

Review of Mastersound 845 Compact, by Ken Micallef, 05/2023 on:



Mastersound 845 Compact integrated amplifier



Back in the 1950s, Cesare Sanavio, then a new electronics graduate with a specialty in output transformers for tube amplifiers, began his career in radio and television, traveling to various locations outside his native Italy to apply his expertise. Eventually he settled in Paraguay and started designing tubed sound systems for public installations, teaching his son Luciano the art. A few years later, Sanavio and his family returned to Italy. There, he worked as a consultant to several hi-fi companies. Finally, in 1994, drawing on decades of accumulated knowledge of tube-amplifier design and manufacturing, and a particular focus on output transformers of the highest quality, Cesare Sanavio and his two sons, Luciano and Lorenzo, formed Mastersound.

When Cesare Sanavio died, Lorenzo and Luciano continued operations. In 2015, the company re-formed, with some new international business connections and a new CEO, Antonio Ferro. The company's new headquarters is in Arcugnano, a small town in the province of Vicenza. It employs six people, four in production and two in the office. Luciano is now the company's lead designer and production manager, a role previously held by Lorenzo, who has retired from such duties but remains a co-owner of the business.

Today, Mastersound's stated goal is to produce tube amplifiers of the highest quality available on the market. To this end, the company hand-builds each amplifier in its own laboratory, "one by one, with extreme care," their "Made in Italy" webpage asserts, "using the best components" and manufacturing techniques. Mastersound output transformers are hand-wound on a mechanical winding machine in a secret, closely guarded process the company claims makes them "unique in the world."

The company's line currently includes three preamplifiers, which use ECC82 and ECC83 tubes; three monoblock power amplifiers utilizing 6SN7, 300B, and 845 tubes; and nine integrated amplifiers, which, variously, set ECC802, EL34, 300B, 6SN7, 845, KT120, and KT150 tubes aglow. The Compact 845 integrated (\$10,495), the subject of this review, is one of Luciano's designs.

Design

The Compact 845 is beautiful. Its stout pair of Psvane 845B HiFi Series power triodes is protected by a butterfly-like, laser-cut, anodized aluminum tube guard; its curved black-walnut side panels adorn a hefty, CNC-fabricated chassis made of antimagnetic stainless steel. The 75lb Compact 845 stands 10.8" high, 18.1" wide, and 16.3" deep, which stretches the "Compact" designation to its limit.

The sleek tube guard creates a symmetry that ties the amplifier's external components together in graceful, flowing lines. The Compact 845 is sure to draw looks and praise for its striking design.

Viewed from the front, two large aluminum knobs occupy the two sides of the faceplate: The left knob allows the user to choose among five input sources, marked CD, Tape, Tuner, Aux, and Direct; the right knob controls a motorized, Alps 50k ohm logarithmic potentiometer, one of the silkiest, most solid-feeling volume controls I've encountered—a feature I appreciated especially after learning that the lovely, wood-encased remote control didn't work.



Back-panel connections include the two pairs of RCA and XLR inputs for connection to an external preamplifier; three pairs of gold-plated RCA inputs and one pair of XLR inputs; two sets of speaker binding posts (4 and 8 ohm taps); a fuse plug, and an IEC power connector. The XLR and RCA jacks are manufactured in Italy, by Axiomedia, as are the speaker posts. The unit sits on four robust, tall feet.

As mentioned, the output transformers are the company's particular focus and point of pride. In a recent email, Ferro, the CEO, elaborated. "Power and output transformer are designed and built by hand, by us, using high-quality OFC copper cable and grain-oriented sheet metal. Our transformers have EI-type cores. Each amplifier has its own dedicated power and output transformer, designed especially to obtain the maximum performance from the tubes used. Our output transformers have a unique design that permits a very large bandwidth and allows us to zero the feedback, with enormous benefit to the naturalness of the sound."

The Compact 845 includes custom capacitors by Italian firm ICEL. Why custom? They're "made for us in polypropylene," Ferro wrote, "because this type allows much better insulation."

The amplifier also makes use of Vishay 1% resistors and Swiss Huber+Suhner wire. In addition to the big Psvane 845B HiFi tubes, the Compact 845 employs long-plate JJ ECC802 triodes in the preamplifier stage (because they're "quieter and less microphonic than the standard ECC82," Ferro explained) and TungSol 6SN7GTBs driver tubes. The 845 uses solid state rectification.

Tube bias is factory-set and mustn't be altered, Ferro stressed, except when changing tubes. "Biasing ... is usually unnecessary for the 845 because these tubes usually work for a very long time. We have our own design of auto-bias circuit that maintains the tubes' value constant during [their] life. Our triode amps are set at the factory and only need be set again when the power tubes [are] changed." Tubes should, consequently, only be changed by a qualified technician. "For our pentode amps, it's completely automatic and doesn't need to be set again until the tubes need to be changed."

