



SUPREMO

Country of Origin



Italy



Recent advances in DAC technology blur the lines between well-designed products in the \$3'000 to \$5'000 range; and low five-figure kit circa 2010 as well as some of today's five-figured fare. It's like comparing the razor-thin garlic slices Paulie lovingly coaxes from the bud at the end of the film Goodfellas. Without a microscope, how can one tell the difference? With a few exceptions, I find it very difficult to consider one DAC in this price range demonstrably superior to another when overall quality is so high. Many of us have heard wonderful DACs by Auralic, April Music, Metrum Acoustics, Resonance Labs, Weiss and many other producers at audio shows, in stores; or we've had some of them in da house. They all pass the Hippocratic test of doing no harm. Each one brings a finely tuned flavour to the feast. Which do you prefer? There may be ten or twenty world-class DACs in this price range that all possess the fundamental core of musicality, with minor differences at the margins. The \$3'299 North Star Design Supremo 384-32 DSD D/A converter certainly belongs with these top-shelf DACs and is among the least expensive of the lot.

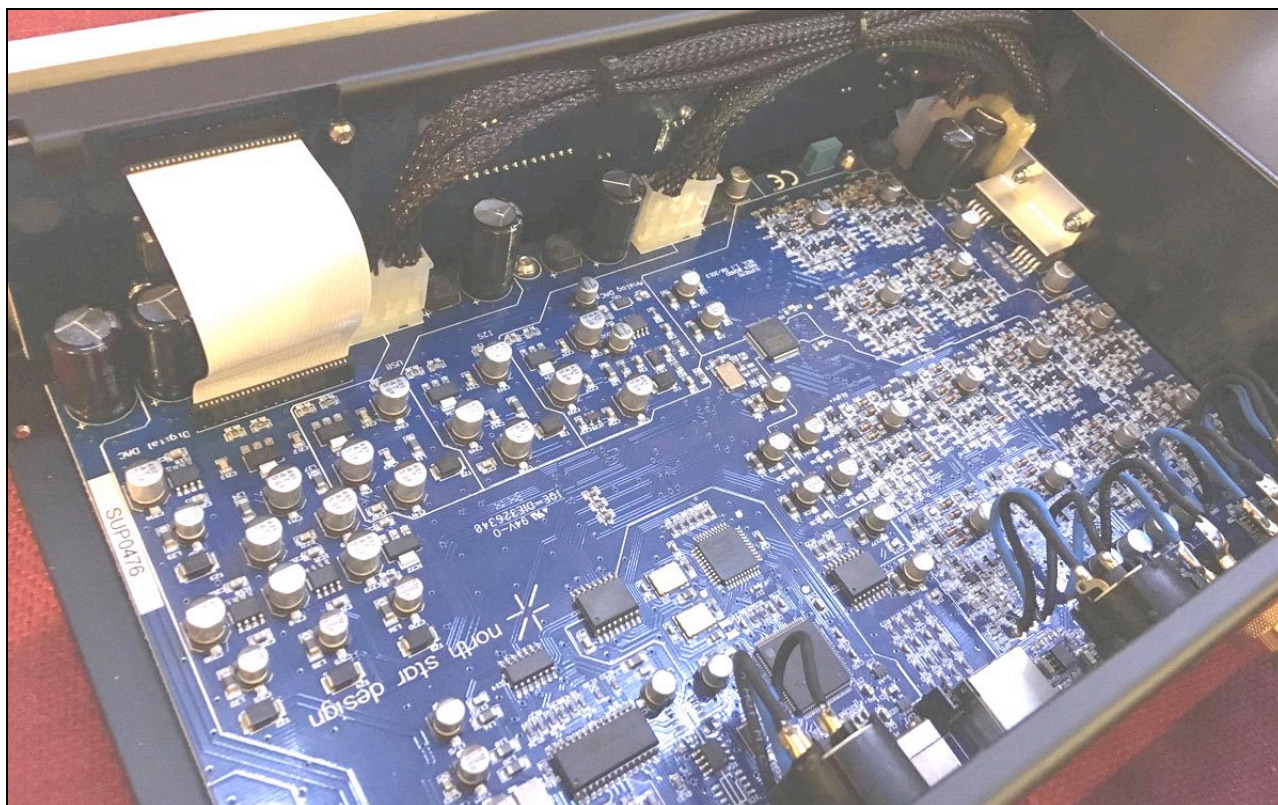
It also appears to be the least expensive in this range made by rich-world high-wage workers, a few kilometres outside Pisa to be precise. The Supremo delivers a surprisingly wide range of features including an OFC power inlet, USB 2.0 input at 32 bits, two RCA coaxial inputs, two Toslink inputs and one XLR AES/EBU. I saw no shortcuts, no compromises. There is one unbalanced analogue output and one balanced. The Supremo sports the ESS Sabre ES9018 chip in double balanced configuration. It offers selectable absolute phase and various digital filters, WBT Nextgen flagship RCA connectors and Neutrik XLR connectors. I played around with the filters but frankly didn't notice a concrete difference. The quality of construction appeared very robust, with rock-solid connections at the back. I did not listen in balanced mode nor did I use the AES/EBU input. With 16/44.1 I noticed little difference between USB and coax. Streaming via Toslink sounded no different and there were no clicks, drop-outs or buffering issues.

