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Moscode 401HR Tube Hybrid Stereo Amplifier

An audio classic, revised and updated.

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One of the well-known downsides to planar or electrostatic speakers is that they aren't simply hungry for current; they're ravenous for it. Almost any speaker can benefit from gobs of power, but trying to satisfy the appetites of dipoles can be a particularly exasperating experience, one that has led some audiophiles to conclude that current-greedy speakers can't produce realistic dynamic levels or are more trouble than they're worth. High-powered amps that can provide

prohibitively costly ones may simply falter, like an underpowered car struggling up a steep hill, when pushed beyond their limits. So it was with more than a pinch of skepticism that I listened several months ago to designer George Kaye's confident assurances that his new tube-hybrid Moscode HR401 stereo amplifier would be able to drive Magnepan's famously power-hungry flagship 20.1 loudspeaker with aplomb.

Would I really discover that his reasonably priced, by audiophile standards, amplifier, based, no less, on a classic

Almost immediately after powering up the Moscode, I realized that it is not a good amplifier. It is a superb one. Sumptuous and dynamic, it conveys any type of music, ranging from orchestral to rap, with unusual authority and self-assurance. So fetching is the Moscode, visually and sonically, that I found myself eagerly lugging it to several friends' systems, delighting in their stunned expressions as they discovered the smooth, grainless presentation of the Moscode as it powered their respective Thiel 1.6s and Kharma Midi-Exquisites. The \$70,000+ Midi-Exquisites powered by a \$5000 amplifier? You bet. The combo sounded ravishing. While the Moscode is not without some sonic flaws—find me an amp that isn't, please—it can more than hold its own with any loudspeaker, regardless of cost. And there are few speakers, apart from high-sensitivity horns, that would not profit from the Moscode's abundant reserves of power.

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slam and impact are, more often than not, extremely expensive and, in some cases, prone to producing an overly analytical or bleached-out sound, while less

design, differed from others that had made a good initial impression but ultimately failed to deliver the musical goods? Absolutely.

Right out of the box, there is no mystery about the sonic signature of the Moscode. If neutrality is what you're looking for in an amp, then look elsewhere. The Moscode may have a solid-state power supply and output stage, but it errs emphatically on the side of a tube-like presentation. It is, you might say, about the lush life. In fact, after being on for a few hours, it becomes even more relaxed and tuneful than upon startup, erasing most traces of transistoritis, which can often be a welcome thing. Perhaps these qualities should come as no surprise given the intellectual provenance of the amplifier, which is a tribute piece to the late Dr. Harvey Rosenberg (hence the HR in the amplifier's logo), a legendarily wacky and tube-obsessed designer of amplifiers (the owner's manual comes complete with an introduction by Rosenberg for the original version of the amplifier in which he recommends, among other things, wearing a silk robe and indulging in a Shiatsu massage before listening to the amp).

Nevertheless, this is clearly no rusty museum piece from yesteryear, but a thoroughly modern design that never faltered or failed. Push the little button in front, watch the beautifully lit blue soft-start flash on and off as the tubes gently power up, and you're off and running. So meticulous is Kaye that there is even a little dial in back to modulate the glow. A switch in back lets you use one amp in stereo or two in biamp mode. I ran the amps both ways, but preferred the added power of two. No matter where or when I ran the amps, they never failed to perform glitch-free. The only no-no that I indulged in was to flout the manual's instructions and lift the ground on the amp with a cheater plug to banish a persistent hum.

One other thing: this amp is heaven for tube-rollers. For the gain tubes, Moscode gives you seven different options. Some manufacturers like to claim that they've voiced their equipment specifically to match certain tubes, but I've always regarded this as blarney. The advantage of using tubes is that you can tailor the sound to your preferences or change it if you want a change of pace. I

didn't do a huge amount of tube-rolling, but did learn that, in this case, the factory-supplied 6H30 sounded markedly superior to my vintage Telefunken 12AX7s. The sound became more refined, airier, and the bass tightened up with the 6H30s, but I also had to turn up the volume since the gain went down substantially. Others might prefer the more swollen sound of the 6DJ8 tube (which I really don't think should be used in any audio applications even though it's convenient and easy for manufacturers to source). Anyway, no matter what tubes you use, I'm quite sure that the basic sound of the amp will remain constant.

Consistent with my initial reservations about the amps' power, I ran two of them in biamp mode on the Magnepan 1.6s. Upon inserting them, I rather nonchalantly turned back toward the listening chair, but halfway there I almost suffered whiplash as I turned around,

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mouth agape, at the gale-force sheets of sound emanating from the speakers. I had always enjoyed the highly touted Parasound JC-1s on the 1.6s, but this was sound of a different order. Cymbal rim-shots exploded with ferocity, while the saxophones took on a breathy and palpable character they simply hadn't had before. The Moscodes revealed much more clearly the propulsive dynamic character of the Convergent Audio Technology preamplifier, making the JC-1s by contrast sound somewhat veiled and demure in character, which was far from what I had expected.

