

Lamm M1.1 Monoblock Amplifier & L1 Line-stage Preamp

In an interview a few years back with a Russian High End audio magazine, Vladimir Shushurin, proprietor and engineer of Lamm Industries, said, "From my point of view, the ideal audio review is when the reviewer has nothing to say." After a few months of listening to his M1.1 amps and L1 line-stage preamp, I'm tempted to take his cue and call it a night. For these pieces of gear -- to some degree separately, but especially together -- capture music of all sorts, in all aspects, so wonderfully, so truthfully, that there really isn't much to say except, "You like music? You'll like Lamm."

There are many pieces of audio gear that make you sit up and go, "Wow, listen to that bass drum," or "Jeez, I've never heard that tiny bell over in the corner before," or "Damn, I can understand every word Rickie Lee Jones is singing." With the Lamm gear, you hear all these things -- no less than with something that makes you go "Wow" -- but they don't stick out from the rest of the music. They're just another part -- a clear, vital, effortlessly erupting part -- of everything else that's going on.

When you go to a concert, you don't note how deeply the bass goes or how the singer sounds like she's in the same room with you. Instead, you marvel at how deftly the bassist plays or how the singer's voice makes you shiver. That's the difference, quite often, between going out to hear live music and staying home to have a hi-fi "listening session." And it's the

difference between listening to Lamm's gear and listening to just about anything else I've run across.

The M1.1 is a pair of monoblock amps, pumping out 100 watts of Class A power to 8 ohms or 4 ohms. (They can also drive speakers below 1 ohm, though not in pure Class A.) They're powered mainly by MOS-FETs, except for a single 6922 triode tube in the second stage of amplification (which Shushurin considers the most important). The L1 is solid-state except for three vacuum tubes powering the voltage-regulator. And yet, these units give up little to pure-tube amps in the way of depth or dimensionality, or to pure-transistor amps in the way of detail, definition, dynamics, or extension of high and low frequencies. I'm not talking about running down a checklist of audiophile categories. I'm talking about the stuff that makes the music come alive.

On "There's Never Been a Day," from Kendra Shank's luscious *Afterglow* [Mapleshade 02132], listen to drummer Steve Williams swirling his brushes around on the snarehead. With many excellent components, the whooshing is identifiable as brushstrokes (as opposed to a vague hiss); but with the Lamms, I can also hear the 4/4 time he's keeping, the subtle accents on the shifting beats, and how those accents shape his interplay with pianist Larry Willis.



Something similar happens with Analogue Productions' LP-reissue of Bill Evans' *Waltz for Debby* [AP 009].¹ I hear, much more than before, the subtle accents in Evans' piano playing and the way bassist Scott LaFaro embellishes, and drummer Paul Motian plays off, those accents. In other words, the Lamms let me hear this group create music as a cohesive, interacting trio, not just as three musicians. The dynamics of Motian's stick work or brushstrokes, the clarity of LaFaro's bass, are also more lifelike than I've heard before. By "dynamics," I mean dynamic *range* (the difference between the loudest and softest sounds) and dynamic *contrasts* (the subtle gradations marked by the smallest thrust of a violin's bow, the slightest pressure on a piano's pedal, the hint of modulation in a singer's voice). On both measures, the Lamms perform superbly.

Or check out "Maqam Hedjaz," from the Eduardo Paniagua Group's

Danzas Medievales Espanoles [MA Recordings M034A], which features an oblique flute and a huge hand drum called a *bendir*. An excellent stereo system can tell you how hard or soft, and exactly where, the player is hitting that drum. But I've never heard just how these differences alter the pitch and tone-colors of the drum, or how they affect the duration and the specific overtones of the reverberation in the church where the disc was recorded.

Well, I could go on. We all have our "reference discs" that we fetch out to test how a component handles this or that aspect of sound. The Lamms aced them all. On Count Basie's 88 *Basie Street* [JVC XR 00210-2], the hammer and the reverb of the piano, the muted trumpet in the back, the sumptuous saxophone section across the wall, the slap and sizzle of the trapset – they're all there. On KD Lang's *Ingenu* [Sire/Warner Bros. 9 26840-2], do the drum-thwacks make my eyes blink, can I distinguish the different kinds of guitars, can I see all the background singers, are the diphthongs enunciated when she sings the line "beneath my skin?" Yes, yes, yes, yes. On the Reiner/Prokofiev *Lt. Kije* [RCA LSC 2150, especially Classic Records' 45 rpm reissue], the mournful double-bass solo, the silky violins, the overtones of the reeds, the cymbal crashes that billow forth a gigantic cushion of air -- *oh*, yes.

The only area where the M1.1s fall short is in very loud peaks, for instance the climactic moment toward the end of the first movement of Gorecki's *Third Symphony* [Nonesuch 799282-2]. It sounds a little bit strained, a little bit tightened. This is where I could use 200 or 300 watts per side, at least with my Hales Transcendent 5 speakers, which have a rather modest sensitivity (87 dB). Still, the

Lamms stir up a bigger storm than their 100-watt rating suggests.

I'm also left wondering a bit about the M1.1's speed at very high frequencies. I've heard faster, higher amps, but the Lamms are no slouches in this region, and what goes on up there is so supremely well integrated with everything else. One note: With certain preamps (in my experience, the Krell KRC-HC), the M1.1s are particularly constricted in those ethereal realms. However, with others, for instance the Audible Illusions Modulus 3a and the Lamm L1, the noose not only loosens, it falls away.