The silver aluminium front shone like a diamond in the light à la Jeff Rowland but the case appeared in some lighting situations to be a dull industrial silver-gray like the old Wyred4Sound look if with a bit more polish. A pretty face to be sure but I'm not so sure about the case. Where looks are concerned, some of the competition in this price range is sexier. The Supremo may not be a looker but it cuts no corners and wastes none of your time on superfluous bling. The Supremo is the flagship North Star DAC, three times as expensive as their entry-level Intenso whose published specs would seem to make it somewhat of a best buy. With the Supremo you get primo parts from head to toe, including organic polymer capacitors on the analogue stage, separate and heavily shielded toroids for the digital and analogue stages, discrete components with very carefully matched film resistors, star grounding, shielded wiring and many more goodies.



The Supremo was recognized instantly by iTunes, Audirvana and Pure Music, with setup requiring no drivers for my iMac or MacBook Air. A couple of clicks of dialog boxes on the computer and sound was optimized. Streaming via Apple Airport Express was effortless, too. For me the ability to play native DSD 2.8-5.6Mbit/s and 384kHz (on USB only) was icing on the cake. With thousands of CDs and SACDs, I am too heavily invested in the first and second generations of digital to contemplate a big change but I do own a few high-resolution downloads. The Supremo's Redbook and even MP3 ability was utterly mesmerizing and worth the price of admission alone.

