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EQUIPMENT REPORT



## Reasonably Priced Excellence

**NuForce Reference 9 Special Edition V2 Class D Monoblock Amplifier**

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Several years ago I was loaned a pair of Class D monoblock amplifiers, became fascinated by certain aspects of their sound, and decided to investigate a number of the Class D (or “switching”) amplifiers then on the market. As my search progressed, I eventually had the opportunity to listen to offerings from Audio Research, Channel Islands Audio, Kharma, NuForce, Red Dragon, and Spectron, and to hear the amps driving a broad range of speakers (planar-magnetic panels, various affordable small monitors and bookshelf speakers, and floorstanders ranging in price up to about \$8k pair). While none of the Class D amps I sampled offered honest-to-gosh “state of the art” performance, it seemed to me the best Class D designs handled certain aspects of music differently and, to my ears, better than many like-priced, traditional Class A/B amplifiers did.

I was particularly impressed with NuForce’s Reference 9 monoblocks (reviewed in TAS 158), which offered significant virtues in three key areas: taut, deep, and remarkably tightly controlled bass; heightened focus, detail, and tonal purity through the midrange; and lively, expressive dynamics. One area of potential controversy involved the NuForces’ upper midrange and treble response—an area that seems to be an Achilles’ heel, of sorts, for many Class D designs. In my original review of the Reference 9 I said that while not exactly sterile-sounding the amp’s highs did have a certain “accurate-to-a-fault, garbage in/garbage out quality” that was not very forgiving.

Later on, when the TAS staff did a survey of Class D amplifiers in Issue 166, TAS Editor-in-Chief Robert Harley and

I took turns evaluating NuForce’s upgraded Reference 9 SE (for Special Edition) amp, while then-TAS Editor Wayne Garcia gave the original Reference 9 monoblocks a try. Our reactions were mixed, to say the least. I felt the Reference 9 SE retained the original Reference 9’s strengths, but offered superior bass, clearer mids and highs, and heightened focus and delicacy. Robert Harley found the Ref 9 SE offered “startling dynamics, a big and transparent soundstage, and outstanding resolution,” though he noted a “chalky coloration” in the upper mids and highs with some “truncation of the air riding on the top octave.” Wayne Garcia, however, felt the Reference 9 was “terrible” and sounded “cold and clinical with that kind of false ‘clarity’ that makes us think it’s transparent when it really isn’t.”

Why the divergent viewpoints? Apart from matters of taste, one explanation is that NuForce amps may be quite speaker-sensitive, matching synergistically with some models and not well with others (though this has not been my experience in using NuForce amps with a broad range of speakers over time). A more plausible explanation, though, may be that the NuForce’s strengths tend to predominate when heard through good mid-priced speakers (of the type I use for many of my listening tests), while their shortcomings stand out in sharper relief when heard through more revealing top-tier speakers (such as the five- or even six-figure models Harley and Garcia used as references). But in any event, it appears that upper mids and highs are areas that bear particularly close scrutiny in evaluating any Class D amplifier design.

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Whatever the benefits or drawbacks of Class D amps circa 2006 (when the TAS 166 feature article was published), the fact is that the technology has continued to evolve rapidly. This has certainly been the case with NuForce, a company that over the past two years has released a second-generation “V2” family of monoblock amplifiers—the top model of which, the Reference 9 Special Edition V2, is the subject of this review. To better evaluate the amplifiers’ high-frequency performance, I conducted the first half of my listening tests using Usher Audio’s extraordinarily revealing Be-20 loudspeakers and then switched to Mirage’s somewhat more forgiving OMD-28 omnidirectional floorstanders for the second half of my tests.

Looking back, you can see that NuForce has actually offered four distinct configurations of its flagship amplifier: the Reference 9 V1, Reference 9 SE V1, the Reference 9 V2, and now the Reference 9 SE V2. So as to have a sense of context, let’s review the changes between the models.

The original Reference 9 (V1) was a 160-watt monoblock featuring switch-selectable single-ended or XLR inputs. As mentioned above, the amp offered taut and potent bass, lucid mids, expressive dynamics and, well, controversial upper mids and highs. When I recently revisited the original amps using the Usher Be-20 as my reference, I found their highs exhibited a subtly dry, mechanistic, “color by numbers” quality that fell well short of optimal transparency and sweetness. Interestingly, these flaws had not been evident through the reference speakers I used in my initial review, but were readily apparent when listening through the big Ushers.

