

Phillip Holmes ponders the little wonder that is the
\$639 Jasmine LP2.0 SE phono preamp

October 2008



Specifications:

RIAA EQ Distortion: - 0.03 ~ +0.15dB (20Hz to 20KHz)

THD: < 0.01 (20Hz to 20KHz)

Output Level : 10V (Max)

S/N: MM > 88dB , MC > 82dB

Input Impedence: MM = 47K ohm ,MC = 30/100/250/1K ohm selectable

Input Capacity: 100PF

Power Consumption: 6 Watt (MAX)

Size: 185(W) x 205(D) x 65(H) mm

Gain @1KHz: MM = 55dB; MC = 70dB

MSRP: \$639

Manufacturer:

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(fill out online form)

I suppose it's beating a dead horse, but it's both exciting and scary what the Chinese manufacturers are able to produce. I say exciting because it's more affordable now than ever to get high-end sound on a budget. I say scary because it means that the establishment will keep losing market share.

You'd like to see the old names in audio continue to exist and be economically viable, but with the ever increasing variety and quality of Chinese offerings, it makes you wonder what the high-end landscape will look like in ten years. Something like the Jasmine phono stage could have easily commanded six times the price twenty years ago, and nobody would've thought anything about it. Perhaps because of its low price, people will refuse to take it seriously; that would be a mistake. There is no direct correlation between price and sound (it would make buying easier if there was a direct correlation).

WHAT IT IS!

Here's what the Jasmine web site says about the LP2.0:

"Jasmine LP2.0 is specially designed for HI-END level LP audiophiles. Independent power supplies, Single-End Class A circuit with non negative-feedback, RC attenuation RIAA network, multi-levels and mixed materials used to isolate the circuitry from electromagnetic interference, all these characteristics identify that the Jasmine LP 2.0 is challenging the limit of the performance of phono stage. Uses precisely matched J-FET 2SK170 for low-noise amplifying."



I was intrigued by the description and wanted to see what they meant by "mixed materials" -- so I opened it up after a few weeks of listening. I was pleasantly surprised to find polypropylene coupling caps, which I intuitively knew it used. The unit does not sound like an "old fashioned" transistor piece. After hearing direct-coupled transistor designs, i.e. servo

circuits, and units that use coupling capacitors, it becomes plain to hear that coupling capacitors, specifically electrolytic types, are a major contributor to what we perceive as “transistor sound”.

There are multiple power supply caps in the unit, decoupling the various stages and that’s a good thing. The LP2.0se uses no op-amps in the signal path, I only found discrete devices. The loading selector switch for MC is a very high quality ceramic model. Finally, I noticed a brass (or copper) faraday cage for the first stage transistors, indicating that Jasmine is committed to building a quality product and going the extra mile.

Externally, the unit is beautiful. The paint, metal work, glass and lettering are all first rate. It could easily command more money just on build quality. The power supply is detached from the audio circuitry and uses high quality screw-on connectors. The two “bricks” look identical from the front, with very attractive “Jasmine” script when the units are running. I could find nothing to criticize about the Jasmine in regards to solidity, looks, parts quality, fit or finish.



I encourage you to go to the [Jasmine web site](#). You’ll find that Jasmine is a tube amp company. So why a transistor phono stage? I didn’t ask the designers, but I can infer from the parts choices that Jasmine decided to take a pragmatic approach for their phono preamp.

The tubes used in phono stages have gradually changed from high gain tubes like the 12AX7 and 6SL7, to high transconductance tubes, like the 6DJ8, in the last 30 years. The classic phono stage designs made heavy use of the 12AX7 and other high mu tubes (high mu means lots of gain). In the late ‘70s, designers shifted gears and started experimenting with high transconductance tubes like the 6DJ8. High transconductance means that it moves a lot of current for a given change in grid voltage — a very limited definition, but I’m not an electrical engineer.

That's all fine and dandy, but one of the things that make a tube a high transconductance tube is the proximity of the control grid to the cathode. The closer the control grid, the more control over the current the grid will have, it's like putting drag racing gears in your car — a real fast launch with lower gears. As you move the grid closer to the cathode, the more critical microphonics becomes. All grids will vibrate. Unfortunately, as the grid gets closer to the cathode, the more sensitive to microphonics the tube will be.

So, if you are like me, and you are tube rolling to find the best 6DJ8 (or variant) for your phono stage, the process can quickly devolve into a sadomasochistic ritual with no light at the end of the tunnel. One tube sounds fantastic, but is so microphonic that you actually get feedback while playing music. The next tube is dead quiet, no hiss, no microphonics, but sounds quite dead. I would guess that Jasmine decided that they wanted lots of transconductance, but didn't want the hassle or nightmare of finding good tubes.