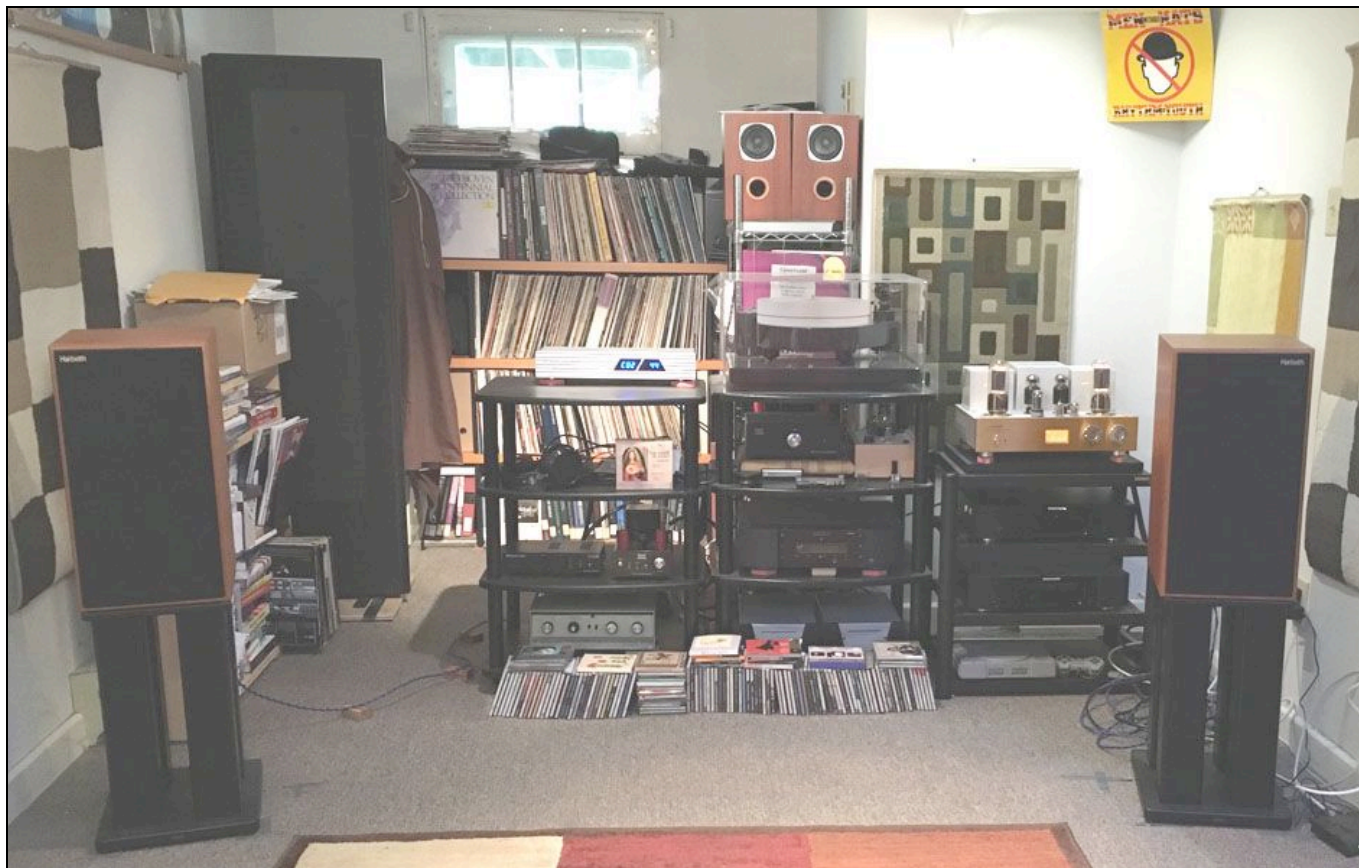
This is a hefty little device on all counts except coin. The Supremo tips the scales at 6.5kg or 14.5lbs, with a sometimes heavy and dense sound to boot. But that's not to say it was ever congested. It's more a case of tonal colors being so saturated that there is never a sense of excessive air or hollowness. The Supremo was also quiet and refined, with a claimed 132dB dynamic range and distortion of 0.0001% @ 0dB in balanced out mode. This might explain its ability to shock and awe with its grip on electric bass and the ease whereby it conveyed mighty orchestral swings, drum solos and pyrotechnics of all sorts. The synthesized beats of Parliament (which also underpin some of Dr Dre's best work) were rendered, courtesy of the late great Bernie Worrell, with a finely grained texture I don't recall experiencing before.



Early on it was clear that the Supremo packed serious heat down low. With Michael Manring and David Cullen's awkwardly named *Equilibré*, the music is never quite in equilibrium. Manring's bass is boss and the Supremo never failed to remind me. But it's not like the overproduced bloat and blunt force of Paul McCartney on the remasters of a few years back. With Manring's bass it's all about restrained and spatially precise, firmly anchored images. It's a Big Bang approach in which the note starts out as a tiny speck and then explodes with remarkable speed. Listening to the sharpness and fine-toothed detail of electric bass over the Supremo, my Harbeths and a First Watt F5 amp reminded me of a \$50k system I heard several times anchored by Vivid loudspeakers and Luxman monos. On my desert island disc *Standards, Vol. 2* by the Keith Jarrett Trio, Jack DeJohnette's cymbals and rim shots are very crisp and articulated. Jarrett's piano was crystal clear, seemingly shorn of some of its reverberant romance. That must have been greater clarity and resolution speaking. There was less warmth (or was it less haze and smearing?) than I was used to with my tubed DACs but also much more detail without any edge.