I have not drawn much distinction between the sound of the M1.1 and that of the L1, because they're pretty much the same. They both impart little color of their own, besides this slight (and I do mean slight) darkening of the highest frequencies. They seem to pass along the character of the recording and the front end (turntable, CD player, cable, whatever) that they are amplifying. For instance, when I replaced my Nirvana SL-1 interconnect with a sample of Nirvana's new SKGs, another veil was stripped away. Everything, which had been vivid enough, was more vivid still, though not at all etched or electronic-sounding.

Finally, tonal colors, ensemble blooms, seamlessly wide and deep soundstages, images right there, behind, in front of, or to the left or right of, the speakers (depending on how the recording was made) -- the Lamms are spot-on in all these aspects, too.

So, what's going on here? Shushurin says he builds his equipment to fit a mathematical model describing how the human ear responds to sound pressure. He devised this model in the Soviet Union, when he was working in the military avionics

industry, which had civilian applications in audio and video (though, for economic and technical reasons, he couldn't test the theory till he came to the States). In our talks, he did not delve into the differential equations involved (and I wouldn't have understood them, if he had), but apparently they had a profound implication for his design of audio equipment. One observation was that in the properly designed amplifier, distortion smoothly increases with the increase in power but remains constant at each power level regardless of the frequency. He has designed his circuit-topology to conform to this rule and built the gear with components of the most exacting tolerances to ensure the least possible deviation. I cannot evaluate his argument (which I've oversimplified). But the owner's manual for the M1.1 contains a set of measurement-curves, taken by an independent lab, that are flatter than any I've ever seen and consistently flat at various frequencies and watts. Slew rate, rise time, and other specs are similarly about as fast as they come.

Another novel aspect of the M1.1s is a switch that lets you match them to a speaker's impedance. Tube amps with output-transformers have such a switch, but nobody has ever stopped to think it would matter in solid-state. Well, it does matter. I listened to the Hales first with the 1-6 ohm option. Switching to the 8-16, I noted that the quality changed noticeably: less air, less dimension, less clarity at the frequency extremes. The point of this switch is to let the amps pump 100 watts of pure Class A power into 8 or 4 ohms. Without the switch, it would, by necessity, deliver 100 watts of Class A into 8 ohms, and 200 watts of Class AB into 4. To Shushurin's mind, 100 watts of A sounds better than 200 watts of AB.

It is also worth noting that the amps are ruggedly built. The toroidal power transformer is suspended in a special capsule, making no mechanical contact with the chassis and absorbing mechanical vibrations. There are two sets of brass, gold-plated, six-way binding posts (for bi-wiring). There are single-ended and balanced inputs (they sound the same). On-off switches are situated in the back,

which can be a pain (sitting idle, they consume 300 watts of electricity each -- warm-up takes about 45 minutes). However, the L1 has a

switch and a remote wire that lets you turn the amps on and off from there.

The L1, besides boasting similar specs, has single-ended and balanced outputs, and seven pairs of gold-plated inputs, one of which is labeled "Direct." This bypasses all the switches (for phase-inversion, stereo-reversal, tape-monitoring), except for the volume knobs. The difference is so dramatic, in fact, that

I recommend using the Direct input for everything you feed into this thing, even though it's a pain to get

behind the unit and switch cables. One minor complaint: The Mute switch is a waste; unless you turn the volume all the way down first (making Mute moot), it makes a loud clicking noise that sometimes shuts down the amps and the preamp.

A final note. At nearly \$16,000 a pair for the amps and \$7,000 for the line-stage, these are expensive pieces. But if you're interested in what hi-fi can do, in how close we have come to that elusive absolute, you must at least listen to the Lamms.

FRED KAPLAN

Footnotes:

¹The L-1 has no phono stage. For LPs, I plugged the Audible Illusions Modulus 3a (using the Tape Output) into the L1's Direct input.

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Price: **M1.1 amps** -- \$15,990/pair; **L1 preamp** -- \$6,990

SPECS

M1.1 amps

Monaural hybrid power amplifier; switch selectable bias/voltage settings for 8- and 4-Ohm operation; no overall feedback; 850-VA toroidal power transformer. Power Output: 100 watts pure class A into 8 or 4 ohms; 200 watts (50 Class A) into 2 ohms; 300 watts (25 Class A) into 1 ohm, minimum continuous sine-wave power; 20 Hz- 20 kHz @ no more than 0.3% THD (8 ohms); 1 percent (1 ohm). Output impedance: 0.2 Ohms (constant from 20Hz – 20KHz). Voltage gain: 39 ± 2% or 31.8 ± 0.2dB. Slew rate: 32 Volts per microsecond. Power consumption: 300 Watts @ rated power @ 8(4) Ohms and at idle. Warranty: 5 years, non-transferable.

L1 line-stage preamp

Pure class A zero-feedback design; super-linear high voltage MOS-FET transistors; high-speed vacuum tube high-voltage regulator; output muting; absolute phase switch; remote turn-on/off for LAMM power amplifiers. Frequency response: 4Hz-140KHz (-3dB). THD: no more than 0.03% (20Hz-20KHz). Output impedance: 130 Ohms (constant from 20Hz-20KHz); voltage gain: 5.54 ± 2% or 18.47 ± 0.2dB. Slew rate: 30 Volts per microsecond. Power consumption: 65 Watts.

Associated Equipment

Clearaudio Pentagon CD-70 CD player; VPI HW-19 Mk 4 turntable, VPI JMW Memorial pick-up arm, Clearaudio Gold-Coil Signature cartridge; Audible Illusions Modulus 3a and Krell KRC-HC preamps, Classé CA-150 amp; Hales Transcendence 5 speakers; Nirvana SKG and SL-1 cables.

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