Next came the Reference 9 Special Edition (V1)—a 150-watt monoblock amp. The Special Edition model improved upon the original design by adding a better power-supply board with a “low-ESR capacitor bank,” an improved input section with a dedicated power supply, and pure, oxygen-free copper input wiring. The resulting amps shared all the virtues of the standard Ref 9, plus superior bass, improved upper midrange-to-treble clarity, and heightened focus and delicacy. Even so, the problem of somewhat mechanical-sounding highs, though mitigated to a degree, remained (as determined by listening through the Usher Be-20s).

Later, looking to take even bigger steps forward, NuForce revised its original circuit topology and completely re-laid out its circuit boards to create the Reference 9 V2. The V2 model offered slightly higher power output (190 watts at 8 ohms) and its circuit board changes resolved niggling operational problems to which the V1 amps had been prone (turn-on/turn-off pops and clicks, reported instances of FM interference, etc.). More importantly, NuForce says, the V2 circuit board lowers the amplifier’s noise floor by a significant 20dB, increases the amp’s output stage efficiency to 85%, and shortens the current-delivery pathway to “achieve a 20% increase in through-put.”

Sonically, I found the Reference 9 V2 handily outperformed the original Reference 9 Special Edition amp, offering even better defined bass, smoother mids, and slightly softer-sounding, more forgiving highs, while still delivering plenty of upper midrange and treble detail—especially on fast-rising transients. The V2 is at once more listenable yet more detailed than its predecessors, though it might still leave high-frequency connoisseurs wishing for an elusive, overarching touch of treble transparency and sweetness. Which brings us, at last, to the Reference 9 Special Edition V2.

The Reference 9 Special Edition V2 monoblock is in essence a standard Reference 9 V2 amp whose power supply has been beefed up with a “low ESR capacitor bank” and that incorporates detail touches such as WBT Next-Gen input jacks. On paper these might seem like less than earth-shaking improvements, but in practice they enable the Special Edition V2 amp to round a sonic corner of sorts, so that it finally achieves the kinds of high-level treble openness, transparency and, yes, sweetness that have narrowly eluded previous NuForce designs. Gone is that dry, mechanistic, “color-by-numbers” treble quality, replaced with a sound that is intimate, focused, and pure. Reproduction of imaging and soundstaging cues has gotten better, too, as has the SE V2’s bass (which, in my view, has always been a NuForce strong suit).

To appreciate the Reference 9 SE V2’s newfound treble prowess, put on Marilyn Mazur and Jan Garbarek’s *Elixir* [ECM], and just drink in the rich, varied percussion instrument textures you’ll hear. Mazur and company present a veritable cornucopia of high- and low-frequency percussion instruments—some familiar and others exotic and mysterious—and the NuForce amps answer the call by showing how the attack, decay, voice, and harmonic structure of each instrument differs from the next, sometimes by the subtlest of degrees. The SE V2 reveals, but does not overplay, the distinctiveness of each instrument, enhancing realism in the process. Transient edges, on everything from deep-pitched gongs to evanescent hand bells, are carved cleanly, yet without etching or exaggeration, while delicious lingering overtones seem to float in the air long after the bodies of notes have faded. The sense of air in the reverberant recording space is readily apparent, yet not overdone; there’s no sense of synthesizer-like electronic “reverb” at all. But what really sets the SE V2 apart from its predecessors (and many other good amplifiers) is its ability to convey detail while preserving essential qualities of liquidity and smoothness.

To understand what the SE V2 has to offer in imaging and soundstaging, may I suggest that you put on a good LP, but perhaps one you’ve not listened to in a while, just to see what new sonic discoveries you might make. I tried this experiment by putting on an old favorite—namely, Weather Report’s *Sweetnighter* [Columbia]—and was floored to hear how much wider, deeper, and more spacious the soundstage sounded through the NuForce amps. What caught my attention was the way that the percussion chorus, led by Dom Um Romao, created the sonic equivalent of a semi-circular band shell within which the principal players—keyboardist Josef Zawinul, saxophonist Wayne Shorter, and bassist Miroslav Vitous—could trade musical statements and counter-statements. Vitous’ bass sounded almost shockingly focused and hearty, while Shorter’s sax—especially the tenor sax—added piquant comments and tart yet exuberant interjections, even as Zawinul wove in brilliant atmospheric lines from the left side of the stage. But what made the whole piece hold together was the vivid way in which NuForces positioned the surrounding “cloud” of supporting percussionists, whose instruments formed a hemispheric stage within which the proceedings could unfold. I’ve heard this album dozens of times, but I can’t ever recall it sounding at once so focused (in the specific details of solo instrumental lines), yet so wide-open and spacious (in overall stage dimensions).