There was another exceptional trait that took a bit longer to identify: the ability to gracefully uncoil the music and send it floating effortlessly through the air. Think of how Robert Fripp's guitar at once melts into the soundstage and floats away from it on the tune "Epitaph" from King Crimson's debut album. That sense of effortless flow I associate with Weiss DACs can be so beguiling and soothing. I often got the same sense from the Supremo at less than one half the asking price of a new Weiss 202.

Alas, it took another prog rock band, the Moody Blues, to reveal the essence of this DAC. Justin Hayward is one of the great unsung heroes in the history of rock and roll songwriting. By the age of 22, Hayward could boast of "Nights in White Satin", "The Actor", "Voices in the Sky" and "Tuesday Afternoon." Yet he was never one to boast, seeing himself as just a singer in a rock and roll band. "Nights", written by him at the age of 19, was overplayed for a quarter century but not having heard it in several years, I felt ready to come back to it with a fresh mind. It was captivating but the Supremo showed that the Beatles did a far better job in taming Abbey Road's reverberant halls. It sounded like a mess, more than usual. The Supremo didn't add the alchemist's touch to its bag of tricks: garbage in, garbage out. Fortunately for us, the Moodys' other albums were generally better produced.



"It's such a rainy afternoon. No point in going anywhere. The sounds just drift across my room. I wish this feeling I could share." Hayward's "The Actor" from the 1968 album *In Search of the Lost Chord* was the revelation I needed to understand the North Star Design Supremo DAC. This, by contrast to "Nights," sounded wonderful. The Supremo seemed on the humid side, slightly warm and full but capable of openness to send sounds drifting through the air, effortlessly without congestion. On a very dark night I was listening to good old 16/44.1 Redbook fare using a Marantz SA15-S2B Limited Edition SACD/CD player as transport. And transported I was from my earthly concerns to revel in the psychedelic cheese served up thick the way I like it. The North Star was warm but not too much, just right - Bermuda without Bermuda prices. In the seventeen months I had the machine, I found it never got too hot on top and it almost never was cool, clinical or flabby down below. It was generally a dense sound but as the music allowed, the sky cleared and the North Star shone with its detail retrieval and its open dimensional sound. That sense of space was evident with a Deutsche Harmonia Mundi recording of Monteverdi's *Vespro della beata Vergine*. Choral music soared and solo vocals were rarely sibilant.

Images were razor sharp, clearly delineated, with individual vocals rarely becoming unrealistically large. With my Marantz SACD player and Musical Paradise D-1 DAC, Doug Macleod's voice seems freakishly large and unfocused. With the Supremo, Macleod was cut down to proper size. As a result, it seemed more not less present. With small jazz ensembles and orchestras alike, there's usually a good sense of front-to-back instrument placement. Like a powerful solid-state amplifier, this DAC was firmly in control. It did for bass images what my Wyred4Sound SX-1000 mono amps do, bolt them securely in place on the soundstage. With a tube amp, bass firmed up noticeably; with my First Watt F5, that characteristic was less pronounced but never did the Supremo lose its grip. It paired well with direct - heated triode, Class D and Class A solid-state amplification.

Generally, with my Harbeth Compact 7 ES-3 loudspeakers I got a bit more of the Harbeth house sound: warm, round, tonally dense but with a serious dose of speed and deep bass thrown into the mix. So much for my plan to add a subwoofer! With a DAC like this, there was no need especially given my small listening room. Surprisingly, with my Magnepan 1.7 planarmagnetic loudspeakers, I also found the North Star to be full and thick, to a greater extent than I had ever experienced with these wafer-thin sub \$2'500 instruments.

