THE E-ZINE FOR FRUGAL AUDIO ENTHUSIASTS

Affordable$$Audio

Issue Twenty-Five: January 2008

Monarchy Audio SE-250 **mono block amplifier**

H2O Audio Signature 100 **stereo amplifier**

An Amplifier Comparison

By Sean Fowler
seanfowler@affordableaudio.org

Disclaimer: I've done my best to ensure that this review paints an accurate picture of each component. The goal is to provide you with enough accurate information so that you may make the right choice for your system. Please bear in mind that this is little more than a collection of thoughts and experiences. None of the content in this review should be held as gospel.

We are lucky to enjoy this hobby at a time when variety is so abundant. At nearly any given price point, there exists a number of avenues and selections in which to choose from. While this variety abounds for those savvy enough to seek it; the problem is finding a way to get your hands and ears on the gear before plunking down the big bucks. The opportunity to get a genuine high end experience has become increasingly difficult. Unless you are fortunate enough to live in or near a city sprawling with hi-fi goodness, odds are you'll have to saddle up for a road trip to get some first hand experience, or bite the bullet and buy blind.

With such a multitude of sundry exotica available and very few opportunities to hear any of it, the gates are left wide open for anyone to stumble onto the scene to riff wax poetic about the magnificence of a component. This environment contributes to what I call the hamster wheel effect. This is where a proud owner of questionable background clams that product X is better than Y. Often times there's very little frame of reference to these customer testimonials. Add to that a series of counter-opinions and you've got a mess that is difficult to make sense of. For the guy or gal whose only main outlet for product information is through public forums; the confusion can lead to a frustrating and non-satisfactory experience.

This article is designed to help curb that effect by evaluating the performance of two very high quality components that adopt very different technologies to produce desired results. This review will examine each of the amplifiers strengths, weaknesses, and determine where they fit into today's market. Please note that this article is not a con-

turing business. To get things kick-started, Andrew Hefley, of Ampzilla fame, aided Mr. Poon in designing Monarchy Audio's very first amplifier, the SE-100. The original SE-100 embodied the virtues that would later become the trademark sound of Monarchy Audio amplifiers; a warm and lush presentation that is akin to a good tube amplifier.

Before I touch on the SE-250, it bears mentioning that in August 2006, our own John Hoffman, a self admitted tube nut took in the inexpensive SM-70 Pro for review and found himself smitten by its performance. John was so impressed that he ended up putting his money where his mouth was and purchased a pair. Affordable Audio recognized the great value of the SM-70 Pro and gave it a 2006 Product of the Year award. Having personally owned the SM-70 Pro during my travels, I can attest to its wonderful value.

However, sometimes there are situations where 30 watts per side just isn't enough, especially in a market where inefficient speakers are the order of the day. The SE-250 mono block amplifiers were built to act as an affordable solution to those who lust for a lot of current, yet do not want to sacrifice the Monarchy "house" sound. To accomplish this, Mr. Poon ended up with a hybrid design which uses a single tube of the 6DJ8/6922/ECC88 variety on the input stage, and Hitachi mosfets on the output stage. The entire circuit is free of any feedback. Combined with a massive 850w toroidal transformer, Mr. Poon feels this topology gives his amplifiers exceptional dynamic range. To extract that last bit of warmth and blossom, the first 50 watts the SE-250 produces is all done in class A.

It is important to note that Mr. Poon claims that the output stage of the SE-250 is incredibly transparent and will ultimately take on the sound of whatever tube is used at the input stage. Unfortunately, the only tube I had on-hand was the one supplied with me from Monarchy – a Jan Phillips 5814A. Usually Mr. Poon supplies a stock military grade 6DJ8 tube with the SE-250. This review will be based off my impressions of the SE-250 using the Jan Phillips tube.

Another important note; Many of you will notice that the MSRP for a pair of SE-250 mono blocks is a whopping $5000 USD. This is over twice the price of the H2O amplifier. On the surface of things, this looks like a completely lopsided match. Although there is only so much I can divulge, I can tell you that there is a significant difference between the MSRP and the actual selling price. Give Monarchy Audio a call to get a quote. You'll find that this comparison, although still a bit disproportionate, to be more fairly matched.

