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Wyetech Labs Monoblock Amplifiers
Model Topaz 572M

Source: Wyetech Labs

Price: **click here**

Rating: ♪♪♪♪

Regular readers of TIER will be familiar with the Topaz 211A stereo amplifier which we've been using in almost all system evaluation for the past couple of years. For those of you who do not know about the Topaz, here is a short recap. Under the direction of Wyetech Labs' chief designer, Roger Hebert, this small Canadian manufacturer from Ottawa, ON currently markets the Topaz amplifier, the Opal preamplifier and the recently introduced Jade preamplifier, reviewed in Vol. 12 #1. All components are hand made with the emphasis on parts quality, workmanship and, of course, sound. Hebert is a perfectionist who isn't easily pleased; thus, he goes to great lengths to find premium parts for his designs of single ended vacuum tube components. The Monoblocks under review are his latest design.

Appearance:

The monoblocks are accommodated on the same chassis as the Topaz stereo amplifiers 12 gauge steel chassis which is finished in a baked-on whimsical mauve. Highly polished showcase chrome and black nickel plating on brass is used to accentuate the chassis styling on these units. Solid brass handles with nickel finish make handling the amps a bit easier. A fine mesh screen covers the high voltage transformers and chokes while the tubes are left uncovered.

While most power amplifiers feature a clean faceplate with the on/off switch in front, these mono Topaz amps each sport two speaker terminals, two input RCAs and a couple of status indicator lights -- red for standby, green for the operating function. The power switch, with a standby position, is located on the unit's rear. Each amp weighs 102 lbs (95 kg) and measures 16 inches wide, 22 inches deep and 10 inches high.

Technology:

The fundamental classic single ended conceptual design is maintained here. What's changed are the vacuum tube configuration and the power supplies. Whereas the stereophonic version employs 211 output tubes, the monoblocks use the new Svetlana SV-572-10 triodes. These directly heated triodes are an almost exact replacement for the

211-VT4C used in the stereo Topaz design.

They are somewhat smaller in size, but have a larger plate dissipation (a 25% increase over the 211's). This results in an increase of output power from the amplifiers while still operating in pure class A1. The amps are high powered versions of the Topaz 211A stereo amplifier. The 572M monoblocks put out 45 watts of pure class A single ended power as compared to the 18 watts/channel of the stereo Topaz.

Each monoblock contains two channels identical to the Topaz (211A). The output transformer windings from each channel are added together to double the power. This method avoids the high frequency loss that would result with a higher power single output transformer. It also avoids the negatives inherent in paralleling output tubes. The dual output windings are controlled by two toggle switches that enable the amplifiers to drive 2, 4, 8 and 16 ohm speaker loads. This configuration allows the monoblocks to match the performance of and project a sonic signature identical to the stereo version, while doubling the output power.

What we have here is a single ended, self biased output stage with each Svetlana directly heated triode (DHT) driving its own Audio Note output transformer. The power supplies are dual output toroidal power transformers for 572-10 filaments, full wave rectified and DC filtered separately for each output triode. A p (pi) LC choke filter provides optimum performance and eliminates adjustments by reducing ripple to 0.002 volts for each filament drawing 4 amps of current. Separate power transformers and filters provide total isolation between the input and output stages. The input high voltage power supply (+450V) uses a double p (pi) LC filter network to obtain complete immunity from power supply induced signal aberrations. The lst stage is further isolated from the 2nd stage using an RC filter network. The output high voltage power supply (+1200V) uses a full wave rectifier configuration feeding a double p (pi) LC filter network for excellent regulation as well as superb ripple and noise rejection. Wyetech use polypropylene in oil capacitors that double the storage energy in each monoblock from that used in the original stereo version of the Topaz. A total of six large chokes are employed in each monoblock power supply and only polypropylene capacitors are used in the high voltage power supplies.

As in the stereo Topaz, hand crafted Vectorboards with precision swayed double turret terminal posts are used for this design. These posts are divided into two areas. The wiring used is laid out on both top and bottom of the board and is soldered to the bottom layer of the terminal post. This point to point wiring allows the highest possible component density while maintaining the shortest possible signal path. The components are then soldered into place on the top layer of the terminal which allows the replacement of any part without removing the circuit board. High quality Teflon coated silver plated OFHC copper wiring is used where appropriate and silver solder is used throughout.

Each amplifier has 1 octal base 6SN7GT dual triode tube, 1 octal base 6BX7GT dual triode tube (or optional 6BL7GT for increased sensitivity) and 2 SV-572-10 SVETLANA large triode tubes rated for 125 watts plate dissipation.

Features include auto sequencing (power on cycle completes in 60 seconds). Three time-delay relays provide proper power sequencing to stabilize circuitry before use and to provide extended tube life. The standby sequence allows the filaments to reach operating temperature before applying high voltage. This function can be activated manually via the power switch.

The power sequence applies voltage to the filaments for 30 seconds before applying high

voltage to input stages(red LED lights) and allows circuit elements to stabilize before the next sequence (green LED lights) which applies high voltage to the output stage. The last sequence -- a few seconds later -- then disengages the auto-mute and completes the turn-on. The specifications reveal the amplifiers' superb design. Frequency response in reference to a sine wave at 5 watts RMS/8 Ohm output is 1. +/-O dB flat-10OHz to 10kHz, 2. +0 dB/ -1 dB-20Hz to 25kHz, 3. +0 dB/ -3 dB-16 Hz to 37kHz. The input impedance is 100 kW; non-inverting phase; gain is 27dB (0.55 V RMS maximum for full output using 6Bx7 driver), 31dB (0.35V RMS maximum for full output using 6BL7 driver optional); noise and distortion is below audibility. Now to the nitty gritty...