The 1.7 are well known for their unparalleled imaging in this price range but rarely are described as tonally dense. A few weeks after the Supremo arrived, I was listening upstairs in the living room while my family was away. It was time to pay attention to my long-neglected Maggies, barely broken in after 30 months of ownership. Maggies are hard to tame, renowned for their ability to reveal garbage upstream. They are demanding idiosyncratic speakers, perhaps not well suited to review products with. No matter. I put the Supremo into a chain consisting of the ARC LS-17 preamp, Wyred4Sound SX-1000 monos and a Marantz transport. The speakers were unrecognizable. Finally they were complete. It had taken this \$3'299 DAC from northern Italy to do the job.

Now I had floor-rattling but dry and tight bass beasts which also reproduced highs with startling immediacy. I had suspected that a change in amplification or the addition of a subwoofer might add that touch of missing bass but had never imagined that panel speakers could benefit so much from a digital source change. Nor did I expect that they could sound so tonally dense like my Harbeths, so rich and full. But there it was—the sweetness, the tonal colors of Tony Rice's great vintage guitar, the ravishing timbres of Rostropovich's cello, the fine filament decays of Ray Brown's final days as his double bass takes center stage on the wonderful disc *Walk On: The Final Ray Brown Trio Recordings*.

I thought I had a good sense of how fast my Maggies were but was unprepared for what was in store. When you're in a Jazz bar close to the stage, you'll anticipate a certain amount of spine shaking if you keep your eye on the drummer. As I typed on my computer in the dining area that adjoins my living room, I was unprepared for the dynamic swings the Supremo could conjure, in this case not the whack of a drum but the blaring of a note from Roy Hargrove's trumpet. It was from the track "Laura" on Hargrove's CD *Parker's Mood*. This disc features the incomparable Christian McBride, a brilliant stand-up comedian who also wields one mighty double bass. I was seated seven meters from the speakers but they literally made me jump. For a second I feared for the tweeters—how could they soar such heights so quickly? If live music has the ability to startle with its immediacy, then the North Star Supremo gets one very close indeed. Then I wondered: were the hardwood floors and untreated room upstairs speaking, adding some liveliness? Surely that was a factor but when I swapped the Supremo out for a Marantz SA-8003 SACD/CD player, it was clear that the Supremo had the final word - speed.

At that moment I realized that I had been underfeeding my Maggies. I always knew how they wanted the 1100 watts from my ICEPower Wyred4Sound monos but apparently they also wanted a far more robust source. Down in the man cave, vinyl had always sounded far better on my Maggies than any digital I tried, including SACD played with the very respectable Ken Ishiwata Special Edition Marantz SA-15S2B, a machine containing perhaps 95% of Marantz's finest technology, albeit five year old. What a difference half a decade can make. Without a truly reference level source, the Maggies won't show what they're capable of. Even standard CD sounded fuller and more powerful through the Supremo than SACD did. Thanks(?) to the Supremo, I often asked myself if I had wasted thousands of dollars investing in SACD over the past ten years.