The 2SK170 is a low noise, high transconductance J-Fet. The unit uses passive RIAA, is single-ended, Class A and uses polypropylene coupling caps. What this unit is then, is a tube inspired design like many traditional tube units made over the last 30 years that uses transistors.

SET UP AND CONFIGURATION

Setting the unit up is as easy as plugging everything in correctly. I did find a few things that I'd like to see changed. The input and output jacks are just a wee bit too close together and the output jacks of the Jasmine were too close together that the interconnects were almost touching. I'm not a big fan of big RCA plugs, but want to caution you that if you have some huge phono jacks, you might have an issue. All loading adjustment is conveniently accessible on the back of the unit. You have the choice between MC or MM, but there are no loading provisions for MM. Maybe I could criticize that, but most people use MC nowadays.

Still, this unit is just a few features away from hitting a grand slam, and it would be nice to see a capacitive loading feature along with the MC loading options. The MC loading options are normal and usual choices: 30/100/250/1K. While flexible, there are a number of cartridges that like to see ultra-low loading, like 3 ohms. My Lyra Argo specified 10R to 47K. That's like saying "just plug it in". Well, with the Jasmine, the cartridge sounded remarkably similar in all four settings.

The only issue I really had with the unit is the omission of a "ground lift" switch. The power supply is configured for an IEC cord which is grounded. The problem is that if you have something else grounded in the system, a preamp or amp but not both, you will generate an instant ground loop. Ideally, only one component will be grounded. Trust me on this. For lowest noise floor, you can only ground one component in the system, and usually the best choice is the preamp. Along with the LP2, Jasmine sent a very nice AC power cord which is very well made. I had to use one of those orange ground lift plugs to help get rid of an annoying hum (120Hz, I think). Those things are quite cheap, and I didn't want to modify the unit or the power cable. After that, it was just a matter of waiting for the unit to break in.

I used my Denon DP80 and SME V arm with Lyra Argo and Shure V15-V cartridges. These are cartridge choices that seem normal for a phono preamp in this price range; I wouldn't expect to see a Koetsu Coral or Shure M25C mated with this preamp. I used the Jasmine to drive an Audion Silver Night, McIntosh MC240, modified Heath W6 monos among a few others. In at least two cases, I used a passive, stepped attenuator and the Jasmine had more than enough drive to push the amps to clipping and beyond. If you are a vinyl junkie, like me, and are using tube amps to drive efficient speakers like a MaxxHorn, you probably won't need a preamp. The Jasmine has plenty of gain, and since it's a high-current transistor design, it will drive pretty much anything you put after it.

BREAKING IN AND BREAKING THROUGH

The break-in period was very interesting. The Jasmine was brand new and not previously used prior to me receiving it. After sorting out the hum issue, I noticed a rather opaque background, slightly washed out and with a hash (or white noise) similar to a noisy tube.

Not wanting to jump to any conclusions, I decided to let the unit idle for a few days. When I returned two days later, the unit had dramatically changed for the better. That hash was the power supply filter caps breaking in. I've heard similar effect from breaking in electrolytics, but never so dramatic. The hiss and opaque character was the noise from the AC power lines and the switching noise of the diodes. Electrolytic capacitors must physically and chemically break in before they sound good, and this was the best example I've ever heard.

I first employed my Lyra Argo, which was mounted on the SME V. It was a combination that had strengths and weaknesses. The pairing had already proved slightly lean with other phono stages. In all honesty, the SME V was designed to work with higher compliance cartridges than the Lyra and most other MC cartridges. The SME V is actually "too good" in one area: its magnesium construction means the effective mass is lower than other competing 9" arms. SME is able to compensate somewhat by the use of damping and "dynamic balancing". That helps, but it doesn't undo the laws of physics. The compliance of the cartridge and effective mass of the arm will dramatically affect the tonal balance of the system. It creates a slightly lightweight sound. Still, the net result was very becoming.

The combination of SME V/Lyra/Denon DP80/Record clamp/periphery clamp and Jasmine produced more micro-dynamic realism, stereo spread, and top-end detail than any other combination I've recently used. It's somewhat of a mixed blessing. That much detail reveals every wart you never wanted to hear on your records. But I'm not shooting the messenger.

I tried several settings and decided that the 30-ohm load was the most forgiving of the slight mismatch of SME V and Lyra. It gave a more relaxed, warmer presentation than the 1K loading. On perfect pressings, the 1K load might be preferable, but for extended listening, the 30-ohm load made me happier.

"This was one of the few transistor components that seemed able to reproduce dimensionality the way tubes can."