Specification Comparison

Specifications	H2O Signature 100	Monarchy SE250
MSRP:	$2000.00 USD	$5000.00 USD
Warranty:	5 years	1 year-Transferable
Configuration:	Dual mono stereo	Mono block
Architecture:	ICE power	Hybrid tube/mosfet
RMS Current Delivery (into 8 ohms)	100wpc	250wpc
Maximum Power Consumption	110w	800w
Total Storage Capacitance:	400,000uf	32,800uf
Damping Factor (at 1 khz)	1600	100 – varied
Input Impedance:	100k ohms	100k Ohms
Input Sensitivity:	2V RMS	2.5V RMS
Unit Weight:	50lbs	45lbs each
Dimension:	13.5 x6 x15	12.5 x5 x16

System Configuration
I've always been a fan of near-field listening, so its of no surprise that the majority of this evaluation took place in my main listening room; a small space that measures only 9ft D x 8ft H x 12ft L. Heavy wooded furniture along with carpeted flooring really help create a decent acoustic space. For reducing a few first reflection points, I use the wonderful GIK Acoustic 242 panels. The over-all effect is a nice blend of damping / reflection that prevents the room from sounding too dull, or too alive.

On the electronics side of things; I'm used the affordable Arcam Diva 62 CD player as my main source. The primary pre-amplifier used was an Ayre CX-5e, which was soon replaced by the beguiling H2O FIRE, a single ended class A pre that proved to be a better match for both amps. The two speakers used during the evaluation were the very affordable Totem Acoustic Sttaf, and the more expensive Totem Acoustic Forest. Even though both speakers boast of a fairly easy impedance load – they tend to sound their best when given a healthy dose of clean current. Overall, the entire configuration has all the necessary elements that will allow me to experience what each amplifier can and cannot do.

The Break Down
We've now arrived to the meat and potatoes of this comparison. As mentioned earlier, I've decided to take a road rarely traveled in the reviewing gig in an effort to make things very easy to understand. Instead of forcing you to read through paragraphs in search for the aspects of performance that are important to you, I am breaking everything down into sections that audiophiles concern themselves over whenever its time to research or listen to a component. This should make the reading quick, informative, and painless.

Build / Ergonomics
H2O Signature 100 **:** The H2O Signature looks like you're a-typical power amplifier. It wasn't designed to capture admiration from friends and family stopping by. It's a plain, very heavy - very sturdy machined aluminum box. In a few of the pictures you will see that my sample unit, en all black, has a solid top plate. Henry informed me that the production version will feature a much lighter vented top. The corners of the amplifier will also be rounded to give it more aesthetic appeal.

Ergonomically speaking, I have a few immediate nit-picks. The first has to do with the location of the power switch, which is placed on the rear of the amp. Because of the Signature 100's size, reaching around the back to switch the thing on/off gets a bit tiresome. In some rack configurations, this could be a deal killer. Further aggravating the situation is the requirement to shut the Signature 100 off before any other components in the chain whenever it's time to power-down the system. My next nit-pick is the speaker level binding posts, which do not allow for easy bare-wire connection.

On the plus side; this amplifier runs stone cold even under high output levels. Ventilation is not a concern – saving you precious space and energy.

Monarchy SE-250: I was pleasantly surprised by just how well built and attractive the SE-250's were. The slightly elevated horizontal heat sinks give the SE-250 a very sleek and modern look. This is accented by a hefty front panel, which is a machined 1" thick piece of aluminum. The front panel is lapped and polished by the same outfit that polished the Hubble telescope. A special coating is then applied on the surface, resulting in an incredibly smooth feel. Apparently, there are benefits to living near Silicone Valley. One thing's for sure, I couldn't keep my hands off of these amps when they were in the rig. Sooo smoooooth…

With a solid build and handsome look, the Monarchy SE-250's were also very easy to operate. The power switch, which had a dim red glow when powered on, was located on the front panel for easy access. In fact, my only complaint has to do with the binding posts, which are unable to properly accommodate spade connections. As you'd expect from any amplifier that houses a tube and is biased for class A output – these things run HOT. The SE-250's will need lots of ventilation for safe operation

General Character

H2O Signature 100: Summarizing the character of the Signature 100 can be done with these words; delicate, powerful, dynamic, refined, and transparent. The Signature 100 represents a few firsts for me. It is the first affordable high power amplifier I've encountered that sounds as delicate and as resolute as a component that utilizes a short signal path. It is also one of the first transistor amplifiers I've come across that has managed to focus my attention away from those glass valve thingy's. Unlike most amplifiers that impart an obvious flavor to every selection of the music, the H2O's incredibly neutral presentation allows every component and recording to stand on their own merit.

Dynamics
H2O Signature 100: What do you get when you take an efficient topology, a huge power supply, and a massive reservoir of capacitance and put them together? Incredible dynamic range – that's what. Even though the H2O is rated at a common 100wpc, it is able to pound out dynamic shifts with a sense of effortlessness that make a few 200-300w amps I've ran sound like tinker-toys. This level of dynamic prowess brought on a whole new sense of scale and emotion to Tchaikovsky's 1812 Overture, as played by Erich Kunzel and the Cincinnati Pops Orchestra. The same can be said for any type of music that benefits from muscle.