Ferro recounted when Luciano Sanavio illustrated the difference between class-A and class-A/B designs by way of analogy: "Luciano did a demonstration at an Italian audio dealer where he asked, 'Do you know the ball-throwing machine that is used in tennis for training? You can have the ball inside the machine that is already turned on, or you can insert the ball and then turn on the machine: class-A is the first case—at all times you're running at maximum power; class-A/B, instead, operates only when necessary. Therefore, class-A/B won't have the same reactivity and speed in transients as class-A.'" The Compact 845 operates in class-A.



Setup

The Compact 845 fit snugly into my five-tier Salamander Archetype rack. I connected it to my [Tavish Design Adagio](#) phono stage and, variously, pairs of [DeVore Fidelity O/96](#), [Volti Audio Razz](#), and [MoFi Electronics SourcePoint 10](#) loudspeakers with Analysis Plus Silver Apex speaker cables. Acoustic Signature Maximum Neo, [Thorens TD 124](#), and [Kuzma Stabi R](#) turntables were my analog sources.

When you turn on the Mastersound amplifier, a red LED begins to flash; when the amplifier reaches operational status, it stops flashing. For optimal performance, the Compact 845 should be turned on at least 30 minutes prior to listening, the manual advises, to allow the tubes to stabilize at their optimal operating temperature. The manual also notes that during operation, the cylindrical transformer enclosures, which act as heatsinks, become quite warm, which is normal.

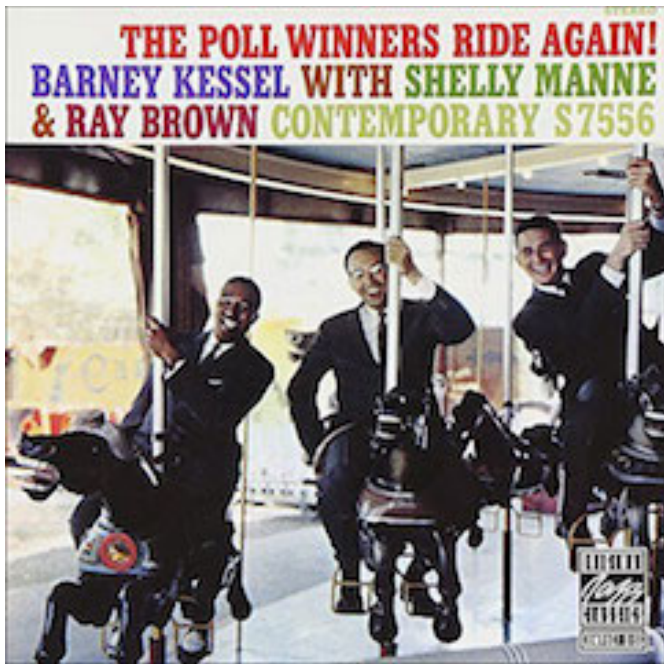
The manual recommends a minimum of 200 burn-in hours for peak performance. I dutifully streamed Roon/Tidal/Qobuz for about this duration, using an Apple iPad mini and a [HoloAudio May](#) DAC as a source.

The 845–O/96 combination

I began my audition with the two-way DeVore Fidelity O/96 loudspeaker (footnote 1), a rich, warm, incisive speaker that uses a 1" silk-dome tweeter and a 10" paper-cone woofer and sounds good with every amplifier and in every room I've heard it in. It was a natural fit for the Mastersound.

I had to push my reference DeVore Fidelity O/96 loudspeakers back 6" to optimize coherence and clarity; once I did that, the system sang. The 845 wowed me with its immense soundstage, which I attribute partly to its aforementioned silence: the long decay of reverb tails contrasting that outer-space–blackness each enhancing the other. Against this backdrop, music blossomed, consistently creating a you-are-there, live-performance quality that made my DeVore Fidelity O/96s resemble [Quad ESL-57s](#). Music had energy, speed, dynamics, punch, and depth. The Compact 845 ran hot, and so did the music that flowed from its mighty triodes.

The Compact 845 inspired me to audition some new LPs and a few old ones. I listened to Wayne Shorter (may he rest in peace), Tony Rice, and Maki Asakawa—to Renata Tebaldi, the Beatles, and ZZ Top. The Compact 845 did not favor one genre of music over another. It rendered a sense of intimacy on operatic vocals, jazz, and bluegrass; it was equally generous with rock, electronic, and classical works. Its broad, deep soundstage framed each record in its unique space and time, encouraging repeated playback.



The Contemporary Records recordings of engineer [Roy DuNann](#) are the most natural-sounding small-group jazz recordings I've ever heard. For 50-year-old recordings, they sound oddly modern and immediate; these are perfect records to audition hi-fi equipment with. I started with "Custard Puff" from Barney Kessel, Ray Brown, and Shelly Manne's *The Poll Winners Ride Again!* (LP, Contemporary Records S7556). A buoyant, bubbly performance, the Mastersound played it with great

weight, air-moving dynamics, and tangible textures, especially on guitar and drums. The dry ride cymbal, taut snare drum, and all the other pieces of Manne's drums came to life with the Mastersound/DeVore pairing: I felt like I was sitting right in front of the kit. As I jotted in my notes, again and again, the soundstage was extremely deep, the backgrounds dead quiet. The music was full-toned and populated with dramatic stop-start rests. The sound was warm and lush but not syrupy, detailed but not analytical.