Finally, to experience the SE V2’s remarkable combination of bass tautness and sheer low-frequency clout, put on “The

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Lesson” from Victor Wooten’s *Palmystery* [Heads Up]. The track showcases Wooten’s dazzling array of slap-style and finger-style electric bass playing techniques, and the SE V2 makes the most of them. One interesting technique Wooten employs on the track is to thump very low-frequency drone notes while overlaying them with blisteringly fast, almost Flamenco-flavored finger-style runs played high up on the bass’s neck. As a result, you hear two very different aspects of the instrument’s voice at once (deep, shuddering low-frequency rumble punctuated with delicate, spicy accent notes)—a test that can make many amps stumble. But the Reference 9 SE V2 never falters, cheerfully demonstrating its ability to go low with appropriate punch, power, and—most importantly—control. NuForce amps have traditionally been known for their very high damping factors and ability to keep woofers under control, but what makes the SE V2 special is the way it can serve up intense bursts of low-frequency energy while simultaneously reproducing the subtlest of bass transient and textural details. The only caveat, however, is that the SE V2 cannot and does not add any extra bass warmth of its own; this is a *not* one of those amps that will compensate for speakers that are even a little bit bass shy.

Despite the many positive qualities of the Reference 9 SE V2, I suspect its sound will not suit every taste—nor will it be a good match for all speakers. Here’s why. For starters, the SE V2 can seem a little too lightly balanced. While I would hesitate to call it a “bright-sounding” amp, the fact is that the NuForce does, according to company-supplied reference charts, exhibit a slight degree of treble emphasis (there is a gentle rise in the frequency response curve, starting at around 8kHz and cresting at about + 0.8dB at 20kHz). Second, the amp’s *extremely* tightly controlled bass can initially strike listeners as a lack of low-end weight (not true) and/or as the absence of a potentially desirable dab of added midbass warmth (definitely true, though unexaggerated bass is an integral part of the amp’s charm). So, this would not be a good amplifier to marry with components that exhibit even trace amounts of excess brightness, or that require bass reinforcement.

But another, perhaps more subjective, aspect of the SE V2 that readers should be aware of is its tendency to emphasize *delineation* of musical details and individual musical lines, sometimes at the expense of conveying a more *integrated* sense of the musical whole. If you love to follow the sounds of individual instruments or voices as music plays, the NuForce could be your new best friend, but if you like to drink in the whole *gestalt* effect of musical compositions, there are other amps that might better serve your needs. The same pattern holds true in speaker matching. For example, I would say the SE V2 proved a good but not great match for the Usher Be-20s, because it tended to emphasize the more analytical side of the speaker’s personality, leading to a sound that a friend described as offering “more detail than my brain can process.” But the NuForces matched exceptionally well with the Mirage OMD-28 speakers, because the amps fully exploited the Canadian speakers’ stunning soundstaging capabilities while giving them higher levels of focus and resolution than they had ever shown before in my system. My point, really, is that this is very much an amp you should try before you buy—something NuForce (and many of its dealers) make possible through an in-home audition program.

NuForce’s Reference 9 SE V2 monoblock amplifier offers real elements of excellence at a reasonable, though certainly not cheap, price. If the amplifier’s strengths align with your musical tastes and the characteristics of your ancillary equipment, the result can be breathtaking realism and deep musical satisfaction. But if not, then be aware that the NuForce amps emphasize tautness, control, and resolution of fine transient and textural details—an emphasis that will fit some tastes better than others. **TAS**

### SPECS & PRICING

**Power output:** 190 watts @ 8 ohms, 300 watts @ 4 ohms  
**Number and type of audio inputs:** One balanced (XLR) and one single-ended (RCA), switch selectable.  
**Dimensions:** 8.5" x 15" x 1.8"  
**Weight:** 8 lbs./each  
**Price:** \$5000/pair

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