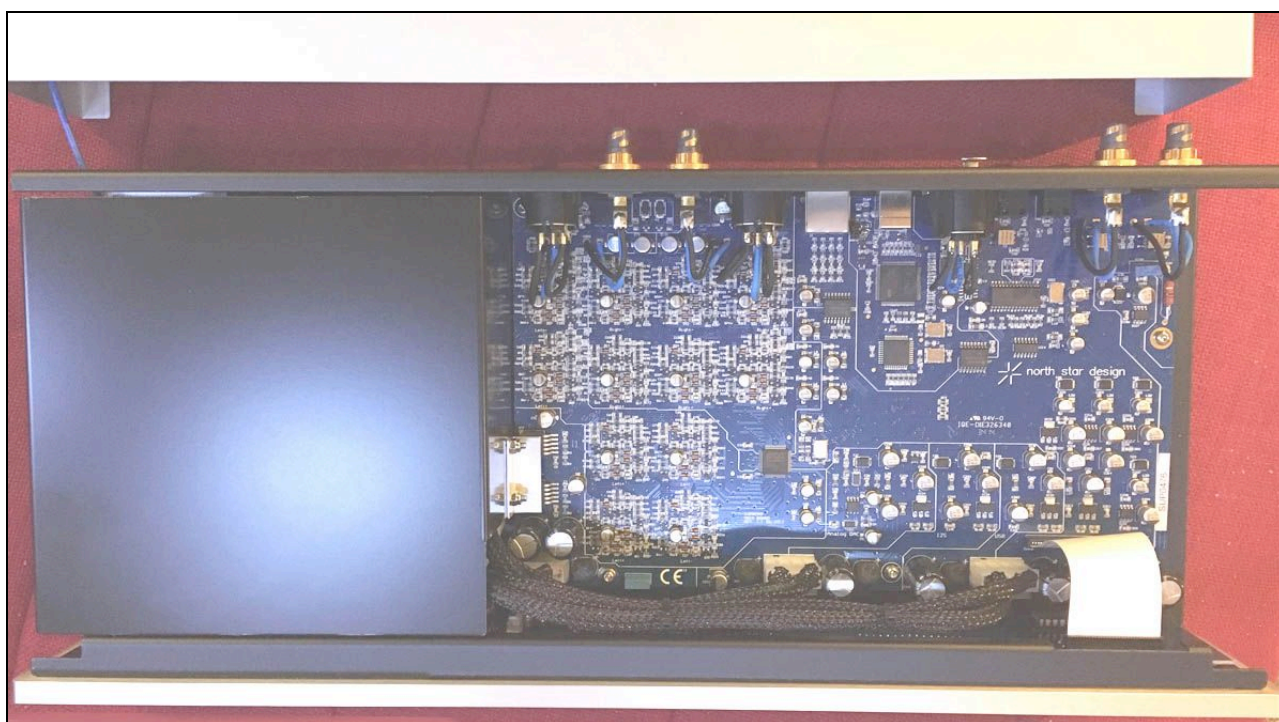
I own a dozen albums in five formats: CD and MP3 derivatives, DSD downloads, SACD and high-quality vinyl reissues. Decadent perhaps but useful in this instance! I chose five Analogue Productions remasters of the music of Bill Evans, Louis Armstrong, Grant Green, John Coltrane and Miles Davis. The differences were small and subtle but fairly consistent. The SACDs sometimes sounded clearest and most open and always revealed more ambient cues than vinyl. Vinyl tended to be a bit tonally compressed. But vinyl sometimes also seemed to have the largest if not airiest soundstage. The DSD downloads tended to sound warmest, softest and most fluid. Was one format 'better'? Leaving MP3 aside, not really. All four full resolution formats sounded magnificent. My biggest surprise was just how well standard CDs played over coax held up to the other formats over the Supremo. It was night and day better than with my other digital players and DACs—warmer, more propulsive, more resolved, with tighter bass and a larger soundstage. To be sure, in the future if and when I decide to expand my music collection, like many I might invest in DSD. But today I see no need to repurchase DSD versions of my current music library.

The main reason is, ironically, that this fine DSD-capable DAC which sports the acronym "DSD" in its model name, showed me just how narrow the gap has become between CD and higher resolution formats. Was it the Supremo's fine analogue output stage speaking?

With most music, no matter the resolution including MP3 rips that had languished on my hard drive for eleven years, the midrange acquired substantial mass through the Supremo. Now with my Maggies, I was getting close to the benefits of a conventional boxed transducer with none of their potential drawbacks. I could feel the infectious pulse of the Moody Blues as "Ride my See-Saw" picked up speed in the opening minute. I felt no twinge of guilty pleasure, just a sense of freedom that comes with the realization that I could get pretty darn close to a concert in my house.

Thick, uncut, pure, organic, warm, luscious but quick: with all my loudspeakers, this was the North Star Supremo's sonic signature. If you want the peerless fluidity of Federer's footwork or the galloping grace of Justine Henin's perfect back hand, go with a Resonessence Labs Mirus which pours smooth music out of a pure dark stream but can sometimes seem too polite. If you want a brighter more Lafite-like ethereal sound, the Supremo isn't it. Perhaps you'd be better off with an Esoteric. The Supremo is no airy, dancing-on-the-ceiling-of-your-senses DAC. It's a big ripe Super Tuscan Bolgheri with a tube-like sense of fullness but cheetah reflexes. The North Star is pure Rafael or Serena: muscular and explosively fast. No matter the music, there was always that relentless drive at the core of the sound.

