lengthy andante movement, and the whirlwind presto finish, all were enough to make you hold your breath at times in respect and amazement at the musical prowess conveyed by the Classé.

These qualities were underscored for me in listening to one of my favorite jazz recordings, a trumpet duo between legendary New Orleans trumpeters Doc Cheatham and Nicholas Payton on the Verve label. By turns sassy, melancholy, and jaunty, this CD has always been one of my favorites when I try to put a new piece of equipment through its paces. The speed and clarity of the CP-800 shone through on each number. Particularly noteworthy were the transient speed and snap of the preamp. Every rasp and growl of the two trumpeters seemed to be vividly captured. Nor did the CP-800 lose any of its fidelity when played at very low levels. On soft numbers, it rendered the breathiness of the two trumpets with great fidelity as well as the confiding tone that Cheatham adopts when singing. It simply makes for a greater sense of sonic realism when you can hear all the nuances—the pitter-pat of the cymbals behind Cheatham's vocals—with such a sense of accuracy and relaxation.

So for all its strengths, where does this preamp come up short when compared to some of its more expensive competitors? There is one area that I would single out, which is that it is not as harmonically fleshed out as, say, a VTL 7.5, MK. III or an Ypsilon. There is a thinner, more metallic quality to the sound of the Classé, a quality that is also evident in the Classé amplifier. This does not mean that the Classé sounds bright or astringent. But it lacks the refulgence of more expensive tube preamplifiers. It compensates with a shockingly low noise floor, something that again became palpably evident when I listened to a fine Sony recording of Murray Perahia playing Handel's suites, including

the "Harmonious Blacksmith," which was wholly appropriate since the Classé is itself a harmonious preamp. When you hear these pieces played with such grace, it leaves behind the mechanical aspects of sound reproduction and establishes a profound emotional connection with some of the greatest music ever composed.

Classé is justly proud of its preamp, which Classé's president Dave Nauber told me is the most sophisticated piece of equipment it has ever produced. He won't get an argument from me. (The one downside I should note is that Classé, due no doubt to cost considerations, is now apparently producing its gear in China, but that is the case for many audio manufacturers.) Dedicated readers of TAS may recall that for a number of years I used Classé's mighty Omega and Omicron monoblock amplifiers. Then I reviewed and was smitten by Classé's powerhouse amplifier, the CA-M600, which possessed a clarity and extension in the treble region that its precursors lacked. To my ear, it took Classé to a new plane of sound reproduction. Now the CP-800 has completed Classé's latest audio odyssey.

No, the CP-800 will not satisfy the most persnickety among us, who are searching for an elusive sonic nirvana that usually seems to recede in the measure that it is approached and for whom cost is incidental to performance. More power to them. But there is also the phenomenon of the hedonic treadmill—the peril that today's greatest piece of equipment is only the precursor to searching for the next most-expensive piece that proves only transitorily satisfactory. Classé does not fall in that camp. For many audiophiles, particularly those who are solid-state fans, these two pieces from Classé could—and probably should!—be enough to call it a day. In my view, anyone searching for knockout performance at a reasonable price need look no further. **tas**

SPECS & PRICING

Inputs: Three RCA, two XLR
Digital inputs: USB Type A, USB Type B, AES/EBU, three coaxial, four TosLink
Outputs: Two RCA and two XLR, headphone jack, subwoofer
Frequency response: 8Hz-200kHz
Maximum output: Single-ended, 9V; balanced, 18V
Signal-to-noise ratio: 104dB bypassed, analog source; 105dB, digital source
Channel separation: >100dB
Dimensions: 17.5" x 4.78" x 17.5"
Weight: 23 lbs.
Price: \$5000

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ASSOCIATED EQUIPMENT
dCS Scarlatti digital playback system, Continuum Caliburn turntable, Classe CA-M600 monoblock amplifiers and Ypsilon SET-100 Ultimate amplifiers, Ypsilon PST-100 Mk. III preamplifier, Wilson XLF loudspeaker and Hammer of Thor subwoofers, Lyra Atlas cartridge, Transparent Opus cabling



Classé Audio CP-800 Preamplifier



Inside the CP-800

The CP-800 is an extremely sophisticated and advanced piece of audio engineering that brings new features and technologies to the preamplifier category.

Everything about the CP-800 is forward-thinking, starting with the switch-mode power supply. As mentioned in the review, a switch-mode supply is more efficient and quieter, but it also has the potential to sound better than a conventional linear supply if done right. The CP-800's supply is based on a new Classé-developed technique called Zero Volt Switching that minimizes radiated EMI by reducing the amplitude of the radiated noise and also spreading out the energy over a wider range of frequencies. It does this by performing the switching only near the zero-crossing points of the waveform.

The CP-800 is fully balanced from input to output. Unbalanced input signals are converted to balanced and then processed differentially. This approach requires four independent signal paths, left +, left -, right +, right -, and is much more expensive to implement than preamplifiers that are inherently unbalanced.

The main left and right outputs are supplemented by two auxiliary channels that can drive a second power amplifier in a bi-amplified system. Another way of bi-amping with the CP-800 is to use the unit's dedicated subwoofer output. Via the front-panel menu, the user engages a crossover for this output, with variable frequency and slope. If the auxiliary outputs are not used, one of them can be configured as a second subwoofer output.

Analog input signals can pass through the CP-800 and remain in the analog domain, or can be converted to digital (with a Cirrus Logic CS5381) to take advantage of the CP-800's extensive digital signal processing capabilities. Two Analog Devices Sigma DSP chips offer the ability to set parametric equalization and tone controls on any input, as well as to realize the subwoofer crossover. I've used this same parametric EQ in Classe's reference-grade SSP-800 processor and found it to be exceptionally useful in smoothing out room modes in my theater system.

All DSP is performed in 56-bit, double-precision mode for best low-level resolution. Although the CP-800's Analog Bypass setting assures that the signal is never converted to digital, parallel signal paths make it possible to generate a subwoofer output signal with the DSP and still keep the main signal path pure analog.

The CP-800's DAC section features a USB input that is powered from its own galvanically isolated power supply, preventing noise from USB devices from getting into the CP-800's audio circuits. There is no direct electrical connection between the CP-800 and USB devices connected to it. Digital-to-analog conversion is performed by dual Wolfson WM8741 stereo DACs for true differential output. Because the Wolfson DACs are voltage-output devices, no current-to-voltage converter is needed.

Finally, the CP-800's architecture allows for the future addition of a phono module or network connectivity.

The CP-800 offers an astounding array of features and capabilities not usually found in a preamplifier—and at an eminently reasonable price, particularly when you consider Jacob's enthusiastic reaction to its sound quality. —Robert Harley