Monarchy SE-250: Far from being dynamically limited, the SE-250 was also very adept at handling large dynamic swings. Never once did these amps sound strained. However, despite having the 150watt advantage per channel, they still could not equal the H2O in terms of scale and force.

The Highs
H2O Signature 100: The H2O speaks precisely and clearly. There are no romantic over-tones that attach themselves to each note. Guitars zip and bite. Snares attack with instant sharpness and decay. Like most ICE powered units, the Signature 100 has a cool top end. Yet unlike most ICE powered units I've come across, it has a 'liquid' quality to the highs, something that I feel helps prevent the amp from living on the hyper-detail side of town. This quality is a welcome departure from what I've come to expect from ICE power. Long listening sessions were quite enjoyable.

Monarchy SE-250: The SE-250 has an ever so slightly rolled off top end, a character that I feel lends itself to a much wider variety of music. Although it does sacrifice a bit of extension and resolution, this slightly topped off treble lets you get back to enjoying a plethora of music out there that was never given the audiophile treatment during the recording and mixing process. While some discs are beyond help (think: Linkin Park's, Meteora), the SE-250's allowed me to sit back and enjoy a whole lot of music. These are the kind of amps that will have you cranking up the volume.

The Mids
H2O Signature 100: Open, clean and free of artifacts with excellent detail and separation – the H2O amp may have the most neutral midrange presentation I've encountered. That being said, it is important to note that no piece of hi-fi is truly neutral. The H2O's tendency to project sound well into the room gives it a slightly forward character. Whatever the recording has to offer – that's exactly what you get. It doesn't get any more straight-forward than that.

Monarchy SE-250: As you would expect from any component with a piece of glass in it, the mid-range is the SE-250's greatest asset. Although it is not as clean and clear as the H2O, its blossom and rich tone gives the music a more palpable feel. Vocals are outright haunting. Acoustic instruments resonate throughout the room with a more natural sense of tone. This is the very first muscle amp I've encountered that has that oh so delicious midrange that is usually exclusive to smaller, pure valve components.

The Bass
H2O Signature 100: One of the biggest advantages of ICE power is its ability to deliver prestigious amounts of clean, controlled, and detailed bass. The Signature 100 exemplified this strength in spades; allowing bass to flow with effortless slam and extension. The amps grip on the woofers never allowed for any over-hang and lagged decay. Instead, it showcased the energy of the recording with first rate precision – reproducing complex bass lines with absolute ease.

Monarchy SE-250: Once again, the Monarchy takes on a different tact. True to character, the SE-250 sacrifices ultra precision and detail in favor for a richer, warmer perspective. Distinctly colored and notably slower than the H2O, the Monarchy's pleasantly plump presentation helped to give the low end more heft and body. Appealing though as this character can be, this amp may not be the best choice for those who need something with an iron-grip.

Summary
I am downright floored by the extreme value the H2O Signature 100 offers. I know of no other high power transistor amp in its class that is able to excel at so many things. From low level listening to high output sessions, the H2O will give you a sophisticated and neutral sound that is chalk full of clarity, dynamics, and control. All of this comes wrapped in a hefty package that is unfailingly musical. I know of many products that aim to compete in this range. All I can say is; they're going to have to try like hell to beat the Signature 100.

The Monarchy SE-250's romantic flavor and delightful presentation made for many hours of enjoyable, long listening sessions. Once the music began to play, I found it pretty difficult to leave the comfort of my chair. This is not the amp for someone caught in the high resolution rat race. Instead, this is for the audiophile that is ready to settle down for the long haul. Considering what Mr. Poon actually sells these units for, they are a downright exceptional value. If you are an audiophile / music lover that wants that tube love in a high power package, these should be put on your short list. Highly recommended!

CONCLUSION

All too often, audiophiles get caught up in what stripes to wear, be it the tube versus solid state crowd, the ribbon versus dynamic cones and domes crowd, and so on. My time with the H2O Signature 100 and the Monarchy SE-250 further reinforced my own belief that not only can vastly different perspectives yield brilliant results, but that they can also have an equal appeal to the listener. During my time with the amps, I never found my preference to sway in one particular direction. What I ended up listening to was more influenced by my mood and the music that I wanted to hear. Both the H2O Signature 100 and the Monarchy SE-250 amps are exceptional products worthy of many accolades. My hat goes off to both Henry Ho and Mr. Poon for creating two wonderful products that are within reach of the common man. And thus concludes the tale of two muscle amps that won over the ears of this short-signal path fan boy.

Monarchy Audio Tel: 650 873 3055 Email: monarchy@earthlink.net
http://www.monarchyaudio.com

H2O Audio Tel: 804 873 8974 Email: h2oaudio@verizon.net
http://www.iceh2oaudio.com

Copyright 2008 Affordable$$Audio www.affordableaudio.org. Used by permission.