The Mastersound Compact 845, like my [Shindo Labs separates](#), veers toward the dark side of neutral, yet it is faster and somewhat more transparent than the Shindo separates. In this respect, it fell somewhere between the rich, opulent tone of the Shindos and the detailed transparency of the Audio Note Meishu Tonmeister, which I reviewed in the [February 2023 issue](#). The Mastersound, though, cast a wider, deeper soundstage than either of the other amplifiers.

The 845–O/96 pairing (re)created a dense, finely layered stage on Vincent d'Indy's *Symphony on a French Mountain Air* (LP, EMI ASD 3480). On Roy Haynes's engrossing *We Three* (LP, New Jazz NJ-8210), it pulled an intimacy-and-bangers feat similar to what it did on *The Poll Winners* disc. On jazz-vocal great Betty Carter's *Inside Betty Carter* (LP, United Artists Records UAL 3379), it cut through the poor recording quality to extract gut-punch dynamics.

The 845–O/96 duo produced sweet tone, lush, transparent mids, and satisfying bass—of the full-bodied variety, not carved-in-space tight. To my ears, perfect balance.

The 845 with the Volti Razz

The Volti Audio Razz loudspeaker is a three-way, hybrid bass reflex/horn loudspeaker that combines a 1" horn-loaded tweeter, a wide-dispersion, metal midrange horn with a 2" composite-diaphragm compression driver, and a 12" paper-cone woofer paired to a front-firing rectangular port. I've reviewed the Volti Rival; the Razz is cut from a similar cloth.

The Razz is considerably heavier than the DeVore Fidelity O/96, although its cabinet volume is slightly smaller. And where richness, sweetness, and detail are the DeVore's strengths, what's most notable about the Razz is a clear-blue-sky top end and earth-rumbling lows.



On record after record, with the Compact 845 in the driver's seat, the Razz produced deep, clean, copious low end, a sparkling, neutral midrange, and brilliant, wide-open treble. On Art Pepper's *Smack Up* (LP, Contemporary Records S7602), Pepper's tone was tart and fast, Jack Sheldon's trumpet spun his *Schoolhouse Rock!* days on their head, and the rhythm section of bassist Jimmy Bond and drummer Frank Butler delivered dancing cadences at a measured pace, with appropriate momentum.

This combination also ran the table with classical vinyl due to its exceptional clarity, beautiful layering of instruments, impressive speed, and deep soundstage. On Boulez Conducts Stravinsky: *Firebird Suite* (Columbia MS 7206), the pairing heightened the sense of drama and urgency of the piece. A rip-roaring *Night on Bald Mountain*, with the Cleveland Orchestra under Lorin Maazel, from Mussorgsky: *Pictures at an Exhibition / Night on Bald Mountain* (LP, Telarc 10042), played with such spirited power that I felt as if I myself were being chased down the mountain, the devil at my heels. The 845/Razz combination had tone and texture as well, amply heard in Eugene Ormandy and the Philadelphia Orchestra's recording of Shostakovich's 5th Symphony (LP, RCA Red Seal ARL1- 1149).

The 845/SourcePoint duo

Just as I was finishing this review, I received the MoFi Electronics SourcePoint 10 loudspeakers, which Technical Editor John Atkinson reviewed in the [January 2023 issue](#). John used a variety of solid state amplifiers to drive the SourcePoint 10, from Parasound, Schitt, and Benchmark. I wanted to audition the MoFi speaker with tubes.

With the Mastersound driving the SourcePoint 10s, I heard nothing tipped up—but I did hear a treble that was lit, clear, dense, and super-detailed. Tony Williams's hi-hat and ride cymbals, on "Love for Sale," the title song of an album by the Great Jazz Trio (LP, East Wind EW-8046), played with detail, silken texture, and clean, full-bodied attack—more so than I'd ever heard it. On the same track, Ron Carter's bass was incredibly deep and tight. The Mastersound and the SourcePoints played together like friends in a hi-fi sandbox.

Conclusion

The Mastersound Compact 845 hits all my sonic sweet spots: gorgeous, burnished tube tone, palpable instrumental texture, unerring naturalism, lush, rich, transparent midrange, solid bass, open treble, black background, precise layering of instruments and vocals—and the deepest, punchiest soundstage I've heard. It was also eerily quiet. Like the [Audio Note Meishu Tonmeister](#) integrated amplifier, I would be happy to live with this amplifier for the rest of my days. With the Compact 845, Mastersound moves to the front row in the hallowed hall of master tube-amplifier manufacturers, alongside Shindo, Audio Note, Air Tight, Line Magnetic, Luxman, and PrimaLuna.