Voice and massed voices are an acid test for a system. Listening to Spirituals by the Tuskegee Institute Choir (on Westminster Gold WGM-8154), I was very pleased with the organic quality of voices. Especially with the bass and baritone voice, you have two distinct contributors to sound: the mouth and chest cavity. You could hear the bodies resonating, something that is glossed over many times. The recording, mono from the '50s, had clean center placement and was dimensional. Dimensionality is possible on mono recordings, but many times a system needs the extra information from two distinct channels to create the illusion. Obviously, if it's not on the recording a system won't reproduce it. This was one of the few transistor components that seemed able to reproduce dimensionality the way tubes can.

Sticking with mono, I listened to Rostropovich with Boult and the Royal Philharmonic performing the Dvorak Cello Concerto. Again, what was immediately evident was a connection between the resonance of the cello body with the rosin sound of bow and string. The fact that the Jasmine allowed me to enjoy mono recordings, really speaks to how good the preamp is. Mono usually becomes uninvolved with transistor gear, or that has been my experience.



On stereo disks, several strengths of transistors came through loud and clear. This unit has plenty of noise free gain. I tried the Lyra with the MM input, and there was enough gain, though just a touch of wispieness; it could've been that the cartridge didn't really like 47k. Another transistor strength of the Jasmine was its ability to image well outside the speakers. Soundstage width was excellent — a byproduct of both channels being better matched than what can be achieved with tubes. I stuck with the Lyra for several weeks, but got the impression that most records sounded a bit too bright and a little light weight. The combination slightly emphasized groove grunge, sounded a bit forward and didn't have enough bass depth and macrodynamic slam.

Needing to know what the intrinsic sound of the Jasmine was (whether it was making some recordings sound forward) I went to an old, reliable, Shure V15v. It can still hold its own against much more expensive cartridges, tracks like a champ and has virtually no needle-talk. The tonal balance immediately improved. Bass was fuller, midrange in better proportion to the rest of the signal, vinyl noise quieter, and with better dynamics — both small and large. The Jasmine easily let me hear the difference in compliance between the Lyra and Shure, proving its transparency. It was transparent enough to hear the effects as I tweaked the tracking force. I say “transparent enough” because it didn’t throw detail at the cost of the music.

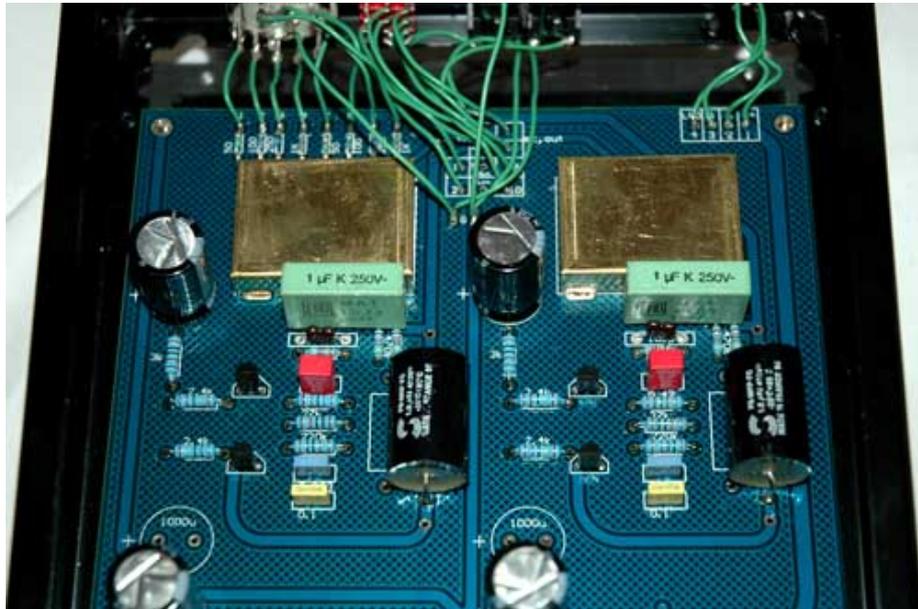
The highlight of my listening sessions was the 45 rpm jazz reissues from Music Matters and AcousTech. These records are as close to a two track 15ips tape as I’ve heard, and might be the best mastered records ever produced. On Johnny Griffin’s *The Little Giant*, the acoustic space of the studio was large and filled the end of the room, although the width was a little better than depth. The pop of the snare and high frequency sparkle of the cymbals on Albert Heath’s drums did expose the size of the room, as if you were to set off a camera flash in the dark.

“In all my listening, I never sensed that the Jasmine was running out of steam or being pushed too hard.”