I have found that a chief difference between some very good DACs in the \$500 to \$2'000 range and superlative ones priced from \$3'000 to \$5'000 or higher is the ability of the pricier spread to avoid congestion and to convey a greater sense of scale and grandeur with complex music. Great DACs like the \$11'000 Accuphase DC-37 I had on loan for a few months sound full and powerful like vinyl even at low volume. A great DAC can fill the room with bloom without valves in the power amp. This might well be the defining characteristic of ESS Sabre chips as employed in the Supremo. Whether the ESS is placed in an Audiolab M-DAC, Resonessence Labs Mirus or this North Star DAC (three of the most recent ESS-based DACs I have owned or reviewed), it shares that full, resolved and slightly warm flavour. Clearly the Resonessence Labs Mirus is more versatile with its ability to play music from SD cards and with its numerous filters. But you'll pay an extra \$1'700 for that versatility. On my budget, it's not worth it. The North Star wins without doubt but your mileage may vary. The Resonessence is more relaxed and some might prefer it.



Somewhat taken aback by the ability of the North Star to make music seem fuller, less thin, less digital, I reached for Van Morrison and Nazareth. A quest for astral themes seemed in order but I was primarily interested in how the DAC would handle poorly recorded or transferred CD. In most systems, Nazareth's work has always sounded tinny, unlistenable. By this point I'd be lying if I said I was surprised that the North Star had no trouble finding the magic in bright and thin 1970s rock tunes including "This Flight Tonight". Dan McCafferty's screeching voice was all the evidence many people of my parents' vintage needed to dismiss hard rock out of hand but I swear that the Supremo surpassed Joni Mitchell's original magic as McCafferty bellowed as only McCafferty can: Not the early one/That you can wish upon/Not the northern one/That guides in the sailors. None of my several Marantz players (SA 15-S2B Limited Edition, SA8003, CD5004) finds that magic. Marantz's house style is often said to be warm and open, somewhat laid back. The North Star showed the Marantz products to be demonstrably inferior, comparatively scooped out in the mids, in fact lacking in warmth and density, unable to flesh out undertones, sometimes sibilant and always slower, one step behind the beat.

Above all, with my Marantz gear there was a sense of hollowness, of something missing in the middle. It was the difference between a nicely maintained and tuned upright with a thick cherry soundboard pressed against the drywall of a reasonably damped room and the tinny cries of an out-of-tune neglected piano that has languished in a humid church hall for decades. My Marantz SACD 15S2B Special Edition player is a fine machine but once again it sounded comparatively thin - a tinny transistor amp to the North Star's massive ARC reference level amplifier with arresting levels of tonal density and bloom. Full, warm, with exceptionally deep bass and delivered fast: this was the Supremo's sonic signature. For some, this DAC may prove to be an end game product, realizing most of their sonic goals most of the time, offering up enough warmth to satisfy their inner vinyl spinner and enough resolution to satisfy their craving for detail retrieval. With the Supremo, just 16/44 was alright by me. I don't think one needs a large library of hi-rez files to justify the purchase of this machine. Sure, each of the 50 or so tracks I played in DSD sounded wonderful but Redbook rips sounded very nice and will suffice.

During my lengthy reviewing session, I concluded that in 16/44.1 mode, the Supremo sounded better than SACD through my acclaimed Marantz SA 15S2B Limited Edition SACD player: fuller, more spacious, more powerful, warmer yet more resolving. Like many, I have heard hundreds of fine DACs and CD players at audio shows and in audio shops but since no more than a dozen DACs plus half a dozen CD players valued over \$1'000 have actually visited my house, my frame of reference is too narrow and the level of subjectivity too great to come to any definitive conclusion. I simply suspect that with this \$3,299 DAC, we are getting close to the best one can buy for under \$7'500.

Tim Smith