The Sound:

For our auditioning sessions, we used both of Wyetech Labs' preamplifiers, the Opal and Jade as well as the Belcanto SEP-2. We decided on Coincident Technology's Super Eclipse, Tetra's Live models, Focus Audio's Reference Series FR6T-11 and Angstrom's Obbligato speakers for the "nitty gritty" auditions. Our in-house Elite transport/Audio Alchemy DAC and DTI-Pro and the Magnum 108 tuner served as source components. Cabling included Nordost's SPM speaker cables and Quattro Fil interconnects. The only accessory used was the Symposium Rollerblocks placed under the CD transport.

The various loudspeakers used for this evaluation served to establish the amplifiers' ability to handle efficient, medium efficient and inefficient loudspeakers. Thus, we first connected the easy-to-drive Super Eclipse (9OdB/w/m) which we had auditioned with the stereo Topaz; and -- no surprise -- the tonal character was identical. However, the sound stage improved, not in size, but in definition. The monoblocks managed to elucidate boundaries and elevated the image by about 12 inches over its stereo sibling. As well, focus on instruments and voices were better distinguished with a clearer perspective into the musical landscape with all the musicians and instruments clearly arranged. The all-round resolving calibre of these monoblocks leaves nothing to the imagination. Though still smooth and sweet, high frequencies were an audible touch more authoritative. A noticeably enriched midrange section of the frequency spectrum sets the monoblocks a step above most amplifiers we have auditioned, including Wyetech Lab's stereo Topaz. However, the foremost distinction of the monoblocks relates to how it handles bass. A comparison revealed that the mono amps added weight and body to mid and deep bass notes, resolving these with such clout and control that all panelists's mouth fell open -- literally!

The next test was conducted with the help of the rather inefficient Focus Audio speakers. When we auditioned and reviewed the Focus-Vol. 1 1 #3 -- we found that the best all-round sound was achieved with powerful amps such as the Bryston 8B, the OCM 800 and the Parasound HCA3500. Our in-house (stereo) Topaz couldn't achieve levels above 85dB. The mono amps, however, not only drove the Focus speakers to a whopping llOdB, but also introduced the sonic finesse described above. The Angstrom Obbligatos, often connected to the (stereo) Topaz, always sound superb. With the mono amps, added body, improved sound stage, richer, more blossoming midrange and highs and one heck of a bass elevated the listening experience by as much as 20% -- high when considering the dreaded diminishing return factor, where a 10% improvement can cost double the money.

The Tetra Lives livened up significantly as well. While these speakers really sang with the stereo Topaz, connected to the monoblocks, they sounded incredibly spirited and took on musical gusto and an almost spiritual mastery of program material -- any program material.

All in all, these amplifiers are -- for lack of a better description -- breathtaking, arousing and exciting.

Synopsis and Commentary:

Actually, it didn't take more than a few bars of music to realize that these monoblocks offered more musical substance, more virility and, though not verifiable, better sonic neutrality than most amps we have heard. Neutral, in audio terms, can be defined as "without distinguishing character" which basically means that the amplifiers don't impose a signature when connected to a variety of loudspeakers. You may have noticed that we said "better neutrality", as it is impossible to ignore what these amps do when hooked up to loudspeakers with minimal sonic characteristics. All of our panelists, as well as our Editor, often sit down to enjoy music for the sake of music-and that's the way it should be. Reviewers, however, have a devil of a time not evaluating the performance of any audio gear they hear. This is what happened when we tried to listen to the monoblocks. Having listened to hundreds of amplifiers, we all agreed that the Topaz amps are closer to the "real thing", the music, than any other amplifiers we have auditioned up to now. Still, when we listened just to relax, we couldn't help but admire the audio system for it's ability to provide a much needed retreat from the stresses life imposes on us. Our Editor often states that his work evaluating audio gear takes time away from his listening leisure as the subconscious mind doesn't allow him to just enjoy the music. All audiophiles and music lovers are forever wondering, analyzing and assessing the performance of their system -- and reviewers probably do this more often than consumers. The interesting part is that sometimes, ever so rarely, when we assess components, it happens that we get distracted by the music. The Topaz amps provoked both critical listening and distraction, which is to say that these amplifiers managed to thrill the high-end, hardcore audio enthusiast as well as the ardent music lover in us all. It's obvious that these amplifiers are aimed at people who understand and appreciate high-end audio -- a large bank account also helps. Those who have not yet aspired to audio at its best are well advised to listen to these amplifiers as they can serve as reference components; and those who have already spent a small fortune on components and are looking for an upgrade should also consider an audition. The way we see it, the Topaz amplifiers are world class electronics and all you need are good ears, some muscle and deep pockets. To sweeten the deal, Wyetech Labs offers a one-year limited warranty on tubes, three years parts and labour with an extended warranty package offering twenty (20) years P&L for components only. We believe that these amps deliver and, though the price is high, you get what you are paying for.