Did timbral accuracy suffer a little bit? Certainly. But the Moscodes lowered the noise floor and peered further into the recesses of the soundstage than the JC-1s. There was simply a feeling of drive and dynamism, an emotional connection that

I had never experienced with the 1.6s. The same characteristics were even more amply displayed in running the Moscodes full-range on the big 20.1s, whose far more complex three-way crossover presents higher current demands than the 1.6s. On Wynton Marsalis' new album *Live At the House of Tribes* [Blue Note] his trumpet leapt out of the speaker and every microtone, as Marsalis half-keys his trumpet to moan, slur, and soar through glissandos, was captured with remarkable fidelity and presence. The imaging of the amps was quite good, but not stellar. Once again, while the amp doesn't commit the sin of blurring images, it focuses more on presenting a larger picture rather than spotlighting performers.


The power supply has clearly been carefully regulated. This shows up not only in the unconditional stability of the amp, which never loses its composure no matter how demanding the music, but also in the low noise floor that is as apparent on the 20.1s as it is on the 1.6s. Indeed, the weight of the hall almost comes through physically with the Moscode; on one disc what I think must have been the air-conditioning system running came through loud and clear, too, desired or not. And no matter how hard I tried to drive the amp into overload, it only became warm, not hot, to the touch. It's hard to believe that it couldn't handle the most punishing speaker load.

Despite its raw power, however, the amplifier did display one weakness: deep bass control. Ironically, since Kaye features a picture of himself playing the bass on the first page of the manual and touts the amplifier's supposed grip on low frequencies, the Moscode's performance here is not as iron-fisted as it might be. It is, in fact, overripe, tubby, and not, dare it be said, the last word in extension, either. On the Kharma Midi-Exquisites, which are a mite polite in the bass, the Moscode's overly voluptuous low end was not detectable and, if anything, fleshed out the speaker. But on the Thiel 1.6s and both sets of Magnepans, the bass did not match the standard set by the midrange and treble. The Parasound JC-1s and the Classé Omega monoblocks both dis-

played better tautness and resolution down in the nether regions, which is what one would expect from solid-state.

Did the Moscode amp surpass the

Classé Omega and Omicron monoblocks, which cost at least four times as much? No, it did not. The Moscode is not as pure and detailed. But what it conveys, and what no

purely solid-state amplifier will perhaps ever fully achieve, is the visceral excitement and palpability of a high-powered hybrid or fully tubed unit. Maybe it was the translucent blue light emanating from the glass windows on the front of the amp, but I found this diminutive amp rather bewitching. If you're considering an amp around \$5000 or even double that, you would be remiss not to consider the Moscode. You can spend a lot more for a lot less than the Moscode. It will be awfully hard to break the spell it casts. 

SPECIFICATIONS

Power output: 200Wpc @ 8 ohms, 300Wpc @ 4 ohms

Frequency response: 10Hz–100kHz +/-2db

Full power frequency response: 10Hz–20kHz +/-2db

Input impedance: 100k ohms

Tubes supplied: 6H30Pi, 6GU7

Number and type of inputs: One stereo pair, line-level (RCA)

Dimensions: 17.5" x 6.5" x 15.5"

Weight: 52 lbs.

ASSOCIATED EQUIPMENT

VPI HR-X turntable with JMW 12.6 tonearm, Dynavector XV-1S and Lyra Titan cartridges; Sony 777ES SACD player; EMM Labs CDS transport and DCC2 preamp/DAC; Messenger preamplifier and phono stage; Convergent Audio Technology SL-1 Mk. III preamplifier; Classé Omega and Omicron monoblock amplifiers; Magnepan MG 1.6 and 20.1 loudspeakers; Jena Labs Symphony and Hovland Music Groove 2 interconnects; Nordost Valhalla speaker cables; Jena Labs Fundamental Power One Power Cords; Shunyata Hydra-8 line conditioner

MANUFACTURER INFORMATION

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Manufacturer Comments

Moscode 401HR Tube Hybrid Stereo Amplifier

This is a happy day for Moscode Corp, for my partner Gage Rommel, and for Dr. Gizmo, who I know is looking down with a huge grin on his kisser.

Jacob Heilbrunn's comprehensive and beautifully written review put the 401HR right in the frame. Regarding tube rolling, we made the amp both obsolescence-proof and tunable by accommodating a wide range of tubes giving the user more control over the

sound. Tuning the amplifier is essential at this price point since every system is so different.

Mr. Heilbrunn is exactly right about the bass. We're always looking for ways to improve the Moscode Experience, and we found one in the output stage biasing circuit. The new bias design extends the ultra low bass response by a factor of two resulting in improved bass definition and punch.

This improved bias circuit can be found in every 401HR we sell.

Jacob Heilbrunn's hi-fi party with audiophile friends brings to mind our Moscode Referral Program, which rewards 401HR owners for spreading the word. And don't forget, the amplifier comes with a no-risk 33 1/3 day in-home audition period.

George Kaye, Designer
Moscode