On *Speakin’ My Piece* by the Horace Parlan Quintet, the sound of Stanley Turrentine was projected from the speaker with force. He was out into the room and had a palpable presence. These records are cut loud and the Jasmine had no problem at all. In all my listening, I never sensed that the Jasmine was running out of steam or being pushed too hard. Dynamics were always at least good and sometimes spectacular, depending on the recordings.

Occasionally there were times where it seemed that images were pushed a little forward. There was a very slight lack of depth that seemed to make recording venues sound a little less deep than they were, though width was never a problem for the Jasmine. Also, there wasn’t as much space or air around instruments compared to the best, way more expensive tube products I’ve heard. That’s not much of a criticism though. It beat out a \$15K fully balanced transistor phono preamp I heard at a friend’s house, producing more natural sound. The only area where the more expensive preamp might excel was deeper bass and tiny bits of detail at the expense of the whole.

With Hank Mobley’s *Soul Station*, the instruments were reproduced with tremendous power, but never at the expense of musicality. If you’ve never been a few feet from a tenor sax or trombone, you probably don’t know what I mean by that. Get out to a big band jazz concert, or visit a music school. Try to get in the front row. Much like a concert grand piano, these wind instruments can be forceful, and the Jasmine didn’t fall down on the job. On all the 45 rpm jazz titles, drums had terrific snap. The acoustic space was different on every recording session, something you should hear with a good system.



HAPPILY EVER AFTER?

It must be my prejudice against transistors, or perhaps it was the low price, but I wasn't expecting the quality of sound this elegant little phono stage produced. It's not perfect, but I haven't heard anything that is. What the Jasmine is, is a fine sounding transistor phono preamp that combines some of the strengths of transistors, with a sound similar to classic tube designs. It's not at all what I expected.

The Jasmine is good enough to be heard in a much more expensive system. The few things it doesn't do really well are sins of omission rather than commission. Perhaps there isn't quite as much deep bass; perhaps there could be a wee bit more depth in the sound stage; maybe it doesn't have quite as much air around instruments as some other designs; at times, the image pushes too far forward. These are very minor complaints. I think that with different coupling caps, some of those criticisms might go away. If you are handy with a soldering iron, and willing to experiment, you might be able to take the Jasmine to higher levels of performance just by experimenting with different coupling caps; of course, you might break it and void your warranty, so be careful. Keep in mind that you will spend more than you paid for the Jasmine to get four of those exotic silver foil capacitors (retail for a 1uF Audio Note silver foil in oil cap is around \$500 ----- each). I'm not criticizing the build quality of the Jasmine: you have to use affordable parts to offer this unit at what seems like a giveaway price.

There is the breath of life with Jasmine, something that before I had only heard with tube phono stages. It has very good dynamics, excellent soundstage width, and good high frequency extension/quality like tubes. Overall, it sounded very lifelike. After the first week, the preamp was as quiet as any I've had in my system. Wanting to affirm what I was hearing, I took the unit to a friend whose hearing I trust. He compared it to a Levinson 25s with PLS-226 power supply and preferred the Jasmine. That's not meant as a slam on the Levinson, but as a compliment to the Jasmine.

Yes, I could live with this unit. Once I adjusted to not having to roll tubes, my life would be less stressful. Listening to music is what we want, not obsessive compulsive tweaking. This was my first experience with a piece of high-end gear designed and produced in China, though I

haven't been avoiding the segment. I've heard gear designed in the west and produced in China (everyone has). If this phono preamp is any indication, audiophiles are now able to get better sound at a better price than ever before. That's progress!

Regardless of your budget, if you are looking for a phono stage, check out the Jasmine. If the combination of components works in your favor, you might find that the Jasmine is as much preamp as you'll need and free up money for a better cartridge, or more records, or better cables.

U.S. Distributor's Comment:

Many thanks for such a thorough and insightful review. We appreciate the expertise and effort it took to burn-in both the Jasmine energy 1 power cable and Phono LP2.0SE.

You were absolutely correct in that the design goal for Jasmine Audio was to create a tube-like solid state phono stage that would keep in line with their overall value and sound philosophy but also match well with their integrated tube amplifier line of products. I also would like to inform your readers that we are currently looking at possible mods that would be offered via cruzeFIRST Audio which would not void manufacturer's warranty and would take the stock Jasmine Phono LP2.0SE to the next level!

Thank you Phillip, for your efforts and skill, and to Constantine for the opportunity to have this review. It really is a credit to this industry to see publishers and reviewers who give the same amount of thoroughness to their reviews regardless of price point or assumed brand pedigree, bringing new and innovative products to light!

Fernando Cruz
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US Distributor for Jasmine Audio